

Application for Planning Approval

Land Use Planning and Approvals Act 1993

APPLICATION NO.

SA2024/025

LOCATION OF AFFECTED AREA

1/221 GLENSTONE ROAD, BRIDGEWATER (CT 185369/1); 5/221 GLENSTONE ROAD, BRIDGEWATER (CT 185369/5); 175 COBBS HILL ROAD, BRIDGEWATER (CT 156752/1 & 251 GLENSTONE ROAD, BRIDGEWATER (CT 181190/2)

DESCRIPTION OF DEVELOPMENT PROPOSAL

SUBDIVISION (4 LOTS) AND BOUNDARY ADJUSTMENT

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT www.brighton.tas.gov.au AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON 23/12/2024. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT development@brighton.tas.gov.au. REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

JAMES DRYBURGH Chief Executive Officer







26 NOV 2024 Suite 1 Level 3 "Kirksway House" OUR REF: 305532 P01-6.DWG 2-8 Kirksway Place Veris CONTOUR INTERVAL: 0.25m Battery Point TAS 7004 DATUM: MGA PLANE per SP181190, AHD 03 6232 0400 ORIGINAL SHEET SIZE: A3 SCALE: 1:10,000 hobart@veris.com.au DESCRIPTION NO DATE DRN CHKD DATE OF SURVEY: Various AM/DP veris.com.au This plan is not intended for attachment to sale contract documents DRAWING No: 303532 REV 2 SHEET No: 1 OF 4 ABN 25 098 991 210

NOTES UNDERGROUND UTILITIES HAVE NOT BEEN SURVEYED AND REQUIRE VERIFICATION ON SITE BEFORE CONSTRUCTION.

IMPORTANT NOTE

This plan was prepared as a proposed subdivision to accompany a subdivision application to Brighton Council and should not be used for any other purpose. The dimensions, areas and total number of lots shown hereon are subject to field survey and also to the requirements of Council and any other authority which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. This note is an integral part of this plan.



BULLOCK CIVIL PROPOSED SUBDIVISION 221 GLENSTONE ROAD BRIDGEWATER TAS 703





BULLOCK CIVIL PROPOSED SUBDIVISION 221 GLENSTONE ROAD BRIDGEWATER TAS 703





BUILDING AREAS



SM	/1/1 5W	1/2	5W1/3	5W1/	4
STORMMATER	HEADWALL HEADWALL LARGE SIDE ENTRY PIT	AS FEK ISU-SW30	LARGE SIDE ENTRY PIT AS PER TSD-SW30		
EXISTING POWER AND COMMS IL 59.054 CLEARANCE: 890mm		EXISTING POWER		DN300 SW3/1 IL 63.750	DN300 SW2/1 IL 66.100
LEGEND: FCR BACKFILL	DN225 S PIP IL 59.691 CLEARANCE	AND COMMS IL 61.675 SW4/1 IL 60.476 : 229mm	EX GAS MAIN IL 60.392 CLEARANCE: 1798mm		
PIPE DETAILS GRADE	DN600 BLACKMAX 2.36%	DN600 BLACKMAX 5.78%		DN600 BLACKMAX 7.77%	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57	DN600 BLACKMAX 2.36%	DN600 BLACKMAX 5.78%		DN600 BLACKMAX 7.77%	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER	DN600 BLACKMAX 2.36% 6/27 0	DN600 BLACKMAX 5.78%	1.780	DN600 BLACKMAX 7.77% RL 296.0	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT	DN600 BLACKMAX 2.36% 6/2.0 5/28.0 1.131 1.	DN600 BLACKMAX 5.78%	2.226 1.630	DN600 BLACKMAX 7.77% RL 296.0 895.1 1513 1513	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT INVERT LEVEL	DN600 BLACKMAX 2.36% 622.0 528.0 520	084.00 1571 084.00 09 09 09 09 09 09 09 09 09	63.610 2.376 1.780 63.760 2.226 1.630	DN600 BLACKMAX 7.77% RL 296.0 99.00 99.00 99.00 99.00 99.00 99.00 99.00 90.09 90.09 90.09 90.09 90.09 90.09 90.09 90.09 90.00 90.09 90.000	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT INVERT LEVEL FINISHED SURFACE	DN600 BLACKMAX 2.36% 672.0 672.0 727.1 0.875 60.330 60.000 60.0	DN600 BLACKMAX 5.78%	65.986 63.610 2.376 1.780 63.760 2.226 1.630	DN600 BLACKMAX 7.77% RL 296.0 E951 050.99 E1979 E1979	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT INVERT LEVEL FINISHED SURFACE EXISTING SURFACE	DN600 BTCKWax 5'36% 6'2020 7'2020 6'2020 7'2020 6'2020 6'2020 7'2000 7'2	DN600 BLACKMAX 5.78%	66.408 65.986 63.610 2.376 1.780 63.760 2.226 1.630 1	DN600 BLACKMAX 7.77% RL 296.0 296.0 296.0 296.0 200.99 200.0 200.99 200.0 200.	DN600 BLACKMAX 7.37%
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT INVERT LEVEL FINISHED SURFACE EXISTING SURFACE CHAINAGE	DN600 BLACKMAX 2.36% 6/2.00 6/2.00 0.000 0.875 60.000 0.875 0.000 0.000 0.875 0.000 0.000 0.875 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.000	DN600 BLACKMAX 5.78%	68.170 66.408 65.986 63.610 2.376 1.780 (3.760 2.226 1.630)	DN600 BLACKMAX 7.77% RL 296.0 E121 050.99 E1972	DN600 BLACKMAX 7.37% 63
PIPE DETAILS GRADE DATUM RL 57 COVER DEPTH TO INVERT INVERT LEVEL FINISHED SURFACE EXISTING SURFACE CHAINAGE	DN600 BLACKMAX 2.36% 672.0 278.0 277	DN600 BLACKMAX 5.78%	98:10 92:20 98:10 98:20	DN600 BLACKMAX 7.77% RL 2960 E191 00 5951 001.99 E1912 001.99 29.458 DNG SECTION - LINE SW1 HORIZ 1:500 VERT 1:100	<u>DN600 BLACKMAX</u> 7.37% 63





Table of Contents

1 1.1	Introduction Purpose	.5
1.2	Copyright	5
2	The proposed subdivision	.6
3	The zoning of the subject site	.9
4	General Industrial zone	11
4.1	Development standards for subdivision in the General Industrial zone	11
5	General overlays	17
6	Code overlays	20







1 Introduction

1.1 Purpose

The purpose of this report is to provide town planning responses to triggered subdivision standards in the Industrial zone under the State Planning Provisions and Brighton LPS with respect to a proposed subdivision and boundary adjustment and associated works at 1/221 Glenstone Road (CT-185369/1), 5/221 Glenstone Road (CT-185369/5), Crown Reserved Road CT-164049, 175 Cobbs Hill Road (CT-156752/1) and Lot 2 Glenstone Road (CT-181190/1) (the 'subject site').

1.2 Copyright

The report is subject to copyright the owner of which is Danielle Gray Planning, trading as Gray Planning. All unauthorised copying or reproduction of this report or any part of it is forbidden by law and is subject to civil and criminal penalties as asset out in the *Copyright Act 1968*. All requests for permission to reproduce this report or its contents must be directed to Danielle Gray.

This document may only be used for the purposes for which it was commissioned and in accordance with the Letter of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Last updated: 19 September 2024

Report Author: Danielle Gray B.Env.Des MTP MPIA

Report Version: 1.0







2 The proposed subdivision

The proposed subdivision seeks approval for the subdivision of 221 Glenstone Road into 2 lots and balance (with the intention to replace the current strata plan) and also a boundary adjustment with 175 Cobbs Hill Road and Lot 2 Glenstone Road.

Proposed physical works to service 221 Glenstone Road will be undertaken within 221 Glenstone Road as noted in the submitted proposal plan prepared by Veris which includes concept servicing details.

Lot 100 is intended to be a road lot to be transferred to Council.

The proposal plan includes the following:

- New lot 1(Balance) to measure 5.854 hectares;
- New lot 2 to measure 1.482 hectares;
- Lot 3 to be added to 175 Cobbs Hill Road (CT-156752/1);
- New lot 4 to measure 2.119 hectares;
- Lot 5 to be added to Lot 2 Glenstone Road (CT-181190/2); and
- Proposed lot 100 road lot to be transferred to Council as a road.

The proposal plans for the development are shown below:













danielle@grayplanning.com.au224 Warwick St, West Hobart, Tas, 7000



grayplanning.com.au ABN 99148920244









3 The zoning of the subject site

The subject site at 1/221 Glenstone Road (CT-185369/1), 5/221 Glenstone Road (CT-185369/5), Crown Reserved Road CT-164049 and Lot 2 Glenstone Road (CT-181190/1) are wholly zoned General Industrial under the Brighton LPS.

The subject site at 175 Cobbs Hill Road (CT-156752/1) is partially zoned General Industrial and predominantly Rural zone.

The proposed subdivision and boundary adjustment only affects land zoned General Industrial.

The zoning of the subject site and surrounding area is shown below:



<u>Figure.1.</u> The General Industrial (purple shaded) zoning of the subject site. Source: TheLIST, sourced September 2024. No nominated scale.









<u>Figure.2.</u> Aerial image of the subject site and surrounding land. The subject site is located in an area primarily cleared of vegetation and adjacent to other existing industrial use and development to the east. Source: TheLIST, sourced September 2024. No nominated scale.







4 General Industrial zone

4.1 Development standards for subdivision in the General Industrial zone

Subdivision standards for land zoned General Industrial zone are contained in part 19.5 of the State Planning Provisions.

The following applies to the proposed subdivision and boundary adjustment (in the absence of any specific clauses for boundary adjustments for the zone subdivision standards are applied):

19.5 Development Standards for Subdivision

Objective: That each lot: (a) has an area and dimensions app (b) is provided with appropriate acce				propria ess to	ate for use and development in the zone; and a road.
Acceptable Solutions		Perf	ormance Criteria		
A1				P1	
Eac mus (a)	Each lot, or a lot proposed in a plan of subdivision, must:		Each lot, or a lot proposed in a plan of subdivision, must have sufficient useable area and dimensions suitable for its intended use, having regard to:		
	(i)	be a 20n	able to contain a minimum area of n x 40m clear of:	(a)	the relevant requirements for development of buildings on the lot;
		a.	all setbacks required by clause 19.4.2 A1; and	(b)	existing buildings and the intended location of new buildings on the lot;
		b.	easements or other title restrictions that limit or restrict development; and	(c) (d) (e)	the topography of the site; the presence of any natural hazards; and the pattern of development existing on
	(ii) existing buildings are consistent with the established setback required by clause 19.4.2 A1;	established properties in the area.			
(b)	be r coui	be required for public use by the Crown, a council or a State authority;			
(c)	be re	equir	ed for the provision of Utilities; or		
(d)	 (d) be for the consolidation of a lot with another lot provided each lot is within the same zone. 				

19.5.1 Lot design

11



R



In terms of the proposed boundary adjustment, no General Industrial zoned land will be created less than 2000sqm. Furthermore the adhesion of lots 3 and 5 onto adjacent land at 175 Cobbs Hill Road and Lot 2 Glenstone Road will result a lot adhering General Industrial zoned land to existing General Industrial zoned land.

Both resulting areas of General Industrial zoned land at 175 Cobbs Hill Road and Lot 2 Glenstone Road are capable of containing an area of 20m x 40m clear of all easements. Both lots are vacant.

The boundary adjustment is therefore considered to comply with the A1 Acceptable Solution.

In terms of the proposed subdivision, the proposed lots 1, 5 and 2 are all substantially greater than 2000sqm in total site area.

The proposed lots 1, 5 and 2 are all able to contain an area of 20m x 40m clear of all easements with building areas shown on the proposed plan (red diagonal lines).

Setbacks for the General Industrial zone comprise 10m setback from a road frontage boundary with no side and rear boundary setbacks specified for the zone.

The building areas nominated on the proposal plan are all located 10m from any frontage boundary and also avoid easements.

Likewise, existing buildings are able to comply with the A1 Acceptable Solution under clause 19.4.2 of 10m setback from a road frontage boundary with no side and rear boundary setbacks specified for the zone.

It is considered the proposal complies with clause 19.5.1.A1.







A2	P2	
Each lot, or a lot proposed in a plan of subdivision, must have a frontage of not less than 20m.	Each lot, or a lot proposed in a plan of subdivision, must be provided with a frontage or legal connection to a road by a right of carriageway, that is sufficient for the intended use, having regard to:	
	 (a) the number of other lots which have the land subject to the right of carriageway as their sole or principal means of access; 	
	(b) the topography of the site;	
	(c) the functionality and useability of the frontage;	
	 (d) the anticipated nature of vehicles likely to access the site; 	
	(e) the ability to manoeuvre vehicles on the site;	
	(f) the ability for emergency services to access the site; and	
	(g) the pattern of development existing on established properties in the area.	

Each proposed new lot in the subdivision (lots 1, 5 and 2) will have more than 20m frontage to either Glenstone Road or the proposed new road lot 100.

The frontages of 175 Cobbs Hill Road and Lot 2 Glenstone Road will not be further reduced from their current road frontage.

The proposal is considered to comply with clause 19.5.1.A2.







A3	P3
Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from the boundary of the lot to a road in accordance with the requirements of the road authority.	Each lot, or a lot proposed in a plan of subdivision, must be provided with reasonable vehicular access to a boundary of a lot or building area on the lot, if any, having regard to:
······································	(a) the topography of the site;
	 (b) the distance between the lot or building area and the carriageway;
	 (c) the nature of the road and the traffic, including pedestrians; and
	 (d) the pattern of development existing on established properties in the area.

Each proposed new lot in the subdivision (lots 1, 5 and 2) will have more than 20m frontage to either Glenstone Road or the proposed new road lot 100.

Access to lots 1 and 2 is proposed to occur off the Crown Reserved Road (CT-164049/1). Lots 1 and 5 are intended to have their legal access from the new proposed road lot 100 intended to be taken over by Council as part of any approval of the application.

Compliance with the A3 Acceptable Solution is up to Council and Crown and the relevant road authorities.

A detailed planning response or further traffic engineering advice (additional to that provided in the submitted TIA) can be provided with respect to access from the proposed lot 100 against the P3 Criteria if required.







10 5 2 Convioor

19.5	19.5.2 Services				
Obje	ctive:	That the subdivision of land provides services for the future use and development of the lan			
Acceptable Solutions		olutions	Performance Criteria		
A1			P1		
Each	n lot, or a l	ot proposed in a plan of subdivision,	No Performance Criterion.		
exclu	uding for p	ublic open space, a riparian or littoral			
reserve or Utilities, must:		ties, must:			
(a) be connected to a full water supply service if		cted to a full water supply service if			
	the fronta	ige of the lot is within 30m of a full			
	water sup	oply service; or			
(b)	be conne	cted to a limited water supply service			
	if the fron	tage of the lot is within 30m of a			
	connectio	on to a limited water supply service,			

unless a regulated entity advises that the lot is unable to be connected to the relevant water supply service.

Response:

The proposal plan includes concept servicing details prepared by an engineer (Dean Panton of PDA).

Further information can be provided upon request of Council's development engineer who has been consulted with to date in terms of the proposal.

A2	P2
Each lot, or a lot proposed in a plan of subdivision,	Each lot, or a lot proposed in a plan of subdivision,
excluding for public open space, a riparian or littoral	excluding for public open space, a riparian or littoral
reserve or Utilities, must have a connection to a	reserve or Utilities, must be capable of
reticulated sewerage system.	accommodating an on-site waste-water treatment
	system adequate for the future use and development
	of the land.

Response:

The proposal plan includes concept servicing details prepared by an engineer (Dean Panton of PDA).

Further information can be provided upon request from Council's development engineer who has been consulted with to date in terms of the proposal. Advice was requested from Council's engineer from Gray Planning and the requested information incorporated into the concept servicing details on the submitted proposal plan.







A3	P3
Each lot, or a lot proposed in a plan of subdivision,	Each lot, or a lot proposed in a plan of subdivision,
excluding for public open space, a riparian or littoral	must be capable of accommodating an on-site
reserve or Utilities, must be capable of connecting	stormwater management system adequate for the
to a public stormwater system.	future use and development of the land, having
	regard to:
	(a) the size of the lot;
	(b) topography of the site;
	(c) soil conditions;
	(d) any existing buildings on the site;
	(e) any area of the site covered by impervious
	surfaces; and
	(f) any watercourse on the land.

The proposal plan includes concept servicing details prepared by an engineer (Dean Panton of PDA).

Further information can be provided upon request from Council's development engineer who has been consulted with to date in terms of the proposal. Advice was requested from Council's engineer from Gray Planning and the requested information incorporated into the concept servicing details on the submitted proposal plan.







5 General overlays

The subject site is located wholly within the following overlay:



<u>Figure.3.</u> The subject site is wholly located within the Brighton Industrial Hub Specific Area Plan. Source: TheLIST, sourced September 2024. No nominated scale.

The Brighton Industrial Hub Specific Area Plan is contained in the Brighton LPS and includes:







BRI-S10.0 Brighton Industrial Hub Specific Area Plan

BRI-S10.1 Plan Purpose

The purpose of the Brighton Industrial Hub Specific Area Plan is:

BRI-S10.1.1 To protect the Brighton Industrial Hub from sensitive use establishing in the area.

BRI-S10.2 Application of this Plan

- BRI-S10.2.1 The specific area plan applies to the area of land designated as Brighton Industrial Hub Specific Area Plan on the overlay maps.
- BRI-S10.2.2 In the area of land this plan applies to, the provisions of the specific area plan are in substitution for the provisions of the Attenuation Code, as specified in the relevant provision.

BRI-S10.3 Local Area Objectives

This sub-clause is not used in this specific area plan.

BRI-S10.4 Definition of Terms

This sub-clause is not used in this specific area plan.

BRI-S10.5 Use Table

This sub-clause is not used in this specific area plan.

BRI-S10.6 Use Standards

BRI-S10.6.1 Sensitive Use

This clause is in substitution for Attenuation Code – clause C9.5.2 Sensitive use within an attenuation area.

Objective:	That new sensitive use is not established within the Brighton Industrial Hub.		
Acceptable Solutions		Performance Criteria	
A1		P1	
Use or development is not for sensitive use.		No Performance Criterion.	

BRI-S10.7 Development Standards for Buildings and Works

This sub-clause is not used in this specific area plan.

BRI-S10.8 Development Standards for Subdivision

This sub-clause is not used in this specific area plan.

BRI-S10.9 Tables

This sub-clause is not used in this specific area plan.







The Brighton Industrial Hub SAP has no bearing or implications on the proposal for subdivision and a boundary adjustment which seeks to facilitate existing and future industrial use of the land being subdivided.

This SAP seeks to place restrictions (prohibition) on proposed use for sensitive use in the SAP land area.

No change of use is proposed as part of the application and the SAP is not triggered.







6 Code overlays

The subject site is affected by the following Code overlays:



<u>Figure.4.</u> The subject site contains a 60m wide Waterway and Coastal Protection Area which is 60 wide and is in the vicinity of the proposed lot 100. Source: TheLIST, sourced September 2024. No nominated scale.

In terms of the above Code overlay, the application documentation submitted includes a Natural Values Assessment prepared by Enviro Dynamics and dated May 2024.









<u>Figure.5.</u> The subject site and surrounding area is wholly covered with a Bushfire Prone Area overlay. Source: TheLIST, sourced September 2024. No nominated scale.

In terms of the above Code overlay, the applicant (Mr Andrew Bullock) is currently in the process of having a bushfire management plan prepared for the proposed subdivision. When this is ready it will be submitted to Crown (if requested) and then to Council.











Glenstone Road, Bridgewater



Contents

1	Intro	duction1				
2	Back	ground1				
	2.1	Site and Study Area Description	1			
	2.2	Proposal	2			
3	Meth	nods	1			
	3.1	Desktop analysis	1			
	3.2	Field survey	1			
	3.3	Limitations of the survey	1			
4	Natu	ral Values Assessment	2			
	4.1	Vegetation Communities	2			
	4.2	Flora	8			
	4.2.1	Threatened Flora	8			
	4.2.2	Weeds1	.5			
	4.3	Fauna1	15			
	4.3.1	Threatened fauna1	.5			
	4.3.2	Threatened fauna habitat1	.5			
	4.3.3	Raptor Nests within 2 km1	.9			
5	Deve	lopment Impacts and Legislation2	20			
	5.1	Commonwealth Environment Protection and Biodiversity Conservation Act 19992	20			
	5.2	Tasmanian Threatened Species Protection Act 19952	20			
	5.3	Tasmanian Nature Conservation Act 20052	21			
	5.4	Tasmanian Biosecurity Act 20192	21			
	5.5	Tasmanian Planning Scheme – Brighton2	21			
6	Conc	lusion and Recommendations 2	27			
R	eference	25	29			
A	Appendix 1 – Vascular Plant Species List 30					
Α	Appendix 2 – Natural Values Atlas Records within 5 km					

1 Introduction

This natural values report has been prepared as a requirement of a rezoning application under the Tasmanian Planning Scheme - Brighton.

Enviro-dynamics has been contracted to undertake this natural values assessment on behalf of the proponent. The assessment identifies the natural values of the site including the type and extent of vegetation communities, presence of threatened species and threatened fauna habitat. It also maps weed infestations and identifies any other threats present. Any potential impacts to natural values posed by the development are then analysed against the requirements of the relevant legislation.

2 Background

2.1 Site and Study Area Description

The site covers two separate titles (Title references 18922/3 and 156752/1) and approximately 170 hectares. It is currently a mix of agricultural land which has been used for cattle grazing and areas of native vegetation including woodland remnants and grasslands. The native areas have been used in the past for grazing, however not as intensively.

The study areas within the site is made up of two sections. One within the north which has been earmarked for a solar farm and an area further southadjacent to the current works area, which is proposed to be rezoned from Rural to General Industrial (Figure 2 and 3). This report focusses on these two study areas.

There is a small gully, containing Crooked Billet Creek running from north to southeast within the centre of the site. This is an ephemeral creek and it is currently not flowing. The geology is primarily Jurassic dolerite.

The study area is zoned Rural within the Brighton Municipality and has the following overlays relating to natural values covering all or part of the site:

- Bushfire-prone areas (Bushfire-prone Areas Code)
- Waterway and coastal protection area (Natural Assets Code)
- Priority vegetation area (Natural Assets Code)
- Landslip Hazard Code (low)





2.2 Proposal

The proposal includes two changes:- rezoning the section of the study area within the south of the site from Rural Zone to General Industrial Zone, and assessing the suitability in relation to natural values impacts, of the northern section for a future solar farm development (Figure 2 and Figure 3). It is noted that the latter is a longer-term project, and will require a specific development application. The proposed expansion of the industrial recycling facility will also require a specific development application.



Figure 2: Proposed rezoning plan as supplied by the proponent

1



Figure 3: Preliminary plan showing proposed future solar farm area

3 Methods

The natural values assessment was undertaken in two stages; desktop analysis and field survey.

3.1 **Desktop analysis**

The desktop analysis involved extracting data from the following sources:

- Natural Values Atlas report, generated 28th March 2024 (NRE 2023)
- LIST map

3.2 Field survey

The field survey was undertaken on the 1st of May 2024. Vegetation communities on the site were assessed and classified according to TASVEG 4.0. All vascular plant species encountered were recorded, with an emphasis on detecting rare and threatened species. Searches for potential threatened fauna habitat e.g. tree hollows and den sites, and other evidence e.g. scats, diggings and tracks were also undertaken. No detailed fauna surveys were conducted.

Locations of threatened flora, fauna habitat and significant weeds were mapped using Mergin Maps (merginmaps.com) on an iPhone handheld device with built in GPS at an accuracy of between 3.5 and 5 m and population data was captured e.g. numbers of individuals, area occupied etc. Geographic datum used was GDA94 Zone 55.

Taxonomic nomenclature for flora follows the latest Census of Vascular Plants of Tasmania (Baker & de Salas 2023). Classification of vegetation communities is in accordance with Kitchener and Harris (2013) and TASVEG 4.0.

3.3 Limitations of the survey

Whilst every effort was made to compile a complete list of vascular plants, a single survey is unlikely to detect all species present due to seasonal/temporal variations, noting this survey was conducted in late Autumn. Some plants could not be identified to a species level and some species may have been overlooked due to a lack of fertile material. It is also possible that additional species are present but were dormant at the time of survey e.g. annuals, ephemerals.

4 Natural Values Assessment

This section outlines the findings of the desktop analysis and field survey, including a description of the vegetation communities, threatened flora, fauna habitat values and weeds (Figure 4).

4.1 Vegetation Communities

Three native and one modified vegetation communities were identified during the field survey, as per the TASVEG 4.0 classification system.

- Eucalyptus globulus dry forest and woodland (DGL) **
- Acacia-Bursaria woodland and scrub (NBA)
- Lowland grassland complex (GCL)
- Agricultural land (FAG)

The distribution of the vegetation communities is illustrated in Figure 4 below.

** Denotes the community is listed as threatened under the Nature Conservation Act 2005 (NCA).

Eucalyptus globulus dry forest and woodland (DGL)

Listed as a threatened vegetation community under the NCA.

Description from Harris and Kitchener, 2005.

Eucalyptus globulus dry forest and woodland is dominated by a canopy of E. globulus that varies in height from about 40 m in productive coastal areas to < 20 m on poor soils in more arid inland areas. The understorey in this forest community is usually dominated by native grasses and Lomandra longifolia, with a sparse cover of tall shrubs and a sparse low shrub layer.

There is approximately 7 hectares of DGL within the study area. These are mainly small remnant patches within grasslands with the exception being a small patch in the southwest which is part of a larger patch extending northwest. These remnant patches would have once been part of a larger tract of forest pre-European modification.

The *Eucalyptus globulus* trees which form the canopy are large old growth hollow bearing trees of approximately 20 m tall. The understory is predominantly grassy, with sparse groupings of shrubs. Although the understory has pasture grasses present, there is still a dominance of native species, including the threatened species, *Scleranthus fasciculatus*. A large amount of recruitment was observed, especially in the patches to the west which have been fenced off from cattle, with saplings of around 1 m height present.

Species recorded within the DGL include *Eucalyptus globulus, Bursaria spinosa, Acacia dealbata, Dichondra repens, Poa labillardierei, Senecio quadridentatus, Austrostipa* sp. and *Rytidosperma* sp. A full species list can be found in Appendix 1.



Plate 1: Remnant DGL patch showing a healthy level of recruitment

Acacia-Bursaria woodland and scrub (NBA)

Description from Harris and Kitchener, 2005.

This vegetation community is characterised by scattered small trees of prickly box (Bursaria spinosa), silver wattle (Acacia dealbata), black wattle (Acacia mearnsii), blackwood (Acacia melanoxylon), drooping she oak (Allocasuarina verticillata) and other small trees and shrubs. They form a sparse to dense layer over a grassy understory dominated by kangaroo grass (Themeda triandra) or wallaby grasses (Rytidosperma sp.). Species compositions can vary between sites).

NBA is present in two small patches within the study area, totalling approximately 2 hectares. These areas show signs of past disturbance and may have been the result of vegetation clearance. *Bursaria spinosa* and *Acacia dealbata* are both present and the ground layer is made up of similar grass species within the GCL and DGL.



Plate 2: Small patch of NBA

Lowland grassland complex (GCL)

Description from Harris and Kitchener. 2005.

The lowland grassland complex generally contains natural or disturbance-induced grasslands dominated by species of Rytidosperma or Austrostipa, but commonly also containing Poa species and Themeda triandra. Semi-improved pasture can revert to this community over time, especially where drought conditions favour the native species).

GCL makes up approximately 55 hectares of the study area. It is understood that in the past there has been grazing within this area, however cattle and sheep have since been excluded from much of it. This community is dominated by *Austrostipa* and *Rytidosperma* species in places, with *Themeda triandra* and *Poa labillardierei* also present in smaller numbers. There are patches where the *Poa* is more abundant, and these are mainly close to the remnant DGL patches. Due to the time of the year in which the survey was done, the herb layer was virtually absent with only introduced species such as *Acetosella vulgaris* and *Cirsium vulgare* present in small numbers.

Pasture grasses such as *Dactylis glomerata* and *Phalaris aquatica* were present, with some areas having a higher concentration of introduced species than others.



Plate 3: GCL within the proposed solar farm study area

Agriculture land (FAG)

Description from Harris and Kitchener, 2005

Agricultural land (FAG) includes exotic grassland pastures and croplands. The pastures are dominated by mixtures of exotic temperate grasses and clovers. Crops range from common temperate vegetables and orchard fruits and nuts through to crops such as Tanacetum cinerariifolium (pyrethrum) and Papaver somniferum (opium poppy). FAG can include exotic grassland pastures with scattered trees (less than 5% crown cover)

There is approximately 11.5 hectares of FAG which presently has cattle grazing. These areas are heavily degraded with a lot of bare soil and very little growth.


Plate 4: Degraded agricultural land



Figure 4: Natural Values recorded on site.

4.2 Flora

A total of 22 vascular plants were recorded during the survey, of which 5 are introduced species. Additional flora species are likely to occur within the site and some plants could have been overlooked due to the inherent limitations of the survey e.g. seasonal timing, timed meander method. For the full list of flora species recorded during the survey see Appendix 1.

4.2.1 Threatened Flora

One threatened flora species listed under the *Threatened Species Protection Act 1995* (TSPA) was recorded on site. *Scleranthus fasciculatus* (Figure 4).

Scleranthus fasciculatus

Listed as vulnerable under the TSPA

Scleranthus fasciculatus is only recorded from a few locations in the Midlands and south-east of Tasmania. The vegetation at most of the sites is *Poa* grassland/grassy woodland. *Scleranthus fasciculatus* appears to need gaps between the tussock spaces for its survival and both fire and stock grazing maintain the openness it requires. Often found in areas protected from grazing such as fallen trees and branches. This species can sometimes be confused with a similar species, *Scleranthus biflorus*, however *S. fasciculatus* has scarious leaf margins and a more fascicled leaf arrangement.

Three plants were found within the site. They were all found at the bases of large trees amongst the leaf litter. Two plants are outside of the study area, and one within the edge of the proposed solar farm study area. As this wasn't a targeted survey for this species, it is likely there are more plants present, which may have been overlooked due to the nature of the timed meander survey technique.



Plate 5: Scleranthus fasciculatus

Additional Species

A search of the Natural Values Atlas (NRE database) revealed that several threatened flora species had been recorded within 5 km of the site. these are addressed in the table below. Those with no suitable habitat and no conceivable chance of occurring (such as marine species) are listed in Appendix 2.

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
<i>Asperula scoparia</i> subsp. <i>scoparia</i> prickly woodruff	r/-	0/4	Asperula scoparia subsp. scoparia is widespread in Tasmania and is mainly found in native grasslands and grassy forests, often on fertile substrates such as dolerite- derived soils. Forested sites are usually dominated by <i>Eucalyptus</i> globulus and <i>E. viminalis</i> (lower elevations) and <i>E. delegatensis</i> (higher elevations). Suitable habitat present, targeted survey recommended to determine presence.

Table 1: Threatened flora species recorded on the Natural Values Atlas within 5 km of the site

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
Austrostipa bigeniculata double-jointed speargrass	r/-	0 / 171	Austrostipa bigeniculata is found mainly in the south-east and Midlands in open woodlands and grasslands, where it is often associated with Austrostipa nodosa. Suitable habitat present, targeted survey recommended to determine presence.
Austrostipa blackii crested spear grass	r/-	0/3	The habitat of <i>Austrostipa blackii</i> is poorly understood because of confusion with other species. In its "pure" form (i.e., long coma), <i>A. blackii</i> is a species of very near- coastal sites such as the margins of saline lagoons, creek outfalls and vegetated dunes. Further inland, where it seems to grade into other species, it occurs in open grassy woodlands. Suitable habitat present, targeted survey recommended to determine presence.
Brachyscome rigidula cutleaf daisy	v/ -	0/4	Brachyscome rigidula is found in the Midlands, East Coast and in parts of the eastern Central Highlands of Tasmania, where it occurs in rough pasture, grassland and grassy woodland on dry rocky hills and flats. Suitable habitat present, targeted survey recommended to determine presence.
Calocephalus citreus lemon beautyheads	r/ -	0 / 159	Calocephalus citreus inhabits disturbed dry grasslands, and is found from a few locations in the south-east of the State. Suitable habitat present, targeted survey recommended to determine presence.
Calocephalus lacteus milky beautyheads	r/ -	0/9	<i>Calocephalus lacteus</i> occurs in open, dry sites in lowland areas of eastern and northern Tasmania and on lower altitudes of the Central Plateau. It requires bare ground for recruitment, and may benefit from disturbance. It

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
			is often found on roadsides and beside tracks.
			Suitable habitat present, targeted survey recommended to determine presence.
<i>Desmodium varians</i> slender ticktrefoil	e/ -	0/4	Desmodium varians occurs locally in the east of the State, growing in native grassland, or open grassy shrubland or woodland, with Themeda triandra (kangaroo grass) and Poa labillardierei (silver tussockgrass) being the most prominent grasses. Suitable habitat present, targeted survey recommended to determine presence.
Dianella amoena grassland flaxlily	r/ EN	7 / 718	Dianella amoena occurs mainly in the northern and southern Midlands, where it grows in native grasslands and grassy woodlands. Suitable habitat present, targeted survey recommended to determine presence.
<i>Eryngium ovinum</i> blue devil	v/ -	0/31	<i>Eryngium ovinum</i> occurs in a range of lowland vegetation types most often on fertile heavy clay soils derived from dolerite. Vegetation types include open grasslands usually dominated by <i>Themeda triandra</i> (kangaroo grass), grassy forests and woodlands on slopes, ridges and broad flats, and also roadside verges (representing remnant populations),
			Suitable habitat present, targeted survey recommended to determine presence.
<i>Eucalyptus risdonii</i> Risdon peppermint	r/-	59 / 64	<i>Eucalyptus risdonii</i> is restricted to the greater Hobart area (particularly the Meehan Range), with an outlying population at Mangalore and on South Arm. It occurs on mudstone, with an altitudinal range from near sea level to 150 m above sea level. It can occur as a dominant in low

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
			open forest with a sparse understorey on dry, insolated ridgelines and slopes (e.g. with a north-west aspect), and individuals can extend into other forest types typically dominated by <i>E. tenuiramis</i> or <i>E. amygdalina</i> (but occasionally by other species) on less exposed sites. Suitable habitat present. However, no trees were recorded. Due to the distinctiveness of the species, it is unlikely to have been overlooked.
<i>Glycine latrobeana</i> clover glycine	v/ VU	3 / 12	Glycine latrobeana occurs in a range of habitats, geologies and vegetation types. Soils are usually fertile but can be sandy when adjacent to or overlaying fertile soils. The species mainly occurs on flats and undulating terrain over a wide geographical range, including near-coastal environments, the Midlands, and the Central Plateau. It mainly occurs in grassy/heathy forests and woodlands and native grasslands. Suitable habitat present, targeted survey recommended to determine presence.
Isoetopsis graminifolia grass cushion	v/ -	12 / 150	Isoetopsis graminifolia grows in native grasslands, usually dominated by <i>Themeda triandra</i> (kangaroo grass), or on rockplates, the underlying substrate being mostly basalt or dolerite. The elevation range of recorded sites is 20-360 m above sea level in areas of low rainfall. Suitable habitat present, targeted survey recommended to determine presence.
<i>Pterostylis ziegeleri</i> grassland greenhood	v/ VU	2 / 34	Pterostylis ziegeleri is restricted to the east and north of Tasmania. In coastal areas, the species occurs on the slopes of low stabilised sand dunes and in grassy dune swales, while in the

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
			Midlands it grows in native grassland or grassy woodland on well-drained clay loams derived from basalt. Suitable habitat present.
			targeted survey recommended to determine presence.
Scleranthus diander tufted knawel	v/ -	0/2	Scleranthus diander is found from the Central Midlands area to Hobart with most of the records from the Ross and Tunbridge areas. This species inhabits grassy woodland and is associated with dolerite and basalt substrates.
			Suitable habitat present, targeted survey recommended to determine presence.
Scleranthus fasciculatus spreading knawel	v/ -	2/2	Scleranthus fasciculatus is only recorded from a few locations in the Midlands and south-east. The vegetation at most of the sites is Poa grassland/grassy woodland. Scleranthus fasciculatus appears to need gaps between the tussock spaces for its survival and both fire and stock grazing maintain the openness it requires. Often found in areas protected from grazing such as fallen trees and branches. Species recorded from site.
Senecio squarrosus leafy fireweed	r/ -	0/18	Senecio squarrosus occurs in a wide variety of habitats. One form occurs predominantly in lowland damp tussock grasslands. The more widespread and common form occurs mainly in dry forests (often grassy) but extends to wet forests and other vegetation types. Suitable habitat present, targeted survey recommended to determine presence.
<i>Triptilodiscus pygmaeus</i> dwarf sunray	v/ -	0 / 64	<i>Triptilodiscus pygmaeus</i> grows within grasslands, grassy woodlands or rockplates, with the underlying substrate being mostly Tertiary basalt or Jurassic

Species	Status TSPA / EPBCA	Records within 500m / 5km	Comments
			dolerite. The elevation range of recorded sites in Tasmania is 30- 470 m above sea level, with an annual rainfall of about 450-600 mm. The species occurs within native grassland dominated by <i>Themeda triandra</i> (kangaroo grass). Suitable habitat present, targeted survey recommended to determine presence.
<i>Velleia paradoxa</i> spur velleia	v/ -	0/4	Velleia paradoxa is known from the Hobart and Launceston areas, and the Midlands and the Derwent Valley, where it occurs in grassy woodlands or grasslands on dry sites. It has been recorded up to 550 m above sea level at sites with an annual rainfall range of 450-750 mm. Recent name change to Goodenia paradoxa Suitable habitat present,
			to determine presence.
Vittadinia burbidgeae smooth new-holland-daisy	r/-	1/5	Vittadinia burbidgeae occurs in native grassland and grassy woodland. Suitable habitat present, targeted survey recommended to determine presence.
<i>Vittadinia gracilis</i> woolly new-holland-daisy	r/-	1 / 57	Vittadinia gracilis occurs in native grassland and grassy woodland. Suitable habitat present, targeted survey recommended to determine presence.
<i>Vittadinia muelleri</i> narrowleaf new-holland-daisy	r/-	66 / 337	Vittadinia muelleri occurs in native grassland and grassy woodland. Suitable habitat present, targeted survey recommended to determine presence.

(EPBCA) CR = Critically Endangered, EN = Endangered, VU = Vulnerable (TSPA) e = endangered, v = vulnerable, r= rare

4.2.2 <u>Weeds</u>

A range of introduced species were recorded at the site. One of which, african boxthorn (*Lycium ferocissimum*) (Table 2), is listed as a declared weed/pest under the *Biosecurity Act 2019* (BA) and is a Weed of National Significance (WoNS).

African boxthorn is classed as a Zone B species within Brighton, which includes those Tasmanian municipalities for which containment of the declared weed is the principal management objective. Such municipalities host large, widespread infestations of the declared weed that are not deemed eradicable because the feasibility of effective management is low at this time.

These will need to be managed in accordance with the act following the best practise prescriptions as laid out in the *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania* (DPIPWE, Stewart and Askey-Doran, 2015)

Table 2: Declared weeds present on site

Species	Comment	BA Zone	WoNs
african boxthorn Lycium ferocissimum	Isolated plants within solar farm study area	Zone B Containment	YES

4.3 Fauna

4.3.1 Threatened fauna

No threatened fauna species listed under the *Threatened Species Protection Act 1995* (TSPA) or under the *Environment Protection and Biodiversity Act 1999* (EPBCA) were recorded during the survey.

4.3.2 Threatened fauna habitat

Habitat for three species listed under the TSPA and the EPBCA were recorded during the survey:

Blue-winged parrot (Neophema chrysostoma)

EPBCA – Vulnerable

Blue-winged parrots inhabit a range of habitats from coastal, sub-coastal and inland areas, through to semi-arid zones. They tend to favour grasslands and grassy woodlands and are often found near wetlands both near the coast and in semi-arid zones. They breed in Tasmania, coastal south-eastern South Australia and southern Victoria. During the breeding season (spring and summer), birds occupy eucalypt forests and woodlands. Nests are made in hollows, preferably with a vertical opening, in live or dead trees or stumps.

There are numerous large eucalypt trees within the study areas which could provide habitat for the blue-winged parrot. These trees are largely confined to the areas mapped as DGL.

Eastern barred bandicoot (Perameles gunnii)

EPBCA – Vulnerable

The eastern barred bandicoot originally occurred in native grasslands and grassy woodlands in Tasmania's Midlands. However, it is now rare in the Midlands where most of its habitat has been cleared. Since European settlement the eastern barred bandicoot has spread into (originally heavily forested) agricultural areas in the state's south-east, north-east and north-west. In these areas, the eastern barred bandicoot occurs in mosaic habitats of pasture and remnant native forest, often with a significant amount of cover provided by weeds such as gorse and blackberry (Threatened Species Section, 2023).

This species may utilise the site for foraging or nesting, adapts well to modified landscapes within the vicinity of agricultural or native landscapes.

Swift parrot (Lathamus discolor)

TSPA – endangered, EPBCA – Critically Endangered

During the breeding season, nectar from the Tasmanian blue gum (*Eucalyptus globulus*) and black gum (*Eucalyptus ovata*) flowers are the primary food source for the species. These eucalypts are patchily distributed, and their flowering patterns are erratic and unpredictable, often leading to only a small proportion of swift parrot habitat being available for breeding in any one year. Swift parrots breed in tree hollows in mature eucalypts within foraging range of a flower source.

The DGL mapped on site could provide foraging and nesting habitat for the swift parrot. There are numerous large trees which have potential to contain hollows, and as these are predominantly *Eucalyptus globulus* they also provide a food source.

Tasmanian masked owl (Tyto novaehollandiae castanops)

TSPA – endangered, EPBCA - Vulnerable

The Tasmanian Masked Owl (*Tyto novaehollandiae castanops*) is a subspecies of Masked Owl which occurs only in Tasmania. Its population has been estimated to comprise approximately 500 breeding pairs. It is a large bird with a mask-like facial disc and distinctive husky, screeching call. The Tasmanian masked owl hunts at night for small mammals and birds in a range of habitats which contain some mature forest, usually below 600 m altitude. These habitats include native forests and woodlands as well as agricultural areas with a mosaic of native vegetation and pasture (Threatened Species Section, 2023).

There are large trees within the site which have potential to provide nesting habitat for the masked owl. There is foraging habitat present on site.

Additional species

A search of the Natural Values Atlas (NRE database) indicated that several threatened fauna species have been recorded within 5 km of the site. Those recorded within 500 m or within 5 km and have suitable habitat on site are addressed in the table below. Those with no suitable habitat and no conceivable chance of occurring (such as marine species) are listed in Appendix 2.

Species	Status TSPA / EPBCA	Records 500m / 5 km	Comment
Accipiter novaehollandiae Grey goshawk	e / -	0/3	Inhabits large tracts of wet forest and swamp forest, particularly patches with closed canopies above an open understorey, but with dense stands of prey habitat nearby. Mature trees provide the best nesting sites. Most nests have been recorded from blackwoods and occasional myrtle beech. No suitable nesting habitat may utilise the site for foraging.
Aquila audax subsp. fleayi Wedge-tailed eagle	e / EN	1/16	Nests in a range of old growth native forests and is dependent on forest for nesting. Territories can contain up to five alternate nests usually close to each other but may be up to 1 km apart where habitat is locally restricted. This eagle preys and scavenges on a wide variety of fauna including fish, reptiles, birds, and mammals. No suitable nesting habitat may utilise the site for foraging.
<i>Dasyurus maculatus</i> subsp. <i>maculatus</i> Spotted-tailed quoll	r/VU	0/5	Habitat for the spotted-tailed quoll is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex areas are present, and includes remnant patches in cleared agricultural and or plantation areas. No suitable denning habitat may utilise the site for foraging.
<i>Dasyurus viverrinus</i> Eastern quoll	- / EN	0 / 10	Habitat for the eastern quoll includes rainforest, heathland, alpine areas, and scrub. However, it seems to prefer dry forest and native grassland mosaics which are bounded by agricultural land.

Table 3: Threatened fauna species recorded on the Natural Values Atlas within 5 km of the site

Species	Status TSPA / EPBCA	Records 500m / 5 km	Comment
			No suitable denning habitat may utilise the site for foraging.
Haliaeetus leucogaster White-belled sea-eagle	v / -	0/15	Found in coastal habitats (especially those close to the seashore) and around terrestrial wetlands in tropical and temperate regions of mainland Australia and its offshore islands. The habitats occupied by the sea-eagle are characterised by the presence of large areas of open water (larger rivers, swamps, lakes, the sea).The species is mostly recorded in coastal lowlands, but can occupy habitats up to 800 m above sea level in Tasmania. No suitable nesting habitat may utilise the site for foraging
Hirundapus caudacutus White-throated needletail	- / VU	0 / 2	Aerial species which rarely alights. No suitable habitat.
<i>Lathamus discolor</i> Swift parrot	e / CE	1/8	During the breeding season, nectar from Tasmanian blue gum (<i>Eucalyptus globulus</i>) and black gum (<i>Eucalyptus ovata</i>) flowers are the primary food source for the species. These eucalypts are patchily distributed, and their flowering patterns are erratic and unpredictable, often leading to only a small proportion of swift parrot habitat being available for breeding in any one year. Swift parrots breed in tree hollows in mature eucalypts within foraging range of a flower source. Potential foraging and nesting habitat on
Neophema chrysostoma blue-winged parrot	- / VU	0/5	site. See above. The Blue-winged Parrot inhabits a range of habitats from coastal, sub-coastal and inland areas, right through to semi-arid zones. Throughout their range they favour grasslands and grassy woodlands. They are often found near wetlands both near the coast and in semi-arid zones. Blue-winged Parrots can also be seen in altered environments such as airfields, golf-courses, and paddocks. Potential foraging and nesting habitat on site. See above.
Pardalotus quadragintus Forty-spotted pardalote	e / EN	0/1	Endemic to Tasmania and occurs in only a few small areas within the State. It is relatively restricted to dry grassy forest and woodland

Species	Status TSPA / EPBCA	Records 500m / 5 km	Comment
			along the east coast containing mature white gum (<i>Eucalyptus viminalis</i>).
			No suitable habitat
<i>Perameles gunnii</i> Eastern barred bandicoot	- / VU	0 / 39	Potential habitat for the eastern barred bandicoot is forests with a grassy understorey, native and exotic open vegetation types including woodlands and open grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland.
			Species may utilise the site, adapts well to modified landscapes within the vicinity of agricultural or native landscapes
<i>Pseudemoia pagenstecheri</i> Tussock skink	v / -	0/1	A ground-dwelling lizard, occurring in grassland and grassy woodland habitats at a range of elevations. Records in Tasmania a few disconnected patches of habitat from Midlands, inland Cradle Coast, and eastern Bass Strait islands. Suitable habitat present
Sarcophilus harrisii Tasmanian devil	e / EN	6 / 40	This species lives in a wide range of habitats across Tasmania, especially in landscapes with a mosaic of pasture and woodland. No suitable denning habitat may utilise the site for foraging.
Tyto novaehollandiae castanops Tasmanian masked owl	e / VU	0/8	This species occupies a range of habitats which contain some mature forest, usually below 600 m altitude - these include native forests and woodlands as well as agricultural areas with a mosaic of native vegetation and pasture.
			Potential foraging and nesting habitat on site. See above.

4.3.3 Raptor Nests within 2 km

Four eagle nests have been identified within 2 km of the site. One unknown eagle, one wedge-tailed eagle and two white-bellied sea eagles. These were last observed in 2020 with observation details available on the natural values atlas. There is one nest (unknown eagle) recorded in 2020 which falls approximately 1 km west of the site.

5 Development Impacts and Legislation

The following section outlines the impacts of the proposed rezoning and future solar farm on natural values and provides an assessment of the proposal against the relevant legislation.

Impacts on natural values

The rezoning itself will have no impact on any natural values within the site. However, it is understood that the future use for the rezoned area (General Industrial Zone) will incorporate an extension to the current usage which is a facility to recycle building waste from construction projects, to reduce the need for more raw materials to be sourced.

It has been communicated by the landowner that no remnant DGL or large trees will be impacted, and future use will be confined to the agricultural land and areas outside of the DGL.

The area which is proposed for the solar farm is predominantly GCL which has a high density of introduced grasses amongst it.

5.1 **Commonwealth** *Environment Protection and Biodiversity Conservation Act* 1999

A person must not take an action that has, will have or is likely to have a significant impact on any of the matters of national environmental significance without approval from the Australian Government Minister for the Environment (the Minister).

No species or ecological communities listed under the EPBCA were recorded on site.

There is habitat for three species: blue-winged parrot, swift parrot and eastern barred bandicoot within the study area.

These species and their habitat will not be impacted by the proposed use of the site and therefore will an EPBC referral will not be required. However, if future proposed works have the potential to impact the habitat of these species on site (DGL) and therefore potentially have a significant impact on one or more of these species, a formal assessment of whether an EPBC referral is required should be undertaken.

5.2 Tasmanian Threatened Species Protection Act 1995

In Tasmania, threatened species (flora and fauna) are protected under the Tasmanian Threatened Species Protection Act 1995. Under this Act, a permit is required to knowingly "take" (which includes kill, injure, catch, damage, destroy and collect), keep, trade in or process any specimen of a listed species. One flora species listed under the TSPA was recorded on site. *Scleranthus fasciculatus* (vulnerable). Impacts to this species should be avoided. If this cannot be achieved, a permit to take will be required. Foraging and nesting habitat for the swift parrot (endangered) occurs throughout the site in the *Eucalyptus globulus* remnant woodland. It is understood that none of these trees will be impacted by the future proposals for the site.

5.3 Tasmanian Nature Conservation Act 2005

Eucalyptus globulus dry forest and woodland (DGL) is a threatened vegetation community listed under the NCA.

The current proposal does not include disturbance to, or the removal of trees within this community. In the event that this alters with future development proposals, and this community may be disturbed, a forest practices plan prepared by a forest practices officer will be required as a first step in the assessment process.

5.4 Tasmanian Biosecurity Act 2019

One declared weed was recorded on site, african boxthorn which is a Zone B species. Zone B classifications are those which have infestations that are not deemed eradicable, and the objective for these species is to contain them, and prevent the spread neighbouring properties. Landowners have a legal responsibility to manage declared weeds.

This species will need to be managed in accordance with the relevant Statutory Weed Management Plans following the best practise prescriptions as laid out in the *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania* (DPIPWE, Stewart and Askey-Doran, 2015)

5.5 **Tasmanian Planning Scheme – Brighton**

The site is subject to the Natural Assets Code (C7.0), with both Priority Vegetation and Waterway and Coastal Protection Areas being applied. The priority vegetation area covers the majority of the study area, encompassing both titles. The waterway and coastal protection area has been applied to Crooked Billet Creek and extends from midway along the northern boundary of (title reference 18922/3), along the boundary of the existing industrial recycling facility on the adjoining title, and through the industrial Toll facility.

At the current time, it is understood that the proponent is primarily interested in rezoning part of the southern title (title reference 156752/1) to allow for the expansion of the adjoining industrial recycling facility. Specific detail regarding this development is not currently available. Specific detail – other

than a general location, regarding the future proposed solar farm is also not currently available. However, this natural values report will provide the basis for future siting and additional on-ground surveying considerations. Therefore, the following is a preliminary assessment only.

Requirements relating to the relevant provisions of the Natural Assets Code are addressed below.

Requirements of the Natural Assets Code (C7.0)

The site is subject to the Natural Assets Code (C7.0) as it is within a Priority Vegetation Area (PVA) overlay. Within the definition of terms in the planning scheme 'Priority Vegetation' means native vegetation where any of the following apply:

 (a) it forms an integral part of a threatened native vegetation community as prescribed under Schedule 3A of the Nature Conservation Act 2002;

Response: *Eucalyptus globulus* dry forest and woodland (DGL) is a threatened vegetation community under the NCA.

The following also apply to the site:

a) is a threatened flora species;

Response: One flora species - *Scleranthus fasciculatus* (vulnerable) was recorded on site. There is also potential for other threatened flora species to occur on the site.

b) it forms a significant habitat for a threatened fauna species; or

Response: Habitat for a number of threatened fauna species exists on the site.

C7.6.2 Clearance within priority vegetation area

Response: The acceptable solutions cannot be met, therefore the relevant performance criteria must be addressed.

P1.1 - Clearance of native vegetation within a priority vegetation area must be for:

 (a) an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmania Fire Service or an accredited person;

Response: Not applicable.

 (b) buildings and works associated with the construction of a single dwelling or an associated outbuilding;

Response: Not applicable.

(c) subdivision in the General Residential Zone or Low Density Residential Zone;

Response: Not applicable.

(d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design;

Response: The proposed rezoning will allow for increased industrial material recycling, with associated social and economic benefits. The future proposed solar farm will also contribute to the states renewable energy transition.

 (e) clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or

Response: The current rezoning application does not include a proposal for the clearance of native vegetation. However, the proponent has indicated that future development on the site will be restricted to either the heavily degraded agricultural land (for a proposed recycling facility on title reference 18922/3) or the lowland grassland complex (GCL) - (for a proposed solar farm on title reference 18922/3). Remnant areas of *Eucalyptus globulus* dry forest and woodland (DGL) will not be disturbed or cleared.

(f) the clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site.

Response: The proposed future buildings and works associated with the expansion of the industrial recycling facility can be confined to the degraded agricultural land. Clearance of the threatened *Eucalyptus globulus* dry forest and woodland will not be required.

<u>P1.2 - Clearance of native vegetation within a priority vegetation area must minimise adverse impacts</u> on priority vegetation, having regard to:

 a) the design and location of buildings and works and any constraints such as topography or land hazards;

Response: The proposed future buildings and works associated with the expansion of the industrial recycling facility can be confined to the degraded agricultural land. This degraded area is bounded by Crooked Billet Creek and an embankment to the north, which forms a natural topographic constraint on development.

(b) any particular requirements for the buildings and works;

Response: It is understood that the proposed expansion of the recycling facility can be accommodated on the level area of degraded agricultural land, without encroaching on the threatened *Eucalyptus globulus* dry forest and woodland. (c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of any future habitable buildings;

Response: The proposed future developments on the site do not include habitable buildings.

 (d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;

Response: The proposed future buildings and works associated with the expansion of the industrial recycling facility can be confined to the degraded agricultural land. Clearance of the threatened *Eucalyptus globulus* dry forest will not be required.

(e) any on-site biodiversity offsets; and

Response: Biodiversity offsets will not be required for the proposed rezoning application, and unlikely required for the future developments proposed for the site.

(f) any existing cleared areas on the site.

Response: The proponent has indicated that future development / expansion of the recycling facility will be located on the existing cleared and degraded agricultural land on title reference 156752/1 The future proposed solar farm is to be located within an area of the site where native grassland persists (lowland grassland complex). Whilst this is not a forested landscape, further on-ground surveys are required to ascertain whether or not additional threatened species are present.

<u>C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia</u> area.

The site is also bisected by a waterways and coastal protection overlay, which has been applied to the ephemeral Crooked Billet Creek. Minimal information is available regarding the potential future development of the solar farm, therefore it is not considered in any detail below.

Response: Acceptable solutions cannot be met; therefore, performance criteria must be addressed.

P1.1 - Buildings and works within a waterway and coastal protection area must avoid or minimise adverse impacts on natural assets, having regard to:

a) impacts caused by erosion, siltation, sedimentation and runoff;

Response: The proposed rezoning and future proposed expansion of the industrial recycling facility can be accommodated within the degraded agricultural land, and not impact on Crooked Billet Creek and the extent of the associated overlay. The impact, if any, of the proposed future solar farm on the creek is currently unknown – including the exact location of infrastructure in relation to the waterway and coastal protection overlay. This will need to be addressed in the future development application.

b) impacts on riparian of littoral vegetation;

Response: The proposed future development of the recycling facility can be accommodated within the degraded agricultural land, and placed outside of the overlay and any riparian vegetation.

c) maintaining natural streambank and streambed condition, where it exists;

Response: There will be no impacts to the natural streambank or streambed associated with the rezoning and development of the recycling facility. Impacts on the streambank associated with the development of the proposed future solar farm is currently not known.

d) impacts on in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;

Response: As above.

e) the need to avoid significantly impeding natural flow and drainage;

Response: There will be no impacts to the streambank or streambed, therefore no natural flow (or current flow if modified) or drainage will be impacted. Any future development within close proximity to the creek will need to consider drainage / minor flood mitigation.

f) the need to maintain fish passage, where known to exist;

Response: Not applicable.

g) the need to avoid land filling of wetlands;

Response: Not applicable.

h) the need to group new facilities with existing facilities, where reasonably practical;

Response: The proposed expansion of the industrial recycling facility directly adjoins the existing faculty, and will consolidate this use on previously cleared and degraded land.

i) minimising cut and fill;

Response: Should cut and fill be required, it is advised to use sediment fences during construction to ensure no silt or runoff enters the waterway. Such detail should be considered in a future development proposal for the proposed recycling facility.

j) building design that responds to the particular size, shape, contours or slope of the land;

Response: The proposed recycling facility expansion is to be located on level land to the south-west of the creek / overlay. There is amble space in this area to provide a buffer between the facility and the extent of the overlay.

k) minimising impacts on coastal processes, including sand movement and wave action;

Response: Not applicable.

 minimising the need for future works for the protection of natural assets, infrastructure and property;

Response: Not applicable.

m) the environmental best practice guidelines in the Wetlands and Waterways Works
Manual; and

Response: Not currently applicable. Future development applications may need to address this provision.

n) the guidelines in the Tasmanian Coastal Works Manual.

Response: Not applicable.

6 Conclusion and Recommendations

The natural values of land at Glenstone Road, Bridgewater were assessed as part of a rezoning application.

Threatened species and communities observed:

- Scleranthus fasciculatus (TSPA vulnerable)
- *Eucalyptus globulus* dry forest and woodland (DGL) Listed as a threatened vegetation community under the NCA

Threatened fauna habitat observed:

- Blue-winged parrot (EPBCA vulnerable) nesting and foraging
- Swift parrot (TSPA endangered, EPBCA Critically Endangered) nesting and foraging
- Tasmanian Masked Owl (TSPA endangered, EPBCA Vulnerable) nesting and foraging
- Eastern barred bandicoot (EPBCA Vulnerable) denning and foraging

Council may consider incorporating the following recommendations into a planning permit, in the event the proposed development is approved.

Recommendations:

- Undertake a targeted threatened species survey prior to the commencement of works, with specific focus on the species in Table 2 which have been identified as having suitable habitat present on site. This survey work should be undertaken prior to the layout and design of the potential solar farm on the site.
- Confine industrial use and development associated with the proposed expansion of the industrial recycling facility to the degraded agricultural land (FAG), and avoid impacts to the *Eucalyptus globulus* dry forest and woodland (DGL)
- Retain and protect all *Eucalyptus globulus* trees.
- Avoid impacts to the *Scleranthus fasciculatus* plants and immediate area. If this cannot be achieved, a permit to take will under the *Threatened Species Protection Act 1995* will be required
- All declared weeds (i.e. english boxthorn) and environmental weeds must be controlled in accordance with the Statutory Weed Management Plan and the Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania (DPIPWE, Stewart and Askey-Doran, 2015). Weed management should be undertaken prior to the commencement of works.

 Any soil or gravel imported to the site for construction or landscaping purposes should be from a weed free source to prevent the establishment of further introduced species on the site.

References

Biosecurity Act 2019.

Available at https://www.legislation.tas.gov.au/view/html/inforce/current/act-2019-022

Commonwealth of Australia (1999) Environment Protection and Biodiversity Conservation Act 1999. No. 91, 1999.

de Salas, M.F. & Baker, M.L. (2019) *A Census of the Vascular Plants of Tasmania, Including Macquarie Island.* (Tasmanian Herbarium, Tasmanian Museum and Art Gallery. Hobart)

DPIPWE (2015) *Guidelines for Natural Values Survey – Terrestrial Development Proposals. Version 1.0. 16th April 2015*. Policy and Conservation Advice Branch. Department of Primary Industries, Parks, Water and Environment, Hobart.

DPIPWE (2015). Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania. (Eds.) Karen Stewart and Michael Askey-Doran. Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania.

FPA (2014), *Identifying swift parrot breeding habitat, Fauna Technical Note No. 3,* Forest Practices Authority, Hobart, Tasmania.

FPA (2016) 'Habitat descriptions and survey notes for Tasmania's threatened flora species', Forest Practices Authority, Hobart, Tasmania

TASVEG 4.0, Released July 2020. Tasmanian Vegetation Monitoring and Mapping Program, Natural and Cultural Heritage Division.

Harris, S and Kitchener, A. 2005, From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation, DPIW, Hobart.

NRE *Threatened Species Note Sheets, Listing Statements and Recovery Plans* Available at https://www.threatenedspecieslink.tas.gov.au/

Nature Conservation Act 2002.

Available at https://www.legislation.tas.gov.au/view/html/inforce/current/act-2002-063

Threatened Species Protection Act 1995.

Available at https://www.legislation.tas.gov.au/view/html/inforce/current/act-1995-083

Appendix 1 – Vascular Plant Species List

Species list - Lowland grassland complex (GCL)						
Recorder: Fiona Walsh Date: Wednesday, 1 May 2024						
Dicotyledons						
ASTERACEAE						
Cirsium vulgare	spear thistle	i				
MYRTACEAE						
Eucalyptus globulus subsp. globulus	tasmanian blue gum					
PITTOSPORACEAE						
Bursaria spinosa subsp. spinosa	prickly box					
POLYGONACEAE						
Acetosella vulgaris	sheep sorrel	i				
SOLANACEAE						
Lycium ferocissimum	african boxthorn	i	d			
wonocotyleaons						
ASPARAGACEAE						
Lomanara longijona	sagg					
POACEAE						
Austrostipa sp. Poa labillardierei var Jabillardierei	silver tussockørass					
Rvtidosperma sp.	Silver tussoekgruss					
Themeda triandra	kangaroo grass					
end = Tasmanian endemic i = introduced						
d = declared weed	~ (Weed Management Act 1999)					
CR = Critically Endangered, EN = Endangered, VU =	= ~ (Environment Protection and Biodi	versity Conserva	tion			
Vulnerable	Act 1999)					
e = endangered v = vulnerable r= rare	~ (Tasmanian Threatened Species Pro	otection Act 199	5)			

Species list *Eucalyptus globulus* dry forest and woodland (DGL)

Recorder: Date: Wednesday, 1 May 2024

Dicotyledons

POACEAE

ASTERACEAE		
Cirsium vulgare	spear thistle	i
Senecio quadridentatus	cotton fireweed	
CARTOPHILLACEAE	correcting knowed	.,
Scierantinus jusciculatus	spreading knawer	V
CONVOLVULACEAE		
Dichondra repens	kidneyweed	
EDICACEAE		
Styphelia humifusa	native cranherry	
Styphena nannjasa	hative cranberry	
FABACEAE		
Acacia dealbata subsp. dealbata	silver wattle	
GENTIANACEAE		
Centaurium erythraea	common centaury	i
	control centuary	
MYRTACEAE		
Eucalyptus globulus subsp. globulus	tasmanian blue gum	
Eucalyptus pulchella	white peppermint	end
Eucalyptus viminalis subsp. viminalis	white gum	
	0	
PITTOSPORACEAE		
Bursaria spinosa subsp. spinosa	ргіскіў вох	
PLANTAGINACEAE		
Plantago lanceolata	ribwort plantain	i
Acetosella vulgaris	sheen sorrel	i
neetosena vargans		1
RUBIACEAE		
Asperula sp.		
Monocotyledons		

Aira caryophyllea subsp. caryophyllea Austrosting sp	silvery hairgrass i
Poa labillardierei var. labillardierei Rytidosperma sp.	silver tussockgrass
Themeda triandra	kangaroo grass
end = Tasmanian endemic i = introduced	
d = declared weed	~ (Weed Management Act 1999)
CR = Critically Endangered, EN = Endangered, VU =	~ (Environment Protection and Biodiversity Conservation
Vulnerable	Act 1999)
e = endangered v = vulnerable r= rare	~ (Tasmanian Threatened Species Protection Act 1995)

Appendix 2 – Natural Values Atlas Records within 5 km

Verified threatened flora records within 5 km of the project area; SS = Tasmanian Threatened Species Protection Act 1995, NS = Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Threatened	flora	within	5000	metres
------------	-------	--------	------	--------

Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Asperula scoparia subsp. scoparia	prickly woodruff	r		n	4	27-Jul-2016
Austrostipa bigeniculata	doublejointed speargrass	r		n	171	11-Feb-2022
Austrostipa blackii	crested speargrass	r		n	3	12-Jan-2022
Bolboschoenus caldwellii	sea clubsedge	r		n	6	01-Mar-1978
Brachyscome rigidula	cutleaf daisy	v		n	4	15-Nov-1998
Caladenia anthracina	blacktip spider-orchid	е	CR	е	1	01-Nov-1842
Caladenia caudata	tailed spider-orchid	v	VU	е	2	31-Aug-1920
Calocephalus citreus	lemon beautyheads	r		n	159	10-Feb-2022
Calocephalus lacteus	milky beautyheads	r		n	9	01-Dec-1992
Carex gunniana	mountain sedge	r		n	2	01-Nov-1984
Colobanthus curtisiae	grassland cupflower	r	VU	n	1	01-Jan-1877
Coronidium gunnianum	swamp everlasting	? e		n	1	01-Jan-1900
Cryptandra amara	pretty pearlflower	е		n	28	09-Dec-2021
Desmodium varians	slender ticktrefoil	е		n	4	09-Jan-2016
Dianella amoena	grassland flaxlily	r	EN	n	718	24-Feb-2022
Discaria pubescens	spiky anchorplant	е		n	1	01-Jan-1880
Eryngium ovinum	blue devil	v		n	31	09-Dec-2021
Eucalyptus risdonii	risdon peppermint	r		е	64	10-Apr-2015
Glycine latrobeana	clover glycine	v	VU	n	12	17-Dec-2008
Gratiola pubescens	hairy brooklime	r		n	1	01-Feb-1892
Haloragis aspera	rough raspwort	v		n	1	05-Mar-1945
Haloragis heterophylla	variable raspwort	r		n	36	23-Nov-2021
Hibbertia basaltica	basalt guineaflower	е	EN	е	143	12-Jan-2022
Isoetopsis graminifolia	grass cushion	v		n	150	13-Jan-2022
Lepidium hyssopifolium	soft peppercress	е	EN	n	8	01-Jun-2006
Lepilaena patentifolia	spreading watermat	r		n	1	27-Feb-1976
Levenhookia dubia	hairy stylewort	x		n	2	01-Jan-1880
Lythrum salicaria	purple loosestrife	v		n	1	01-Mar-1894
Pellaea calidirupium	hotrock fern	r		n	21	12-Jan-2022
Pentachondra ericifolia	fine frillyheath	r		е	1	01-Nov-1891
Pterostylis ziegeleri	grassland greenhood	v	VU	е	34	04-Nov-2016
Pultenaea prostrata	silky bushpea	v		n	46	08-Dec-2021
Ranunculus pumilio var. pumilio	ferny buttercup	r		n	1	27-Sep-1993
Rumex bidens	mud dock	v		n	1	01-Jan-1875
Ruppia megacarpa	largefruit seatassel	r		n	12	10-Mar-2021
Schoenoplectus tabernaemontani	river clubsedge	r		n	3	08-Apr-2020
Scleranthus diander	tufted knawel	v		n	2	09-Nov-2021
Scleranthus fasciculatus	spreading knawel	v		n	2	01-Jun-2006
Senecio squarrosus	leafy fireweed	r		n	18	02-Dec-2021
Stackhousia subterranea	grassland candles	е		n	7	02-Nov-2021
Stuckenia pectinata	fennel pondweed	r		n	2	01-Dec-1891
Teucrium corymbosum	forest germander	r		n	2	18-Jan-1930
Thesium australe	southern toadflax	x	VU	n	1	01-Jan-1804
Triptilodiscus pygmaeus	dwarf sunray	v		n	64	09-Nov-2021
Vallisneria australis	river ribbons	r		n	19	16-Mar-2001
Velleia paradoxa	spur velleia	v		n	4	01-Jan-1999
Vittadinia burbidgeae	smooth new-holland-daisy	r		е	5	04-Nov-2021
Vittadinia cuneata var. cuneata	fuzzy new-holland-daisy	r		n	4	02-Jun-2012
Vittadinia gracilis	woolly new-holland-daisy	r		n	57	04-Nov-2020
Vittadinia muelleri	narrowleaf new-holland-daisy	r		n	296	01-Feb-2022
Vittadinia muelleri (broad sense)	narrow leaf new holland daisy	р		n	41	05-Jan-2005
Xanthoparmelia amphixantha		е		n	38	01-Apr-2014
Xanthoparmelia mannumensis		v		n	3	01-Apr-2009
Xanthoparmelia molliuscula		е		n	11	01-Apr-2009
Xanthoparmelia vicariella		r		е	14	02-Dec-2021

Verified threatened fauna records within 5 km of the project area; SS = Tasmanian Threatened Species Protection Act 1995, NS = Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Threatened fauna within 5000 metres

Verified Records						
Species	Common Name	SS	NS	Bio	Observation Count	Last Recorded
Accipiter novaehollandiae	grey goshawk	е		n	3	23-Feb-2023
Alcedo azurea subsp. diemenensis	azure kingfisher or azure kingfisher (tasmanian)	e	EN	е	1	01-Jan-1900
Aquila audax	wedge-tailed eagle	pe	PEN	n	8	12-Jun-2023
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	е	EN	е	8	21-Feb-2024
Botaurus poiciloptilus	australasian bittern		EN	n	9	17-Dec-2021
Dasyurus maculatus	spotted-tailed quoll	r	VU	n	2	12-Feb-2023
Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	n	3	16-Feb-2024
Dasyurus viverrinus	eastern quoll		EN	n	10	09-Dec-2019
Eagle sp.	Eagle	е	EN	n	2	07-May-2020
Gallinago hardwickii	lathams snipe		VU	n	2	25-Sep-1981
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	15	24-Jun-2023
Hirundapus caudacutus	white-throated needletail		VU	n	2	31-Dec-1980
Lathamus discolor	swift parrot	е	CR	mbe	8	04-Jan-2015
Neophema chrysostoma	blue-winged parrot		VU	n	5	09-Jan-2015
Pardalotus quadragintus	forty-spotted pardalote	е	EN	е	1	14-0 ct-1920
Perameles gunnii	eastern barred bandicoot		VU	n	36	25-Dec-2023
Perameles gunnii subsp. gunnii	eastern barred bandicoot		VU		3	20-Aug-2021
Podiceps cristatus	great crested grebe	v		n	5	30-Nov-2020
Poliocephalus cristatus subsp. australis	great crested grebe	pv			1	07-Dec-1981
Prototroctes maraena	australian grayling	v	VU	ae	4	28-0 ct-1987
Pseudemoia pagenstecheri	tussock skink	v		n	1	01-Dec-2009
Sarcophilus harrisii	tasmanian devil	е	EN	e	40	14-Feb-2024
Thalassarche cauta	shy albatross	v	EN	ae	1	23-Nov-1884
Tyto novaehollandiae	masked owl	pe	PVU	n	8	13-Feb-2019

Unverified Records

Species	Common Name	SS	NS	Bio	Observation Count
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	е	EN	е	1

Threatened fauna within 5000 metres

(based on Range Boundaries)

Species	Common Name	SS	NS	BO	Potential	Known	Core
Litoria raniformis	green and gold frog	v	VU	n	1	0	1
Lathamus discolor	swift parrot	е	CR	mbe	1	0	1
Discocharopa vigens	Ammonite Pinwheel Snail	е	CR		2	0	0
Prototroctes maraena	australian grayling	v	VU	ae	1	0	0
Antipodia chaostola	chaostola skipper	е	EN	ae	1	0	0
Pseudemoia pagenstecheri	tussock skink	v		n	1	0	2
Haliaeetus leucogaster	white-bellied sea-eagle	v		n	3	0	0
Tyto novaehollandiae subsp. castanops	masked owl (Tasmanian)	е	VU	е	1	0	1
Dasyurus maculatus subsp. maculatus	spotted-tailed quoll	r	VU	n	1	0	0
Sarcophilus harrisii	tasmanian devil	е	EN	е	1	0	0
Accipiter novaehollandiae	grey goshawk	е		n	1	0	0
Pardalotus quadragintus	forty-spotted pardalote	е	EN	е	1	0	0
Perameles gunnii	eastern barred bandicoot		VU	n	1	0	1
Aquila audax subsp. fleayi	tasmanian wedge-tailed eagle	e	EN	е	1	0	0
Dasyurus viverrinus	eastern guoll		EN	n	0	0	1

Reference is made to the Traffic Impact Statement below (dated 19 April 2022) which was prepared by PDA Surveyors for a new vehicle access off Glenstone Road for a Strata development of our client's property at 221 Glenstone Road, Bridgewater.

Our client now wishes to lodge an application at Brighton Council for a 3 lot subdivision of the land (CT 185369/0). Please refer proposed lot layout on separate application

It is considered that the Traffic Impact Statement for the Strata development is applicable to the proposed subdivision (as the road location and general arrangement of the lots is the same as that for the Strata development.

Dean Panton BE, FIE Aust, CP Eng, NER

Consultant Civil Engineer

Reference is made to the Traffic Impact Statement below (dated 19 April 2022) which was prepared by PDA Surveyors for a new vehicle access off Glenstone Road for a Strata development of our client's property at 221 Glenstone Road, Bridgewater.

Our client now wishes to lodge an application at Brighton Council for a 3 lot subdivision of the land (CT 185369/0). Please refer proposed lot layout on separate application

It is considered that the Traffic Impact Statement for the Strata development is applicable to the proposed subdivision (as the road location and general arrangement of the lots is the same as that for the Strata development.

Dean Panton BE, FIE Aust, CP Eng, NER

Consultant Civil Engineer

TRAFFIC IMPACT STATEMENT

PROPOSED NEW ENTRANCE 221 GLENSTONE ROAD

GLENSTONE ROAD BRIDGEWATER

28 February 2022 (updated 19 April 2022)

Job Number 47359HC

Prepared by

Dean Panton BE, FIE Aust, CP Eng NER

Civil Engineer



1. STATEMENT OF QUALIFICATION & EXPERIENCE

This TIS has been prepared by an experienced and qualified civil engineer with over 40 years' experience in road and intersection design. This TIS was prepared by Dean Panton. Dean's experience and qualifications are briefly outlined as follows;

- Bachelor of Engineering (Civil) University of Tasmania, 1975
- Fellow,

•

- Institution of Engineers, Australia - Institution of Engineers, Australia
- Member, Civil College
 - Registered NER Institution of Engineers, Australia
- Certified Municipal Engineer Tasmania
- Certified Hydraulic Engineer Tasmania
- Member, Australian Water and Wastewater Association
- Member, Concrete Institute of Australia

Dean is a Consultant to PDA Surveyors Engineers & Planners and was formerly a Director of the firm for many years. Dean has undertaken numerous Traffic Impact Statements and then the resulting road network design for developments of all sizes for PDA's varied client base, including large residential & industrial subdivisions.

2. INTRODUCTION

A new development is being proposed by Bullock Civil Contracting for the area of land shown below (Figure-1) contained in CT 164049/4 located at 221 Glenstone Road, Bridgewater Bullock Civil Contracting have arranged to purchase 11ha of land from the Crown at the southern end of the CT 164049/4. This land has had a new title issued (CT 181190-1) however the final transfers of the title have yet to occur to reflect the change in ownership.

This Traffic Impact Statement has been prepared in support of the proposed new entrance. It outlines the impact of the proposed new entrance location on the Glenstone Road

The statement is based on the Department of State Growth's Glenstone Road (Station - A1105100 & Station- A1105120) annual road usage trend. An onsite sight distance investigation at the intersection of proposed site and Glenstone Road has also been conducted by PDA Surveyors.



Figure 1: Glenstone Road shown with the subject land parcel (CT 164049/4) shaded orange.

Area shaded purple (CT 163911/2) was previously occupied by Bullock Civil Contracting.



Figure 2: Proposed new entrance location. Distance from existing entrance to proposed 380m

Development Proposal

The current proposal is for a new access road to service the land for future development. Once fully developed the proposed development area is for a 11ha industrial development accessed via Glenstone Road. Future development of the land will be via separate applications, however the ability to access the land and provide services to any future development is critical as the first stage of development.

3. TRAFFIC IMPACT ASSESSMENT

Traffic Generation

Traffic generation rates were sourced from the Roads and Traffic Authority of NSW publication, Guide to Traffic Generating Developments, 2002 (RTA Guide). The RTA Guide provides the following equations for the peak hour traffic generation of Factories:

Rates.

Daily vehicle trips = 5 per 100 m2 gross floor area

Evening peak hour vehicle trips = 1 per 100 m2 gross floor area.

Given a total developable site area of 11 hectares, the total gross leasable floor area is expected to be in the order of 11,000m2 (approximately 10% of total site area). This results in a traffic generation as follows:

Peak hour vehicle trips (PVT) = 110 vehicles per hour

The proposed industrial subdivision is therefore likely to generate in the order of 550 vehicles per day based on the total site area as set out in the RMS Guide when fully developed.

It is noted that the proposed access is opposite the existing Toll entrance point, the Toll site exit is located to approximately 500m south of the proposed access.

As shown in figure 3 below as Glenstone Road has been designed with a central turn lane there is little to no conflict of turning paths. All turning vehicles either entering or exiting 221 Glenstone Road or entering the Toll site will be travelling at low speed and the intersection has ample sight distance.

The construction of a future access point/road was catered for at the time of the construction of the Glenstone Road with the earth works already partially undertaken as shown in figure 5 below.

3.1. ANNUAL AVERAGE DAILY TRAFFIC (AADT)

Based on DSG'S report generated on 3rd November,2020:

Current Data:

In 2019 Glenstone Road had an AADT of

3506 vehicles/day towards/from Bridgewater with 39.9% of the traffic counted to be trucks.

1042 vehicles/day towards/from Brighton with 34.4% of the traffic counted to be trucks.

Forecast Data:

It has been forecast in DSG's report that in 2021

The AADT on Glenstone Road is projected to be 3925 vehicles/day with an annual growth rate of 8.510% towards/from Bridgewater; and

The AADT on Glenstone Road is projected to be 1021 vehicles/day with an annual growth rate of 3.733% towards/from Brighton;

Assume a similar ratio for the traffic generated by the strata development.
The AADT on Glenstone Road from the strata is projected to be 430 vehicles/day or an overall increase of 10.9%

The AADT on Glenstone Road from the strata is projected to be 110 vehicles/day or an overall increase of 10.3%

3.2. SIGHT DISTANCE AT THE INTERSECTION OF 221 GLENSTONE ROAD

Upon inspecting on site, we found that the proposed intersection satisfied all the requirements of Safe Intersection Sight Distance (SISD) for a design speed of 90km/h (SISD = 210m each side from the conflict point at the intersection) as per TSD-RF01.



It is to be noted that the posted speed limit on Glenstone Road is 70km/h.

Figure 3: Proposed driveway overlay at new entrance location



Figure 4: Proposed driveway new entrance location



Figure 5: Proposed driveway new entrance location with pre-existing earthworks highlighted

4. CONCLUSIONS

Upon reviewing the data from DSG and sight distance investigation, it can be said that the proposed new entrance will have no adverse impact on the traffic conditions on Glenstone Road as the current and forecast data already largely incorporates the traffic volume generated by the proposal. Refer to the attached DSG report generated on 3rd November,2020.

Intersections and junctions reach capacity when the total conflicting approach traffic volumes are around 1,500 vehicles/hour. The expected maximum future traffic conflict at the road junction/ entrance during peak traffic periods will be less than 40% of this maximum conflicting traffic volume.



MULCAHY PLANNING

And Property Services

410 Nelson Road Mt Nelson TAS 7007 email: jimsplanning@outlook.com Mobile: 0424 505 184

Bushfire Hazard Report For proposed three-lot subdivision at 221 Glenstone Road, Bridgewater, v1.0

Clients:Bullock Property Developments P/LPrepared by:Jim Mulcahy (BFP-159)Date:September 2024

Contents

Executive Summary 1				
1. Int	roduction3			
1.1	Site Details			
1.2	Site Description			
1.3	Development proposal5			
2. Bu	shfire Hazard Assessment7			
3. Bu	shfire Management Measures 11			
3.1	Hazard Management Areas11			
3.2	Public and Firefighting Access13			
3.3	Firefighting Water Supply17			
3.4	Construction Standards19			
4. Ad	vice			
5. Su	mmary and Conclusions20			
6. Lin	6. Limitations of BHMP			
7. Glossary and Abbreviations21				
8. Re	8. References			
APPEN	NDIX 1 - Illustrative photos of site, access and vegetation			
ATTAC	HMENT 1 – Bushfire Hazard Management Plan (BHMP), pages 1 - 3			
ATTAC	HMENT 2 - Certificate Under S51(2)(D) Land Use Planning and Approvals Act 1993			

Executive Summary

The following Bushfire Hazard Report has been prepared in support of a proposed three-lot subdivision at 221 Glenstone Road, Bridgewater.

The proposed development is within the Bushfire-Prone Areas overlay of the Tasmanian Planning Scheme - Brighton (the Scheme). The Scheme requires that the bushfire risk to the development and appropriate hazard management responses to those risks be considered during the planning process.

The proposed three-lot subdivision has been assessed against the requirements of C13.0 Bushfire-Prone Areas Code (the Code) and AS 3959-2018 Construction of Buildings in Bushfire Prone Areas (AS 3959).

A BHMP has been prepared for the site, prescribing hazard management areas which demonstrate the potential for future habitable buildings on all lots to achieve a Bushfire Attack Level (BAL) rating of BAL-19 under Table 2.4.4 of AS 3959.

The BHMP at Attachment 1 demonstrates compliance with the acceptable solutions for subdivision under the Code and has been certified. It will accompany the final version of this report and will be provided to Brighton Council as part of a development application for the proposed subdivision and minor boundary adjustments.

Disclaimers

Bushfire hazard management

All reasonable steps have been taken to ensure that the information and advice contained in this report is an accurate reflection of the fire hazard affecting the proposed development at the time of the assessment and the hazard management measures necessary to meet the standards prescribed in C13.0 Bushfire Prone Areas Code (the Code) of the Tasmanian Planning Scheme – Brighton (the Scheme) and Australian Standard AS 3959-2018 (AS3959).

The prescribed hazard management measures are designed to reduce bushfire risk to future habitable buildings on the site. The effectiveness of these measures relies on their implementation in full and their maintenance for the life of the development. No liability can be accepted for actions by landowners or third parties that undermine or compromise the integrity of prescriptions and recommendations contained in this report.

Due to the unpredictable nature of bushfires, particularly under extreme weather conditions, landowners should be aware that implementation and maintenance of the hazard management measures outlined in this report cannot guarantee that a building will survive a bushfire event.

Planning Scheme provisions

This report and the attached Bushfire Hazard Management Plan (BHMP) address the requirements of the Code. In so doing, they define building areas which demonstrate the capacity of the proposed new lots to support habitable buildings which can meet the requirements of BAL-19. It is the owners' responsibility to address any other planning requirements relating to use and development of the subject land. Nothing in this report or the attached BHMP should be taken to suggest or imply that the potential building areas will:

- satisfy all relevant provisions of the Scheme in respect of the current application for a three-lot subdivision (one new lot and balance), or
- at the time of any future applications to build on the lots, satisfy any relevant provisions of the planning scheme in force at that time.

Jim Mulcahy

ACCREDITED BUSHFIRE ASSESSOR (BFP-159) CERTIFICATE No: JM_BHR_019 DATE: 26 September 2024

Signed Mulcaly

1. Introduction

The following Bushfire Hazard Report has been developed to address the provisions of C13.0 Bushfire-Prone Areas Code (the Code) of the Tasmanian Planning Scheme – Brighton (the Scheme) in respect of a proposed three-lot subdivision at 221 Glenstone Road, Bridgewater. The report provides an assessment of the bushfire hazard affecting the development and identifies protective features to ensure compliance with the Code in respect of hazard management areas (HMAs), access for firefighting and water supplies for firefighting.

The analysis in this report has been used to prepare a Bushfire Hazard Management Plan (BHMP) which demonstrates the capacity of future habitable buildings on each lot to meet the requirements of BAL-19 under AS 3959-2018 Construction of Buildings in Bushfire-Prone Areas (AS3959).

1.1 Site Details

Landowners:	Bullock Property Developments P/L
Location:	221 Glenstone Road, Bridgewater (Figure 1)
<u>Title:</u>	CT 185369/0 (encompassing strata titles CT 185369/1 and CT 185369/5)
Municipality:	Brighton Council
Zoning:	General Industrial
Scheme Overlays:	Bushfire prone area (whole site),
	Waterway and coastal protection area (drainage line along northern margins)
Type of Development:	Three-lot subdivision
Date of Assessment:	20 th September 2024
Reference Number:	JM_BHR_019

1.2 Site Description

Maps showing the location and context of the subject land are shown at Figure 1 and Figure 2, while illustrative photos are provided in Appendix 1.

The land being subdivided and requiring assessment under the Code consists of a single title +/- 11.0 ha in size which currently encompasses two strata titles. The lot lies west of Glenstone Road in the Brighton Industrial Hub. It is bound to the east by Glenstone Road, with over 380 m road frontage on this aspect. The lot can be accessed either via a formed and sealed property access within a Crown road reservation at the southern end of the site, or from a formed gravel property access coming directly from Glenstone Road in the northeast corner of the lot.



Figure 1 – Site Location (Source: theLIST 2024)



Figure 2 – Site Context and Zoning Map (Source: theLIST 2024)

The property has an easterly aspect, with an altitudinal range of 60 - 91 m above sea level and moderate slopes typically in the range of $2 - 6^\circ$. Until recently, the whole site was occupied by pasture, but a range of industrial activities have been undertaken in recent years affecting vegetation cover at the site. Currently, the west and southwest of the site are not vegetated, being occupied by recently excavated gravel / rock base or gravel fill, while the northeast and southeast are occupied by vegetation best categorised as pasture / grassland.

The site is serviced with power and reticulated water, but existing hydrants are all located across Glenstone road to the east and are not accessible for use in service of the proposed lots.

Surrounding land is a mix of General Industrial and Rural zoning (see Figure 2). The industrial land across Glenstone Road to the east has all been developed and is largely free of vegetation. The industrial land to the northeast and southwest of the site is largely undeveloped and is mostly occupied by pasture, with some small areas dominated by blackberry and other shrubby weeds. The rural land to the north of the site is mostly occupied by pasture, with some small patches of remnant woodland (scattered eucalypts and native box).

1.3 Development proposal

It is proposed to subdivide the existing title (which currently encompasses two strata titles) into three freehold titles and a new road lot (see Figure 3), resulting in the following new lots:

- a lot +/- 5.86 ha in size taking its access from the existing road reservation to the south and capturing the existing industrial uses by Bullock Civil Contracting (Lot 1),
- a vacant lot +/- 1.47 ha in size along the frontage to Glenstone Road (Lot 2),
- a vacant lot +/- 2.13 ha in size located in the northeast and comprising only a minor alteration to the boundaries and area of the existing strata lot at that location (Lot 4), and
- a new road lot +/- 6439 m² in size along the northern boundary of the site.

Minor boundary adjustments are also proposed with the adjoining titles to the northeast and northwest ('Lot 3' and 'Lot 5' on the Plan of Subdivision). Minor boundary adjustments do not constitute subdivision under the Scheme and do not require assessment under the Code.

In terms of access provisions, it is proposed that:

- Lot 1 will have its primary access from the new road along the northern boundary but also retain the existing access from the private road within a Crown road reservation at the southern end of the site,
- Lot 2 will be accessed via a new driveway from the existing private road at the southern end of the site, and
- Lot 4 will be accessed from the new road along the northern boundary (there is an existing concept design by PDA Surveyors for access, parking and trafficable areas on this lot).

Bushfire Hazard Report - three-lot subdivision at 221 Glenstone Road, Bridgewater



Figure 3 – Plan of proposed subdivision and minor boundary adjustments (Veris Surveying, September 2024)

2. Bushfire Hazard Assessment

<u>Bushfire Hazard</u>: the bushfire hazard at the site is posed by fuel loads, slope and classified vegetation in the form of C. Shrubland (actual and potential) and G(i) Grassland (potential).

<u>Potential Bushfire Attack Mechanisms</u>: radiant heat, ember attack, wind, flame, and smoke are all potential mechanisms impacting the site.

Bushfire Threat

In terms of the probability of extreme fire weather conditions, the highest threat is from pasture (potential grassland) and woodland remnants in the broader landscape to the north and northwest, which are the directions of prevailing fire weather conditions.

In terms of vegetation and slope which may impact fire behaviour, the greatest threat is probably from the relatively large areas of undisturbed forest in the broader landscape downslope to the west and southwest, although extreme fire weather is unlikely from southerly aspects.

Bushfire threat within 100 m of the potential building areas is mostly posed by the surrounding areas of pasture (potential grassland). Left unmanaged, particularly after periods of rain, pasture can rapidly develop fuel loads that can support a grassfire. Grassfires spread rapidly and can generate a lot of radiant heat and surprisingly large flames relative to the height of the grass.

<u>Fire History</u>: the fire history layer on theLIST indicates that land adjoining the site to the west and southwest, including the pasture immediately adjoining the site, was subject to bushfire in 1982 (Dromedary 2 Fire) and again in 2003 (Broadmarsh-Bluff Road fire).

Fire Danger Index (FDI): an FDI of 50 applies across Tasmania.

Classified Vegetation

Vegetation was assessed within 500 m of the potential building areas for context, and in more detail within 100 m in all directions. For the purposes of this assessment and as per the classifications in Table 2.3 of AS 3959-2018:

- areas to the west of the subject land dominated by blackberry and other shrubby weeds have been classified as C. Shrubland (actual and potential), and
- all areas of pasture / grassland have been classified as G(i) Grassland (potential).

Hazard Assessment

The subject land and surrounds were surveyed by the author on 20th September 2024. Information and images were collected which allowed assessment of Bushfire Attack Level (BAL) using Method 1 (Simplified Procedure) of AS3959. Refer to Figure 4 and Tables 1 - 3 for a summary of the Bushfire Hazard Assessment.



Figure 4 – Bushfire Hazard Assessment Map

Direction	Vegetation Classification [#]	Effective Slope under vegetation	Distance from BA (m)	Current BAL rating	Separation for BAL-19 (m)	Prescribed HMA separation distance
Northeast	Non vegetated (quarry and road)	-	0-42	-	-	To boundary
	G(i) Grassland (potential)	+/- flat across slope	42 - 100	BAL-LOW	-	(10 m)
Southeast	Non vegetated (quarry and road)	-	0 - 11	-	-	To boundary
	G(i) Grassland (potential)	Downslope 1-5°	11 - 84	BAL-19	11 - < 16	(11 m)
	G(i) Grassland (potential)	Downslope 20 ^o	84 - 100	BAL-LOW	-	
Southwest	G(i) Grassland (potential)	+/- flat across slope	0 - 15	BAL-FZ	10 - < 14	To boundary
	Non veg. & low threat (road & verge)*	-	15 - 20	-	-	(10 m)
	G(i) Grassland (potential)	+/- flat across slope	20 - 70	BAL-12.5	-	
	G(i) Grassland (potential)	Downslope 1-5°	70 - 100	BAL-LOW	-	
West	Non vegetated (quarry and road)*	-	0-14	-	-	To boundary
	C. Shrubland	Upslope	14 - 29	BAL-19	13 - < 19	(14 m +)
	Non veg. & low threat (road & verge)*	-	29 - 38	-	-	
	C. Shrubland	+/- flat across slope	38 - 100	BAL-12.5	-	
Northwest	Non vegetated (quarry)	-	0 – 10	-	-	To boundary
	G(i) Grassland (potential)	Upslope	10 - 100	BAL-19	10 - < 14	(10 m)

Table 1 – Separation distance calculations for the potential building area (BA) on Lot 1

[#] Classification as per AS3959-2018 Figures 2.4(A)-2.4(G)

* Exclusion under AS3959-2018 2.2.3.2

Direction	Vegetation Classification [#]	Effective Slope under vegetation	Distance from BA (m)	Current BAL rating	Separation for BAL-19 (m)	Prescribed HMA separation distance
Northeast	G(i) Grassland (potential)	Downslope 1-5°	0 - 100	BAL-19	11 - < 16	11 m
Southeast	G(i) Grassland (potential)	Downslope 1-5°	0 -43	BAL-FZ	11 - < 16	11 m
	G(i) Grassland (potential)	Downslope 20°	43 - 69	BAL-12.5	-	
	Non veg. & low threat (road, verge & industrial buildings / parking)*	-	-	-	-	
Southwest	G(i) Grassland (potential)	+/- flat across slope	0 - 30	BAL-FZ	10 - < 14	To boundary
	Non veg. & low threat (road & verge)	-	30 - 40	-	-	(10 m)
	G(i) Grassland (potential)	+/- flat across slope	40 - 100	BAL-12.5	-	
Northwest	Non vegetated (trafficable areas & quarry)*	-	0 – 100	-	-	None

Table 2 - Separation distance calculations for the potential building area (BA) on Lot 2

Table 3 - Separation distance calculations for the potential building area (BA) on Lot 4

Direction	Vegetation Classification [#]	Effective Slope under vegetation	Distance from BA (m)	Current BAL rating	Separation for BAL-19 (m)	Prescribed HMA separation distance
Northeast	G(i) Grassland (potential)	+/- flat across slope	0 - 10	BAL-FZ	10 - < 14	To boundary
	Non vegetated (road & verge)*	-	10 – 24	-	-	(10 m)
	G(i) Grassland (potential)	+/- flat across slope	24 - 100	BAL-12.5	-	
Southeast	G(i) Grassland (potential)	Downslope 1-5°	0 -45	BAL-FZ	11 - < 16	11 m
	G(i) Grassland (potential)	Downslope 20 ^o	45 - 67	BAL-12.5	-	
	Non veg. & low threat (road, verge & industrial buildings / parking)*	-	-	-	-	
Southwest	G(i) Grassland (potential)	+/- flat to upslope	0 - 100	BAL-FZ	10 - < 14	To boundary (10 m)
Northwest	G(i) Grassland (potential)	Upslope	0 - 10	BAL-FZ	10 - < 14	To boundary
	Non vegetated (quarry)*	-	10 – 100	-	-	(10 m)

[#] Classification as per AS3959-2018 Figures 2.4(A)-2.4(G)

3. Bushfire Management Measures

The site is within the Bushfire-Prone Areas overlay of the Tasmanian Planning Scheme – Brighton (the Scheme). The potential building areas on all lots are within 100 m of bushfireprone vegetation as defined under AS3959, in the form of C. Shrubland (actual and potential) and G(i) Grassland (potential).

The requirements for subdivision in a bushfire-prone area are set out under clause C13.6.1 of C13.0 Bushfire-Prone Areas Code of the Scheme (the Code).

The proposed subdivision must comply with the following clauses of the Code (shaded clauses in Table 3).

CLAUSE	ISSUE
C13.2	Application of Code
C13.3	Definition of Terms
C13.4	Use or Development Exempt from this Code
C13.5	Use Standards
C13.5.1	Vulnerable uses
C13.5.2	Hazardous uses
C13.6	Developments Standards for Subdivision
C13.6.1	Provision of hazard management areas (HMAs)
C13.6.2	Public and firefighting access
C13.6.3	Provision of water supply for firefighting purposes

Table 3 – Compliance with C13.0

3.1 Hazard Management Areas

The objectives of providing hazard management areas (HMAs) are:

- to facilitate an integrated approach between subdivision and subsequent building on a lot, and
- to provide for sufficient separation of building areas from bushfire-prone vegetation to reduce radiant heat levels, direct flame attack and ember attack at the building area.

HMAs provide cleared space between buildings and bushfire hazards. Any vegetation in these areas needs to be maintained in a low fuel state to protect buildings from direct flame contact, ember attack and intense radiant heat, thereby allowing them to be defended from lower intensity bushfires.

Further information on the maintenance of HMAs can be found at the Tasmania Fire Service (TFS) website:

http://www.fire.tas.gov.au/Show?pageId=colBuildingForBushfire.

Requirements

In summary, the acceptable solutions under C13.6.1 A1 of the Code require that:

- a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision, or
- b) The proposed plan of subdivision:
 - (ii) shows the building area for each lot, and
 - (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of AS3959.

Current conditions

Currently, the west and southwest of the site are not vegetated, being occupied by recently
excavated gravel / rock base or gravel fill, while the northeast and southeast are occupied
by pasture / grassland.

Adjoining land within 100m of potential building areas is largely undeveloped and is mostly occupied by pasture, with some small areas dominated by blackberry and other weeds.

- For the purposes of this assessment and as per the classifications in Table 2.3 of AS 3959-2018:
 - areas to the west of the subject land dominated by blackberry and other shrubby weeds have been classified as C. Shrubland (actual and potential), and
 - o all areas of pasture / grassland have been classified as G(i) Grassland (potential).

Compliance

 The bushfire hazard assessment indicates that any future habitable buildings within the potential building areas will require HMAs to provide separation distances from bushfire prone vegetation sufficient to meet the requirements of BAL-19 under Table 2.4.4 of AS3959 (see Figure 4 and Tables 1 - 3).

- All lots can accommodate HMAs meeting the requirements of BAL-19 entirely within the lot boundaries.
- The BHMP at Attachment 1 defines HMAs with sufficient separation distances from bushfire prone vegetation to allow future habitable buildings within the potential building areas on all lots to achieve BAL-19 separation from surrounding bushfire prone vegetation.

Establishment and maintenance of hazard management areas (HMAs)

- The prescribed HMAs must be established at the time of constructing any habitable buildings on the lots.
- Establishment and maintenance of HMAs will require regular mowing, slashing or grazing of any pasture such that it meets the definition of low-threat vegetation (as defined by Clause 2.2.3.2 of AS3959-2018, eg less than 100 mm in height).
- Mature trees and shrubs can be established within the HMAs without compromising bushfire hazard management outcomes. When establishing trees and shrubs within the HMAs, the following standards should be met:
 - no tree branches should overhang habitable buildings and preferably no branches/canopy should be within 10 m of habitable buildings,
 - o trees and shrubs should be separated to create discontinuous 'clumps',
 - o at least 5 m horizontal separation should be maintained between tree canopies, and
 - low branches should be removed to create a minimum 2 m vertical separation between tree canopy and underlying shrubs or ground cover.
- To minimise bushfire hazard to habitable buildings, HMAs must be maintained as low threat vegetation and/or non-vegetated land for the life of the development.
- The need to maintain effective HMAs into the future must be considered when planting gardens and landscaping. An annual inspection and maintenance of HMAs should be conducted prior to the bushfire season or any other identified period of high fire risk and any flammable material such as leaves, litter and wood piles should be removed.

3.2 Public and Firefighting Access

The objectives for roads, property access and fire trails within a subdivision are:

- to allow safe access and egress for residents, fire fighters and emergency services personnel,
- to provide access to the bushfire-prone vegetation that allows both the property to be defended when under bushfire attack and for hazard management works to be undertaken,
- to provide access to water supplies for fire appliances,

- that design and construction allow for fire appliances to be manoeuvred, and
- that design allows connectivity, and where needed, offers multiple evacuation points.

The requirements for public and firefighting access within a subdivision are detailed in C13.6.2 of the Code. In summary, the acceptable solutions are that:

- TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of firefighting, or
- b) A proposed plan of subdivision showing the layout of roads ... and the location of property access to building areas, is included in a bushfire hazard management plan that:
 - (i) demonstrates proposed roads will comply with Table C13.1 and proposed property accesses will comply with Table C13.2, and
 - (ii) is certified by the TFS or an accredited person.

Requirements for Roads

The following summarises the acceptable solutions for roads pursuant to Table C13.1 of the Code:

- two-wheel drive, all-weather construction,
- o load capacity of at least 20 tonnes, including for bridges and culverts,
- minimum carriageway width is 7 m for a through road, or 5.5 m for a dead-end or culde-sac road,
- minimum vertical clearance of 4 m,
- o minimum horizontal clearance of 2 m from the edge of the carriageway,
- o cross falls of less than 3 degrees (1:20 or 5%),
- maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads,
- curves with a minimum inner radius of 10 m,
- dead-end or cul-de-sac roads are not more than 200 m in length unless the carriageway is 7 m in width,
- dead-end or cul-de-sac roads have a turning circle with a minimum 12 m outer radius; and
- carriageways less than 7 m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard, AS 1743-2001 Road signs -Specifications.

Current and proposed conditions

- Glenstone Road is a sealed public road +/- 12 m wide where it fronts the subject land.
- The existing road formation from Glenstone Road in the northeast of the site and within the proposed new road lot is a gravel road +/- 10 m wide.

There is currently no formed turning circle along the existing road formation, although the site provides ample space for vehicle turning. The width of the proposed road lot on the plan by Veris Surveying (20 m) is insufficient for a compliant turning area to be constructed within the bounds of the lot.

Compliance

- Glenstone Road provides compliant road access to the site for firefighting purposes.
- The existing road formation from Glenstone road in the northeast of the site and within the proposed new road lot provides a compliant road for firefighting purposes except for the absence of a formed turning circle.
- The BHMP at Appendix 1 shows indicative road design provisions which demonstrate the potential for the proposed new road to comply with the acceptable solutions under C13.6.2 and Table C13.1 of the Code.
- At the time of construction, owners / developers must ensure the road is compliant in all respects with Table C13.1 of the Code, as summarised above.

Requirements for Property Access

The requirements for property access within a subdivision are detailed in C13.6.2 of the Code. In summary, the acceptable solutions are that:

- a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of firefighting, or
- b) A proposed plan of subdivision showing the location of property access to building areas is included in a bushfire hazard management plan that:
 - (i) demonstrates proposed private accesses will comply with Table C13.2, and
 - (ii) is certified by the TFS or an accredited person.

Where property access length is less than 30 m or access is not required for a fire appliance to access a firefighting water point, there are no specified design and construction requirements for property access (Table C13.2 Element A).

The following summarises the requirements for property access which is more than 30 m long or is required to access a firefighting water point pursuant to Table C13.2 Elements B and C of the Code:

- all weather construction,
- o load capacity of at least 20 tonnes, including for bridges and culverts,
- o minimum carriageway width of 4 m,
- o minimum vertical clearance of 4 m,
- o minimum horizontal clearance of 0.5 m from the edge of the carriageway,
- o cross falls of less than 3 degrees (1:20 or 5%),
- o dips less than 7 degrees (1:8 or 12.5%) entry and exit angle,
- curves with a minimum inner radius of 10 m,
- maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads, and
- terminate with a turning area for fire appliances provided by one of the following:
 - a turning circle with a minimum outer radius of 10m, or
 - a property access encircling the building, or
 - a hammerhead "T" or "Y" turning head 4 m wide and 8 m long, and
- where property access length is 200 m or greater, passing bays of 2 m additional carriageway width and 20 m length must also be provided every 200 m.

Current and proposed conditions

- There is existing access to the site via:
 - a sealed private road +/- 4 m wide within a Crown road reservation at the southern end of the site, and
 - a gravel property access from Glenstone road in the northeast of the site and within the proposed new road lot that is +/- 10 m wide.
- The Plan of subdivision does not include much detail of proposed property access arrangements for the various lots, but it is proposed that:
 - Lot 1 will have its primary access from the new road along the northern boundary but also retain the existing access from the existing private road within a Crown road reservation at the southern end of the site,
 - Lot 2 will be accessed via a new driveway from the existing private road at the southern end of the site, and
 - Lot 4 will be accessed from the new road along the northern boundary (there is an existing concept design by PDA Surveyors for access, parking and trafficable areas on this lot).

Compliance

- The BHMP at Appendix 1 shows indicative property access provisions which demonstrate the potential for future habitable buildings on all lots to access a hydrant in association with a suitable hardstand area:
 - the indicative hydrant location for Lot 1 relative to the potential building area means that property access may not be required to access a firefighting water point on this lot and as such, property access could comply with Table C13.2 Element A (no specific design and construction requirements),
 - an indicative property access is shown for Lot 2 which can meet the requirements of Table C13.2 Element B, being 4 m wide, less than 200 m long and ending in a compliant 'T' turning area, and
 - the concept design by PDA Surveyors for access, parking and trafficable areas on Lot 4 has been shown, which can meet the requirements of Table C13.2 Element B by providing an access at least 4 m wide, with less than 200 m between the frontage and the firefighting water point, and a looped access encircling any future buildings.
- At the time of construction of any future habitable buildings, owners / developers must ensure that property access to service those buildings is compliant in all respects with Table C13.2 of the Code.

3.3 Firefighting Water Supply

The objective in provision of water supply for firefighting purposes is that:

• adequate, accessible and reliable water supply for the purposes of firefighting can be demonstrated at the subdivision stage and allow for the protection of life and property associated with the subsequent use and development of bush fire-prone areas.

Requirements

The development occurs in an area serviced with a reticulated water supply. The requirements for provision of reticulated water supplies for firefighting purposes are detailed in C13.6.3 A1 and Table C13.4 of the Code.

In summary, the acceptable solutions are that:

- a) The TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant provision of a water supply for firefighting purposes,
- b) A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by the TFS or accredited person as being compliant with Table C13.4.

The following summarises the requirements for reticulated water supplies for firefighting pursuant to Table C13.5 of the Code.

Distance between building area to be protected and water supply:

- The building area to be protected must be located within 120 m of a fire hydrant, and
- The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area.

Design criteria for fire hydrants

The following standards apply:

- A fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition, and
- Fire hydrants are not installed in parking areas.

Hardstand

A hardstand area for fire appliances must be provided:

- No more than 3 m from the hydrant, measured as a hose lay,
- No closer than 6 m from the building area to be protected,
- With a minimum width of 3 m constructed to the same standard as the carriageway,
- Connected to the property access by a carriageway equivalent to the standard of the property access.

Current conditions

- The site is serviced with reticulated water but there are currently no dedicated firefighting water supplies.
- There are existing hydrants located across Glenstone road to the east, but these hydrants are not accessible for the purposes of servicing the subject land.
- There is existing 150 mm water reticulation in place to service all proposed lots.

Compliance

• For the purposes of this report, it is assumed that any future habitable buildings on site can and will be serviced with compliant hydrants located within 120 m hose lay of the furthest parts of those habitable buildings.

- The indicative locations of hydrants and indicative hardstand provisions shown on the BHMP at Attachment 1 demonstrate the capacity of all lots to support reticulated water supplies compliant with the Code.
- Water supplies for firefighting to service all lots must be provided at the time of building on the lots and must be completed to a compliant standard prior to the occupation of any habitable buildings.
- At the time of construction / installation, the owners / developers must ensure that new reticulated water supplies for firefighting comply in all respects with the provisions of Table C13.4, as summarised above.

3.4 Construction Standards

The attached BHMP only certifies that future habitable buildings constructed within the potential building areas on all lots can achieve the separation distances required to allow construction to BAL-19 (Section 6 of AS3959).

Section 11F (2) (a) of the Tasmanian *Building Act 2016* provides that the attached BHMP can be used to satisfy the bushfire planning requirements of a subsequent application to build on lots arising from the subdivision for a period of six years from certification. To utilise the attached BHMP for a subsequent building application:

- o construction would have to be within the potential building areas shown on the BHMP,
- o construction standards would have to be at least BAL-19, and
- the furthest part of any proposed habitable building would have to be located within 120 metres hose lay of a compliant hydrant and associated hardstand.

Unless all these conditions can be met, a new Bushfire Hazard Report and BHMP will be required in support of an application for a future habitable building.

4. Advice

The following recommendation does not form part of the requirements being certified under this report and the attached BHMP. It is provided as advice to future owners to ensure effective bushfire hazard management planning for any future habitable buildings.

Recommendation

Notwithstanding the provisions of Section 11F (2) (a) of the Tasmanian *Building Act 2016*, it is recommended that a new report and BHMP be commissioned at the time of constructing any

new habitable buildings on the lots. This will ensure that any changes in the intervening period can be taken into consideration and that the resulting BHMP is tailored to the actual building footprint and the circumstances prevailing at the time of the build.

5. Summary and Conclusions

The proposed three-lot subdivision has been assessed against the requirements of C13.0 Bushfire-Prone Areas Code (the Code) and AS 3959-2018 Construction of Buildings in Bushfire Prone Areas (AS 3959).

A BHMP has been prepared for the site, prescribing hazard management areas which demonstrate the potential for future habitable buildings on all lots to achieve a Bushfire Attack Level (BAL) rating of BAL-19 under Table 2.4.4 of AS 3959.

The BHMP at Attachment 1 demonstrates compliance with the acceptable solutions for subdivision under the Code and has been certified. It will accompany the final version of this report and will be provided to Brighton Council as part of a development application for the proposed subdivision and minor boundary adjustments.

6. Limitations of BHMP

The bushfire protection measures outlined in the BHMP at Attachment 1 are based on a Fire Danger Index of 50 (FDI 50) which relates to a fire danger rating of 'very high'. Defending the property or sheltering within a structure constructed to AS3959-2018 on days when the fire danger rating is greater than 50 (i.e., 'severe' or higher) is not recommended.

Due to the unpredictable nature of bushfire behaviour and the impacts of extreme weather no structure built in a bushfire-prone area can be guaranteed to survive a bushfire. The safest option in the event of a bushfire is to leave the area early and seek shelter in a safe location.

7. Glossary and Abbreviations

AS – Australian Standard

BAL – Bushfire Attack Level – means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per metre squared, and the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire (AS3959-2018).

BFP – Bush Fire Practitioner – a suitably qualified person accredited by the Tasmania Fire Service to undertake assessments of bushfire hazard and certify Bushfire Hazard Management Plans.

BHMP – Bushfire Hazard Management Plan – plan for individual house or subdivision identifying separation distances required between a habitable building(s) and bushfire prone vegetation based on the BAL for the site. The BHMP also indicates requirements for construction, property access and firefighting water.

FDI – fire danger index – relates to the chance of a fire starting, its rate of spread, its intensity and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long- and short-term drought effects (AS3959-2018).

ha - hectares; m - meters

HMA – Hazard Management Area – the area, between a habitable building or building area and the bushfire-prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.

8. References

AS3959-2018. Australian Standard for Construction of buildings in bushfire-prone areas. SAI Global Limited Sydney, NSW Australia.

Building Act 2016. The State of Tasmania Department of Premier and Cabinet. https://www.legislation.tas.gov.au/view/html/inforce/current/act-2016-025

Building Act 2016. Director's Determination – Bushfire Hazard Areas v1.1 (2021) DOC/17/62962. Director of Building Control. https://www.cbos.tas.gov.au/__data/assets/pdf_file/0019/607006/Directors-Determination-Bushfire-Hazard-Areas-v1_1-2021.pdf

Building Regulations 2016. The State of Tasmania Department of Premier and Cabinet. https://www.legislation.tas.gov.au/view/html/inforce/current/sr-2016-110.

Bullock Civil Proposed Subdivision, 221 Glenstone Road, Bridgewater Rev 2 (September 2024). Veris Surveying.

Bullock Civil Contracting Pty Ltd, Industrial Strata Development 221 Glenstone Road, Brighton (February 2023). PDA Surveyors (47359HC / C).

Tasmanian Planning Scheme – Brighton (State Planning Provisions). https://www.planning.tas.gov.au/__data/assets/pdf_file/0011/711002/State-Planning-Provisionseffective- 26-June-2024.PDF

LISTmap 2024. Land Information System Tasmania, Tasmania Government. https://maps.theLIST.tas.gov.au/listmap/app/list/map.

APPENDIX 1 - Illustrative photos of site, access and vegetation

A. Property access



Photo 1: Glenstone Road on approach to the subject land from the south



Photo 2: Crossover to existing private road servicing the subject land from the south



Photo 3.: Lower section of existing private road servicing the subject land from the south



Photo 4: Upper section of existing private road servicing the subject land from the south



Photo 5: Internal drive to infrastructure on proposed Lot 1 from the existing private road servicing the subject land from the south



Photo 6: Glenstone road on approach to the proposed new road at the northern end of the site



Photo 7: Crossover from Glenstone road to the proposed new road at the northern end of the site



Photo 8: Formed crossover from the proposed new road to the eastern end of proposed Lot 4



Photo 9: Formed crossover from the proposed new road to the western end of proposed Lot 4

B. Vegetation on and around proposed Lot 1



Photo 10: Proposed Lot 1 viewed from the northwestern boundary



Photo 11: Proposed Lot 1 viewed from the northeastern boundary



Photo 12: Existing built infrastructure and parking at the southern end of proposed Lot 1



Photo 13: Managed land and potential grassland along the southwestern boundary of proposed Lot 1 (boundary fence at right)



Photo 14: Managed land southwest of proposed Lot 1



Photo 15: Potential grassland within the easement inside the southwestern boundary of proposed Lot 1



Photo 16: Typical area of potential grassland southwest of proposed Lot 1



Photo 17: Shrubland (blackberry and fennel), managed land and potential grassland west of proposed Lot 4



Photo 18: Typical area of potential grassland northwest of proposed Lot 1



Photo 18: Potential grassland north of proposed Lot 1



Photo 19: Managed land and potential grassland northeast of proposed Lot 1 with new road formation in the foreground
C. Vegetation on and around proposed Lot 2



Photo 20: Indicative building area on proposed Lot 2 when viewed from near the southern boundary



Photo 21: Indicative building area on proposed Lot 2 when viewed from the northern boundary



Photo 21: Potential grassland and private road south of the indicative building area on proposed Lot 2, with alignment of indicative property access at far left



Photo 22: Potential grassland east of the indicative building area on proposed Lot 2, with industrial buildings beyond Glenstone Road in the background



Photo 23: Non-vegetated land west of the indicative building area on Lot 2 (on proposed Lot 1)



Photo 24: Potential grassland north of the indicative building area on Lot 2 (on proposed Lot 4)

D. Vegetation on and around proposed Lot 4



Photo 25: Potential grassland on proposed Lot 4 when viewed from the northern boundary



Photo 26: Potential grassland east of the indicative building area on proposed Lot 4, with industrial buildings beyond Glenstone Road in the background



Photo 27: Non-vegetated land southwest of proposed Lot 4 (on proposed Lot 1)



Photo 28: Looking along the western boundary of proposed Lot 4 from the northwest corner, with potential grassland on Lot 4 at left and non-vegetated land on proposed Lot 1 at right



Photo 29: Managed land and potential grassland north of the indicative building area on proposed Lot 4, with formed crossover to the lot in the foreground and formation of proposed new road in the middle ground

ATTACHMENT 1. Bushfire Hazard Management Plan – proposed three-lot subdivision at 221 Glenstone Road, Bridgewater, v1.0, September 2024, page 1 of 3



1. Hazard Management Areas (HMAs) (see pages 2 and 3)

- a) HMAs must be established at the time of building on the lots and prior to the occupation of any habitable buildings. b) To be effective, HMAs must be maintained as 'low threat vegetation' or 'non-vegetated land' (as defined by Clause
 - 2.2.3.2 of AS3959) for the life of the development.
- c) No tree branches should overhang habitable buildings.
- d) Trees & shrubs should be separated to create discontinuous 'clumps' and a minimum 10 m separation should be maintained between clumps of shrubs.
- e) Horizontal separation of at least 5 m should be maintained between tree canopies and low branches should be removed to create at least 2 m vertical separation between tree canopy and underlying shrubs or ground cover.
- f) Grassland, pasture & lawn must be kept short (< 100 mm).
- g) Fine fuels such as leaves, bark and twigs should be removed from the ground periodically, particularly leading into summer or any other identified period of high fire risk.
- h) Flammable vegetation should not be retained or planted under or directly adjacent to habitable buildings (particularly decks, flammable cladding and glazed elements) or in corridors which can act as a 'wick' to channel fire to habitable buildings.
- Flammable material such as firewood, building materials, organic mulch and fuel should not be stored under nor directly adjacent to decks or habitable buildings.

2. Access for firefighting

- a) Pages 1 3 of this plan show indicative road provisions which can comply with the acceptable solutions under C13.6.2 and Table C13.1 of the Code.
- b) The new section of road must be completed to a compliant standard prior to the sealing of final plans.
- c) Property access is not required to access a firefighting water point on Lot 1 and as such, is not required to meet any specific design and construction requirements, pursuant to Table C13.2 element A.
- d) Pages 1 3 of this plan show indicative property access provisions to service Lots 2 and 4 which are 4 m wide and provide compliant turning areas.
- e) Property access must be constructed at the time of building on the lots and must be compliant with Table C13.2 of the Bushfire Prone Areas Code (the Code) prior to occupancy of any habitable buildings.

3. Water Supply for Firefighting

- a) Pages 1 3 of this plan show indicative new water hydrants to service all lots located within 3 m of a hardstand, more than 6 m from indicative building areas, and with the potential to be located within 120 m hose lay of the furthest parts of future habitable buildings.
- b) Water supplies for firefighting to service all lots must be provided at the time of building on the lots and must be compliant with Table C13.5 of the Code prior to the sealing of the final plans.

4. Construction Standards

a) This plan only certifies that future habitable buildings on all lots can achieve the separation distances required to allow construction to BAL-19.





1. Hazard Management Areas (HMAs) (see pages 2 and 3)

- a) HMAs must be established at the time of building on the lots and prior to the occupation of any habitable buildings. b) To be effective, HMAs must be maintained as 'low threat vegetation' or 'non-vegetated land' (as defined by Clause
 - 2.2.3.2 of AS3959) for the life of the development.
- c) No tree branches should overhang habitable buildings.
- d) Trees & shrubs should be separated to create discontinuous 'clumps' and a minimum 10 m separation should be maintained between clumps of shrubs.
- e) Horizontal separation of at least 5 m should be maintained between tree canopies and low branches should be removed to create at least 2 m vertical separation between tree canopy and underlying shrubs or ground cover.
- f) Grassland, pasture & lawn must be kept short (< 100 mm).
- g) Fine fuels such as leaves, bark and twigs should be removed from the ground periodically, particularly leading into summer or any other identified period of high fire risk.
- h) Flammable vegetation should not be retained or planted under or directly adjacent to habitable buildings (particularly decks, flammable cladding and glazed elements) or in corridors which can act as a 'wick' to channel fire to habitable buildings.
- Flammable material such as firewood, building materials, organic mulch and fuel should not be stored under nor directly adjacent to decks or habitable buildings.

2. Access for firefighting

- a) Pages 1 3 of this plan show indicative road provisions which can comply with the acceptable solutions under C13.6.2 and Table C13.1 of the Code.
- b) The new section of road must be completed to a compliant standard prior to the sealing of final plans.
- c) Property access is not required to access a firefighting water point on Lot 1 and as such, is not required to meet any specific design and construction requirements, pursuant to Table C13.2 element A.
- d) Pages 1 3 of this plan show indicative property access provisions to service Lots 2 and 4 which are 4 m wide and provide compliant turning areas.
- e) Property access must be constructed at the time of building on the lots and must be compliant with Table C13.2 of the Bushfire Prone Areas Code (the Code) prior to occupancy of any habitable buildings.

3. Water Supply for Firefighting

- a) Pages 1 3 of this plan show indicative new water hydrants to service all lots located within 3 m of a hardstand, more than 6 m from indicative building areas, and with the potential to be located within 120 m hose lay of the furthest parts of future habitable buildings.
- b) Water supplies for firefighting to service all lots must be provided at the time of building on the lots and must be compliant with Table C13.5 of the Code prior to the sealing of the final plans.

4. Construction Standards

a) This plan only certifies that future habitable buildings on all lots can achieve the separation distances required to allow construction to BAL-19.

ATTACHMENT 1. Bushfire Hazard Management Plan – proposed three-lot subdivision at 221 Glenstone Road, Bridgewater, v1.0, September 2024, page 3 of 3



1. Hazard Management Areas (HMAs) (see pages 2 and 3)

- a) HMAs must be established at the time of building on the lots and prior to the occupation of any habitable buildings. b) To be effective, HMAs must be maintained as 'low threat vegetation' or 'non-vegetated land' (as defined by Clause
 - 2.2.3.2 of AS3959) for the life of the development.
- c) No tree branches should overhang habitable buildings.
- d) Trees & shrubs should be separated to create discontinuous 'clumps' and a minimum 10 m separation should be maintained between clumps of shrubs.
- e) Horizontal separation of at least 5 m should be maintained between tree canopies and low branches should be removed to create at least 2 m vertical separation between tree canopy and underlying shrubs or ground cover.
- f) Grassland, pasture & lawn must be kept short (< 100 mm).
- g) Fine fuels such as leaves, bark and twigs should be removed from the ground periodically, particularly leading into summer or any other identified period of high fire risk.
 - Flammable vegetation should not be retained or planted under or directly adjacent to habitable buildings (particularly decks, flammable cladding and glazed elements) or in corridors which can act as a 'wick' to channel fire to habitable buildings.
 - Flammable material such as firewood, building materials, organic mulch and fuel should not be stored under nor directly adjacent to decks or habitable buildings.

2. Access for firefighting

- a) Pages 1 3 of this plan show indicative road provisions which can comply with the acceptable solutions under C13.6.2 and Table C13.1 of the Code.
- b) The new section of road must be completed to a compliant standard prior to the sealing of final plans.
- c) Property access is not required to access a firefighting water point on Lot 1 and as such, is not required to meet any specific design and construction requirements, pursuant to Table C13.2 element A.
- d) Pages 1 3 of this plan show indicative property access provisions to service Lots 2 and 4 which are 4 m wide and provide compliant turning areas.
- e) Property access must be constructed at the time of building on the lots and must be compliant with Table C13.2 of the Bushfire Prone Areas Code (the Code) prior to occupancy of any habitable buildings.

3. Water Supply for Firefighting

- a) Pages 1 3 of this plan show indicative new water hydrants to service all lots located within 3 m of a hardstand, more than 6 m from indicative building areas, and with the potential to be located within 120 m hose lay of the furthest parts of future habitable buildings.
- b) Water supplies for firefighting to service all lots must be provided at the time of building on the lots and must be compliant with Table C13.5 of the Code prior to the sealing of the final plans.

4. Construction Standards

a) This plan only certifies that future habitable buildings on all lots can achieve the separation distances required to allow construction to BAL-19.

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993

1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:	221 Glenstone Road, Bridgewater		
CT 185369/0			
2. Droncood Llos en Develonment			
2. Proposed Use of Development			
Description of proposed Use Three-lot subdivision			
and Development:			
Applicable Planning Scheme: Tasmanian Planning Scheme - Brighton			

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Proposal Plan – three-lot subdivision 221 Glenstone Road, Bridgewater	Veris Surveying	September 2024	Rev 2
Bushfire Hazard Report for proposed three-lot subdivision at 221 Glenstone Road, Bridgewater	Mulcahy Planning and Property Services	September 2024	1.0
Bushfire Hazard Management Plan – proposed three-lot subdivision at 221 Glenstone Road, Bridgewater	Mulcahy Planning and Property Services	26 September 2024	1.0

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

C13.4 – Use or development exempt from this Code	
Compliance test	Compliance Requirement
C13.4(a)	Insufficient increase in risk

C13.5.1 – Vulnerable Uses		
Acceptable Solution Compliance Requirement		
C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
C13.5.1 A2	Emergency management strategy	
C13.5.1 A3	Bushfire hazard management plan	

C13.5.2 – Hazardous Uses		
Acceptable Solution Compliance Requirement		
C13.5.2 P1		
C13.5.2 A2	Emergency management strategy	
C13.5.2 A3	Bushfire hazard management plan	

\boxtimes	C13.6.1 Subdivision: Provision of hazard management areas			
	Acceptable Solution	Compliance Requirement		
	C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.		
	C13.6.1 A1 (a)	Insufficient increase in risk		
\boxtimes	C13.6.1 A1 (b)	Provides BAL-19 for all lots		
	C13.6.1 A1(c)	Consent for mechanism on title		

\boxtimes	C13.6.2 Subdivision: Public and firefighting access		
	Acceptable Solution	Compliance Requirement	
	C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	C13.6.2 A1 (a)	Insufficient increase in risk	
\boxtimes	C13.6.2 A1 (b)	Access for all lots can comply with relevant Table	

\boxtimes	C13.6.3 Subdivision: Provision of water supply for firefighting purposes			
	Acceptable Solution	Compliance Requirement		
	C13.6.3 A1 (a)	Insufficient increase in risk		
	C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table		
	C13.6.3 A1 (c)	Water supply consistent with the objective		
	C13.6.3 A2 (a)	Insufficient increase in risk		
\boxtimes	C13.6.3 A2 (b)	Static water supply for all lots can comply with relevant Table		
	C13.6.3 A2 (c)	Static water supplies consistent with the objective		

5. Bushfire Hazard Practitioner				
Name:	Jim Mu	Icahy	Phone No:	0424 505 184
Postal Address:	s: 410 Nelson Road, Mt Nelson 7007		Email Address:	jimsplanning@outlook.com
Accreditation No:		BFP – 159	Scope:	1 & 3B

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or

The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed: certifier	Mulcaly		
Name:	Jim Mulcahy	Date:	26/09/2024
		Certificate Number:	JM_BHR_019

(For Practitioner Use only)

Aboriginal Heritage SEARCH RECORD

This search for

UNIT 1 221 GLENSTONE RD BRIDGEWATER TAS 7030 (PID 9127843)

has not identified any registered Aboriginal relics or apparent risk of impacting registered Aboriginal relics.

This Search Record has been requested for Danielle Gray at 1:35PM on 03 September 2024 and delivered to danielle@grayplanning.com.au. This Search Record expires on 03 March 2025.

Your personal Search Identification Number is PS0345742.

Please be aware that the absence of records on the <u>Aboriginal Heritage Register</u> for the nominated area of land does not necessarily mean that the area is devoid of Aboriginal relics. If at any time during works you suspect the existence of Aboriginal relics, cease works immediately and contact Aboriginal Heritage Tasmania for advice.

It is also recommended that you have the Unanticipated Discovery Plan on hand during any ground disturbance or excavation activities, to aid you in meeting requirements under the Aboriginal Heritage Act 1975 should Aboriginal relics be uncovered. There are requirements that apply under the *Aboriginal Heritage Act 1975*. It is an offence to destroy, damage, deface, conceal or otherwise interfere with relics without a permit granted by the Minister. There is an obligation to report findings of relics as soon as practicable.

This Search Record is confirmation that you have checked the Aboriginal Heritage Property Search website for this property. This Search Record will expire in six months from the search date.

If you have any queries please do not hesitate to contact <u>Aboriginal Heritage Tasmania</u> on **1300 487 045** or at <u>aboriginalheritage@dpac.tas.gov.au</u>.



Aboriginal Heritage Tasmania Department of Premier and Cabinet

Aboriginal Heritage SEARCH RECORD

This search for

UNIT 5 221 GLENSTONE RD BRIDGEWATER TAS 7030 (PID 9127844)

has not identified any registered Aboriginal relics or apparent risk of impacting registered Aboriginal relics.

This Search Record has been requested for Danielle Gray at 1:33PM on 03 September 2024 and delivered to danielle@grayplanning.com.au. This Search Record expires on 03 March 2025.

Your personal Search Identification Number is PS0345737.

Please be aware that the absence of records on the <u>Aboriginal Heritage Register</u> for the nominated area of land does not necessarily mean that the area is devoid of Aboriginal relics. If at any time during works you suspect the existence of Aboriginal relics, cease works immediately and contact Aboriginal Heritage Tasmania for advice.

It is also recommended that you have the Unanticipated Discovery Plan on hand during any ground disturbance or excavation activities, to aid you in meeting requirements under the Aboriginal Heritage Act 1975 should Aboriginal relics be uncovered. There are requirements that apply under the *Aboriginal Heritage Act 1975*. It is an offence to destroy, damage, deface, conceal or otherwise interfere with relics without a permit granted by the Minister. There is an obligation to report findings of relics as soon as practicable.

This Search Record is confirmation that you have checked the Aboriginal Heritage Property Search website for this property. This Search Record will expire in six months from the search date.

If you have any queries please do not hesitate to contact <u>Aboriginal Heritage Tasmania</u> on **1300 487 045** or at <u>aboriginalheritage@dpac.tas.gov.au</u>.



Aboriginal Heritage Tasmania Department of Premier and Cabinet