TASMAN COUNCIL
1713 Main Road, Nubeena TAS 7184
Phone: (03) 6250 9200
Email: tasman@tasman.tas.gov.au
Website: www.tasman.tas.gov.au
ABN: 63 590 070 717

NOTICE OF PROPOSED DEVELOPMENT

Notice is hereby given that an application has been made for planning approval under the Land Use Planning and Approvals Act 1993, for the following development(s):

NUMBER:	SA 16 / 2022
ADDRESS:	4 Waterfall Bay Road, Eaglehawk Neck (CT 11988/7)
DESCRIPTION:	Subdivision – Subdivision of One Lot Into Two (One New and Balance)

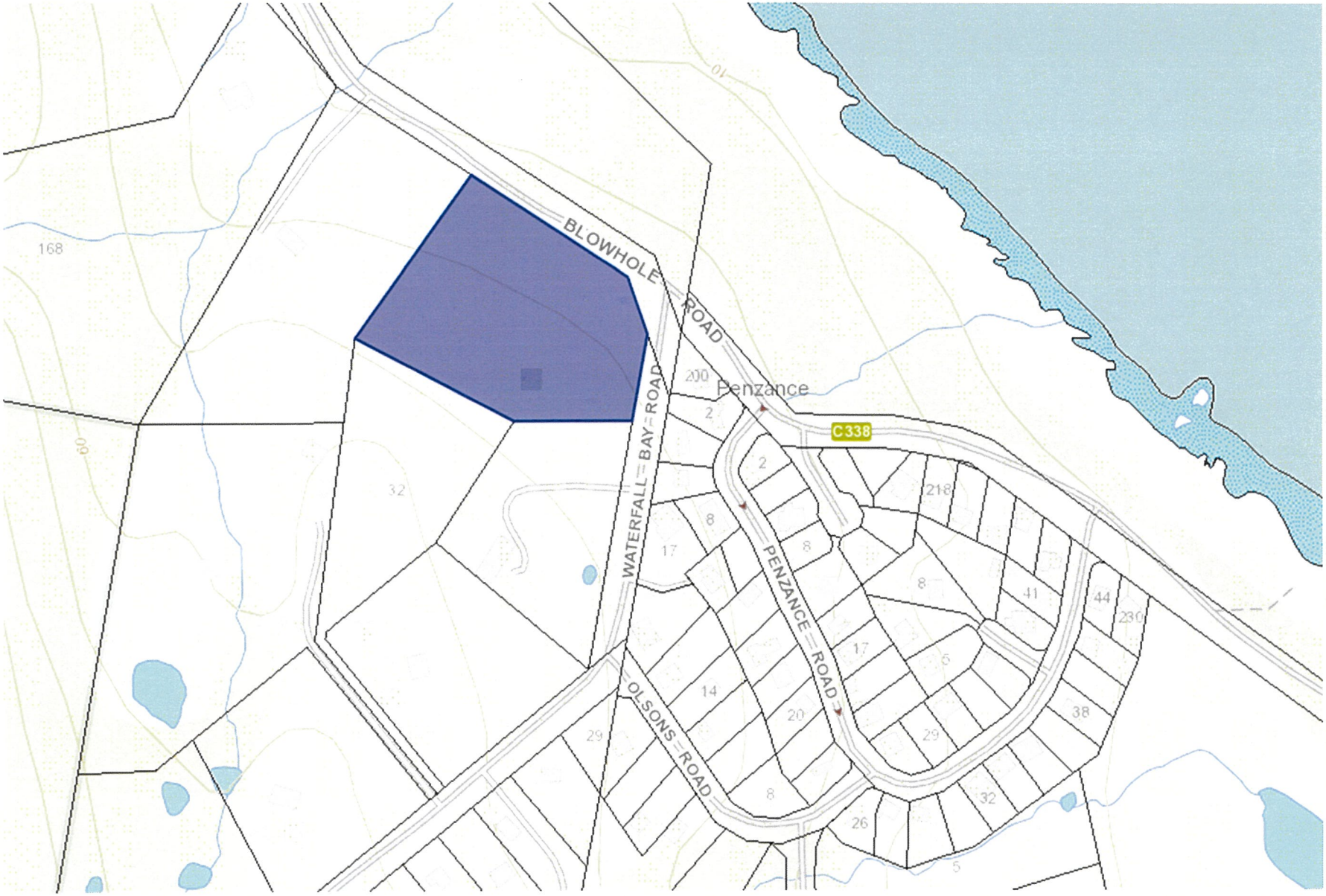
The relevant plans and documents can be viewed on Council's website https://www.tasman.tas.gov.au/developmentservices/publicnotices/or are available in hard copy upon request by calling Council on (03) 6250 9200 or email tasman@tasman.tas.gov.au until 4:30pm **06 October 2022.**

Any person may make a representation relating to the application. Representations are to be made in writing addressed to the General Manager, Tasman Council, 1713 Main Road, Nubeena TAS 7184 or by email to tasman@tasman.tas.gov.au and will be received no later than 4.30pm on **06 October 2022**. Late representations will not be considered.

Kim Hossack
General Manager
Date: 23 September 2022

SA 16 / 2022 – 4 Waterfall Bay Road, Eaglehawk Neck (CT 11988/7)- The relevant plans and documents can be inspected at the Council Offices at 1713 Main Road, Nubeena during normal office hours, or the plans may be viewed on Council's website at www.tasman.tas.gov.au until 4:30pm on Date Representations Close 06 October 2022.

The below imagine was sourced from The List: https://maps.thelist.tas.gov.au/listmap/app/list/map



TASMAN COUNCIL
1713 Main Road, Nubeena TAS 7184
Tel 03 6250 9200 **Fax** 03 6250 9220
Email tasman@tasman.tas.gov.au
Web www.tasman.tas.gov.au
ABN 63590070717

Application for Planning Permit

The personal information requested on this form is being collected by council for purpose set out in the title of the form. The personal information will be used solely by council for the primary purpose or directly related purposes. The applicant understands that personal information is provided for the above mentioned function and that he/she may apply to council for access to and/or amendment of the information. Requests for access or correction should be made to Tasman Council's Customer Service Officer.

APPLICANT DETAILS*

FULL NAME			
POSTAL ADDRESS		**POSTCODE**	
PHONE (BUSINESS HOURS)		**FAX**	
MOBILE		**EMAIL**	

OWNERS DETAILS (IF DIFFERENT)*

FULL NAME			
POSTAL ADDRESS		**POSTCODE**	
PHONE (BUSINESS HOURS)		**MOBILE**	

DESCRIPTION OF PROPOSED DEVELOPMENT*

☐ New Dwelling	☐ New Shed/ Outbuilding	
☑ Subdivision	☐ Extension/ Addition	
☐ Change of Use	☐ Demolition	
☐ Commercial/ Industrial Building	☐ Other (please specify – right)	

PRESENT USE OF LAND/ BUILDING(S)
SHACK - SHED 10x11 metres - with bathroom.

LOCATION OF PROPOSED DEVELOPMENT*

ADDRESS	4 Waterfall Bay Road Eaglehawk Neck 7179		
CERTIFICATE OF TITLE	11988	**LOT NUMBER**	7.
FLOOR AREA			
Existing floor area (square metres):		Proposed floor area (square metres):	
CAR PARKING			
Number existing		Number proposed	

SITE CONTAMINATION	
Have any potentially contaminating uses been undertaken on this site? (Refer to list provided on page 5)	☐ Yes ☑ No
TASMANIAN HERITAGE REGISTER	
Is this property on the Tasmanian Heritage Register?	☐ Yes ☑ No
VALUE (mandatory field)	
Value of work (inc. GST)	

PRE-APPLICATION DISCUSSIONS*

HAVE YOU HAD PRE-APPLICATION DISCUSSIONS WITH A COUNCIL OFFICER? (If yes, please specify officers name, if known) Shane Wells	☑ Yes ☐ No

DECLARATION BY APPLICANT*

I/ we declare that the information given is a true and accurate representation of the proposed development; and I/ we am/ are liable for the payment of Council application processing fees, even in the event of the development not proceeding; and I/ we authorise Tasman Council to provide a copy of my documents relating to this application to any person for the purpose of assessment and public consultation and agree to arrange for the permission of the copyright owner of any part of this application to be obtained.	
SIGNATURE OF APPLICANT	
NAME OF APPLICANT (PLEASE PRINT)	
DATE	

DECLARATION IF APPLICANT IS NOT THE OWNER

I hereby declare that I am the applicant for the development at the address detailed in this application for a planning permit, and that I have notified the owner/s of the land for which I am making this application, in accordance with Section 52(1a) of the *Land Use Planning and Approvals Act 1993*.	
SIGNATURE OF APPLICANT	
NAME OF APPLICANT (PLEASE PRINT)	
DATE	
NAME/S OF OWNER/S NOTIFIED	
DATE	

DECLARATION IF LAND IS COUNCIL OR CROWN LAND

If the land that is the subject of this application is owned or administered by either the Crown or Tasman Council, the consent of the Minister of the Crown or the General Manager of the Council, whichever is applicable, must be included here. This consent should be completed and signed by either the Minister, the General Manager of Tasman Council, or their delegate (as specified in Subsections 52(1d-1g) of the *Land Use Planning and Approvals Act 1993).*	
DECLARATION	I, _____ being responsible for the administration of land at _____ declare that I have given permission for the making of this application.
SIGNATURE OF MINISTER/ GENERAL MANAGER	
DATE	

NON-RESIDENTIAL DEVELOPMENTS

Note: This section must be completed for all applications for non-residential uses, home occupations and domestic/ residential businesses or other managed/ commercial residential uses (e.g. hostel or motel).

HOURS OF BUSINESS			
CURRENT		PROPOSED	
Monday to Friday		Monday to Friday	
Saturday		Saturday	
Sunday		Sunday	
NUMBER OF EMPLOYEES			
CURRENT		PROPOSED	
Total Employees		Total Employees	
Employees on Site		Employees on Site	

PLANT/ MACHINERY	
Is there any large plant or machinery that would need to be installed or used on site such as refrigeration units and generators? (If yes, please list below the type of machinery and ensure location, dimensions etc are clearly marked on your plans.)	☐ Yes ☐ No

OUTDOOR STORAGE/ SEATING/ NUMBER OF BEDS		
Is outdoor storage proposed? (If yes, please ensure that your plans show where the outdoor storage areas are and what type of goods are stored. This information will help us assess the impact of the proposal on the amenity.		☐ Yes ☑ No
If you are proposing a night club, café or the like, what is the number of seats proposed including the capacity at any bar area?		Please ensure that the arrangements are shown on your plans. This information enables us to assess the car parking arrangements.
If you are proposing a hotel, motel, visitor accommodation, hostel or the like, what is the number of beds proposed?		Please ensure the beds are clearly indicated on your plans. This information enables us to assess the car parking arrangements.

GOODS DELIVERIES			
Will there be any goods deliveries to and from the site? (If yes, please estimate the number and type of vehicles and how often they will make trips.)			☐ Yes ☐ No
Type and Size of Vehicle		Number of Vehicles on Site	
Trip Frequency per Month			

CHECKLIST

To ensure that we can process you application as quickly as possible, please read the following checklist carefully to ensure that you have provided the following at the time of lodging the application. If you are unclear on any aspect of your application, please phone **(03) 6250 9200** to discuss or arrange an appointment concerning your proposal. Note that, in accordance with Section 54 of the *Land Use Planning and Approvals Act 1993,* Council may require additional information.

1. A completed Application for Planning Permit Form. *Please ensure that the form provides an accurate description of the proposal, has the correct address and contact details and is signed and dated by the applicant.*

2. A current copy of the Certificate of Title for all lots involved in the proposal. *The title details must include, where available, a copy of the search page, title plan, sealed plan or diagram and any schedule of easements (if any), or other restrictions, including covenants. Council notification or conditions of transfer.*

3. One (1) copy of the following information (email submissions are accepted):
   a. An analysis of the site and surrounding area setting out accurate descriptions of the following:
      i. topography and major site features including an indication of the type and extent of native vegetation present, natural drainage lines, water courses and wetlands, trees greater than 5 metres in height in areas of skyline or landscape importance and identification of any natural hazards including flood prone areas, high fire risk areas and land subject to instability;
      ii. soil conditions (depth, description of type, land capability etc);
      iii. the location and capacity of any existing services or easements on the site or connected to the site;
      iv. existing pedestrian and vehicle access to the site;
      v. any existing buildings on the site;
      vi. soil and water management plans.
   b. A site plan for the proposed use or development, drawn at a scale of not less than 1:200 (1:1000 for sites in excess of 1 hectare), showing:
      i. a north point;
      ii. the boundaries and dimensions of the site;
      iii. Australian Height Datum (AHD) levels;
      iv. natural drainage lines, watercourses and wetlands;
      v. soil depth and type
      vi. the location and capacity of any existing services or easements on the site or connected to the site;
      vii. the location of any existing buildings on the site, indicating those to be retained or demolished, and their relationship to buildings on adjacent sites, streets and access ways;
      viii. the use of adjoining properties;
      ix. shadow diagrams of the proposed buildings where development has the potential to cause overshadowing;
      x. the dimensions, layout and surfacing materials of all access roads, turning areas, parking areas and footpaths within and at the site entrance;
      xi. any proposed private or public open space or communal space or facilities;
      xii. proposed landscaping, indicating vegetation to be removed or retained and species and mature heights of plantings; and
      xiii. methods of minimizing erosion and run-off during and after construction and preventing contamination of storm water discharged from the site.
   c. Plans and elevations of proposed and existing buildings, drawn at a scale of not less than 1:100, showing internal layout and materials to be used on external walls and roofs and the relationship of the elevations to natural ground level showing any proposed cut or fill.

4. A written submission supporting the application that demonstrates compliance with the relevant parts of the Act, State Policies and planning scheme.

5. Application Fees. *Please contact the Council's Building &* Development Services Officer on *(03) 6250 9200 for details of fees.*

POTENTIALLY CONTAMINATING ACTIVITIES	
Agricultural Fertiliser Manufacture	Metal Founders
Asbestos Production and Manufacture	Metal Sprayers
Battery Manufacture and Recycling	Metal Treatments and Picklers
Chemical Manufacture or Formation	Mining and Extractive Industries
Defence Establishments and Training Areas	Pest Controllers (being areas where pest control chemicals are stored or vehicles and tanks used in connection with pest control are washed.)
Drum Reconditioning Wastes	Petroleum and Petrochemical Industries
Dry Cleaning Establishments	Pharmaceutical Manufacture or Formation
Electroplating	Printers
Explosives Production and Storage	Railway Yards
Fuel Depots and Storage Areas	Sanitary and Refining
Galvanisers	Scrap Yards
Gas Works	Service Stations
Gun, Pistol and Rifle Clubs	Smelting and Refining
Hazardous Waste Landfills	Tannery or Fellmongery or Hide Curing Works
Industrial Cleaners	Wood Treatment and Preservation Sites
Lime Burners	

DEFINITION OF OWNER
"Owner" means any of the following:
(a) in the case of a fee simple estate in land – the person in whom that estate is vested;
(b) in the case of land not registered under the *Land Titles Act 1980* and subject to a mortgage – the person having, for the time being, the equity of redemption in that mortgage;
(c) in the case of the land held under a tenancy for life – the person who is the life tenant;
(d) in the case of land held under a lease of a term not less than 99 years or for a term of not less than such other prescribed period – the person who is the lessee of the land;
(e) in the case of land in respect of which a person has a prescribed interest – that person;
(f) in the case of Crown Land within the meaning of the *Crown Lands Act 1976* – the Crown on right of the State of Tasmania

OFFICE USE ONLY:

☐ Planning Fees

$_____ Receipt No: _____

☐ Advertising Fees

Date of Receipt: _____

$_____

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
11988	7
EDITION	DATE OF ISSUE
6	29-Jan-2020

SEARCH DATE : 06-Jun-2022
SEARCH TIME : 12.07 PM

DESCRIPTION OF LAND

Parish of TARANNA, Land District of PEMBROKE
Lot 7 on Sealed Plan 11988
Derivation : Part of Lots 12393 and 12394 Gtd. to S. Clemes.
Prior CT 3753/30

SCHEDULE 1

M507141 & M686505 TRANSFER to
Registered 10-May-2018 at 12.01 PM

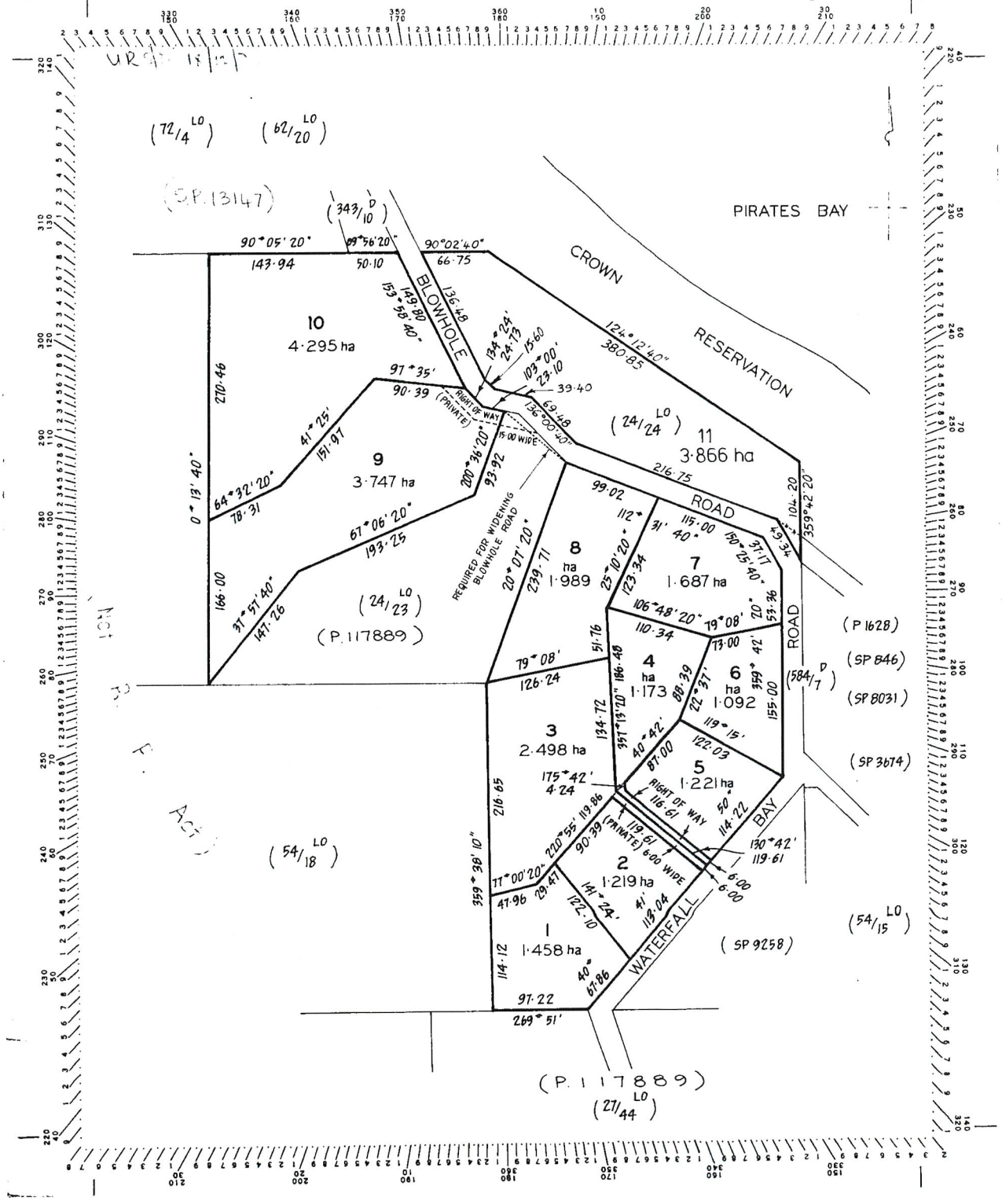
SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP 11988 COVENANTS in Schedule of Easements
SP 11988 FENCING PROVISION in Schedule of Easements
E207556 MORTGAGE to Westpac Banking Corporation Registered
29-Jan-2020 at 12.01 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Owner: L S. Clemes	**PLAN OF SURVEY** by Surveyor J. L. Cerutty of land situated in the LAND DISTRICT OF PEMBROKE PARISH OF TARANNA SCALE 1 400	**Registered Number:** S.P 11988
Title Reference: c.t. 2653/72		Effective from:
Grantee: part of lot 12392 (29 · 2 · 10) part of lot 12394 (48 · 1 · 13) Samuel Clemes		P/ Recorder of titles



S.P

SCHEDULE OF EASEMENTS **Plan No.** 11988

NOTE:—The Town Clerk or Council Clerk must sign the certificate on the back page for the purpose of identification.

The Schedule must be signed by the owners and mortgagees of the land affected. Signatures should be attested.

No profits a prendre are created to benefit or burden any lots on the plan.

EASEMENTS:

Each lot in Column A is :

1. TOGETHER WITH a right of carriageway over that portion of the land marked "Right of Way (Private)" shown hereon passing through the lots and land specified opposite thereto in Column B and
2. SUBJECT TO a right of carriageway over that portion of the land marked "Right of Way (Private)" passing through that lot as appurtenant to the lots ~~and other land~~ shown opposite thereto in Column C.

COLUMN A	COLUMN B	COLUMN C
10	9 and Balance	Nil
9	Balance	10
~~Balance~~	~~Nil~~	~~10 and 9~~
3	4	4
4	3	3

COVENANTS :

(a) The owner of ~~that portion of the Balance lying on the northern side of Blowhole Road~~ Lot 11 covenants with Loris Shirley Clemes and the owners for the time being of every lot shown on the plan to the intent that the burden of this covenant may run with and bind the Covenantors lot and every part thereof and that the benefit thereof shall be annexed and devolve with each and every part of every other lot shown on the plan to observe the following stipulation, namely, not to erect any dwelling house or other building on ~~that portion of the Balance which lies on the northern side of Blowhole Road~~ the said Lot 11.

(b) The owner of each lot on the plan except lot 11 covenants with Loris Shirley Clemes and the owners for the time being of every other lot shown on the plan to the intent that the burden of this covenant may run with and bind the Covenantors lot and every part thereof and that the benefit thereof shall be annexed to

11988

and devolve with each and every part of every other lot shown on the plan and with the Balance and each and every part thereof to observe the following stipulations :

(i) not to erect more than one messuage on the said lot and not to use or permit to be used any messuage upon the said lot for any purpose other than a private dwelling house

(ii) not to erect any dwelling house on the said lot which exceeds 4 metres in height measured from the highest point of the natural ground surface adjacent to the house wall to the underside of the eaves or roof line

(iii) not to erect any dwelling house on the said lot which has a roof with a pitch of less than 15^{o} or more than 30^{o}

(iv) not to erect any dwelling house on the said lot having a roof or exterior walls cladding of light coloured or reflective finish

(v) not to erect any dwelling on the said lot of such a size that its eastern elevation excluding roof exceeds 60 square metres

(vi) not to extend any existing dwelling on the said lot so that its eastern elevation excluding roof exceeds 60 square metres

(vii) not to erect any building on the said lot within 20 metres of the boundary of any road

(viii) not to carry on nor permit to be carried on any trades noisome noxious offensive or otherwise upon the said lot

(ix) not to subdivide the said lot

(x) not to ring bark cut down lop top remove injure or wilfully destroy any tree or trees having a diameter exceeding 150 millimetres measured 1 metre above ground level on the said lot except with the permission of the Tasman Municipal Council for the purposes of safety site access or within the plan area of the proposed dwelling

FENCING PROVISION :

In respect of each lot on the plan Loris Shirley Clemes the Vendor shall not be required to fence.

INTERPRETATION :

Wherever used in this Schedule the expression "Balance" means the land comprised in Certificate of Title Volume 2653 Folio 72 at the date of acceptance hereof excluding the lots in the plan.

11988

SIGNED by the said LORIS SHIRLEY CLEMES the Registered Proprietor of Certificate of Title Volume 2653 Folio 72 in the presence of :

11988

This is the schedule of easements attached to the plan of LORIS SHIRLEY CLEMES
(Insert Subdivider's Full Name)

affecting land in

Certificate of Title Volume 2653 Folio 72
(Insert Title Reference)

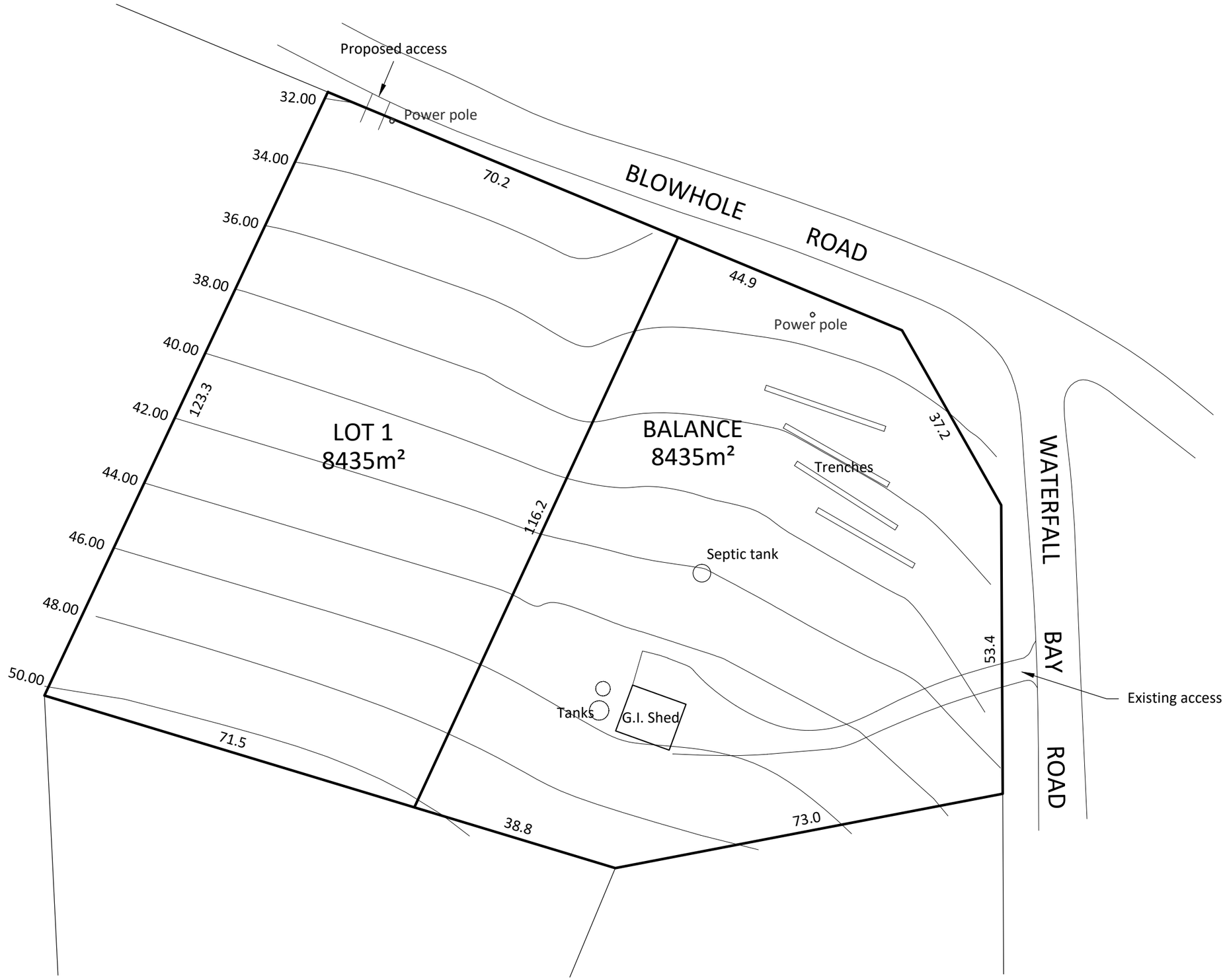
Sealed by Municipality of Tasman on 12th Dec 1978

Solicitor's Reference

J. Wells.
Council Clerk/~~Town Clerk~~

27263

NOTE:-
1. CONTOURS 2.00m INTERVAL



C.T. 11988 - 7
OWNER

PROPOSED SUBDIVISION
4 WATERFALL BAY ROAD
EAGLEHAWK NECK

SCALE 1: 750 (A3)	DATE: JULY 2022	DRAWN: IDS/TNW	DWG NO. D2062-2

T. N. WOOLFORD & ASSOCIATES
LAND & ENGINEERING SURVEYORS
72 GRAHAMS RD, MT. RUMNEY
Phone (03) 6248 5224
m: 0418 248 569
e: tnwoolford@tassie.net.au

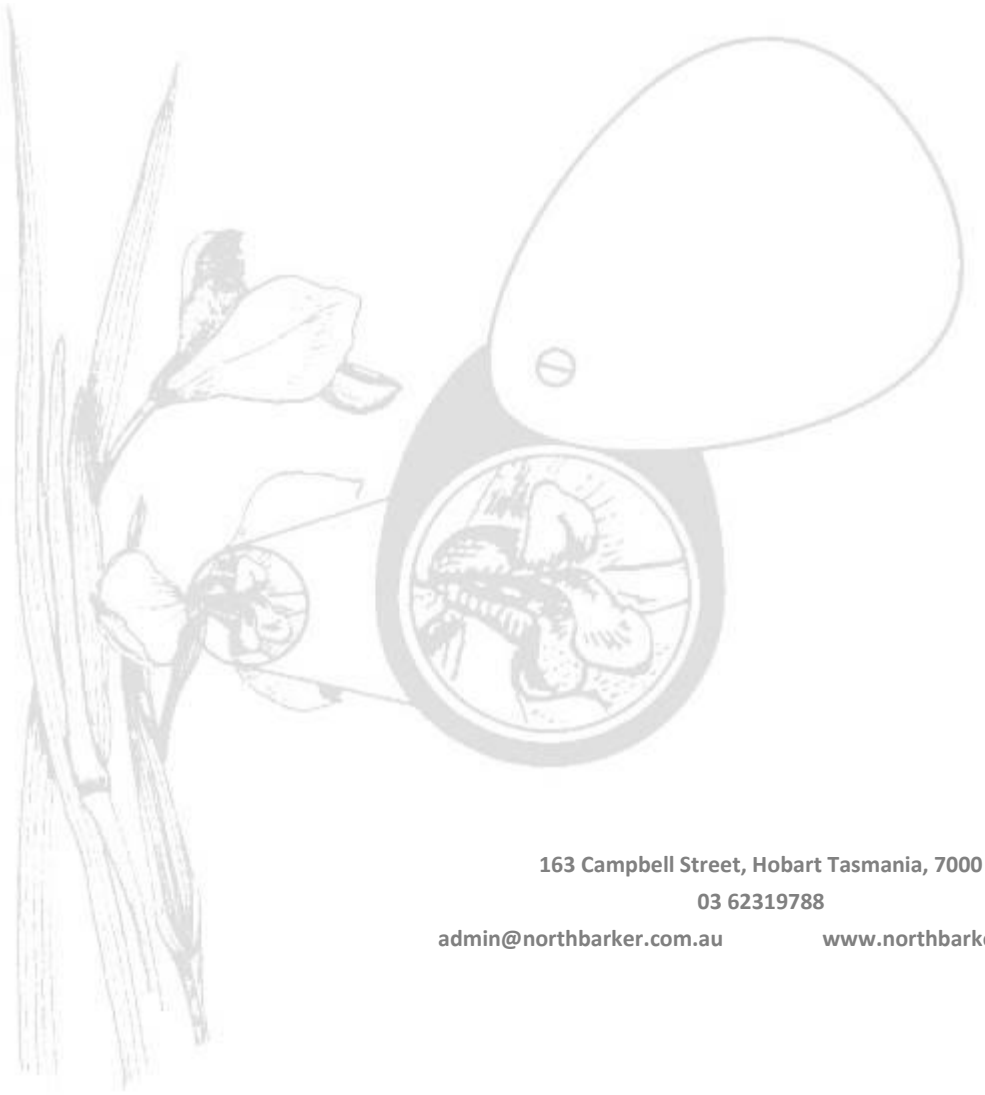
4 Waterfall Bay Road, Eaglehawk Neck
Two lot subdivision

Bushfire Report and Hazard Management Plan

22nd August 2022

For

(COW002)



163 Campbell Street, Hobart Tasmania, 7000
03 62319788
admin@northbarker.com.au www.northbarker.com.au

CONTENTS

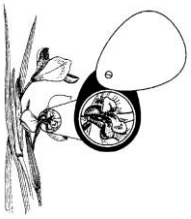
ACKNOWLEDGMENTS

Client: I

Survey and bushfire report: Phil Barker

HMP: Philip Barker

Mapping: Linda Drummond



1. INTRODUCTION

The following proposal is for the development of a 2 lot subdivision (lot 1 plus balance) at 4 Waterfall Bay Road, Eaglehawk Neck. The development site is on a title of approx. 1.7 ha (Title Ref: 11988/7).

Tasman Council requires a Bush Fire Hazard Management Plan (HMP) demonstrating the required BAL for the proposal and the proposed mitigation in compliance with the AS3959 (2018).

The BHMP is required to be developed for the purposes of Tasmanian Planning Scheme C13.0 – Bushfire Prone Areas Code. This bushfire hazard management plan addresses the requirements for all lots in the subdivision.

2. SITE DESCRIPTION

The land is within the municipality of Tasman Council and the relevant parcels are within the bushfire overlay.
The site sits on a small ridge with slopes to the east and west. Lot 1 is to be accessed from Blowhole Road while the balance access is to remain on Waterfall Road.

The parcel is predominantly grassland with a small patch of forest to the south west in lot 1.

See Figure 1 for the context and locality of the proposal.

Limitations:

This report on based on site measurements at the time of inspection and from information provided by the proponent. The report is limited in scope to bushfire hazard assessment only. The assessment is based on this building proposal and its findings are for this site only. Future changes to the building proposal or changes in the vegetation that affect bushfire hazard have not been considered.

3. PROPOSED USE

The proposal is for a residential subdivision 4 Waterfall Road, Eaglehawk Neck into two (2) low density residential lots.

Both lots will be serviced by static water for firefighting purposes and have independent access.

4. BUSHFIRE SITE ASSESSMENT

4.1 VEGETATION:

Both lots are predominantly grass with a small patch of forest on Lot 1 in the southwest. The land to the north is forested, to the east is low threat vegetation and to the south and west is grassland. The existing vegetation is depicted in Figure 2 and tabulated in Table 1.

4.2 SLOPE AND FIRE PATHS:

On all parcels the slopes are low (Table 1). Only the slopes that affect the BAL rating at the house site are reported in Table 1, although there are changes in slope within the 100m zone but beyond the distance that affects the BAL rating on the building areas.

4.3 DISTANCE:

Table 1 and Figure 2 indicate the site characteristics for a 100 m radius that have been assessed to determine the bushfire attack level of the building and provide the dimensions for the BHMA for a BAL 19 solution as per Section 2 of AS 3959. All aspects have been resolved to BAL 19 by the bushfire hazard management plan (Appendix 1). Table 2 provides distances from the building area to the corner north west and south west corner of each proposed lot.

NOTE: All distances are based on the existing and notional building areas illustrated in Figure 2.

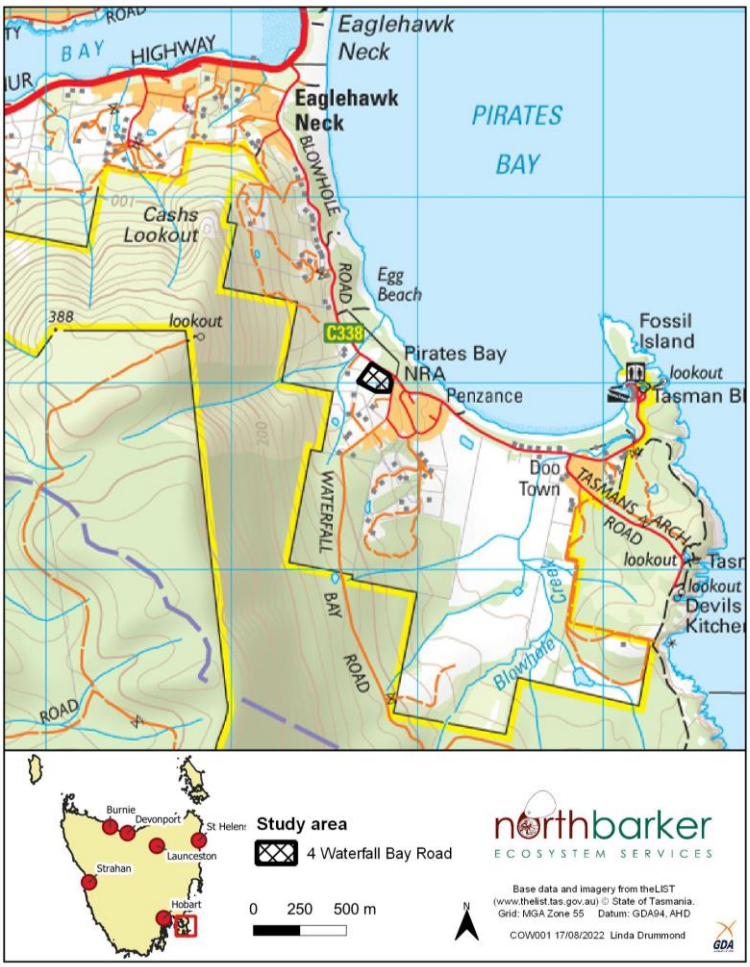


Figure 1. The location and context of 4 Waterfall Bay Road, Eaglehawk Neck

Plate 1 Typical grass vegetation at 4 Waterfall Bay Road with Forest in the south west

Table 1. Slope and vegetation characteristics and AS3959 solution for BAL 19

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
Lot 1					
Northeast	Grassland	5 – 10°	0-36	13	n/a
Northeast	Forest	5 – 10°	36 - 100	34	n/a
Southeast	Grassland	0 - 5°	0 - 35	11	n/a
Southwest	Grassland	upslope	0 - 29	10	
Southwest	Forest	upslope	29 - 65	23	n/a
Northwest	Grassland	0 - 5°	0 - 35	11	n/a
Balance					
Northeast	Grassland	5 – 10°	0-85	13	n/a
Southeast	Grassland	0 - 5°	0 – 60	11	n/a
Southeast	Low Threat Vegetation	0 - 5°	60 - 100	n/a	Yes (LTV)
Southwest	Grassland	Flat/upslope	0 – 60	10	n/a
Northwest	Grassland	0 - 5°	0-85	11	n/a

Table 2. Notional building size and location for each lot.

	Area (m2)	Distance from north-western corner to of proposed dwelling to north-western corner of proposed lot	Distance from south-western corner to of proposed dwelling to south-western corner of proposed lot
Lot 1	150	34 m	92 m
Balance	150	73 m	44 m

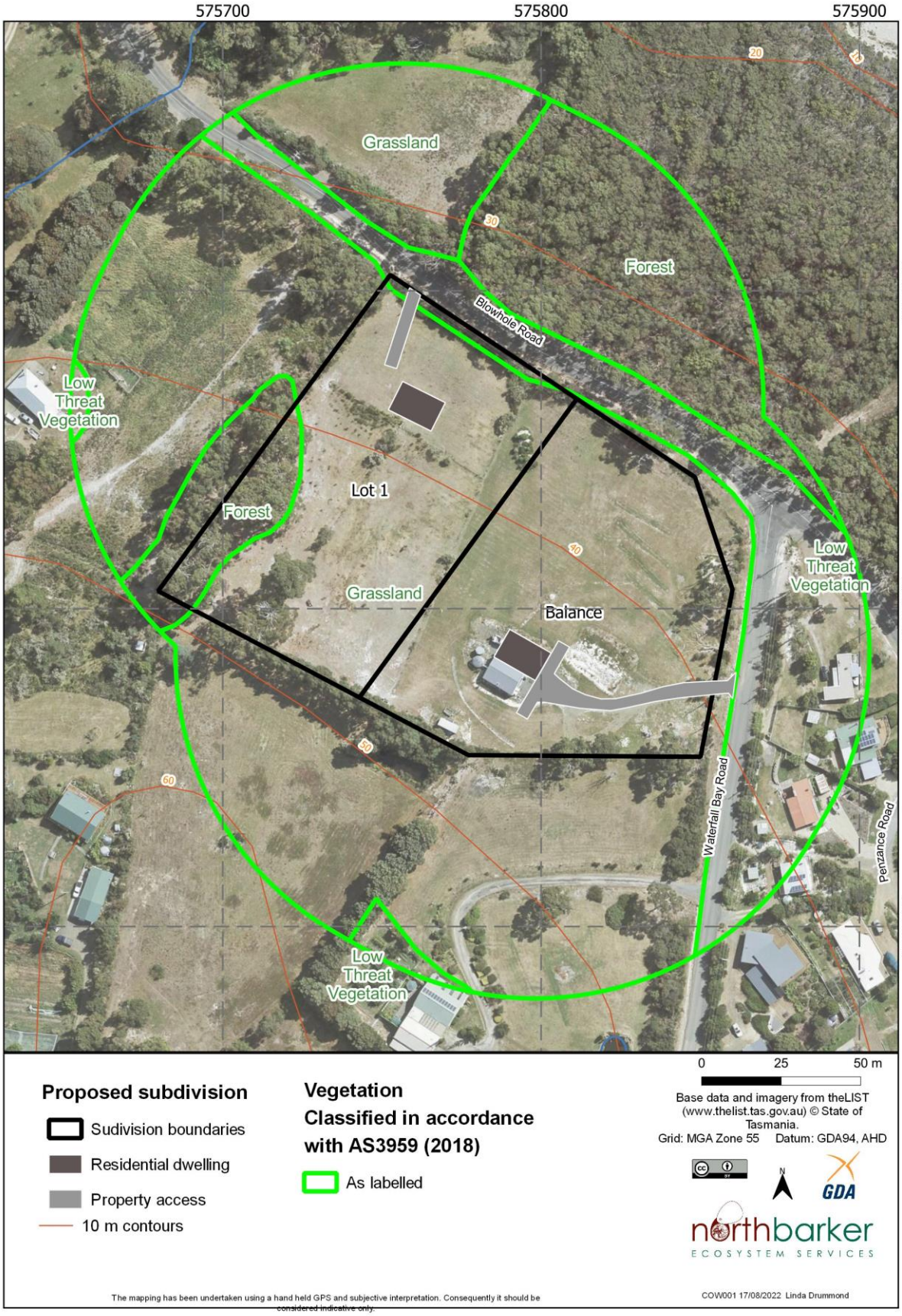


Figure 2. Vegetation and contours in relation to the site

BUSHFIRE PRONE AREAS MANAGEMENT OBJECTIVES

The Bushfire-Prone Areas Code (C13.0) applies within the Tasmanian Planning Scheme and applies to the subdivision of land that is located within, or partially within, a bushfire prone area. This code has been developed to ensure that use and development is designed, located, serviced and constructed to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

Appendix 2 of this report tabulates the specifications for standards set out in C13.0 for subdivisions. This proposal must comply with this code as set out in Table 3 below.

Access for Lot 1 will be off Blowhole Road, access for the balance will be off Waterfall Road.

Table 3. Compliance of the accommodation building proposal Tasmanian Planning Scheme Bushfire Prone Areas Code.

	Deemed to satisfy requirements (Elements)	**Requirement (Appendix 2)**	**Compliance**
	Construction requirements	AS 3959 - 2018	Yes All construction specifications will be compliant and verified by a building surveyor.
E1.6.1	Hazard management area	Private A1 (b)	Yes, all lots will have a compliant hazard management area. The hazard management area on lot 1 and the balance lot should be implemented and verified by a building surveyor before occupancy of a habitable building.
E1.6.2	Firefighting access	Private A1 (b)	Access for lot 1 is less than 30 m long, therefore no additional standards are required. Access for the balance is greater than 30 m but less than 200 m and therefore must meet the requirements of table E2 (b) to be compliant. All access should be implemented before sealing of titles and verified by council. For the lot 1 and the balance, access should be implemented prior to occupancy of any habitable building and verified by a building surveyor.
E1.6.3	Provision of water supply for firefighting purposes	A2 (b)	Yes. All parts of the building areas will be within 90 m of a static water point as measured by hose lay. All lots will be compliant subject to a dedicated water supply and remote water offtake as per the requirements of table E5. The water supply should be implemented on all lots and the balance lot prior to occupancy of each lot and should be verified by a building surveyor.

5. MANAGEMENT OF THE HMA AND LANDSCAPING

The bushfire hazard management plan (Appendix 1) has resolved all aspects to BAL 19 as per Table 1. All vegetation within the HMA of the site will be managed in a low fuel state and the following recommendations (5-7) are made.

1. Required - Maintain HMA in a low fuel state. Ground cover vegetation less than 100 mm tall, trees pruned of low hanging foliage to > 2m.
2. Recommended - Gardens exclude shrubs from within 5 m of the building.

3. Recommended - All aspects to be mineral surface to a minimum of 0.5 m from the building.
4. Recommended - No trees or shrubs within 10 m to exceed the height of the gutters unless leaf shedding gauze is fitted.

References

Australian Standard AS 3959 (2018) Construction of Buildings in Bushfire Prone Areas.

Directors Determination Version 1.1– Hazard Management Areas.

Tasmanian Planning Scheme C13.0 – Bushfire Prone Areas Code.

APPENDIX 1. BUSHFIRE HAZARD MANAGEMENT PLAN

Assessment date: 22nd August 2022
Assessor: Philip Barker BFP- 147 1,2,3A,3B,3C

BUSHFIRE ATTACK LEVEL ASSESSMENT REPORT

Bushfire Attack Level (BAL) assessment conducted in accordance with Clause 2.2 Simplified Procedure (Method 1) of AS 3959 – 2018.

This BAL Assessment Report has been provided to determine the BAL (in accordance with AS3959-2018) for the site and where necessary provide recommendations for BAL reduction methods to comply Directors Determination 2.2. Requirements for water supply for fire fighting and vehicle access and egress for fire fighting have been included; and should part of the Building Surveyors Certificate of Likely Compliance assessment.

Limitations

All measurements have been made using standard practices and may contain small errors of precision.

Compliance with the AS3959 building standards referred to in this assessment does not mean that there is no risk to life or property as a result of bushfire.

A primary limitation is that the BAL value is determined under an FDI of 50. The FDI can be higher under certain weather and fuel conditions and consequently the BAL may also be higher than determined here.

Property Details

Applicants Name:

Municipality: Tasman

PID: 5995422

Certificate of title / number: CT 11988/7

Address: 4 Waterfall Bay Road, Eaglehawk Neck, 7179

Proposal: 2 lot subdivision

Bush Fire Attack Level (BAL) 19

Relevant fire danger index: (see clause 2.2.2) FDI 50

Determination of Bushfire Attack Level (BAL 19)

Summary of Compliance Requirements and Recommendations (see Figure 1):

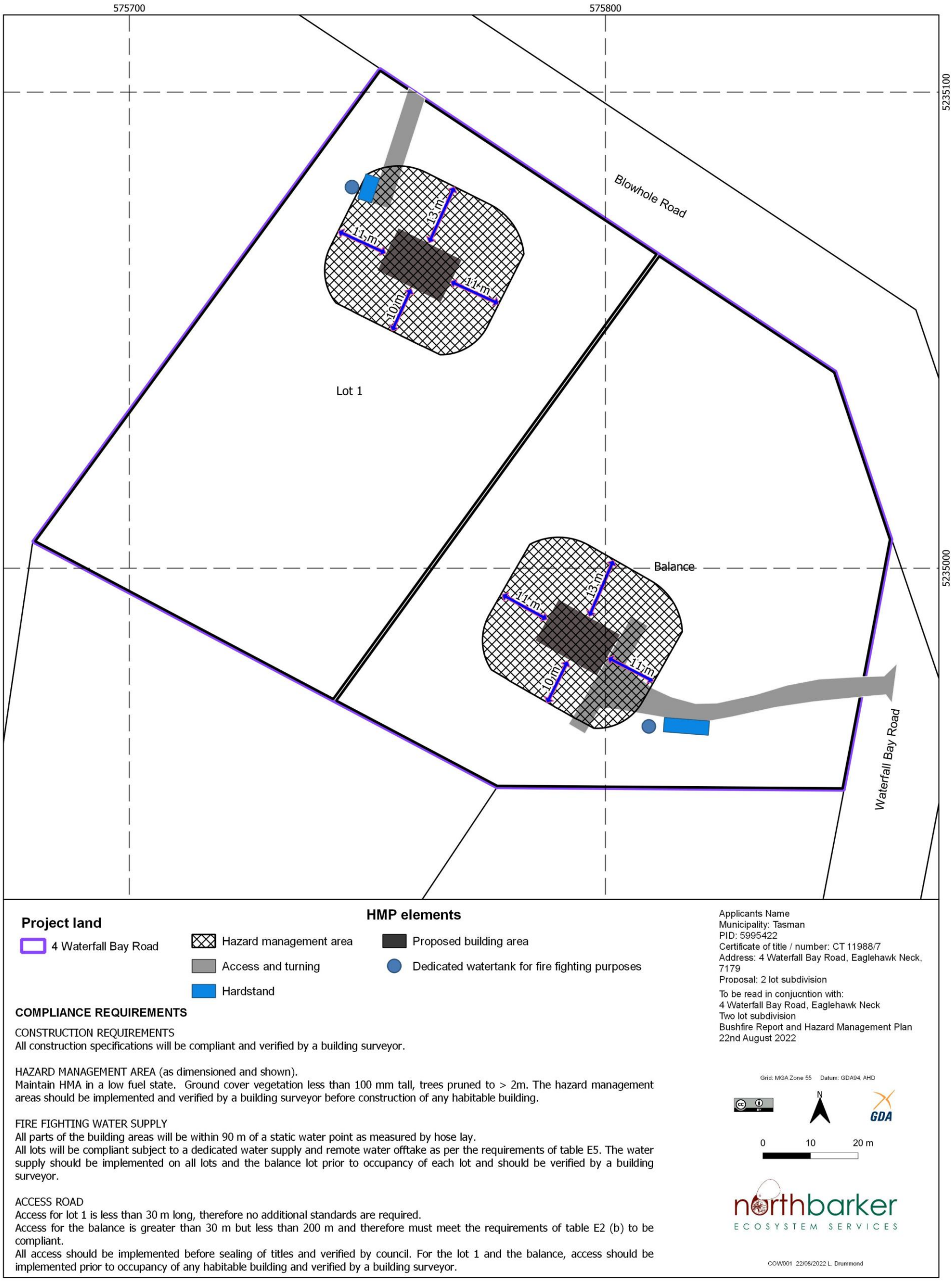
1. Building materials and design must comply with BCA for BAL 19.
2. Access should be implemented prior to occupancy of any habitable building and verified by a building surveyor.
3. The hazard management areas must be implemented and maintained by the respective owner/s before occupancy.
4. All lots must install a dedicated water supply and remote water offtake as per the requirements of table E5. The water supply should be implemented on each lot prior to occupancy of each lot and should be verified by a building surveyor.

Determination of vegetation and slope within 100m in all directions.

Quadrant	Vegetation class Table 2.3 AS3959	Effective Slope (degrees)	Distance under effective slope (m)	Minimum Defendable Space Required for BAL-19 (m)	Exclusions of low threat vegetation under 2.2.3.2 AS3959
Lot 1					
Northeast	Grassland	5 – 10°	0-36	13	n/a
Northeast	Forest	5 – 10°	36 - 100	34	n/a
Southeast	Grassland	0 - 5°	0 - 35	11	n/a
Southwest	Grassland	upslope	0 - 29	10	
Southwest	Forest	upslope	29 - 65	23	n/a
Northwest	Grassland	0 - 5°	0 - 35	11	n/a
Balance					
Northeast	Grassland	5 – 10°	0-85	13	n/a
Southeast	Grassland	0 - 5°	0 – 60	11	n/a
Southeast	Low Threat Vegetation	0 - 5°	60 - 100	n/a	Yes (LTV)
Southwest	Grassland	Flat/upslope	0 – 60	10	n/a
Northwest	Grassland	0 - 5°	0-85	11	n/a

Bushfire Hazard Management Plan - BAL19

Assesor: Phillip Barker BFP - 147 1,2,3A,3B,3C
Assessment date: 22/08/2022



COMPLIANCE REQUIREMENTS

CONSTRUCTION REQUIREMENTS
All construction specifications will be compliant and verified by a building surveyor.

HAZARD MANAGEMENT AREA (as dimensioned and shown).
Maintain HMA in a low fuel state. Ground cover vegetation less than 100 mm tall, trees pruned to > 2m. The hazard management areas should be implemented and verified by a building surveyor before construction of any habitable building.

FIRE FIGHTING WATER SUPPLY
All parts of the building areas will be within 90 m of a static water point as measured by hose lay.
All lots will be compliant subject to a dedicated water supply and remote water offtake as per the requirements of table E5. The water supply should be implemented on all lots and the balance lot prior to occupancy of each lot and should be verified by a building surveyor.

ACCESS ROAD
Access for lot 1 is less than 30 m long, therefore no additional standards are required.
Access for the balance is greater than 30 m but less than 200 m and therefore must meet the requirements of table E2 (b) to be compliant.
All access should be implemented before sealing of titles and verified by council. For the lot 1 and the balance, access should be implemented prior to occupancy of any habitable building and verified by a building surveyor.

FIGURE 1. BUSHFIRE HAZARD MANAGAMENT PLAN

APPENDIX 2. SPECIFICATIONS FOR ACCESS, WATER SUPPLY AND HAZARD MANAGEMENT AREAS.

Table E1: Standards for Roads

Element		Requirement
A	Roads	Unless the development standards in the zone require a higher standard, the following apply: (a) two-wheel drive, all-weather construction; (b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 2m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; (h) curves have a minimum inner radius of 10m; (i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7 metres in width; (j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and (k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743-2001 Road Signs-Specifications.

Table E2 Standards for property access

Element		Requirement
A	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	The following design and construction requirements apply to property access: (a) all-weather construction; (b) load capacity of at least 20t, including for 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 of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (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 roads; 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.
C	Property access length is 200m or greater.	The following design and construction requirements apply to property access: (a) the requirements for B above; and (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.
D	Property access length is greater than 30m, and access is provided to 3 or more properties.	The following design and construction requirements apply to property access: (a) complies with requirements for B above; and (b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.

Table E3 Standards for fire trails

Element		Requirement
A.	All fire trails	The following design and construction requirements apply: (a) all-weather, 4-wheel drive construction; (b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 2m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for unsealed fire trails; (j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and (k) 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 hammerhead "T" or "Y" turning head 4m wide and 8m long.
B	Fire trail length is 200m or greater.	The following design and construction requirements apply: (a) the requirements for A above; and (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.

Table E5 Static water supply for firefighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 90 m of 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 static water supply: (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 300mm2*;* (e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to firefighting 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 firefighting 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 hydrant, measured as a hose lay; (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.

E1.6.1 Subdivision: Provision of Hazard management areas

Objective: Subdivision provides for hazard management areas that: (a) facilitate an integrated approach between subdivision and subsequent building on a lot; (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and (c) provide protection for lots at any stage of a staged subdivision.	
Acceptable Solution	Performance Criteria
A1 (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or (b) The proposed plan of subdivision: (i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision; (ii) shows the building area for each lot; (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.4.4 of *Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas*; and (iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than,	**P1** A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to: (a) the dimensions of hazard management areas; (b) a bushfire risk assessment of each lot at any stage of staged subdivision; (c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability; (d) the topography, including site slope; (e) any other potential forms of fuel and ignition sources; (f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development; (g) an instrument that will facilitate management of fuels located on land external to the subdivision; and

the separation distances required for BAL 19 in Table 2.4.4 of *Australian Standard AS 3959 – 2009 Construction of buildings in bushfire-prone areas*; and (c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.	(h) any advice from the TFS.

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:	4 Waterfall Bay Road, Eaglehawk Neck
Certificate of Title / PID:	PID: 5995422 Certificate of title / number: CT 11988/7

2. Proposed Use or Development

Description of proposed Use and Development:	2 lot subdivision
Applicable Planning Scheme:	Tasmanian Planning Scheme – Tasman

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

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
4 Waterfall Bay Road, Eaglehawk Neck Two lot subdivision Bushfire Report and Hazard Management Plan 22nd August 2022	NBES P Barker	22nd August 2022	1
Proposed subdivision, 4 Waterfall Bay Road, Eaglehawk Neck	TN Woolford & Associates, Land & Engineering Services	July 2022	D2062-2

4. Nature of Certificate

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

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

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

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

☐	E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

☐	**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)	Insufficient increase in risk
☒	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)	Consent for Part 5 Agreement

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

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

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

5. Bushfire Hazard Practitioner

Name:	Philip Barker	**Phone No:**	0438250713
Postal Address:	63 Campbell Street Hobart 7000	**Email Address:**	pbarker@northbarker.com.au
Accreditation No:	BFP – 147	**Scope:**	1,2,3A,3B,3C

6. Certification

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

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

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

Signed:

certifier

Name: Philip Barker **Date:** 22nd August 2022

Certificate Number: COW001

(for Practitioner Use only)

SITE SUITABILITY ASSESSMENT REPORT

FOR A PROPOSED 2 LOT SUBDIVISION

4 Waterfall Bay Road, Eagle Hawk Neck 7179

September 2022

Email: admin@seam.com.au
Web: www.seam.com.au

Table of Contents

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Introduction

This assessment follows a request to ascertain if the land proposed for a 2 lot subdivision (inclusive of the balance lot) is suitable for the installation of onsite wastewater disposal systems as well as not affect the existing system located on the proposed Balance Lot. The request was from the owner

The Site Plan with preferred lots is presented in Figure 1. The assessment provides an appraisal of suitability of onsite wastewater disposal systems for the proposed vacant Lot and also an assessment and of the current wastewater disposal system for the existing dwelling.

Methodology

This wastewater assessment is based on the subdivision plan by TN Woolford & Associates. A site visit was undertaken on the 15th October 2021 and extra test holes were excavated on 5th September 2022 on the proposed lot. The approximate location of the test hole is illustrated on the Site Plan (Figure 2). The general soil profile is illustrated below. The soils consist of silty clays to a depth of 1200mm

Test Hole 1 (Balance Lot – Existing Dwelling)

0 – 200mm	Grey Silt (Cat 4)
200 – 1200mm+	White/Grey Silty Clay (Cat 5)
1200mm+	Mudstone Rock

Test Hole 2 (Proposed Lot 1)

0 – 300mm	Pale Grey Silty Clays (Cat 4/5)
300 – 800mm+	Pale Brown/Brown Silty Clays (Cat 5)

The assessment was carried out in accordance with AS 1547 – 2012 and using the EHA recognised *Trench 3* ™ program. The methodology for the assessment is in Appendix A. The modelling results are representative of only the balance lot, with a detailed design required for the new lot when Building approval is sought.

In preparing the assessment, the following documentation has been reviewed:

- Google Earth/Maps Imagery
- Subdivision plan provided by TN Woolford & Associates and dated July 2022
- Tasmania Department of Mines Geological Atlas 1:50,000
- Bureau Of Meteorology Rainfall Data for Eaglehawk Neck

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Figure 1: Location Plan showing subdivision Layout (Detail over page)

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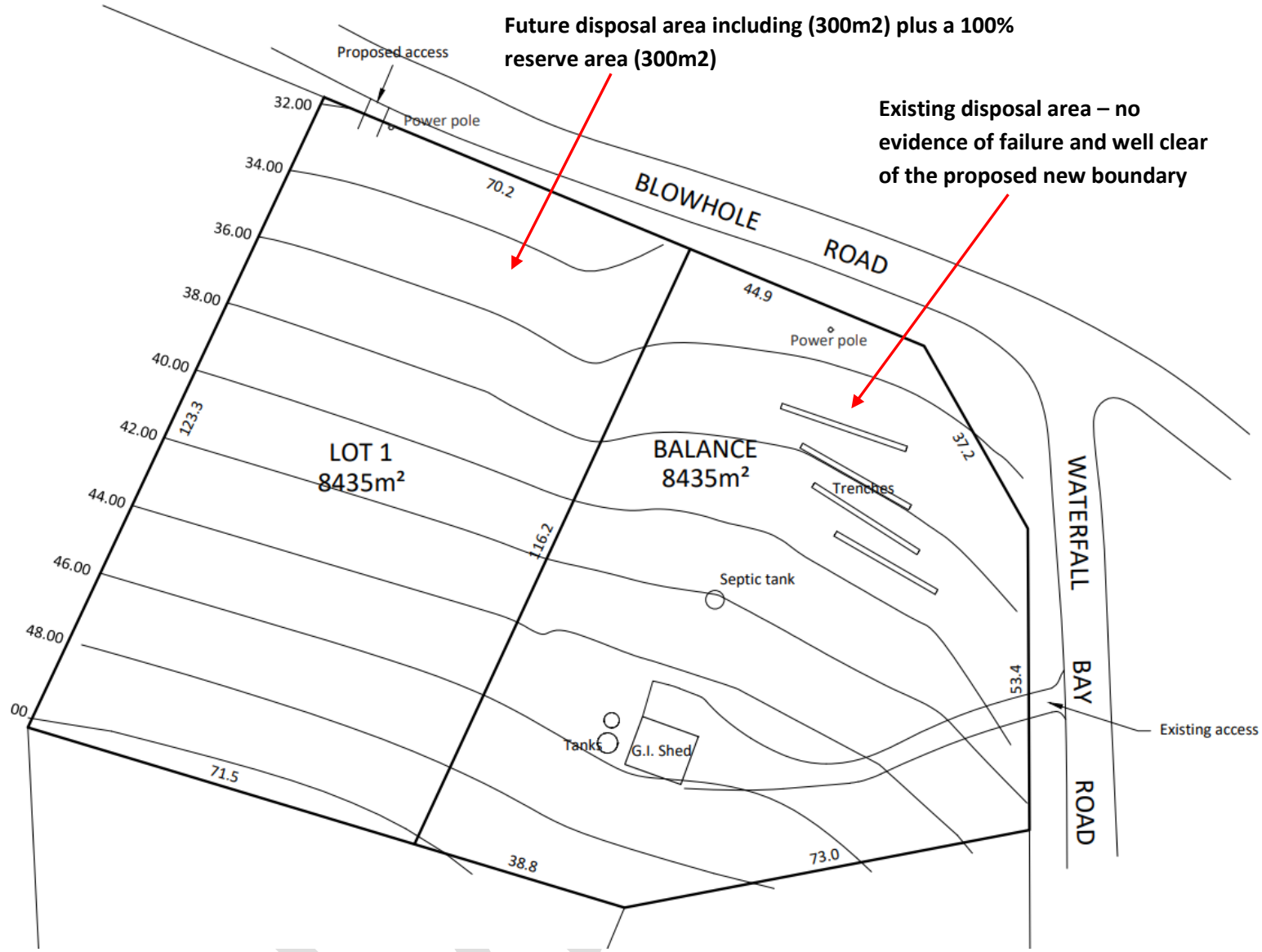

Figure 2: Site Plan showing subdivision Layout and existing wastewater infrastructure

Site and Soil Evaluation Findings

Topography

The slopes throughout the property are generally gentle, and ranging from 5-7 degrees. The aspect varies, but is generally north easterly.

Vegetation

The vegetation consists predominantly of grassland.

Soils and Geology

The soils throughout the site consist of – Silty Clays (Category 5), with average drainage.

The soil profile is illustrated above and their location on Figure 1. The assessment concurs with the Tasmania Department of Mines Geological map Jurassic Dolerite (Geology of Tasmania 1:500,0000).

Site Limitations and Constraints

We have conducted a site evaluation for the proposed lot. The existing dwelling has a functioning wastewater disposal system (located towards the north of the dwelling) consisting of a septic tank and 4 x absorption trenches. There is also room for a 100% reserve area (located towards the south of the existing disposal area) within the proposed Lot 1. Therefore, the results are representative of the proposed balance only.

There were some site features that may restrict wastewater disposal. The features that were identified were:

- Potentially a large volume of wastewater
- Phosphorus. Adsorption capacity
- Silty clay soils with average drainage

Positive aspects for the land overall include:

- Large land areas (for wastewater disposal)
- Medium density of other wastewater systems
- No groundwater

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Assessment Report

The Assessment Report collates all the information from the Site Capability Report and the Environmental Sensitivity Report and provides advice on suitability of on-site wastewater management and recommended preliminary designs.

Existing wastewater infrastructure

New Balance Lot- Existing dwelling (8,435m2) – The existing dwelling has a functioning wastewater disposal system. There is also as ample room for a 100% reserve area within Lot 1. Furthermore the location of the proposed boundary will not affect the existing wastewater disposal area. There is ample land to the south of the existing disposal area where wastewater could be disposed of if the existing system needs upgrading.

Proposed treatment and disposal for balance lot (8,435m2).

This assessment assumes a 4 bedroom dwelling on tank water (without any water saving devises). The design assumes 2 people for the first two bedrooms and one person for each of the remaining 2 bedrooms. With each person generating 120L of wastewater per day, a total wastewater loading is calculated at: 6 x 120 = 720L / day. This is a large potential loading which has been used to provide a level of conservatism into the design.

Due to the poorly drained soils as well as the potentially high wastewater load it is deemed an AWTS with irrigation is the best wastewater disposal method for the proposed new lot. The area required for this is A=Q/DIR; A=720/2.5; A=288m^2 - Say 300m2 (Therefore the irrigation area would need to be 600m^2 with a 100% reserve area).

Therefore there is sufficient land for OSWM on the proposed new Lot 1. This assessment therefore has determined that an AWTS with irrigation is the most suitable method for wastewater within the proposed subdivision as shown on the plan. This assessment does not include any consideration of the agricultural values of the bushland on the land, nor the issues around legal access to each proposed lot.

Our assessment recommends that for up to 2 possible lots there is more than ample land available for onsite wastewater management. The methods of treatment and disposal will depend on a separate individual Site and Soil Evaluation to be prepared for the new lot and could include:

- Aerated wastewater treatment systems with subsurface irrigation
- Aerated wastewater treatment systems with surface irrigation

Conclusion

- It is concluded that a proposed 2 lot (including balance) subdivision is suitable for onsite wastewater disposal systems, with the use of an Aerated Wastewater Treatment System (AWTS) and irrigation on the proposed new Lot 1. The proposed balance Lot will retain its existing wastewater system.
- If 4 bedroom dwelling is constructed on the proposed new lot then with the use of an AWTS and irrigation, a minimum total disposal area of 600m^2 (with 100% backup area included) would be required.
- Given that the both of the two lots proposed are 8,435m^2 it is deemed that there is sufficient area for wastewater disposal (including a 100% reserve area) for the proposed new lot. There is also adequate room for a reserve area to be constructed on the balance lot (existing dwelling) if ever required in the future.
- To meet the required setback distances to boundaries as outlined in the Directors Guidelines, the disposal area for any future upgrades or a new dwelling on the balance lot will need to be located 1.5m from any upslope and side-slope boundary, as well as 8.5m from the downslope boundary (1.5m + 1m x 7 degrees = 8.5m (secondary treated)).

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Appendix A – Site and Soil Evaluations Methodology

The SSE is a report that identifies any significant issue that may inhibit or retard wastewater disposal. When an issue is identified then ways to ameliorate the impacts are considered. The outcomes of this process may result in the development being modified to try and resolve the issue. To populate a SSE report we use the outputs of Trench 3™ modelling which consist of 3 components: Site Capability Report, Environmental Sensitivity Report and Assessment Report

Site Capability

Site capability parameters include:

- Design area
- Density of disposal systems
- Slope angle
- Slope form
- Surface drainage
- Flood potential
- Heavy rain events
- Aspect
- Frequency of strong winds
- Wastewater volume
- Sodium Absorption Ratio (SAR) of septic tank effluent
- SAR of sullage
- Soil thickness
- Depth to bedrock
- Surface rock outcrop
- Cobbles in soil
- Soil pH
- Soil bulk density
- Soil dispersion
- Adopted permeability
- Long term acceptance rate and Design loading

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Environmental Sensitivity

Environmental Sensitivity parameters include:

- Cation exchange capacity
- Phosphorus absorption capacity
- Annual rainfall
- Minimum depth to water table
- Annual nutrient load
- Groundwater environmental values
- Minimum separation distance required
- Risk to adjacent bores
- Surface water environmental values
- Distance to nearest surface waters
- Distance to nearest other features
- Risk of slope instability
- Distance to landslip

Assessment Report

The Assessment Report collates all the information from the Site Capability Report and the Environmental Sensitivity Report and provides a recommended design including the size of the disposal field. In this case the design is indicative only, and the design is not be used for any particular dwelling or lot.

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Sustainable Environmental Assessment and Management

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report

Proposed 2 lot subdivision

Assessment for		Assess. Date	15-Sep-22
		Ref. No.	22027
Assessed site(s)	4 Waterfall Bay Road, Eagle Hawk Neck	Site(s) inspected	15-Oct-15
Local authority	Tasman Council	Assessed by	Jamie Wood

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation Treach	Amended	Remarks
	Expected design area	sq m	8,435	V. high	Very low		
	Density of disposal systems	/sq km	3	Mod.	Very low		
	Slope angle	degrees	7	V. high	Low		
	Slope form	Straight simple		V. high	Low		
	Surface drainage	Imperfect		High	Moderate		
	Flood potential	Site floods <1:100 yrs		Mod.	Very low		
	Heavy rain events	Infrequent		Mod.	Moderate		
	Aspect (Southern hemi.)	Faces NE or NW		V. high	Low		
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	720	Mod.	Moderate	No change	
	SAR of septic tank effluent		2.3	Mod.	Moderate	Low	Other factors lessen impact
	SAR of sullage		2.5	Mod.	Moderate	No change	
	Soil thickness	m	1.0	High	Low	Moderate	
	Depth to bedrock	m	1.3	Mod.	Moderate	Low	
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		7.0	Guess	Very low		Other factors lessen impact
	Soil bulk density	gm/cub. cm	1.5	Guess	Low		
	Soil dispersion	Emerson No.	8	High	Very low		
	Adopted permeability	m/day	0.08	High	Low		
	Long Term Accept. Rate	L/day/sq m	11	Mod.	Low	Moderate	Other factors increase impact

Sustainable Environmental Assessment and Management

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report

Proposed 2 lot subdivision

Assessment for		Assess. Date	15-Sep-22
		Ref. No.	22027
Assessed site(s)	4 Waterfall Bay Road, Eagle Hawk Neck	Site(s) inspected	15-Oct-15
Local authority	Tasman Council	Assessed by	Jamie Wood

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

Alert	Factor	Units	Value	Confid level	Limitation: Trench	Limitation: Amended	Remarks
A	Cation exchange capacity	mmol/100g	55	Mod.	Moderate	High	
	Phos. adsorp. capacity	kg/cub m	0.7	Mod.	Moderate		
	Annual rainfall excess	mm	126	High	Low		
	Min. depth to water table	m	3	High	Very low		
	Annual nutrient load	kg	6.1	Guess	Low	Moderate	
	G'water environ. value	Agric sensit/dom irrig		High	Moderate		
	Min. separation dist. required	m	8	High	Very low	Low	Other factors increase impact
	Risk to adjacent bores						Factor not assessed
	Surf. water env. value	Agric sensit/dom drink		High	Moderate		
	Dist. to nearest surface water	m	500	High	Low		
	Dist. to nearest other feature	m	200	High	Very low		
	Risk of slope instability		Very low	High	Very low		
	Distance to landslip	m	300	High	Very low		

Sustainable Environmental Assessment and Management

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report

Proposed 2 lot subdivision

Assessment for		Assess. Date	15-Sep-22
		Ref. No.	22027
Assessed site(s)	4 Waterfall Bay Road, Eagle Hawk Neck	Site(s) inspected	15-Oct-15
Local authority	Tasman Council	Assessed by	Jamie Wood

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and sustem sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 720 (using the 'No. of bedrooms in a dwelling' method)

Septic tank wastewater volume (L/day) = 240

Sullage volume (L/day) = 480

Total nitrogen (kg/year) generated by wastewater = 3.9

Total phosphorus (kg/year) generated by wastewater = 2.3

Climatic assumptions for site (Evapotranspiration estimated using mean max. daily temperatures)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	52	43	56	70	66	73	80	80	61	68	60	72
Adopted rainfall (R, mm)	57	54	62	77	73	80	88	88	67	75	66	79
Retained rain (Rr, mm)	48	46	53	65	62	68	75	75	57	64	56	67
Max. daily temp. (deg. C)	19	19	18	16	13	11	11	12	13	14	16	17
Evapotrans (ET, mm)	71	58	55	46	36	40	41	45	47	52	58	63
Evapotr. less rain (mm)	**22**	**12**	**2**	**-20**	**-26**	**-28**	**-34**	**-30**	**-10**	**-12**	**1**	**-4**

Annual evapotranspiration less retained rain (mm) = -126

Soil characterisitics

Texture = Silty Clay Category = 5 Thick. (m) = 1

Adopted permeability (m/day) = 0.08 Adopted LTAR (L/sq m/day) = 11 Min depth (m) to water = 3

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site:	All wastewater will be disposed of on the site
The preferred method of on-site primary treatment:	In a package treatment plant
The preferred method of on-site secondary treatment:	In-ground
The preferred type of in-ground secondary treatment:	None
The preferred type of above-ground secondary treatment:	
Site modifications or specific designs:	Not needed

Suggested dimensions for on-site secondary treatment system

Total length (m) =	20
Width (m) =	15
Depth (m) =	0.2
Total disposal area (sq m) required =	600
comprising a Primary Area (sq m) of:	300
and a Secondary (backup) Area (sq m) of:	300

Sufficient area is available on site

Comments

See report for full details

Appendix B – Site Photos

Plate A: Looking at the soil from the test hole on lot 1

Plate B: Looking west over both the balance lot (foreground and the proposed Lot 1 (background of image.

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Report Certification

I/We authorise the Tasman Council to make copies of the report for internal office use. Attached with the report or included with the application are original copies of all required certifications from suitably qualified persons.

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Signed _____ Date 15th September 2022

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