SORELL COUNCIL

NOTICE OF PROPOSED DEVELOPMENT

Notice is hereby given that an application has been made for planning approval for the following development:

SITE: 2217 Arthur Highway, Copping

PROPOSED DEVELOPMENT:

THREE LOT SUBDIVISION & BOUNDARY ADJUSTMENT

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website www.sorell.tas.gov.au until **Tuesday 26th March 2024.** Any person may make representation in relation to the proposal/s by letter or electronic mail (sorell.council@sorell.tas.gov.au) addressed to the General Manager. Representations must be received no later than **Tuesday 26th March 2024.**

APPLICANT: Rogerson & Birch Surveyors

DATE: 07 March 2024
APPLICATION NO: 7.2023.25.1

SORELL COUNCIL

2217 Arthur Highway, Copping

7-Mar-2024

50 m

Disclaimer: This map is a representation of the information currently held by Sorell Council. While every effort has been made to ensure the accuracy of the product, Council accepts no responsibility for any errors or omissions. Any feedback on omissions or errors would be appreciated.

Part B: Please note that Part B of this form is publicly exhibited.

Full description of Proposal:	*Use:*
	Development: Proposed Subdivision.
	Large or complex proposals should be described in a letter or planning report.
Design and construction cost of proposal:	$ .....
Is all, or some the work already constructed:	No: ☑ Yes: ☐
Location of proposed works:	Street address: 2217 Arthur Highway Suburb: Copping Postcode: 7174 Certificate of Title(s) Volume: 172538 Folio: 1 244710 2
Current Use of Site	Residential / Vacant Block
Current Owner/s:	Name(s): Mark Whitehead

Is the Property on the Tasmanian Heritage Register?	No: ☑ Yes: ☐	*If yes, please provide written advice from Heritage Tasmania*
Is the proposal to be carried out in more than one stage?	No: ☑ Yes: ☐	*If yes, please clearly describe in plans*
Have any potentially contaminating uses been undertaken on the site?	No: ☑ Yes: ☐	*If yes, please complete the Additional Information for Non-Residential Use*
Is any vegetation proposed to be removed?	No: ☑ Yes: ☐	*If yes, please ensure plans clearly show area to be impacted*
Does the proposal involve land administered or owned by either the Crown or Council?	No: ☐ Yes: ☑	*If yes, please complete the Council or Crown land section on page 3*

If a new or upgraded vehicular crossing is required from Council to the front boundary please complete the Vehicular Crossing (and Associated Works) application form
https://www.sorell.tas.gov.au/services/engineering/

Part B continued: Please note that Part B of this form is publicly exhibited

Declarations and acknowledgements
• I/we confirm that the application does not contradict any easement, covenant or restriction specified in the Certificate of Title, Schedule of Easements or Part 5 Agreement for the land. • I/we consent to Council employees or consultants entering the site and have arranged permission and/or access for Council's representatives to enter the land at any time during normal business hours. • I/we authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation and have permission of the copyright owner for such copies. • I/we declare that, in accordance with s52(1) of the *Land Use Planning and Approvals Act 1993*, that I have notified the owner(s) of the intention to make this application. • I/we declare that the information in this application is true and correct. *Details of how the Council manages personal information and how you can request access or corrections to it is outlined in Council's Privacy Policy available on the Council website.*
• I/we acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process, for display purposes during public exhibition, and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.
• Where the General Manager's consent is also required under s.14 of the *Urban Drainage Act 2013*, by making this application I/we also apply for that consent.

Applicant Signature:	Signature: ..... Date: 14/12/23

Crown or General Manager Land Owner Consent
If the land that is the subject of this application is owned or administered by either the Crown or Sorell Council, the consent of the relevant Minister or the Council General Manager whichever is applicable, must be included here. This consent should be completed and signed by either the General Manager, the Minister, or a delegate (as specified in s52 (1D-1G) of the *Land Use Planning and Approvals Act 1993*). Please note: • If General Manager consent if required, please first complete the General Manager consent application form available on our website www.sorell.tas.gov.au • If the application involves Crown land you will also need a letter of consent. • Any consent is for the purposes of making this application only and is not consent to undertaken work or take any other action with respect to the proposed use or development.
I Fiona McLeod being responsible for the administration of land at State Road declare that I have given permission for the making of this application for As Above

Signature of General Manager, Minister or Delegate:	Signature: ..... Delegate of Minister for Infrastructure Michael Ferguson MP ..... Date: 8/2/2024

22 February 2024

Sorell Council
By email: sorell.council@sorell.tas.gov.au

Dear Sir/madam,

2217 ARTHUR HIGHWAY – PROPOSED SUBDIVISION 7.2023.25.1
DRIVEWAYS

BACKGROUND

A subdivision and boundary adjustment is proposed at 2217 Arthur Highway Copping to create 3 lots from 2.

In the RFI dated 12 January 2024 Council has requested:

- Please demonstrate an existing approved access has been constructed in accordance with the prescribed standard 12.5.1 & C3.5.1. *Alternatively please amend the proposed plan of subdivision to denote a proposed access to lot a. It has been noted by council that land owner consent (from the crown) has been granted.*

Poortenaar Consulting was asked to address the driveways.

DRIVEWAYS

The situation is somewhat unique as a parking area is sealed to the boundary so no works are required within the road reserve.

The driveway for lot 1 was previously a gravel/grass parking area off the sealed parking area. The owner has recently upgraded the driveway with gravel contained by a edging. There is no space to turn around within the property so a vehicle must back out onto the parking area. The parking area is 7.2m from the edge of the running lane so there is plenty of clearance.

Similarly the shared driveway to lot 2 and 3 is existing. It is sealed to the boundary. The gate is set back 6m from the boundary. There is space for two vehicles to exit and enter the driveway clear of the road.

A shared driveway for lot 2 and 3 is preferable for reducing traffic conflicts.

All driveways have sight lines in excess of 110m in both directions. The posted speed limit is 60km/hr requiring a sight distance of 105m.

There is potential for conflict between users of the informal sealed parking area and users of the driveways but no more than any informal pull off area. The speed environment is low and the parking area is only busy when there is an event on. Some sort of delineation was considered but it would just create confusion.

Yours Faithfully

Hein Poortenaar
Poortenaar Consulting Pty Ltd

Attachments
Photos
Drawing

Lot1 driveway

Lot 2&3 driveway

Sight distance west

Sight distance east

BRIDGE

RAVENSCROFT RIVULET

DRAIN

POND

POND

POND

PREBBLES ROAD

3
7,036m²±

300Ø

#9

1
3095m²±

2
5,168m²±

POND

2,500

2,537

Existing Building

Existing Building

2,500

Existing Access for Lot 2 & Lot 3

Existing Lot Access

ARTHUR HIGHWAY

300Ø

EXISTING DRIVEWAY

GATE

BOUNDARY

EXISTING SEALED SHOULDER

Building

2.500

EXISTING DRIVEWAY RECENTLY UPGRADED

EXISTING SEALED SHOULDER

BOUNDARY

AY

Rev No	Revision note	Date	Approved
A	FOR APPROVAL	FEB24	HJP

POORTENAAR CONSULTING
ABN 40 672 032 737
PH 62664708
hein@poortenaarconsulting.com

Client	Mark Whitehead
Project	2218 ARTHUR HIGHWAY, COPPING
Title	GENERAL ARRANGEMENT
Scale	1:2000 A3
Designed By	H.POORTENAAR
Date	FEB24
	A1
Drawing No.	24396-01
Rev.	A

19 February 2024

Sorell Council
By email: sorell.council@sorell.tas.gov.au

Dear Sir/madam,

2217 ARTHUR HIGHWAY – PROPOSED SUBDIVISION 7.2023.25.1
WATERWAY IMPACT STATEMENT

BACKGROUND

A subdivision and boundary adjustment is proposed at 2217 Arthur Highway Copping to create 3 lots from 2. The site has a watercourse passing through it.

In the RFI dated 12 January 2024 Council has requested:

Provide a Natural values report prepared by a suitably qualified and experienced ecologist or equivalent that is:

- Prepared in accordance with the Guidelines for natural values surveys (wwww.nre.tas.gov.au) and has regard to clause C7.7.1 subdivision within a waterway and coastal protection area.

Poortenaar Consulting was asked to address the provisions of the Waterways Protection overlay.

SUITABLE QUALIFICATIONS

The subdivision has a very low risk of impacting the ecological values of the watercourse as:

- the watercourse is a class 4 watercourse,
- it is normally dry, heavily modified by damming and diversions
- the area is not covered by a Biodiversity Overlay
- the development satisfies A1 of C7.7.1 that any foreseeable development is outside the waterways protection zone

I believe I as an environmental engineer with 35 years experience including many watercourse impact assessments am suitably qualified and experienced to assess the natural values of the watercourse. I am assisted with species identification Ben Poortenaar, final year undergraduate environmental scientist.

THE SITE

Property details are summarised as follows:

Owner	Mark Whitehead
Address	2217 Arthur Highway, Copping

Property ID	3533689
Title reference	244710/2,172538/1
Zoning	Village
Overlays	Waterways protection area Bushfire prone area

THE WATERCOUSRE

The watercourse has a catchment of 33Ha south of the highway comprising rural residential, farmland and some bush on the top of a hill. The upper parts of the catchment at two steep hills. There are two dams used for irrigation that intercept most of the catchment's flow. There are a number of small ponds too. The catchment is piped under the highway with a 300mm culvert which is very undersized for the size of the catchment. Approximately 130m of highway drain to a side entry pit connected to the 300mm pipe. The area is dry with an annual rainfall of 495mm and a water deficit where 100% of reuse water is used up.

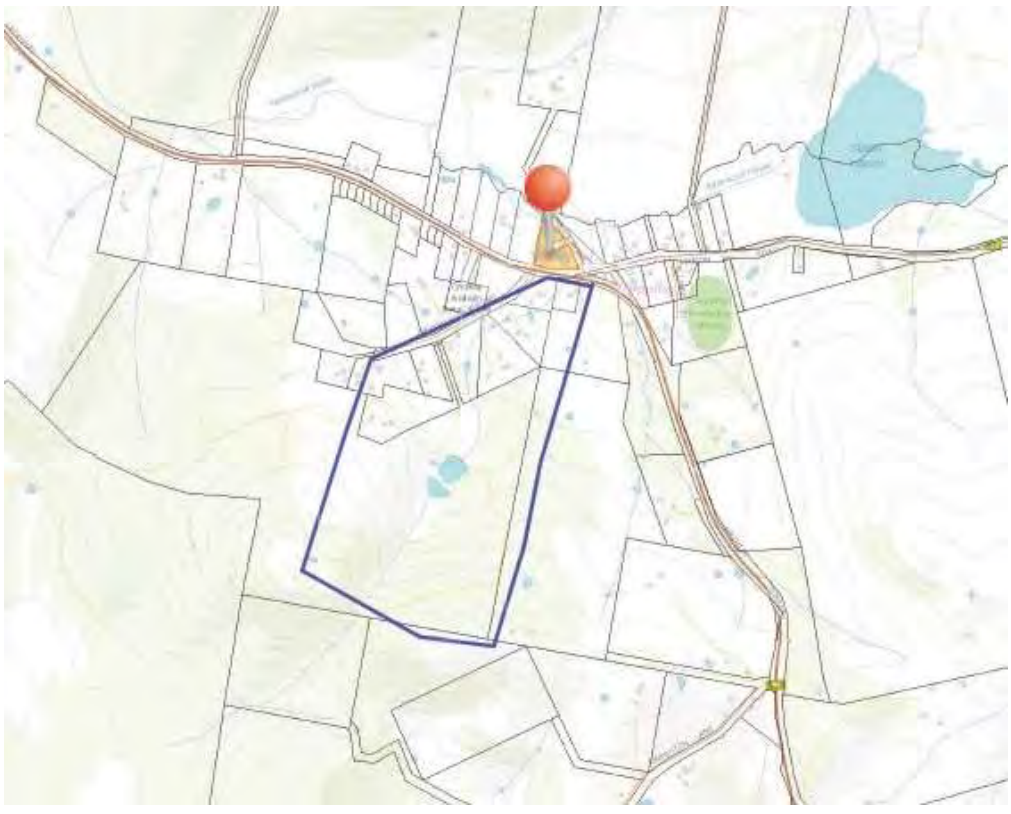

Figure 1. Catchment. (↑N) (Source: annotated map from the LISTmap[Error! Bookmark not defined.]).

Within the property the watercourse is 200m long. The mapped location of the watercourse on the List is inaccurate as shown below:

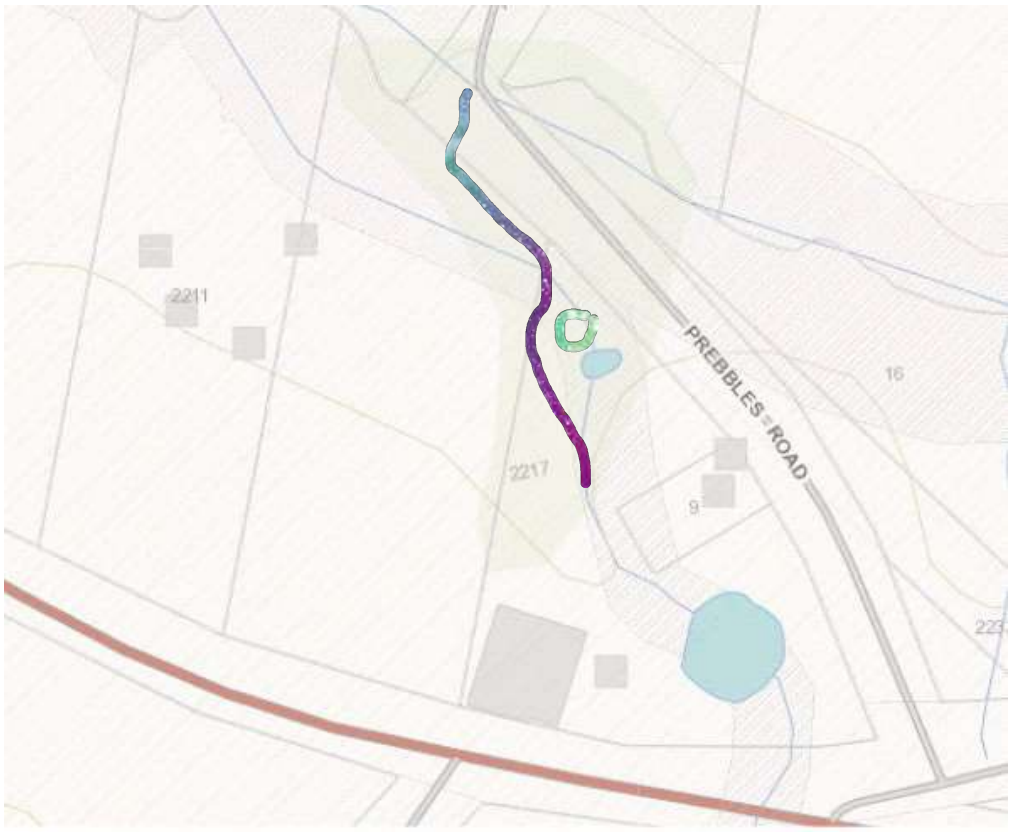

Figure 2. Alignment of watercourse (purple) compared with mapped location. (↑N) (Source: annotated map from the LISTmap[Error! Bookmark not defined.]).

The 300mm diameter pipe under the highway discharges to a short section of grassed drain and then to a large pond. The pond is choked with bulrushes (Typha orientalis). The pond has an outlet through a low dam wall into a grassed swale that runs along the back fence of the house at #9 Prebbles Road. The drain then passes through a culvert where a farm track crosses the watercourse. Downstream of the culvert is a small pond/scout hole with standing water and surrounded by dense reeds and sedges. From here a shallow (0.5m deep x 1m wide) ditch bypasses two treatment ponds before following the boundary and joining Ravenscroft Rivulet

at the Prebbles Street bridge outside the property. This ditch is dry, grassed with occasional rushes.

The only aquatic habitat is in large pond which is choked with bulrushes which suppresses any other aquatic flora and the small scour hole below the farm culvert which appears healthy. Riparian vegetation comprises rushes and sedges. Weeds observed include Typha orieltalis, crack willow (*Salix Fragilis*), Flax (*Phormium tenax*) and Gorse (*Ulex europaeus*). Through the proposed lot 3 the drain is entirely artificial and appears to be on the boundary or in the road reserve as the fence is not on the boundary.

Photos of the watercourse are attached.

Although highly modified, dammed and diverted the watercourse performs its purpose adequately. There is no nuisance flooding or erosion evident and the watercourse filters sediment, nutrients and contaminants from the catchment and highway before it joins Ravenscroft Rivulet.

IMPACTS ON THE WATERCOURSE

The subdivision will not result in any direct impacts on the watercourse protection zone:

- Lot 1 already has a dwelling and there would be no additional development anticipated
- Lot 2 already has a large commercial building and it would be unlikely there would be any dwelling constructed and there is adequate space clear of the waterways protection area
- Lot 3 is likely to be developed as a rural residential property. It is a large 7038m2 paddock and any dwelling would be in the middle. Lot 3 is already a separate title so could be built upon without the boundary adjustment. The watercourse is along the northern boundary or appears to be outside the boundary in the road reserve.

The only potential impact of the subdivision is stormwater discharge to the watercourse. However roof water for any new dwelling is captured for reuse and as the lots are large and flat there is adequate soakage potential from impervious surfaces such as driveways. (refer Stormwater Management Plan)

COMPLIANCE WITH THE PLANNING SCHEME

The Waterways protection area falls under C7.0 Natural Assets Code/ C7.7 Development Standards for subdivision. The code covers works for the subdivision (of which there are none) or future development likely to be facilitated by the subdivision.

Acceptable solution A1 is satisfied as the future development of any of the lots including building, services, bushfire hazard management or vehicle access will be outside the waterways protection area.

CONCLUSION

The watercourse is a class 4 highly modified, dammed, diverted, ephemeral watercourse. It is normally dry as irrigation dams upstream use most of the flow.

The subdivision and boundary adjustment does not necessarily facilitate any additional development as the only vacant lot already is on a separate title.

Regardless due to the large size of the lots and the watercourse following the northern edge any development including dwelling, services, and access will be well clear of the watercourse protection area so satisfy C7.7.1 of the natural values Code for subdivision in a waterways protection zone.

Yours Faithfully

Hein Poortenaar
Poortenaar Consulting Pty Ltd

Attachments
Photos
Drawing

Culvert under highway

Large pond

Large pond overflow

Swale behind #9

Track crossing

Pond/scout hole below culvert

Off line treatment pond 1

Offline treatment pond 2

Drain in lot 3

Prebbles road looking towards lot 3

Drain through lot 3

COVER

RAVENSCROFT RIVULET

DRAIN

45.92

5.71

5.78

POND

POND

POND

67.71

PREBBLES ROAD

158.92

3

7,036m²±

84.25

10m x 15m Min.
Compliance Area

Existing Boundary
to be adjusted

POND

33.53

300Ø

#9

18.29

33.53

19.19

2

5,168m²±

27.35

Proposed Right of
Way 6.00 Wide

20.23

32.08

2.500

2.537

24.25

POND

36.45

Existing
Building

Existing
Building

23.87

1

3095m²±

28.67

26.68

2.500

16.44

48.76

15.13

9.63

Existing
Access for
Lot 2 & Lot 3

ARTHUR HIGHWAY

Existing Lot
1 Access

300Ø

Rev No	Revision note	Date	Approved
A	FOR APPROVAL	FEB24	HJP

POORTENAAR CONSULTING
ABN 40 672 032 737
PH 62884708
hein@poortenaarconsulting.com

Client: Mark Whitehead
Project: 2218 ARTHUR HIGHWAY, COPPING
Title: WATERWAY

Scale	Designed By	Date		Drawing No.	Rev.
1:2000 A3	H.POORTENAAR	FEB24	A1	24396-01	A

GEOTECH 23-170

7/12/2023

ROCK SOLID GEOTECHNICS PTY LTD
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Rogerson & Birch Surveyors
Craig@rbsurveyors.com

ONSITE WASTEWATER ASSESSMENT / SYSTEM DESIGN – 2217 Arthur Highway, Copping

Below find the assessment to determine of the type and size of wastewater treatment system, and the allocation of a Land Application Area (LAA) for the current cottage at 2217 Arthur Highway, Copping. This assessment should be read in conjunction with Site & Soil Evaluation Report (GEOTECH 23-170) - enclosed.

It is proposed to subdivide the property, removing the current cottage and southeastern portion of the land (Proposed Lot 1). The cottage has a joint wastewater system (with the existing building on proposed Lot 2). The system's Land Application Area is located on proposed Lot 2. This report designs a system for the cottage that is wholly contained on proposed Lot 1.

A site investigation was completed on Friday 1 December, 2023, in the presence of Mr Mark Whitehead (property owner). This assessment included the augering of two test holes to assess the site for onsite wastewater disposal suitability (4WD mounted SAMPLA25 mechanical auger with 100mm solid flight augers). The locations of the test holes are marked on Figure 1.

Proposed Lot 1 is a 3095m^2 +/- block on the southwestern corner of Arthur Highway and Prebbles Road, with direct access from Arthur Highway (Figure 1). The 2-bedroom cottage lies on the western side of the land (Plate 1), with a natural drainage line containing a large dam running south to northwest through the centre of the block (Figures 2 & 3).

The large dam and defined natural drainage line occupies a significant portion of the site. The land immediately to the north and east/southeast of the residence and drainage line is best suited for an onsite wastewater LAA. These areas are on the highest and driest portions of the block. Both areas are covered in grass, with mature trees on the southern side of the site adjacent to Arthur Highway. The land slopes very shallowly towards the dam (1-2 degrees) (Plate 1).

The profile encountered in Test Hole #1 (Plate 2) consisted of:

0.00 – 0.20m	SAND: fine grained, dark greyish brown, rootlets – TOPSOIL
0.20 – 0.80m	SAND: fine grained, very light grey, dry to slightly moist
0.80 – 2.10m	sandy CLAY: medium to high plasticity, olive brown, 25% fine to medium grained, brown, moist
2.10m+	Hole terminated at required depth – 2.10m.

The profile encountered in Test Hole #2 (Plate 3) consisted of:

0.00 – 0.20m	SAND: fine grained, dark greyish brown, rootlets – TOPSOIL
0.20 – 0.45m	SAND: fine grained, brownish grey, dry to slightly moist
0.45 – 2.10m	sandy CLAY: medium plasticity, olive & greyish brown, 25-30% fine to medium grained, brown, moist
2.10m+	Hole terminated at required depth – 2.10m.

Groundwater was not encountered in either test hole.

The site is classified as a Class 2 (sandy LOAM) over Class 5 (light CLAY) with an Indicative Permeability of 0.12-0.5 m/day.

A conservative Design Irrigation Rate (DIR) of 3mm/day is appropriate for secondary treated effluent form an Aerated Wastewater Treatment System (AWTS), due to the close proximity to the dam and natural drainage line.

It is proposed to install an Aerated Wastewater Treatment System (AWTS) and to dispose of the effluent into the abovementioned LAAs sited to the northeast and east of the residence.

Plate 1 – Looking to the northwest at the cottage (main building - ex museum, in the background).

Plate 2 – Test Hole #1 – Proposed LAA – Looking to the southwest. Cottage in the background, dam on LHS.

Plate 3 – Test Hole #2 – Proposed LAA – Looking to the west. Cottage in the background, dam in centre.

COMPLIANCE WITH THE 2016 DIRECTOR'S GUIDELINES FOR ONSITE WASTEWATER

Compliance Table Directors Guidelines for OSWM		
Acceptable Solutions	Performance Criteria	Compliance achieved by
7. Standards for Wastewater Land Application Areas		
A1 Horizontal separation distance from a building to a LAA must comply with one of the following: a) be no less than 6m; b) be no less than: (i) 3m from an upslope boundary or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building.	P1 The LAA is located so that the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.	Complies with A1 LAA >6m from any building.
A2 Horizontal separation distance from downslope surface water to a LAA must comply with (a) or (b) (a) be no less than 100m; or (b) be no less than the following: (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water.	P2 Horizontal separation distance from downslope surface water to a LAA must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Complies with P2 See Risk Assessment
A3 Horizontal separation distance from a property boundary to a LAA must comply with either of the following: (a) be no less than 40m from a property boundary; or (b) be no less than: (i) 1.5m from an upslope or level property boundary; & (ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or (iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.	P3 Horizontal separation distance from a property boundary to a LAA must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable.	Complies with A3 Minimum 1.5m setback from upper and side-slope boundaries. Minimum 10m setback from lower-slope boundary.
A4 Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient.	P4 Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable.	Complies with A4 No known potable bores in the area.

A5 Vertical separation distance between groundwater & a LAA must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.6m if secondary treated effluent	P5 Vertical separation distance between groundwater and a LAA must comply with the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable.	Complies with A5 Groundwater not encountered.
A6 Vertical separation distance between a limiting layer & a LAA must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.5m if secondary treated effluent.	P6 Vertical setback must be consistent with AS/NZS1547 Appendix R.	Complies with A6 Limiting layer >0.5m.
A7 Nil	P7 A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties.	Complies with P7

RISK ASSESSMENT

Each identified environmental aspect is subject to a qualitative risk analysis based on likelihood and consequences of environmental impact. The risk analysis matrix is as follows:

LIKELIHOOD	***CONSEQUENCES***				
	Catastrophic 1	Major 2	Moderate 3	Minor 4	Insignificant 5
A (almost certain)	Extreme	Extreme	High	High	Medium
B (likely)	Extreme	Extreme	High	High	Medium
C (possible)	Extreme	Extreme	High	Medium	Low
D (unlikely)	Extreme	High	Medium	Low	Low
E (rare)	High	Medium	Low	Low	Low

Criteria for the five categories of likelihood:

Almost certain: An environmental health impact is expected to occur in most circumstances.

Likely: An environmental health impact will probably occur in most circumstances

Possible: An environmental health impact could occur.

Unlikely: An environmental health impact could occur but is not expected.

Rare: An environmental health impact would occur only in exceptional circumstances.

Criteria for determining consequence to environmental health from an on-site wastewater management issue:

Catastrophic: Widespread, irreparable environmental damage; loss of human life or long-term human health effects; serious litigation; over $1 million to manage consequences.

Major: Widespread, medium to long term impact; moderate human health impacts requiring medical treatment; major breach of legal requirements (prosecution); $50,000 to $1 million to manage consequences.

Moderate: Localised medium to long term impact; minor and reversible human health impacts treatable with first aid; moderate breach of legal requirements with fine (EIN/prosecution); $5,000 to $50,000 to manage consequences.

Minor: Localised short to medium term impact; no injury to people; minor breach of legal requirements (eg. legal notice, EIN); $1000 to $5,000 to manage consequences.

Insignificant: Limited impact to a local area but no long-term effects; concern or complaints from neighbours; no injury to people; minor technical nonconformity but no legal nonconformity; less than $1000 cost to manage consequences.

Conducting a risk analysis results in the allocating of a risk level of *extreme*, *high*, *moderate* or *low* for each environmental aspect. Environmental health aspects with an *extreme* or *high* risk are considered to be *significant*, that is, they have or can have a significant environmental impact.

Defined risks are:

- Setback distance to surface water.

The defined site constraint items of specific concern (as defined in Table R1 of AS/NZS 1547:2021) FOR THE ABOVE DEFINED RISKS are: A, B, D, E, F, G, J

A Microbial quality of effluent.

- Effluent to be secondary treated in an AWTS – low risk level.

B Surface Water.

- Profile sandy topsoils over sandy clay subsoils. Subsurface application – low risk of off-site effluent movement. Dam and creek not high resource value. Low application rate by utilising two LAAs intermittently dosed using an indexing valve.

D Slope.

- Natural slope 1-2° to the W. Subsurface application – low risk of off-site effluent movement.

E Position of land application area in landscape.

Profile sandy topsoils over sandy clay subsoils. Subsurface application – low risk of off-site effluent movement. Dam and creek not high resource value. Low application rate by utilising two LAAs intermittently dosed using an indexing valve.

F Drainage.

Profile sandy topsoils over sandy clay subsoils. Subsurface application – low risk of off-site effluent movement. Dam and creek not high resource value. Low application rate by utilising two LAAs intermittently dosed using an indexing valve.

G Flood Potential.

- See comments for F – low risk level. Dam level artificially controlled with spillway (dam will spill well before any chance of LAAs being inundated).

J Application method.

- Secondary treated effluent into subsurface irrigation – low risk level for this site.

The risk assessment identifies several, linked risks for wastewater application on this site.

- These issues will be mitigated / reduced to an acceptable level by secondary treating the wastewater effluent, and applying the effluent into the ground via shallow subsurface irrigation in two LAAs – at a low Design Irrigation Rate.

WASTEWATER SYSTEM DESIGN:

It is proposed to install an Aerated Wastewater Treatment System (AWTS) and to dispose of the effluent into two LAAs consisting of subsurface irrigation lines.

The size of the total LAAs is conditional on the wastewater load entering the system and the permeability of the site. The site is classified as a Class 1 (SAND) over Class 5 (light CLAY) with an Indicative Permeability of 0.12-0.5 m/day, and a very conservative Design Irrigation Rate (DIR) of 3mm/day.

2-bedroom residence	4 persons occupancy	
Tank water	120 litres/person/day	
Wastewater Load	4 x 120 litres/person/day	480 litres/day
Design Irrigation Rate (DIR)	3mm/day	Secondary treated effluent
Irrigation Area	480 / 3 = 160m^2	

Total size of calculated Land Application Area (LAA) is 160m^2.

It is proposed to intermittently dose the two x 80m^2 LAAs utilising an indexing valve.

LAND APPLICATION AREAS

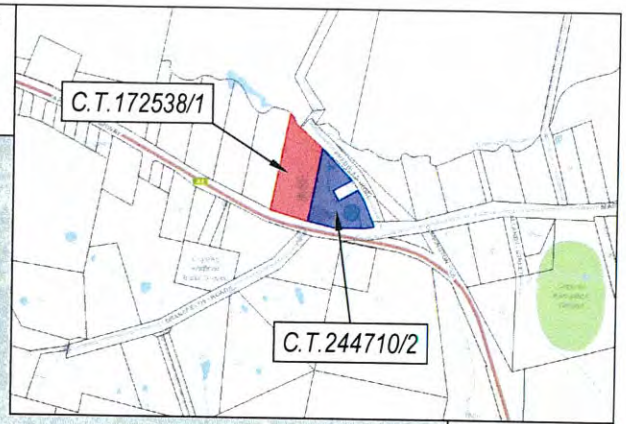
The new Land Application Area should be constructed as per the following specifications:

- Establishment and maintenance of 160m^2 of irrigation areas in two x 80m^2 zones, utilising an indexing valve.
- The areas are to consist of sub-surface irrigation under designated lawns.
- Landscaping of the irrigation area is to be maintained in good order at all times. Such maintenance includes the mowing of the lawns.
- The current topsoil should be scoured / ripped to a minimum depth of 200mm, and any rocks removed.
- The drip lines must be rated for use with wastewater (pressure compensated), and organized to cover the entire two x 80m^2 zones @ 0.7m spacings.
- Vacuum Breaker Valves should be provided at the high points of the LAAs, and placed in valve boxes to enable inspection.
- Flush Valves should be provided for the LAAs, with piping returning the flush water to the treatment plant. The Flush Valves are to be installed in valve boxes to allow inspection and servicing.
- An inline strainer (150-200 mesh) is to be installed to prevent solids from entering the irrigation system.
- Cutoff drains upslope from the LAAs will not be required.
- The areas should not be driven on, as compaction of the subsurface driplines could render the system unserviceable.

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania



LOCATION PLAN

3
7,036m²±

2
5,168m²±

1
3095m²±

10m x 15m Min. Compliance Area

Existing Boundary to be adjusted

Proposed Right of Way 6.00 Wide

Existing Building

Existing Building

Existing Access for Lot 2 & Lot 3

Existing Lot 1 Access

ARTHUR HIGHWAY

45.92
5.78
61.71
158.92
84.25
33.53
18.29
33.53
19.19
27.35
20.23
32.08
28.67
2.500
2.531
24.25
23.87
2.500
26.68
16.44
48.76
15.13
9.63
36.45

Site Drainage

Lot 1: Existing On-site Water, Stormwater & Wastewater

Lot 2: Existing On-site Water, Stormwater & Wastewater

Lot 3: Proposed On-site Water, Stormwater & Wastewater

Development Standards for Subdivision
Sorell
12.0 Village Zone

P1 - All lots comply with requirements

A2 - All lots comply - Min. 10m frontage

A3 - All lots comply - vehicular access directly from road

12.5.2 Roads
A4 - All lots comply - no new roads

8.6.3 Services
A1 - All lots comply - On-site Water Management
A2 - All lots comply - On-site Waste-water Management
A3 - All lots comply - On-site Stormwater Management

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

ROGERSON & BIRCH SURVEYORS
UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

OWNER: MARK D. WHITEHEAD
TITLE REFERENCE: C.T.172538/1 & C.T.244710/2
LOCATION: 2217 ARTHUR HIGHWAY, **COPPING**

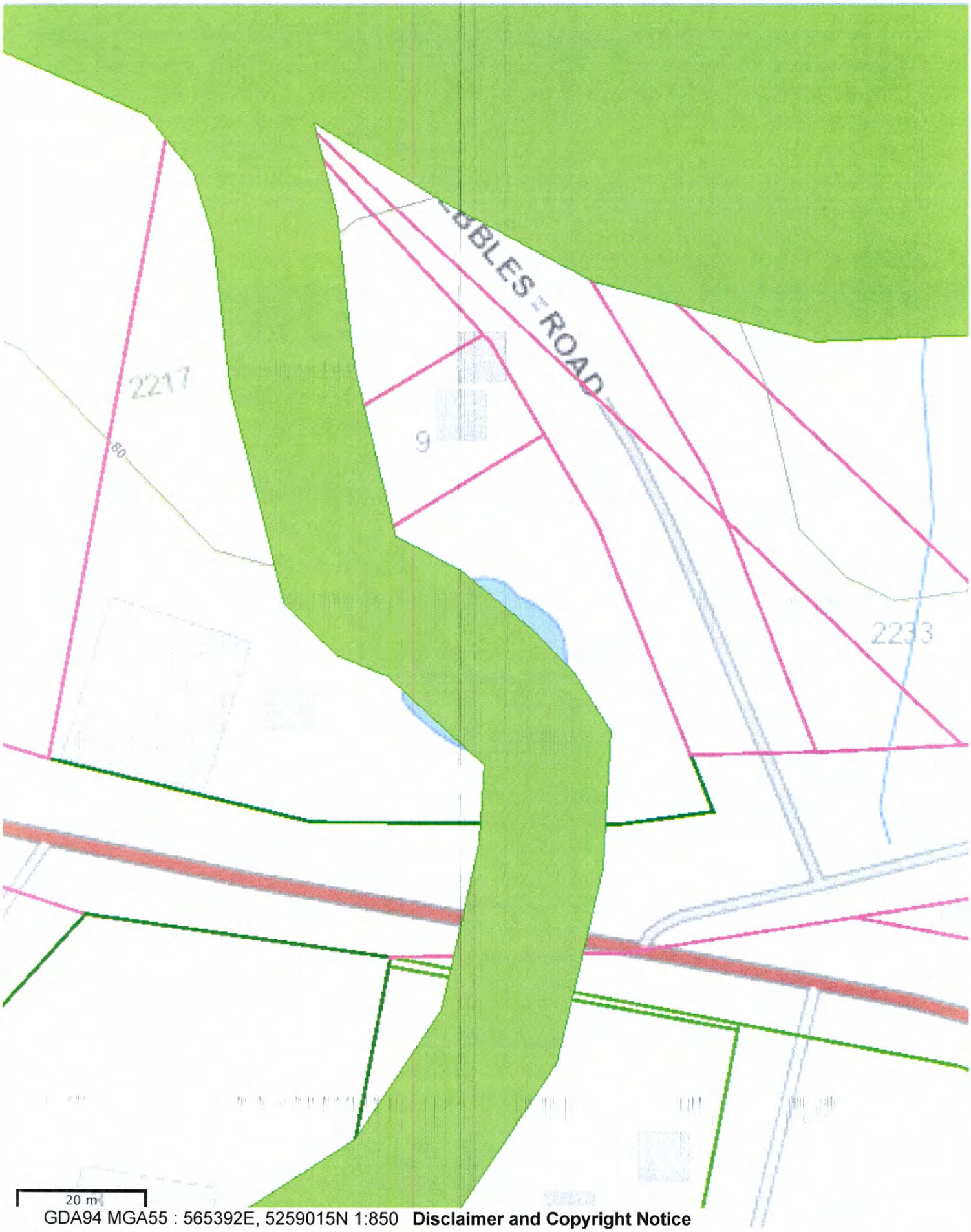
Proposed Subdivision

Date: 21/08/2023
Reference: WHITE01 15104-00
Scale: 1:800 (A3)
Municipality: SORELL

FIGURE 1

GDA94 MGA55 : 565458E, 5258951N 1:425 **Disclaimer and Copyright Notice**

FIGURE 2



GDA94 MGA55 : 565392E, 5259015N 1:850 **Disclaimer and Copyright Notice**

FIGURE 3

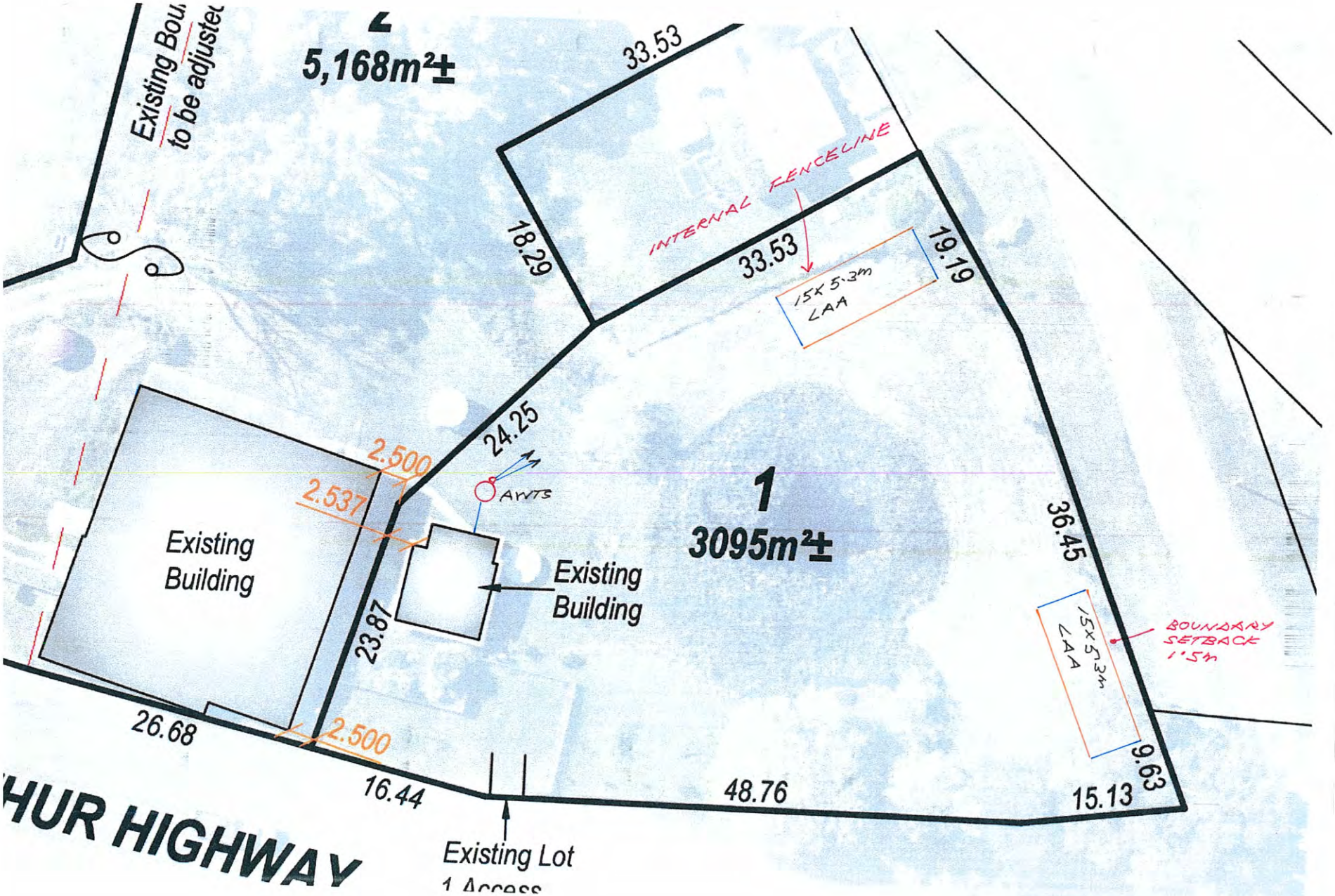
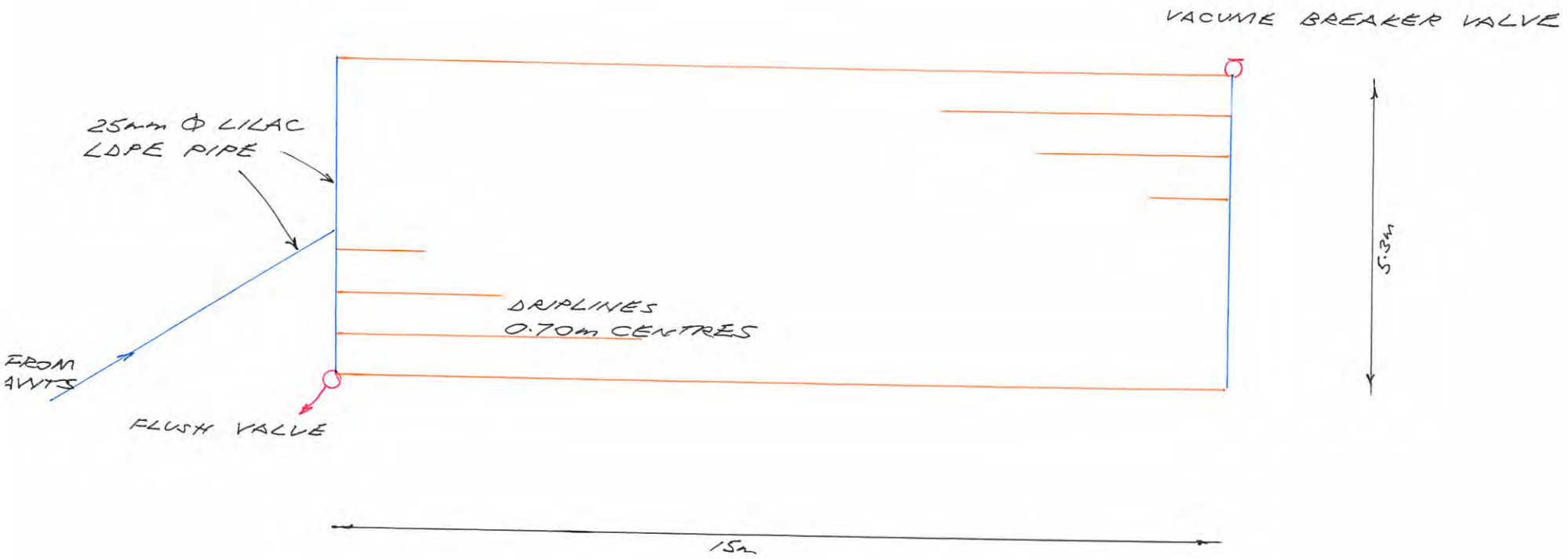

Existing Bou
to be adjuste
5,168m²±
33.53
INTERNAL FENCELINE
18.29
33.53
19.19
15x 5.3m
LAA
24.25
2.500
2.537
AWTS
1
3095m²±
Existing
Building
Existing
Building
36.45
23.87
BOUNDARY
SETBACK
1.5m
15x 5.3m
LAA
26.68
2.500
16.44
48.76
15.13
9.63
HUR HIGHWAY
Existing Lot
1 Access

FIGURE 4

PLAN
IRRIGATION AREAS
(BOTH AREAS
SAME LAYOUT)



1:100

SITE AND SOIL EVALUATION REPORT

Soil Category:

	Modified Emerson Test Required	No
1,...2,...3,...4,...5,...6	If Yes, Emerson Class No.	
Measured or Estimated Soil Permeability (m/d):	1.0m/d	
Design Irrigation Rate (DIR)	0.12-0.5 m/day	
Geology:	Quaternary sediments	

Slope:	1-2 degrees
Drainage lines / water courses:	As marked
Vegetation:	Grass
Site History: (land use)	Museum
Aspect:	West
Pre-dominant wind direction:	Northwest to southwest
Site Stability: Will on-site wastewater disposal affect site stability?	No
Is geological advice required?	No
Drainage/Groundwater:	Not Encountered
Depth to seasonal groundwater (m):	Not Encountered
Are surface or sub-surface drains required upslope of the land application area?	No
Date of Site Evaluation:	1/12/2023
Weather Conditions:	Fine

ROCK SOLID GEOTECHNICS PTY LTD
Peter Hofto
163 Orielton Rd
Orielton
TAS 7172
0417960769
peter@rocksolidgeotechnics.com.au

Mark Whitehead
mwhitehead1979@yahoo.com.au

7/12/2023

Loading Certificate for Onsite Wastewater System

2217 Arthur Highway, Copping

1 System Capacity:

- (medium/long term) 2-bedroom residence - 4 persons, 480 litres/day

2 Design Criteria Summary:

Secondary Treated Effluent	Aerated Wastewater Treatment System (AWTS)
Soil Category	Class 1 SAND over Class 5 light CLAY
Land Application System	160m^2 of subsurface irrigation

3 Reserve Area:

- Reserve LAA available if required.

4 Variation from design flows etc:

- The system should successfully assimilate additional peak loadings which may result from occasional social gatherings provided that this does not exceed use by more than 8 persons in a 24-hour period or more than 2 temporary resident visitors (ie. up to 6 persons total) for a period not exceeding 4 days. Visitors should be advised of the requirement to minimise time spent in showers, not running taps whilst cleaning teeth, and other common sense water conservation measures.

5 Consequences of overloading the system:

- Long term use by more than 4 residents or equivalent may result in overloading of the system, surfacing of effluent, public and environmental health nuisances, pollution of surface water etc.

6 Consequences of under-loading the system:

- Nil.

7 Consequences of lack of operation, maintenance and monitoring attention:

- The septic tank should be pumped at least every 3 years.

Peter Hofto
Rock Solid Geotechnics Pty Ltd

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form 35

To: Mark Whitehead 0449089504 *Owner name*

mwhitehead1979@yahoo.com.au *Address*

Suburb/postcode

Designer details:

Name: Peter Hofto

Category: Building Services Designer Hydraulic - Restricted

Business name: Rock Solid Geotechnics P/L

Phone No: 0417960769

Business address: 163 Orielton Road

Orielton 7172

Fax No:

Licence No: CC6159I

Email address: peter@rocksolidgeotechnics.com.au

Details of the proposed work:

Owner/Applicant Mark Whitehead

Designer's project reference No. GEOTECH 23-170

Address: 2217 Arthur Highway, Copping

Lot No:

Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:

ONSITE WASTEWATER MANAGEMENT SYSTEM

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions): *(X all applicable certificates)*

Certificate Type:	Certificate	Responsible Practitioner
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☐ Civil design	Civil Engineer or Civil Designer
	X Hydraulic design	Building Services Designer
	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

Deemed-to-Satisfy: X Performance Solution: *(X the appropriate box)*

Other details:

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: ROCK SOLID GEOTECHNICS	Date: 7/12/2023
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: ROCK SOLID GEOTECHNICS	Date: 7/12/2023
Computations:	Prepared by: ROCK SOLID GEOTECHNICS	Date: 7/12/2023
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

AS 1547:2021 On-site domestic wastewater management

Director's Guidelines for Onsite Wastewater Management

Any other relevant documentation:

Site & Soil Evaluation and design report, for 11257 Tasman Highway, Pontypool, dated 27/11/2023

Attribution as designer:

I Peter Hofto – ROCK SOLID GEOTECHNICS P/L ..... am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

	Name: (print)	*Signed*	*Date*
Designer:	Peter Hofto		7/12/2023
Licence No:	CC6159I		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- [x] The works will not increase the demand for water supplied by TasWater
- [x] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- [x] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [x] The works will not damage or interfere with TasWater's works
- [x] The works will not adversely affect TasWater's operations
- [x] The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- [x] I have checked the LISTMap to confirm the location of TasWater infrastructure
- [x] If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I .....Peter Hofto – ROCK SOLID GEOTECHNICS P/L..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	Name: (print)	*Signed*	*Date*
Designer:	Peter Hofto	PHO	7/12/2023

CONDITIONS OF INVESTIGATION

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This report should not be used for submission for Building or Development Application until RSG has been paid in full for its production. RSG accepts no liability for the contents of this report until full payment has been received.

The results & interpretation of conditions presented in this report are current at the time of the investigation only. The investigation has been conducted in accordance with the specific client's requirements &/or with their servants or agent's instructions.

This report contains observations & interpretations based often on limited subsurface evaluation. Where interpretative information or evaluation has been reported, this information has been identified accordingly & is presented based on professional judgement. RSG does not accept responsibility for variations between interpreted conditions & those that may be subsequently revealed by whatever means. Due to the possibility of variation in subsurface conditions & materials, the characteristics of materials can vary between sample & observation sites. RSG takes no responsibility for changed or unexpected variations in ground conditions that may affect any aspect of the project. The classifications in this report are based on samples taken from specific sites. The information is not transferable to different sites, no matter how close (ie. if the development site is moved from the original assessment site an additional assessment will be required).

It is recommended to notify the author should it be revealed that the sub-surface conditions differ from those presented in this report, so additional assessment & advice may be provided.

- AS1547-2012: Onsite Domestic Wastewater Management

Any assessment that has included an onsite wastewater system design will require a further site visit / inspection once the system has been installed. It is the responsibility of the client / plumber to inform the author as to when the wastewater system is being installed, and to arrange the final inspection. After the inspection to verify that the system has been installed as per RSG's design a statement will be provided. An additional fee applies for the site visit & issuing the certificate.

RSG is not responsible for the correct installation of wastewater systems. Any wastewater installation is the sole responsibility of the owner/agent and certified plumber. Any variation to the wastewater design must be approved by RSG, and an amended Special Plumbing Permit obtained from the relevant council. The registered plumber must obtain a copy and carefully follow the details in the council issued Special Plumbing Permit. A "Certificate of Completion" will be based on surface visual inspection only, to verify the location of the system. All underground plumbing works are the responsibility of the certified plumber.

PETER HOFTO

ROCK SOLID GEOTECHNICS PTY LTD

BUSHFIRE ASSESSMENT REPORT

Proposed Three Lot Subdivision

Address: 2217 Arthur Highway, Copping TAS 7174

Title Reference: C.T.172538/1 & C.T.244710/2

Prepared by James Rogerson, Bushfire Hazard Practitioner (BFP-161)
VERSION – 1.0
Date: 28/11/2023

Contents

Disclaimer: The information contained within this report is based on the instructions of AS 3959-2018 the standard states that *"Although this Standard is designed to improve the performance of building when subjected to bushfire attach in a designated bushfire-prone area there can be no guarantee that a building will survive a bushfire event of every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire and extreme weather conditions." (Standards Australia Limited, 2011)*

INTRODUCTION

1.1 Background

This Bushfire Assessment Report and associated Bushfire Hazard Management Plan (BHMP) has been prepared by James Rogerson of Rogerson and Birch Surveyors on behalf of the proponent to form part of supporting documentation for the proposed three lot subdivision of 2217 Arthur Highway, Copping. Under the Tasmanian Planning Scheme – Sorell (TPS) and C13.0 Bushfire-Prone Areas Code it is a requirement that a subdivision application within a bushfire-prone area must accomplish a minimum Bushfire Attack Level (BAL) rating of BAL-19 for all future dwellings on newly formed allotments. This report also includes an associated BHMP which is also a requirement under C13.0.

The proposed development is within a Bushfire-Prone Area overlay and there is bushfire-prone vegetation within 100m from the site. Therefore, this site is within a bushfire-prone area.

1.2 Scope

This Bushfire Report offers an investigation and assessment of the bushfire risk to establish the level of bushfire threat and vulnerability on the land for the purpose of subdivision. This report includes the following:

- A description of the land and adjacent land, and description of the use or development that may be at threat by a bushfire on the subject site;
- Calculates the level of a bushfire threat and offers opinions for bushfire mitigation measures that are consistent with AS3959:2018 and C13.0.
- Subdivision Proposal Plan (Appendix B)
- Bushfire Hazard Management Plan (Appendix C)
- Planning Certificate (Appendix D)

1.3 Scope of BFP Accreditation

I, James Rogerson am an accredited Bushfire Practitioner (BFP-161) to assess bushfire hazards and endorse BHMP's under the the *Chief Officers Scheme for the Accreditation of Bushfire Hazard Practitioners.* I have successfully completed the *Planning for Bushfire Prone Areas Short Course* at University of Technology Sydney.

1.4 Limitations

The site assessment has been conducted and report written on the understanding that:

- The report only deals with the potential bushfire risk, all other statutory assessments are outside the scope of this report;
- The report only classifies the size, volume and status of the vegetation at the time the site assessment was conducted;
- Impacts on future development and vegetation growth have not been considered in this report. No action or reliance is to be placed on this report, other than which it was commissioned.

1.5 Proposal

The proposal is for the subdivision of current titles C.T.172538/1 & C.T.244710/2 into 3 resultant titles. See proposal plan (Appendix B).

2 PRE-FIELD ASSESSMENT

2.1 Site Details

Table 1

Owner Name(s)	Mark David Whitehead
Location	2217 Arthur Highway, Copping TAS 7174
Title Reference	C.T.172538/1 & C.T.244710/2
Property ID	3533689
Municipality	Sorell
Zoning	Village
Planning Overlays	7 – Natural Assets Code & 13 – Bushfire-prone Areas Code
Water Supply for Firefighting	The property is not serviced by reticulated water. Static water supply tanks will be required.
Public Access	Access to the development is off the Arthur Highway.
Fire History	Record fires approximately 270m west of the site from 2012-2023.
Existing Development	All-weather gravel private driveways.

Figure 1 - Location of subject site. Source: The LIST, © State of Tasmania

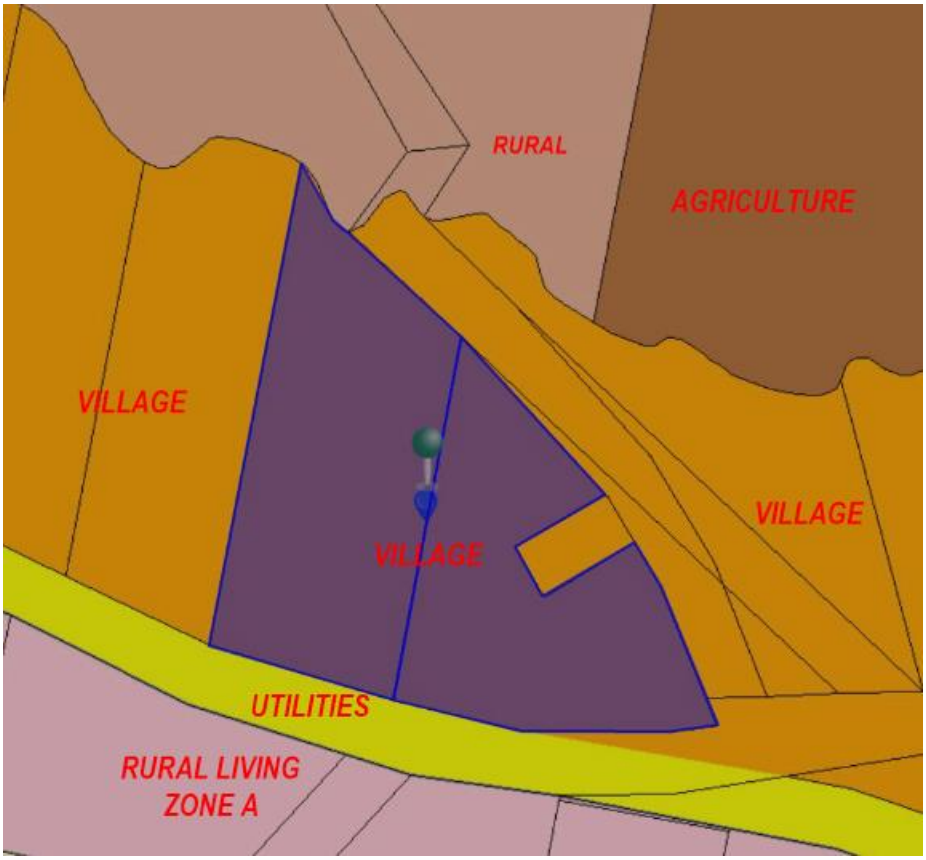


Figure 2 - Planning Scheme Zoning of site and surrounding properties. Source: The LIST, © State of Tasmania

2.2 TasVeg 4.0

There are 2 classified vegetation communities on the subject site, and the same communities on the surrounding land and parcels. Figure 3 below shows the classified vegetation from TASVEG4.0(Source: The LIST).

Please note that TASVEG4.0 classification does not necessarily reflect ground conditions.

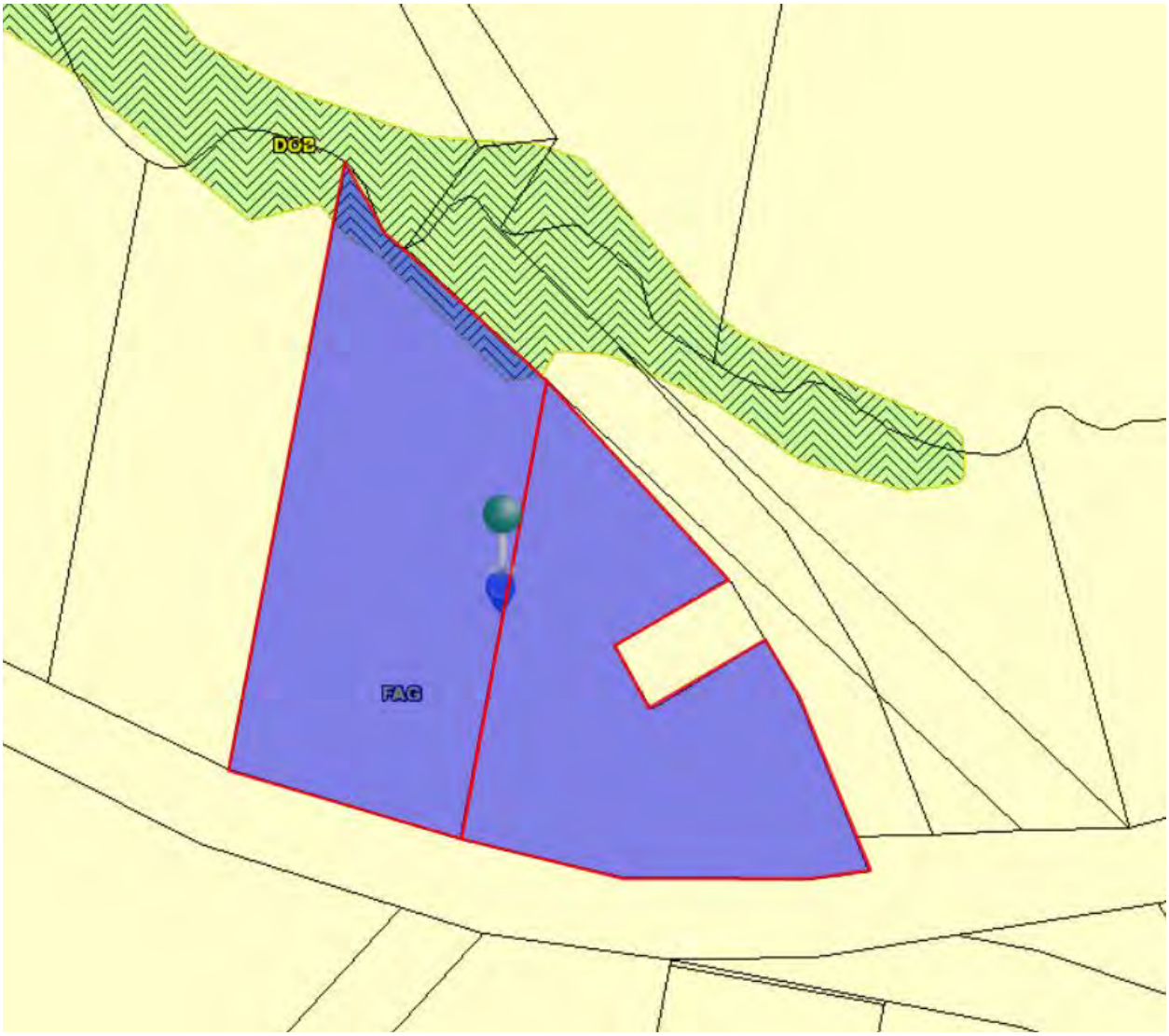


Figure 3 - TASVEG4.0 communities on subject site and surrounding land. FUR – Urban areas, FAG – Agricultural land & DOB – Eucalyptus obliqua dry forest. Source: The LIST, © State of Tasmania

3 SITE ASSESSMENT

The site assessment was conducted by James Rogerson (BFP-161) on the 10th of October 2023.

3.1 Bushfire Hazard Assessment

C13.0 Bushfire Prone Areas Code defines Bushfire-prone areas as follows;

> *a) Land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; or*
>
> *b) Where there is no overlay on a planning scheme map, or where the land is outside the boundary of a bushfire-prone area shown on such map, land that is within 100m of an area of bushfire –prone vegetation equal or greater than 1ha.*

The subject site is within a bushfire-prone areas overlay for the TPS, and the subject site is within 100m of an area of bushfire-prone vegetation equal or greater than 1ha. Therefore, this proposed subdivision is within a bushfire-prone area as per the TPS.

For the purposes of the BAL Assessment, vegetation within 100m of the proposed subdivision site was assessed and classified in accordance with AS3959:2018 Simplified Procedure (Method 1) (relevant fire danger index: 50-which applies across Tasmania).

BUSHFIRE THREAT DIRECTION

Bushfire threat to this development is from the **GRASSLAND FUEL** within, north and south of the property. An additional threat is from the small patch of **WOODLAND FUEL** within the property.

Prevailing Winds: The prevailing winds for this site are primarily westerly, north westerly.

3.2 Vegetation and Effective Slope

Vegetation and relevant effective slopes within 100m of the proposed subdivision have been inspected and classified in accordance with AS 3959:2018. Effective Slope refers to the slope of the land underneath the classified bushfire-prone vegetation relative to the building site and not the slope between the vegetation and the building site. The effective slope affects a fires rate of spread and flame length and is an acute aspect of bushfire behaviour.

WITHIN THE TITLE BOUNDARY (BDY) & PROPERTY DESCRIPTION

The property is a medium sized, developed, Village zoned property that is in the central part of the small, rural township of Copping. The property is located at the intersection of Arthur Highway and Marion Bay Road. The property is two existing titles. The developed property is the old antiques store (now closed) and a coffee shop (temporarily closed). The property is orientated in a north-south aspect. The terrain within the property is gentle, sloping slightly in a northerly aspect. The property consists of two Class 1a dwellings, in addition to various Class 10a sheds (including the old stores), cultivated lawns and gardens and all-weather driveways. (See Figure 4 for slopes).

The land directly surrounding the dwellings and sheds is used as private open space and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018. The entire of the existing vacant property and small portions of the existing developed property are grassed, appearing in an unmanaged condition, due to minimal land use and is therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959:2018. There is a patch of Eucalyptus trees that are <10m high, have a foliage cover of <30% with an understory of grass and smaller isolated shrubs, that would be classed as woodland fuel, however, the area of this vegetation is only ~1700m² and is not classed as woodland as grassland is the far greater predominant fuel in this area.

NORTH OF THE TITLE BDY

To the north of the property (upslope) are various developed, vacant, large sized, Rural and Agricultural Zoned properties.

The developed properties (21 and 23 Prebbles Road) are also the Rural Zoned properties. These two properties consist of Class 1a dwellings, in addition to various Class 10a sheds, cultivated lawns, gardens and all-weather driveways. The land directly surrounding the dwellings and sheds is used as private open space (POS) and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018. External to the POS the land is grassed, appearing in an unmanaged condition due to minimal land use and is therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959:2018. The remainder of these two properties are vegetation with Eucalyptus trees, that are <10m high, with a foliage cover of <30% and an understory of grass and is therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959:2018.

The vacant two properties (51 Breem Creek Road) are the Agricultural zoned properties and are predominately covered with unmanaged pasture grass, that is appearing unmanaged due to minimal land use and is therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959:2018. The remainder of the larger of the two vacant properties is vegetated with Eucalyptus trees, that are <10m high, with a foliage cover of <30% and an understory of grass and is therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959:2018.

EAST OF THE TITLE BDY

To the east of the property (across slope) are various medium sized, developed, Village Zone properties. The land directly surrounding the dwellings and sheds is used as POS and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018. External the POS the land within these properties is predominately grassed, that appeared in a managed condition, due to the sizes of the properties, regular use and mowing and is therefore classed as LOW THREAT VEGETSTION per Clause 2.2.3.2 (f) of AS3959:2018.

SOUTH OF THE TITLE BDY

To the south of the property (across slope and upslope) are various medium sized, developed, vacant, Rural Living Zone A and Community Purpose zoned properties.

2224 Arthur Highway and 3 Dransfield Lane are small, developed Rural Living Zone A zoned properties consisting of Class 1a dwellings, in addition to various Class 10a sheds, cultivated lawns, gardens and all-weather gravel driveways. The land directly surrounding the dwellings and sheds is used as POS and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018. External the POS the land within these properties is predominately grassed, that appeared in a managed condition, due to the sizes of the properties, regular use and mowing and is therefore classed as LOW THREAT VEGETSTION per Clause 2.2.3.2 (f) of AS3959:2018.

2226 Arther Highway is a larger, developed, Rural Living Zone A zoned property consisting of Class 1a dwellings, in addition to various Class 10a sheds, cultivated lawns, gardens and all-weather gravel driveways. consisting of Class 1a dwellings, in addition to various Class 10a sheds, cultivated lawns, gardens and all-weather gravel driveways. External the POS and the remainder of the property is vegetated with Eucalyptus trees, that are <10m high, with a foliage cover of <30% and an understory of grass and is therefore classed as GROUP B WOODLAND per Table 2.3 of AS3959:2018.

The vacant (unaddressed property) is zoned Rural Living Zone A. The property is grassed, appearing in an unmanaged condition due to minimal land use and is therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959:2018.

2204 Arthur Highway is the 'Copping Anglican Burial Ground' and is zoned Community Purpose. The site is a graveyard and the whole site is managed and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018.

WEST OF THE TITLE BDY

To the west of the property boundary (across slope) is three titles all addressed 2201 Arthur Highway and owned by the same person. These properties are all zoned Village. The middle of the three properties is developed, consisting of a Class 1a dwelling, in addition to various Class 10a sheds, cultivated lawns, gardens and an all-weather gravel driveway. The land directly surrounding the dwelling and sheds is used as POS and is therefore classed as MANAGED LAND or LOW THREAT VEGETATION per Clause 2.2.3.2 (e)(f) of AS3959:2018. External the POS on the property directly to the west of the subject property is vacant and is grassed, that appeared partly mowed (assuming as part of the Sorell Fire Abatement Policy) These mowed parts are classed as LOW THREAT VEGETATION per Clause 2.2.3.2 (f). The remainder of this property and the remaining property of this address is grassed, appearing unmanaged due to minimal land use and is therefore classed as GROUP G GRASSLAND per Table 2.3 of AS3959:2017.

Figure 4 below shows the relationship between the subject site and the surrounding vegetation.

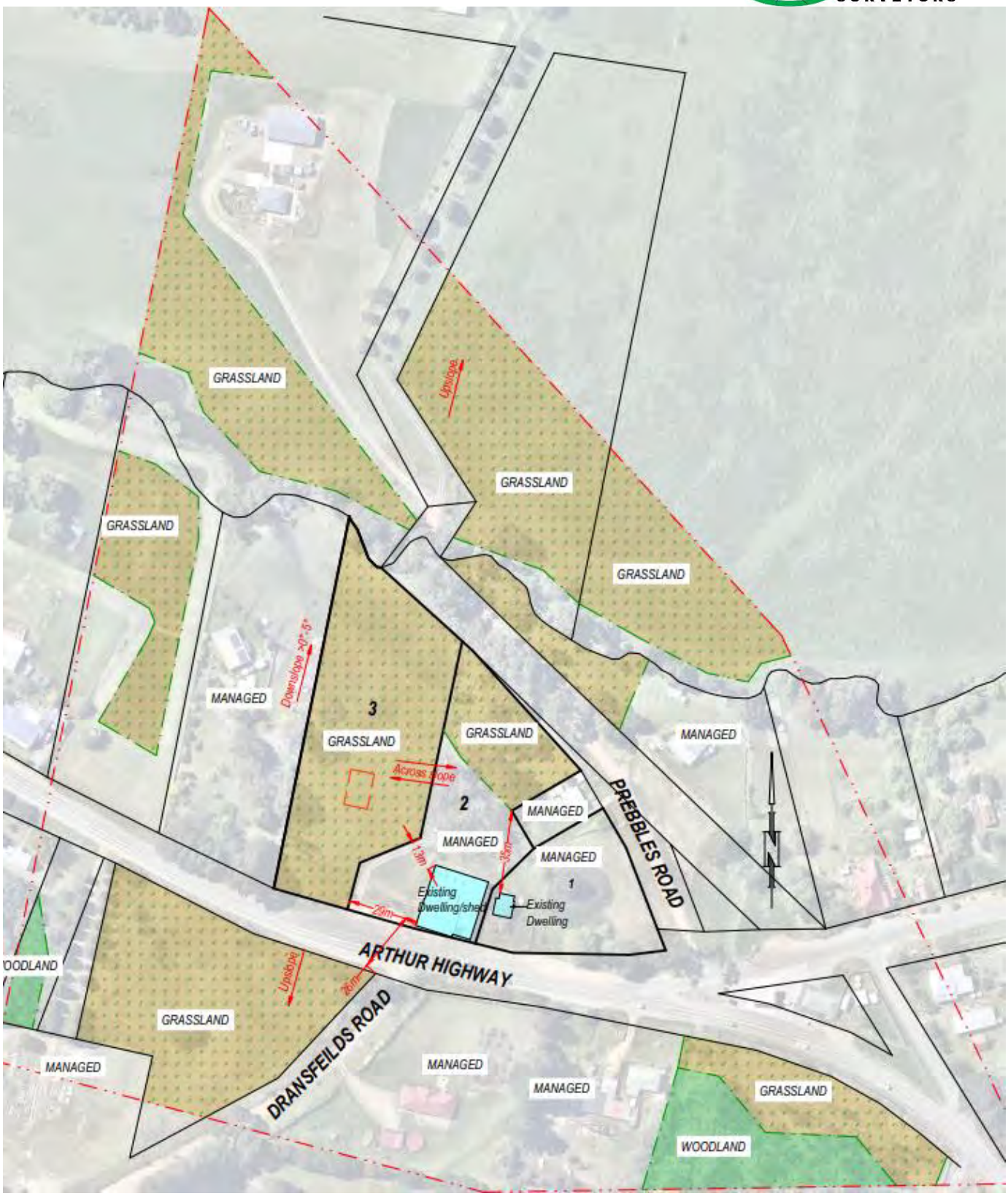


Figure 4 classified vegetation (within 100m of site) and existing separation from bushfire-prone vegetation (not to scale)

3.3 Bushfire Attack Level (BAL)

Table 2 - BAL rating for each lot and required separation distances

LOT 1 – Existing Dwelling (Existing separation)				
DIRECTION OF SLOPE	**N**	**E**	**S**	**W**
Vegetation Classification	MANAGED GRASSLAND	MANAGED	MANAGED	MANAGED GRASSLAND
Existing Horizontal distance to classified vegetation	35m-73m (G)	N/A	N/A	59m-92m (G)
Effective Slope under vegetation	Downslope >0°-5° Upslope	Across slope	Across slope & upslope	Across slope
Exemption				>50 to (G)
Current BAL value for each side of the site	BAL-12.5	BAL-LOW	BAL-LOW	BAL-LOW
Separation distances to achieve BAL-19	11m	N/A	N/A	N/A
Separation distances to achieve BAL-12.5	16m	N/A	N/A	N/A

LOT 2 – Existing Dwelling (Existing separation)				
DIRECTION OF SLOPE	**N, NE**	**E, SE**	**SW**	**NW**
Vegetation Classification	MANAGED GRASSLAND	MANAGED	MANAGED GRASSLAND	MANAGED GRASSLAND
Existing Horizontal distance to classified vegetation	38m-76m (G)	N/A	26m-88m (B)	13m-97m (G)
Effective Slope under vegetation	Downslope >0°-5° Upslope	Across slope	Upslope	Downslope >0°-5°
Exemption				
Current BAL value for each side of the site	BAL-12.5	BAL-LOW	BAL-12.2	BAL-19
Separation distances to achieve BAL-19	11m	N/A	10m	11m
Separation distances to achieve BAL-12.5	16m	N/A	14m	16m

LOT 3 – Vacant (Indicative Building Area)				
DIRECTION OF SLOPE	**N, NE**	**E, SE**	**S, SW**	**W, NW**
Vegetation Classification	GRASSLAND MANAGED	GRASSLAND MANAGED	GRASSLAND MANAGED	GRASSLAND MANAGED
Existing Horizontal distance to classified vegetation	m-78m (G)	0m-24 (G)	0m-43m & 63m-100m (G)	0m-22m & 80m-100m (G)
Effective Slope under vegetation	Downslope >0°-5° Upslope	Across slope	Upslope	Across slope
Exemption				
Current BAL value for each side of the site	BAL-FZ	BAL-FZ	BAL-FZ	BAL-FZ
Separation distances to achieve BAL-19	11m	10m	10m	10m
Separation distances to achieve BAL-12.5	16m	14m	14m	14m

3.4 Definition of BAL-LOW

Bushfire Attack Level shall be classified BAL-LOW per Section 2.2.3.2 of AS3959:2018 where the vegetation is one or a combination of any of the following Exemptions:

a) Vegetation of any type that is more than 100m from the site.
b) Single areas of vegetation less than 1 hectare in area and not within 100m of other areas of vegetation being classified.
c) Multiple areas of vegetation less than 0.25 ha in area and not within 20m of the site, or each other.
d) Strips of vegetation less than 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or each other, or other areas of vegetation being classified.
e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
f) Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTE: Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100mm).

The BAL level will also be classified as BAL-LOW if Grassland fuel is >50m from the site for any effective slope per Table 2.6 of AS3959:2018.

Due to some existing developed and managed land, some separations distances are already achieved.

Where there were multiple fuel classifications and effective slopes, the predominant fuel and slope have been used in the BAL table above.

BAL ratings are as stated below:

BAL LOW	BAL 12.5	BAL 19	BAL 29	BAL 40	BAL FZ
There is insufficient risk to warrant any specific construction requirements, but there is still some risk	Ember attack and radiant heat below 12.5 kW/m²	Increasing ember attack and windborne debris, radiant heat between 12.5 kW/m² and 19 kW/m2	Increasing ember attack and windborne debris, radiant heat between 19kW/m² and 29 kW/m2	Increasing ember attack and windborne debris, radiant heat between 29 kW/m² and 40 kW/m². Exposure to flames from fire front likely	Direct Exposure to flames, radiant heat and embers from the fire front

4 BUSHFIRE PROTECTION MEASURES

4.1 Hazard Management Areas (HMA)

Hazard Management Area as described in the Code "*maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire".* Also as described from Note 1 of AS3959:2018 Clause 2.2.3.2 "*Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm)".*

Compliance to C13.6.1

The building areas within all lots require a Hazard Management Area (HMA) to be established and maintained between the bushfire vegetation and the area at a distance equal to, or greater than specified for the Bushfire Attack Level in Table 2.6 of AS3959:2018.

Due to the sizes of the lots, only the building areas are to be maintained as an HMA for Lots 2 and 3. And the entire of Lot 1 to be an HMA. The building areas within Lots 1 and 2 are already kept in a HMA condition and must continue to do so in perpetuity.

Requisite fuel removal is required for Lot 3 to achieve BAL-19 compliance.

Minimum separation distances for each lot are stated below.

LOT 1 – Separation Distances (Existing Dwelling)				
Aspect	N	E	S	W
BAL-19	11m	N/A	N/A	N/A
BAL-12.5	16m	N/A	N/A	N/A

LOT 2 – Separation Distances (Existing Dwelling)				
Aspect	N, NE	E, SE	S, SW	W, NW
BAL-19	11m	N/A	10m	11m
BAL-12.5	16m	N/A	14m	16m

LOT 3 – Separation Distances (Indicative Building Area)				
Aspect	N, NE	E, SE	S, SW	W, NW
BAL-19	11m	10m	10m	10m
BAL-12.5	16m	14m	14m	14m

The Tasmanian Fire Service provides the following advice regarding the implementation and maintenance of Hazard management areas:

- Removing of fallen limbs, sticks, leaf and bark litter
- Maintaining grass at less than a 100mm height
- Removing pine bark and other flammable mulch (especially from against buildings)
- Thinning out understory vegetation to provide horizontal separation between fuels
- Pruning low-hanging tree branches (<2m from the ground) to provide vertical separation between fuel layers
- Pruning larger trees to maintain horizontal separation between canopies
- Minimize the storage of flammable materials such as firewood
- Maintaining vegetation clearance around vehicular access and water supply points
- Use of low-flammability species for landscaping purposes where appropriate
- Clearing out any accumulated leaf and other debris from roof gutters.

Additional site-specific fuel reduction or management may be required. An effective hazard management area does not require removal of all vegetation. Rather, vegetation must be designed and maintained in a way that limits opportunity for vertical and horizontal fire spread in the vicinity of the building being protected. Retaining some established trees can even be beneficial in terms of protecting the building from wind and ember attack

4.2 Public and Fire Fighting Access

Public Access

The proposed development fronts Arthur Highway and Marion Bay Road. Arthur Highway and Marion Bay Road are bitumen sealed roads. Arthur Highway is maintained by State Growth and Marion Bay Road is maintained by the Sorell Council. Arthur Highway has a nominal carriageway width of 8m, and Marion Bay Road has a nominal carriageway width of 7m.

No upgrades are required to the public roads and the public roads comply with public access road requirements.

Property Access

Current Conditions:

Lot 1

The existing private access to the existing dwelling within Lot 1 is an all-weather gravel material driveway, which runs perpendicular off Arthur Highway, and terminates adjacent to the front fence. The length of the access is approximately 11m.

Lot 2

The existing access to the existing dwelling within Lot 2 is an all-weather gravel material driveway, which runs perpendicular off Arthur Highway, and curves around behind the dwelling and terminates at a parking area behind the dwelling. The approximate length of the access is 65m for a nominal width of 3.5m.

Lot 3

The existing access to Lot 3 is using the same access as Lot 2 for a distance of approximately 20m only.

Figure 5 – Existing access to Lot 1

Figure 6 – Existing access to Lots 2 & 3

Compliance to C13.6.2

Lot 1

Access to the existing dwelling within Lot 1 is <30m and the access is not required for a fire appliance, therefore, there are no specified design or construction requirements, and the existing access complies to the Acceptable Solution A1 and Table 13.2 (B) of C13.6.2.

Lot 2

Access to the existing dwelling within the Lot 2 is >30m, but <200m, access is required for a fire appliance. The existing access has a nominal width of 3.5m, therefore minor upgrades to widen the access to 4m are required. There is existing compliant turning head space for a fire appliance. Upon upgrades to the existing access the proposal will comply with the Acceptable Solution A1 and Table C13.2 (B) of C13.0 demonstrated in Table 3 below.

Lot 3

Access to the building area within Lot 1 will be >30m but <200m, access is required for a fire appliance. Therefore, the access must comply with the relevant standards of Acceptable Solution A1 and Table C13.2 (B) of C13.0 demonstrated in Table 3 below.

Upgrades to existing access, hardstand and turning head for Lot 2 to be constructed prior to sealing of titles. New access, turning and hardstand for Lot 3 to be constructed prior to occupancy of a future habitable dwelling.

Table 3 - Requirements for access length greater than 30m and less than 200m per Table C13.2 (B)

Access Standards: (access length >30m, <200m)

a) All-weather construction;
b) Load capacity of at least 20 t, including bridges and culverts;
c) Minimum carriageway width of 4m;
d) Minimum vertical clearance of 4m;
e) Minimum horizontal clearance of 0.5m from the edge of the carriageway;
f) Cross falls less than 3 degrees (1:20 or 5%)
g) Dips less than 7 degrees (1:8 or 12.5%);
h) Curves with a minimum inner radius of 10m;
i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed road; and
j) Terminate with a turning area for fire appliances provided by one of the following
    i. A turning circle with a minimum outer radius of 10m; or
    ii. A property access encircling the building; or
    iii. A hammerhead 'T' or 'y' turning head 4m wide and 8m long.

4.3 Water Supply for Fire Fighting

Current Conditions:

Site assessment confirmed the property is not serviced by reticulated water. Existing tanks for domestic use only exist.

Compliance to C13.6.3

Lot 2

Lot 2 has an existing unused concrete tank (min. 10,000L) which can be used as a static water supply for fire fighting once the appropriate fitting is installed.

Upon installation of the new fitting, prior to sealing of titles Lot 2 will comply with Acceptable Solution A2 of C13.6.3 and Table C13.5.

Lots 1 and 3

Both lots 1 and 3 **must** be provided with a firefighting water supply that meets the requirements for Acceptable Solution A2 of section C13.6.3 and Table C13.5.

Firefighting water supply requirements for Lot 1 **must** be provided prior to sealing of titles and prior to occupancy of a future habitable dwellings for Lot 3.

Static water supply requirements are outlined in Table 4 below which is per C13.6.3 and Table C13.5

Table 4 – Requirements for Static Water Supply per C13.6.3 and Table C13.5

A. Distance between building area to be protected and water supply

a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and

b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area

B. Static Water supplies

a) may have a remotely located offtake connected to the static water supply;

b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;

c) must be a minimum of 10,000L per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;

d) must be metal, concrete or lagged by non-combustible materials if above ground; and

e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959-2009 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by:

(i) metal;

(ii) non-combustible material; or

(iii) fibre-cement a minimum of 6mm thickness.

C. Fittings, pipework and accessories (including stands and tank supports)

Fittings and pipework associated with a fire fighting water point for a static water supply must:

(a) have a minimum nominal internal diameter of 50mm;

(b) be fitted with a valve with a minimum nominal internal diameter of 50mm;

(c) be metal or lagged by non-combustible materials if above ground;

(d) if buried, have a minimum depth of 300mm [S1];

(e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;

(f) ensure the coupling is accessible and available for connection at all times;

(g) ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);

(h) ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this Table; and

(i) if a remote offtake is installed, ensure the offtake is in a position that is:

(i) visible;

(ii) accessible to allow connection by fire fighting equipment;

(iii) at a working height of 450 – 600mm above ground level; and

(iv) protected from possible damage, including damage by vehicles.

D. Signage for static water connections

The fire fighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must:

a) comply with water tank signage requirements within Australian Standard AS 2304-2011 Water storage tanks for fire protection systems; or

b) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.

E. Hardstand

A hardstand area for fire appliances must be:

a) no more than 3m from the fire fighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);
b) no closer than 6m from the building area to be protected;
c) a minimum width of 3m constructed to the same standard as the carriageway; and
d) connected to the property access by a carriageway equivalent to the standard of the property access.

4.4 Construction Standards

Existing and future habitable dwellings within the specified building areas on each lot must be designed and constructed to the minimum BAL ratings specified in the BHMP (Appendix C) and to BAL construction standards in accordance with AS3959:2018 or subsequent edition as applicable at the time of building approval.

The BAL-19 building setback lines on the BHMP define the minimum setbacks for habitable buildings.

Future Class 10a buildings within 6m of a Class 1a dwelling must be constructed to the same BAL as the dwelling or provide fire separation in accordance with Clause 3.2.3 of AS3959:2018.

5 STATUTORY COMPLIANCE

The applicable bushfire requirements are specified in State Planning Provisions C13.0 – Bushfire-Prone Areas Code.

Clause	Compliance
C13.4 Use or development exempt from this code	N/A
C13.5 Use Standards	
C13.5.1 Vulnerable Uses	N/A
C13.5.2 Hazardous Uses	N/A
C13.6 Development Standards for Subdivision	
C13.6.1 Provision of Hazard Management Areas.	To comply with the Acceptable Solution A1, the proposed plan of subdivision must; • Show building areas for each lot; and • Show hazard management areas between these building areas and that of the bushfire vegetation with the separation distances required for BAL 19 in Table 2.6 of *Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas.* The BHMP demonstrates that all lots can accommodate a BAL rating of BAL-19 with on-site vegetation managing and clearing for Lot 3. The HMA for Lots 1 and 2 to be implemented prior to sealing of titles and prior to occupancy of future habitable dwellings for Lot 3. Subject to the compliance with the BHMP the proposal will satisfy the Acceptable Solution C13.6.1(A1)
C13.6.2 Public and firefighting access; A1	The BHMP (through reference to section 4 of this report) specifies requirements for private accesses are consistent with Table C13.2. Existing access to Lot 2 requires minor upgrades to meet the min. 4m width. The new or upgrades to accesses, turning heads and hardstands to be constructed prior to sealing to sealing of titles for Lot 2 and prior to occupancy of a future habitable dwelling for Lot 3. Subject to the compliance with the BHMP the proposal satisfies the Acceptable Solution C13.6.2(A1).
C13.6.3 A2 Provision of water supply for firefighting purposes.	Static water supply is required for all lots per C13.6.3 A2. Lot 2 has an existing tank to be used as the static water supply. A new fitting is required for the existing tank to be fitted prior to dealing of titles. Firefighting water supply requirements for Lot 1 **must** be provided prior to sealing of titles and prior to occupancy of a future habitable dwellings for Lot 3. Subject to the compliance with the BHMP the proposal satisfies the Acceptable Solution C13.6.3

6 CONCLUSION & RECOMMENDATIONS

The proposed subdivision is endorsed that each lot can meet the requirements of Tasmanian Planning Scheme – Sorell and C13.0 Bushfire-prone Areas Code for a maximum BAL rating of BAL-19. Providing compliance with measures outlined in the BHMP (Appendix C) and sections 4 & 5 of this report.

Recommendations:

- The HMA's within the subdivision be applied in accordance with section 4.1 of this report and the BHMP (Appendix C).
- Bushfire protection measures for Lots 1 and 2 outlined in Sections 4.1, 4.2 and 4.3 to be implemented/construction/installed prior to sealing of titles.
- Sorell Council condition the planning approval on the compliance with the BHMP (as per Appendix C).

7 REFERENCES

Department of Primary Industries and Water, The LIST, viewed November/December 2023, www.thelist.tas.gov.au

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

Tasmanian Planning Commission, 2015, *Tasmanian Planning Scheme – Sorell* viewed November/December 2023, www.iplan.tas.gov.au

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

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

8 APPENDIX A – SITE PHOTOS

Figure 7 – Grassland fuel within the property (Lot 3), view facing NW

Figure 8 – Grassland fuel within the property (Lot 2), view facing north

Figure 9 – Grassland fuel north of the property, view facing north

Figure 10 – Grassland fuel south of the property, view facing SW

Figure 11 – Existing managed land and dwellings within the property (Lots 1 & 2), view facing south

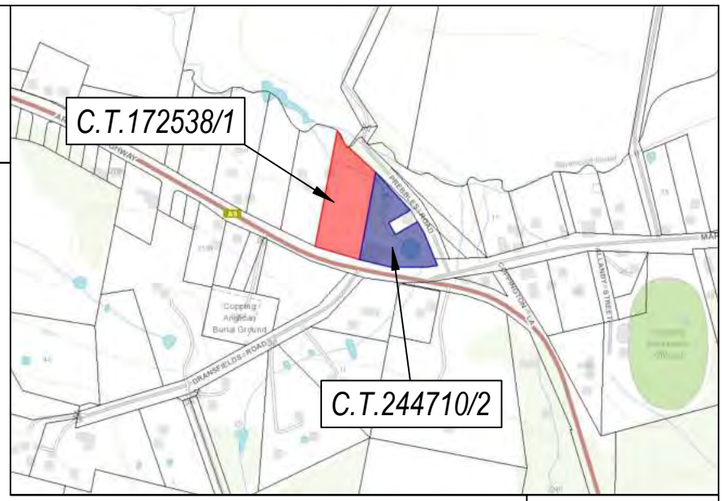
Figure 12 – Existing managed land and dwellings within the property (Lots 1 & 2), view facing west

9 APPENDIX B – SUBDIVISION PROPOSAL PLAN

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania



LOCATION PLAN

2
8,296m²

158.92

51.70

67.71

1
7,002m²

118.89

33.53

18.29

33.53

19.19

36.45

9.63

15.13

48.76

43.11

60.75

Existing Building

Existing Building

Existing Access

Existing Lot 1 Access

ARTHUR HIGHWAY

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

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CAMBRIDGE 7170
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EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

OWNER: MARK D. WHITEHEAD
TITLE REFERENCE: C.T.172538/1 & C.T.244710/2
LOCATION: 2217 ARTHUR HIGHWAY, **COPPING**

Existing Site Plan

Date: 21/08/2023
Reference: **WHITE01** 15104-00
Scale: 1:800 (A3)
Municipality: SORELL

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

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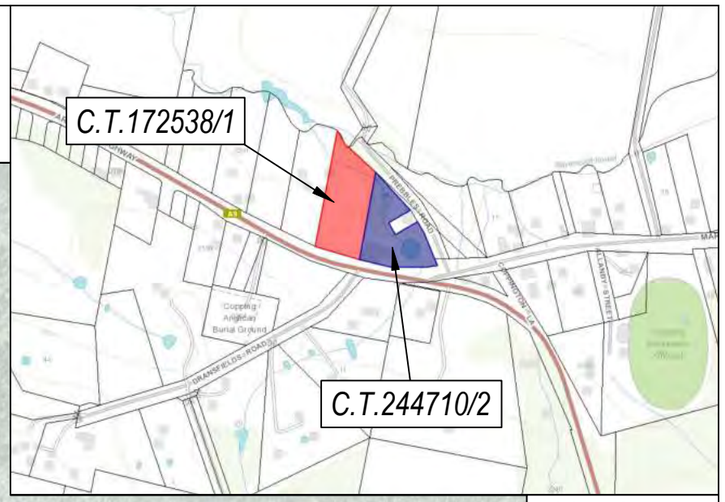
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania



LOCATION PLAN

3
7,036m²±

2
5,168m²±

1
3095m²±

10m x 15m Min.
Compliance Area

45.92
5.78
67.71
158.92
84.25
Existing Boundary to be adjusted
33.53
18.29
33.53
19.19
24.25
36.45
27.35
Proposed Right of Way 6.00 Wide
20.23
32.08
28.67
2.500
2.537
Existing Building
Existing Building
23.87
26.68
2.500
16.44
48.76
15.13
9.63
Existing Access for Lot 2 & Lot 3
Existing Lot 1 Access
ARTHUR HIGHWAY

Site Drainage

Lot 1: Existing On-site Water, Stormwater & Wastewater

Lot 2: Existing On-site Water, Stormwater & Wastewater

Lot 3: Proposed On-site Water, Stormwater & Wastewater

Development Standards for Subdivision
Sorell
12.0 Village Zone

P1 - All lots comply with requirements

A2 - All lots comply - Min. 10m frontage

A3 - All lots comply - vehicular access directly from road

12.5.2 Roads
A4 - All lots comply - no new roads

8.6.3 Services
A1 - All lots comply - On-site Water Management
A2 - All lots comply - On-site Waste-water Management
A3 - All lots comply - On-site Stormwater Management

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

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OWNER: *MARK D. WHITEHEAD*
TITLE REFERENCE: *C.T.172538/1 & C.T.244710/2*
LOCATION: *2217 ARTHUR HIGHWAY,* ***COPPING***

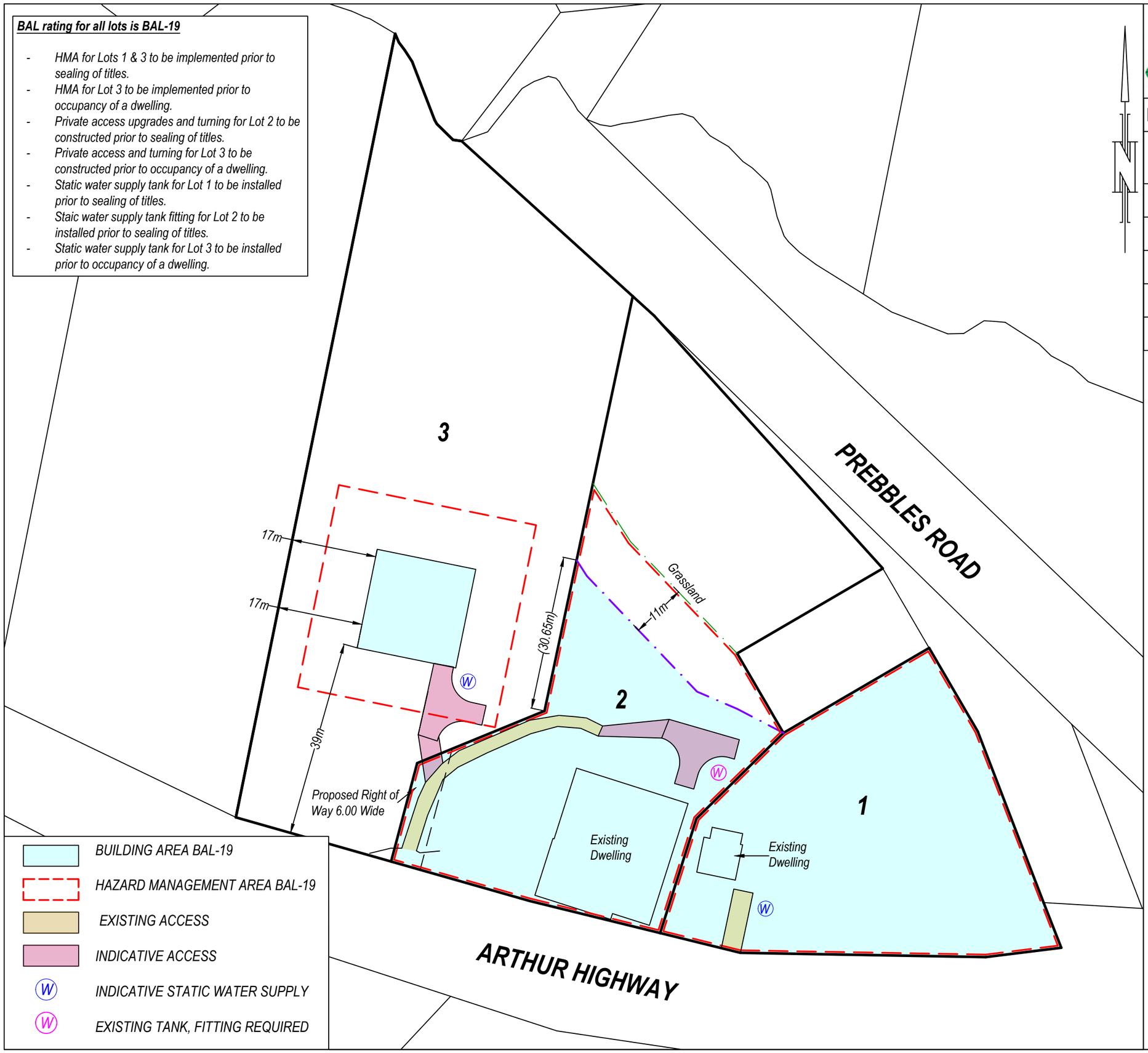
Proposed Subdivision

Date:	Reference:
21/08/2023	**WHITE01** 15104-00
Scale: 1:800 (A3)	Municipality: SORELL

10 APPENDIX C – BUSHFIRE HAZARD MANAGEMENT PLAN

BAL rating for all lots is BAL-19

- *HMA for Lots 1 & 3 to be implemented prior to sealing of titles.*
- *HMA for Lot 3 to be implemented prior to occupancy of a dwelling.*
- *Private access upgrades and turning for Lot 2 to be constructed prior to sealing of titles.*
- *Private access and turning for Lot 3 to be constructed prior to occupancy of a dwelling.*
- *Static water supply tank for Lot 1 to be installed prior to sealing of titles.*
- *Staic water supply tank fitting for Lot 2 to be installed prior to sealing of titles.*
- *Static water supply tank for Lot 3 to be installed prior to occupancy of a dwelling.*



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BUSHFIRE HAZARD MANAGEMENT PLAN

LOCATION:	2217 Arthur Highway, Copping TAS 7174
TITLE REFERENCE:	C.T.172538/1 & C.T.244710/2
PROPERTY ID:	3533689
MUNICIPALITY:	Sorell
DATE:	6th of December 2023 (v1.0)
SCALE: 1:750 @ A3	REFERENCE: WHITE01

REQUIREMENTS

1. HAZARD MANAGEMENT AREAS (HMA)
   - 1.1. HMA to be established to distances indicated on this plan and as set out in Section 4.1 of the Bushfire Hazard Report.
   - 1.2. Vegetation in the HMA needs to be strategically modified and then maintained in a low fuel state to protect future dwellings from direct flame contact and intense radiant heat. An annual inspection and maintenance of the HMA should be conducted prior to the bushfire season. All grasses or pastures must be kept short (<100 mm) within the HMA. Fine fuel loads at ground level such as leaves, litter and wood piles must be minimal to reduce the quantity of wind borne sparks and embers reaching buildings; and to halt or check direct flame attack.
   - 1.3. Some trees can be retained provided there is horizontal separation between the canopies; and low branches are removed to create vertical separation between the ground and the canopy. Small clumps of established trees and/or shrubs may act to trap embers and reduce wind speeds.
   - 1.4. No trees to overhang houses to prevent branches or leaves from falling on the building.
   - 1.5. Non-combustible elements including driveways, paths and short cropped lawns are recommended within the HMA.
   - 1.6. Fine fuels (leaves bark, twigs) should be removed from the ground periodically (pre-fire season) and all grasses or pastures must be kept short (<100 mm).
2. CONSTRUCTION STANDARDS
   - 2.1. Future dwellings within the specified building areas to be designed and constructed to BAL ratings shown on this plan in accordance with AS3959:2018 at the time of building approval
   - 2.2. Future outbuildings within 6m of a class 1a dwelling must be constructed to the same BAL as the dwelling or provide fire separation in accordance with Clause 3.2.3 of AS3959:2018.
3. PUBLIC AND FIRE-FIGHTING ACCESS REQUIREMENTS
   - 3.1. Access to all lots must comply with the design and construction requirements specified in Section 4.2 of the Bush Fire Report.
4. STATIC FIRE-FIGHTING WATER SUPPLY

4.1 New habitable dwellings and existing dwellings must be supplied with a static water supply that is;
- Dedicated solely for fire fighting purposes;
- Minimum capacity of 10,000L;
- is accessible by fire fighting vehicles and within 3.0m of a hardstand area; and
- Consistent with the specifications outlined in section 4.3 of the Bushfire Report.

This plan is to be read in conjunction with the preceding *Bushfire Assessment Report "Proposed 3 Lot Subdivision 2217 Arthur Highway, Copping" dated 28/11/2023.*

BHMP BY JAMES ROGERSON
ACCREDITED BUSHFIRE PRACTITIONER (BFP-161), scopes: 1, 2 & 3B

11 APPENDIX D – PLANNING CERTIFICATE

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE[1] 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:	**2217 Arthur Highway, Copping TAS 7174**
Certificate of Title / PID:	**C.T.172538/1 & C.T.244710/2 / 3533689**

2. Proposed Use or Development

Description of proposed Use and Development:	**THREE LOT SUBDIVISION OF C.T.172538/1 & C.T.244710/2**
Applicable Planning Scheme:	**Tasmanian Planning Scheme - Sorell**

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
SUBDIVISION PROPOSAL PLAN	ROGERSON & BIRCH SURVEYORS	21/08/2023	00
BUSHFIRE HAZARD REPORT – 2217 ARTHUR HIGHWAY, COPPING	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	28/11/2023	1.0
BUSHFIRE HAZARD MANGAEMENT PLAN– 2217 ARTHUR HIGHWAY, COPPING	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	07/12/2023	1.0

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

4. Nature of Certificate

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

☐	**E1.4 / C13.4 – Use or development exempt from this Code**	
	Compliance test	**Compliance Requirement**
☐	E1.4(a) / C13.4.1(a)	

☐	**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	
☐	E1.5.1 A3 / C13.5.1 A2	

☐	**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	
☐	E1.5.2 A3 / C13.5.2 A3	

☐	**E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas**	
	Acceptable Solution	**Compliance Requirement**
☐	E1.6.1 P1 / C13.6.1 P1	***Planning authority discretion required. A proposal cannot be certified as compliant with P1.***
☐	E1.6.1 A1 (a) / C13.6.1 A1(a)	
☒	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
☐	E1.6.1 A1(c) / C13.6.1 A1(c)	

☐	**E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access**	
	Acceptable Solution	**Compliance Requirement**
☐	E1.6.2 P1 / C13.6.2 P1	
☐	E1.6.2 A1 (a) / C13.6.2 A1 (a)	
☒	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

☐	**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)	
☐	E1.6.3 A1 (b) / C13.6.3 A1 (b)	
☐	E1.6.3 A1 (c) / C13.6.3 A1 (c)	
☐	E1.6.3 A2 (a) / C13.6.3 A2 (a)	
☒	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant the Table.
☐	E1.6.3 A2 (c) / C13.6.3 A2 (c)	

5. Bushfire Hazard Practitioner

Name:	JAMES ROGERSON	**Phone No:**	0488372283
Postal Address:	UNIT 1-2 KENNEDY DRIVE, CAMBRIDGE PARK	**Email Address:**	JR.BUSHFIREASSESSMENTS@GMAIL.COM
Accreditation No:	BFP – 161	**Scope:**	1, 2, 3B

6. Certification

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

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

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

Signed: *certifier*

Name: JAMES ROGERSON **Date:** 8/12/2023

Certificate Number: 161

(for Practitioner Use only)

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE[1] 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:	**2217 Arthur Highway, Copping TAS 7174**
Certificate of Title / PID:	**C.T.172538/1 & C.T.244710/2 / 3533689**

2. Proposed Use or Development

Description of proposed Use and Development:	**THREE LOT SUBDIVISION OF C.T.172538/1 & C.T.244710/2**
Applicable Planning Scheme:	**Tasmanian Planning Scheme - Sorell**

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
SUBDIVISION PROPOSAL PLAN	ROGERSON & BIRCH SURVEYORS	21/08/2023	00
BUSHFIRE HAZARD REPORT – 2217 ARTHUR HIGHWAY, COPPING	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	28/11/2023	1.0
BUSHFIRE HAZARD MANGAEMENT PLAN– 2217 ARTHUR HIGHWAY, COPPING	JAMES ROGERSON – ROGERSON & BIRCH SURVEYORS	07/12/2023	1.0

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

4. Nature of Certificate

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

☐	**E1.4 / C13.4 – Use or development exempt from this Code**	
	Compliance test	**Compliance Requirement**
☐	E1.4(a) / C13.4.1(a)	

☐	**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	
☐	E1.5.1 A3 / C13.5.1 A2	

☐	**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	
☐	E1.5.2 A3 / C13.5.2 A3	

☐	**E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas**	
	Acceptable Solution	**Compliance Requirement**
☐	E1.6.1 P1 / C13.6.1 P1	***Planning authority discretion required. A proposal cannot be certified as compliant with P1.***
☐	E1.6.1 A1 (a) / C13.6.1 A1(a)	
☒	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')
☐	E1.6.1 A1(c) / C13.6.1 A1(c)	

☐	**E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access**	
	Acceptable Solution	**Compliance Requirement**
☐	E1.6.2 P1 / C13.6.2 P1	
☐	E1.6.2 A1 (a) / C13.6.2 A1 (a)	
☒	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

☐	**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)	
☐	E1.6.3 A1 (b) / C13.6.3 A1 (b)	
☐	E1.6.3 A1 (c) / C13.6.3 A1 (c)	
☐	E1.6.3 A2 (a) / C13.6.3 A2 (a)	
☒	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant the Table.
☐	E1.6.3 A2 (c) / C13.6.3 A2 (c)	

5. Bushfire Hazard Practitioner

Name:	JAMES ROGERSON	**Phone No:**	0488372283
Postal Address:	UNIT 1-2 KENNEDY DRIVE, CAMBRIDGE PARK	**Email Address:**	JR.BUSHFIREASSESSMENTS@GMAIL.COM
Accreditation No:	BFP – 161	**Scope:**	1, 2, 3B

6. Certification

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

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

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

Signed: *certifier*

Name: JAMES ROGERSON **Date:** 8/12/2023

Certificate Number: 161

(for Practitioner Use only)

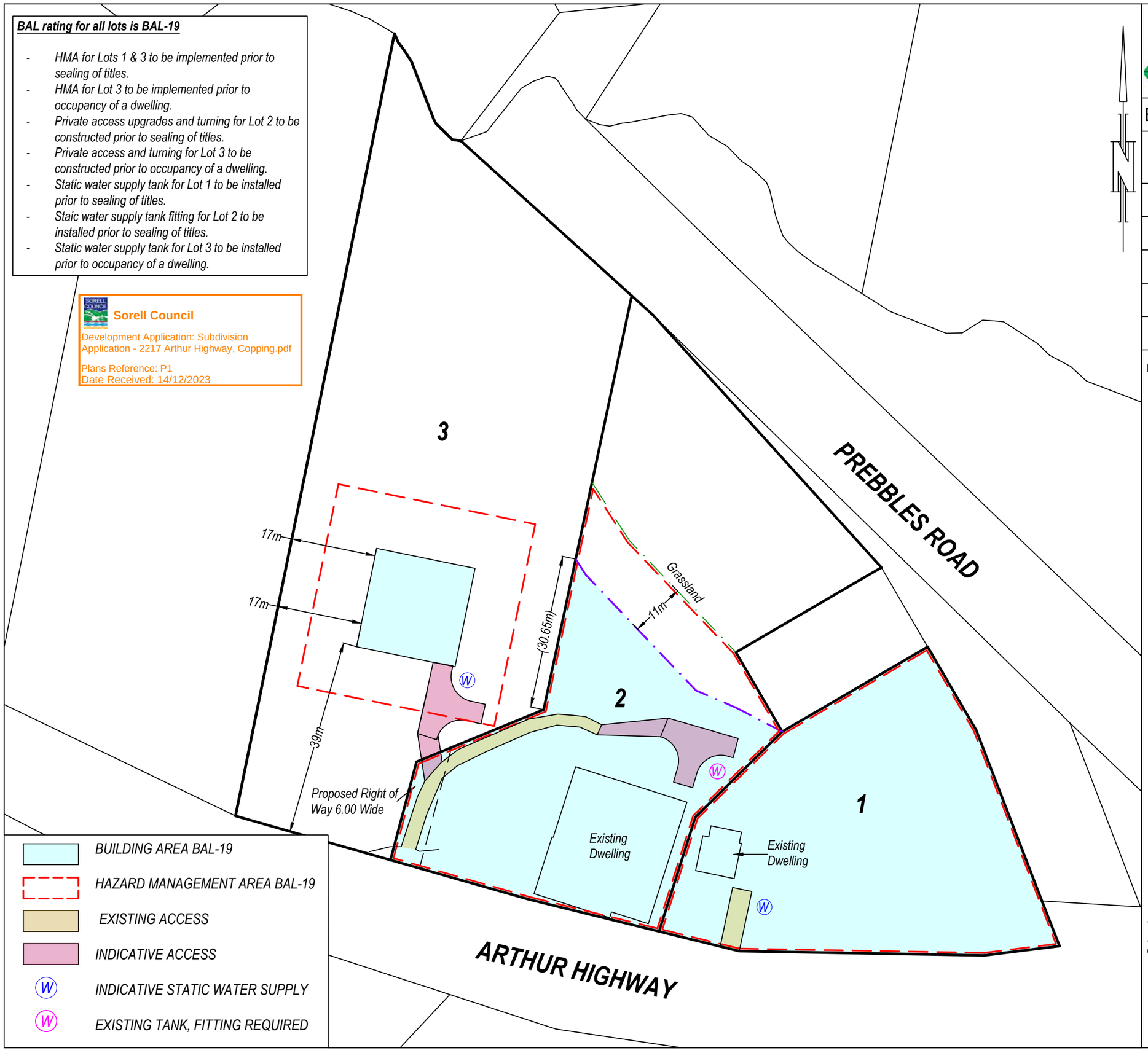
BAL rating for all lots is BAL-19

- *HMA for Lots 1 & 3 to be implemented prior to sealing of titles.*
- *HMA for Lot 3 to be implemented prior to occupancy of a dwelling.*
- *Private access upgrades and turning for Lot 2 to be constructed prior to sealing of titles.*
- *Private access and turning for Lot 3 to be constructed prior to occupancy of a dwelling.*
- *Static water supply tank for Lot 1 to be installed prior to sealing of titles.*
- *Staic water supply tank fitting for Lot 2 to be installed prior to sealing of titles.*
- *Static water supply tank for Lot 3 to be installed prior to occupancy of a dwelling.*

Sorell Council

Development Application: Subdivision Application - 2217 Arthur Highway, Copping.pdf

Plans Reference: P1
Date Received: 14/12/2023



ROGERSON & BIRCH SURVEYORS
UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@blcsurveyors.com.au
WEB: www.rbsurveyors.com

BUSHFIRE HAZARD MANAGEMENT PLAN

LOCATION:	2217 Arthur Highway, Copping TAS 7174
TITLE REFERENCE:	C.T.172538/1 & C.T.244710/2
PROPERTY ID:	3533689
MUNICIPALITY:	Sorell
DATE:	6th of December 2023 (v1.0)
SCALE: 1:750 @ A3	REFERENCE: WHITE01

REQUIREMENTS

1. HAZARD MANAGEMENT AREAS (HMA)
   - 1.1. HMA to be established to distances indicated on this plan and as set out in Section 4.1 of the Bushfire Hazard Report.
   - 1.2. Vegetation in the HMA needs to be strategically modified and then maintained in a low fuel state to protect future dwellings from direct flame contact and intense radiant heat. An annual inspection and maintenance of the HMA should be conducted prior to the bushfire season. All grasses or pastures must be kept short (<100 mm) within the HMA. Fine fuel loads at ground level such as leaves, litter and wood piles must be minimal to reduce the quantity of wind borne sparks and embers reaching buildings; and to halt or check direct flame attack.
   - 1.3. Some trees can be retained provided there is horizontal separation between the canopies; and low branches are removed to create vertical separation between the ground and the canopy. Small clumps of established trees and/or shrubs may act to trap embers and reduce wind speeds.
   - 1.4. No trees to overhang houses to prevent branches or leaves from falling on the building.
   - 1.5. Non-combustible elements including driveways, paths and short cropped lawns are recommended within the HMA.
   - 1.6. Fine fuels (leaves bark, twigs) should be removed from the ground periodically (pre-fire season) and all grasses or pastures must be kept short (<100 mm).
2. CONSTRUCTION STANDARDS
   - 2.1. Future dwellings within the specified building areas to be designed and constructed to BAL ratings shown on this plan in accordance with AS3959:2018 at the time of building approval
   - 2.2. Future outbuildings within 6m of a class 1a dwelling must be constructed to the same BAL as the dwelling or provide fire separation in accordance with Clause 3.2.3 of AS3959:2018.
3. PUBLIC AND FIRE-FIGHTING ACCESS REQUIREMENTS
   - 3.1. Access to all lots must comply with the design and construction requirements specified in Section 4.2 of the Bush Fire Report.
4. STATIC FIRE-FIGHTING WATER SUPPLY

4.1 New habitable dwellings and existing dwellings must be supplied with a static water supply that is;
- Dedicated solely for fire fighting purposes;
- Minimum capacity of 10,000L;
- is accessible by fire fighting vehicles and within 3.0m of a hardstand area; and
- Consistent with the specifications outlined in section 4.3 of the Bushfire Report.

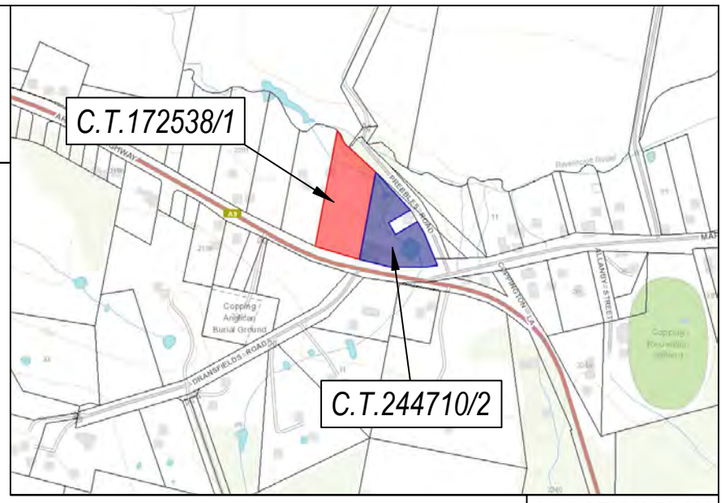
This plan is to be read in conjunction with the preceding *Bushfire Assessment Report "Proposed 3 Lot Subdivision 2217 Arthur Highway, Copping" dated 28/11/2023.*

BHMP BY JAMES ROGERSON
ACCREDITED BUSHFIRE PRACTITIONER (BFP-161), scopes: 1, 2 & 3B

This plan has been prepared only for the purpose of obtaining preliminary subdivsional approval from the local authority and is subject to that approval.

All measurements and areas are subject to the final survey.

Base image by TASMAP (www.tasmap.tas.gov.au), © State of Tasmania
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania



LOCATION PLAN

Sorell Council

Development Application: Subdivision
Application - 2217 Arthur Highway, Copping.pdf

Plans Reference: P1
Date Received: 14/12/2023

2
8,296m²

1
7,002m²

158.92
51.70
67.71
118.89
33.53
18.29
33.53
19.19
36.45
9.63
15.13
48.76
43.11
60.75

Existing Building
Existing Building
Existing Access
Existing Lot 1 Access

ARTHUR HIGHWAY

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

ROGERSON & BIRCH SURVEYORS
UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

OWNER: MARK D. WHITEHEAD
TITLE REFERENCE: C.T.172538/1 & C.T.244710/2
LOCATION: 2217 ARTHUR HIGHWAY, **COPPING**

Existing Site Plan

Date:	Reference:
21/08/2023	**WHITE01** 15104-00
Scale: 1:800 (A3)	Municipality: SORELL

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All measurements and areas are subject to the final survey.

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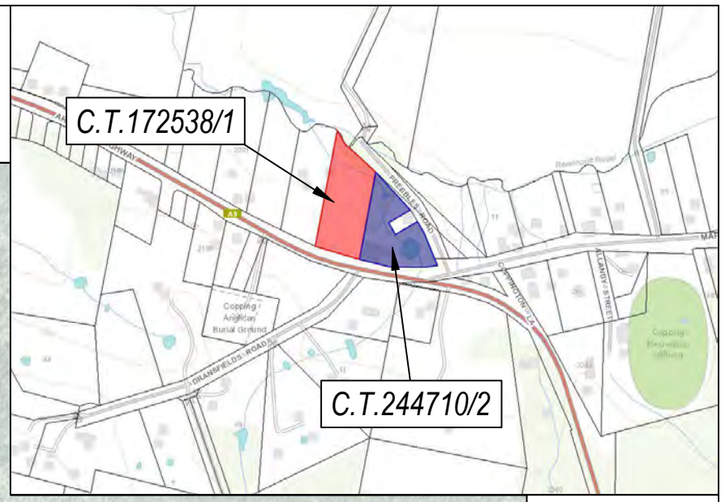
Base data from the LIST (www.thelist.tas.gov.au), © State of Tasmania

Sorell Council
Development Application: Response to Request for Information - 2217 Arthur Highway, Copping.pdf
Plans Reference: P5
Date Received: 27/02/2024



LOCATION PLAN

3
7,036m²±

2
5,168m²±

1
3095m²±

45.92
5.78
67.71
158.92
84.25
33.53
18.29
33.53
19.19
24.25
36.45
9.63
15.13
48.76
16.44
2.500
26.68
2.500
23.87
2.537
28.67
32.08
20.23
27.35

10m x 15m Min. Compliance Area

Existing Boundary to be adjusted

Proposed Right of Way 6.00 Wide

Existing Building

Existing Building

Existing Access for Lot 2 & Lot 3

ARTHUR HIGHWAY

access to Lot 1

Site Drainage

Lot 1: Existing On-site Water, Stormwater & Wastewater

Lot 2: Existing On-site Water, Stormwater & Wastewater

Lot 3: Proposed On-site Water, Stormwater & Wastewater

Development Standards for Subdivision
Sorell
12.0 Village Zone

P1 - All lots comply with requirements

A2 - All lots comply - Min. 10m frontage

A3 - All lots comply - vehicular access directly from road

12.5.2 Roads
A4 - All lots comply - no new roads

8.6.3 Services
A1 - All lots comply - On-site Water Management
A2 - All lots comply - On-site Waste-water Management
A3 - All lots comply - On-site Stormwater Management

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

ROGERSON & BIRCH SURVEYORS
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CAMBRIDGE 7170
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OWNER: *MARK D. WHITEHEAD*
TITLE REFERENCE: *C.T.172538/1 & C.T.244710/2*
LOCATION: *2217 ARTHUR HIGHWAY,* ***COPPING***

Proposed Subdivision

Date:	Reference:
21/08/2023	**WHITE01** 15104-00
Scale: 1:800 (A3)	Municipality: SORELL