# **Public Notification of Application for Planning Permit**

# Land Use Planning and Approvals Act 1993

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The Application will only be available until the conclusion of the public notification period.

For help finding the property and zoning information in Circular Head the following link can be used to the Land Information System Tasmania (the LIST).

http://maps.thelist.tas.gov.au/listmap/app/list/map?bookmarkId=18634#.U-1DpC\_Bd8I.email

For the Tasmanian Planning Scheme – Circular Head please see

https://www.planning.tas.gov.au/other-resources/Tasmanian-planning-scheme

Application documents are available below.

# **APPLICATION FOR PLANNING PERMIT** (s.57(3) Land Use Planning and Approvals Act 1993)

# **Tasmanian Planning Scheme – Circular Head**

Application No	SA 2020/004
Location	Cantara Road, Smithton
Applicant/Owner	516BHP Pty Ltd /Vukasinovic J R
Use Class	Subdivision
Proposal	Subdivision (1 Lot into 19 Lots)
Discretionary Matter	8.6.1 (P4) Lot design, 8.6.2 (P1)
	Roads, 10.6.1 (P1) Lot design, 10.6.2
	(P1) Roads, C9.6.1 (P1) Lot design,
	C15.7.1 (P1) Subdivision within a
	landslip hazard area

Application(s) may be viewed during office hours at the Council Office, 33 Goldie St, Smithton till the date listed below. In accordance with s.**57(5)** of the Act, any person may make written representation to the General Manager, PO Box 348 SMITHTON 7330 or <u>council@circularhead.tas.gov.au</u> and be received by 5.00pm 09/05/2024.

Vanessa Adams GENERAL MANAGER Ph: 03 6452 4800 www.circularhead.tas.gov.au



2850674



33 Goldie Street PO Box 348 SMITHTON TAS 7330 council@circularhead.tas.gov.au (03) 6452 4800 www.circularhead.tas.gov.au

# APPLICATION FOR PERMIT LAND USE PLANNING AND APPROVALS ACT 1993 Tasmanian Planning Scheme – Circular Head

Office Use:	Date Receive	ed:	27/03/202	20	Application No:	SA 2020/00	4	PID: 2850	)674		
To: Planning Authority Circular Head Council PO Box 348 SMITHTON TAS 7330											
DETAILS OF PROPOSED DEVELOPMENT OR USE											
Address:	Lot 2, Ca	antar	a Road, S	mithton							
							Po	ostcode:	7330		
				Lot No:	2	Certificate o	of Title N	lo: P1493	52		
Description Includes:											
Subdivision of 1 lot into 20 lots											
							$\mathbf{X}$	Subdivisio	n		
								New Build	ings		
								Alteration	S		
								Demolitio	n		
Value of w	ork (Inc GS <sup>-</sup>	Г)	\$ 1.2M				Cont	ract Price	🖾 Estimate		
Existing Us	e of Site:	Va	acant Land	k		I					
APPLICAN	NT / OWN	IER I	DETAILS								
Please note listed on th	e that all ap e title neec	plico I to b	ants need be on the j	to sign thi form and s	s form. If the c ign this form.	application is	by an o	wner, all tit	le owners		
Applicant(s	;): Jakob	Vuka	asinovic (	C/- JCA La	nd Consultants	;					
Address:	Suite 9, 30	3 Ma	Iroondah H	Highway, R	lingwood						
							Pos	stcode: 313	34		
Email: tov	vnplanning(	)jcal	c.com.au		Phone: (	)3 9735 4888	6 Mob	oile:			
🔲 Appli	cant owns	the p	oroperty (	Tick if Yes	– If No then co	omplete the	owner d	etails belov	v)		
Owner(s):	516BHP I	ΡΤΥ Ι	LTD (Jako	b Vukasino	ovic)						
Address:	6 Turner	Cour	t, Wodong	ja							
							Pos	tcode: 36	90		
Email: 5	16BHP@g	mail.	com		Phone:		Mob	oile: 0400	563 999		
Applicant(s) listed above declare that the owner(s) of the property have been notified of the intention to make this application.											
Signed By:							Dat	:e:			
COUNCIL	OR CROV	VN I	AND								
Must be sig	ned if Counc	il or (	Crown Land	d and accor	mpanied with a	letter of perm	nission ar	nd a copy of a	delegation.		
Signed By:							Dat	:e:			
Minis	ster (or dele	egate	e) of the r	esponsible	e State Departi	ment or 🔲	Gener	al Manager	(or delegate)		

Doc No:	DW 21 016 1	Edition:	В	Version:	1	Date:	16/07/21	Officer:	TP	Approval:	MDRS	Page 1 of 2



33 Goldie Street PO Box 348 SMITHTON TAS 7330 council@circularhead.tas.gov.au (03) 6452 4800 www.circularhead.tas.gov.au

# APPLICATION FOR PERMIT LAND USE PLANNING AND APPROVALS ACT 1993 Tasmanian Planning Scheme – Circular Head

# **DESIGNER DETAILS**

**Designer Name:** 

Address:

Postcode:

Mobile:

Category:

Email:

Phone:

Accreditation No:

# DOCUMENTS AND CERTIFICATES PROVIDED

The following specified documents and certificates are provided with this application together with any necessary information to demonstrate compliance with applicable provision of the planning scheme. A separate checklist is available from Council. The Planning Scheme provisions can be viewed at <a href="https://www.iplan.tas.gov.au">www.iplan.tas.gov.au</a> OR <a href="https://iplan.tas.gov.au/pages/plan/book.aspx?exhibit=tpscir">https://iplan.tas.gov.au/pages/plan/book.aspx?exhibit=tpscir</a> follow the links through to Circular Head

	Document or Certificate Description	Prepared By
X	Full copy of the current Certificate of Title including plan and any	
	schedule of easements	
$\mathbf{X}$	A full description of the proposed use or development and	
	A description of how the proposed use or development will operate	
	All applicable information listed in clause 6.1.3 including: Where it is proposed to erect buildings, a detailed layout plan of the proposed buildings with dimensions at a scale of 1:100 or 1:200	

LISTED REPORTS, PLANS AND SUPPORTING INFORMATION ACCOMPANYING THIS APPLICATION

**Copyright Authority:** Unless a written refusal of authority to copy documents relating to this application is provided, the Council and the Crown (Tasmanian State Government) departments and agencies may provide a partial or complete copy of any documents relating to this application, to any person for the purpose of assessment. Notwithstanding this these documents may be displayed publicly in accordance with the provisions of the Land Use Planning and Approvals Act 1993, including display on a website.

# DECLARATION

I/We declare the information and details supplied in this application are a true and accurate description of the proposed development.

I/We hereby give/have arranged permission for Council Officers to enter the property to conduct inspections for this application.

# Applicant(s): Jakob Vukasinovic

Signed:	Au	Date: 15/06/2023
Planca No		plicants pood to sign this form. If the application is by an owner, all title owners list.

**Please Note** All applicants need to sign this form. If the application is by an owner, all title owners listed on the title need to be on the form and to sign this form.

#### Privacy Statement

The personal information on this form is required by Council for building purposes under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend or personal information at any time. How we use this information is explained in our Privacy Policy, which is available at www.circularhead.tas.gov.au or at the Council office.

Doc No:	DW 21 016 1	Edition:	В	Version:	1	Date:	16/07/21	Officer:	TP	Approval:	MDRS	Page 2 of 2





SEARCH OF TORRENS TITLE

VOLUME	FOLIO
149352	2
EDITION	DATE OF ISSUE
4	07-Jun-2017

SEARCH DATE : 24-Mar-2020 SEARCH TIME : 11.35 AM

# DESCRIPTION OF LAND

Town of SMITHTON Lot 2 on Plan 149352 (Section 27A of the Land Titles Act.) Derivation : Whole of Lot 2 on Plan 149352 Gtd. to The Crown

# SCHEDULE 1

E5697 TRANSFER to 516BHP PTY LTD Registered 07-Jun-2017 at noon

# SCHEDULE 2

- C726093 Land is limited in depth to 15 metres, excludes minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown M169933 Land is limited in depth to 15 metres, excludes
- minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown M169933 FENCING PROVISION in Transfer

# UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



Search Date: 24 Mar 2020 Search Time: 11:36 AM Department of Primary Industries, Parks, Water and Environment Revision Number: 01

Volume Number: 149352



**FOLIO PLAN** 





SEARCH OF TORRENS TITLE

VOLUME	FOLIO
209809	1
EDITION	DATE OF ISSUE
3	24-May-2016

SEARCH DATE : 24-Mar-2020 SEARCH TIME : 12.10 PM

# DESCRIPTION OF LAND

Parish of FORD, Land District of WELLINGTON Lot 1 on Plan 209809 Derivation : Part of Lot 29630 Gtd to C Dunn Prior CT 2451/91

# SCHEDULE 1

E5598 TRANSFER to 516BHP PTY LTD Registered 24-May-2016 at 12.01 PM

# SCHEDULE 2

Reservations and conditions in the Crown Grant if any C958072 BURDENING EASEMENT: a drainage easement in favour of Circular Head Council over the lands marked Drainage Easements 'A' and 'B' 3.00 wide and Water Storage Easement shown on Plan 209809 Registered 16-Jun-2011 at noon

# UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



Revision Number: 02



Application for Planning Permit

# **Proposed Subdivision**

In the

# **General Residential & Low Density Residential**

Lot 2 Cantara Road, Smithton

Supporting Documentation

10/03/2020

# **CONSULTANT DETAILS**

Mr. Micheal Wells GradDipUrbRegPlan.BEnvDes Town Planner, Bushfire Assessor, Building Designer, Fire Engineer (IFE) Bushfire Accreditation No: BFP-128

Mr. Jeremy Lee Cadet Town Planner

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**Document Status** 

Revision No	Author	Vetting	Signature , ,	Date
1	J. Lee	M. Wells	and	10/03/2020
			Moor	

# **Engagement & Invoicing Directions**

EnviroPlan Australia (*the Agent*) has been engaged by Jakob Vukasinovic (the *Permit Holder*) to prepare documentation for a planning permit located on land known as Lot 2 Cantara Road, Smithton. Any Permit issued is affixed to land and not an individual.

The services rendered by *the Agent* are strictly limited to the preparation of documentation in order to obtain planning permissions only. *The Agent* is not to be considered as the "permit holder" as part of any permit condition issued by any Authority and is not responsible for any costs incurred through a *Permit Holder* enacting a permit condition.

In such circumstances where the primary *Permit Holder* named above sells land or otherwise relinquishes the land; the new permit holder is the party responsible for all costs and invoices incurred by enacting any permit issued that is affixed to the land.

# The Land – Site

# **Title & Description**

The Certificate of Title for the subject site is C/T: 149352/2, PID: 2850674. A copy of the title is provided as Annexure A.

The street address is Lot 2 Cantara Road, Smithton and Jakob Vukasinovic is the owner.



Figure 1 – Location of land Lot 2 Cantara Road, Smithton

The 4.795 ha property fronts onto Flowery Flat Lane and is located on southern side of the road.

# **Existing Use and Development**

The current use of land is vacant land. Currently there are not buildings located on the property.

#### **Site Analysis**

# Topography

The land falls from South East to North West.

The average slope of the land is an average of 4° over a 130m run.

# Drainage

Stormwater and sewerage is intended to be disposed of via municipal reticulation mains that are located throughout the area.

# Land Capability

The land is within a delineated area of the Land Capability Survey Tasmania by RM Morton and CJ Grose; Department of Primary Industry and Fisheries: Tasmania 1997. The soil classification of the subject site is Class 5 & 6. However the site has been rezoned and developed for another purpose and it therefore not considered as agricultural land under the definitions of the PAL Policy.



Figure 2 - Land Capability of site - source: www.thelist.tas.gov.au

# Access

Access to the subject land is off Flowery Flat Road via an unformed crossover that requires upgrades as part of this proposal.

#### **Reticulated Services**

Water, sewerage and stormwater reticulation services are located within the subject area. However these are anticipated to be upgraded as part of this proposal.

# **Surrounding Property Use**

- North residential uses
- East bushland and residential uses.
- South bushland.
- West residential uses.

# Lands Limitations

Minor limitations have been identified within the subject site. The limitations are described as:

• Minor risk which is exempted from the Code under Section E6.4.4(j) subdivision of land located in a Low Landslide Hazard Area shown on the planning scheme map



Figure 3 - Landslide Layer, Lot 2 Cantara Road, Smithton - source: www.thelist.tas.gov.au

# Proposal

The applicant, Jakob Vukasinovic is seeking to construct a Proposed Subdivision under the State Planning Provisions and the Circular Head Local Provisions Schedules of the Tasmanian Planning Scheme.

The proposal seeks to create a 19 allotment subdivision with the subject land.

A copy of the proposal plans is included as Annexure C.

The applicant is applying to the Council, as the Planning Authority, to utilise its discretion and approve the development in accordance with the provisions of Section 57 of the Land Use Planning and Approvals Act 1993.

# **Planning Scheme Provisions**

The applicable planning instrument is the Circular Head Interim Planning Scheme 2013 and the subject land is zoned as General Residential.

The relevant sections of the Planning Scheme are listed below for discussion. The relevant issue and item identifier is provided and states whether the proposal meets the Acceptable Solutions (AS) or the Performance Criteria (PC) for each relevant section.

The clauses that are not applicable to the proposal have not been discussed.

The applicable Scheme standards for development in the General Residential & Low Density Residential Zone are described in the following relevant sections of the Circular Head Interim Planning Scheme 2013:

# 10.0 General Residential Zone

- 10.1.1 Zone Purpose Statements
- 10.1.2 Local Area Objectives
- 10.1.3 Desired Future Character Statements
- 10.2 Use Table
- 10.3 Use Standards

# 10.4 Development Standards

- 10.4.9 Suitability of a site or lot for use or development
- 10.4.12 Setback of development for sensitive use
- 10.4.13 Subdivision

# 12.0 Low Density Residential Zone

- 12.1.1 Zone Purpose Statements
- 12.1.2 Local Area Objectives
- 12.1.3 Desired Future Character Statements

# 12.2 Use Table

# 12.3 Use Standards

# 12.4 Development Standards

- 12.4.1 Suitability of a site or a lot on a plan of subdivision for use or development
- 12.4.2 Dwelling Density
- 12.4.7 Setback of development for sensitive use
- 12.4.8 Subdivision
- 12.4.9 Reticulation of an electricity supply to new lots on a plan of subdivision.

# Part E Codes

- E1 Bushfire-Prone Areas Code
- E2 Airport Impact Management Code
- E3 Clearing and Conversion of Vegetation Code
- E6 Hazard Management Code
- E9 Traffic Generating Use and Parking Code

# Part F Special Area Plans

• There are no specific area plans in relation to the Circular Head Interim Planning Scheme 2013

# 10.0 General Residential Zone

# 10.1 Zone Purpose

# **10.1.1 Zone Purpose Statements**

**10.1.1.1**-To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.

**10.1.1.2**-To provide for compatible non-residential uses that primarily serve the local community.

#### 10.1.2 Local Area Objectives

This zone applies for land at -

- (a) Suburban residential area make efficient use of land and optimise available and planned infrastructure provision through a balance between infill and redevelopment of established residential areas and incremental release of new land
- (b) Suburban residential areas provide equivalent opportunity for single dwelling and multiple dwelling developments and for shared and supported accommodation through private, public, and social investment.
- (c) Suburban residential areas enable opportunity for convenient access to basic level services and facilities for education, health care, retail, social, and recreation purposes;
- (d) Suburban residential areas provide small-scale employment opportunities in home occupation and home based business.
- (e) The amenity and character of suburban residential use is commensurate with the location of housing and support activity within a shared urban setting, and is to take into account
  - (i) the likely impact on residential use from the occurrence and operation of non-housing activity;
  - (ii) the effect of location and configuration of buildings within a site on
    - a. apparent bulk and scale of buildings and structures;
    - b. opportunity for on-site provision of private open space and facilities for parking of vehicles;
    - c. opportunity for access to daylight and sunlight;
    - d. visual and acoustic privacy of dwellings; and
    - e. consistency of the streetscape; and
  - (iii) the relationship between new sensitive use and the use of land in an adjoining zone

#### **10.1.3 Desired Future Character Statements**

Use or development in a suburban residential area is to provide –

- (a) housing as a predominant but not exclusive form of development;
- (b) choice and diversity in the design, construction, and affordability of buildings;
- (c) buildings that are typically of one or two storeys;
- (d) buildings that are set apart from adjacent buildings to -
  - (i) reduce apparent bulk and scale;
  - (ii) enable each an opportunity for access to sunlight; and
  - (iii) assist visual and acoustic privacy between adjoining dwellings;
- (e) a streetscape in which buildings are setback consistently from the frontage;
- (f) site coverage that retains sufficient external ground area for recreation, service activity, and vehicle parking; and
- (g) an ordered pattern of lots and a well-connected internal road network

#### 10.2 Use Table

#### 10.3 Use Standards

#### **10.4 Development Standards**

#### 10.4.9 Suitability of a site or lot for use or development

#### **Objective:**

The minimum properties of a site and of each lot on a plan of subdivision are to -

- (a) provide a suitable development area for the intended use;
- (b) provide access from a road; and
- (c) make adequate provision for connection to a water supply and for the drainage of sewage and stormwater

#### **Acceptable Solutions A1**

A site or each lot on a plan of subdivision must –

- (a) have an area of not less than 330m2 excluding any access strip; and
- (b) if intended for a building, contain a building area of not less than 10.0m x 15.0m
  - (i) clear of any applicable setback from a frontage, side or rear boundary;

- (ii) clear of any applicable setback from a zone boundary;
- (iii) clear of any registered easement;
- (iv) clear of any registered right of way benefiting other land;
- (v) clear of any restriction imposed by a utility;
- (vi) not including an access strip;
- (vii) accessible from a frontage or access strip; and

(viii) if a new residential lot, with a long axis within the range 30o east of north and 20o west of north

#### Discussion:

Each proposed allotment has an area greater than 330m2 and each allotment is capable of containing a 10m x 15m building envelope that complies with A1 (b) above.

# Acceptable Solutions A2

A site or each lot on a subdivision plan must have a separate access from a road -

- (a) across a frontage over which no other land has a right of access; and
- (b) if an internal lot, by an access strip connecting to a frontage over land not required as the means of access to any other land; or
- (c) by a right of way connecting to a road -
  - (i) over land not required as the means of access to any other land; and
  - (ii) not required to give the lot of which it is a part the minimum properties of a lot in accordance with the acceptable solution in any applicable standard; and
- (d) with a width of frontage and any access strip or right of way of not less than -
  - (i) 3.6 m for a single dwelling development; or
  - (ii) 6.0 m for multiple dwelling development or development for a non-residential use; and
- (e) the relevant road authority in accordance with the *Local Government (Highways) Act 1982* or the Roads and *Jetties Act 1935* must have advised it is satisfied adequate arrangements can be made to provide vehicular access between the carriageway of a road and the frontage, access strip or right of way to the site or each lot on a proposed subdivision plan

#### Discussion:

Each allotment has a separate access across a frontage complying with A2(a) which is not less than 3.6m and is intended for single dwelling development complying with A2(d)(i).

An application to the road authority for its consent has been made in accordance with the Local Government (Highways) Act 1982.

#### Acceptable Solutions A3

A site or each lot on a plan of subdivision must be capable of connecting to a water supply provided in accordance with the Water and Sewerage Industry Act 2008

#### Discussion:

Each allotment is capable of connecting to a reticulated water supply complying with A3 above.

#### Acceptable Solutions A4

A site or each lot on a plan of subdivision must be capable of draining and disposing of sewage and waste water to a sewage system provided in accordance with the *Water and Sewerage Industry Act 2008* 

#### Discussion:

Each allotment is capable of draining and disposing of sewage a waste water to the reticulated sewage system complying with A4 above.

#### Acceptable Solutions A5

A site or each lot on a plan of subdivision must be capable of draining and disposing of stormwater to a stormwater system provided in accordance with the *Urban Drainage Act 2013* 

# **Discussion:**

Each allotment is capable of draining and disposing of stormwater to a stormwater system complying with A5 above.

# 10.4.10 Dwelling density for single dwelling development

#### Objective:

Residential dwelling density [R2] is to -

- (a) make efficient use of suburban land for housing;
- (b) optimise utilities and community services; and
- (c) be not less than 12 and not more than 30 dwellings per hectare

#### **Acceptable Solutions A1**

- (a) The site area per dwelling for a single dwelling must -
  - (i) be not less than 325m<sup>2</sup>; and

#### **Discussion:**

Each allotment is capable of achieving a site area per dwelling for a single dwelling to be not less than 325m2 complying with A1 above.

#### 10.4.12 Setback of development for sensitive use

#### **Objective:**

Development for a sensitive use is to -

- (a) minimise likelihood for conflict, interference, and constraint between the sensitive use and the use or development of land in a zone that is not for a residential purpose; and
- (b) minimise unreasonable impact on amenity of the sensitive use through exposure to emission of noise, fumes, light and vibration from road, rail, or marine transport

#### **Acceptable Solutions A1**

A building containing a sensitive use must be contained within a building envelope determined by -

- (a) the setback distance from the zone boundary as shown in the Table to this clause; and
  - (b) projecting upward and away from the zone boundary at an angle of 45° above the horizontal from a wall height of 3.0m at the required setback distance from the zone boundary

# Discussion:

Not applicable - no new buildings are part of this application.

#### Acceptable Solutions A2

Development for a sensitive use must be not less than 50m from -

- (a) a major road identified in the Table to this clause;
- (b) a railway;
- (c) land designated in the planning scheme for future road or rail purposes; or
- (d) a proclaimed wharf area

# **Discussion:**

The proposal is not located within 50m to a major road identified in the Table to this clause, a railway, future road or proclaimed wharf area complying with A2 above.

# 10.4.13 Subdivision

#### **Objective:**

The division and consolidation of estates and interests in land is to create lots that are consistent with the purpose of the General Residential zone

#### Acceptable Solutions A1

Each new lot on a plan of subdivision must be -

- (a) intended for residential use;
- (b) a lot required for public use by the State government, a Council, a Statutory authority or a corporation all the shares of which are held by or on behalf of the State, a Council or by a statutory authority

#### **Discussion:**

Each allotment of the proposed subdivision is intended for a residential use complying with A1 (a) above.

#### Acceptable Solutions A2

A lot, other than a lot to which A1(b) applies, must be an internal lot

# Discussion:

The proposed allotments are not internal lots which is demonstrated in the submission plans complying with A2 above.

#### 10.4.14 Reticulation of an electricity supply to new lots on a plan of subdivision

# **Objective:**

Distribution and connection of reticulated electricity supply to new lots on a plan of subdivision is to be without visual intrusion on the streetscape or landscape qualities of the residential area

#### **Acceptable Solutions A1**

Electricity reticulation and site connections must be installed underground

#### **Discussion:**

The proposed subdivision intends to install electricity reticulation and site connections underground complying with A1 above.

# **12.0 Low Density Residential Zone**

#### **12.1 Zone Purpose**

#### **12.1.1 Zone Purpose Statements**

#### 12.1.1.1

To provide for residential use or development on larger lots in residential areas where there are infrastructure or environmental constraints that limit development.

#### 12.1.1.2

To provide for non-residential uses that are compatible with residential amenity.

#### 12.1.2 Local Area Objectives

a) Land is available for residential use in urban and semi-urban settings;

- b) Low density residential areas make efficient use of land and optimise available infrastructure provision through a balance between infill and redevelopment of established residential areas and by incremental release of new land;
- c) The type, scale, and intensity of use or development are consistent with the level of permanent constraint on residential use at suburban densities.
- New or intensified use or development is restricted if the limit of a known constraint on residential use is uncertain;
- e) Low density residential areas provide equivalent opportunity for single dwelling and multiple dwelling developments and for shared and supported accommodation through private, public, and social investment.
- f) Low density residential areas enable opportunity for convenient access to basic level services and facilities for education, health care, retail, social, and recreation purposes;
- g) Low density residential areas provide small-scale employment opportunities in home occupation and home based business.
- h) The amenity and character of low density residential areas is commensurate with the location of housing and support activity within a shared urban or semi-urban living space, and is to take into account –
  - a. the likely impact on residential use from the occurrence and operation of non-housing activity;
  - *i.* suitable of a site for intended use;
  - ii. possible absence in provision or capacity of community services, transport infrastructure and utilities;
  - iii. restriction imposed by an environmental constraint;
  - iv. the level of risk from exposure to a natural hazard; and
  - v. the effect of location and configuration of buildings within a site on
    - a. apparent bulk and scale of buildings and structures;
    - b. opportunity for on-site provision of private open space and facilities for parking of vehicles;
    - c. opportunity for access to daylight and sunlight;
    - d. visual and acoustic privacy between adjacent dwellings; and
    - e. consistency of the streetscape; and
    - f. the relationship between new sensitive use and the use of land in an adjoining zone

# **12.1.3 Desired Future Character Statements**

Use or development in a low density residential area is to provide -

- a) sites that are typically larger than suburban lots, although size is dependent on availability of utilities and land capability;
- b) choice and diversity in the design, construction, and affordability of buildings;
- c) housing as a predominant but not exclusive form of development;
- d) buildings that are typically of one or two storeys;
- e) a streetscape in which buildings are setback consistently from the frontage;
- f) buildings that are set apart from adjacent buildings to
  - *i.* reduce apparent bulk and scale;
  - ii. enable each an opportunity for access to sunlight; and
  - iii. assist visual and acoustic privacy of adjoining residents;
- g) site coverage that retains unbuilt area for recreation, service activity, vehicle parking, and on-site disposal of sewage or stormwater; and
- h) an ordered pattern of lots and an internal road network

#### 12.2 Use Table

#### 12.3 Use Standards

#### 12.4 Development Standards

# 12.4.1 Suitability of a site or lot for use or development Objective:

The minimum properties of a site and of each lot on a plan of subdivision are to -

- a) provide a suitable development area for the intended use;
- b) provide access from a road; and
- c) make adequate provision for a water supply and for the drainage and disposal of sewage and stormwater

#### Acceptable Solutions A1

A site or each lot on a plan of subdivision must -

- a) have an area of
  - i. not less than 500m2 excluding any access strip; or

- *ii. if in a locality shown in the Table to this clause, not less than the site area shown for that locality; and*
- b) contain a building area of not less than 10.0m x 15.0m
  - *i.* clear of any applicable setback from a frontage, side or rear boundary;
  - *ii.* clear of any applicable setback from a zone boundary;
  - iii. clear of any registered easement;
  - iv. clear of any registered right of way benefitting other land;
  - v. clear of any restriction imposed by a utility;
  - vi. not including an access strip;
  - vii. Accessible from a frontage or access strip; and
  - viii. if a new residential lot, with a long axis within the range 300 east of north and 200 west of north

#### Discussion:

Each allotment of the proposed subdivision that contains the Low Density Residential zoning has an area greater than 500m2 and is capable of containing a building area of not less than 10m x 15m which would comply with A1(b) above.

# Acceptable Solutions A2

A site or each lot on a subdivision plan must have a separate access from a road -

- a) across a frontage over which no other land has a right of access; and
- b) if an internal lot, by an access strip connecting to a frontage over land not required as the means of access to any other land; or
- c) by a right of way connecting to a road
  - *i.* over land not required as the means of access to any other land; and
  - ii. not required to give the lot of which it is a part the minimum properties of a lot in accordance with the acceptable solution in any applicable standard; and
- d) with a width of frontage and any access strip or right of way of not less than
  - *i.* 3.6m for single dwelling development; or
  - *ii.* 6.0*m* for multiple dwelling development or development for a non-residential use; and
- e) the relevant road authority in accordance with the Local Government (Highways) Act 1982 or the Roads and Jetties Act 1935 must have advised it is satisfied adequate arrangements can be made to provide vehicular access between the carriageway of a road and the frontage, access strip or right of way to the site or each lot on a proposed subdivision plan.

# Discussion:

Each allotment has a separate access across a frontage complying with A2(a) which is not less than 3.6m and is intended for single dwelling development complying with A2(d)(i).

An application to the road authority for its consent has been made in accordance with the Local Government (Highways) Act 1982.

# Acceptable Solutions A3

A site or each lot on a plan of subdivision must be capable of connecting to a water supply -

- a) provided in accordance with the Water and Sewerage Industry Act 2008; or
- b) from a rechargeable drinking water system [R4] with a storage capacity of not less than 10,000 litres if
  - *i.* there is not a reticulated water supply; and
    - ii. development is for
      - a. a single dwelling; or
      - b. a use with an equivalent population of not more than 10 people per day

#### **Discussion:**

Each allotment is capable of connecting to a reticulated water supply complying with A3 above.

# **Acceptable Solutions A4**

A site or each lot on a plan of subdivision must be capable of draining and disposing of sewage and liquid trade waste -

- a) to a sewerage system provided in accordance with the Water and Sewerage Industry Act 2008; or
  b) by on-site disposal if
  - i. sewage or liquid trade waste cannot be drained to a reticulated sewer system; and
  - ii. the development -

- a. is for a single dwelling; or
- b. provides for an equivalent population of not more than 10 people per day; or
- c. creates a total sewage and waste water flow of not more than 1,000l per day; and
- the site has capacity for on-site disposal of domestic waste water in accordance with AS/NZS1547:2012 On-site domestic-wastewater management clear of any defined building area or access strip

#### Discussion:

Each allotment is capable of draining and disposing of sewage a waste water to the reticulated sewage system complying with A4 above.

#### Acceptable Solutions A5

ii.

A site or each lot on a plan of subdivision must be capable of draining and disposing of stormwater -

- a) to a stormwater system provided in accordance with the Urban Drainage Act 2013; or
  - b) if stormwater cannot be drained to a stormwater system
    - i. for discharge to a natural drainage line, water body, or watercourse; or
      - for disposal within the site if
        - a. the site has an area of not less than 5000m2;
        - b. the disposal area is not within any defined building area;
        - c. the disposal area is not within any area required for the disposal of sewage;
        - d. the disposal area is not within any access strip; and
        - e. not more than 50% of the site is impervious surface; and
    - iii. the development is for a single dwelling

#### Discussion:

Each allotment is capable of draining and disposing of stormwater to a stormwater system complying with A5 above.

#### 12.4.2 Dwelling density

#### **Objective:**

Residential dwelling density is to -

- a) make efficient use of land for housing;
- b) optimise utilities and community services; and
- c) be consistent with any constraint on suitability of the land for residential use

# Acceptable Solutions A1

The site area per dwelling must -

a) be not less than 500m2 if the site has –

- *i.* connection to a reticulated water supply;
- *ii.* connection to a reticulated sewer system; and
- iii. connection to a stormwater system; or
- b) if the site is in a locality shown in the Table to this Clause, not less than the site area for that locality.

#### Discussion:

Each allotment has an area greater than 500m2 and is capable of connecting to a reticulated water, sewer and stormwater systems remaining consistent with A1 above.

#### 12.4.7 Setback of development for sensitive use

#### **Objective:**

Development for a sensitive use is to –

- a) minimise likelihood for conflict, interference, and constraint between the sensitive use and the use or development of land in a zone that is not for a residential purpose; and
- b) minimise unreasonable impact on amenity of the sensitive use through exposure to emission of noise, fumes, light and vibration from road, rail, or marine transport

# **Acceptable Solutions A1**

A building containing a sensitive use must be contained within a building envelope determined by -

a) the setback distance from the zone boundary as shown on the Table to this clause; and

 b) projecting upward and away from the zone boundary at an angle of 45° above the horizontal from a wall height of 3.0m at the setback distance from the zone boundary

#### Discussion:

Not applicable – the proposal is a subdivision and no new buildings are part of this application.

#### Acceptable Solutions A2

Development for a sensitive use must be not less than 50m from -

- a) a major road identified in the Table to this clause;
- b) a railway;
- c) land designated in the planning scheme for future road or rail purposes; or
- d) a proclaimed wharf area

#### **Discussion:**

The proposal is not located within 50m to a major road identified in the Table to this clause, a railway, future road or proclaimed wharf area complying with A2 above.

#### 12.4.8 Subdivision

#### **Objective:**

The division and consolidation of estates and interests in land is to create lots that are consistent with the purpose of the Low Density Residential zone

#### Acceptable Solutions A1

Each new lot on a plan of subdivision must be -

- a) intended for residential use;
- b) a lot required for public use by the State government, a Council, a Statutory authority or a corporation all the shares of which are held by or on behalf of the State, a Council or by a statutory authority

#### **Discussion:**

The proposed subdivision is intended for a residential use complying with A1 (a) above.

#### Acceptable Solutions A2

A lot, other than a lot to which A1(b) applies, must not be an internal lot

# Discussion:

Each allotment of the proposed subdivision is not an internal lot complying with A2 above.

# 12.4.9 Reticulation of an electricity supply to new lots on a plan of subdivision

# Objective:

Distribution and connection of reticulated electricity supply to new lots on a plan of subdivision is to be without visual intrusion on the streetscape or landscape qualities of the residential area

#### Acceptable Solutions A1

Electricity reticulation and site connections must be installed underground

#### Discussion

The proposed subdivision intends to install electricity reticulation and site connections underground complying with A1 above.

# Part E Codes

# E1 Bushfire-Prone Areas Code

The proposal is a subdivision and is therefore subject to the provisions of the Code. A bushfire hazard management plan from an accredited person is featured as an annexure to this report.

# E2 Airport Impact Management Code

The proposal is located within the areas defined within the Air Navigation Services – Aircraft Operations Surfaces on planning scheme maps and is therefore applicable to the code.

# E2.5 Use Standards

# E2.5.1 Exposure to Aircraft Noise

The proposal is located approximately 2.3 miles (3.7 km) ('as the crow flies') west of the main runway. This approach to the runway is seldom used as the predominant wind conditions on the north-west coast of Tasmania are westerly and this approach is only used in easterly conditions.

Assuming the typical glideslope of 3° to the approach to the runway and a rate of decent of 300 ft per nautical mile to remain on that glideslope; the aircrafts glideslope should be 572 ft (174m) above the proposed building on approach (factoring in site elevations AHD to the AHD of the airport).

The effects of continuous dB exposure for site is between 80-90dB which could cause damage over a continuous 8 hour exposure. Therefore; given the seldom approach noise on easterly conditions where damage is like to occur with continuous expose – the likelihood of aircraft to cause harm to human health or to interfere with the amenity of the site is extremely unlikely.

# E2.5.1 Exposure to Aircraft Nose

# Objective

- (a) The likelihood for aircraft noise to cause harm to human health or to unreasonably interfere with the amenity of nonairport use is to be minimised; and
- (b) Non-airport use is to minimise likely interference or constraint on the operation of an airport

# Acceptable Solutions – A1

- (a) The use must be -
  - (i) An 'Acceptable' use class for the applicable ANEF noise exposure level as shown on the Table to this clause; or
    (ii) An 'Acceptable' use class subject to conditions for the ANEF noise exposure level as shown on the Table to this clause;
- (b) Building construction must satisfy AS 2021 (2000) with respect to interior noise levels for the use class; and
- (c) The owner of the site has given written consent for an agreement in accordance with Part 5 of the Land Use Planning and Approvals Act 1993 to be registered on the title indicating likely exposure of use or development to noise nuisance from operations at the airport.

# Discussion:

The internal fit-out of any future dwellings will be required to comply with the AS 2021 (2000) with respect to interior noise levels for a residential dwelling.

# E2.6 Development Standards

#### E2.6.1 Information Requirements

In addition to the requirements of clause 8.1, the following information is required to show:

- (a) whether the use or development is likely to penetrate operational airspace;
- (b) whether the use or development is likely to impact operation of aviation facilities;

- (c) location of the site relative to ANEF contours;
- (d) whether the site is within a public safety area;
- (e) any strategy to manage or mitigate likely adverse effect of the use or development on:
  - (i) operational airspace or the function of aviation facilities; and
  - (ii) human health, public safety, and amenity from aircraft operation and aviation facilities at the airport

# Discussion:

The proposal itself is for the subdivision of land and there is no change to the overall height of existing circumstances and therefore the proposal is not likely to penetrate operational airspace or impact on the operation of aviation facilities

It is unlikely that the proposal will have a significant adverse effect on human health, public safety or amenity or operational airspace or the function of aviation facilities.

# E2.6.2 Protection of operational airspace

#### **Objective:**

Development is to maintain –

- (a) efficient operation and safety of aircraft in operational airspace; and
- (b) function of aviation facilities

# Acceptable Solution – A1

Use or development must not -

- (a) penetrate the Obstacle Limitation Surface (OLS); or
- (b) interfere with operation of aviation facilities

# Discussion:

The use or development does not penetrate the OLS of aircraft operations and is sited under the canopy level of surrounding trees. Likewise the development does not interfere with the operation of aviation facilities as it is a residential subdivision of land.

#### E2.6.3 Public Safety Areas

#### **Objective:**

The likelihood for risk to use from the effect of aircraft accidents near the end of a runway in association with take-off or landing is to be minimised.

#### Performance Criteria – P1

The airport operator or agency must advise it is satisfied the use or development does not unduly increase:

- (a) direct risk to people in an aircraft and on the ground;
- (b) secondary incidents arising from damage to ground facilities in the event of an aircraft incident; and
- (c) any requirement for the location, design and control of the use or development

#### **Discussion:**

The use or development does not penetrate the OLS of aircraft operations and is sited under the canopy level of surrounding trees. Likewise the development does not interfere with the operation of aviation facilities as it is a residential dwelling.

# E3 Clearing and Conversion of Vegetation Code

The proposal does not seek to modify any existing native vegetation communities, habitats or areas of vegetation and therefore this Code is not applicable to this application.

# E3.6.1 Protection of a threatened native vegetation community or native vegetation providing habitat for a threatened species

#### **Objective:**

(a)

The clearing and conversion of native vegetation is to minimise likely adverse impact on biodiversity, ecological process, and habitat value.

#### Acceptable Solution – A1

- Vegetation must not be any of the following
- (i) a threatened native vegetation community;
- (ii) contain threatened flora or be threatened fauna habitat; or
- (iii) be within 30m of a water body, watercourse, wetland, or coastal shoreline; or
- (b) the removal or destruction of any rare or threatened species or rare or threatened communities protected under state or commonwealth legislation must not occur unless authorised by the appropriate agency

#### Discussion:

The subject land does not contain any threatened native vegetation communities, threatened flora or threatened flauna habitat. The proposal site is not within 30m of a water body, watercourse, wetland or coastal shoreline.

#### E3.6.2 Clearing of vegetation on land of scenic or landscape value

#### **Objective:**

The clearing and conversion of vegetation is to minimise likely adverse impact on scenic or landscape value -

- (a) on land in the Environmental Living zone, Environmental Management zone, Open Space zone, and Rural Living zone; or
- (b) on land identified on the planning scheme map as significant for scenic or landscape value

#### Performance Criteria – P1

- (a) Clearing and conversion of vegetation must -
  - (i) be necessary to deliver an overriding social, economic or environmental benefit to the community; or
    - (ii) be justified by exceptional circumstances; and
    - (iii) there is no suitable alternative site; or
- (b) be consistent with the objectives and outcomes for any scenic or landscape management plan incorporated as a document forming part of this planning scheme; and
- (c) the extent of clearing and conversion must -
  - (i) retain a sufficient intensity and distribution of vegetation to screen cleared and converted areas;
  - (ii) not impact on the visual qualities of a shoreline, skyline, ridge, or other prominent landform feature;
  - (iii) not be exposed to view from a road, public place, or settlement area; and
  - (iv) include measures to minimise likely adverse impact for scenic or landscape value

#### Discussion:

Not applicable – the subject land is within the General Residential and Low Density Residential Zones and is not on land of scenic or landscape value.

#### E3.6.3 Clearing of vegetation on land susceptible to landslide

#### **Objective:**

The clearing and conversion of vegetation on land in a landslide hazard area to which Code E6 – Hazard Management applies under this planning scheme is to minimise risk for activating a landslide.

#### Acceptable Solution – A1

The site must be within an area –

- (a) exposed to a low level of likely risk from landslide; and
- (b) a landslide hazard risk assessment as defined in E6<sup>L1</sup> must indicate clearing of native vegetation
  - (i) can achieve and maintain a tolerable level of risk; or
    - there is an insufficient increase in the level of risk to warrant any specific hazard reduction or protection measures; or
    - (iii) any condition or requirement for specific hazard reduction or protection measures

# Discussion:

The site is within a low risk landslide area complying with A1(a). The application is exempted from Code E6 under clause E6.4.4(j) as it is a subdivision of land located in a low landslide hazard area shown on the planning scheme map.

# E4 Change in Ground Level Code – Not Applicable

The proposal does not alter any ground levels to existing or natural ground levels and therefore this Code is not applicable to this application.

# E5 Local Heritage Code – Not Applicable

The proposal does not contain any heritage issues and therefore this Code is not applicable to this application.

#### E6 Hazard Management Code – Not Applicable

The proposal site is located in a low landslide risk area and is exempted under clause E6.4.4(j) of the Scheme as it is a subdivision of land in a low risk landslide area.

#### E7 Sign Code – Not Applicable

The proposal does not contain any signage as part of the application and therefore this Code is not applicable to this application.

#### E8 Telecommunication Code – Not Applicable

The proposal is for a subdivision and does not contain any telecommunications infrastructure and therefore this Code is not applicable to this application.

#### E9 Traffic Generating Use and Parking Code

#### **E9.5 Use Standards**

#### E9.5.1 Provision for parking

#### **Objective:**

Provision is to be made for convenient, accessible, and usable vehicle parking to satisfy requirements for use or development without impact for use or development of other land or for the safety and operation of any road

#### Acceptable Solution – A1

Provision for parking must be -

(a) the minimum number of on-site vehicle parking spaces must be in accordance with the applicable standard for the use class as shown in the Table to this Code;

# **Discussion:**

Each allotment has sufficient area to accommodate 2 car parking spaces per residential dwelling remaining consistent with the Table to this Code.

#### E9.5.2 Provision for loading and unloading vehicles

#### **Objective:**

Provision is made for conveniently located and accessible areas for the loading and unloading of goods and materials and for the pick-up and set-down of passengers from vehicles

#### Acceptable Solution – A1

There must be provision within a site for -

(a) on-site loading area in accordance with the requirement in the Table to this Code; and

(b) passenger vehicle pick-up and set-down facilities for business, commercial, educational and retail use at the rate of 1 space for every 50 parking spaces

#### **Discussion:**

The proposal is intended for a residential uses and there are no requirements in the Table to this Code.

# E9.6.1 Design of vehicle parking and loading areas

#### **Objective:**

Vehicle circulation, loading, and parking areas-

- (a) protect the efficient operation and safety of the road from which access is provided;
- (b) promote efficiency, convenience, safety, and security for vehicles and users; and
- (c) provide an appropriate layout and adequate dimension to accommodate passenger or freight vehicle associated with use of the site

#### Acceptable Solution – A1.1

All development must provide for the collection, drainage and disposal of stormwater; and

#### Acceptable Solution – A1.2

Other than for development for a single dwelling in the General Residential, Low Density Residential, Urban Mixed Use and Village zones, the layout of vehicle parking area, loading area, circulation aisle and manoeuvring area must -

- (a) Be in accordance with AS/NZS 2890.1 (2004) Parking Facilities Off Street Car Parking;
  (b) Be in accordance with AS/NZS2890.2 (2002) Parking Facilities Off Street Commercial Vehicles;
- (c) Be in accordance with AS/NZS 2890.3 1993) Parking Facilities Bicycle Parking Facilities;
- Be in accordance with AS/NZS 2890.6 Parking Facilities Off Street Parking for People with Disabilities; (d)
- Each parking space must be separately accessed from the internal circulation aisle within the site: (e)
- Provide for the forward movement and passing of all vehicles within the site other than if entering or leaving a loading (f) or parking space; and
- (q) Be formed and constructed with compacted sub-base and an all-weather surface.

#### **Discussion:**

The proposal collects and drains excess stormwater satisfying A1.1. Parking and circulation is intended to be contained within the property boundaries of the proposed allotments. The proposed crossovers is to be constructed to Councils standards as per the road access consent conditions.

#### Acceptable Solution – A2

Design and construction of an access strip and vehicle circulation, movement and standing areas for use or development on land within the Rural Living, Environmental Living, Open Space, VILLAGE, or Environmental Management zones must be in accordance with the principles and requirements for in the current edition of Unsealed Roads Manual - Guideline for Good Practice ARRB

# **Discussion:**

Each proposed allotments is to be provided with a crossover that complies with the provision as per the conditions of the road access consent.

#### E10 Water and Waterways Code – Not Applicable

The proposal is located approximately 103 metres away from the nearest water body to; exceeding the 30 metre requirement and therefore the Code is not applicable to this application.

# Conclusion

This supporting documentation demonstrates that the proposal of a subdivision supports and furthers the Planning Scheme aims and objectives, relevant Clauses and Schedules as set out for development within the General Residential Zone.

Where the proposal does not comply with the Acceptable Solution (AS) it has been demonstrated that the Performance Criteria (PC) are satisfied and there is not an unreasonable loss of amenity as a consequence of this proposal. Therefore Council are requested to exercise its Discretionary powers in relation to this development.

With the above in mind, a planning permit for a proposed subdivision at Lot 2, Cantara Road, Smithton is respectfully sought from the Planning Authority.



List of Annexure

Annexure A – Title Documents

Annexure B – Proposal Plan

Annexure C – Bushfire Report



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**Regional** Unit 5, 67 Wigg Street Wodonga VIC 3690 **T:** 02 6062 3648

E: jca@jcalc.com.au ABN: 75 083 816 915

Our Reference: JCA REF 28519

19 May 2023

Attention: Ashley Thornton Manager Development & Regulatory Services By email: <u>council@circularhead.tas.gov.au</u>

Dear Ashley,

# Re: <u>COUNCIL REF: SA 2020 / 00004 PID 2850674 - CANTARA ROAD, SMITHTON</u> <u>MULTI LOT SUBDIVISION</u>

I refer to your letter dated 17 December 2020 requiring further information for this application in accordance with Circular Head Interim Planning Scheme 2013, 8.1 and Section 52 of the Land Use Planning and Approvals Act 1993. In response to your request please find enclosed supporting documentation, amended plans and a response to your comments and recommendations.

# Validity of the Application

1. Crown consent to construct stormwater infrastructure which crosses crown land and discharges into the Duck River – It is noted that the Stormwater Plan provided does not reflect the existing Council infrastructure. Please contact Council's Technical Officer – Engineering and Development, Kevin Maguire on 64524849 to obtain information in this regard. The completed development application will also require the signature of the relevant Minister (or delegate).

Once we have received the above information, your submission will become active and your application will be processed accordingly.

It is understood that this application was submitted to Council under the Circular Head Interim Planning Scheme 2013 which subsequently requires two different landowner consents under Section 52(1B) of the Land Use Planning and Approvals Act 1993 ("the Act"):

- a. General Manager Circular Head Council: This was required for works within Flowery Flat Lane and Billing Street.
- b. Crown Land Services: This was required for the stormwater extension required in the Duck River reserve.

We have been advised by George Walker, the planner acting on behalf of the Circular Head Council, the following:

• Consent from the General Manager Circular Head Council *'was provided 19 May 2020'.* 

• Crown Land Services:

'that if the stormwater design no longer requires an extension or works within Crown Land, then this removes the need to obtain Crown Land consent and it is possible that the application would be valid prior to the TPS coming into effect because the only land owner consent that would have been required is Council, which was provided prior to the TPS coming into effect'.

JCA engineers have been liaising with Council and specifically James Brewer, Manager Engineering and Projects. These discussions have led to an outcome whereby the Duck River Reserve is no longer required and the storm water quality targets can be achieved by connecting to the 450 pipe culverts located under Cantara Road around 25-30m north of Flowery Flat Lane. Specifically, James has advised that 'Council would have no objections, in principle, to connecting to it to discharge the development runoff. Subject to the development stormwater design, it may need to be upgraded as a part of the development'. Please refer to the enclosed email chain between the JCA and Council engineers.

In light of the above, it is submitted that the application can be considered valid under the Interim Planning Scheme and the matters detailed in Council's request for further information remain relevant to this application.

# Amendments to the proposed subdivision plan for consideration

• Written consent from the land owner of 21 Flowery Flat Lane agreeing to the entering into of a Part 5 agreement for the hazard management areas for the proposed lots 8,9 and 10 to be located on the adjoining lot to the east.

Our client is the owner of the adjoining land at 21 Flowery Flat Road and he has no objection to entering into an agreement to ensure the ongoing management of the 'hazard areas' created by proposed lots 8, 9 and 10. It is suggested that this requirement can be included on any planning permit to issue.

• As the southern area of the lot is subject to a 'Low' risk landslide hazard overlay, the Clearing and Conversion of Vegetation code would apply pursuant to clause E3.2.1(c). In order to determine compliance with E3.6.1A1/P1 a Natural Values Assessment would need to be prepared by a suitably qualified and experience consultant. In addition, in order to determine compliance with Clause E3.6.3 A1/P1 a Landslide Hazard Risk Assessment by a suitably qualified and experience to determine if clearing of a landslide risk area is appropriate.

The revised Plan of Subdivision shows areas of medium risk for landslides being fully contained within the proposed public open space reserve. No works or tree removal is proposed within this area with the exception of a 1.5m footpath which we understand has been requested by Council to facilitate a pedestrian connection to the adjoining Tier Hill Reserve.

It is suggested that any footpath construction within the medium risk landslip area could occur in a manner that requires minimal ground and root disturbance. Specifically, the footpath could be constructed above ground, without excavation and using crushed rock to maintain the stability of the area and to offset any potential encroachment into nearby tree protection zones.

A portion of the proposed Tier Hill pedestrian connection as well as proposed lots 10, 11, 12, 13, 14 and 15 comprise areas of low risk potential for landslides. It is submitted that for continuity, the footpath

located within the pedestrian connection could also be constructed above ground, without excavation and using crushed rock for the entire length. A concrete crossover is proposed at the end of the footpath to help minimise the transfer of gravel to the wider pedestrian footpath.

With regard to the proposed lots, it is considered that there is sufficient room within each lot to adequately locate a dwelling and associated structures without needing to encroach into the identified potential landslip areas.

# • A road reserve width of 18m is considered sufficient.

The revised Plan of Subdivision has been updated to show an internal road reserve of 18m as requested.

It is the client's preference to construct this road as a single way access road and discussions with James Brewer, Manager Engineering & Projects at Circular Head Council are ongoing. Notwithstanding the outcome of these discussions, it is submitted that the 18m wide road reserve is sufficient in width to facilitate agreed traffic requirements as well as accommodating all required services.

• Flowery Flat Lane will be required to be sealed for full length and a footpath provided to the edge of Cantara Road/Emmett Street.

Acknowledged. The revised Plan of Subdivision includes details relating to the construction of Cantara Road.

- In accordance with Section 8 of the Local Government (Building and Miscellaneous Provisions) Act 1993 Council can require 1/20 of the land to be dedicated to Public Open Space which equates to approximately 2390m<sup>2</sup>. Further discussion around this aspect is requested, though in the interim the following comments are made from observations of the plans submitted:
  - Following assessments undertaken with the Code requirements outlined above, it may be determined that the location of the retained vegetation and public pathway be better suited elsewhere. After this point, Council would welcome any discussions around the bush pathway location.

The revised Plan of Subdivision sets aside 2480m<sup>2</sup> for public open space purposes. A portion of this open space is dedicated to a pedestrian accessway of crushed rock construction to facilitate movement between the subject land and the surrounding neighbourhood to the Tier Hill scenic lookout in a manner that is responsive to its natural setting.

The main area of the proposed public open space adjoins the rear boundary of the subject land and will integrate seamlessly with the heavily vegetated Tier Hill reserve. It is submitted that the proposed increase in the overall size of the Tier Hill reserve will be of benefit to the wider community as well as the biodiversity values of the area.

It is also submitted that incorporation of land that is identified as a potential landscape risk is an appropriate land use outcome in this circumstance due to the vegetation located within this area to be maintained in perpetuity, thus stabilising the soil and managing the potential risk.

 Council's preference would be for the proposed northern section of pathway tract adjacent Lot 19 be removed. The reason being anticipated difficulties surrounding managing bushland and expectations of occupants of Lot 19. The preference being that instead the width of the southern portion be as wide as possible to ensure best possible retention of bush integrity. An alternative may be to provide a Water Sensitive Urban Design footpath along the road which incorporated native vegetation or equivalent planting to continue the 'bushland setting' theme.

The revised plan of subdivision has redesigned the remove the northern section of the pathway tract adjacent Lot 19. This land, which was intended as an open space corridor, has been re-distributed to the southern boundary of the site where it is considered to make a more meaningful contribution to the neighbouring community and the biodiversity values of the land.

It is submitted that the revised plan of subdivision includes an 18m wide internal road network that could incorporate elements of water sensitive urban design. It is suggested that future detailed design could incorporate this requirement if necessary.

It is noted that it is the landowner's intent to maintain as much vegetation on each lot, as far as practicable and that only the areas required for future construction will be cleared. Accordingly, the revised subdivision provides for larger lots to allow for the retention of vegetation and with consideration of the constraints of the site, including the potential for landslip. Accordingly, for the reasons outlined above, it is submitted that the proposed subdivision is consistent with and responsive to the neighbourhood character.

We trust that the information contained within this submission allows for further consideration of the proposed subdivision and we look forward to working with Council as the application progresses. Should you wish to discuss any matters further, please don't hesitate to contact JCA town planning by phone on 9735-4888 or via email townplanning@jcalc.com.au

Yours faithfully,

<u>Fiona Wiffrie</u> Senior Town Planner JCA Land Consultants

Enc. Email: Storm water quality – Circular Head requirements Revised Plan of Subdivision



**CIRCULAR HEAD** 

Please quote our ref: SA 2020 / 00004 PID 2850674 Your ref: Enquiries to: Development Services 6452 4820 | council@circularhead.tas.gov.au

6 July 2023

516BHP Pty Ltd PO Box 254 WODONGA VIC 3690

Dear Jakob

# REQUEST FOR ADDITIONAL INFORMATION – SA 2020 / 00004 - SUBDIVISION (1 LOT INTO 20 LOTS) - CANTARA ROAD, SMITHTON - TASMANIAN PLANNING SCHEME - CIRCULAR HEAD & LOCAL GOVERNMENT (BUILDING AND MISCELLANEOUS PROVISIONS) ACT 1993

Thank you for submitting the above application for a planning permit.

After reviewing the application it is requested that you provide the following information before assessment can continue:

- 1. Please provide a revised subdivision plan showing the concise area of Lot 16.
- 2. As lots 9, 10 and 15 of the subdivision plan could not meet the Acceptable Solution of 8.6.1 (A4), please provide written address to its Performance Criteria.
- 3. Please provide a revised site plan showing each lot of the subdivision plan can connect to full water supply service (with a water connection point) to meet Clause 8.6.3 A1 or P1.
- 4. Please provide a revised site plan showing each lot of the subdivision plan has the capacity to connect to a public stormwater system (with a stormwater connection point) to meet Clause 8.6.3 A3 or P3.
- 5. The Eastern part of the property is zoned Low Density Residential. Please provide written address to the applicable development standards in the zone including 10.6.1, 10.6.2 and 10.6.3.







6. To address C3.5.1, please provide a Traffic Impact Assessment (TIA) developed generally in accordance with the Department of State Growth Traffic Impact Assessment Guidelines August 2020.

The TIA would will define the road infrastructure requirements to suit the project traffic volumes, including any upgrade to downstream infrastructure such as Billing Street and Flowery Flat Lane. Council requires the subdivision roads to allow for two-way traffic with through connection to Flowery Flat Lane and Emmett Street, to maximise traffic efficiency and movement.

7. In accordance with S85 of *Local Government (Building and Miscellaneous Provisions) Act 1993; and* Clause 8.6.1 (A3) and 8.6.2 (P1) of the planning scheme, Council's engineering has requested the appropriate road design.

Given the subdivision is located in a General Residential Zone, urban road construction standards would be required. Cross section widths are defined for the urban area in Tasmanian Standard Drawing TSD-R06. Subject to the outcome of the TIA, it would be expected that the appropriate cross section classification would be likely be Class 4 Local Road which equates to an 8.9m wide roadway (between faces of kerb). The desired outcome is for road width to provide for streetside parking both sides of the road with 1 lane width of traffic between. Flowery Flat Lane would be required to be upgraded on the southern side of the road where fronted by the subdivision lots, and through to Emmett Street. To satisfy the desired outcome for street side car parking, adjacent to proposed lots, and 1 lane of traffic, and given that the proposed subdivision only fronts onto the southern side of Flowery Flat Lane, a sealed width of 6.9m would likely be appropriate, subject to the TIA findings.

Following our discussion around traffic calming outcomes and the provision of a constrained and vegetated road environment, Council recognises that the developer's preference is for a softer engineering solution. In keeping with the stormwater quality targets contained in the State Stormwater Strategy, and the developers desire for a softer infrastructure solution, Council would be happy to consider Water Sensitive Urban Design (WSUD) and Local Area Traffic Management solutions, if backed by Derwent Estuary Program Water Sensitive Urban Design guides and Austroads Guide to Local Area Traffic Management. WSUD solutions may feature flush kerbing, vegetated swales in lieu of kerb and channel. In addition, Council would require a landscaping plan to be provided at design stage to incorporate at least 1 street tree per property as a standard requirement.

8. In accordance with S85 of *Local Government (Building and Miscellaneous Provisions) Act 1993*, Council can have opinion on the public open space (POS) for the subdivision.



**CIRCULAR HEAD** 

Council has determined the proposed POS (yellow highlight in the picture below) does not provide appropriate benefits to the community due to its topography and accessibility. Hence, should the applicant propose an alternative location for the POS or a payment in lieu of land for POS in accordance with S117 of the *Local Government (Building and Miscellaneous Provisions) Act 1993.* 



In terms of the proposed walking track to connect in future to the Tier Hill Lookout, the development application would need to demonstrate that the path could be feasibly connected to the lookout through to the Council land considering final grades and constructability.

- 9. As the subdivision plan has changed its layout, please provide a revised Bushfire Hazard Management Plan and Report to complies with C13.6.1, C13.6.2 and C13.6.3 of the Bushfire-prone Area Code.
- 10. Lot 15 of the proposed subdivision plan is within a Landslip Hazard area. It does not meet the exemption standards of C15.4.1 (e) of the Code because it will involve vegetation clearance to meet general requirements of the Bushfire Hazard Management Plan. Please provide written addressing C15.7.1 A1 or P1 to advise that Lot 15 complies with this standard.

This request is made under section 54 of the *Land Use Planning and Approvals Act 1993* ('the Act'). Council has 42 days under the Act to assess your application, however until you provide the requested information the application is placed 'on stop'. The application will remain stopped on **day 14** until the above information is provided to Council's satisfaction.

You may appeal this request or any items contained within it by contacting the Resource and Planning Stream of the Tasmanian Civil and Administrative Tribunal on 1800 657 500.





If you wish to discuss this request or any items contained within it, please contact me on 6452 4848.

Yours sincerely

**CIRCULAR HEAD** 

Dang Minh Duc Van TOWN PLANNER




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JCA Ref 28519

Council Ref SA2020/00004

PID 28550674

Mr Dang Minh Duc Van Town Planner Circular Head Council PO Box 348 Smithton Tas 7330

Dear Mr Dang Minh Duc Van

### RE: SA 2020 / 00004 - SUBDIVISION (1 LOT INTO 20 LOTS) - CANTARA ROAD, SMITHTON

Please find attached the response to Councils request for further information listed in the letter dated 6<sup>th</sup> July 2023.

### Item 1: Plan of Subdivision.

A plan of subdivision is attached to this letter with full details, dimensions and areas of all proposed allotments.

### Item 2: Development standards for Subdivisions section A4 – Lot Orientation.

As identified, the lot orientation of the proposed lots varies depending on the road frontage and topography. Lots 1-8, 13,14,16–19 are oriented with the long axis in a North – South Direction and comply with the Acceptable Solution A4. The remaining lots, (9-12, 15) rely on the performance criteria P4 due to their lot area, dimensions and topography of the land.

Lots 9-12 and 15 are slightly irregular in shape with the following lot areas:

- Lot 9 2138 m<sup>2</sup>
- Lot 10  $2190 \text{ m}^2$
- Lot 11 3240m<sup>2</sup>
- Lot 12 5156 m<sup>2</sup>
- Lot 15 2628 m<sup>2</sup>

All these lots are large in relation to the expectations of the General Residential Zone due to the topography which dictates road layout and building design options due to slope. The large size of these allotments allows for future building design options to cater for orientation for solar access, views, access and to minimize excavation. As such, the performance criteria for this Clause has been met.

### Item 3: Water Supply connection.

The attached proposed subdivision plan also shows the proposed location of a water main extension to service each allotment and the location of the connection point in accordance with section 8.6.3 A1.

### Item 4: Storm Water connection.

The attached proposed subdivision plan also shows the proposed location of a water main extension to service each allotment and the location of the connection point in accordance with section 8.6.3 A3.

### Item 5: Low Density Residential Land.

A narrow strip of land along the Eastern Part of the property is Zoned Low Density Residential whilst the balance of the site is zoned General Residential land. The Low density zone land is fully enclosed by the site on this eastern side with the adjoining land being zoned rural land.

In relation to residential uses, the purpose of the Low Density residential zone is:

• 10.1.1 To provide for residential use and development in residential areas where there are infrastructure or environmental constraints that limit the density, location or form of development.

In respect of this purposed it should be noted that the proposed subdivision has been designed to address this purpose of the zone in the following ways:

- Each proposed lot in the subdivision is being provided with a sewer connection point to the reticulated sewerage system. Therefore wastewater will not be discharged onto the site.
- Each proposed lot in the subdivision is being provided with a water supply connection.
- Each proposed lot and road on the subdivision is being provided with a discharge point for storm water connection.
- The lots are large in size and increase in area as the topography dictates due to slope and access limitations.
- The Road is designed as a through road as accessible grades for standard and emergency vehicles.

Under section 10.6 Development Standards for Subdivision the following items are relevant:

10.6.1 Lot design Objective: That each lot:

- (a) has an area and dimensions appropriate for use and development in the zone;
- (b) is provided with appropriate access to a road; and
- (c) contains areas which are suitable for residential development

The subdivision design and lot layout is a clear response to this objective providing large lots, good access and housing design and siting options. The acceptable solution criteria A1 for this clause is met for all lots within the Low Density Zone with the exception of lot 8:

Each lot, or a lot proposed in a plan of subdivision, must:

(a) have an area of not less than 1500m2 and:

(i) be able to contain a minimum area of 10m x 15m with a gradient not steeper than 1 in 5, clear of:

- a. all setbacks required by clause 10.4.3 A1 and A2; and
- b. easements or other title restrictions that limit or restrict development; and
- (ii) existing buildings are consistent with the setback required by clause 10.4.3 A1 and A2;

Lot 8 is considered to meet the applicable performance standard P1:

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:

- (a) the relevant requirements for development of buildings on the lots;
- (b) the intended location of buildings on the lots;
- (c) the topography of the site;
- (d) adequate provision of private open space;
- (e) the pattern of development existing on established properties in the area; and
- (f) any constraints to development, and must have an area not less than 1200m<sup>2</sup>.

Lot 8 is located where the topography has reasonable grades for smaller lot areas and is over 1200m<sup>2</sup> with suitable areas for building a dwelling whilst maintaining setbacks in keeping with the expectations of the location and zoning of the balance of the land.

In relation to 10.6.1 A2/P2 Lot frontage, as the section of land within this low density zone is a narrow strip located along the Eastern Boundary it is only lot 8 that has a frontage within this zone, the frontage exceeds 20m and therefore complies with the acceptable solution. The remaining frontages all comply with the General residential standards.

In relation to 10.6.1 A3/P3 Road access, each lot has direct access to a proposed public Road and therefore comply with the acceptable solution.

In relation to clause 10.6.2 the road network connects to all lots and is designed in accordance with the general residential requirements and councils engineering standards. This clause is not relevant to this proposal.

In relation to clause 10.6.3 all services are designed in accordance with the general residential requirements and councils engineering standards. This clause is not relevant to this proposal.

#### Item 6: Traffic Impact Assessment.

A Traffic Impact Assessment (TIA) has been prepared and is attached to this report for information.

#### Item 7: Road Design.

A plan of subdivision is attached to this letter with full details, dimensions and areas of all proposed Roads.

### Item 8: Public Open Space.

At the meeting with council it was agreed that the Public open space contribution would be made as a combination of:

- 1. Land In the form of the Public reserve access walkway which links the subdivisional road with Tier Hill Lookout reserve.
- 2. Cash in lieu to make up the total amount of open space contribution required after the above land component is credited.

The plan has been amended to remove additional public open space areas and retain the access walkway between lots 13 and 14. This walkway provides a linkage from the site to the Tier Hill lookout. Without this linkage residents would need to walk a considerable distance around public roads to access this reserve. The access path can be designed, and the surface treatment confirmed as part of the overall engineering design for the site. The existing Tier Hill reserve is quite board allowing scope for the path to meander across the slope at the steeper section of the hillside. The steepness of the hill is reflected in the dramatic views afforded from the top making the effort to reach the look out well worth it.

### Item 9: Bushfire hazard Management plan.

A Bushfire Hazard Management plan (BFHMP) was submitted with the original application and whilst the plan has undergone some review and amendment the final plan is similar to the one used to prepare the original report. It includes the same number of lots and basic configuration.

The original BFHMP has determined BAL ratings applicable to each allotment, these are BAL 12.5 or Low for all lots apart from lot 8 and 15 having a BAL of 19.

Given the similar configuration we do not expect the BAL ratings to change nor the required separation distances, nor the general requirements application to each lot on the updated plan. Therefore, we do not believe an updated BFHMP is warranted at this stage and any subsequent requirements can be achieved as conditions on a permit.

### Item 10: Landslip Hazard.

A geotechnical report has been prepared in accordance with the requirement of clause C15.7.1 in relation to the land slip hazard identified on lot 15 to confirm the requirements for land clearance and siting requirements for bushfire protection and landslip risk. This report is attached to this letter.

We believe the supplied information is a complete response to the information requested and look forward to the application being further assessed by the council.

Yours Sincerely,

<u>Michael Hipfel</u> Managing Director JCA Land Consultants



# Lot 2 Cantara Road, Smithton

Transport Impact Assessment



230663TIA001B-F.docx 14 November 2023



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### **DOCUMENT INFORMATION**

Prepared for	JCA Land Consultants		
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Prepared by	JJB	Reviewed by	JD

**one**mile**grid** operates from Wurundjeri Woiworung Country of the Kulin nation. We acknowledge and extend our appreciation to the Wurundjeri People, the Traditional Owners of the land. We pay our respects to leaders and Elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Wurundjeri Peoples.

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## 1 INTRODUCTION

**one**mile**grid** has been requested by JCA Land Consultants to undertake a Transport Impact Assessment of the proposed residential subdivision at Lot 2 Cantara Road, Smithton.

This report has been prepared to specifically respond to a request for additional information (RFI) from Circular head Council dated 6<sup>th</sup> July 2023 which included the following matters relevant to transport:

6. To address C3.5.1, please provide a Traffic Impact Assessment (TIA) developed generally in accordance with the Department of State Growth Traffic Impact Assessment Guidelines August 2020.

The TIA would will define the road infrastructure requirements to suit the project traffic volumes, including any upgrade to downstream infrastructure such as Billing Street and Flowery Flat Lane. Council requires the subdivision roads to allow for two-way traffic with through connection to Flowery Flat Lane and Emmett Street, to maximise traffic efficiency and movement.

7. In accordance with \$85 of Local Government (Building and Miscellaneous Provisions) Act 1993; and Clause 8.6.1 (A3) and 8.6.2 (P1) of the planning scheme, Council's engineering has requested the appropriate road design.

Given the subdivision is located in a General Residential Zone, urban road construction standards would be required. Cross section widths are defined for the urban area in Tasmanian Standard Drawing TSD-R06. Subject to the outcome of the TIA, it would be expected that the appropriate cross section classification would be likely be Class 4 Local Road which equates to an 8.9m wide roadway (between faces of kerb). The desired outcome is for road width to provide for streetside parking both sides of the road with 1 lane width of traffic between. Flowery Flat Lane would be required to be upgraded on the southern side of the road where fronted by the subdivision lots, and through to Emmett Street. To satisfy the desired outcome for street side car parking, adjacent to proposed lots, and 1 lane of traffic, and given that the proposed subdivision only fronts onto the southern side of Flowery Flat Lane, a sealed width of 6.9m would likely be appropriate, subject to the TIA findings.

As part of this assessment, the subject site has been reviewed with due consideration of the development proposal, and relevant background information also reviewed.



## 2 **EXISTING CONDITIONS**

## 2.1 Site Location

The subject site (Lot 2 Cantara Road, Smithton) is located in the northern outskirts of Smithton, on the southern side of Flowery Flat Lane, approximately 50 metres to the east of the intersection with Emmett Street / Cantara Road, as shown in Figure 1 below.



### Figure 1 Site Location

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The subject site has a total area of approximately 4.8 hectares and is generally rectangular in shape. An approximate 20 metre frontage is provided to Billing Street along the western boundary, with the majority of the site set back behind the existing lots along the eastern side of Emmett Street, and an approximate 186 metre frontage is provided to Flowery Flat Lane along the northern boundary.

The subject site is currently vacant, occupied only by a small woodland. Land uses in the immediate vicinity consist primarily of residential uses to the south, with lower density residential and rural uses provided to the north and east.

An aerial view of the subject site is provided in Figure 2.



### Figure 2 Site Context



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## 2.2 Planning Zones and Overlays

It is shown below in Figure 3 that the subject site is located within a General Residential Zone under the Circular Head Local Provisions Schedule of the Tasmanian Planning Scheme.



### Figure 3 Planning Scheme Zones



## 2.3 Road Network

### 2.3.1 Flowery Flat Lane

Flowery Flat Lane is a minor access road generally aligned east-west, originating at the intersection with Emmett Street / Cantara Road in the west, and terminating approximately 220 metres to the east of the intersection, at the boundary of 21 Flowery Flat Lane.

Flowery Flat Lane provides an approximately 3.0 metre wide gravel road with grassed shoulders provided on both sides, and operates with the default speed limit of 50km/h.

No traffic data has been obtained, however, based upon the number of properties access from Flowery Flat Lane, current traffic activity is estimated in the order of 30 vehicles per day.

The cross-section of Flowery Flat Lane looking east towards the frontage of the site is shown below in Figure 4.

### Figure 4 Flowery Flat Lane, looking east towards the subject site



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### 2.3.2 Billing Street

Billing Street is a minor access road aligned east-west, currently running approximately 120 metres to the west of Emmett Street, before terminating in a court bowl formation, and approximately 50 metres to the east of Emmett Street up to the western boundary of the subject site.

Billing Street provides an approximately 3.0 metre wide sealed carriageway with grassed shoulders provided on both sides, and operates with the default speed limit of 50km/h.

No traffic data has been obtained, however, based upon the number of properties access from Billing Street, current traffic activity is estimated in the order of 20 vehicles per day.

The cross-section of Billing Street looking towards Emmett Street and the frontage of the site is shown below in Figure 5.



### Figure 5 Billing Street, looking east towards the subject site

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### 2.3.3 Emmett Street

Emmett Street, proximate to the site, is a local access road generally aligned north-south, running between Havelock Street in the south, and Flowery Flat Lane in in the north, where Emmett Street turns into Cantara Road.

Emmett Street generally provides an approximately 7.5 metre wide sealed carriageway, however, narrows down to approximately 4.5 metres wide, to the north of the intersection with Billing Street. Further north, when Emmett Street turns into Cantara Road, the carriageway stops being sealed and becomes a gravel road.

A footpath is provided along the western side of Emmett Street in the proximity of the site, however, does not continue north past the intersection with Flowery Flat Lane. Emmett Street operates with the default speed limit 50km/h.

No traffic data has been obtained, however, based upon the number of properties access from Emmet Street to the north of Billing Street, current traffic activity is estimated in the order of 130 vehicles per day.

The cross-section of Emmett Street north towards the intersection with Billing Street, proximate to the site, is shown below in Figure 6.



### Figure 6 Emmett Street, looking north proximate to the subject site

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## **3 DEVELOPMENT PROPOSAL**

## 3.1 General

It is proposed to develop the subject site for the purposes of a residential subdivision, which will comprise of 19 lots, ranging from 1,209 m<sup>2</sup> to 5,156 m<sup>2</sup> in size.

The subdivision is proposed to be staged, with Stage 1 involving the provision of 8 lots along the southern side of Flowery Flat Lane, and the construction of the northern portion of the proposed internal road. Stage 2 will follow with the provision of the remaining 11 lots, and the connection of the proposed internal road through to Billing Street.

## 3.2 Road Network

The proposed subdivision will be serviced by an internal road, that will form an extension of Billing Street, and provide connection to Flowery Flat Lane. The internal road will have a road reserve width of 18 metres, and provide an 8.9 metre wide carriageway with a footpath provided along one side (western side). The existing portion of Billing Street, (Emmett Street to the site boundary), is also proposed to be upgraded to a 6.6 metre wide carriageway with two indented parking bays.

Additionally, Flowery Flat Lane is proposed to be upgraded along the frontage of the site, through to the intersection with Emmett Street. The upgrade will consist of the carriageway being sealed and widened to 6.9 metres, with a footpath and appropriate kerb and channel provided on the southern side.

Finally, a pedestrian path is proposed to be provided in the southern portion of the site, connecting the footpath for the proposed internal road with the reserve to the south. A view of the proposed subdivision is provided in Figure 7 below.



### Figure 7 Proposed Subdivision



## 4 TRAFFIC

## 4.1 Traffic Generation

Traffic generation rates applicable to residential dwellings from the Transport for NSW Guide to Traffic Generating Development (Oct 2002), suggest daily vehicle trips of 9 per dwelling, with 0.85 per dwelling expected during the weekday peak hours.

The proposed development, with a total yield of 19 lots, is therefore expected to generate up to approximately 171 vehicle trips per day, once all dwellings have constructed, and up to approximately 16 vehicle trips per hour during both the AM and PM peak hour periods.

During the morning peak hour, it is estimated that approximately 80 percent of residential traffic will be outbound from the site, whilst during the afternoon peak, approximately 60 percent of residential traffic will be inbound.

Based on the above results, the anticipated traffic generated by the proposed development is shown in Table 1.

### Table 1 Anticipated Traffic Generation

Period	Inbound	Outbound	Total
AM Peak	3	13	16
PM Peak	10	6	16

## 4.2 Traffic Distribution

It can be observed that the site is located approximately 1km north of the local town centre of Smithton, with the only road for town access from the subject site being Emmett Road.

Additionally, the Bass Highway, which is located further to the south and provides connection to several other towns/regions in north-west Tasmania, is also only accessible from the site by using Emmett Road.

As such, it is considered that all traffic movements to and from the site will be from/towards the south via Emmett Street.

The peak period and daily traffic volume distributions are shown in Figure 8 below.







## 4.3 Traffic Impact

Reviewing the volumes above, it is noted that the development is projected to generate up to 72 daily movements and 7 peak period movements to Flowery Flat Lane and the northern portion of Emmett Street. Similarly, a modest increase of 10 peak period and 99 daily movements are expected to be generated to Billing Street.

In context with the low existing traffic volumes on roads surrounding the site, it is expected that these modest increases to Flowery Flat Road and Emmett Street will be readily accommodated without measurable impact, having consideration to the upgrades proposed to Flowery Flat Road.

It is noted that the existing carriageway of Billing Street adjacent to the site is likely not suitable to accommodate the projected increase in traffic volumes, noting that it currently serves a function akin to an extended driveway. As such, the proposal seeks to upgrade this to an urban standard.



## 5 SUBDIVISION ASSESSMENT

## 5.1 Tasmanian Planning Scheme

**one**mile**grid** has undertaken an assessment of the design of the proposed residential subdivision, with due consideration of the Tasmanian Planning Scheme, specifically the Development Standards for Subdivisions – General Residential Zones (C8.6) and the Road and Railway Assets Code (C3.0).

### 5.1.1 Development Standards for Subdivisions – General Residential Zones

Table 2	Development	Standards fo	or Subdivisions	8.6.2

Performance Criteria			Response
P1	rich wir wir lev cy a) b) c) b) c) d) e) f) g) h)	e arrangement and construction of roads thin a subdivision must provide an appropriate vel of access, connectivity, safety and onvenience for vehicles, pedestrians, and clists, having regard to: any road network plan adopted by the council; the existing and proposed road hierarchy; the need for connecting roads and pedestrian and cycling paths, to common boundaries with adjoining land, to facilitate future subdivision potential; maximising connectivity with the surrounding road, pedestrian, cycling and public transport networks; minimising the travel distance between key destinations such as shops and services and public transport routes; access to public transport; the efficient and safe movement of pedestrians, cyclists, and public transport; the need to provide bicycle infrastructure on new arterial and collector roads in accordance with the Guide to Road Design Part 6A: Paths for Walking and Cycling 2016; the topography of the site; and	No road network plan has been adopted by Circular Head Council for the subject site. The proposed road network has been designed generally in accordance with the Tasmanian Subdivision Guidelines (Oct 2013), as demonstrated in Section 5.2 below, and allows for appropriate carriageway cross-sections throughout the subject site. Furthermore, pedestrian connectivity to the existing footpath network is provided, and allows access to the adjoining land, including the reserve to the south. Finally, the proposed road network does not negatively impact on the accessibility of key destinations or public transport, in comparison to the existing conditions.
	i)	the tuture subdivision potential of any	

balance lots on adjoining or adjacent land.



### 5.1.2 Road and Railway Assets Code

Ассер	otable Solution	Response
A1.1	<ul> <li>For a category 1 road or a limited access road, vehicular traffic to and from the site will not require:</li> <li>a) A new junction;</li> <li>b) A new vehicle crossing;</li> <li>c) A new level crossing.</li> </ul>	Access to a category 1 road or a limited access road is not required for the proposed subdivision.
A1.2	For a road, excluding a category 1 road or limited access road, written consent for a new junction, vehicular crossing, or level crossing to serve the use and development has been issued by the road authority.	Consent will be required for new vehicle crossings to lots accessed from Flowery Flat Lane.
A1.3	For all rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.	No level crossing required for the proposed subdivision.
A1.4	<ul> <li>Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:</li> <li>a) The amounts in Table C3.1: or</li> <li>b) Allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road.</li> </ul>	No existing vehicle crossing, or private level crossing will be utilised for the proposal.
A1.5	Vehicular traffic must be able to enter and leave a major road in a forward direction.	Design of the road network is in accordance with the Tasmanian Subdivision guidelines and allow vehicles to enter and exit the site in a forward direction.

 Table 3
 C3.5.1 Traffic Generation at a Vehicle Crossing, Level Crossing or New Junction

## 5.2 Tasmanian Subdivision Guidelines

**one**mile**grid** has also undertaken an assessment of the design with consideration of the Tasmanian Subdivision Guidelines (Oct 2013) prepared by the Local Government Association Tasmania.

The proposed road network has been designed to accommodate cross sections consistent with the Local Government Association Tasmania (LGAT) Urban Roads - Typical Sections and Pavement Width standard drawing (TSD-R06-v3), as detailed below.

Table 4	<b>Residential Road Requirements</b>
---------	--------------------------------------

Road	Road Type	Road Length	Min. Road Width	Min. Footpath Requirement
Flowery Flat Lane	Cul-De-Sac	Length < 150m and/or ≤ 15 tenements	6.9m	One Side Only
Billing Street	Through Road	Any length	8.9m	One Side Only

It is noted that Flowery Flat Lane is currently a Cul-De-Sac, with the road terminating approximately 220 metres east of the intersection with Emmett Road/Cantara Road and provides access to 3 dwellings. It is proposed to provide access for an additional 8 residential lots from Flowery Flat Lane, therefore a total of 11 tenements would be provided post development.



As such, it is considered appropriate that Flowery Flat Lane only be widened to 6.9 metres as part of the proposal. Should further development occur along Flowery Flat Lane that would increase the number of the tenements past 15, the road can be further widened along the northern side to 8.9 metres, in line with the requirements of TSD-R06-v3.

With regard to the existing portion of Billing Street (Emmett Street to site boundary), it is noted that the existing carriageway is not currently considered suitable to accommodate the additional volume of traffic generated by the proposal.

However, to reduce the likelihood of vehicles utilising Billing Street instead of Emmett Street to access future development to the north, in addition to reducing the impact of the proposal on the two dwellings that are currently provided access from Billing Street, a reduced carriageway with of 6.6 metres has been proposed. This carriageway width allows opposing vehicle movement to occur, and to offset the reduced ability for on-street parking, two indented bays (one for each dwelling) are also proposed to be provided.

The reduced carriageway width will act as a form of Local Area Traffic Management (LATM), similar to that provided by horizontal deflections or lane narrowing, and is expected to assisting with reducing vehicle speeds and improve safety and access for the proposed lots.

It is recommended that provision of a road hump, as shown in Figure 9 below, also be considered, given this would further assist with reducing vehicle speeds along Billing Street and could also be used to facilitate a pedestrian crossing that connects with the proposed footpath leading to the reserve to the south.



### Figure 9 Recommended Road Hump

As such, it is considered each of the road upgrades will offer ample capacity to cater for development-generated traffic.

Furthermore, all other road construction standards should be consistent with the LGAT standard drawings, including:

- Urban Roads Driveways (TSD-R09-v3)
- Urban Roads Footpaths (TSD-R11-v3)
- > Approved Concrete Kerb and Channels Profile Dimensions (TSD-R14-v3)
- Concrete Kerb and Channels Access Ramps (TSD-R18)

Finally, footpaths are proposed along the southern side of Flowery Flat Lane, and along the western side of the proposed internal road, providing connection to Emmett Street and to the reserve to the southern side of the site.



## 6 CONCLUSIONS

It is proposed to develop the subject site for the purposes of a residential subdivision, comprising of 19 lots, with access provided via the existing road network (Flowery Flat Lane and Billing Street), which is proposed to be extended and upgraded as part of the development.

Considering the analysis presented above, it is concluded that:

- The proposed subdivision design is considered to be generally in accordance with the relevant requirements of the Tasmanian Planning Scheme and the Tasmanian Subdivision Guidelines (Oct 2013);
- > The proposed upgrade road cross-section for Flowery Flat Lane is considered appropriate considering the number of tenements proposed.
- The proposed reduced carriageway width of Billing Street (between Emmett Street and site boundary) is considered appropriate and will assist with reducing vehicle speeds and improving safety and access to the proposed lots.
- > It is recommended that a Road Hump (as per TSD-R12-v2) be considered along the proposed internal road.
- > The traffic volumes generated by the proposal are considered very low, and are expected to be easily absorbed into the surrounding road network;
- > There are no traffic engineering reasons to preclude the issuing of a Planning Permit.



## LANDSLIDE RISK ASSESSMENT PROPOSED RESIDENTAL SUBDIVISION LOT 2 CANTARA ROAD, SMITHTON

Prepared for:

JCA Land Consultants

Date:

14 December 2023

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Appendix A	Engineering Borehole Logs
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Appendix D	Hillside Construction Practice

Version	Date	Prepared by	Reviewed by	Distribution
Original	14 December 2023	Tara Silwal	Dr Wayne Griffioen	Electronic

### 1 INTRODUCTION

Tasman Geotechnics was commissioned by JCA Land Consultants to carry out a geotechnical investigation and Landslide Risk Assessment for a proposed residential subdivision at Lot 2 Cantara Road, Smithton (title reference 149352/2).

The assessment is required as part of the Planning Application process as part of the proposed development is mapped as "Low/Medium" hazard band on the Landslide Planning Map V2 – Hazard Bands overlay on The LIST.

Our scope of work consisted of:

- ) Reviewing available reports and maps;
- ) Carrying out a site walkover to note geomorphological features associated with landslide activity;
- Probing of eight boreholes (BH1 to BH8) to determine subsurface conditions;
- J Carrying out Dynamic Cone Penetrometer (DCP) tests adjacent to five boreholes;
- ) Conducting a Landslide Risk Assessment.

The assessment is consistent with the Landslide Risk Assessment guidelines published by the Australian Geomechanics Society (2007).

### 2 BACKGROUND INFORMATION

#### 2.1 Planning Scheme

The Tasmanian Planning Scheme is effective in the Circular Head municipality from 26 May 2021. Clause C15.7 addresses Development Standards for Subdivision. The objective for subdivision within a landslip hazard area is:

That subdivision within a landslip hazard area does not create an opportunity for use or development that cannot achieve a tolerable risk from a landslip.

The acceptable solutions are that:

Each lot, or a lot proposed in a plan of subdivision, within a landslip hazard area, must:

- (a) be able to contain a building area, vehicle access, and services, that are wholly located outside a landslip hazard area;
- (b) be for the creation of separate lots for existing buildings;
- (c) be required for public use by the Crown, a council or a State authority; or
- (d) be required for the provision of Utilities.

In this instance the acceptable solutions cannot be satisfied for Lot 15, given that approximately half of the proposed lot is within a landslip hazard area. Accordingly, it is not possible to identify areas for buildings, vehicle accesses and services that are wholly located outside a landslip hazard area.

Thus, Lot 15 has to satisfy the performance criteria, which states that:

Each lot, or a lot proposed in a plan of subdivision, within a landslip hazard area must not create an opportunity for use or development that cannot achieve a tolerable risk from landslip, having regard to:

- (a) any increase in risk from a landslip for adjacent land;
- (b) the level of risk to use or development arising from an increased reliance on public

infrastructure;

- (c) the need to minimise future remediation works;
- (d) any loss or substantial compromise, by a landslip, of access to the lot on or off site;
- (e) the need to locate building areas outside the landslip hazard area;
- (f) any advice from a State authority, regulated entity or a council; and
- (g) the advice contained in a landslip hazard report.

This report is the landslip report to support the proposed subdivision.

A tolerable risk is one which is tolerable both in terms of risk to property and risk to life.

Although tolerable levels of risk for property loss are rarely quoted in literature, AGS (2007d) suggests a Moderate risk profile as a tolerable level of risk for low-rise residential buildings on existing slopes as well as existing landslides.

AGS (2007c) suggests the tolerable loss of life individual risk should be 10<sup>-5</sup>/annum for new constructed slopes, new development, or existing landslide, and 10<sup>-4</sup>/annum for existing slopes or existing development.

For the proposed development, the following tolerable levels of risk are adopted;

- ) Risk to property: Moderate,
- ) Risk to life: 10<sup>-5</sup>/annum.

### 2.2 Regional Setting

The proposed development area is situated at the Northern end of the Smithton town. The site is located east of the Duck River and at the foot of a 2.5 km long and 600m wide plateau, facing towards the northwest. The elevation of the plateau is 65m, abruptly descending to 20m at an average angle of 20 degree towards the proposed development area.

### 2.3 Geology

The surface geology was taken from the Mineral Resources Tasmania (MRT), Digital Geological Atlas 1:25,000 Series, Smithton Sheet and shows two geological units mapped at the site.

The western part of the property is mapped on Cenozoic cover sequences, described as "Older stabilised aeolian sand of predominantly coastal plain, with underlying marine sands in places; may show relict landforms including terraces, lunettes, linear or barchan dunes, and beach ridges". The eastern part of the side is mapped as Proterozoic aged sediments, described as "Massive and amygdaloidal, dominantly tholeiitic basalt, commonly with pillows (Correlate of Spinks Creek Volcanics)"

An extract of the MRT geology map is presented in Figure 1.

#### 2.4 Landslide Mapping

MRT maintain a digital landslide inventory focused primarily on urban areas of Tasmania, but which also includes known landslides statewide. The MRT landslide database shows that the site is not mapped on a known landslide, nor are landslides mapped on the escarpment below the plateau within 2 km of the site.

The nearest mapped landslide is a polygon (ID 1906) located 4.8km south of the site. It has only been inspected through remote sensing, and its current activity state is unknown. The landslide measures approximately 30m in length from the head scarp to the toe and spans about 30m in width.

MRT has been actively mapping landslides and landslide susceptibility since the 1950s, with a particular focus on urban growth areas beginning in the 1960s.

In 2003, MRT embarked on a new phase of landslide zoning in Tasmania. This work targeted the major urban areas of the State and areas of likely future development where it was assessed that a significant landslide hazard may exist. Consequently, there have been landslide hazard parameters developed within specific geographic areas such as the Tamar Valley and the Hobart-Glenorchy region. The parameters may include ground slope angles representative of potential source, regression, and runout areas, applicable specifically to the relevant geologic units within those areas.

The mapped landslide hazard bands at the site have been generated using a more simplistic approach, which uses fixed slope angles irrespective of the mapped geology. The trigger slope angles are based on those for debris flow for Cenozoic aged basalt and are applied universally across the state regardless of the actual rock type, outside of the major urban areas.

Ground Slope	Hazard Band
<11°	Not applicable
11 – 20°	Low Hazard Band
>20°	Medium Hazard Band

Table 1. Hazard Band with Slope

On this basis, the low and medium hazard band mapped on the relevant portion of the site is based on the ground slope being between 11-20° and >20° respectively.

The landslide hazard bands are presented on Figure 2.

### 2.5 **Previous Reports**

A search on the MRT website for previous investigations at or near the site revealed no reports pertaining to slope stability assessments near the Site.

#### 2.6 Proposed Development

The provided drawing shows that the land will be divided into 19 lots and access road, storm water drainage, water supply, sewerage and other services will be constructed for those residential subdivision.

The access road will be constructed from the central north of the plot, extending towards the center and terminating at the western end.

Lot 15 will be approximately 2628 m<sup>2</sup> in the south west corner of the subdivision. Approximately 1300m<sup>2</sup> of Lot 15 is low or medium hazard band.

### 3 FIELD INVESTIGATION

The fieldwork was conducted by an Engineering Geologists and a Geotechnician from Tasman Geotechnics on 16 November 2023 and involved:

- A site walkover to note topographic features relevant to landsliding.
- Drilling of 8 boreholes (BH1 for LRA and BH2 to BH8 for geotechnical investigation), to the depths of 0.7m, 3m, 2.2m, 2m, 1m, 2.2m, 2.9m and 1.8m respectively, using a 4WD mounted Eziprobe rig, and
- ) Performing Dynamic Cone Penetrometer (DCP) tests to 0.8m below ground level adjacent to boreholes BH2, BH3, BH4, BH5 and BH6 to determine the in-situ CBR. The DCP tests were recorded as blows/100mm.

The engineering log of the borehole (BH1) in proposed Lot 15 is presented in Appendix A. The borehole locations are shown in Figure 2.

One (1) soil sample from BH1 was analyzed by Tasman Geotechnics for Atterberg Limits and particle size distribution.

### 4 **RESULTS**

### 4.1 Surface Conditions

The c. 4.7 ha site is within well vegetated area is going to be divided in 19 Lots. Lot 15 (c. 2628m<sup>2</sup>) is situated at the south west corner of the subdivision. There are many mature trees in the proposed development site although there were several heaps of limbs and branches indicating recent cleaning. There is an existing dwelling at west of the proposed lot 15. The existing dwelling and other nearby houses are constructed by either cladding or brick and appear to be in good condition, with no damage attributable to landslide movement apparent from an external inspection.

The property lies in the foot of an escarpment facing a north west direction. The slope surface of the property itself is 8° to 4° towards the northwest, whereas the slope of the surface south to the boundary of the property steepened from 17° to 25°, observed ending as flat land at the crest of the plateau. There were dwellings and asphalt road on the plateau, with no any landslide related features.

The site has mixed surfaces of bare soils and grassed area under the trees. The trees were upright with no notable leaning or trunk bending. The surface soil is sandy silt with gravels, cobbles and large boulders of basalt more than 0.8m diameter. There is an outcrop of tholeiitic basalt at the southern boundary of the property with 2 distinct joint sets (J1 044°/53° and J2 172°/66°). The bare soils commonly exhibited desiccation cracking. No tension cracks were observed.

No springs, seeps, or changes in vegetation consistent with high groundwater levels were observed.

No indications of recent or active landslide movement were noted at the site.

#### 4.2 Subsurface Conditions

BH1 was drilled within the proposed Lot 15 and encounter the following subsurface conditions:

- ) 0.2m of low plasticity Sandy SILT with gravel (topsoil), red brown, fine to coarse grained sand, fine to coarse grained, sub-rounded to angular gravel with cobble and boulders in the surface, possibly colluvium from eastern upslope, overlying,
- ) Low plasticity SILT with sand, red brown, fine to coarse grained sand, trace fine to coarse grained, sub-rounded to angular gravel to 0.45m, overlying
- ) Silty GRAVEL, fine to coarse grained sub-rounded to sub-angular, low plasticity silt, red brown, fine to coarse grained trace sand, to a terminated depth of 0.7m below the ground level.

Four attempts were made to drill a borehole in the area, with 0.7m being the maximum depth achieved. The borehole was terminated due to refusal on cobbles and boulders.

No ground water inflow was observed while drilling the borehole.

#### 4.3 Laboratory Results

Laboratory testing was conducted by Tasman Geotechnics on one soil sample of BH1 in Lot 15. The results are summarized in Table 2.

Table 2. Soil classification results

Sample	Liquid	Plastic	Plasticity	Linear	%	%	%
	Limit (%)	Limit (%)	Index (%)	Shrinkage (%)	Gravel	Sand	Fines
BH1, 0.4 – 0.7m	31	25	6	3.90	63	14	23

Based on the laboratory results, the sample is classified as silty GRAVEL (GM), fine to coarse grained, sub-rounded to sub-angular, low plasticity silt, trace sand.

### 5 LANDSLIDE RISK ASSESSMENT

### 5.1 General

Risk assessment and management principles applied to slopes can be interpreted as answering the following questions:

- What might happen? (HAZARD IDENTIFICATION).
- *J* How likely is it? (LIKELIHOOD).
- ) What damage or injury might result? (CONSEQUENCE).
- *J* How important is it? (RISK EVALUATION).
- *J* What can be done about it? (RISK TREATMENT).

The risk is a combination of the likelihood and the consequences for the hazard in question. Thus both likelihood and consequences are taken into account when evaluating a risk and deciding whether treatment is required.

The qualitative likelihood, consequence and risk terms used in this report for risk to property are given in Appendix B and are based on the Landslide Risk Management Guidelines, published by Australian Geomechanics Society (AGS, 2007). The risk terms are defined by a matrix that brings together different combinations of likelihood and consequence. Risk matrices help to communicate the results of risk assessment, rank risks, set priorities and develop transparent approaches to decision making.

### 5.2 Geotechnical Model

The field observations indicate that the subsurface condition at the site consists of 0.45m topsoil and low plasticity silt, overlying low plasticity silty GRAVEL. Gravels, cobbles and boulders (more than 0.8m diameter) are observed in the surface of the site. Boulders and cobbles are of tholeiitic basalt consistent with the mapped geology. The site has a change in the slope, upslope from the west to east. Bedrock of basalt with dip 50° to 70° occurs in the eastern part of the site. The top sediments observed in the surface of the site is colluvium from slopes to the east. BH1 refused possibly in boulder or bed rock of tholeiitic basalt.

No groundwater was present in the near surface at the time of the investigation.

There is no indication of recent or active landslide-related movement at the site.

### 5.3 Potential Hazards

Based on the site observations, borehole data and available information discussed in the sections above, the following landslide hazard is identified for the site:

**Deep-seated (regional) landslide**. MRT have not mapped any landslides near the site, and for several kilometers along the escarpment.

Initiation of a new deep-seated landslide at or close to the site could occur due to elevated groundwater levels at a regional scale (e.g. impeded groundwater drainage or

increased surface infiltration) possibly combined with extensive excavation/erosion at the slope toe to disturb the existing equilibrium.

The likelihood for initiation of a new deep-seated landslide would involve mobilisation through the boulders exposed in the slope uphill of Lot 15. Therefore, under current climatic conditions the likelihood of a deep-seated landslide is assessed to be Rare.

**Small to Medium scale landslide** (up to about 3m deep). Such landslides can occur where slopes are locally steep, or have been steepened by earthworks (cut or fill) and could involve up to 1,000 m<sup>3</sup> of soil. Small to Medium scale landslides may also occur due to localised soil erosion (e.g. from poor control of surface runoff) and locally elevated groundwater levels (e.g., seepage water behind retaining walls).

There is presently no evidence of soil erosion at the site and the permanent groundwater level at Lot 15 appears to be greater than 3.0m below ground level. The likelihood of a small to medium scale landslide under current climatic conditions is assessed to be Unlikely, provided good hillside practices are adopted and the depth of a cut is minimised (or supported with engineer designed retaining walls).

The identification of the potential hazards considers both the site and nearby properties, and is necessary to address stability issues that may negatively impact upon the site and influence the risk to property.

### 5.4 Risk to Property

The following table summarizes the risk to property of the landslide events in relation to the proposed development as described in Section 2.6, assuming limitations in Section 6 are incorporated.

Scenario	Likelihood	Consequence	Risk Profile
Deep-seated (regional) landslide	Rare: Under current climatic conditions	Major: The future house and other buildings could be damaged	Low
Small to medium scale landslide	Unlikely: Depth of cut is limited or retained with engineer designed retaining wall	Medium: Damage to future house, and some part of the site requiring stabilisation works	Low

### Table 3. Landslide risk profiles

The assessment shows that the proposed development presents a Low level of risk, provided the limitations listed in Section 6 are incorporated in the design.

#### 5.5 Risk to Life

The calculation of risk to life requires a quantitative assessment. Here, we have used an event tree approach to assess the risk to life for a person in a future house, assuming the house is utilised for 16 hours per day, 7 days a week.

An event tree showing a possible sequence of events is presented in Appendix C for the landslide hazards identified above. The risk assessment shows that the Risk to Life assuming management measures are incorporated in the design and construction of the house is  $5.0 \times 10^{-7}$  annum.

#### 5.6 Risk Evaluation

As noted in Section 2.1, the performance criteria require that subdivision does not create an opportunity for use or development that cannot achieve and maintain a tolerable risk from landslip. The proposed tolerable levels of risk were presented in Section 2.1.

### Risk to Property

The risk to property is assessed to be Low. As the risk profile is lower than the adopted level of risk, the works achieve and maintain a tolerable risk from a landslip, and thus the requirements of Clause C15.7.1 are satisfied for risk to property. No reduction or protection measures are required beyond the boundary of the site.

### Risk to Life

Given that the assessed risk to life is less than the tolerable risk, the requirements of Clause C15.7.1 are satisfied for risk to life.

With respect to the items listed for the performance criteria, we note that:

- Development in accordance with Section 6 does not increase the risk of landslide on adjacent land.
- ) Subdivision will be designed such that new services (stormwater, sewerage) can be accommodated, away from landslip hazard areas, and
- ) Access to the proposed Lot 15 is outside landslip hazard areas, and would not be compromised by a landslip.

We are not aware of existing requirements from a state authority or council.

### 6 DISCUSSION & RECOMMENDATIONS

### 6.1 Limitations on Development

To ensure the development at Lot 15 does not change the risk profile above Low for the site, it is recommended that the following limitations be enforced:

- ) Footings for the development in the proposed lot should be designed as per AS2870 (discussed in Section 6.2).
- ) Cut slopes and fill batters should be sloped at a maximum of 1V:2.5H (about 22°). All batter faces should be protected against erosion (eg by vegetation, erosion mats or mulch). Steeper slopes will need to be retained by an engineer designed retention system.
- ) Permanent excavations should be no more than 1m below ground level in the hazard band area. Excavations are likely to encounter basalt boulders. Such boulders should be left alone as much as possible. If boulders are to be removed, they should be broken up by rock hammer or splitting (eg expanding epoxy resin), not blasting.
- Fill depths should not exceed 1.5m above the present ground level and be compacted in layers (loose thickness <0.3m) to a Dry Density Ratio (DDR) of at least 95% (Standard Compaction) at 0% to +2% of Optimum Moisture Content (OMC). Fill designed to support slabs should be compacted to a DDR of at least 98% (Standard Compaction) at 0% to +2% OMC.
- ) Where possible, vegetation should be maintained on the slopes to prevent erosion of surface soils. As a minimum, vegetation should comprise grass. If trees are planted on the slope, then the site should be managed such that when the trees reach maturity and are removed, they are replaced with new (young) trees.
- ) Maintenance of surface runoff, vegetation, retaining structures and other measures described above are the responsibility of the site owner.
- ) Stormwater from roofs and paved areas should be diverted to the proposed stormwater system.
- ) Good hillside construction practices should be followed. A copy of Geoguide LR8 Hillside Construction Practice is presented in Appendix D.

### 6.2 Site Classification

The default site classification according to the Directors Determination – Landslip Hazard Areas is Class P.

Nevertheless, after allowing due consideration of the site geology, drainage and soil conditions, the site has been re-classified as follows:

### CLASS S (AS2870 - 2011)

#### Characteristic surface movement, y<sub>s</sub> < 20 mm

This Classification is applicable only for ground conditions encountered at the time of this investigation. If cut or fill earthworks in excess of 0.5m are carried out, then the Site Classification will need to be re-assessed, and possibly changed.

### 6.3 Footings

An allowable bearing pressure of 100 kPa is available for edge beams, strip and pad footings founded on the natural soil.

It is recommended that no structure be founded across cut and fill without the footings extending through the fill to the natural soils, allowance made in the structural design for differential settlements or engineer designed pier or pile foundations adopted.

The site classification presented in Section 6.2 assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.

Attention is drawn to Appendix B of AS 2870 and CSIRO Building Technical File BTF18 "Foundation Maintenance and Footing Performance: A Homeowner's Guide" as a guide to maintenance requirement for the proposed structure.

### 6.4 Wind Classification

The wind classification for the site is as follows:

#### N2 (AS 4055 - 2021)

Based on region, terrain, shielding and topography as follows:

Region	Terrain category	Topography	Shielding
А	TC1	Т0	FS



## Important information about your report

These notes are provided to help you understand the limitations of your report.

### **Project Scope**

Your report has been developed on the basis of your unique project specific requirements as understood by Tasman Geotechnics at the time, and applies only to the site investigated. Tasman Geotechnics should be consulted if there are subsequent changes to the proposed project, to assess how the changes impact on the report's recommendations.

### **Subsurface Conditions**

Subsurface conditions are created by natural processes and the activity of man.

A site assessment identifies subsurface conditions at discrete locations. Actual conditions at other locations may differ from those inferred to exist, because no professional, no matter how qualified, can reveal what is hidden by earth, rock and time.

Nothing can be done to change the conditions that exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, the services of Tasman Geotechnics should be retained throughout the project, to identify variable conditions, conduct additional investigation or tests if required and recommend solutions to problems encountered on site.

### **Advice and Recommendations**

Your report contains advice or recommendations which are based on observations, measurements, calculations and professional interpretation, all of which have a level of uncertainty attached.

The recommendations are based on the assumption that subsurface conditions encountered at the discrete locations are indicative of an area. This can not be substantiated until implementation of the project has commenced. Tasman Geotechnics is familiar with the background information and should be consulted to assess whether or not the report's recommendations are valid, or whether changes should be considered.

The report as a whole presents the findings of the site assessment, and the report should not be copied in part or altered in any way.



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# Appendix A

**Engineering Borehole Logs** 



### SOIL DESCRIPTION EXPLANATION SHEET

Soils are described in accordance with the Unified Soil Classification System (UCS), as shown in the following table.

		ICATION					
	an		GW	Well graded gravels and gravel-sand mixtures, little or no fines			
ILS	Siss the second		GP	Poorly graded gravels and gravel-sand mixtures, little or no fines			
D S O	S S S S S S S S S S S S S S S S S S S		GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines			
AINE	mate than	SOILS	GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines			
E GR/	% of arger		SW	Well graded sands and gravelly sands, little or no fines	Ē		
ARSE	an 65 n is li	SANDS	SP	Poorly graded sands and gravelly sands, little or no fines	ENG	5	ESS
Ô			SM	Silty sand, sand-silt mixtures, non-plastic fines	STRI	DILATAN	TOUGHN
	ဋိ SOILS	SC	Clayey sands, sand-clay mixtures, plastic fines	DRY			
[	le u	AΥ, ess 6	ML	Inorganic silts, very fine sands or clayey fine sands	None to low	Quick to slow	None
SOILS	materis less tha	T & CL d limit l ìan 50%	CL	Inorganic clays or low to medium plasticity, gravelly clays, sandy clays and silty clays	Medium to high	None to very slow	Medium
LED	% of m is l 5mm	SIL liqui t	OL	Organic silts and organic silty clays of low plasticity	Low to medium	Slow	Low
GRAIN	ian 35 <sup>6</sup> n 63mi 0.075	LAY, mit han	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts	Low to medium	Slow to none	Low to medium
INE	s thau s thau & CI uid lir ter t		СН	Inorganic clays of high plasticity, fat clays	High	None	High
	les m	SILT liq grea	ОН	Organic clays of medium to high plasticity	Medium to high	None to very slow	Low to medium
	PEA	λТ	Pt	Peat muck and other highly organic soils			

### Particle size descriptive terms

Name	Subdivision	Size
Boulders		>200mm
Cobbles		63mm to 200mm
Gravel	coarse	20mm to 63mm
	medium	6mm to 20mm
	fine	2.36mm to 6mm
Sand	coarse	600µm to 2.36mm
	medium	200µm to 600µm
	fine	75µm to 200µm

#### **Minor Components**

Term	Proportions	Observed properties
'Trace of'	Coarse grained: <5%	Presence just detectable by feel or eve. Soil properties
	Fine grained: <15%	little or no different to general properties of
'With	Coarse grained:	Presence easily
some'	5-12%	detected by feel or
		eye. Soil properties
	Fine grained:	little different to
	15-30%	general properties of
		primary component.

#### Density of granular soils

Term	Density index
Verv loose	<15%
Loose	15 to 35%
Medium Dense	35 to 65%
Dense	65 to 85%
Very dense	>85%

#### Consistency of cohesive soils

001131310	noy c		50115	
Term		Undrained strength	Approximate Pocket Penetrometer Reading	Field guide
Very soft	VS	<12kPa	25kPa	A finger can be pushed well into soil with little effort
Soft	S	12 - 25kPa	25-50kPa	Easily penetrated several cm by fist
Firm	F	25 - 50kPa	50-100kPa	Soil can be indented about 5mm by thumb
Stiff	St	50-100kPa	100-200kPa	Surface can be indented but not penetrated by thumb
Very stiff	VSt	100-200kPa	200-400kPa	Surface can be marked but not indented by thumb
Hard	н	>200kPa	>400kPa	Indented with difficulty by thumb nail
Friable	Fb	-	-	Crumbles or powders when scraped by thumb nail

#### **Moisture Condition**

Dry (D) s	LOOKS and feels dry. Conesive soils are hard, friable or powdery. Granular soils run freely through fingers.
Moist (M) S	Soil feels cool, darkened in colour. Cohesive soils are usually weakened by moisture presence, granular soils tend to cohere.
Wet (W) A	As for moist soils, but free water forms on hands when sample is handled

Cohesive soils can also be described relative to their plastic limit, ie: <Wp, =Wp, >Wp. The plastic limit is defined as the minimum water content at which the soil can be rolled into a thread 3mm thick.
ENGI	NEER	ING BO	RE	HOLE	LOC	3			Вс	oreh	ole no	b: BH1	
Client: Projec Locatio	JCA L t: LRA on: Lot	and Cons & Geotec 2 Cantara	ultan hnica i Roa	its al Inves ad, Smit	tigatio thton	on				L	Sheet Job D Logged	t no. 1 ( no. T( ate: 16 By: TS	of 1 523254/1 5 Nov 2023 5
Drill m Hole d Slope:	odel: F iamete -90	Probe er: 58mm Bearin	ng: (	)			TASMAN geotechnics		G	GDA9 DA94	94 East 4 North Elevat	ting: 34 ling: 54 tion:	2226 77993
Method 1	etration 2 3 4	Notes Samples Tests	Water	Depth	Graphic Log	Classification	Material Description	Moleture	Condition	Consistency density, index		(blows	DCP per 100mm) ₽ ≈
Push Tube		D				ML GM	Sandy SILT with gravel, low plasticity, low liquid limit, red brown; sand, fine to coarse grained; gravel, fine to coarse grained, sub-rounded to angular Silty GRAVEL, fine to coarse grained, sub-rounded to sub-angular; silt, low plasticity, red brown; trace sand, fine to coarse grained Terminated at 0.7m, refusal		D	S MD			
method DT AS AH RR CB NMLC NQ, HC	J Diatu Auge Auge Rolle Claw NML Wire	ube er screwing er drilling er/tricone //blade bit C core line core		17/03/18 on date s water inf partial dr	water le shown ow ill fluid lo drill fluid	vel ss i loss	Notes, Samples, Tests         Moisturbed sample 50mm diameter           D         Disturbed sample         Dry (D)           N         Standard Penetration Test (SPT)         Moist (M           N*         SPT with solid cone         Vet (W           V         Vane Shear (kPa)         Cohesi           P         Pressure Meter         be desc           B         Bulk Sample         their pl           R         Refusal <wp< td="">           PID PID Measurement         =Wp           WS         Wster Sample         &gt;Wp</wp<>	re Conditi //) ) ve soils c cribed rela astic limit	on an also ative to t, ie:		Consistency /S Ver S Soff F Finn St Stiff /St Ver H Har b Fria b Fria b Fria L Ver L Ver L Ver L O D Der /D Ver	y soft d ble y Loose se lium Dense ise y Dense	

# Appendix B

Landslide Risk Matrix



# Terminology for use in Assessing Risk to Property

These notes are provided to help you understand concepts and terms used in Landslide Risk Assessment and are based on the "Practice Note Guidelines for Landslide Risk Management 2007" published in *Australian Geomechanics* Vol 42, No 1, 2007.

### Likelihood Terms

The qualitative likelihood terms have been related to a nominal design life of 50 years. The assessment of likelihood involves judgment based on the knowledge and experience of the assessor. Different assessors may make different judgments.

Approximate Annual Probability	Implied indicative Recurrence Interval	Description	Descriptor	Level
10 <sup>-1</sup>	10 years	The event is expected to occur over the design life	Almost Certain	А
10 <sup>-2</sup>	100 years	The event will probably occur under adverse conditions over the design life	Likely	В
10 <sup>-3</sup>	1000 years	The event could occur under adverse conditions over the design life	Possible	С
10 <sup>-4</sup>	10,000 years	The event might occur under very adverse conditions over the design life	Unlikely	D
10 <sup>-5</sup>	100,000 years	The event is conceivable but only under exceptional circumstances over the design life	Rare	E
10 <sup>-6</sup>	1,000,000 years	The event is inconceivable or fanciful for the design life	Barely Credible	F

### **Qualitative Measures of Consequence to Property**

Indicative Cost of	Description	Descriptor	Level
Damage			
200%	Structure(s) completely destroyed and/or large scale damage requiring major engineering works for stabilisation. Could cause at least one adjacent property major consequential damage.	Catastrophic	1
60%	Extensive damage to most of structure, and/or extending beyond site boundaries requiring significant stabilisation works. Could cause at least one adjacent property medium consequential damage	Major	2
20%	Moderate damage to some of structure, and/or significant part of site requiring large stabilisation works. Could cause at least one adjacent property minor consequential damage.	Medium	3
5%	Limited damage to part of structure, and/or part of site requiring some reinstatement stabilisation works	Minor	4
0.5%	Little damage.	Insignificant	5

The assessment of consequences involves judgment based on the knowledge and experience of the assessor. The relative consequence terms are value judgments related to how the potential consequences may be perceived by those affected by the risk. Explicit descriptions of potential consequences will help the stakeholders understand the consequences and arrive at their judgment.

Likeliho	od	Consequences to Property					
	Approximate annual probability	1: Catastrophic	2: Major	3: Medium	4: Minor	5: Insignificant	
A: Almost Certain	10 <sup>-1</sup>	VH	VH	VH	Н	L	
B: Likely	10 <sup>-2</sup>	VH	VH	Н	М	L	
C: Possible	10 <sup>-3</sup>	VH	н	М	М	VL	
D: Unlikely	10 <sup>-4</sup>	Н	М	L	L	VL	
E: Rare	10 <sup>-5</sup>	М	L	L	VL	VL	
F: Barely credible	10 <sup>-6</sup>	L	VL	VL	VL	VL	

### Qualitative Risk Analysis Matrix - Risk to Property

NOTES:

1. The risk associated with Insignificant consequences, however likely, is defined as Low or Very Low

2. The main purpose of a risk matrix is to help rank risks and set priorities and help the decision making process.

### **Response to Risk**

In general, it is the responsibility of the client and/or regulatory and/or others who may be affected to decide whether to accept or treat the risk. The risk assessor and/or other advisers may assist by making risk comparisons, discussing treatment options, explaining the risk management process, advising how others have reacted to risk in similar situations and making recommendations. Attitudes to risk vary widely and risk evaluation often involves considering more than just property damage (eg environmental effects, public reaction, business confidence etc).

The following is a guide to typical responses to assessed risk.

R	isk Level	Example Implications
VH	Very High	Unacceptable without treatment. Extensive detailed investigation and research, planning and implementation of treatment options essential to reduce risk to Low; may be too expensive and not practical. Work likely to cost more than the value of the property.
н	High	Unacceptable without treatment. Detailed investigation, planning and implementation of treatment options required to reduce risk to Low. Work would cost a substantial sum in relation to the value of the property.
М	Moderate	May be tolerated in certain circumstances (subject to regulator's approval) but requires investigation, planning and implementation of treatment options to reduce the risk to Low. Treatment options to reduce to Low risk should be implemented as soon as practicable.
L	Low	Usually accepted by regulators. Where treatment has been required to reduce the risk to this level, ongoing maintenance is required.
VL	Very Low	Acceptable. Manage by normal slope maintenance procedures

# Appendix C

Risk to Life



### Event Tree – Risk to Life, with management measures where recommended

Tasman Geotechnics Reference: TG23254/1 - 01report



# Appendix D

**Hillside Construction Practice** 

### AUSTRALIAN GEOGUIDE LR8 (CONSTRUCTION PRACTICE)

### HILLSIDE CONSTRUCTION PRACTICE

Sensible development practices are required when building on hillsides, particularly if the hillside has more than a low risk of instability (GeoGuide LR7). Only building techniques intended to maintain, or reduce, the overall level of landslide risk should be considered. Examples of good hillside construction practice are illustrated below.



#### WHY ARE THESE PRACTICES GOOD?

**Roadways and parking areas -** are paved and incorporate kerbs which prevent water discharging straight into the hillside (GeoGuide LR5).

Cuttings - are supported by retaining walls (GeoGuide LR6).

**Retaining walls** - are engineer designed to withstand the lateral earth pressures and surcharges expected, and include drains to prevent water pressures developing in the backfill. Where the ground slopes steeply down towards the high side of a retaining wall, the disturbing force (see GeoGuide LR6) can be two or more times that in level ground. Retaining walls must be designed taking these forces into account.

**Sewage** - whether treated or not is either taken away in pipes or contained in properly founded tanks so it cannot soak into the ground.

**Surface water -** from roofs and other hard surfaces is piped away to a suitable discharge point rather than being allowed to infiltrate into the ground. Preferably, the discharge point will be in a natural creek where ground water exits, rather than enters, the ground. Shallow, lined, drains on the surface can fulfil the same purpose (GeoGuide LR5).

**Surface loads** - are minimised. No fill embankments have been built. The house is a lightweight structure. Foundation loads have been taken down below the level at which a landslide is likely to occur and, preferably, to rock. This sort of construction is probably not applicable to soil slopes (GeoGuide LR3). If you are uncertain whether your site has rock near the surface, or is essentially a soil slope, you should engage a geotechnical practitioner to find out.

Flexible structures - have been used because they can tolerate a certain amount of movement with minimal signs of distress and maintain their functionality.

**Vegetation clearance -** on soil slopes has been kept to a reasonable minimum. Trees, and to a lesser extent smaller vegetation, take large quantities of water out of the ground every day. This lowers the ground water table, which in turn helps to maintain the stability of the slope. Large scale clearing can result in a rise in water table with a consequent increase in the likelihood of a landslide (GeoGuide LR5). An exception may have to be made to this rule on steep rock slopes where trees have little effect on the water table, but their roots pose a landslide hazard by dislodging boulders.

Possible effects of ignoring good construction practices are illustrated on page 2. Unfortunately, these poor construction practices are not as unusual as you might think and are often chosen because, on the face of it, they will save the developer, or owner, money. You should not lose sight of the fact that the cost and anguish associated with any one of the disasters illustrated, is likely to more than wipe out any apparent savings at the outset.

#### ADOPT GOOD PRACTICE ON HILLSIDE SITES

### **AUSTRALIAN GEOGUIDE LR8 (CONSTRUCTION PRACTICE)**

# EXAMPLES OF **POOR** HILLSIDE CONSTRUCTION PRACTICE



#### WHY ARE THESE PRACTICES POOR?

**Roadways and parking areas -** are unsurfaced and lack proper table drains (gutters) causing surface water to pond and soak into the ground.

**Cut and fill -** has been used to balance earthworks quantities and level the site leaving unstable cut faces and added large surface loads to the ground. Failure to compact the fill properly has led to settlement, which will probably continue for several years after completion. The house and pool have been built on the fill and have settled with it and cracked. Leakage from the cracked pool and the applied surface loads from the fill have combined to cause landslides.

**Retaining walls -** have been avoided, to minimise cost, and hand placed rock walls used instead. Without applying engineering design principles, the walls have failed to provide the required support to the ground and have failed, creating a very dangerous situation.

A heavy, rigid, house - has been built on shallow, conventional, footings. Not only has the brickwork cracked because of the resulting ground movements, but it has also become involved in a man-made landslide.

**Soak-away drainage -** has been used for sewage and surface water run-off from roofs and pavements. This water soaks into the ground and raises the water table (GeoGuide LR5). Subsoil drains that run along the contours should be avoided for the same reason. If felt necessary, subsoil drains should run steeply downhill in a chevron, or herring bone, pattern. This may conflict with the requirements for effluent and surface water disposal (GeoGuide LR9) and if so, you will need to seek professional advice.

**Rock debris** - from landslides higher up on the slope seems likely to pass through the site. Such locations are often referred to by geotechnical practitioners as "debris flow paths". Rock is normally even denser than ordinary fill, so even quite modest boulders are likely to weigh many tonnes and do a lot of damage once they start to roll. Boulders have been known to travel hundreds of metres downhill leaving behind a trail of destruction.

**Vegetation** - has been completely cleared, leading to a possible rise in the water table and increased landslide risk (GeoGuide LR5).

#### DON'T CUT CORNERS ON HILLSIDE SITES - OBTAIN ADVICE FROM A GEOTECHNICAL PRACTITIONER

#### More information relevant to your particular situation may be found in other Australian GeoGuides:

_	Coo Cuido I D1	Introduction		CooCuida LDC	Dataining Walls
•	GeoGuide LR I	- Introduction	•	GeoGuide LR6	- Retaining wans
•	GeoGuide LR2	- Landslides	•	GeoGuide LR7	- Landslide Risk
•	GeoGuide LR3	- Landslides in Soil	•	GeoGuide LR9	- Effluent & Surface Water Disposal
•	GeoGuide LR4	- Landslides in Rock		GeoGuide LR10	<ul> <li>Coastal Landslides</li> </ul>
•	GeoGuide LR5	- Water & Drainage	•	GeoGuide LR11	- Record Keeping

The Australian GeoGuides (LR series) are a set of publications intended for property owners; local councils; planning authorities; developers; insurers; lawyers and, in fact, anyone who lives with, or has an interest in, a natural or engineered slope, a cutting, or an excavation. They are intended to help you understand why slopes and retaining structures can be a hazard and what can be done with appropriate professional advice and local council approval (if required) to remove, reduce, or minimise the risk they represent. The GeoGuides have been prepared by the <u>Australian Geomechanics Society</u>, a specialist technical society within Engineers Australia, the national peak body for all engineering disciplines in Australia, whose members are professional geotechnical engineers and engineering geologists with a particular interest in ground engineering. The GeoGuides have been funded under the Australian governments' National Disaster Mitigation Program.

7/17/23, 9:05 AM

r					-					
Forest Practices A	ct 1985	For	est F	Practice	s Pla	n		FPP No.:	GEW03	57-03
Certification Numb	er: 2019-0218						Loc	al File ID:	-	
Update S Type: Va	ection 23 ariation	Last edit by:	GEW (Dies	- Williams G E el)	E	Created on:	13/04/2019	Update	ed 17/0 n:	7/2023
Update 4 <sup>-</sup> code:	16174	Change Description:	Exter	Id FPP and DC	)P end da	tes		1		
t is necessary to read this Forest Practices Plan in its entirety for the specifications required by Section 18(2) of the Forest Practices Act 1985. This Forest Practices Plan authorises forest practices and operations to which it refers on the land specified in the Plan and during the period specified in the Plan, provided that the operations are carried out in accordance with the Plan. This authority is given for the purposes of the Forest Practices Act 1985 only. Those carrying out the operations under the Plan should ensure that they comply with all relevant laws including the conditions of licences, permits and other authorities issued under other laws.										
Coupe Name:	JV001A	Lc	ocation:	Smithton			PTR	Number:	-	
Tenure:	Private property	IBRA 4	region:	Woolnorth			UPI or PID	Numbers:	2850674	 ,
District:	North West	Munio	cipality:	Circular Hea	d		Lar	downers:	516BHP	P/L
Map Sheet:	SMITHTON : 344		erence:	342295mE,	5478093m	ηΝ	Principal Pr	ocessors:		
Applicant:	516BHP P/L, PO	Box 254, Wodonga '	VIC 3690	, jakobv@bigp	ond.com,	0400 563 999				
2: Quaternary Alluvial Deposits (QAD) Erodibility Class 1: Moderate (M) 2: Majority Slope: 8 deg. Maximum Altitude: 20 m Within town water catchment: No Within a landscape zone in a Municipal Planning Scheme: No Water Intake: - Known Domestic Water Supply Intake within 2km: No										
Public Safety Risk	Assessment: Not	Required								
Emergency meetin	g Point: 0 - N/A -	N/A								
Plan GEV certified G E by:	W - Williams Date (Diesel)	certified: 04/05/20	)19	Period for which the plan is to remain in force:	04/05/20 31/12/20	19 - Date r 26	notice of intent	sent: 29	/01/2019	
Discrete Operation	Discrete Operational Phase Estimated Start Date Estimated End Date Details									
Non Commercial C	Non Commercial Clearing 04/05/2019 31/12/2026									
Current RFA Forest Community and/or Land Use Prescription Ha										
E. viminalis grassy forest (V) Clearfall to Remain Cleared (CF-CLR) 3.80										
Net Operational Area:       3.80       Total Area to be Reforested:       0.00       Total Area to be Harvested:       3.80       Total Area of Operation:       3.80										



# **APPLICATION FOR VARIATION TO CERTIFIED FOREST PRACTICES PLAN** (SECTION 23 OF THE FOREST PRACTICES ACT [the Act])

I, J Vukasinovic for BHP516 P/L as the person who applied to the FPA under section 18 of the Act for the certification of the Forest Practices Plan (FPP) GEW0357 (the Plan) (or is a person to whom the applicant's responsibilities have been assigned in accordance with section 25D of the Act hereby apply for the Plan to be varied.

16 July 2023 .....Date... Signature.

I do consent for notice of the decision to be sent to me by email

Email address: jakobv@bigpond.com

Manner in which the provisions of the certified FPP are to be varied:

Extend FPP and DOP end dates to 31/12/26

### Decision

In accordance with section 24 of the Act this application for variation of certified Forest Practices

Plan. GEW0357 has been granted

G E Williams Signed (Certifying FPO) .....

Name of FPO: Greg E Williams

This variation and the original FPP may be made available to members of the public and other government departments in accordance with the provisions of the Right to Information Act 2009 and the FPA's policy available at http://www.fpa.tas.gov.au/ data/assets/pdf file/0005/58118/FPA policy on communication of information relating to FPPs.pdf.

gew 17/07/23

### Office Use only: FPP GEW0357 Variation No. 02

### **MEMORANDUM**

### Pursuant to section 23 of the Forest Practices Act 1985

### **APPROVAL TO SUBMIT VARIATION TO**

### FOREST PRACTICES PLAN No GEW0357 (the Plan)

#### Landowners consent

I am the owner of the land or the authorised agent of the owner of the land referred to in the Plan.

I give my approval for the variation to be submitted to the Forest Practices Authority as an application for certification under section 23 of the Forest Practices Act 1985.

Name	J Vukasinovic
Company or other entity	BHP 516 P/L
Address	PO Box 254
	Wodonga, VIC, 3690
Email	jakobv@bigpond.com
Phone	0400 563 999
Signature	
Date	16 July 2023

JW 17/07/23



Please quote our ref: SA 2020 / 00004 PID 2850674 Your ref: Enquiries to: Development Services 6452 4820 | council@circularhead.tas.gov.au

2 January 2023

516BHP Pty Ltd PO Box 254 WODONGA VIC 3690

Dear Jakob and Michael

# ADDITIONAL INFORMATION REQUIRED - DEVELOPMENT APPLICATION – SUBDIVISION (1 LOT INTO 20 LOTS) - CANTARA ROAD, SMITHTON

I am writing to advise that the further information received on 18 December 2023 was unsatisfactory to restart the clock and determination of your application.

Under Section 54 of the *Land Use Planning and Approvals Act 1993* Council seeks further information in relation to application SA 2020 / 00004 for Subdivision (1 Lot into 20 Lots) at Cantara Road, Smithton. In order to further progress the assessment of your application, please provide the following;

- Item 1. Satisfied
- Item 2. Satisfied
- Item 3. Satisfied
- Item 4. Satisfied
- Item 5. Satisfied
- Item 6 and Item 7. As shown and recommended in the submitted Traffic Impact Assessment, please provide a revised subdivision plan that reflects:
  - a. the road layout for the extension to Billing Street,
  - b. Flowery Flat Lane upgrade,
  - c. carriageway width of internal road.

CIRCULAR HEAD COUNCIL ABN: 43 826 151 424 33 Goldie St (PO Box 348) Smithton TAS 7330 DX 70706 Smithton





**CIRCULAR HEAD** 

- Item 8. Regarding the submitted RFI Response Cover Letter, please provide a revised subdivision plan showing the amendment.
- Item 9. Given the differences in the number of new lots produced (19 vs 20 lots), lot size, lot frontage, building areas, and internal road design, the Council expects to have a statement from TFS or an accredited person to certify that the original BFHMP is still valid to determine the compliance of C13.6.1, C13.6.2 and C13.6.3 of the Bushfire-prone Area Code or a new BFHMP is required to demonstrate the compliance with the Code.
- Item 10. Majorly satisfied. Please revise the proposed subdivision plan to match Figure 2, Project No: TG23254/1-01 report, as prepared by Tasman Geotechnics and dated 7/12/2023.

Your application remains on hold until all relevant documentation has been received to the satisfaction of the Planning Authority.

If you have any queries or require further information, please contact the Council's Development Services Department on 6452 4820.

Yours sincerely

Dang Minh Duc Van TOWN PLANNER





**Melbourne** Suite 9, 303 Maroondah Hwy Ringwood VIC 3134 **T:** 03 9735 4888

**Regional** Unit 5, 67 Wigg Street Wodonga VIC 3690 **T:** 02 6062 3648

E: jca@jcalc.com.au ABN: 75 083 816 915

JCA Ref 28519

Council Ref SA2020/00004

PID 28550674

15 March 2024

Mr Dang Minh Duc Van- Town Planner Circular Head Council PO Box 348 Smithton Tas 7330

Dear Mr Dang Minh Duc Van

### RE: SA 2020 / 00004 - SUBDIVISION (1 LOT INTO 19 LOTS) - CANTARA ROAD, SMITHTON

Please find attached the response to Councils request for further information listed in the letter dated 2<sup>nd</sup> January 2024.

Item 1: Plan of Subdivision. - Satisfied

Item 2: Development standards for Subdivisions section A4 – Lot Orientation -Satisfied

Item 3: Water Supply connection- Satisfied

Item 4: Storm Water connection - Satisfied

Item 5: Low Density Residential Land - Satisfied

### Item 6 & 7 : Traffic Impact Assessment and Road Design

A revised plan of subdivision is attached to reflect and show as recommenced in the submitted Traffic Impact Assessment:

- a. The road Layout for the extension to Billing Street,
- b. Flowery Flat Lane upgrade,
- c. Carriageway width of internal road.

### Item 8: Public Open Space.

A revised plan of subdivision is attached.

### Item 9: Bushfire hazard Management plan.

A new Bushfire Hazard Management plan (BFHMP) completed 6<sup>th</sup> March 2024 and a Planning Certificate rev 4 completed 8<sup>th</sup> March 2024, are attached.

This BFHMP has determined BAL ratings applicable to each allotment, these are: Stage 1 all Lots are BAL 19 except Lot 3 & 4 having a BAL 12.5, and for Stage 2 all Lots are BAL 12.5 or Low, apart from lot 15 having a BAL of 19.

### Item 10: Landslip Hazard.

A revised plan of subdivision is attached, which now matches the submitted figure 2, Project No: TG23254/1-01 Geotechnical report as prepared by Tasman Geotechnics and dated 7/12/2023.

We believe the supplied information is a complete response to the information requested and look forward to the application being further assessed by the Council.

Yours Sincerely,

<u>Michael Hipfel</u> Managing Director JCA Land Consultants

# **BUSHFIRE-PRONE AREAS CODE**

# CERTIFICATE<sup>1</sup> 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:

Lot 2 Cantara Road Smithton

Certificate of Title / PID:

CT 149352/2 PID 2850674 and CT 209809/1 PID 6239880

### 2. Proposed Use or Development

Description of proposed Use and Development:

19 Lot subdivision

Applicable Planning Scheme:

Tasmanian Planning Scheme - Circular Head

### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Plan of Subdivision (51346)	JCA	29/09/2023	2
Bushfire Hazard Report	Matt Perry BFP-175	6 March 2024	4
Hazard Management Plan	Matt Perry BFP-175	6 March 2024	4

<sup>&</sup>lt;sup>1</sup> 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:

E1.4 / C13.4 – Use or development exempt from this Code				
Compliance test	Compliance Requirement			
E1.4(a) / C13.4.1(a)	Insufficient increase in risk			

E1.5.1 / C13.5.1 – Vulnerable Uses			
Acceptable Solution	Compliance Requirement		
E1.5.1 P1 / C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.		
E1.5.1 A2 / C13.5.1 A2	Emergency management strategy		
E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan		

E1.5.2 / C13.5.2 – Hazardous Uses				
Acceptable Solution	Compliance Requirement			
E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.			
E1.5.2 A2 / C13.5.2 A2	Emergency management strategy			
E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan			

$\boxtimes$	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas			
	Acceptable Solution	Compliance Requirement		
	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>		
	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk		
$\boxtimes$	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')		
$\boxtimes$	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement		

$\boxtimes$	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access			
	Acceptable Solution Compliance Requirement			
$\boxtimes$	E1.6.2 P1 / C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.		
	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk		
	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables		

$\boxtimes$	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes				
	Acceptable Solution	Compliance Requirement			
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk			
$\boxtimes$	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table			
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective			
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk			
	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table			
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective			

5. Bushfire Hazard Practitioner					
Name:	Matt Perry	Phone No:	6431 2999		
Postal Address:	Environmental Service and Design Pty Ltd PO Box 231 WYNYARD TAS 7325	Email Address:	mperry@esandd.com.au		
Accreditati	on No: BFP - 175 BFP - Provisional	Scope:	1 and 2 3A,3B and 3C		

### 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

Name:

 $\square$ 

Tom O'Connor obo Chief Officer, Tasmania Fire Service

Date: 8-March-2024

Certificate Number: A24/75808

(for Practitioner Use only)



# Environmental Service and Design Pty Ltd ABN 97 107 517 144 ACN 107 517 144

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# **BUSHFIRE HAZARD REPORT-** Version 4 Client – Jakob Vukasinovic

19 Lot subdivision

Lot 2 Cantara Road

SMITHTON TAS

Author- Matt Perry BFP-175 6 March 2024

### **Scope of Assessors Accreditation**

Matt Perry (BFP-175) accredited by the Chief Officer of the Tasmania Fire Service under Section 60B of the Fire Service Act 1979 for scope of works:

1. Certify a Bushfire Hazard Management Plan for the purposes of the Building Act 2016

2. Certify an Exemption from a Bushfire Hazard Management Plan for the purposes of the Building Act 2016

**Provisionally** accredited by the Chief Officer of the Tasmania Fire Service under Section 60B of the *Fire Service Act* 1979 for scope of works:

**2.** Certify an Exemption from a Bushfire Hazard Management Plan for the purposes of the Land Use Planning and Approvals Act 1993

**3A.** Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for Vulnerable Uses and Hazardous Uses for the purposes of the Land Use Planning and Approvals Act 1993.

**3B.** Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for small subdivisions for the purposes of the Land Use Planning and Approvals Act 1993.

**3C.** Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for large subdivisions for the purposes of the Land Use Planning and Approvals Act 1993.

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Any measures implemented based on the advice from *Environmental Services and Design Pty Ltd,* is offered as potential methods of reducing your properties risk of fire damage only and is not to be relied upon as a total solution. It in no way guarantees that any or all buildings on site will survive the effects of a bushfire nor does it guarantee the safety and security of any individuals whom frequent the property.

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### **Re-Certification – Ability to Re-Evaluate**

If in the event that the land owner requests a re-assessment of this plan due to a reduced or eliminated bushfire risk in the future; an Accredited Bushfire Assessor can over-ride any or all of the requirements or provisions of this plan. This provision serves to formally expunge any Part 5 Agreement with a Council Planning Authority (if placed on a Title as a condition of Permit) or to reduce the construction standards required under AS3959 Construction of Buildings in Bushfire Prone Areas (as amended) if the bushfire risk is reduced to **BAL – LOW** or a threat no longer exists.

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# 1. Introduction

Environmental Services and Design Pty Ltd has been engaged to complete a bushfire hazard management assessment for a proposed 19 lot subdivision.

The proposed subdivision in two stages will create 19 lots from the original lot with stage 1 creating 8 lots and stage 2 creating 11 lots.

The purpose of this report is to document the assessment, bushfire attack level and associated hazard management areas under the Tasmanian Building Regulations 2016, Tasmanian Planning Scheme – Circular Head Code C13 and AS3959-2018.

# 2. Site Description

### 2.1 Property Details

Property Address	Lot 2 Cantara Road Smithton			
	21 Flowery Flat Lane Smithton			
Certificate of Title	CT – 149352/2 PID 2850674			
	CT – 209809/1 PID 6239880			
Type of Application	19 lot 2 stage subdivision			
Area	Lot – 4.79ha			
Zoning	General Residential Zone 8			
Surrounding Zoning	North - Low Density Residential and Rural			
	South - Open Space			
	East - Low Density Residential and Rural			
	West - General Residential and Environmental			
	Management			
Planning Scheme	Tasmanian Planning Scheme – Circular Head			
Existing land Use	Vacant			
Proposed land use	In accordance with Tasmanian Planning Scheme – Circular			
	Head			



**Site Aerial** 

### 2.2 Surrounding Land Use

The surrounding land use consists of developed Low Density Residential with Rural lot to the north and east with associated residential dwellings and agriculture related buildings. To the east is Low Density Residential lots with associated dwellings. To the South is Open space containing forest vegetation. To the west is General Residential lots with associate dwellings, outdoor areas and cultivated gardens, roadways, and Environmental Management land.

# 3. Proposed Development

The proposal is for a 19-lot subdivision in two stages with an open space corridor connecting to the southern open space lot.

The proposal requires a part 5 agreement with title 209809/1, as shown on the Bushfire Hazard Management plan. The client is also the title owner of 209809/1 and has consented to the Part 5 agreement.

Plan of Subdivision prepared by JCA Land Consultants Plan Drawing Number 28519 dated 29/09/2023 is at appendix A.

# 4. Bushfire Hazard Assessment

A site assessment was carried out on 22 January 2024. Report assessment was conducted on 6 March 2024.

### 4.1. Vegetation & Effective Slope

Vegetation and relevant effective slopes within 100m of the proposed subdivision has been inspected and classified in accordance with AS 3959-2018.

The Lot slopes down from the southeast to the northwest with a slope of  $0-5^{\circ}$  as well as a slope of  $0-5^{\circ}$  to the north.

The general residential lots and Emmetts Road to the west are assessed as low threat under AS3959 - 2018 (e)&(f).

Flowery Flat Lane to the north is a Council owned sealed road which is to be upgraded as part of the proposal as shown on the plan of subdivision with the northern side of the Flowery Flat Lane the grassland vegetation was maintained in a low threat state at the time of inspection and is assessed as low threat under AS3959 - 2018 as2.2.3.2 (e)&(f).

The reserve access as public open space within lot 2 will be owned and maintained by council on the completion of stage 2 and as such is assessed as low threat.

### Vegetation surrounding the lot.

- North grassland to 100m and forest to the NW of lot 1 boundary at 60m, forest North of lot 8 boundary at 23m and Northeast of lots 5-7 at 34m to 77m
- South forest to 100m
- East forest and grassland to 100m,
- West low threat managed land to 100m.

### Vegetation within the lot.

The original lot contains woodland vegetation within the lot. The woodland vegetation is required to be converted to low threat vegetation as detailed further in section 5 of this report.

### Topography

Effective slope under assessable vegetation was assessed as for all lots as:

- North 0-5° downslope,
- South upslope,
- East upslope
- West –0-5° downslope.



Image 4.1.1 – NW of lot from Flowery Flat Lane



Image 4.1.2 – NE of lot from Flowery Flat Lane



Image 4.1.3 – East of lot 11



Image 4.1.4 - East from Flowery Flat Lane



Image 4.1.5 Western elevation view south down Emmett Street



Image 4.1.6 – Site Analysis

# 4.2. Bushfire Attack Level

Assessment for all lots refer Appendix A

# 5. Bushfire Protection Measures

### Stage 1

The Bushfire Attack Level assessment at appendix A assesses the Bushfire Attack Level as: - BAL19 Lot 1, lot 2, lot 5, lot 6, lot 7 and lot 8 - BAL12.5 Lot 3 and lot 4

### Hazard management

- Hazard management areas must be established and maintained as shown on the Hazard management plan at appendix B.
- Vegetation within the lots of stage 1 must be reduced to low threat by removing the understory shrubs and slashing ground cover vegetation to no more than 100mm. Some trees will be required to be removed for the construction of civil works and individual lot crossovers. Mature trees may be retained if the trees have a consistent open canopy between the trees.
- Is recommended the Council include requirements for vegetation management in either a Part 5 Agreement or covenant for each lot to obligate the owners to maintain their respective properties in a minimum fuel condition.
- The Part 5 agreement with 21 Flowery Flat Lane as shown on the Bushfire Hazard Management plan must be formalized as part of stage 1.
- The creation and maintenance of an interim 29m hazard management area from the south boundary of Stage 1 lots must be implemented prior to the sealing of titles and is required to be maintained by the owner of the balance lot until Stage 2 is developed.
- Requirements of the Bushfire Hazard Management plan must be implemented prior to the issuing of titles and maintained by the owner thereafter.

### Hazard Management Distance

• Each lot in stage 1 the hazard management area extends to all boundaries of the lot.

### Water Supply

- The installation of a reticulated hydrant system is part of the proposal but at the time of assessment no designs have been supplied. Potential locations that comply with maximum 120m hose lay are shown on the Bushfire Hazard Management plan.
- Final Hydrant locations will be determined in the detailed design phase of the project.
- Stage 1 requires the reticulated fire hydrant system along Flowery Flat Lane to be installed to protect lots 1 through to 8.
- A water supply for firefighting purposes is required to be installed and must meet the requirements of Table C13.4 of Bushfire Prone Areas Code C13.
- Reticulated hydrants firefighting water point must be located within 120m of the furthest part of the building area to be protected measured as a hose lay.
- 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 to be installed in parking areas.
- The reticulated water supply has the capacity to meet the requirements of Table C13.4 of Bushfire Prone Areas Code C13.
- The reticulated water supply system must be verified by Council that the detailed deigns complies with Table C13.4.
- Reticulated water supply requirements are included in Appendix D.

### <u>Roads</u>

- Stage one includes the upgrading of Flowery Flat Lane and part of the subdivision road between lot 4 and lot 5 to the southern boundary of lot 4 and lot 5.
- The road will be compliant with Table C13.1 with the exception of (j). The proposed variation, through consultation with Tasmania Fire Service for the turning head at the eastern end of Flowery Flat Lane will still provide for a fire appliance to change direction.
- Code C13 table C13.1 Standards for Roads, requires that dead end roads must terminate in a turning circle for fire appliances. The Flowery Flat Lane Road reserve is 18m in width and cannot contain the required minimum 12m outer radius of the turning circle.
- As the Client owns the land (21 Flowery Flat Lane) at the end of Flowery Flat Lane it is
  proposed an alternate solution to satisfy the Performance Criteria of clause C13.6.2 (P1).
  The construction of a turning head at the end of the made roadway will provide for fire
  appliances to change direction until such time further development of the adjacent land of
  21 Flowery Flat lane is undertaken, as shown on the Bushfire Hazard Management Plan
  at Appendix C.
- The turning head must be of all-weather construction with minimum dimensions of each leg being 8m in length with a minimum width of 4m.
- It is anticipated the detailed road design will be verified for compliance by Council's development engineer prior to construction.
- Road requirements are included in Appendix D.

### Private Access

• Property access is not required to access a firefighting water point. There are no specific design and construction requirements under C13.2 of Bushfire Prone Areas Code C13.

### Stage 2

The Bushfire Attack Level assessment at appendix A assesses the Bushfire Attack Level as: **– BAL19** Lot 15.

- BAL12.5 Lot 9, lot 10, lot 11, lot 12, lot 13, lot 14 and lot 16
- BAL LOW Lot 17, lot 18 and lot 19

### Hazard management

- Hazard management areas must be established and maintained as shown on the Bushfire Hazard Management Plan at appendix B.
- Vegetation within the lots of stage 2 must be reduced to low threat by removing the understory shrubs and slashing ground cover vegetation to no more than 100mm. Some trees will be required to be removed for the construction of civil works and individual lot crossovers. Mature trees may be retained if the trees have a consistent open canopy between the trees. 5m separation between tree canopy's is recommended.
- Requirements of the Bushfire Hazard Management plan must be implemented prior to the issuing of titles and maintained by the owner thereafter.

### Hazard Management Distance

- Lots 9 11 and lots 13 19 within stage 2 the hazard management area extends to all boundaries of the lot.
- Lot 12 hazard management area extends to the boundary to the north, west, and east with 32m to the south.

### Water Supply

- The installation of a reticulated hydrant system is part of the proposal but at the time of assessment no designs have been supplied. Potential locations that comply with maximum 120m hose lay are shown on the Bushfire Hazard Management plan.
- Stage 2 requires the reticulated fire hydrant system along the new subdivision road connecting Flowery Flat Lane to Billing Street to be installed to protect lots 9 through to 19.
- A water supply for firefighting purposes is required to be installed and must meet the requirements of Table C13.4 of Bushfire Prone Areas Code C13.
- Reticulated hydrants firefighting water point must be located within 120m of the furthest part of the building area to be protected measured as a hose lay.
- 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 to be installed in parking areas.
- The reticulated water supply has the capacity to meet the requirements of Table C13.4 of Bushfire Prone Areas Code C13.
- The reticulated water supply system must be verified by the Council that the detailed designs comply with Table C13.4.
- Reticulated water supply requirements are included in Appendix D.

### <u>Roads</u>

- Stage 2 includes the extension and construction of the new subdivision road connecting Flowery Flat Land and Billing Street.
- All road construction and design must comply, as a minimum, with the requirements of Table C13.1.
- It is anticipated the detailed road design will be verified for compliance by Council's development engineer prior to construction.
- Road requirements are included in Appendix D.

### Private Access

• Property access is not required to access a firefighting water point. There are no specific design and construction requirements under C13.2 of Bushfire Prone Areas Code C13.

# 6. Statutory Compliance

The applicable bushfire requirements are specified in the *Tasmanian Planning Scheme – Circular Head Code C13 – Bushfire Prone Areas Code.* 

Deemed-to-Satisfy requirement	Compliance
C13.4.1 Exemptions	N/A
C13.6.1 Hazard management areas	Subject to implementing the hazard management area prescribed on the Bushfire Hazard Management Plan, the proposal will comply with clause C13.6.1 A1(b).
C13.6.2 Public and firefighting access	Subject to the construction of the roads as prescribed in section 5 the proposal will comply with clause C13.6.2 P1. The proposed public roads will substantially comply with the specifications of Table C13.1 except in relation to the proposed turning head at the eastern end of Flowery Flat Lane. The proposed variation to the turning head will essentially achieve the same outcome as would be achieved through full compliance with Table C13.1 and has been developed through consultation with Tasmania Fire Service. Subject to the detailed design being completed, the subdivision roads are expected to perform adequately for the purposes of the Code.
C13.6.3 Water supply for firefighting	Subject to installation of the reticulated water supply for firefighting as prescribed in section 5, the proposal will comply with clause C13.6.3 A1(b).

Table 1 – Compliance Schedule

# 7. Conclusion

If a future habitable building is constructed within any Lot outside of the respective assessed building area shown on the Bushfire Hazard Management plan an updated Bushfire Hazard Report will be required for that lot.

A Bushfire Hazard Management plan is required for compliance with Tasmanian Planning Scheme and is attached as appendix C.

This Bushfire Hazard Report must be read in conjunction with the Bushfire Hazard Management plan.

Part 5 agreement must be registered on the title prior to the issuing of titles for stage 1.

The requirements of the Bushfire Hazard Management plan for Stage 1 must be fully implemented prior to the issuing of titles.

The requirements of the Bushfire Hazard Management plan for Stage 2 must be fully implemented prior to the issuing of titles.

The proposal has the capability to meet the requirements of the Tasmanian Planning Scheme – Circular Head Code C13 – Bushfire Prone Areas Code and AS3959-2018 for all lots to achieve separation distances to vegetation equal to or greater than BAL 19.

### **APPENDIX A - Bushfire Attack Level**

A Bushfire Attack Level assessment has been completed using Method 1 of AS 3959-2018. Assessment relates to the subdivision.

Step 1: Relevant fire danger index (clause 2.2.2): FDI 50

Step 2: Assess the vegetation within 100m in all directions.

### Stage 1

LOT 1		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-60m Forest 60-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	7m Within boundary	To Boundary	To boundary	To boundary	
	BAL value for each quadrant	19	12.5	Low	Low	BAL – 19
LOT 2		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-79m Forest 60-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	7m Within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	19	12.5	Low	Low	BAL – 19
LOT 3		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-27m Grassland 27-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	7m Within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	12.5	12.5	Low	Low	BAL – 12.5
LOT 4		North	South	East	West	BAL Rating
-------	---------------------------------------------------	------------------------------------------------------------------	---------------------------------------------------	---------------------------------------------	----------------------	------------
	Vegetation Classification over 100m	Low threat 0-27m Grassland 27-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	7m Within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	12.5	12.5	Low	Low	BAL – 12.5
LOT 5		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-77m Forest 77-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-83m Forest 83-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	7m within boundary	To boundary	To boundary	To boundary	
	each quadrant	19	12.5	12.5	LOW	BAL - 19
LOT 6		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-46m3 Forest 46-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-43m Forest 43-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	7m within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	19	12.5	12.5	Low	BAL – 19
LOT 7		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-34m Forest 34-100m	Low Threat 0-33.5m Woodland 33.5-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	7m Within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	19	12.5	Low	Low	BAL – 19

LOT 8		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-20m Grassland 20-23m Forest 23-100m	Low Threat 0-23m Woodland 23-100m	Low Threat 0-23m Forest 23-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	7m Within boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	19	12.5	19	Low	BAL – 19

## Stage 2

LOT 9		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-83m Grassland 80-83m Forest 83-100m	Low Threat 0-100m	Low Threat 0-32m Forest 32-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	To boundary	32m	To boundary	
	BAL value for each quadrant	12.5	Low	12.5	Low	BAL – 12.5
LOT 10		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-100m	Low Threat 0-32m Forest 32-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	To boundary	32m	To boundary	
	BAL value for each quadrant	Low	Low	12.5	Low	BAL – 12.5
LOT 11		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-9m	Low Threat 0-32m Forest 32-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	To boundary	To boundary	32m	To boundary	
	BAL value for each quadrant	12.5	Low	Low	Low	BAL – 12.5

LOT 12		North	South	East	West	BAL Rating
	Vegetation Classification over	Low threat 0-100m	Low Threat 0-66m	Low Threat 0-52m	Low Threat 0-100m	
	100m	• • • • • • • • • • • • • • • • • • • •	Forest	Grassland		
	Effective clone	Downolono	66-100m	52-100m	Deurolone	
	under classified	0-5°	upsiope	upsiope	0-5°	
	Proposed HMA	To	32m	To	To	
	BAL value for	Low	12.5	12.5	Low	BAL – 12.5
LOT 12	each quadrant	North	South	East	West	<b>BAL</b> Pating
LOT 13	Vegetation	L ow threat	L ow Threat	Low Threat	Low Threat	DAL Nating
	Classification over 100m	0-100m	0-32m Forest 32-100m	0-70m Grassland 70-100m	0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	32m	To boundary	To boundary	
	BAL value for each quadrant	Low	12.5	12.5	Low	BAL – 12.5
LOT 14		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-32m Forest 32-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	32m	To boundary	To boundary	
	BAL value for	Low	12.5	Low	Low	BAL – 12.5
LOT 15		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-23m Forest 23-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	To boundarv	To boundarv	To boundarv	To boundarv	
	BAL value for each quadrant	Low	19	Low	Low	BAL – 19

LOT 16		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-55m Forest 55-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5º	
	Proposed HMA distance	To boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	Low	12.5	Low	Low	BAL – 12.5
LOT 17		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	Low	Low	Low	Low	BAL – LOW
LOT 18		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-100m	Low Threat 0-100m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5°	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	Low	Low	Low	Low	BAL – LOW
LOT 19		North	South	East	West	BAL Rating
	Vegetation Classification over 100m	Low threat 0-100m	Low Threat 0-100m	Low Threat 0-00m	Low Threat 0-100m	
	Effective slope under classified vegetation	Downslope 0-5º	upslope	upslope	Downslope 0-5°	
	Proposed HMA distance	To boundary	To boundary	To boundary	To boundary	
	BAL value for each quadrant	Low	Low	Low	Low	BAL – LOW

Appendix B– Plan of Subdivision



8 1209m <sup>2</sup>		
	6/1 (6/1 (6/1) (6/1) (6/1) (6/1)	
	RMIT	SHEET SUE A1
NTARA ROAL SMITHTON ERAL LAYOUT PLA	D AN PRINTED: 22/0//2004 BY:	02 DHC No. 28519 SHEET No. 1 of 1 PHL SPENCER



Lot 2 Cantara Road Smithton

Drawn – Matt Perry BFP-175 Version: 4



see // property boundary			
	209809/1-property board		
	LEGEND		
	Low Risk Landslip Area		
	HMA area		
I I	15m wide Building Area		
	Maximum Building Area		
170	To road frontage – min 4.5m		
İ.	To rear boundary – min 4.5m		
	To side Boundary – min 3m		
	Hydrant		
	Page	1 of 2	

This plan has been prepared only for the purpose of complying with C13 Bushfire-Prone Areas Code and the
information shown hereon must not be used for any other purpose. All dimensions and areas are in meters.

### **TABLE - 4.2.1**

LOT	BAL RATING
1	BAL 19
2	BAL 19
3	BAL 12.5
4	BAL 12.5
5	BAL 19
6	BAL 19
7	BAL 19
8	BAL 19
9	BAL 12.5
10	BAL 12.5
11	BAL 12.5
12	BAL 12.5
13	BAL 12.5
14	BAL 12.5
15	BAL 19
16	BAL 12.5
17	BAL LOW
18	BAL LOW
19	BAL LOW

Appendix C– Bushfire Hazard Management Plan

#### Maintenance prior to the onset of each fire season

- · Guttering on all habitable structures must be inspected and cleared of debris annually
- · Ensure all hoses and brass connections are in good working order
- · All valley and wall/roof junctions are inspected and debris removed
- · Roof sheeting inspected for damages or dislodged roofing materials (replace if necessary)
- · Painted surfaces are in good condition and decaying timbers given particular attention to repair
- · Screens/shutters on windows and doors are in good working condition and fit well without breaks, holes or tears,
- Door mats to be of non-combustible materials

Woodpiles, garden sheds and other combustible materials to be kept well away from habitable structures.

#### General

- Plan to be read in conjunction with Bushfire Hazard -Assesment Report v.4
- Ensure that all relevent consultants and contractors are provided with a full copy of this plan snd supporting report
- Stage requirements of the hazard management plan must be implemented prior to the issuing of titles of subdivision and maintained by the owner thereafter.

#### **General Notes**

Design and Construction

 Design and construction must conform to the minimum assesed **BAL** specifications under AS3959:2018 (Refer Table 4.2.1)

Hazard Management (HMA)

- It is the responsibility of the landowner to maintain the landscaping in accordance with the Bushfire Hazard Management Plan
- Establish hazard management • area for whole site as shown on the Bushfire Hazard Management Plan.
- Ensure fuels are reduced sufficiently & other hazards are removed such that the fuel & other hazards do not significantlycontribute to the bushfire attack
- The hazard managent area is to be regulary maintained and managed and in particular betweenthe months of September and March in each calender year.
- Landscaping in the HMA isto be minimised with grass maintained to a maximum height of 100mm
- Pathways and landscaping • material surrounding any habitable structures must be of non-combustible elements for a minimum of 1m from any external walls or decks
- To be established prior to • occupancy

(	C13.6.2 P	ublic and fire fighting acces	SS			
Obj	ective:	That access roads to, and the l subdivision:	ayout of roads, tracks and trails, in a			
		(a) allow safe access and egrees service personnel;	ess for residents, fire fighters and emergency			
		(b) provide access to the bush property to be defended wh management works to be u	fire-prone vegetation that enables both nen under bushfire attack, and for hazard undertaken;			
		<ul><li>(c) are designed and construc manoeuvred;</li></ul>	ted to allow for fire appliances to be			
		(d) provide access to water su	pplies for fire appliances; and			
		(e) are designed to allow conn evacuation points.	ectivity, and where needed, offering multiple			
Aco	ceptable S	Solutions	Performance Criteria			
<b>A1</b>			P1			
(a)	TFS or a	n accredited person certifies	A proposed plan of subdivision shows access and egress for residents, fire-			
	risk from	bushfire to warrant specific				
	measure	s for public access in the	personnel to enable protection from			
	subdivisi	on for the purposes of fire	bushfires, having regard to:			
(b)	fighting; o	or ed plan of subdivision showing	(a) appropriate design measures, including:			
	the layou	t of roads, fire trails and the	(i) two way traffic;			
	location of areas. is	of property access to building included in a bushfire hazard	(ii) all weather surfaces;			
	manager	nent plan that:	<ul><li>(iii) height and width of any vegetation clearances;</li></ul>			
	(i) demor compl	nstrates proposed roads will y with Table C13.1, proposed	(iv) load capacity;			
	prope	ty accesses will comply with	(v) provision of passing bays;			
	Table	C13.2 and	(vi) traffic control devices;			
proposed fire trail Table C13.3 and		C13.3 and	<ul><li>(vii) geometry, alignment and slope of roads, tracks and trails;</li></ul>			
	(ii) is cert accreo	ified by the TFS or an dited person.	(viii) use of through roads to provide for connectivity;			
			(ix) limits on the length of cul-de- sacs and dead-end roads;			
			(x) provision of turning areas;			

(xi) provision for parking areas;
(xii) perimeter access; and
(xiii) fire trails; and
(b) the provision of access to:
<ul> <li>(i) bushfire-prone vegetation to permit the undertaking of hazard management works; and</li> </ul>
(ii) fire fighting water supplies; and (c) any advice from the TFS.

### Table C13.1: Standards for Roads

	Element	Requirement
А.	Roads.	Unless the development standards in the zone require a higher standard, the following apply:
		(a) two-wheel drive, all-weather construction;
		<ul> <li>(b) load capacity of at least 20 tonnes, including for bridges and culverts;</li> </ul>
		(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;
		(d) minimum vertical clearance of 4m;
		<ul> <li>(e) minimum horizontal clearance of 2m from the edge of the carriageway;</li> </ul>
		(f) cross falls of less than 3 degrees (1:20 or 5%);
		<ul> <li>(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;</li> </ul>
		(h) curves have a minimum inner radius of 10m;
		<ul> <li>dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;</li> </ul>
		<ul> <li>(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and</li> </ul>
		(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard, AS 1743-2001 Road signs-Specifications.

### Table C13.4: Reticulated Water Supply for Fire Fighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	<ul> <li>The following requirements apply:</li> <li>(I) the building area to be protected must be located within 120m of a fire hydrant; and</li> <li>(m) the distance must be measured as a hose lay, between the fire</li> </ul>
	Desire criteria for fire	fighting water point and the furthest part of the building area.
В.	Design criteria for fire hydrants.	<ul> <li>(a) fire hydrant system must be designed and constructed in accordance with <i>TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2<sup>nd</sup> edition</i>; and</li> <li>(b) fire hydrants are not installed in parking areas.</li> </ul>
C.	Hardstand.	<ul> <li>A hardstand area for fire appliances must be provided:</li> <li>(a) no more than 3m from the hydrant, measured as a hose lay;</li> <li>(b) no closer than 6m from the building area to be protected;</li> <li>(c) with a minimum width of 3m constructed to the same standard as the carriageway; and</li> <li>(d) connected to the property access by a carriageway equivalent to the standard of the property access.</li> </ul>



Please quote our ref: SA 2020 / 00004 PID 2850674 Your ref: Enquiries to: Development Services 6452 4820 | council@circularhead.tas.gov.au

25 March 2024

516BHP Pty Ltd PO Box 254 WODONGA VIC 3690

Dear Sir/Madam

# ADDITIONAL INFORMATION REQUIRED - DEVELOPMENT APPLICATION – SUBDIVISION (1 LOT INTO 19 LOTS) - CANTARA ROAD, SMITHTON

I am writing to advise that the further information received on 15 March 2024 was unsatisfactory to restart the clock and determination of your application.

Under Section 54 of the *Land Use Planning and Approvals Act 1993* Council seeks further information in relation to application SA 2020 / 00004 for Subdivision (1 Lot into 19 Lots) at Cantara Road, Smithton. In order to further progress the assessment of your application, please provide the following:

- Items 1 to 7 and 8 to 10. Additional information was provided satisfactorily.
- Item 7. Council's Engineering team has requested additional information as below.
  - a. As it appears that the revised proposal is for a staged subdivision, please provide the following information:
    - i. Please confirm if only the access road bell-mouth will be constructed during Flowery Flat Lane upgrade works required prior to sealing of the final plan for Stage 1, as shown in Stage 1 on General Layout Plan Drawing No 28519.
    - ii. Alternatively, please confirm if the access road section in Stage 1 will be constructed prior to the sealing of the final plan for Stage 1. If the latter is the case, then a turning head will need to be constructed prior to the sealing of final plan for Stage 1.
    - iii. Regardless of which option is intended, the road reserve within Stage 1 will be required as a separate road lot (ie lot 101). Please

P (03) 6452 4800
 B council@circularhead.tas.gov.au
 W www.circularhead.tas.gov.au



provide revised plans reflecting the options outlined. Please contact Engineering Services to discuss if further information is required.

b. The Speed Hump located within the subdivision road is located in a position that could have it confused with a pedestrian crossing. If it is intended to be used as a pedestrian crossing then a raised pedestrian (Wombat) Crossing should be used and should comply with the requirements of Austroads Guide to Road Design Part 4: Intersections and Crossings: General, and Austroads Guide to Traffic Management Part 8 – Local Area Traffic Management. Please revise General Layout Drawing appropriately.

Your application remains on hold until all relevant documentation has been received to the satisfaction of the Planning Authority.

If you have any queries or require further information, please contact the Council's Development Services Department on 6452 4820.

Yours sincerely

Dang Minh Duc Van TOWN PLANNER





**Melbourne** Suite 9, 303 Maroondah Hwy Ringwood VIC 3134 **T:** 03 9735 4888

**Regional** Unit 5, 67 Wigg Street Wodonga VIC 3690 **T:** 02 6062 3648

E: jca@jcalc.com.au ABN: 75 083 816 915

JCA Ref 28519

Council Ref SA2020/00004

PID 28550674

09 April 2024

Mr Dang Minh Duc Van- Town Planner Circular Head Council PO Box 348 Smithton Tas 7330

Dear Mr Dang Minh Duc Van

### RE: SA 2020 / 00004 - SUBDIVISION (1 LOT INTO 19 LOTS) - CANTARA ROAD, SMITHTON

Please find attached the response to Councils request for further information listed in the letter dated 2<sup>nd</sup> January 2024.

### Item 7: Traffic Impact Assessment

A revised plan of subdivision (version 03) is attached.

a (i) Indicates construction of intersection

(ii) N/A

(iii) Staging plan adjusted so lot number for roadway not required.

**b** Pedestrian Crossing located within the subdivision is intended to be used as a wombat pedestrian crossing, now shown on attached plan.

We believe the supplied information is a complete response to the information requested and look forward to the application being further assessed by the Council.

Yours Sincerely,

<u>Michael Hipfel</u> Managing Director JCA Land Consultants

## LEGEND

——————————————————————————————————————	WATER DRAINAGE SEWER ELECTRICITY
T	TELSTRA
46	CONTOUR MAJOR CONTOUR MINOR
	EXISTING PROPERTY BOUNDARY
	PROPOSED PROPERTY BOUNDARY
	ROAD SEAL AREA
	PATH CONCRETE
	PATH CRUSHED ROCK
	PUBLIC OPEN SPACE
	LANDSLIDE RISK BOUNDARY LOW
	LANDSLIDE RISK BOUNDARY MED

## NOTES

- THE TOTAL SITE AREA IS 47944 m<sup>2</sup>
   A PORTION OF LOT 23 WILL BE USED FOR WSUD / DETENSION. THIS WILL BE INFORMED BY THE DETAILED DESIGN
- 5% OF THE TOTAL SITE AREA ALLOCATED FOR PUBLIC OPEN SPACE = 2398m<sup>2</sup>
   785m<sup>2</sup> HAS BEEN ALLOCATED TO PUBLIC OPEN SPACE IN THE RESERVE FOR PATHWAY ACCESS. THE REMAINING WILL BE PAID AS OFFSETS IN LIEU.



### WARNING **BEWARE - UNDERGROUND SERVICES**

THE LOCATIONS OF EXISTING UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT DEPTH AND LOCATION SHOULD BE VERIFIED AND PROVEN ON SITE BY THE APPROPRIATE SERVICE PROVIDERS PRIOR TO ANY SITE EXCAVATION. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. CONTRACTOR TO TAKE PRECAUTIONS TO AVOID CONFLICTS