

NOTICE OF PROPOSED DEVELOPMENT

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

NO:	DA 69/2024
LOCATION:	276 Reservoir Drive WYNYARD
APPLICANT:	B Perry & L Perry
SCHEME:	Tasmanian Planning Scheme – Waratah- Wynyard
ZONING:	Rural Living
USE CLASS:	Residential
PROPOSAL:	Shed Extension & Dwelling
DISCRETIONARY MATTER:	Site coverage 11.4.1 (P1)

The application and associated plans and documents are available for inspection on Council website https://www.warwyn.tas.gov.au/planning-and-development/advertised-permits/ and at Council offices, located at 21 Saunders Street Wynyard during normal office hours for a period of 14 days from the date of this notice.

Any person who wishes to make representations in accordance with the *Land Use Planning and Approvals Act 1993*, must do so during the 14-day period.

Representations in writing will be received by the General Manager, PO Box 168, Wynyard, 7325, or email council@warwyn.tas.gov.au by **Wednesday 24 April 2024.**

Dated Wednesday 10 April 2024.

Shane Crawford GENERAL MANAGER



APPLICATION FOR PLANNING APPROVAL

SECTION 51 LAND USE PLANNING & APPROVALS ACT 1993

PERMITTED APPLICATION - Assessment and determination of permit application under S58 Land Use Planning and Approvals Act 1993	\$280.00 plus \$1.35 per \$1,000 of value for use or development
DISCRETIONARY APPLICATION Assessment and determination of a permit application under S57 Land Use Planning and Approvals Act 1993	\$450.00 plus \$1.75 per \$1,000 of value for use or development plus advertising fee
SUBDIVISION APPLICATION – Assessment and determination of a subdivision application for 1 to 5 lots	\$450.00 plus \$1.75 per \$1,000 of
under s57 or s58 Land Use Planning & Approvals Act 1993	value for use or development plus
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	advertising fee
SUBDIVISION APPLICATION – Assessment and determination of a subdivision application for more than	\$815.00 plus \$175 per lot plus
5 lots under s57 or s58 Land Use Planning & Approvals Act 1993	advertising fee
ADVERTISING FEE	\$280.00
Level 2 Environmental Activity – Additional charge to permit application Please refer to www.warwyn.tas.gov.au (Council Services – Planning Services – Planning Fees) for all other	\$530.00 + advertising fee by quote
	No
1. Value of work (inc GST) \$ 450,000 Contract Price	Estimate # 49,000
2. Development Address 276 RESEVOR DRIVE	
3. Full Name of Applicant(s) BREST ANSHOWS PRERY LYND	or mosy feery.
Contact Details: Address: P.O. Box 394	
Email Address /yndolperry 394 6 gmoil Telephone 0459	516 444
For requests in hardcopy format all correspondence in relation to this application and the contact address, otherwise all correspondence will be forwarded to the email and the would you like the contact address recorded above to be applied for all forms.	ddress
correspondence? (including rates/animal control etc)?	YesNo
correspondence: (including rates/animal control etc.):	TesNo
Where the Applicant is not the Owner In accordance with Section 52 of the Land Use Planning and Approvals Act 1993 if the applicant for the permit and in respect of which the permit is required, the applicant must include in the application for the permit, a has notified the owner of the intention to make the application. In the event that the property is owned or managed by the Crown or Council, this application is to be s Minister responsible, or General Manager of the Council, and accompanied by written permission of the M making of this application.	declaration that the applicant igned by the relevant Crown
Owners Full Name	
Address Telephone Work/Business	
Crown Minister/General Manager Signature	
Applicant's Notification to Owner	
replicant o Notification to owner	
Full Name of Applicant(s)	
Full Name of Applicant(s)	
of	person must not obtain or

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7.			ormation if nate		explain speci	al features of	the proposal.
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	******	·					
	To in	nclude –					
	a.	i. ii. iii. iv. v. vi. vii.	nent, showin Sufficient purpose objectives a full descr a full descr a site anal a detailed 1:200; a plan of the car parking	ing where apprinted in the statements or desired for the ription of the ription of the ysis and site layout plan of the proposed of facilities are aring of tree tion, colour,	to demonstration applicable uture character proposed use manner in whete plan at an actification of the proposed landscaping; and capacity; as and bushlar	ate compliar e zones and ter statement e or developr nich the use o eceptable sca ed buildings w	nent; or development will operate;
	b.	A full cop	y of your titl	e shall also	accompany th	ne application	1.
		Title Cert	ificate	Т	itle Plan	Sche	edule of Easements
	c.	Relevant	engineering	pre-lodgem	nent approvals	3	
8.	Pres	Access sent use of		Stormwater buildings – f	□ full descriptior	1	
	25 25.						
9.	7071 1070	ana					
			Car Parki	ng		Floor Area	
			Existing of	n site	(* . ***** ******* ***)	Existing	······································
			Total no.	proposed		Proposed	
	Site A	\rea	m²		Total	m²	2

Questions 10 to 13 relate to Commercial and industrial Uses and Development ONLY

10.	What days and hours of operation are proposed?			
	Monday to Friday:	Froma.m. to	/	. p.m.
	Saturday	Froma.m. to		p.m.
	Sunday	Froma.m. to		p.m.
11.	Number of Employees?			
	Existing	/		
q	Proposed			
12.	Vehicles visiting or deliv	ering to or from the site?	Trips per day	
	Туре	No.		
13.	What type of machinery	is to be installed or used		
	Туре	No.	p: 8	
9				

Declaration By Applicant (Mandatory)

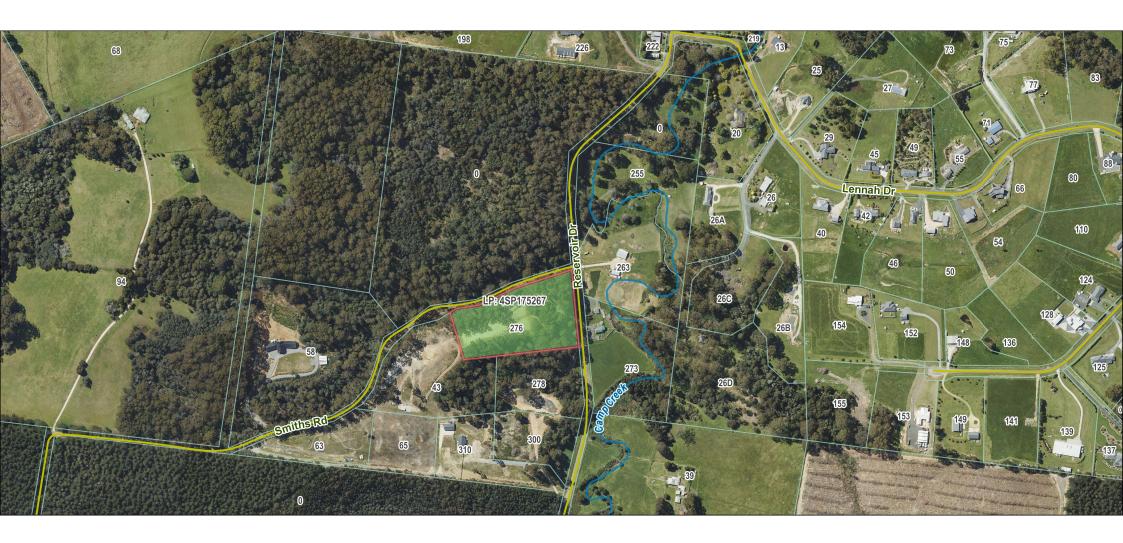
I declare that the information given is a true and accurate representation of the proposed development. I understand that the information and materials provided with the development application may be made available to the public. I understand that the Council may make such copies of the information and materials as in its opinion are necessary to facilitate a thorough consideration of the Permit Application. I have obtained the relevant permission of the copyright owner for the communication and reproduction of the plans accompanying the development application for the purposes of assessment of that application. I indemnify the Waratah-Wynyard Council for any claim or action taken against it in respect of breach of copyright in respect of any of the information or material provided.

I/We hereby acknowledge that Section 20(a) of the *Local Government Act 1993* provides the power for persons authorised by the General Manager to enter land without notice in relation to an application by the owner or occupier for a licence, permit or other approval given by the council.

Signature(s)
(all applicants to sign)

Date 21 · 3 · 202 4

.....





RESULT OF SEARCH

RECORDER OF TITLES





SEARCH OF TORRENS TITLE

VOLUME	FOLIO
175267	4
EDITION	DATE OF ISSUE
3	26-Aug-2021

SEARCH DATE : 17-Jan-2023 SEARCH TIME : 09.53 AM

DESCRIPTION OF LAND

Parish of QUIGGIN Land District of WELLINGTON Lot 4 on Sealed Plan 175267 Derivation: Part of Lot 66, 500 Acres, James Reid PUR. Prior CT 171848/5

SCHEDULE 1

M780675 & M910520 TRANSFER to MATHEW THOMAS WINSKILL

Registered 26-Aug-2021 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP175267 EASEMENTS in Schedule of Easements
SP175267 FENCING PROVISION in Schedule of Easements
SP171848 FENCING PROVISION in Schedule of Easements
E270965 MORTGAGE to Commonwealth Bank of Australia
Registered 26-Aug-2021 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

We are satisfied that the plan accurately represents the property we agreed to purchase, and that all the measurements and location are correct, and that all improvements erected are within the boundaries, and we do not require a check survey

Signed:	
Signed:	*

Page 1 of 1

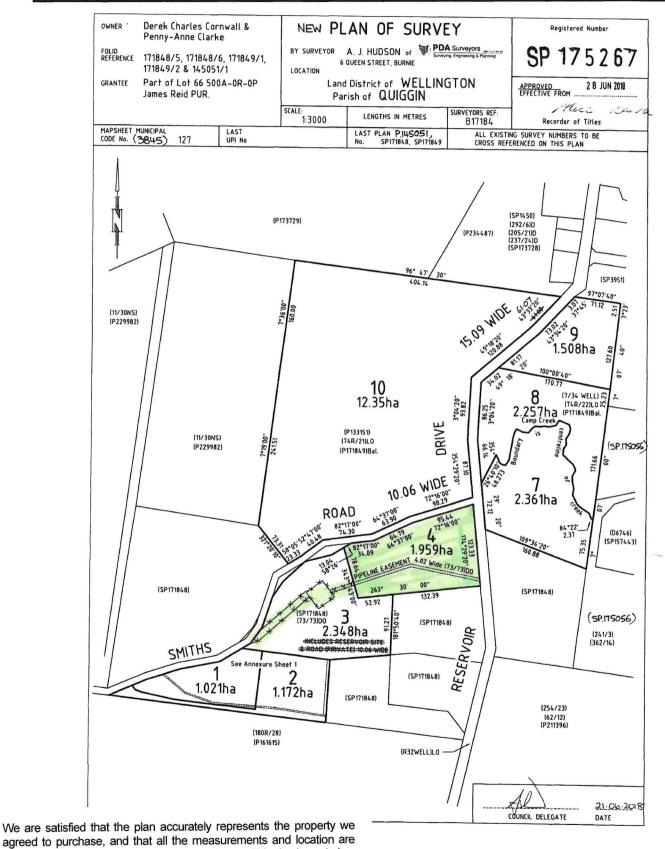


FOLIO PLAN

RECORDER OF TITLES



Issued Pursuant to the Land Titles Act 1980



Signed: ...*

Signed: ...*

correct, and that all improvements erected are within the boundaries,

and we do not require a check survey

Area according to Carcil is 1-959 har

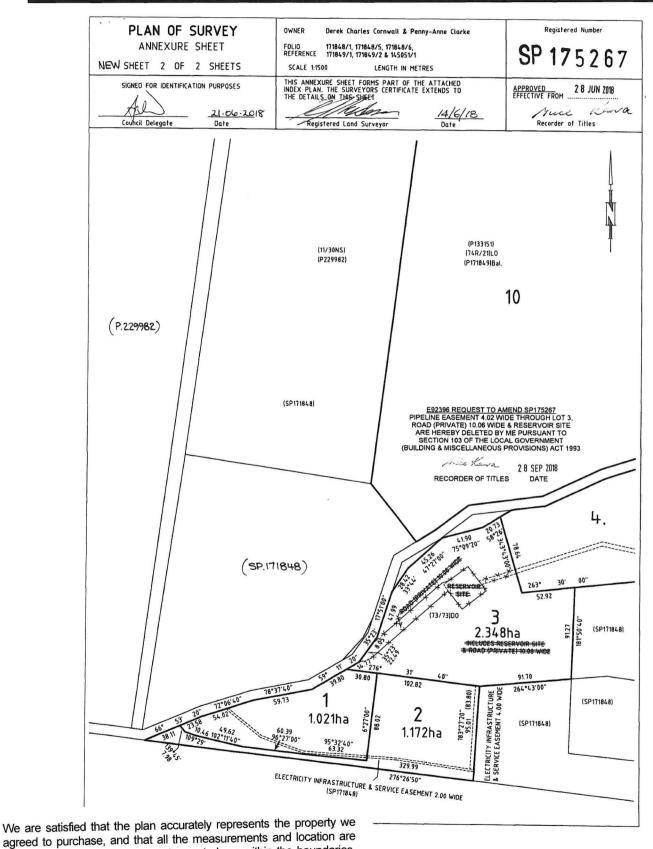


FOLIO PLAN

RECORDER OF TITLES



Issued Pursuant to the Land Titles Act 1980



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Signed:

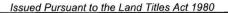
...

5267 Revision Number: 06

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RECORDER OF TITLES





SCHEDULE OF EASEMENTS

NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED.

SIGNATURES MUST BE ATTESTED.

Registered Number

SP 175267

PAGE 1 OF 4 PAGES

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

- (1) such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
- (2) any easements or profits a prendre described hereunder.

Each lot on the plan is subject to:-

- (1) such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
- (2) any easements or profits a prendre described hereunder.

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

EASEMENTS

Electricity Infrastructure and Service Easement

Lots 1 and 2 on the Plan are each subject to an Electricity Infrastructure and Service Easement (as defined herein) (appurtenant to Lot 7 on SP171848) as shown on the plan marked "Electricity Infrastructure and Service Easement 2.00 Wide".

Lot 1 on the Plan is together with an Electricity Infrastructure and Service Easement (as defined herein) as shown passing through Lot 2 on the plan marked "Electricity Infrastructure and Service Easement 2.00 Wide".

Lot 3 on the Plan is together with an Electricity Infrastructure and Service Easement (as defined herein) as shown passing through Lot 2 on the plan marked "Electricity Infrastructure and Service Easement 4.00 Wide".

Lot 2 on the Plan is subject to an Electricity Infrastructure and Service Easement (as defined herein) (appurtenant to Lot 1 on the Plan) as shown on the plan marked "Electricity Infrastructure and Service Easement 2.00 Wide".

SUBDIVIDER: DEREK CHARLES CORNWALL & PENNY-ANNE CLARKE
FOLIO REF: CT 171848/6, CT 171848/5, 171849/1 & 2 and 145051/1
SOLICITOR: Greg Smith & Co
REF: GS/pc18116

NOTE: The Council Delegate must sign the Certificate for the purposes of identification.

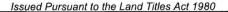
We are satisfied that the plan accurately represents the property we
agreed to purchase, and that all the measurements and location are
correct, and that all improvements erected are within the boundaries,
and we do not require a check survey

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RECORDER OF TITLES





ANNEXURE TO SCHEDULE OF EASEMENTS

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Registered Number

SP 175267

SUBDIVIDER: DEREK CHARLES CORNWALL AND PENNY-ANNE CLARKE FOLIO REFERENCE: CT 171848/6, CT 171848/5, 171849/1 & 2 and 145051/1

PAGE 2 OF 4 PAGES

Lot 2 on the Plan is subject to an Electricity Infrastructure and Service Easement (as defined herein) (appurtenant to Lot 3 on the Plan) as shown on the plan marked "Electricity Infrastructure and Service Easement 4.00 Wide".

Pipeline Easement

Lots \$\overline{p}\$ and 4 on the Plan are subject to a right to lay waterpipes and to convey water and to pass and repass (for the Wynyard Council) over the Pipeline Easement 4.02 wide on the plan and as created by and more fully set forth in 34/2499.

Lot 3 and 4 on the Plan are subject to a Pipeline right (for the Wynyard Council) over the Pipeline Easement 4.02 wide on the plan and as created by and more fully set forth in 34/2499.

Right of Carriageway

Lot 10 on the Plan is together with a Right of Carriageway over the Road (Private) 10.06 Wide and the Reservoir Site as shown on Lot 3 on the Plan and more fully set forth in P145051 (73/73 DO).

Lot 3 on the Plan is subject to a Right of Carriageway (appurtenant to Lot 10 on the Plan) over the Road (Private) 10.06 Wide and the Reservoir site as show on Lot 3 on the Plan and more fully set forth in -P145051 (73/73 DO):

Definition:

Electricity Infrastructure and Services Easement means:

FIRSTLY the full and free right and liberty for Tasmanian Networks Pty Ltd ABN 24 167 357 299 ("TasNetworks) and its successors and its and their servants agents and contractors at all times hereafter to

a) clear the lands marked "Electricity Infrastructure and Services Easement 2.00 Wide" (hereinafter called "servient land") and to lay, erect, construct, install and operate, in, upon, over, along and under the servient land towers, poles, wires, cables, apparatus, appliances and other ancillary and other ancillary work (hereinafter collectively called "electricity infrastructure") for the transmission of electrical energy and for purposes incidental thereto.

b) inspect, maintain, repair, modify, add to, replace and remove the electricity infrastructure.

Signed by Derek Charles Cornwall
and Penny-Anne Clarke the registered
proprietor of the land in CT 171848/6,
CT 171848/5, CT 171849/1, CT171849/2
and CT 145051/1 in the
presence of:

Penny-Anne Clarke

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

We are satisfied that the plan accurately represents the property we agreed to purchase, and that all the measurements and location are correct, and that all improvements erected are within the boundaries, and we do not require a check survey

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Signed: **

www.thelist.tas.gov.au

oad (private) 10.06 wide and Reservoir Site and portion of Pipeline Easement 4.02	ide over Lot 3 hereon deleted by me pursuant to Request to Amend No. E92396	ade under Section 103 of the Local Government (Building & Miscellancous	
on of Pipelin	quest to Am	(Building &	
Site and porti	ursuant to Re	Government	
Reservoir	by me p	he Local	
vide and	on deleted	103 of t	
) 10.06 v	t 3 hereo	Section	ct 1993
(private	over Lo	under	rovisions) Act 1993
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RECORDER OF TITLES





ANNEXURE TO SCHEDULE OF EASEMENTS

PAGE 3 OF 4 PAGES

Registered Number

SP 175267

SUBDIVIDER: DEREK CHARLES CORNWALL AND PENNY-ANNE CLARKE FOLIO REFERENCE: CT 171848/6, CT 171848/5, 171849/1 & 2 and 145051/1

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- c) cause or permit electrical energy to flow or be transmitted or distributed through the electricity infrastructure.
- d) cut away, remove and keep clear of the electricity infrastructure all trees and other obstructions or erections of any nature whatsoever which may at any time overhand, encroach upon or be in or on the servient land and which may in the opinion of TasNetworks or its successors endanger or interfere with the proper operation of the electricity infrastructure.
- e) enter into and upon the servient land for all or any of the above purposes with or without all necessary plant equipment and machinery and other mean of transporting the same and if necessary to cross the remainder of the land in consultation with the registered proprietors for the purposes of access and regress to and from the servient land.

SECONDLY the benefit of a covenant for TasNetworks and its successors with the registered proprietors for themselves and their successors in title not to erect any buildings or place any structures or objects within the servient land without the prior written consent of TasNetworks or its successors to the intent that the burden of the covenant may run with and bind the servient land and every part thereof and that the benefit thereof may be annexed to the easement hereinbefore described.

THIRDLY the full and free right of the registered proprietor of Lot 7 and their servients agents and contractors at all times hereafter to:

- a) break the surface of, dig, open up and use the servient land;
- construct, lay under the surface of the servient land and use ducts, pipes, conductors, cables wires and other works;
- c) construct, lay on or above the surface of the servient land and use incidental or ancillary works for the transmission of an electronic communications service, including manholes and cable markers; and
- d) inspect, take up, maintain, repair, alter, remove, relay or replace works referred to in paragraphs a),
 b) or c)

Signed by Derek Charles Comwall)	
and Penny-Anne Clarke the registered)	Derek Charles Cornwall
proprietor of the land in CT 171848/\$,)	
CT 171848/5, CT 171849/1/2T) (7/1849/2,)	\mathcal{M}
and CT 145051/1 in the)	4./
presence of:) .	Penny-Anne Clarke

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

We are satisfied that the plan accurately represents the property we agreed to purchase, and that all the measurements and location are correct, and that all improvements erected are within the boundaries, and we do not require a check survey

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Signed:	4
Signed:	4



RECORDER OF TITLES





ANNEXURE TO SCHEDULE OF EASEMENTS

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Registered Number

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SUBDIVIDER: DEREK CHARLES CORNWALL AND PENNY-ANNE CLARKE FOLIO REFERENCE: CT 171848/6, CT 171848/5, 171849/1 & 2 and 145051/1

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for the purpose of supplying or conveying an electronic communications service and to enter on and pass along or over the servient land (with or without a vehicle or equipment) to do so.

Fencing Provision

In respect to the Lots 1 to 4 and Lots 7 to 10 (inclusive) on the plan, the Vendor Derek Charles Cornwall and Penny-Anne Clarke shall not be required to fence.

Signed by Derek Charles Cornwall)	
and Penny-Anne Clarke the registered)	Derek Charles Cornwall
proprietor of the land in CT 171848/6,)	· ~ /
CT 171848/5, CT 171849/1, CT171849/2)	1//
and CT 145051/1 in the)	
presence of:)	Penny-Anne Clarke
//// 1		,

Gregory Stephen Smith 124 Goldie Street, Wynyard Solicitor

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Signed:	4
Signed:	Y



Geoton Pty Ltd ABN 81 129 764 629 PO Box 522 Prospect TAS 7250 Unit 24, 16-18 Goodman Court Invermay TAS 7248 Tel (+61) (3) 6326 5001 www.geoton.com.au

15 March 2024

Reference No. GL24029Ab

Mr Brett and Mrs Lyndal Perry PO Box 394 WYNYARD TAS 7325

Dear Sir and Madam

RE: Site Classification & On-site Wastewater Disposal Assessment and Design 276 Reservoir Drive, Wynyard

We have pleasure in submitting herein our report detailing the results of the geotechnical investigation conducted at the above site.

Should you require clarification of any aspect of this report, please contact Michael Goss on 03 6326 5001.

For and on behalf of

Geoton Pty Ltd

Tony Barriera

Director – Principal Geotechnical Engineer

Rev No.	Date	Written By	Reviewed By	Description
Ab	15/03/2024	Michael Goss	M. Banks	Original

1 INTRODUCTION

A limited scope investigation has been conducted for Mr Brett and Mrs Lyndal Perry at the site of a proposed residential development at 276 Reservoir Drive, Wynyard.

The investigation has been conducted to assess the following:

- The general subsurface conditions at the site and consequently assign a Site Classification in accordance with AS 2870 – 2011 "Residential Slabs and Footings";
- Review the topographical setting and provide a Wind Classification in accordance with AS 4055 – 2021 "Wind Loads for Housing"; and
- The suitability of the site for disposal of domestic wastewater and the design of an on-site wastewater disposal system in accordance with AS/NZS 1547:2012 "On-site Domestic Wastewater Management".

Plans of the proposed development were provided, prepared by Rosene Cox Building Design & Drafting. Project No. 2324-19, page No. s A01 and A02, dated 07.02.24.

We understand that the proposed development will comprise an extension to the existing shed and the construction of a two-bedroom equivalent dwelling. Further we understand that the existing shed will be converted to a storage space and will no longer be habitable though it is noted that a lavatory will be maintained within the shed.

2 FIELD INVESTIGATION

The field investigation was conducted on 15 February 2024 and involved the drilling of 3 boreholes by hand auger to the refusal depths of 0.4m to 0.9m.

Insitu vane shear strength tests were conducted in the clay layers encountered in the investigation, with samples of these soils being obtained for subsequent laboratory testing.

The results of the field and laboratory tests are shown on the borehole logs.

The logs of the boreholes are included in Appendix A and their locations are shown in Figure 1 attached.

3 SITE CONDITIONS

The development area is generally level and contains an existing shed and gravel driveway with a low patchy cover of grass. The wider site falls steeply away from the development area at approximately 22° to 24° towards the south, and 26° to 28° towards the north and east. Site vegetation comprises a dense cover of trees and scrub.

Site photographs are attached as Plates 1 & 2.

The MRT Digital Geological Atlas, 1: 25,000 Series, indicates that the site is mapped as Pennsylvanian period sedimentary rocks, with this being generally confirmed by our field investigation.

Examination of the LIST Landslide Planning Map – Landslide Hazard Bands Overlay indicates that portions of the site are within mapped low to medium risk landslide hazard bands.

The investigation indicated that the soil profile varies over the site. Boreholes BH1 and BH2 encountered fill comprising clayey silt/silty clay to the depths of 0.2m to 0.6m, underlain by sandy clay to the investigated/refusal depths of 0.8m to 0.9m. Borehole BH3 encountered sandy clay to the refusal depth of 0.4m.

Auger refusal in the boreholes was inferred to be on highly weathered rock.

The boreholes did not encounter any signs of groundwater seepage over the investigated depths.

Full details of soil conditions encountered are presented on the borehole logs.

4 SITE CLASSIFICATION

After allowing due consideration of the site geology, drainage and soil conditions, and the presence of fill to depths greater than 0.4m, the site has been classified as follows:

CLASS P (AS 2870)

However, if all footings are founded through the fill to found uniformly on the natural sandy clay, footings may be proportioned to a **CLASS M**.

Foundation designs in accordance with this classification are to be subject to the overriding conditions of the Foundations section below.

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

5 FOUNDATIONS

Particular attention should be paid to the design of footings as required by AS 2870 – 2011.

In addition to normal founding requirements arising from the above classification, particular conditions at this site dictate that the founding medium for all footings would be as follows:

Sandy CLAY (CI) - medium plasticity, brown

encountered beneath the fill and topsoil below 0.2m (BH1) and 0.6m (BH2) from the existing ground surface

An allowable bearing pressure of **100kPa** is available for edge beams, strips, pads and bored piers founded as above.

No structure should be founded on fill without the footings extending through the fill to the natural soils.

The site classification presented assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site

development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.

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

Although the borehole data provides an indication of subsurface conditions at the site, variations in soil conditions may occur in areas of the site not specifically covered by the field investigation. The base of all footing or beam excavations should therefore be inspected to ensure that the founding medium meets the requirements referenced herein with respect to type and strength of founding material.

The boreholes were backfilled shortly after being drilled, not allowing time for groundwater seepage flows to develop. Groundwater seepages or higher groundwater levels can occur during and/or after a prolonged period of wet weather or a heavy rainfall event.

6 PLUMBING

Classification for foundations was **Class P** due to the presence of uncontrolled fill. However, the encountered fill was stiff and provided there is no loading around the plumbing pipework, the plumbing can be installed proportioned to **Class M**.

If during plumbing trench excavations, soft or loose ground is encountered, it is recommended the plumbing trenches be excavated to natural ground and backfilled with granular material to the invert level of the pipework.

7 WIND CLASSIFICATION

After allowing due consideration of the region, terrain, shielding and topography, the site has been classified as follows:

WIND CLASSIFICATION N3 (AS 4055)

REGION	TERRAIN CATEGORY	SHIELDING	TOPOGRAPHY		
Α	TC2	NS	T1		

8 EFFLUENT DISPOSAL

The AS/NZS 1547:2012 and *Building Act 2016:* Director's Guidelines for On-site Wastewater Management Systems provide guidelines for typical wastewater flow allowances under a range of circumstances. The documents recommend a typical wastewater flow of 120L/person/day for households on tank water. As the proposed development is to be a two-bedroom equivalent dwelling (with one-bedroom and an office), a population equivalent of 4 persons has been adopted and a wastewater design flow rate of **480L/day** has been adopted.

8.1 Permeability of Soil and Soil Category

The soil has been classified as follows:

- Texture Medium to Heavy Clay (Table E1 from AS/NZS 1547);
- Structure Moderately Structured (Table E4 from AS/NZS 1547); and
- Category 6 (Table E1 from AS/NZS 1547).

For moderately structured Category 6 soils the indicative K_{sat} from AS/NZS1547 Table 5.1 is <0.06m/day.

Adopted Permeability – 0.02m/day.

8.2 Disposal and Treatment Method

The soils within the proposed effluent disposal area are assessed as having sufficient depth and clay content to provide an adequate attenuation period for the breakdown of pathogens within the treated effluent.

Due to the soils being assessed as Category 6 soils that have a very low permeability, the site is not suitable for a conventional trench or bed system. Also, the site has limited available area for the disposal of on-site wastewater due to the steep slopes and required setbacks.

As such, the site assessment indicates that the site is suitable for the disposal of domestic effluent by way of an Aerated Wastewater Treatment System (AWTS) and a conventional distribution bed raised above the natural ground surface to allow the aerobic process and attenuation period to further treat the effluent in a sand and gravel filter bed and reduce the size of the disposal system.

8.3 Tank Installation

Should the site be subject to high groundwater levels, care **must** be taken when installing the AWTS unit. 'AS/NZS 1546:2008 3.2.2 Anchorage' and the specific AWTS unit manufacturer's installation instructions should be adhered to.

8.4 Design Loading Rate

According to AS/NZS 1547 Table L1 and based on the importation of 350mm depth of clean sand and 100mm aggregate to raise the distribution bed above the natural surface, the adopted DLR has been modified and set at **10mm/day**.

8.5 Absorption Bed System

Guidelines for the design of the conventional bed systems are outlined in AS/NZS 1547:2012 Appendix L. The method of determining the dimensions for the bed is outlined in AS/NZS 1547:2012 Section L4 and is as follows:

$$L = Q$$

$$DLR \times W$$

Where L = Length in metres

Q = Design daily flow in L/day

DLR = Design Loading Rate in mm/day

W = Bed width in metres

As the DLR has been set at 10mm/day and the daily flow (Q) has been set at 480L/day, when the parameters are inserted in the above equation the bed dimensions required are as follows:

- Bed length = 9.6m
- Bed width = 5.0m
- Bed depth = 0.6m

This would give a disposal area of approximately 48m².

There is adequate secondary (back-up) area of 48m².

The raised bed is to be located in the area shown on the site plan (Figure 2).

The bed is to be constructed as per the layout and cross section provided on Figure 3 attached.

The raised bed is to be constructed by persons suitably qualified or experienced in the construction of timber retaining walls.

All topsoil and organic matter are to be removed from the footprint of the raised bed prior to backfilling.

Guidelines for the design of sub-surface irrigation are outlined in AS/NZS 1547 Appendix M.

The area of the disposal field shall be vegetated with grasses or other suitable vegetation. A list of Tasmanian plants suitable for treated wastewater from AWTS units is attached as Appendix B.

The risk management process is an inherent part of the on-site wastewater disposal design. The on-site wastewater disposal system has been designed by considering the site characteristics and with risk identification in accordance with AS1547:2012. The risk reduction measures are detailed in the report and form the basis of the system selection and design.

As part of the Building Act, the client must specify the AWTS model and provide the Certificate of Accreditation for that particular model before the proposed

development gets approval. A list of accredited AWTS models can be found on the Tasmanian Consumer, Building and Occupational Services website.

https://www.cbos.tas.gov.au/topics/technical-regulation/plumbing-standards/wastewater/aerated-wastewater-treatment-systems

8.6 Setbacks

The minimum separation distances between the disposal area and downslope features are based on Appendix R from AS/NZS 1547 "Recommended Setback Distances for Land Application Systems" and Section 3.1 from the *Building Act 2016:* Director's Guidelines for On-site Wastewater Management Systems. The following minimum setbacks are required:

- 15m from downslope sensitive features such as watercourses;
- 1.5m from property boundaries;
- 3.0m from buildings; and
- 3.0m from downslope cut and fill batters.

8.7 Wastewater Recommendations

It is recommended that the following actions are undertaken in looking after your system:

- Minimise domestic water use;
- Minimise the use of non-biodegradable detergents;
- Minimise the use of detergents containing phosphorous (e.g. Calgon or similar);
- Avoid discharging polluting chemicals into wastewater systems; and
- Monitor quality of groundwater.

9 REFERENCES

- Department of Justice. (2017). Building Act 2016 Director's Guidelines for On-site Wastewater Management Systems v2.0. Consumer, Building and Occupational Services.
- Standards Australia Limited. (2011). AS 2870: Residential Slabs and Footings Construction. Sydney: SAI Global Limited.
- Standards Australia Limited. (2012). *AS/NZS 1547 On-site Domestic Wastewater Management*. Sydney: SAI Global Limited.
- Standards Australia Limited. (2017). *AS 1726: Geotechnical Site Investigation*. Sydney: SAI Global Limited.
- Standards Australia Limited. (2021). AS 4055: Wind Loads for Housing. Sydney: SAI Global Limited.

Attachments:

Limitations of report

Figure 1 – Locality Plan

Figure 2 - Site Plan

Figure 3 – Conventional Bed Plan and Section

Site Photographs

Appendix A: Borehole Logs & Explanation Sheets

Appendix B: List of AWTS Example Plants

Appendix C: Certificate Forms



Geotechnical Consultants - Limitations of report

These notes have been prepared to assist in the interpretation and understanding of the limitations of this report.

Project specific criteria

The report has been developed on the basis of unique project specific requirements as understood by Geoton and applies only to the site investigated. Project criteria are typically identified in the Client brief and the associated proposal prepared by Geoton and may include risk factors arising from limitations on scope imposed by the Client. The report should not be used without further consultation if significant changes to the project occur. No responsibility for problems that might occur due to changed factors will be accepted without consultation.

Subsurface variations with time

Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. In the event of significant delays in the commencement of a project, further advice should be sought.

Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and at the time they are taken. All available data is interpreted by professionals to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, as it is virtually impossible to provide a definitive subsurface profile which includes all the possible variabilities inherent in soil and rock masses.

Report Recommendations

The report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete and therefore the report recommendations can only be regarded as preliminary. Where variations in conditions are encountered, further advice should be sought.

Specific purposes

This report should not be applied to any project other than that originally specified at the time the report was issued.

Interpretation by others

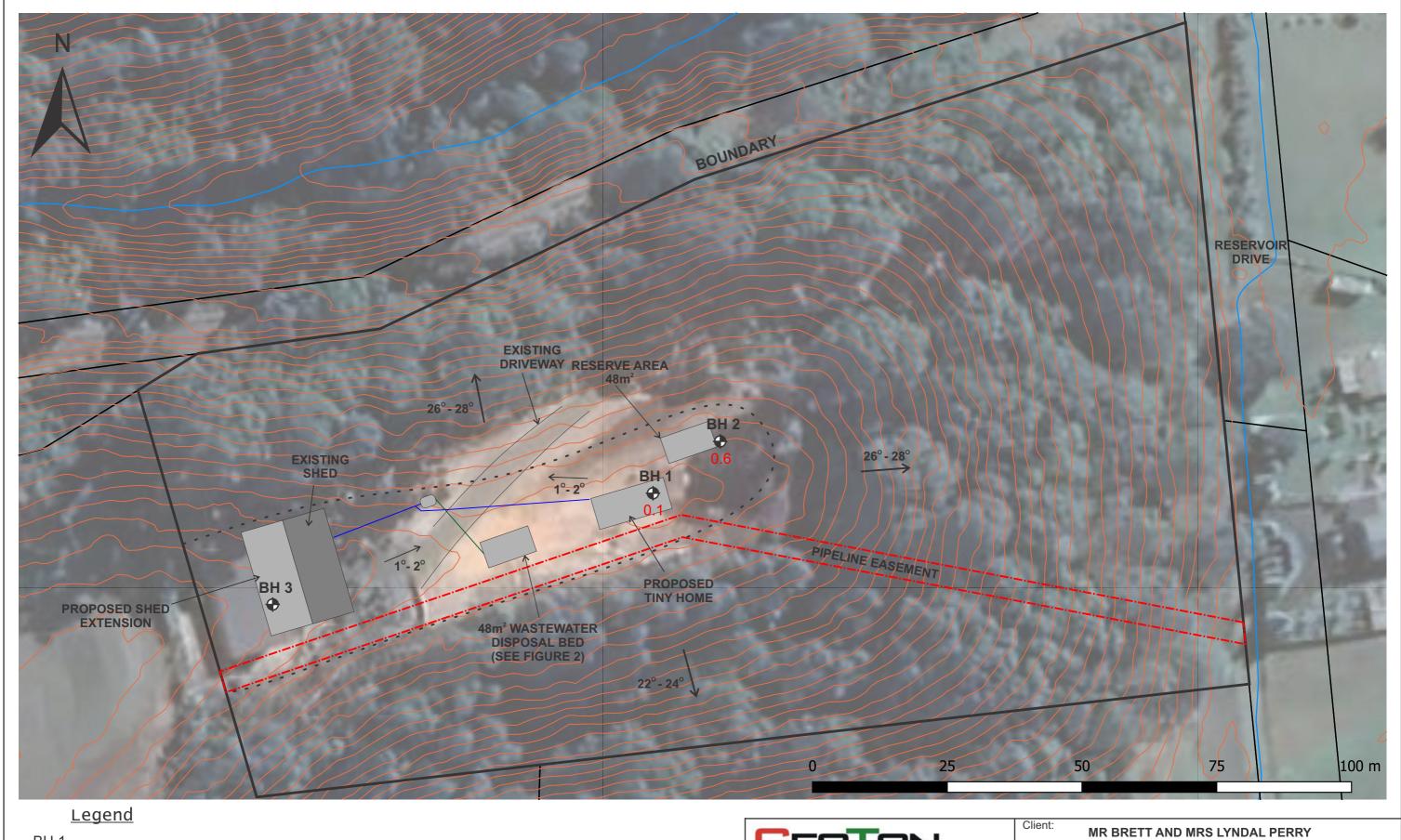
Geoton will not be responsible for interpretations of site data or the report findings by others involved in the design and construction process. Where any confusion exists, clarification should be sought from Geoton.

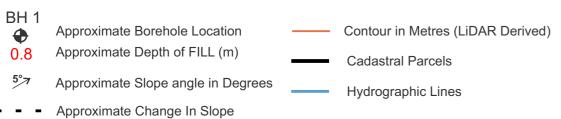
Report integrity

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

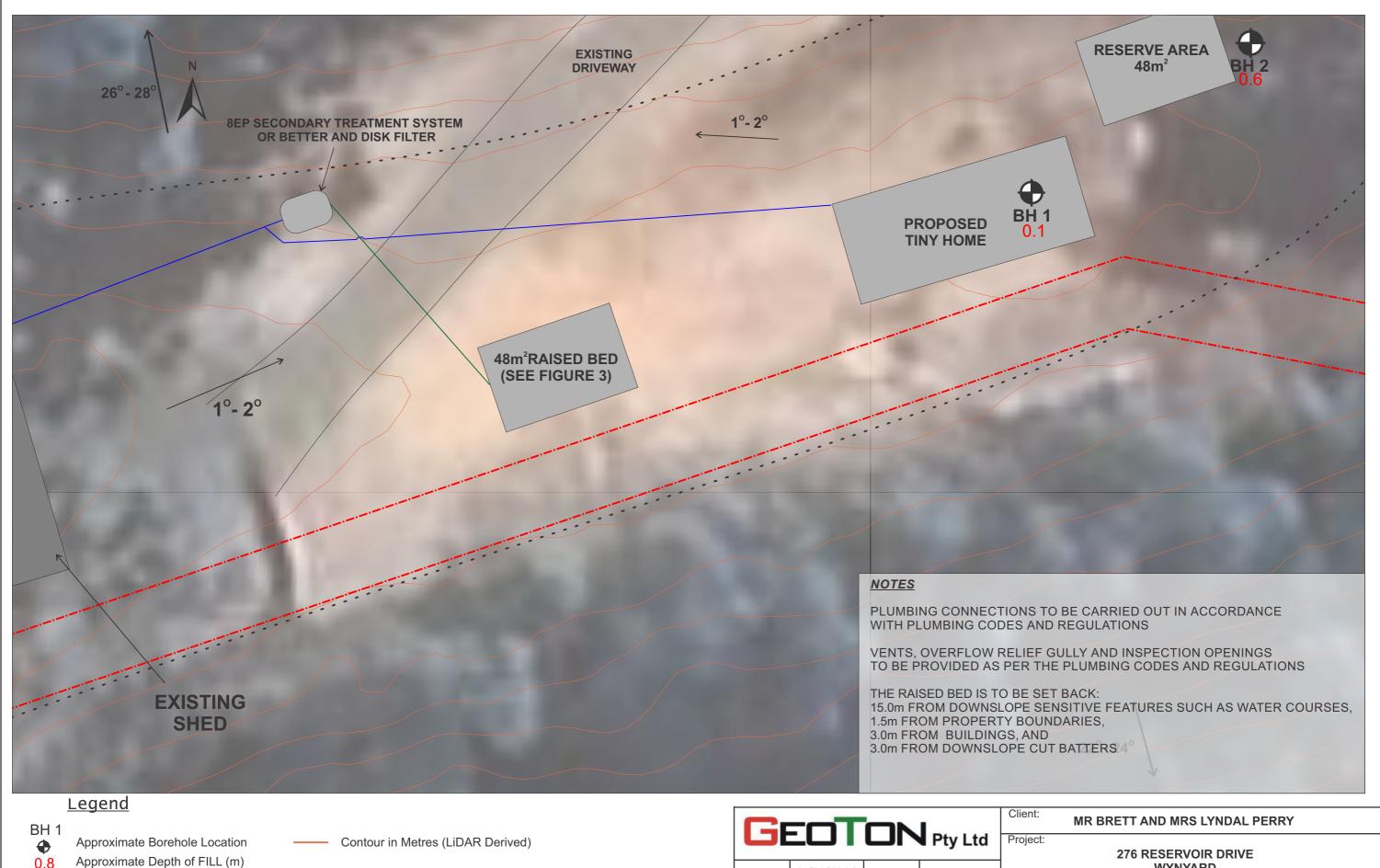
Geoenvironmental issues

This report does not cover issues of site contamination unless specifically required to do so by the client. In the absence of such a request, Geoton take no responsibility for such issues.





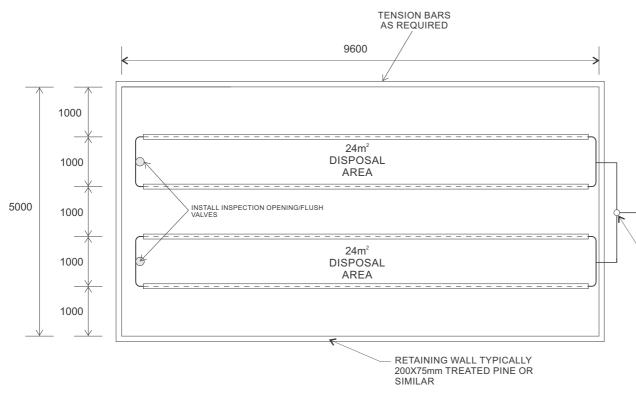
G	EOT		Pty Ltd	Client: MR BRETT AND MRS LYNDAL PERRY Project: 276 RESERVOIR DRIVE			
Date	Date 15/03/2024 Drawn MG						
Scale	As Shown	Approved	ТВ	Title:	LOCALITY PL	AN	
Original size	A3	Rev		Project no:	GL24029A	Figure no.	1



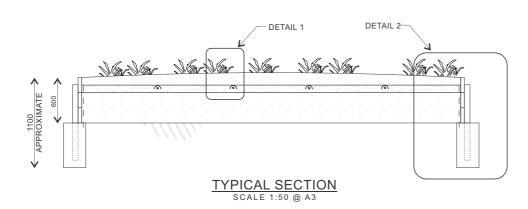
Approximate Slope angle in Degrees Approximate Change In Slope

8.0

276 RESERVOIR DRIVE WYNYARD 15/03/2024 Drawn MG Date Title: Approved TB **SITE PLAN** Scale 1:200 Project no: Original Figure no. 2 Rev GL24029A **A3**

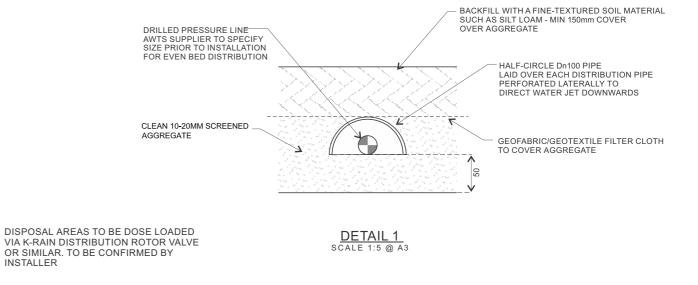


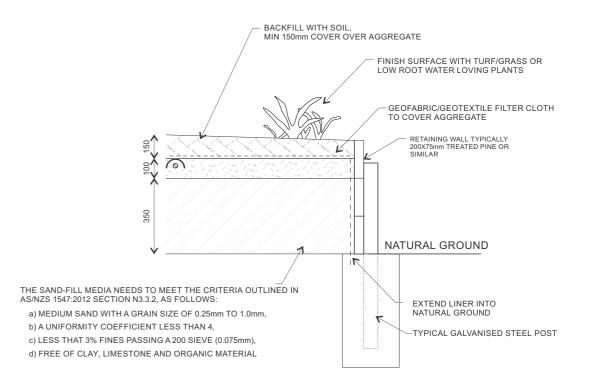
<u>PLAN</u> SCALE 1:75 @ A3



CONSTRUCTION NOTES:

- a) Pine sleepers to be a minimum 75mm and a minimum rating of H4.
- b) Posts are recommended to be anchored a minimum ratio of 1:1 height to depth cemented into natural ground.
- c) Maximum height of timber retaining wall should not exceed 1m.
- d) Posts are recommended to be of steel construction or 75mm treated pine sleeper.
- e) Posts are to be installed on the outside of bed.
- f) Maximum post spacing is to be no more than 2400mm.
- g) Polyethylene Lining LDPE 200um.
- h) Polyethylene liner to be extended into natural ground by a minimum 200mm prior to backfilling.
- i) Timber sleepers to be treated with a bitumen waterproofing on the exterior if backfilled around.
- j) Bed distribution lines MUST enter the beds from the top (pipe work to be attached to the exterior of bed).
- k) Organic matter MUST be removed from base of bed prior to backfilling.
- I) Base of the bed is to be scarified and had gypsum applied at a rate of 1kg/m^2





INSTALLER

DETAIL 2 SCALE 1:20 @ A3

GE	ΞΟΤ		Pty Ltd	client: MR BRETT AND MRS LYNDAL PERRY project:				
date					276 RESERVOIR DRIVE WYNYARD			
scale	As Shown	approved	ТВ	title:	RAISED BED PLAN A	ND SECTION		
original size	А3	rev		project no:	GL24029A	figure no. 3		

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PLATE 1 - View of the existing shed looking to the west



PLATE 2 - View of the proposed tiny house footprint looking to the east

	-OT		p	client: MR BRETT AND MRS LYNDAL PERRY				
LEDION Pty Ltd				project: 276 RESERVOIR DRIVE				
title: PHOTOGRAPH				WYNYARI	D			
date:	15/02/2024	original size	A4	project no:	GL24029A	figure no. PLATES 1 & 2		

Appendix A

Borehole Logs



ENGINEERING BOREHOLE LOG

Borehole no.

Sheet no.

BH1

1 of 1

Job no. GL24029A

Geotechnical Consultants

PO Box 522 Prospect TAS 7250

Unit 24, 16-18 Goodman Court, Invermay TAS

Tel (03) 6326 5001

		nt:		10 30	Mr Brett a	and Mrs	Lvn	dal P	errv			Date: 15/02/2024
		ect							-site Wastewater Disposal Assessme		Logged By: MG	
	-	ıtio				76 Reservoir Drive, Wynyard						
			del		Hand Aug				Easting: Slope: 90°			RL Surface :
Н	ole	dia	ame	ter:	55mm				orthing: Bearing: -			Datum :
Method	Support		Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
									FILL - Sandy CLAY, low plasticity, pale orange/pale brown	D	VSt/ H	FILL/DISTURBED
HA	z					0.25		CI	Sandy CLAY - medium plasticity, brown, trace fine sub-angular gravel	D/M	VSt/ H	NATURAL - - -
		-			D	0.50						V > 140 kPa / Refusal
						0.75						V > 140 kPa
						1.00			Borehole BH1 refusal @ 0.9m on inferred highly weathered rock			-
						1.25						=
						1.50						-
						1.75						-
						2.00 - - - 2.25						-



ENGINEERING BOREHOLE LOG

Borehole no.

BH2

Geotechnical Consultants

PO Box 522 Prospect TAS 7250

Sheet no. 1 of 1 Unit 24, 16-18 Goodman Court, Invermay TAS Job no. GL24029A Tel (03) 6326 5001 Client : Mr Brett and Mrs Lyndal Perry Date: 15/02/2024

	ieni			wir breit a		-						Date: 15/02/2024
	oje				Classification and On-site Wastewater Disposal Assessment						Logged By: MG	
		ation : 276 Reservoir Drive, Wynyard										
Dr	ill n	nodel	:	Hand Au	ger		E	asting: Slo	pe: 90°			RL Surface :
Н	ole o	diame	eter :	55mm			Ν	orthing: Bear	ing: -			Datum :
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Descriptio		Σ	Consistency density, index	Structure, additional observations
НА	Z				0.25		СІ	FILL - Clayey SILT/Silty CLA plasticity, dark brown/black m brown Sandy CLAY - medium plasti brown, trace fine sub-angular	city, r gravel			FILL/DISTURBED - NATURAL W < PL -
					1.25			Borehole BH2 refusal @ 0.8r inferred highly weathered roo				-
					2.25							



ENGINEERING BOREHOLE LOG

Borehole no.

Sheet no.

BH3

1 of 1

Job no. GL24029A

Geotechnical Consultants

PO Box 522 Prospect TAS 7250

Unit 24, 16-18 Goodman Court, Invermay TAS

Tel (03) 6326 5001

Τe	Tel (03) 6326 5001										
Client: Mr Brett and Mrs					and Mrs	Lyn	dal P	erry			Date: 15/02/2024
-				sificatio	on and On-site Wastewater Disposal Assessment Logged By: MG			Logged By: MG			
	Location: 276 Reservoir Dri					rive,	Wyn				
Drill model: Hand Auger				E	Easting: Slope: 90 ^o			RL Surface :			
Н	ole d	diamet	er:	55mm			N	orthing: Bearing: -		Datum :	
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol		Σ	Consistency density, index	Structure, additional observations
НА	Z				- - 0.25		С	Sandy CLAY - medium plasticity, brown, trace fine sub-angular gravel	D/M	VSt	NATURAL W < PL
					0.50			Borehole BH3 refusal @ 0.4m on inferred highly weathered rock			V = refusal
					0.75						-
					1.00 - -						-
					1.25						-
					1.50						-
					1.75 - -						-
					2.00						-
II					2.25						-



Investigation Log Explanation Sheet

METHOD - BOREHOLE

TERM	Description
AS	Auger Screwing*
AD	Auger Drilling*
RR	Roller / Tricone
W	Washbore
CT	Cable Tool
HA	Hand Auger
DT	Diatube
В	Blank Bit
V	V Bit
Т	TC Bit

^{*} Bit shown by suffix e.g. ADT

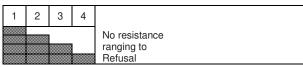
METHOD - EXCAVATION

TERM	Description		
N	Natural exposure		
X	Existing excavation		
Н	Backhoe bucket		
В	Bulldozer blade		
R	Ripper		
E	Excavator		

SUPPORT

TERM	Description
М	Mud
N	Nil
С	Casing
S	Shoring

PENETRATION



WATER

Symbol	Description
—	Water inflow
-	Water outflow
	17/3/08 water on date shown

NOTES, SAMPLES, TESTS

TERM	Description
U ₅₀	Undisturbed sample 50 mm diameter
U ₆₃	Undisturbed sample 63 mm diameter
D	Disturbed sample
N	Standard Penetration Test (SPT)
N*	SPT – sample recovered
N _C	SPT with solid cone
V	Vane Shear
PP	Pocket Penetrometer
Р	Pressumeter
Bs	Bulk sample
E	Environmental Sample
R	Refusal
DCP	Dynamic Cone Penetrometer (blows/100mm)
PL	Plastic Limit
LL	Liquid Limit
LS	Linear Shrinkage

CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

Based on AS 1726:2017

MOISTURE

TERM	Description
D	Dry
М	Moist
W	Wet

CONSISTENCY/DENSITY INDEX

TERM	Description
VS	very soft
S	soft
F	firm
St	stiff
VSt	very stiff
Н	hard
Fr	friable
VL	very loose
L	loose
MD	medium dense
D	dense
VD	Very dense



Soil Description Explanation Sheet (1 of 2)

DEFINITION

In engineering terms, soil includes every type of uncemented or partially cemented inorganic or organic material found in the ground. In practice, if the material can be remoulded or disintegrated by hand in its field condition or in water it is described as a soil. Other materials are described using rock description terms.

CLASSIFICATION SYMBOL AND SOIL NAME

Soils are described in accordance with the AS 1726: 2017 as shown in the table on Sheet 2.

PARTICLE SIZE DEFINITIONS

NAME	SUBDIVISION	SIZE (mm)	
BOULDERS		>200	
COBBLES		63 to 200	
	Coarse	19 to 63	
GRAVEL	Medium	6.7 to 19	
	Fine	2.36 to 6.7	
	Coarse	0.6 to 2.36	
SAND	Medium	0.21 to 0.6	
	Fine	0.075 to 0.21	
SILT		0.002 to 0.075	
CLAY		<0.002	

MOISTURE CONDITION

Coarse Grained Soils

Dry Non-cohesive and free running.

Moist Soil feels cool, darkened in colour.

Soil tends to stick together.

Wet As for moist but with free water forming when

handling.

Fine Grained Soils

Moist, dry of Plastic Limited - w < PL

Hard and friable or powdery.

Moist, near Plastic Limit - w ≈ PL

Soils can be moulded at a moisture content approximately equal to the plastic limit.

Moist, wet of Plastic Limit - w > PL

Soils usually weakened and free water forms on hands when handling.

Wet, near Liquid Limit - w ≈ LL Wet, wet of Liquid Limit - w > LL

CONSISTENCY TERMS FOR COHESIVE SOILS

TERM	UNDRAINED STRENGTH s _u (kPa)	FIELD GUIDE		
Very Soft	≤12	Exudes between the fingers when squeezed in hand		
Soft	12 to 25	Can be moulded by light finger pressure		
Firm	25 to 50	Can be moulded by strong finger pressure		
Stiff	50 to 100	Cannot be moulded by fingers		
Very Stiff	100 to 200	Can be indented by thumb nail		
Hard	>200	Can be indented with difficulty by thumb nail		
Friable	_	Can be easily crumbled or broken into small pieces by hand		

RELATIVE DENSITY OF NON-COHESIVE SOILS

TERM	DENSITY INDEX (%)	
Very Loose	≤15	
Loose	15 to 35	
Medium Dense	35 to 65	
Dense	65 to 85	
Very Dense	> 85	

DESCRIPTIVE TERMS FOR ACCESSORY SOIL COMPONENTS

ATION F ONENT	GR	COARSE RAINED SOILS	IN FINE GRAINED SOILS	TERM
DESIGNATION OF COMPONENT	% Fines	% Accessory coarse fraction	% Sand/ gravel	
Minor	≤5	≤15	≤15	Trace
Minor	>5, ≤12	>15, ≤30	>15, ≤30	With
Secondary	>12	>30	>30	Prefix

SOIL STRUCTURE

ZONING		CEMENTING		
Layer	Continuous across the exposure or sample.	Weakly cemented	Easily disaggregated by hand in air or water. Effort is required to	
Lens	Discontinuous layer of different material, with lenticular shape.	Moderately cemented		
Pocket	An irregular inclusion of different material.		disaggregate the soil by hand in air or water.	

GEOLOGICAL ORIGIN

WEATHERED IN PLACE SOILS

Extremely Weathered material	Material is weathered to such an extent that it has soil properties. Structure and/or fabric of parent rock material retained and visible.
Residual soil	Structure and/or fabric of parent rock material not retained and visible.

TRANSPORTED SOILS

Aeolian soil	Carried and deposited by wind.
Alluvial soil	Deposited by streams and rivers.
Colluvial soil	Soil and rock debris transported downslope by gravity.
Estuarine soil	Deposited in coastal estuaries, and including sediments carried by inflowing rivers and streams, and tidal currents.
Fill	Man-made deposit. Fill may be significantly more variable between tested locations than naturally occurring soils.
Lacustrine soil	Deposited in freshwater lakes.
Marine soil	Deposited in a marine environment.



Soil Description Explanation Sheet (2 of 2)

SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

FIELD IDENTIFICATION PROCEDURES (Excluding particles larger than 63 mm and basing fractions on estimated mass)				GROUP SYMBOL	PRIMARY NAME			
size		GRAVEL More than half of coarse fraction is larger than 2.36 mm	CLEAN GRAVEL (Little or no fines)		ide range in grain size a nounts of all intermediate		GW	GRAVEL
					edominantly one size or th some intermediate siz	•	GP	GRAVEL
COARSE GRAINED SOIL More than 65% of soil excluding oversize fraction is larger than 0.075 mm	SOIL ing over 375 mm		GRAVEL WITH FINES (Appreciable amount of fines)		on-plastic fines (for ident e ML and MH below)	ification procedures	GM	Silty GRAVEL
COARSE GRAINED SOIL an 65% of soil excluding o	naked				astic fines (for identificat _, CI and CH below)	ion procedures see	GC	Clayey GRAVEL
RSE GF 5% of sc is larger	visible to	E E	CLEAN SAND (Little or no fines)		ide range in grain size a nounts of all intermediate		SW	SAND
COA than 65 fraction	particle v	SAND than half o e fraction is than 2.36 r	CLE SAI (Littl no fii		Predominantly one size or a range of sizes with some intermediate sizes missing		SP	SAND
More	mallest	A U.U.5 mm particle is about the smallest particle visible to haked eyes) AY SILT & CLAY The smallest particle visible to haked eyes)	SAND WITH FINES (Appreciable amount of fines)		on-plastic fines (for ident e ML and MH below)	ification procedures	SM	Silty SAND
	out the s		SA WITH (Appre amc of fii		astic fines (for identificat _, CI and CH below)	ion procedures see	SC	Clayey SAND
Ze	s abc	IDENTIFICATION	DENTIFICATION PROCEDURES ON FRACTIONS <0.075 mm					
vers	cle is		DRY STRENGTH		DILATANCY	TOUGHNESS		
olL ing o 075 i	parti	LAY o m ty,	None to Low		Slow to Rapid	Low	ML	SILT
SC clud an 0.	mm	SILT & CLAY (low to medium plasticity, LL ≤ 50)	Medium to High		None to Slow	Medium	CL, CI	CLAY
VINEI oil ex er th	.075	SILT SILT m m plk	Low to Medium		Slow	Low	OL	ORGANIC SILT
GRA of si mallŧ	(A 0	LAY Lty, 3)	Low to Medium		None to Slow	Low to Medium	MH	SILT
FINE GRAINED SOIL 35% of soil excluding n is smaller than 0.07		SILT & CLAY (high plasticity, LL > 50)	High to Very High		None	High	CH	CLAY
FINE GRAINED SOIL e than 35% of soil excluding overs fraction is smaller than 0.075 mm		SILT ple	Medium to High		None to Very Slow	Low to Medium	ОН	ORGANIC CLAY
FINE GRAINED SOIL More than 35% of soil excluding oversize fraction is smaller than 0.075 mm		Highly Organic Soil	Readily identified by colour, odour, spongy feel and frequently by fibrous texture.			Pt	PEAT	
• LL – Liquid	• LL – Liquid Limit.							

COMMON DEFECTS IN SOILS

TERM	DEFINITION	DIAGRAM
PARTING	A surface or crack across which the soil has little or no tensile strength. Parallel or sub parallel to layering (e.g. bedding). May be open or closed.	
FISSURE	A surface or crack across which the soil has little or no tensile strength, but which is not parallel or sub parallel to layering. May be open or closed. May include desiccation cracks.	
SHEARED SEAM	Zone in clayey soil with roughly parallel near planar, curved or undulating boundaries containing closely spaced, smooth or slickensided, curved intersecting fissures which divide the mass into lenticular or wedge-shaped blocks.	
SHEARED SURFACE	A near planar curved or undulating, smooth, polished or slickensided surface in clayey soil. The polished or slickensided surface indicates that movement (in many cases very little) has occurred along the defect.	

TERM	DEFINITION	DIAGRAM
SOFTENED ZONE	A zone in clayey soil, usually adjacent to a defect in which the soil has a higher moisture content than elsewhere.	
TUBE	Tubular cavity. May occur singly or as one of a large number of separate or inter-connected tubes. Walls often coated with clay or strengthened by denser packing of grains. May contain organic matter.	
TUBE CAST	An infilled tube. The infill may be uncemented or weakly cemented soil or have rock properties.	
INFILLED SEAM	Sheet or wall like body of soil substance or mass with roughly planar to irregular near parallel boundaries which cuts through a soil mass. Formed by infilling of open defects.	

Appendix B

Example Plants

Taz Wild Plants

Phone: (03) 6384 2165 Fax: (03) 6384 2165 Web site: www.tazwild.com

Wastewater Treatment Units

Tasmanian Plants suitable for Water from Wastewater Treatment Units

Water from septic tanks and aerated wastewater treatment units such as Biocycle, Envirocycle or other may contain salts, boron and disease bearing microbes. The major ingredients of most cleaning fluids are various salts, of which common kitchen salt (sodium chloride) is the least common. These salts may have large concentrations in wastewater, which can have a detrimental effect on plants. The survival of plants will depend on the concentrations of salts. Long-term build up of chemicals and salts in the soil will adversely affect any plantings.

We can't guarantee these plants will survive but they are tolerant to reasonable amounts of the main offenders and will tolerate wet conditions.

Below is a list of plants to help make an attractive garden bed for your wastewater treatment area.

PLANTS 1 - 6m

Acacia mucronata

Variable sallow wattle. Narrow leaf wattle

An upright or spreading, medium to tall shrub 3-4m X 2-3m. Quick growing. Profuse cream to yellow flowers in spring, showy. Attracts seed eating birds. Drought tolerant.

Acacia verticillata

Prickly Moses

Prickly shrub to 2m. Useful habitat plant and very attractive in flower.

Banksia marginata

Honeysuckle, Silver banksia

Evergreen shrub or small tree with attractive narrow, smooth edged leaves which are square or notched at the end and silvery beneath. Greenish yellow cones of flowers that last as cut flowers. Grows well in sandy soil. Strong upright growth.

Bauera rubioides

Dog Rose

Hardy small to medium dense shrub. 1-2m X 1-2m wide with masses of dainty pink flowers, flowering most of year, attracting butterflies. Grows well in wet or moist soils, prefers acid soils. Likes full or filtered sun. Good coastal pant. Frost tolerant. Prune regularly. Good erosion control.

Callistemon pallidus

Lemon Bottlebrush

Evergreen medium shrub, very upright with silky leaves that become smooth with age. Lovely lemon yellow bottlebrushes in spring and summer. Likes a dry or moist position. Tolerates full or filtered sunlight. Attracts nectar eating birds.

Callitris oblonga

Cypress pine, South esk pine

This is one of Australia's native conifers. It has an attractive shrubby shape and is suitable for use in the garden as a fast growing hedge, since it can be pruned to shape. It is also useful for gardens where the soil is rocky and sandy but will tolerate a range of soils, providing the drainage is good.

Correa backhousiana

Velvet correa

A dense, bushy, spreading shrub to 1.5m high by 2m wide. Leaves are glossy green on top, rusty coloured underneath. Greenish cream bell flowers in winter. Spring bird attracting. Tolerates lime and coastal plantings. Usually frost resistant.

Leptospermum lanigerum

Woolley tea-tree

Hardy medium to large shrub 2.5 to 5m high x 1.2-3m wide, massed with white flowers during spring. Soft grey foliage. Prefers moist to wet soils with good drainage and will grow well in full or filtered sun. Attracts butterflies and seed eating birds. Tolerates light snow, smog and frost.

Melaleuca ericifolia

A very hard, fast growing small evergreen tree suited to most soils and aspects. Suitable for poorly drained or saline soils and withstands coastal exposure. Needle-like leaves and 2-3cm long cream flower spikes, in spring and early summer. Ideal for planting as a screen.

Melaleuca gibbosa

Fine leafed paperbark, Slender honey-myrtle

Evergreen small shrub with mauve/purple ball shaped flowers in late spring and summer. Suitable for most soils, tolerating lime and salt soil. Frost resistant.

Melaleuca squarrosa

Tall, bushy shrub, good foliage. Scented, yellow brush flowers, in spring-summer. Suitable for most soils, tolerating very wet conditions, lime, saline and frost.

Micrantheum hexandrum

River box

Attractive foliage plant with new growth showing red stems. Cream flowers in spring. Grows up to 2m high. Prune to form a dense screen plant.

Notelaea ligustrina

Native Olive, Mock olive, Privet mock olive

Tall shrub with smooth, dark green leaves. Small yellow flowers and purple fruit. Prefers a moist, semi-shaded position but grows well in a wide range of conditions.

Pomaderris apetala

Dogwood

Medium to tall shrub 3 to 15 m. This shrub grows in a wide variety of sites from very dry to very wet but will grow larger with moisture. Looks good planted in copses.

SHRUBS TO 1m

Amperea xiphoclada

Upright or arching stems. Attractive foliage sculpturesque in appearance to 60cm. Useful for basket weaving. Dry to moist sites.

Blechnum penna-marina

Alpine Water Fern

Attractive, low growing, matted ground cover. Leathery dark green fronds to 15cm long, tinged pink when young. Ideal hanging baskets. Rockeries and moist positions in the open ground.

Blechnum wattsii

Hard Water Fern

Hardy and vigorous fern with dark green leathery fronds to 1m tall. Very easily grown in large pot or a moist, shady position in the ground.

Callistemon viridiflorus

Green Bottlebrush

Erect shrub with pale green bottlebrushes. Good in damp conditions. 1-2m X 1m. Frost resistant.

Carex appressa

Tall sedge, Tussock sedge

A tall perennial to 1.8m high. Stems acutely 3 angled and leaves 3-6mm broard. Occurs in winter wet depressions that can dry out completely in summer. Flowers in spring.

Carex inyx

Tassell Sedge

Evergreen clump forming sedge with green foliage and gorgeous golden brown pendulous tassels 1m x 1m.

Carex tasmanica

Curley Sedge

An upright sedge to 30cm. Attractive tight curls on tips of leaves. Wet sites but will tolerate long dry spells.

Dianella tasmanica

Flax Lily

An evergreen perennial plant with arching, strap-like leaves which can be up to 1.2m long. During spring and summer this plant bears clusters of nodding, star shaped, bright blue to purple flowers which are followed by glossy deep blue berries. Thrives in a sunny to partly shaded position in humus rich, well drained soil. Ideal for rockeries, poolside planting and containers.

Ficinea nodosa (syn isolepis nodosa)

Knobby club rush

Dense tufted native rush with stiff stems. Rounded brown flower knobs in summer. Suit damp or moist sandy soil. 60cm X 1m wide.

Ficinea nodosa (syn isolepis nodosa)

Knobby club rush (syn. Isolepis nododa)

Ideal for planting around pond margins, this fast growing perennial plant forms clumps of upright, often arching, dark green stems. Brownish, globular flower heads are produced throughout the year. A tough hardy plant which thrives in full sun in a range of soils. Tolerates salt spray, waterlogged and saline soils. Adds texture and colour to seaside gardens and water features, useful for general garden planting.

Goodenia elongata

Lanky Goodenia

Suckering ground cover 10cm tall X 50cm. Glossy green leaves, rich yellow flowers on tall stems spring-summer, prefers moist soils in full sun or part shade.

Isolepis inundata

Knobby club rush, Swamp club rush

Handy aquatic for waters edge or general planting (eg. shrub beds, dry creek beds).

Lomandra longifolia

Long leaf mat bush, Sagg

A popular plant for use as accent in gardens, where the rush like foliage contrasts well with broad leafed plants. Use it next to ponds or as a boarder plant. Flowers in spring, bearing clusters of cream, strongly perfumed flowers - great for use in flora arrangements. A very adaptable plant that will grow well in a range of soils but does best in a moist position.

Mazus pumilio

Mauve carpet

Low growing creeping plant. Ideal ground cover, with mauve flowers, spring and summer. Semi shade or sun.

Melaleuca squamea

A bushy shrub to 1m with stunning mauve flowers in spring-summer. Grows well in a damp spot. Frost hardy.

<u>Poa labillardieri</u>

A popular native grass grown for its soft blue foliage. In the warmer months this clumping plant produces an attractive flower head with a purple tint. Thrives in a sunny to partly shaded position and grows in a range of soils. Suitable for planting under trees, embankments and mass plantings. Cut to just above ground level in late winter for fresh new spring growth.

Polystichum proliferum

Mother Shield Fern

An easy to grow fern with attractive green fronds. New fronds are covered with eye catching brownish scales. An ideal plant for ferneries and shaded garden positions but will perform equally well when planted in a container. Plant in humus rich, moist, well drained soil in part shade. Fertilise with a good organic fertilizer. When planting in containers use a premium potting mix.

Polystichum proliferum

Mother Shield Fern

Attractive native fern with arching fronds to 1m long forming plantlets near the tip. Very easily grown in a moist position in morning or filtered sun. Suitable for tubs.

Pratia pedunculata

Blue pratia, Common pratia, White pratia

This dainty, spreading plant forms a carpet of tiny green leaves which from spring to early summer is smothered in a mass of tiny, white flowers. This carpeting plant is ideal for filling in spaces near rocks and sleepers and makes an attractive groundcover. Thrives in a sunny to semi-shaded position in moist soil. Keep moist at all times.

Pratia pedunculata

Blue pratia, Common pratia, White pratia

This dainty, spreading plant forms a carpet of tiny, green leaves, which from spring to early summer is smothered in a mass of tiny blue flowers. This carpeting plant is ideal for filling in spaces near rocks and sleepers, and makes an attractive groundcover, thrives in a sunny to semi-shaded position in moist soil. Keep moist at all times.

Scaevola hookeri

Creeping fan flower, Mat fan flower

A very densely matting, evergreen groundcover with glossy, dark green leaves and small, white fan-shaped flowers in flushes, during spring, summer and autumn. An excellent soil binding plant for average to moist positions. Frost hardy.

Velleia paradoxa

Spur valleia

Wild flower 20cm X 20cm with large yellow flowers spring and summer. Prefers moist soils which are well drained and part shade to full sun.

Viola fuscoviolacea

A spreading, matting violet with attractive dense foliage and tiny deep purple-blue flowers in spring and summer. Prefers a moist position. Withstands frosts and snow.

Viola hederacea

Native violet

An attractive creeping evergreen perennial with fan shaped leaves. This plant produces beautiful mauve flowers over a long flowering period. An ideal ground cover for full sun to part shade in well drained soils.

TREES

Acacia dealbata

Silver Wattle

A tall tree with a smooth trunk, often decorated with silvery, mottled patches contrasting with the greyish-green leaves. In spring, clusters of golden-yellow, fluffy ball like flowers almost cover the whole tree.

Acacia melanoxylon

Blackwood

A beautiful formal tree that produces one of Australia's most sought after woods for cabinet making. Light yellow flowers occur in winter and early spring. A useful tree for a windbreak or screen as it grows densely. It is also tolerant of a wine range of positions, however its height and width will be greatest if the soil is moist and fertile.

Eucalyptus ovata

Black gum, Swamp gum

Evergreen medium to tall moisture loving tree, good for poorly drained soils. Smooth white trunk. Masses of white flowers in autumn which attract birds. Frost hardy. Good tree for cool districts. Water absorber. Drought tolerant. Excellent shade and windbreak tree.

Eucalyptus rodwayi

Swamp Peppermint

This tree is suitable for a wide range of conditions, from very dry sandy soils to river banks. Grows 15 to 20m.

Eucalyptus viminalis

White Gum

A magnificent tree with a lovely white trunk. This tree is suitable for very dry to very wet sites. Its height is 20 to 40m depending on availability of moisture.

Pomaderris apetala

Dogwood

Medium to tall shrub 3 to 15 m. This shrub grows in a wide variety of sites from very dry to very wet but will grow larger with moisture. Looks good planted in copses.

Prostanthera lasianthos

Christmas bush, Tasmanian Christmas bush

The Tasmanian Christmas bush comes into flower around Christmas with masses of mint scented foliage. A rapid growth in a range of soils but for best results grow in a well drained soil and mulch to retain moisture in the drier months. An attractive plant that will grow in a range of positions in the garden.

Tasmannia lanceolata

Mountain pepper, Native pepper

Small leafed mountain form. Handsome foliage shrub with bright green leaves and red stems. Creamy-yellow flowers in spring. Slow growing to 1.5m, hardy in a cool moist well drained position in sun or shade.

Appendix C

Certificate Forms

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To:	Mr Brett & Ms Lyndal Perry		Owner /Agent	EE	
	PO Box 394	Address	Form 55		
	Wynyard Tas 73	Wynyard Tas 7325			
Qualified perso	on details:				
Qualified person:	Tony Barriera - Geoton Pty. Ltd.				
Address:	PO Box 522		Phone No:	03 6326 5001	
	Prospect Tas 72	250	Fax No:		
Licence No:	CC6220 P Email address	s: tba	rriera@geotor	n.com.au	
Qualifications and Insurance details:	Tony Barriera – BEng, MSc CPEng, NER – IEAust 471929 Civil, Geotechnical Certain Underwriters at Lloyd's- ENG 22 000330	Detern	iption from Column nination - Certificate sessable Items	3 of the Director's es by Qualified Persons	
Speciality area of expertise:	Geotechnical Engineering	Deterr	ription from Column mination - Certificat sessable Items)	a 4 of the Director's es by Qualified Persons	
Details of work	(:				
Address:	276 Reservoir Drive			Lot No: 4	
	Wynyard Tas 73	325	Certificate of	title No: 175267/4	
The assessable item related to this certificate:	Classification of foundation conditions according to AS2870 - 2011		certified) Assessable item - a material; - a design - a form of cor - a document - testing of a construction of places.		
Certificate deta	ails:				
Certificate type:	Foundation Site Classification – AS2870	Directo		1 of Schedule 1 of the Certificates by Qualified ems n)	
	n relation to the above assessable item, at an nbing work or plumbing installation or demolit		•	ck one)	
a building, tempora	or ary structure or plumbing installation:			X	

Documents:	Geoton Pty Ltd, Report Reference No dated 15/03/2024	o. GL24029Ab,				
Relevant calculations:	Refer to report					
References:	AS 2870 – 2011 Residential Slabs an AS 4055 – 2021 Wind Loads for Hous CSIRO Building Technical File 18	•	ction			
	Substance of Certificate: (what it is that is	s being certified)				
Wind Loading in	on in accordance with AS2870 - 2011 accordance with AS 4055 - 2021 commendations of report					
	Scope and/or Limitations					
The classification applies to the site as investigated at the time and does not account for any future alteration to foundation conditions resulting from earthworks, drainage condition changes or site maintenance variations.						
I certify the matters	s described in this certificate.					
	Signed:	Certificate No:	Date:			
Qualified person:	bonna	GL24029Ab	15/03/2024			

In issuing this certificate the following matters are relevant –

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94 Section 106 Section 129 Section 155

To:	Mr Brett and Mrs Lynda	l Perry			Owner name	25	
	PO Box 394				Address	Form 35	
	Wynyard Tas		732	25	Suburb/postco	ode	
Designer detail	s:						
Name:					Category	· Civil Engineer	
	Tony Barriera				,	Hydraulic - Domestic	
Business name:	Geoton Pty Ltd				Phone No	03 6326 5001	
Business address:	P O Box 522						
	Prospect TAS		725	50	Fax No	:	
Licence No:	IEAust 471929, CC6220 P	ddress:	tbarrier	a@(geoton.con	n.au	
Details of the proposed work:							
Owner/Applicant	Mr Brett and Mrs Lynda	l Perry			Designer's pro		
Address:	276 Reservoir Drive				Lot f	No: 175267/4	
	Wynyard Tas		732	25			
Type of work: Building work Plumbing work X (X all applicable)							
Description of wor	rk:					(new building / alteration /	
on-site wastewate	Pagina Work (Sagna limita	tions or	. avaluai	\		addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)	
Certificate Type:	Design Work (Scope, limita Certificate	tions of	exclusion		sponsible Pi	•	
Certificate Type.	☐ Building design					ding Designer	
	☐ Structural design				Engineer or Civil Designer		
	☐ Fire Safety design			Fire	e Engineer		
	☑ Civil design					r Civil Designer	
	☐ Hydraulic design				uilding Services Designer		
	☐ Fire service design				Iding Service		
	☐ Electrical design ☐ Mechanical design				uilding Services Designer uilding Service Designer		
	☐ Plumbing design			Plu		r; Architect, Building	
	☐ Other (specify)				<u> </u>		
Deemed-to-Satisfy:		Perfor	mance S	Soluti	on: 🗷 (X	the appropriate box)	
Other details: All design docu	uments provided in Rep	ort GL	.24029 <i>F</i>	Ab, d	dated 15/0	3/2024	

Design docume	ents provided	d:		
The following docum	ents are provide	ed with this Certificate	9 –	
Drawing numbers:		Prepared by:		Date:
Schedules:		Prepared by:		Date:
Specifications:		Prepared by:		Date:
Computations:		Prepared by:		Date:
Performance solution	on proposals:	Prepared by:		Date:
Test reports:		Prepared by:		Date:
Standards cod	es or quideli	nes relied on in	design	
process:	es or guiden	nes renea on m	uesigii	
All design docume	ents are contai	ned within report		
AS/NZS1547:201	2 On-site dome	estic-wastewater m	anagement	
Any other relev	ant docume	ntation:		
Attribution as o	lesigner:			
		n responsible for the	design of that part of th	e work as described in this
	Building Act 20	16 and sufficient deta		assessment of the work ir ber to carry out the work ir
This certificate confinential National Construction		and is evidence of si	uitability of this design w	rith the requirements of the
	Naı	me: (print)	Signed	Date
Designer:	Tony Barriera	ı	bonn	15/03/2024

CC6220P

Licence No:

•								
Assessment of	Certifiable Works: (TasWater)						
	ntial dwellings and outbuildings on ncrease demand and are not certification.		connection are					
If you cannot check	If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.							
TasWater must the	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:								
The works will not increase the demand for water supplied by TasWater								
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								
The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure								
The works will	not damage or interfere with TasWate	er's works						
The works will	not adversely affect TasWater's oper	ations						
The work are r	not within 2m of TasWater's infrastruct	ure and are outside any TasWa	ter easement					
I have checked	the LISTMap to confirm the location	of TasWater infrastructure						
If the property applied for to	is connected to TasWater's water sys FasWater.	tem, a water meter is in place, o	or has been					
Certification:								
I Tony Barriera of Geoton Pty Ltd being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the <i>Water and Sewerage Industry Act 2008</i> , 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:	Tony Barriera	bonn	15/03/2024					



LOADING CERTIFICATE

To: Mr Brett and Mrs Lyndal Perry

DO Boy 30/

	1 O DOX 03-1			Section 7.4.2
	Wynyard Tas	7325	Suburb/postcode	
Details of work	:			
Address:	276 Reservoir Drive		L	ot No: 1
	Wynyard Tas	7325	Certificate of til	tle No: 175267/4
The work related to this certificate:	On-site domestic-wastewater management		(description of the certified)	work or part work being
Certificate deta	ils:			
In issuing this certific	ate the following matters are relevant	_		
Documents:	Report GL24029Ab dated 15/0 Figure 1 – Locality Plan Figure 2 – Site Plan Figure 3 – Raised Convention		n and Section	
Relevant calculations:	Contained in the above			
References:	AS/NZS1547:2012 On-site do	mestic-was	stewater mana	gement

Owner /Agent

Address

Certificate Ref:

AS/NZS 1547:2012

Substance of Certificate:

This certificate sets out the design criteria and the limitations associated with use of the system.

Wastewater Characteristics

Population equivalent used for this assessment = 4 (2 bedroom equivelent)

Wastewater volume (L/day) used for this assessment = 480 (120 Litres per person)

Approximate blackwater volume (L/day) = 192 Approximate greywater volume (L/day) = 288

Soil Characteristics/Design Criteria

Texture (Table E1 from AS/NZS 1547) = Medium to Heavy clay

Soil category (Table E1 from AS/NZS 1547) = 6

Soil structure (Table E4 from AS/NZS 1547) = Moderately Indicative permeability (Table 5.1 from AS/NZS 1547) = <0.06m/day Adopted permeability = 0.02m/day Adopted Design Loading Rate = 10mm/day Soil thickness for disposal = >0.4m Minimum depth (m) to water = >2m

Dimensions for On-Site Treatment System

Disposal and treatment methods = Aerated Wastewater Treatment System (AWTS)

and Raised Conventional Bed

Site modification and specific design = Not required

Primary disposal area required $= 48.0 \text{m}^2$ Reserve disposal area required $= 48.0 \text{m}^2$

Location and use of Reserve area = Reserve area located to the northeast of the

proposed dwelling.

Is there sufficient area available on site for disposal (including reserve) = Yes

Notes

The purpose of the reserve area is to allow for future extention of the land application system to allow a factor of safety against unforseen malfunction or failure, perhaps following increased household occupancy or inadvertent misuse of the system.

The land application area may be reduced to account for flow reductions by water-saving devices, provided the organic loading rate is not higher than it would have been without the flow reduction.

Allowable Variation from Design Flow

Based on an approved AWTS 8 EP system (8 equivalent persons) rated at 1200 litres per day and a wastewater design volume of 480L/day the allowable variation from design flow (peak loading events) would be an additional 720L/day.

System Limitations

Consequences of overloading the system:

- (A) Adverse effects on soil properties and plant growth through excess salt accumulation in the root zone during extended dry periods
- (B) Harmful long-term environmental effects to the soil of land application system or the adjacent surface water and groundwater; or
- (C) Increased risk to public heath from surface ponding in the land application area or channelling or seepage beyond the land application area.

Consequences of underloading the system:

Not applicable to this type of system.

Operation Requirements

Refer to operation manual of preferred aerated waterwater treatment system.

Adverse effects of not operating the system correctly may include:

- (A) Odour; and
- (B) Disease.

Maintenace Requirements

Refer to operation manual of preferred aerated waterwater treatment system. Adverse effects of not maintaining and monitoring the system correctly may include:

- (A) Odour:
- (B) Pump failure;
- (C) Air blower failure or filter blockage;
- (D) Alarm failure:
- (E) Irrigation field failure; and
- (F) Poor water quality, lack of disinfection.

	Signed:	<i>Date:</i>	Certificate No.
Certifier:	bonn	15/03/2024	GL24029Ab



Environmental Service and Design Pty Ltd

ABN 97 107 517 144 **ACN** 107 517 144

Office

74 Minna Road Heybridge TAS 7316 Phone: (03) 6431 2999 www.esandd.com.au **Postal**

PO Box 651 Burnie TAS 7320

BUSHFIRE HAZARD REPORT- Version 1 Brett Perry

Proposed dwelling and shed extension

276 Reservoir Drive Wynyard TAS

Author - Bruce Harpley

BFP-140

22 February 2024

Scope of Assessors Accreditation

Bruce Harpley (BFP-140) is accredited by the Chief Officer of the Tasmania Fire Service under Section 60B of the *Fire Service Act 1979 for scope of works:*

- 1. Certify a Bushfire Hazard Management Plan for the purposes of the Building Act 2016
- **2.** Certify an Exemption from a Bushfire Hazard Management Plan for the purposes of the Building Act 2016 or the Land Use Planning and Approvals Act 1993
- **3A.** Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for Vulnerable Uses and Hazardous Uses for the purposes of the Land Use Planning and Approvals Act 1993.
- **3B.** Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for small subdivisions for the purposes of the Land Use Planning and Approvals Act 1993.

Works performed by Bruce Harpley (BFP-140) that require Tasmania Fire Service endorsement:

4. Certify an Emergency Management Strategy or Bushfire Emergency Plan

Disclaimer

This document has been prepared for the sole use of the client and for a specific purpose, as expressly stated in the document. *Environmental Services and Design Pty Ltd* undertakes no duty nor accepts any responsibility to any third party not being the intended recipient of this document. The information contained in this document has been carefully compiled based on the clients' requirements and *Environmental Services and Design Pty Ltd's* experience, having regard to the assumptions that *Environmental Services and Design Pty Ltd* can reasonably be expected to make in accordance with sound professional principles. *Environmental Services and Design Pty Ltd* may also have relied on information provided by the client and/or other external parties to prepare this document, some of which may not have been verified. Subject to the above conditions, *Environmental Services and Design Pty Ltd* recommends this document should only be transmitted, reproduced or disseminated in its entirety.

Bushfires in Tasmania are an unpredictable natural phenomenon and preparing a Bushfire Hazard Management Plan increases your chances of defending your property and assists in the protection the people whom frequent it. This Fire Hazard Management Plan in no way guarantees immunity from a bushfire in or around your property or the effects thereof.

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

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Re-Certification – Ability to Re-Evaluate

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

Contents

1.	Inti	roduction	4
2.	Sit	te Description	4-5
		oposed Development	
		Ishfire Hazard Assessment	
	4.1.	Vegetation & Effective Slope	5-8
		Bushfire Attack Level	
5.	Bu	shfire Protection Measures	9-11
6.	Sta	atutory Compliance	12
		onclusion	

Appendix A – Proposal Site Plan and Drainage Plan

Appendix B – Bushfire Hazard Management Plan

Appendix C – Requirements for Property Access and Water Supply

Form 55

1. Introduction

Environmental Services and Design Pty Ltd has been engaged to complete a bushfire hazard management assessment for proposed shed extension and new dwelling.

The proposed dwelling (Tiny house) is greater than 40m from the existing shed and extension. The shed is not required to be included in the assessment.

The purpose of this report is to document the assessment, bushfire attack level and associated hazard management areas under the Tasmanian Building Regulations 2016, Directors Determination – Bushfire Hazard Areas v1.1 and AS3959 2018.

2. Site Description

2.1 Property Details

Property Address	276 Reservoir Drive Wynyard
Certificate of Title	175267/4 PID 3595185
Type of Application	Proposed shed extension and new dwelling (tiny house)
Area	1.9ha
Zoning	Rural living - Zone 11
Surrounding Zoning	Rural living
Planning Scheme	Tasmanian Planning Scheme – Waratah Wynyard
Existing land Use	Residential
Proposed land use	Residential



Aerial View

2.2 Surrounding Land Use

Surrounding land use within 200m consists of developed and vacant rural living lots.

3. Proposed Development

The proposal includes a new dwelling (tiny house) and extension to the existing shed. The dwelling is proposed to be greater than 40m from the existing shed and extension.

Site plan prepared by Rosene Cox project number 2324-19 dated 07/02/2024 is at appendix A.

4. Bushfire Hazard Assessment

A site assessment was carried out on 11January 2024. Desktop assessment was conducted on 21 February 2024.

4.1. Vegetation & Effective Slope

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

Vegetation

Based on the site assessment the vegetation external and internal to the lot is assessed as:

- North low threat 38m then forest,
- South low threat cleared land 42m then forest,
- East low threat cleared flat land 75m then forest,
- West low threat residential, hardstand and adjacent residential for 100m.

Vegetation within the lot to the north, south and east has previously been cleared to the distances shown above and is assessed as low threat residential gardens and hardstand areas in accordance with AS3959-2018 clause 2.2.3.2. Refer images 4.1.1 to 4.1.4 below.

Topography

Surrounding effective slopes of land under classified vegetation are as follows:

- North 15° downslope,
- South 14° downslope,
- East 14° downslope,
- West across/up slope.



Image 4.1.1 - View northwest - forest



Image 4.1.2 - View northeast - forest



Image 4.1.3 - View southwest to adjacent property



Image 4.1.4 – View southeast - forest



Image 4.1.5 - Site Analysis

4.2. Bushfire Attack Level

A Bushfire Attack Level assessment has been completed using Method 1 of AS 3959-2018.

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

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

Vegetation Classification	N	S	E	w
Group A - Forest	Х	Х	Х	
Group B – Woodland				
Group C – Shrubland				
Group D – Scrub				
Group E – Mallee/Mulga				
Group F – Rainforest				
Group G – Grassland				
Low threat (cl. 2.2.3.2)	X (38m)	X (42m)	X (75m)	X (100m)

Step 3: Distance from classified vegetation (clause 2.2.4)

	N	S	E	W
Existing distance	0-38m low threat 38-100m forest	0-42m low threat 42-100m forest	0-75m low threat 75-100m forest	0-100m Low threat
Proposed HMA distance	41m	41m	41m	10m

Step 4: Effective slope under classified vegetation

N		S		E		w	
Upslope/0		Upslope/0		Upslope/0		Upslope/0	X
>0-5°		>0-5°		>0-5°		>0-5°	
>5-10°		>5-10°		>5-10°		>5-10°	
>10-15°	Х	>10-15°	X	>10-15°	X	>10-15°	
>15-20°		>15-20°		>15-20°		>15-20°	

Step 5: Determination of Bushfire Attack Level (BAL)

	N	S	E	W
BAL value for each quadrant	19	19	19	19

The applicable Bushfire Attack Level is: BAL - 19

5. Bushfire Protection Measures

The Bushfire Attack Level assessment at section 4.2 assesses the Bushfire Attack Level as **BAL 19 and** the following measures must be implemented:

Hazard management

- Hazard management areas must be established and maintained as shown on the Hazard management plan drawing at attachment B.
- Hazard Management Areas must be implemented prior to occupancy to the building surveyor's satisfaction and maintained by the owner thereafter.

N - 41m

S- 41m,

E- 41m,

W- 10m.

Construction

 Dwelling construction must comply with the requirements of AS3959-2018 for BAL 19.

Water Supply

- Property is connected to a reticulated main supply however there are no hydrants in the area within 120m of the furthest part of the dwelling to be protected.
- A static water supply for firefighting purposes must be installed.
- The static water supply tank must be of noncombustible construction with a minimum capacity of 10,000ltr fitted with a 65mm storz fitting.
- The proposed static water supply firefighting water point is located 30m northeast of the proposed dwelling and will be within 90m of the furthest part of the proposed building to be protected measured as a hose lay.
- Proposed location of the static water is shown on the hazard management plan.
- Static water supply must meet the requirements of Table 3B of the Directors Determination – Bushfire Hazard Areas.
- Static water supply requirements are included in Appendix C.
- Static water supply must be implemented prior to occupancy to the building surveyor's satisfaction and maintained by the owner thereafter.



Image 5.1 – Proposed Water supply location east of dwelling

Access

- Access to the property is required to access a firefighting water point.
- The existing all weather gravel access from the Reservoir Drive crossover to the proposed water point is greater than 30m and less than 200m with a width varying between 3.1m and 3.6m.
- Existing access must be upgraded to a minimum of 4m in width as shown on the bushfire hazard management plan at appendix B.
- The existing access must be extended to the static water supply point to create a compliant hardstand turning area.
- The hardstand turning area is shown on the hazard management plan.
- Vegetation along the access must be trimmed back to allow for 500mm horizontal clearance either side of the carriageway with a vertical clearance of 4m.
- Property access requirements are included in Appendix C.
- Access upgrade and hardstand area must be implemented prior to occupancy to the building surveyor's satisfaction and maintained by the owner thereafter.



Image 5.2 - Existing access from Reservoir Drive

6. Statutory Compliance

The applicable bushfire requirements are specified in the *Director's Determination – Bushfire Hazard Areas (v1.1).*

Table 1 - Compliance Schedule

Deemed-to-Satisfy requirement	Compliance
2.3.1 Construction	Subject to design and construction to BAL - 19 standard, the proposal will comply with clause 2.3.1.
2.3.2 Property access	Subject to upgrading of the existing access as prescribed in section 5 Access, the proposal will comply with clause 2.3.2.
2.3.3 Water supply for firefighting	Subject to installation of the static water supply for firefighting as prescribed in section 5, the proposal will comply with clause 2.3.3.
2.3.4 Hazard management areas	Subject to implementing the hazard management area prescribed on the Bushfire Hazard Management Plan, the proposal will comply with clause 2.3.4.
2.3.5 Emergency plan	N/A

7. Conclusion

Design and construction must conform to **BAL – 19** minimum specifications under AS3959:2018.

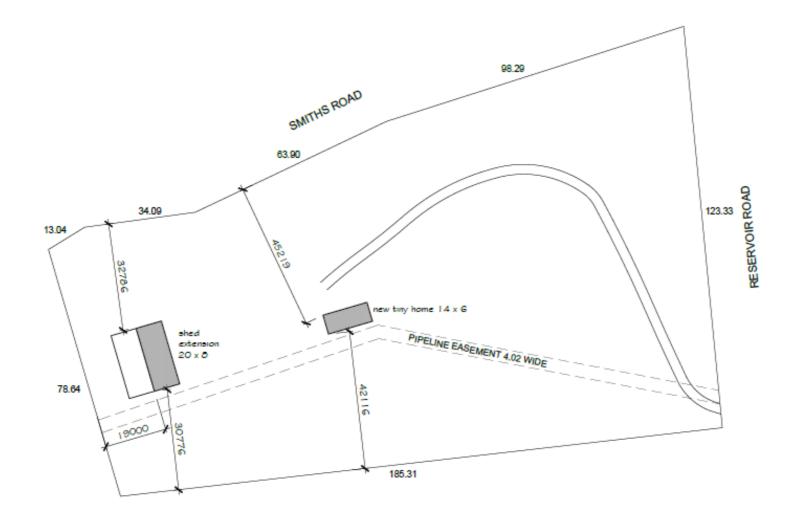
Static water supply for firefighting must be installed, access must be upgraded to a minimum of 4m in width, static water supply hardstand must be constructed and any overhanging vegetation along the access must be trimmed back to create 500mm horizontal clearance either side of carriageway. Requirements are included in Appendix C.

The Hazard Management area must be created and maintained as shown on the Bushfire Hazard Management Plan at appendix B.

A bushfire hazard management plan is required and is at Appendix B. This Bushfire Hazard report must be read in conjunction with the bushfire hazard management plan.

The requirements of the Bushfire Hazard Management Plan must be fully implemented prior to the issue of the certificate of occupancy.

Appendix A Site Plan



GENERAL NOTES:

 Check all dimensions, boundaries, easements and service locations on site

 All work shall comply with the current Tasmanian Building Regulations and relevant current Australian Standards, particularly AS2870 (residential slabs and footings) AS3700 (unified masonary code) AS3600 (concrete structures)

<u>N</u>

SITE PLAN
Scale: as noted at A3

A02

Rosene Cox

BUILDING DESIGN & DRAFTING
e. rosene.cox@gmail.com
12 Jackson St
Wynyard TAS 7225

Mob. 0418 171 074
ABN 84 634 774 986
TCC No. CCS197 G

SITE PLAN Scale 1:1000

Designed/Drawn: RC

This plan has been prepared only for the purpose of complying with Directors Determination – Bushfire Hazard Areas (v1.1) and the information shown hereon must not be used for any other purpose. All dimensions and areas are in meters.

Scale: 1:1000 Drawing No: 9198-1 22 February 2024

Drawn: Bruce Harpley BFP-140 Version: 1

General Notes

Design and Construction

 Design and construction must conform to BAL-29 minimum specifications under AS3959:2018

Hazard Management (HMA)

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

Access and Water Supply

 Access and water supply must be designed in accordance with section 5 of this report and must comply with the requirments in Appendix C

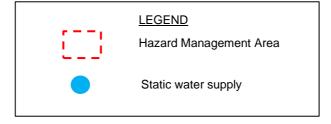
Maintenance prior to the onset of each fire season

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

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

Appendix B Bushfire Hazard Management Plan





BAL 19

276 Reservoir Drive WYNYARD CT – 175267/4

General

- Plan to be read in conjunction with Bushfire Hazard Assesment Report v1.0
- Ensure that all relevent consultants and contractors are provided with a full copy of this plan snd supporting report

Appendix C

Table 2 - Requirements for Property Access

	Column I	Column 2
	Element	Requirement
A.	Property access length is less than 30 metres, or access is not required for a fire appliance to access a firefighting water point.	There are no specified design and construction requirements.
В.	Property access length is 30 metres or greater, or access is required for a fire appliance to access a firefighting water point.	The following design and construction requirements apply to property access: (a) all-weather construction; (b) load capacity of at least 20 tonnes, including for bridges and culverts; (c) minimum carriageway width of 4 metres; (d) minimum vertical clearance of 4 metres; (e) minimum horizontal clearance of 0.5 metres 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 10 metres; (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 10 metres; (ii) a property access encircling the building; or (iii) a hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.

C.	Property access length is 200 metres or greater. The following design and construction requirements apply to property access: (a) complies with requirements for B above; and (b) passing bays of 2 metres additional carriageway width and 20 metres length every 200 metres.	
	Column I	Column 2
D.	Property access length is greater than 30 metres, 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 2 metres additional carriageway width and 20 metres length must be provided every 100 metres.

Table 3B - Requirements for Static Water Supply for Firefighting

Column 1 Column 2		Column 2			
	Element	Requirement			
A. Distance between building area to be protected and water supply		 (a) the building area to be protected must be located within 90 metres of the firefighting water point of a static water supply; and (b) the distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area. 			
В.	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 (firefighting and other uses) but the specified minimum quantity of firefighting water must be available at all times; (c) must be a minimum of 10,000 litres per building area to be protected. This volume of water must not be used for any other purpose including firefighting 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 AS 3959, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6 mm thickness.			
C.	Fittings, pipework and accessories (including stands and tank supports)	Fittings and pipework associated with a firefighting 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;			

	Column 1	1 Column 2			
	Element	Requirement			
		(e) provide a DIN or NEN standard forged Storz 65 mm 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); and			
		(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) where 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 450mm – 600mm above ground level; and (iv) protected from possible damage, including damage by vehicles.			
D.	Signage for static water	The firefighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible			
	connections	location. The sign must:			
		(a) comply with water tank signage requirements within AS 2304; or (b) comply with the TFS Water Supply Signage Guideline.			
Ε.	Hardstand	A hardstand area for fire appliances must be provided:			
		(a) no more than three metres from the firefighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);			
		(b) no closer than six metres from the building area to be protected;			
		(C) a minimum width of three metres 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.			

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To:	Brett Perry		Owner /Agent	EE	
	276 Reservoir Drive		Address	Form 55	
	WYNYARD TAS 7325		Suburb/postcode		
Qualified persor	n details:				
Qualified person:	Bruce Harpley				
Address:	74 Minna Road			Phone No:	0429355259
	HEYBRIDGE TAS	731	5	Fax No:	
Licence No:	BFP-140 Email a	address:	bha	rpley@esand	d.com.au
Qualifications and Insurance details:	Accredited to report on bushfire haz under Part IVA of the Fire Service Act 1979.	under Part IVA of the Fire Service Act Director by Qua		ption from Column 3 of the or's Determination - Certificates nlified Persons for Assessable	
Speciality area of expertise:	Analysis of hazards in bushfire-pro areas	one	Directo	iption from Column or's Determination - alified Persons for A	Certificates
Details of work:					
Address:	276 Reservoir Drive				Lot No: 4
	WYNYARD TAS	732	25	Certificate of	title No: 175267
The assessable item related to this certificate:	Bushfire hazard report for proposed dwelling and shed extension		certified) Assessable item i - a material; - a design - a form of con - a document - testing of a con system or plu		
Certificate detai	ls:				
Certificate type:	Bushfire Hazard Report and Bushfire Hazard Management Plan		(description from 1 of Schedule 1 of Director's Determ Certificates by Qu Persons for Asse Items n)	of the nination - ualified	
This certificate is in relation to the above assessable item, at any stage, as part of - (tick one) building work, plumbing work or plumbing installation or demolition work: or a building, temporary structure or plumbing installation:					

In issuing this certification	te the following matters are relevant –	
Documents:	Bushfire Hazard Report dated 22 Febru Management Plan dated 22 February 2024	ary 2022 and Bushfire Hazard
Relevant calculations:	Contained in above report	
References:	Directors Determination – Bushfire Hazard A Rosene Cox dated 07/02/2024.	Areas, AS3959:2018 and Site Plan
	Substance of Certificate: (what it is that is being	ng certified)
Analysis and report	ing of bushfire hazard assessment and determinat	
Proposal is assesse	ed as: BAL 19	
	Scope and/or Limitations	
existing property a relation to complia	ertification was commissioned to identify the Band new dwelling. All comment, advice and fir ance with Directors Determination – Bushfire Hazding Code of Australia and Australian Standar areas.	e suppression measures are in card Areas, the <i>Building Act</i> &
The report only de the scope of this of the report only id was undertaken a Impacts of future No assurance is goindividuals or occ. No warranty is off bushfire.	entifies the size, volume and status of vegetal and cannot be relied upon for any future development and vegetation growth have not given or inferred for the health, safety or amenupants in the event of a Bushfire. ered or inferred for any buildings constructed ance is to be placed on this certificate or respectively.	atutory assessments are outside tion at the time the site inspection opment. been considered. bity of the general public, on the property in the event of a
I certify the matters	s described in this certificate.	
	Signed:	Certificate No: Date:
Qualified person:	B. Hanfley	9198-1 22 Feb 2024

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94 Section 106 Section 129 Section 155

To:	Relevant Building Surveyo	or		Owner name Address	Form 35
				Suburb/postcode	9
Designer detail	s:				
Name:	Graeme C Moulston			Category:	Civil And Structural Eng.
Business name:	Graeme Moulston & Associated Pty Ltd	ciates Enginee	ring	Phone No:	(07) 5530 6214
Business address:	PO Box 213				
	Mudgeeraba QLD	421	3	Fax No:	
Licence No:	[CC5814]	Email engine	ering(@shedtech.c	om.au
Details of the m	wanaad warki				
Details of the p	roposed work:				
Owner/Applicant	Brett Perry		De ref	esigner's project ference No.	S24-C01-391707
Address:	276 Reservoir Drive			Lot No	:
	Wynyard TAS	7325	5		
Type of work:	Building wo	ork x	P	Plumbing work (X all applicable)	
Description of wo	rk:				
	I Portal Frame Shed			/r w or sy ot	ew building / alteration / addition epair / removal / re-erection ater / sewerage / stormwater / site wastewater management stem / backflow prevention / her)
	Design Work (Scope, limitar	tions or exclusi			
Certificate Type:	Certificate		1	sponsible Pra	
	☐Building design		1	hitect or Buildi jineer or Civil I	
	Structural design		1	Engineer	Designer
	☐ Fire Safety design☐ Civil design			I Engineer or (Civil Designer
	☐ Hydraulic design		_	ding Services	
	☐ Fire service design		+	ding Services	
	☐ Electrical design		+	ding Services	
	☐ Mechanical design		+	ding Service D	
	☐ Plumbing design		Plur		Architect, Building
	☐ Other (specify)		1 068	Signor or Engli	
Deemed-to-Satisfy:	×	Performance S	Solutio	on: 🔲 (× t/	ne appropriate box)

Flood Design Parameters (if required)

Inundation – The building requires a minimum of two (2) opposing door openings with a maximum flood height of 1.5m at a max flood velocity of 0.5 m/s

Flow – The building requires a minimum of four (4) door openings, min of 1 each side of the structure, with the absolute maximum flood height of 0.5 m at a max flood velocity of 1.0 m/s

Design documents provided:

The following documents are provided with this Certificate – Document description:

Design Documents (Certificate Reference # 391707): Wind Load Certificate (1 Page), Building Elevations, Compliance Statement, Typical Details (2 Pages), Bracing Locations, Column and Mullion Locations, Pier and Slab Details, Fly Brace Locations, Purlin & Girt Layout, Slab & Foundation Details, General Notes (1 Page)

Additional Documents:				
Schedules:	Prepared by:	Date:		
Specifications:	Prepared by:	Date:		
Computations:	Prepared by:	Date:		
Performance solution proposals:	Prepared by:	Date:		
Test reports:	Prepared by:	Date:		

Standards, codes or guidelines relied on in design process:

- AS 1170.0 General Principals (2002)
- AS 1170.1 Permanent, Imposed & Other Actions (2002)
- AS 1170.2 Wind Actions (2021)
- AS 1170.3 Snow and Ice Actions (2003)
- AS 1170.4 Earthquake Actions (2007)
- AS 4100 Steel Structures Code (2020)
- AS 4600 Cold Formed Steel Structure (2018)
- AS 3600 Concrete Code (2018)
- AS 4505 Garage Doors and Large Access Doors (2021)
- AS 2870 Residential Slabs and Footings (2011)
- AS 2312.2 Protection of Structural Steel Against Atmospheric Corrosion by the Use of Protective Coatings – Hot Dip Galvanizing

Building Code of Australia Volume 1 & 2 (as applicable) Current BCA 2022

Any other relevant documentation:	

Attribution as de	signer:					
I, <u>Graeme C Moul</u>	lston am responsible for the design of th	at part of the work as described	in this certificate.			
accordance with t	on relating to the design includes suffi the <i>Building Act 2016</i> and sufficient det he documents and the Act.					
This certificate co	onfirms compliance and is evidence of tion Code.	suitability of this design with the	e requirements of the			
	Name: (print)	Signed	Date			
Designer:	Graeme C Moulston	A-	31/01/2024			
Licence No:	CC5814L	-1				
Assessment	of Certifiable Works: (TasWate	r)				
	dential dwellings and outbuildings or crease demand and are not certifiable		connection are not			
_	eck ALL of these boxes, LEAVE THIS					
TasWater must t	hen be contacted to determine if the	proposed works are Certifiable	e Works.			
	e proposed works are not Certifiable Assessments, by virtue that all of the		Guidelines for			
The works v	vill not increase the demand for water so	upplied by TasWater				
	vill not increase or decrease the amount ed into, TasWater's sewerage infrastruct		e removed by,			
	The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure					
The works v	The works will not damage or interfere with TasWater's works					
The works w	vill not adversely affect TasWater's oper	rations				
The work ar	e not within 2m of TasWater's infrastruc	ture and are outside any TasWa	iter easement			
I have checl	ked the LISTMap to confirm the location	of TasWater infrastructure				
If the proper to TasWater	rty is connected to TasWater's water sys r.	stem, a water meter is in place, o	or has been applied for			
Certification:						
satisfied that the Sewerage Indus and understood	e works described above are not Certifia stry Act 2008, that I have answered the a the Guidelines for TasWater CCW Asse elines for TasWater Certification of 0 com.au	ble Works, as defined within the above questions with all due dilignessments.	Water and gence and have read			
	Name: (print)	Signed	Date			
Designer:						



Burnie Sheetmetal

ABN: 90 976 703 289
Address: 10 PHILLIP ST
WIVENHOE TAS 7320

Email: workshop@bumieplumbing.com.au Web: www.bumieplumbing.com.au

Order

Phone: 0448 313 622

No: **391707**Date: 30/01/2024

Windload Certificate (AS/NZS 1170.2:2021)

	ITEM	DESIGN VALUE & DETAILS
Comp	oliance Details	
1	Shed Supplier	Burnie Sheetmetal
2	Shed Engineer	Graeme Moulston & Associates Engineering Pty Lt
3	Compiled By	Burnie Sheetmetal
Buildi	ing Details	
4	Building Description	Skillion Garage/Shed
5	BCA Classification	10a
6	Length	20.00m
7	Width	8.00m
8	Eave Height	4.05m
Site [Details	
9	Site Address	276 Reservoir Drive
		Wynyard TAS, 7325
10	Wind Region	A4
11	Importance Level	2
12	Annual Probability of Wind Exceedance	1:500
13	Climate Change Multiplier	1
14	Regional Wind Speed (m/s)	45.00
15	Wind Direction Multiplier	1.00
16	Terrain Category	2.50
17	Terrain/Height Multiplier	0.87
18	Shielding Multiplier	1.00
19	Topographic Multiplier	1.00
20	Design Wind Speed (m/s)	39.15
21	Design Wind Pressure (kPa)	0.92

This shed has been designed for internal pressure coefficients, $k_v \times Cpi$ = +0.69 & -0.57. Roller door strength is not critical to design

7.03 / 7.03 Page 1 of 1



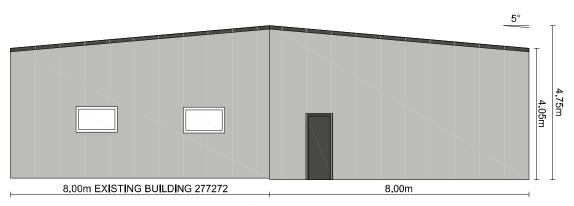
Burnie Sheetmetal

ABN: 90 976 703 289 Address: 10 PHILLIP ST WIVENHOE TAS 7320

Email: workshop@burnieplumbing.com.au Web: www.burnieplumbing.com.au

Order

No: 391707 Date: 30/01/2024

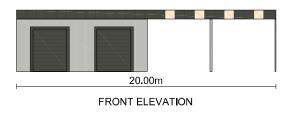


Phone: 0448 313 622

FRONT VIEW



REAR VIEW





EXISTING BUILDING 277272 PLAN VIEW

REAR ELEVATION

Produced by Shed Builder

Page 2 of 4



Shed Kit Compliance Statement

I certify that the shed kit components listed below are structurally adequate for their purpose. This document takes precedence over selections from tables in the standard drawings.

Signed: Date: 31 January 2024

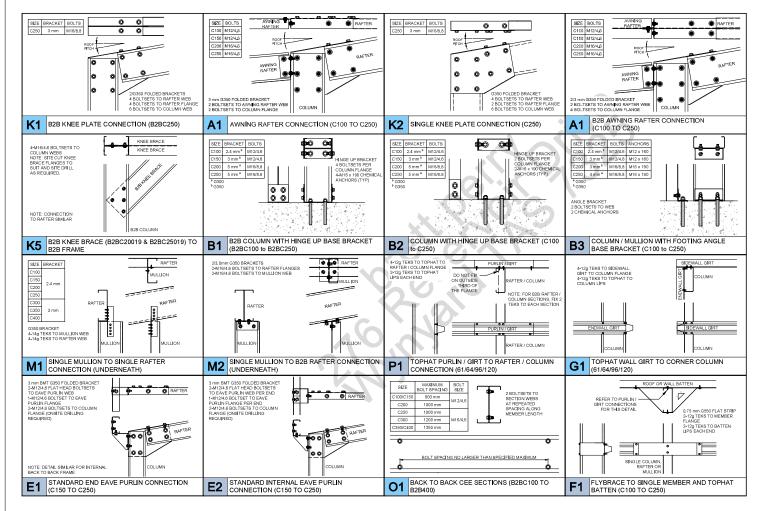
Skillion Portal Frame Shed Specifications				
Length	20.00 m			
Width	8.00 m			
Height	4.05 m			
Roof Style	Skillion			
Roof Pitch	5.0°			
Bay Count	4			
Bay Sizes	5.00m, 5.00m, 5.00m			
Roof Cladding	Corrugated 0.42 BMT Woodland Grey			
Roof Screws	12-14x42 SDM HEX SEAL			
Wall Cladding	Steelclad 0.42 BMT Shale Grey			
Wall Screws	10-16x16 Hex Neo			
Roller-Doors	2 x Series "B" Roller-Door (3450 x 3000)			
P/A Doors	1 x Personal Access Door (2040 x 820)			
Glass Doors	1 x Glass Sliding Door (2110 x 1820)			
Windows	1 x Window (790 x 1274)			
Roller Door Compliance	This shed has been designed for internal pressure coefficients, $k_v \times \text{Cpi} = +0.69 \& -0.57$. Roller door strength is not critical to			
Piers with Slab	Option 1: 300Φ×500mm Deep (4×N12)* Option 2: 450Φ×350mm Deep (No Reo)* (Refer to Pier & Slab Details)			
Piers Only	Option 1: 300Φ×1250mm Deep (4×N12)* Option 2: 450Φ×1400mm Deep (4×N16)*			

Job Details		
Order Number	391707	
Customer Name	brett perry	
Site Address	276 Reservoir Drive, Wynyard TAS 7325, Australia	
Wind Design Code	AS/NZS 1170.2:2021	

Kit Components				
Front End Frame	C25019			
Internal Frame	B2B-C25019			
Back End Frame	B2B-C25019			
Knee Braces	C20019 (4 @ 1.585m)			
Roof Purlin Type	TopHat 120mm 1.00 BMT Lapped			
Roof Purlin Spacing	892 mm			
Side Wall Girt Type	TopHat 120mm 1.00 BMT Lapped			
Side Wall Girt Spacing	1200 mm			
End Wall Girt Type	TopHat 120mm 1.00 BMT Lapped			
End Wall Girt Spacing	1200 mm			
Eave Purlins	C15012			
Roof & Wall Bracing	Refer to Bracing Locations			
Mullions	Refer to Slab Layout			

^{*} The pier design assumes Class M (AS2870-2011) Firm to Stiff Clay with a 100 kPa minimum safe bearing capacity. For other soil conditions, an engineer's advice should be sought.

1. Typical Details



1	Width End Column	C25019
2	Width End Rafter	C25019
3	Reverse Width End Column	B2B-C25019
4	Reverse Width End Rafter	B2B-C25019
5	Internal Column	B2B-C25019
6	Internal Rafter	B2B-C25019
7	Knee Braces	C20019
8	Knee Brace Height Up Frame	1,2m
9	Eave Purlin	C15012
10	Roof Purlin Size	TopHat 120mm 1.00 BMT
11	Roof Purlin Spacing	892mm (Max. 997mm)
12	Roof Purlin Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD ON 14G Zinc
13	Side Wall Batten Size	TopHat 120mm 1.00 BMT
14	Side Wall Batten Spacing	1200mm (Max. 1379mm)
15	Side Wall Batten Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD ON 14G Zinc
16	End Wall Batten Size	TopHat 120mm 1.00 BMT
17	End Wall Batten Spacing	1200mm (Max. 1500mm)
18	End Wall Batten Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD ON 14G Zinc
19	Column Holddown Bracket	Hinge Up Bracket Attached to Slab
20	Mullion Anchor Bolts	Chemset Stud 16 x 190 with Nut-Washer
21	Frame Screw Fasteners	14-14x22 Hex
22	Frame Bolt Fasteners	M16 x 40 Gr8 8 Std Purlin Assembly
23	Roof Sheeting	Corrugated 0.42 BMT Wood and Grey
24	Roof Sheeting Fasteners	12-14x42 SDM HEX SEAL
25	Wall Sheeting	Steelclad 0.42 BMT Shale Grey
26	Wall Sheeting Fasteners	10-16x16 Hex Neo
27	Roller Door Colour	Woodland Grey
28	Glass Sliding Door Colour	Woodland Grey
29	P.A. Door Colour	Woodland Grey
30	Window Colour	Woodland Grey
31	Gutter	Square Gutter
32	Rain Goods Colour	Woodland Grey
33	Down Pipe	Downpipe 90mm Dia
34	Down Pipe Colour	Shale Grey
35	Corner Flashing Colour	Shale Grey
36	Ridge Capping Colour	Woodland Grey
37	Barge Capping Colour	Woodland Grey
38	Opening Flashing Colour	Shale Grey
39	Beam Flashing Colour	Woodland Grey
40	Eave Flashing Colour	Shalle Grey

MEMBER & MATERIAL COLLERUSE

7.03 / 7.03



Site Details

brett perry 276 Reservoir Drive Wynyard TÁS 7325 M: 0459516444

Shed Sold By

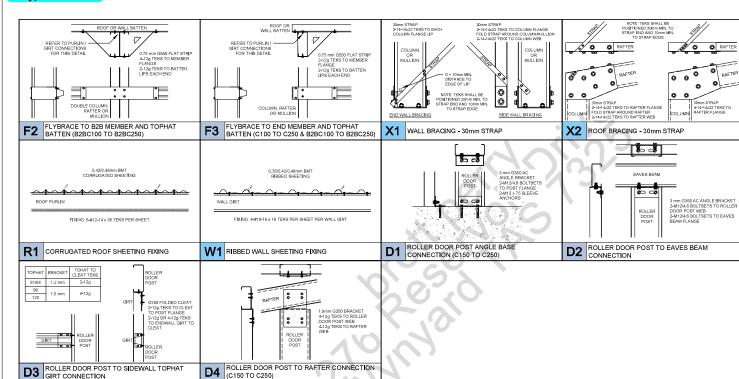
Burnie Sheetmetal ABN: 90 976 703 289 10 PHILLIP ST **WIVENHOE TAS 7320** P: 0448 313 622

W: www.burnieplumbing.com.au E: workshop@burnieplumbing.com.au

Specifics

- The design and details shown on these drawings are applicable to this project only
- Details are not to scale

1. Typical Details



٨	MEMBER & MAT	ERIAL SCHEDULE		
1	Width End Column	C25019		
2	Width End Rafter	C25019		
3	Reverse Width End Column	B2B-C25019		
4	Reverse Width End Rafter	B2B-C25019		
5	Internal Column	B2B-C25019		
6	Internal Rafter	B2B-C25019		l
7	Knee Braces	C20019		l
8	Knee Brace Height Up Frame	1,2m		l
9	Eave Purlin	C15012		l
10	Roof Purlin Size	TopHat 120mm 1.00 BMT		l
11	Roof Purlin Spacing	892mm (Max. 997mm)		l
12	Roof Purlin Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD	ON 14	ŧG.
13	Side Wall Batten Size	TopHat 120mm 1.00 BMT		l
14	Side Wall Batten Spacing	1200mm (Max, 1379mm)		l
15	Side Wall Batten Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD	ON 1	G
16	End Wall Batten Size	TopHat 120mm 1 00 BMT		l
17	End Wall Batten Spacing	1200mm (Max, 1500mm)		l
18	End Wall Batten Fasteners	SDM HEX BARE C4 14-14x22 12G HEAD	ON 14	dG
19	Column Holddown Bracket	Hinge Up Bracket Attached to Slab		l
20	Mullion Anchor Bolts	Chemset Stud 16 x 190 with Nut-Washer		l
21	Frame Screw Fasteners	14-14x22 Hex		l
22	Frame Bolt Fasteners	M16 x 40 Gr8 8 Std Purlin Assembly		l
23	Roof Sheeting	Corrugated 0.42 BMT Wood and Grey		l
24	Roof Sheeting Fasteners	12-14x42 SDM HEX SEAL		l
25	Wall Sheeting	Steelclad 0.42 BMT Shale Grey		l
26	Wall Sheeting Fasteners	10-16x16 Hex Neo		l
27	Roller Door Colour	Woodland Grey		l
28	Glass Sliding Door Colour	Woodland Grey		l
29	P.A. Door Colour	Woodland Grey		l
30	Window Colour	Woodland Grey		l
31	Gutter	Square Gutter		l
32	Rain Goods Colour	Woodland Grey		l
33	Down Pipe	Downpipe 90mm Dia		l
34	Down Pipe Colour	Shale Grey		l
35	Corner Flashing Colour	Shale Grey		
36	Ridge Capping Colour	Woodland Grey		
37	Barge Capping Colour	Woodland Grey		
38	Opening Flashing Colour	Sha l e Grey		
39	Beam Flashing Colour	Woodland Grey		
40	Eave Flashing Colour	Shale Grey		





D3 ROLLER DOOR POST TO SIDEWALL TOPHAT GIRT CONNECTION

Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

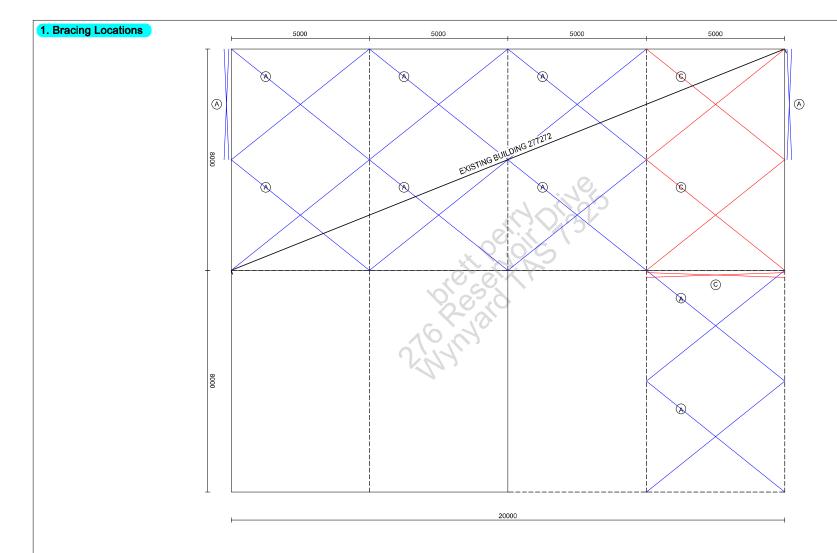
Burnie Sheetmetal ABN: 90 976 703 289 10 PHILLIP ST WIVENHOE TAS 7320 P: 0448 313 622 W: www.burnieplumbing.com.au E: workshop@burnieplumbing.com.au

Specifics

RAFTER

30mm STRAP 4-14-14x22 TEKS TO RAFTER FLANGE

- The design and details shown on these drawings are applicable to this project only
- Details are not to scale



7.03 / 7.03



Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

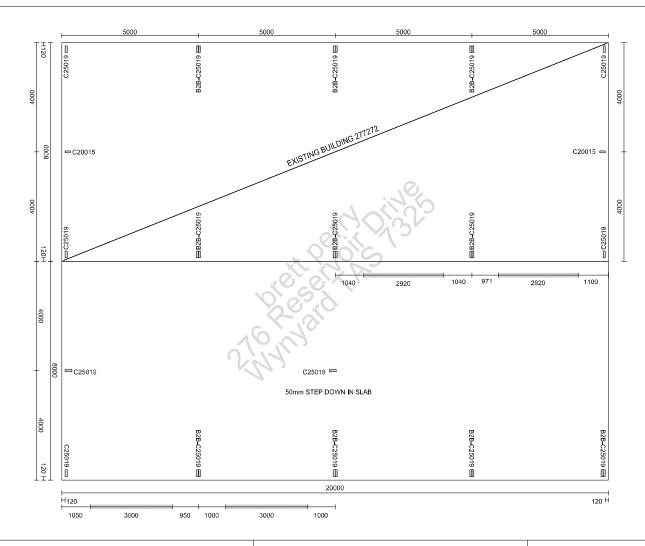
Shed Sold By

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10 PHILLIP ST
WIVENHOE TAS 7320
P: 0448 313 622
W: www.bumieplumbing.com.au
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Bracing Specifics

- (A) 30mm x 1.00mm G550 Strap (Minimum)
- (B) 50mm x 1.20mm G500 Strap (Minimum)
- (C) 12mm Rod
- (D) 16mm Rod

1. Column & Mullion Locations



7.03 / 7.03



Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

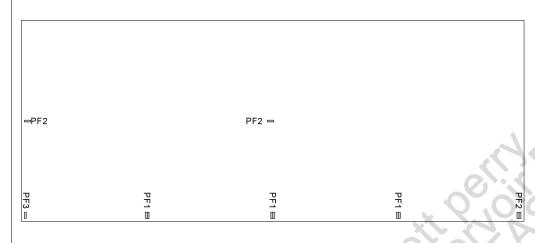
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W: www.burnieplumbing.com.au
E: workshop@burnieplumbing.com.au

Specifics

Shed Order Number: 391707 Shed Type: Skillion Shed

- This drawing is not to scale (NTS) and all dimensions are in millimetres unless noted.
- This drawing should be used in conjunction with the relevant engineering diagrams and hold down brackets specified in the order.

1. Pier & Slab Details

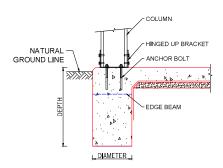


Option 1: 300 Diameter Piers				
Pier Footing Diameter (mm) Depth (mm) Reinforcement Ties (mm				
PF1	300	350	_	_
PF2	300	500	4 × N12	R6 - 300
PF3	300	300	_	_

A 100 mm slab is assumed in this design.

Option 2: 450 Diameter Piers					
Pier Footing Diameter (mm) Depth (mm) Reinforcement Ties (mr					
PF1	450	300	-	_	
PF2	450	350	_	_	
PF3	450	300	_	_	

A 100 mm slab is assumed in this design.



LOCAL FOOTING WITH SLAB

This design assumes Class M (AS2870-2011) Firm to Stiff Clay with a 100 kPa minimum safe bearing capacity. For Class H Firm to Stiff Clay, pier embedments should be a minimum of 1500 mm with steel reinforcement extending to the depths specified in the tables. For other soils, an engineer's advice is to be sought. Refer to the 'Slab & Foundation Details' drawing for slab and edge beam details of domestic structures. Industrial structures should always be referred to an engineer for site-specific designs.

Shed Sold By

Burnie Sheetmetal ABN: 90 976 703 289 10 PHILLIP ST WIVENHOE TAS 7320 P: 0448 313 622 W: www.burnieplumbing.com.au E: workshop@burnieplumbing.com.au

Specifics

Shed Order Number: 391707

1. This drawing is not to scale (NTS) and all dimensions are in millimetres unless noted.

7.03 / 7.03

This drawing should be used in conjunction with the relevant engineering diagrams and hold down brackets specified in the order.



Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

1. Fly Brace Locations



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Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

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Fly Brace Specifics

Shed Order Number: 391707

- Roof View



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Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

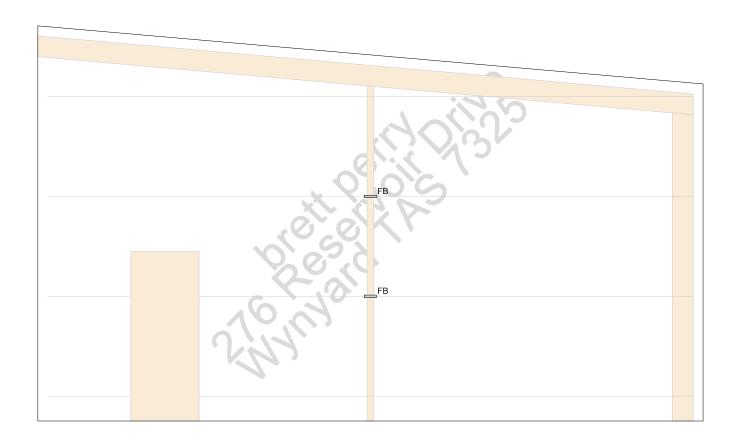
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Fly Brace Specifics

Shed Order Number: 391707

- Length Side View

1. Fly Brace Locations



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Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

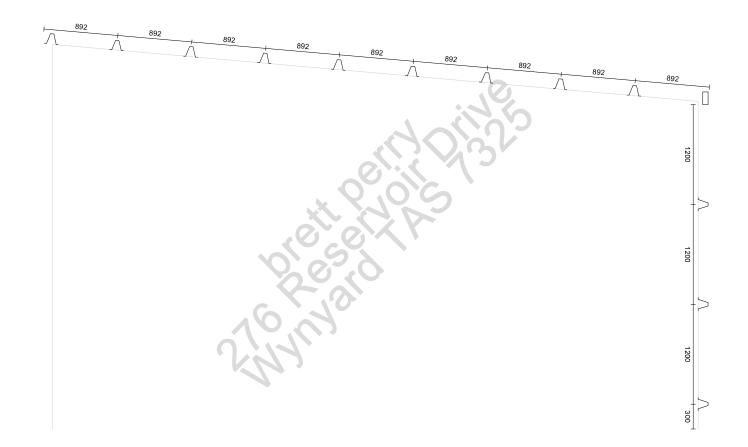
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E: workshop@burnieplumbing.com.au

Fly Brace Specifics

Shed Order Number: 391707

- Width View

1. Purlin & Girt Layout



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Site Details

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E: workshop@burnieplumbing.com.au

Purlin & Girt Locations

- Purlin & Girt Spacings
- (*) Place member as close to knee as possible

1. Purlin & Girt Layout

RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
RP1	RP2	RP3	RP4
	5/17.		

Label	Length
RP1	5.375m
RP2	5.750m
RP3	5.750m
RP4	5.375m

7.03 / 7.03



Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

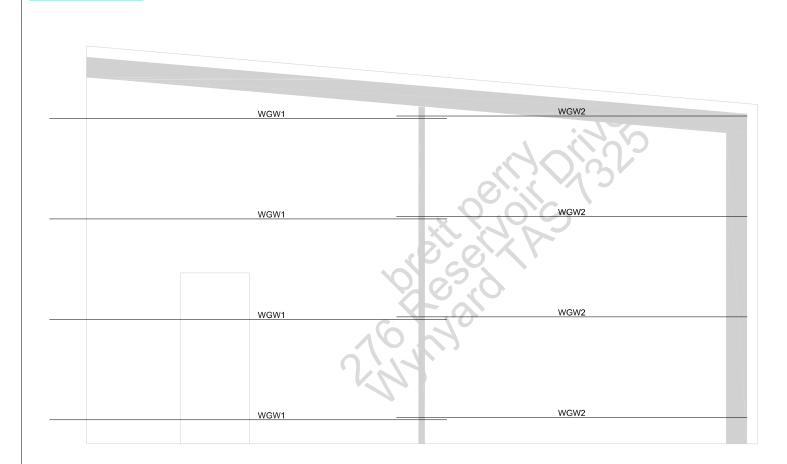
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E: workshop@burnieplumbing.com.au

Purlin & Girt Locations

Shed Order Number: 391707

- Roof Purlins

- (*) Place purlins as close to knee as possible



Label	Length
WGW1 WGW2	4.700m 4.180m

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1. Purlin & Girt Layout

Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

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W: www.burnieplumbing.com.au
E: workshop@burnieplumbing.com.au

Purlin & Girt Locations

Shed Order Number: 391707

- Width View

1. Purlin & Girt Layout



Label	Length
WGL1-2	1.875m
WGL2-2	2.075m

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Site Details

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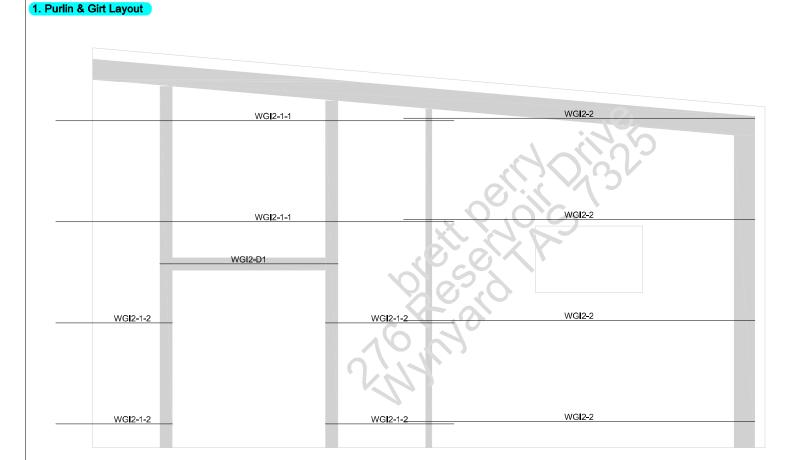
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E: workshop@burnieplumbing.com.au

Purlin & Girt Locations

Shed Order Number: 391707

- Length View



Label	Length
WGI2-1-2	3.060m
WGI2-1-1	4.680m
WGI2-2	4.180m
WGI2-D1	1.820m

7.03 / 7.03



Site Details

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Shed Sold By

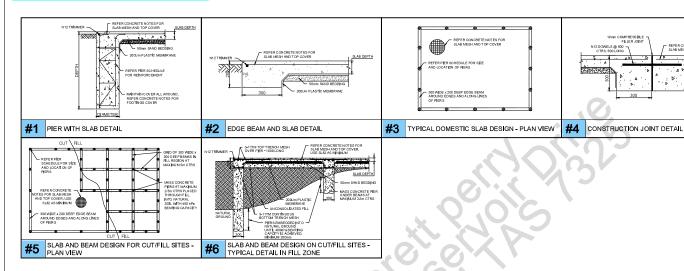
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E: workshop@burnieplumbing.com.au

Purlin & Girt Locations

Shed Order Number: 391707

- Internal Wall View

1. Domestic Slab & Foundation Details



A 100 mm slab is assumed in this Class M design. For Class H soils, ensure slab is 110 mm minumum. Domestic shed slabs shall be reinforced with SL72 mesh with 30 mm top cover. Slabs placed over spans wider than 15 m shall have SL92 slab mesh and be 150 mm thick as standard. All slabs placed longer than 24 m (one pour) shall have SL92 slab mesh as standard.

Industrial structures should be referred to an engineer for site-specific designs.





Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

Bumie Sheetmetal
ABN: 90 976 703 289
10 PHILLIP ST
WIVENHOE TAS 7320
P: 0448 313 622
W: www.burnieplumbing.com.au
E: workshop@burnieplumbing.com.au

Specifics

- The design and details shown on this drawing are applicable to domestic shed structures only
- Details are not to scale

S000 - GENERAL NOTES

GOVERNING CODES

BUILDING CODE	NATIONAL CONSTRUCTION CODE
LOADING CODE	AS 1170 (ALL PARTS)
COLD-FORMED STEEL	AS/NZS 4600:2018

DRAWINGS

THESE DRAWINGS AND THE DESIGNS THEY PORTRAY REMAIN THE INTELLECTUAL PROPERTY OF SHEDTECH HOLDINGDS PTY LTD. THEIR VALIDITY IS CONDITIONAL TO THE BUILDING BEING SUPPLIED BY A DISTRIBUTOR OF SHED BUILDER.

THESE DRAWINGS MAY BE USED FOR OBTAINING BUILDING APPROVAL AND AIDING CONSTRUCTION, ANY OTHER USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM SHED BUILDER.

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER WRITTEN INSTRUCTIONS ISSUED BY SHED BUILDER. ALL DISCREPANCIES SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE ORDERING. THESE DRAWINGS SHALL NOT BE SCALED.

DESIGN CRITERIA

GENERAL NCC BUILDING CLASSIFICATIONIMPORTANCE LEVEL	
VERTICAL LOADING DEAD LOAD COLLATERAL LOAD	SELF WEIGHT
LIVE LOAD	0.25 kPa
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	TC2.5 1.00 1.00 39.2 m/s
SNOW LOADING SITE ALTITUDE GROUND SNOW LOAD S ₀ ROOF SNOW LOAD S _{root}	69.7 m N/A N/A
SOIL PROPERTIES	

ALLOWABLE BEARING CAPACITY q 100 kPa

UNDRAINED SHEAR STRENGTH S...... 50 kPa

CONSTRUCTION

MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE LATEST RELEVANT AUSTRALIAN CODES (AS AMENDED), AND THE STATUTORY AUTHORITIES' REQUIREMENTS INCLUDING WHS REGULATIONS.

SHED BUILDER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING SITE CONDITIONS BEFORE CONSTRUTION.

THE CONTRACTOR MUST NOT DEVIATE FROM THESE DRAWINGS OR MAKE ANY ALTERATIONS (INCLUDING SHEETING REMOVAL) WITHOUT OBTAINING WRITTEN APPROVAL FROM THE CERTIFYING ENGINEER. SHED BUILDER IS NOT RESPONSIBILE FOR CHANGES MADE WITHOUT APPROVAL.

DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART IS OVER-STRESSED. THE BUILDING IS NOT STRUCTURALLY ADEQUATE UNTIL THE INSTALLATION OF ALL COMPONENTS AND DETAILS IN ACCORDANCE WITH THESE DRAWINGS. FOR GUIDANCE ON CONSTRUCTION, THE CONTRACTOR SHOULD CONSULT THE REVELANT SHED BUILDER CONSTRUCTION GUIDE.

SHED BUILDER AND THE ENGINEER ARE NOT THE PROJECT MANAGERS AND WILL NOT BE PRESENT DURING CONSTRUCTION. THE UNDERSIGNING ENGINEER HAS ONLY REVIEWED THIS BUILDING FOR CONFORMITY TO THE STRUCTURAL DESIGN COMPONENTS OF THE GOVERNING CODE.

THE GOVERNING CODE REQUIRES NO SPECIAL INSPECTIONS ON THIS JOB, ANY OTHER INSPECTIONS REQUESTED BY THE LOCAL AUTHORITIES SHALL BE CONDUCTED AT THE OWNER'S EXPENSE. DOORS AND WINDOWS SHALL BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS AND DETAILS. BEFORE WALKING ON ROOF, ENSURE THE ROOF IS TRAFFICABLE AND CONSULT CLADDING MANUFACTURER'S GUIDLINES ON HOW TO DO SO SAFELY AND WITHOUT DAMAGE TO THE PRODUCT.

CONCRETE

ALL CONCRETE DETAILS, MATERIALS AND WORKMANSIP SHALL BE TO AS 2870 AND AS 3600. CONCRETE SHALL HAVE A MINIMUM CHARACTERISTIC STRENGTH GRADE OF N25 (28-DAY STRENGTH OF 25MPa). SLUMP TO BE 100mm ± 15mm WITH MAXIMUM AGGREGATE SIZE OF 20mm.

SLABS TO BE CURED FOR 7 DAYS AFTER PLACEMENT BY AN APPROVED METHOD. THESE INCLUDE:

a. MAINTAINING A WET SURFACE

b. COVERING THE SLAB WITH PLASTIC MEMBRANE

c. SPRAYING WITH FOSROC CONCURE A99 CURING COMPOUND

REINFORCEMENT SHALL CONFORM TO AS/NZS 4671 AND BE SECURED IN PLACE WHILE CONCRETING BY APPROVED PLASTIC TIPPED BAR CHAIRS, SPACERS OR SUPPORT BARS AT MAX. CENTRES OF 800mm FOR FABRIC, 600mm FOR BARS UP TO 12mm DIAMETER, 900mm FOR BARS HOM SECRET.

ALL REINFORCEMENT SHALL HAVE 30mm MINIMUM TOP COVER AND A MINIMUM SIDE AND BOTTOM COVER OF 40mm IN SLABS AND 50mm IN FOOTINGS. FOR CONCRETE SUBJECT TO REPEATED WETTING/DRYING OR LOCATED 50km FROM COASTLINE, ALL COVER SHALL BE INCREASED BY 10mm.

REINFORCEMENT SYMBOLS & SPLICES (NOTE: REINFORCEMENT WELDING NOT PERMITTED)

N DEFORMED BAR GRADE D500N TO ASNIZS 4671 (600mm LAP FOR N12 & 800mm LAP FOR N16)

R PLAIN ROUND BAR GRADE R550N TO ASNIZS 4671

ENSURE THAT HOLD DOWN BOLTS ARE NOT OVER-TIGHTENED.

STRUCTURAL STEEL

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS/NZS 4600 AND MANUFACTURERS INSTALLATION RECOMMENDATIONS.

ALL COLD-FORMED STRUCTURAL STEEL (INCLUDING SHEETING) SHALL BE MANUFACTURED FROM ZINC GALVANISED (Z350) HIGH STRENGTH STEEL STRIP CONFORMING TO AS/NZS 1397:

ALL HOT-ROLLED PLATES SHALL BE MINIMUM GRADE 300 TO AS/NZS 3678.

ALL HOLLOW SECTIONS SHALL BE MINIMUM GRADE 350 TO AS/NZS 1163.

NO WELDING IS TO BE PERFORMED ON THIS BUILDING.

BOLTS SHALL BE IN CONFORMITY WITH AS 4100 AS FOLLOWS:

4.6/S COMMERCIAL BOLTS TO AS/NZS 1111 & AS/NZS 1112, SNUG TIGHTENED

8.8/S HIGH STRENGTH STRUCTURAL BOLTS, NUTS AND WASHERS TO AS/NZS 1252, SNUG TIGHTENED

KNEE AND APEX PLATE BOLTS ARE DESIGNED AS FRICTION TYPE TO AS/NZS 1252 AND SHALL BE INSTALLED AND TENSIONED TO AS 4100. AN APPROVED METHOD OF TENSIONING IS 1/3 A TURN PAST SNUG TIGHT (PODGER SPANNER TIGHT). ROOF AND/OR WALL SHEETING TO AS/NZS 1562 SHALL BE FIXED TO PURLINS OR GIRTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

ALL RAINWATER PRODUCTS SHALL COMPLY WITH AS/NZS 2179.1.

ALL BOLTS, NUTS AND WASHERS INCLUDING HOLDOWNS SHALL BE HOT DIP GALVANISED. GALVANISED ITEMS CAST INTO CONCRETE MUST BE PASSIVATED. STRUCTURAL SCREWS MUST COMPLY WITH AS/NZS 3566.

FOUNDATIONS

FOUNDATION DESIGN IS VALID FOR FIRM TO STIFF CLAY SOILS WITH AN AS 2870 SITE CLASSIFICATIONS OF M OR BETTER AND WITH AN ALLOWABLE BEARING CAPACITY GREATER THAN THE MINIMUM SPECIFIED IN THE DESIGN CRITERIA. FOR OTHER SOIL CONDITIONS, THE ENGINNER'S ADVICE SHOULD BE SOUGHT FOR A CUSTOMIZED FOUNDATION DESIGN.

REGARDLESS OF SPECIFIED DEPTHS, THE MINIMUM FOUNDATION DEPTH SHALL BE 100mm INTO NATURAL GROUND OR BELOW THE FROST DEPTH SPECIFIED BY THE LOCAL COUNCIL. EXCAVATIONS SHALL BE CLEANED OF LOOSE MATERIAL AND WATER AND THEIR SIDES SHALL BE FORMED WHEN UNSTABLE.

WHERE FOUNDATION MATERIAL DIFFERS FROM THAT DESCRIBED IN THE SITE INVESTIGATION REPORT OR SOFT SPOTS ARE FOUND, SHED BUILDER HEAD OFFICE SHALL BE NOTIFIED AND IF NECESSARY THE MATERIAL SHALL BE EXCAVATED AND BACKFILLED WITH APPROVED SELECT FILL MATERIAL.

SLAB

THE BUILDING AREA IS TO BE STRIPPED OF TOPSOIL AND VEGETATION. EDGE BEAMS SHALL BE FOUNDED ON NATURAL SOIL OR CONTROL COMPACTED FILL.

SLAB/BEAMS ON CUT/FILL SITES MAY USE MASS CONCRETE PIERS PLACED THROUGH FILL, 200mm INTO NATURAL SOIL AT 2.5m CENTRES AS PER DETAILS.

ALL FILL SHALL BE TREATED AS UNCOMPACTED FILL UNLESS IT IS LEVEL 1 CERTIFIED TO AS 3798.

A LAYER OF 200 MICRON PVC SHEETING SHALL BE PLACED UNDER THE SLAB. 50mm CRUSHER DUST IS RECOMMENDED FOR A LEVEL COMPACTED SURFACE.

SOIL CONDITIONS ARE ASSUMED TO BE CLASS M OR BETTER FOR STANDARD SLAB. SLAB AND EDGE BEAMS SHALL BE POURED IN A CONTINUOUS OPERATION.

DOMESTIC SHED SLABS SHALL BE REINFORCED WITH SL72 MESH WITH 30mm TOP COVER. SLABS PLACED OVER SPANS WIDER THAN 15m SHALL HAVE SL92 SLAB MESH AND BE 150mm THICK AS STANDARD. ALL SLABS PLACED LONGER THAN 24m (ONE POUR) SHALL HAVE SL92 SLAB MESH AS STANDARD.

MAXIMUM LENGTH BETWEEN CONSTRUCTION JOINTS OF SLAB SHALL BE:

 100mm THCK
 18 metres

 125mm THCK
 24 metres

 150mm THCK
 30 metres

CONCRETE IS TO BE COMPACTED BY VIBRATION OR OTHER MECHANICAL MEANS. ANY SAW CUTTING OF CRACK CONTROL JOINTS SHALL BE CARRIED OUT WITHIN 24hrs OF THE PLACING OPERATION.

ALL INDUSTRIAL SLAB DESIGNS SHOULD BE REFERRED TO AN ENGINEER FOR A SITE-SPECIFIC DESIGN. $7.03\ /\ 7.03$



Site Details

brett perry 276 Reservoir Drive Wynyard TAS 7325 M: 0459516444

Shed Sold By

Burnie Sheetmetal ABN: 90 976 703 289 10 PHILLIP ST WIVENHOE TAS 7320 P: 0448 313 622 W: www.burnieplumbing.com.au E: workshop@burnieplumbing.com.au

General Notes

From: Lyndal Perry To: Town Planning

Subject: Re: DA 69/2024 - Invalid Application Letter (Planning)

Date: Friday, 5 April 2024 11:37:48 AM

Attachments: image001.png

image002.png

Hi Mario,

Yes, you are correct I missed off the timber decking of the dwelling, which makes up the difference from 376 to 404.

Regards Lyndal

On Fri, Apr 5, 2024 at 11:13 AM Town Planning < townplanner@warwyn.tas.gov.au >

Good morning Lyndal,

Could you please clarify the total site coverage, including the proposed development, of the site? Does it exceed the cap 400m²?

If not, it will need revision to the proposal plan submitted with the application since it shows 404m² of total floor area.

If yes, I will use your justification on your email below addressing the Performance Criteria P1 for Clause 11.4.1 of the Planning Scheme.

This to avoid misunderstanding to public as the application will be advertised.

Thanks.

Regards, **Mario Ang**

Town Planner

Waratah-Wynyard Council, 21 Saunders Street (PO Box 168) Wynyard, TAS, 7325 P: 03 6443 8308

E: townplanner@warwyn.tas.gov.au

Working Days

M: 7:30 - 5 | TU: 7:30 - 5 | W: 7:30 - 5 | TH: NWD | F: 7:30 - 5



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c) Size and shape as Site Plan shows

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sender. No hability is accepted for any unauthorised use of the information contained in this transmission.
From: Lyndal Perry < lyndalperry394@gmail.com > Sent: Friday, 5 April 2024 10:30 AM To: Town Planning < townplanner@warwyn.tas.gov.au > Subject: Re: DA 69/2024 - Invalid Application Letter (Planning)
Morning Mario.
- Shed and extension does not exceed 400m3 actual 376m3 as per site plan
a) both Shed and dwelling are at the highest area of the 5 acre plot and does not impact the topography of the site
b)Storm water will be caught in tanks and the overflow will be absorbed within the 40m of bushland decline to property boundary on the southern side and upto 100m of declined bush on the N/e side
down to Smiths Rd and Reservoir Drive through driveway culverts already in place.

dwelling will not impose on new development

d) The Original Shed is situated on the rear boundary and the proposed extension and

e) all vegetation for building site was removed and cleared prior to purchase

f) Dwellings in the area are all skillion roofed and Iron clad and our development will be the same although not seen from surrounding properties
I hope this meets your requirements.
Regards
Brett and Lyndal Perry
On Wed, Apr 3, 2024 at 9:14 AM Town Planning < townplanner@warwyn.tas.gov.au > wrote:
Good morning Lyndal,
Thank you for the submission of the Certificate of Title 276 Reservoir Drive, Wynyard.
Please also address the RFI as per previous attached correspondence for Clause 11.4.1 of the Rural Living Zone provisions (copy of the zone provision is also attached in my previous email).
Please note that the written address can be done via email and/or in dot point format.
Thanks.
Regards, Mario Ang
Town Planner
Waratah-Wynyard Council, 21 Saunders Street (PO Box 168) Wynyard, TAS, 7325 P: 03 6443 8308
E: townplanner@warwyn.tas.gov.au

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M: 7:30 - 5 | TU: 7:30 - 5 | W: 7:30 - 5 | TH: NWD | F: 7:30 - 5



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From: Lyndal Perry < lyndalperry394@gmail.com>

Sent: Wednesday, 3 April 2024 9:02 AM

To: Town Planning < townplanner@warwyn.tas.gov.au >

Subject: Re: DA 69/2024 - Invalid Application Letter (Planning)

Hi, please find attached the required Title showing that we are the current owners of the property.

If you require anything further please let me know.

Regards

Lyndal Perry

On Wed, Apr 3, 2024 at 8:40 AM Town Planning < townplanner@warwyn.tas.gov.au > wrote:

Good morning Lyndal,

Please find attached correspondence regarding planning application DA 69/2024 for a new Dwelling & Shed extension at 276 Reservoir Drive, Wynyard (PID 3595185).

Should you have any further queries, please contact me as per the details below.

Thanks.

Regards, Mario Ang

Town Planner

Waratah-Wynyard Council,

21 Saunders Street (PO Box 168) Wynyard, TAS, 7325 P: 03 6443 8308

E: townplanner@warwyn.tas.gov.au

Working Days

M: 7:30 - 5 | TU: 7:30 - 5 | W: 7:30 - 5 | TH: NWD | F: 7:30 - 5



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Brett Perry 276 Reservoir Drive Shed Extension and New Tiny Home

A01 Cover A02 Site Plan

Project details:

Land Title Reference Number: $\frac{175267}{4}$

Design Wind Speed: N2
Climate Zone: 7
Soil Classification: N/A
BAL Level: N/A
Alpine Area: N/A
Corrosion Environment: N/A

Other Hazards:

(Flooding, Landslip, Dispersive Soils, Sand Dunes, Mine Subsidence,

Landfill) N/A

Area:

A01

Land: 1.959ha
Existing Floor Area: 160m²
New Floor Area: 244m²
Total Floor Area: 404m²

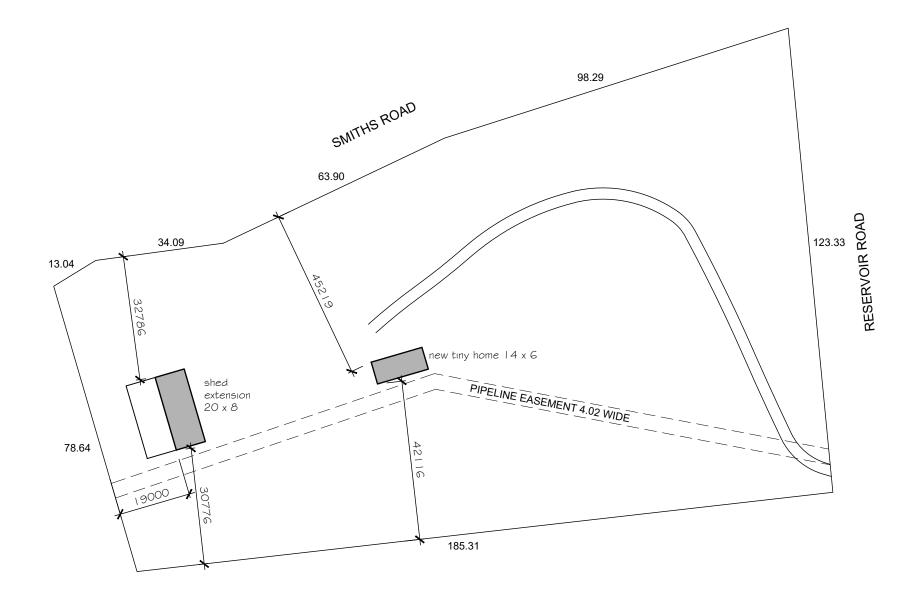
Rosene Cox

BUILDING DESIGN & DRAFTING e. rosene.cox@gmail.com m. 0418 171 074

12 Jackson St ABN 84 634 774 986 Wynyard TAS 7325 CC No. CC5197 G

Project Number: 2324-19

Date: 07.02.24



SITE PLAN

Scale 1:1000



ABN 84 634 774 986

TCC No. CC5197 G

GENERAL NOTES:

service locations on site

(concrete structures)

1. Check all dimensions, boundaries, easements and

2. All work shall comply with the current Tasmanian Building Regulations and relevant current Australian Standards, particularly AS2870 (residential slabs and footings) AS3700 (unified masonary code) AS3600

