32-34 Georges Bay Esplanade St Helens Tasmania 7216 T: 03 6376 7900 ABN 96 017 131 248



Development Applications

Notice is hereby given under Section 57(3) of the *Land Use Planning & Approvals Act 1993* that an application has been made to the Break O' Day Council for a permit for the use or development of land as follows:

DA NumberDA 2025 / 00025ApplicantJ BinnsProposalConstruction of a Dwelling and OutbuildingsLocation98 Grant Street, Falmouth

Plans and documents can be inspected at the Council Office by appointment, 32 – 34 Georges Bay Esplanade, St Helens during normal office hours or online at <u>www.bodc.tas.gov.au</u>.

Representations must be submitted in writing to the General Manager, Break O'Day Council, 32 -34 Georges Bay Esplanade, St Helens 7216 or emailed to <u>admin@bodc.tas.gov.au</u>, and referenced with the Application Number in accordance with section 57(5) of the abovementioned Act during the fourteen (14) day advertised period commencing on Saturday 7 June, 2025 **until 5pm Monday 23 June, 2025**.

John Brown GENERAL MANAGER





www.jenniferbinnsdesign.com.au (03) 6376 2588 : 0439 765 452 : jenniferbinns@bigpond.com suite 8 level 1 avery house, 48 cecilia street, st helens 7216

proposed dwelling + garage

carter + ira zigmantas 98 grant street falmouth tasmania 7215

planning application

Building Areas

dwelling	168.42
garage	36.33
carport	21.81
verandah	11.79
porch	7.12
	245.47





1 proposed floor plan







_____6700 🔀 carport f.l.

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REV:	DESCRIF	PTION:	DATE:			
PROJE	ECT:					
pro	proposed dwelling + garage					
FOR:						
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DRAW	ING NO:	DRAWN BY: J	В			
a06	6	DATE: 20.02	.25			
SCALE	E: 1:100 PROJECT: 0123ZI					
www.jer (03) 633 suite 8	niferbinnsdesign.com.au 76 2588 : 0439 765 452 level 1 avery house, 48 c	ifer bi ; ; jenniferbinns@big ecilia street, st heler	DINS pond.com ns 7216			

ACCREDITATION NO: CC 1269L









DESCRIPTION:

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DESCRIPTION:

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visuals					
DRAWING NO:	DRAWN BY: J	В			
a09	a09 DATE: 20.02.25				
SCALE: PROJECT: 0123ZI					
www.jenniferbinnsdesign.com.au					

proposed dwelling + garage

carter + ira zigmantas 98 grant street falmouth tasmania 7215

planning compliance report

december 5 2024

jennifer binns building design 52 cecilia street st helens tasmania 7216 mail@jenniferbinnsdesign.com.au : 0439 765 452

Introduction

This report aims to demonstrate compliance with relevant planning standards for a proposed dwelling + garage for Carter + Ira Zigmantas at 98 Grant Street Falmouth (c.t.115262/1). The report aims to take into consideration the intent, values and objectives of the Tasmanian Planning Scheme and address all scheme standards applicable to this development.

The proposed development relies on **Performance Criteria** to satisfy relevant planning standards and this application is to be read in conjunction with drawings submitted for the development.

Development Site Details

The development site is a vacant property within the Falmouth township. The block was created through a subdivision of land and the original access point servicing the parent title is being relocated. The development relies on on-site management of wastewater and is not considered bushfire prone for planning purposes. Minor vegetation removal is proposed to facilitate the development and two street trees are proposed to be removed.



Zone: Low Density Residential

Development Details

The proposed development is a single story dwelling with a separate outbuilding comprising a garage and carport.

Use Class: Residential

Applicable Planning Codes

The proposed development is in the *Residential* use class which in the *Low Density Residential* Zone is a *No Permit Required* use.

The following zone standards and codes of the Tasmanian Planning Scheme are applicable to the proposed development:

- Zone 10.0 LOW DENSITY RESIDENTIAL ZONE
- Code 2.0 PARKING AND SUSTAINABLE TRASNPORT CODE
- Code 3.0 ROAD AND RAILWAYS ASSETS CODE

Table 10.3 LOW DENSITY RESIDENTIAL USE STANDARDS

10.3.1 Discretionary uses

A1 Not Applicable

The proposed development is not a *Discretionary* use.

A2 Not Applicable

The proposed development is not a *Discretionary* use.

A3 Not Applicable

The proposed development is not a commercial use.

A4 Not Applicable

The proposed development is not a *Discretionary* use.

10.3.2 Visitor accommodation

A1 Not Applicable

The proposed development is not in the *Visitor Accommodation* use class.

A1 Not Applicable

The proposed development is not in the Visitor Accommodation use class.

Table 10.4 LOW DENSITY RESIDENTIAL DEVELOPMENT STANDARDS

10.4.1. Residential density for multiple dwellings

A1 Not Applicable

The proposed development does not include multiple dwellings.

10.4.2 Building height

A1 Acceptable Solution

The proposed dwelling has a maximum height of 5.8m above natural ground level.

10.4.3 Setback

A1 Acceptable Solution

The proposed dwelling has a front setback of 8.0m.

P2 Performance Solution

The proposed dwelling has a minimum side boundary setback of 3.6m from the northern boundary. The proposed shed has a southern boundary setback of 500mm and an eastern boundary setback of 1000mm. The dwelling and garage have been sited to maximise the solar access and private open space for the dwelling. Siting the garage close to the southern boundary makes efficient use of the site through locating the driveway along the southern side of the property and also maintains solar access to the adjacent dwelling to the east. The layout of the development site is considered appropriate for the size and shape of the lot and the pattern of development in the vicinity of the site. The reduced northern setback for the dwelling is only a small portion of the building which is 'H' shaped, the bulk of the dwelling exceeds the prescribed 5m setback and there will be no loss of solar access due to the reduced northern setback. The land directly to the south of the garage is part of a battle-axe driveway and does not comprise habitable areas.

10.4.4 Site coverage

A1 Acceptable Solution

The proposed development does not comprise more than 30% of the site area.

10.4.5 Front fences for all dwellings

A1 Not Applicable

No front fencing is proposed.

Table 10.5 LOW DENSITY RESIDENTIAL DEVELOPMENT STANDARDS FOR NON-DWELLINGS

Not applicable

The proposed development comprises a single dwelling and associated garage

Table 10.6 LOW DENSITY RESIDENTIAL DEVELOPMENT STANDARDS FOR SUBDIVISION

Not applicable

No subdivision of land is proposed

Table C2.5 CAR PARKING USE STANDARDS

C2.5.1 Car parking numbers

A1 Acceptable Solution

The layout of the development site facilitates parking for >2 vehicles in accordance with the requirements of Table 2.1.

C2.5.2 Bicycle parking numbers

Not Applicable

The proposed development does not require the provision of bicycle parking.

C2.5.3 Motorcycle parking numbers

Not Applicable

The proposed development does not require the provision of motorcycle parking.

C2.5.4 Loading bays

Not Applicable

The proposed development does not require provision of a loading bay.

C2.5.5 Number of car parking spaces within the General Residential zone and Inner Residential zone

A1 Not Applicable

The proposed development is in the Low Density Residential use class.

Table C2.6 CAR PARKING DEVELOPMENT STANDARDS

C2.6.1 Construction of parking areas

P1 Performance Solution

The proposed driveway and turning area is compacted gravel which will drain to Council's stormwater system. Compacted gravel provides an all-weather surface and a sealed crossover is proposed between the property boundary and the road to minimise tracking of gravel.

C2.6.2 Design and layout of parking areas

A1 Acceptable Solution

The layout of the development site meets the prescribed requirements. The development does not require the provision of >4 parking spaces.

A1.2 Not Applicable

No accessible parking is required for the proposed development.

C2.6.3 Number of accesses for vehicles

A1 Not Applicable

The development site has one access point only.

A2 Not Applicable

The development site is in the *Low Density Residential* zone.

C2.6.4 Lighting of parking areas within the Gen. Business zone and Central Business zone

A1 Not Applicable

The development site is in the *Low Density Residential* zone.

C2.6.5 Pedestrian Access

A1.1 Not Applicable

The proposed development does not require the provision of pedestrian access paths.

A1.2 Acceptable Solution

The proposed development does not require the provision of accessible parking.

C2.6.6 Loading bays

A1 Not Applicable

The proposed development does not require the provision of a loading bay.

A2 Not Applicable

There are no commercial vehicles associated with the proposed development.

C2.6.7 Bicycle parking and storage facilities within the Gen. Business zone and Central Business zone

A1 Not Applicable

The proposed development does not require the provision of bicycle parking.

A2 Not Applicable

The proposed development does not require the provision of bicycle parking.

C2.6.8 Siting of parking and turning areas

A1 Not Applicable

The proposed development is in the *Low Density Residential* zone.

A2 Not Applicable

The proposed development is in the *Low Density Residential* zone.

Table C2.7 PARKING PRECINCT PLAN

C2.7.1 Construction of parking areas

A1 Not Applicable

The development site is not within a parking precinct plan.

ONSITE-WASTEWATER ASSESSMENT

98 Grant Street Falmouth January 2025



SOLUTIONS

Disclaimer: The author does not warrant the information contained in this document is free from errors or omissions. The author shall not in any way be liable for any loss, damage or injury suffered by the User consequent upon, or incidental to, the existence of errors in the information.

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Investigation Details

Client:	Carter & Ira Zigmantas
Site Address:	98 Grant Street, Falmouth
Date of Inspection:	01/02/2023
Proposed Works:	New house
Investigation Method:	Hand Auger
Inspected by:	G. McDonald

Site Details

Certificate of Title (CT):	115262/1
Title Area:	Approx. 973.9 m ²
Applicable Planning Overlays:	Coastal Height Reference
Slope & Aspect:	3° W facing slope
Vegetation:	Grass & Weeds
Ground Surface:	Disturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Devonian Granite
Climate:	Annual rainfall 800mm
Water Connection:	Tank
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	AS2870:2011, AS1726:2017 & AS1547:2012



Investigation

A number of bore holes were completed to identify the distribution and variation of the soil materials at the site, bore hole locations are indicated on the site plan. See soil profile conditions presented below. Tests were conducted across the site to obtain bearing capacities of the material at the time of this investigation.

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	Horizon	Description
0.00-0.20	0.00-0.20	A1	Sand (SP): Grey, dry, loose.
0.20-0.90	0.20-0.80	A2	Sand (SP): Light grey, dry, loose.
0.90-1.00		Pan	Sand (SW): Dark brown, slightly moist, very dense hand auger refusal on hard pan.

Site Notes

Soils on site are developing over Denovian Granite and consist deep sand deposits. This soil is unreactive and unlikely to exhibit ground surface movement. A hard pan was encountered at 1.00m

Wastewater Classification & Recommendations

According to AS1547-2012 (on-site waste-water management) the natural soil is classified as **Sandy Loam** (category 2). The site is unsuited to the installation of a traditional septic tank and trenches due to limited space onsite. Secondary treatment of effluent will be required, and it is proposed to install a package treatment system (e.g. Econocycle, Envirocycle, Ozzikleen etc) with treated effluent disposed in a modified absorption bed. A Design Loading Rate (DLR) of 40L/m²/day has been assigned for this site.

The proposed three-bedroom dwelling has a calculated maximum wastewater output of 600L/day. This is based on a tank water supply and a maximum occupancy of 5 people (120L/day/person). With secondary treatment this will require an absorption area of at least 15m². This can be accommodated in a modified absorption bed. During installation it is recommended that the excavator rip through the hard pan. For all calculations please refer to the Trench summary reports.

Due to the highly permeable topsoils a cut-off drain will not be required. A 100% reserve area should be set aside for future wastewater requirements



The following setback distances are required to comply with the Building Act 2016:

Upslope or level buildings:	2m
Downslope buildings:	2.75m
Upslope or level boundaries:	1.5m
Downslope boundaries:	4.5m
Downslope surface water:	>100m

Compliance with Building Act 2016 Guidelines for On-site Wastewater Management Systems is outlined in the attached table.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD

Director



(using the 'No. of bedrooms in a dwelling' method)

GES P/L

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Assessment Report

Site assessment for on-site waste water disposal

Assessment for	Jennifer Binns Building Design	Assess.Date	6-Jan-25
		Ref. No.	
Assessed site(s)	98 Grant Street	Site(s) inspected	1-Feb-23
Local authority	Break O'Day	Assessed by	JP Cumming

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

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 600

Septic tank wastewater volume (L/day) = 200

- Sullage volume (L/day) = 400
- Total nitrogen (kg/year) generated by wastewater = 1.8

Total phosphorus (kg/year) generated by wastewater = 1.5

Climatic assumptions for site

(Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	71	75	74	55	47	65	56	79	52	69	93	55
Adopted rainfall (R, mm)	71	75	74	55	47	65	56	79	52	69	93	55
Retained rain (Rr, mm)	64	68	67	50	42	58	50	71	47	62	84	49
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63		105	126
Evapotr. less rain (mm)	66	42	24	13	0	-29	-18	-29	16	22	21	77
					Annual e	vapotran	spiration	less reta	ined rain	(mm) =	2	06
Soil characterisitics												
Texture =	SandyL	oam					Cate	egory =	2	Thick	(m) =	2
Adopted permeability (m/day) = 3 Adopted LTAR (L/sq m/day) = 40 Min depth (m) to water = 3					3							
Proposed disposal and treatm	ent met	hods										
Proportion of wast	ewater t	o be reta	ained or	n site:	All waste	water w	ill be dis	sposed	of on the	esite		
The preferred method	of on-si	ite prima	arv treat	ment:	In a pack	ade trea	atment p	lant				
The preferred method of	on-site	seconda	arv treat	ment [.]	In-aroun	d d						
The preferred type of in-	around	seconds	arv troat	mont:	Evanotra	a nenirati	n hedig	2)				
The preferred type of the	ground	acconde	ny troat	mont.	Nono	nopnau	Ji bou(3)				
The preferred type of above-	giouna	seconda	ily lieat	inent.	None							
Site mod	lications	sorspe	cinc des	signs:	NOT NEED	iea						
Suggested dimensions for an aits assendent treatment system												

Suggested dimensions for on-site secondary treatment system

Total length (m) =	10	
Width (m) =	1.5	
Depth (m) =	0.6	
Total disposal area (sq m) required =	15	
comprising a Primary Area (sq m) of:	15	
and a Secondary (backup) Area (sq m) of:		

Sufficient area is available on site

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

Using the DLR of 40mm/day, an absorption area of 15m² is required to acommodate the expected wastewater flows.



GES P/L

Land suitability and system sizing for on-site wastewater management Trench 3.0 (Australian Institute of Environmental Health)

Site Capability Report

Site assessment for on-site waste water disposal

Assessment for	Jennifer Binns Building Design	Assess. Date	6-Jan-25
		Ref. No.	
Assessed site(s)	98 Grant Street	Site(s) inspected	1-Feb-23
Local authority	Break O'Day	Assessed by	JP Cumming

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

				Confid	Limi	tation	
Alert	Factor	Units	Value	level	Trench	Amended	Remarks
	Expected design area	sqm	700	V. high	Moderate		
	Density of disposal systems	/sq km	20	Mod.	Moderate		
	Slope angle	degrees	3	High	Very low		
	Slope form	Straight si	imple	High	Low		
	Surface drainage	lmp	erfect	High	Moderate		
	Flood potential Site flood	ls 1 in 75-10	00 yrs	High	Low		
	Heavy rain events	Infre	quent	High	Moderate		
Α	Aspect (Southern hemi.)	Faces SE o	or SW	V. high	High		
	Frequency of strong winds	Com	nmon	High	Low		
	Wastewater volume	L/day	600	High	Moderate		
	SAR of septic tank effluent		1.7	High	Low		
	SAR of sullage		2.6	High	Moderate		
	Soil thickness	m	2.0	V. high	Very low		
	Depth to bedrock	m	3.0	V. high	Very low		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		5.5	High	Low		
	Soil bulk density gn	n/cub. cm	1.4	High	Very low		
	Soil dispersion Eme	erson No.	8	V. high	Very low		
AA	Adopted permeability	m/day	3	Mod.	Very high		
AA	Long Term Accept. Rate L/	/day/sq m	40	High	Very high		

To enter comments, click on the line below 'Comments' . (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

This site has the capability to accept secondary treated onsite wastewater.



GES P/L

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report

Site assessment for on-site waste water disposal

Assessment for	Jennifer Binns Building Design	Assess. Date	6-Jan-25
		Ref. No.	
Assessed site(s)	98 Grant Street	Site(s) inspected	1-Feb-23
Local authority	Break O'Day	Assessed by	JP Cumming

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

				Confid	Limi	tation	
Alert	Factor	Units	Value	level	Trench	Amended	Remarks
	Cation exchange capacity m	nmol/100g	110	High	Very low		
	Phos.adsorp.capacity	kg/cub m	0.7	High	Moderate		
	Annual rainfall excess	mm	-206	High	Very low		
	Min. depth to water table	m	3	High	Very low		
	Annual nutrient load	kg	3.3	High	Very low		
	G'water environ. value	Agric non-s	ensit	V. high	Low		
	Min. separation dist. require	d m	3	High	Very low		
	Risk to adjacent bores	Ve	rylow	V. high	Very low		
Α	Surf. water env. value	Recreat	ional	V. high	High		
	Dist. to nearest surface wate	er m	380	V. high	Low		
	Dist. to nearest other feature	e m	3	V. high	Very high	Moderate	Other factors lessen impact
	Risk of slope instability	Ve	rylow	V. high	Very low		
	Distance to landslip	m	1880	V. high	Very low		

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

There is low risk of environmental degredation from the proposed wastewater system if all setbacks are observed.

Demonstration of wastewater system compliance to Building Act 2016 Guidelines for On-site Wastewater

Acceptable Solutions	Performance Criteria	Compliance
 A1 Horizontal separation distance from a building to a land application area must comply with one of the following: a) be no less than 6m; or b) be no less than: (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building. 	 P1 a) The land application area is located so that (i) the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation 	Complies with P1 a) (i) & (ii) Land application area will be located with a minimum separation distance of 2m from an upslope or level building. Complies with A1 b (iii) Land application area will be located with a minimum separation distance of 2.75m from a downslope building.
 A2 Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b) (a) be no less than 100m; or (b) be no less than the following: (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water. 	 P2 Horizontal separation distance from downslope surface water to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. 	Complies with (a) Land application area will be located a minimum of >100m from downslope surface water

A3	P3	
Horizontal separation distance from a property boundary to a land application area must comply with either of the following:	Horizontal separation distance from a property boundary to a land application area must comply with all of the following:	Complies with A3 (b) (i) Land application area will be located with a minimum separation distance of 1.5m from an
(a) be no less than 40m from a property boundary; or	(a) Setback must be consistent with AS/NZS 1547 Appendix R; and	upslope or level property boundary
(b) be no less than:	(b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been	Complies with A3 (iii) Land application area will be located with a
(i) 1.5m from an upslope or level property boundary; and	completed that demonstrates that the risk is acceptable.	downslope property boundary.
(ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or		
(iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.		
A4	P4	
Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or	Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following:	No bore or well identified within 50m
down gradient.	(a) Setback must be consistent with AS/NZS1547 Appendix R; and	
	(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable	

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

ASSESSMENT OF HORIZONTAL AND VERTICAL SETBACK DISTANCES (adapted from Table R1 in AS1547 - to be used in conjunction with Site Constraint Table)

Site feature	Setback distance range (m)	Site constraint items of specific concern (from Site Constraint Table)	Assessment	Adopted setback distance (m)
	Horizontal setback distance (m)			
Property boundary	1.5 – 50	A, D, J	4.5	>4.5
Buildings/houses	2.0 -> 6	A, D, J	2	>2m
Surface water	15 – 100	A, B, D, E, F, G, J	>100	>100
Bore, well	15 – 50	A, C, H, J	N/A	N/A
Recreational areas (Children's play areas, swimming pools and so on)	3 – 15	А, Е, Ј	N/A	N/A
In-ground water tank	4 – 15	A, E, J	N/A	N/A
Retaining wall and Embankments, escarpments, cuttings	3.0 m or 45° angle from toe of wall (whichever is greatest)	D, G, H	N/A	N/A
	Vertical setback distance (m)			
Groundwater	0.6 – > 1.5	A, C, F, H, I, J	0.6	N/A
Hardpan or bedrock	$0.5 - \ge 1.5$	A, C, J	0.5	0.6

SITE CONSTRAINT RATING

(adapted from Table R2 in AS1547 - used as a guide in determining appropriate setback distances)

ltem	Site/system feature	Constraint scale (see Note 1) LOWER HIGHER Examples of constraint factors (see Note 2)		Sensitive features	Comment	Constraint Rating
A	Microbial quality of effluent	Effluent quality consistently producing ≤ 10 cfu/100 mL <i>E.</i> <i>coli</i> (secondary treated effluent with disinfection)	Effluent quality consistently 6 <i>E. coli</i> (for example, primary treated effluent)	Groundwater and surface pollution hazard, public health hazard	Secondary treated effluent	Low
В	Surface water	Category 1 to 3 soils, no surface water down gradient within > 100 m, low rainfall area	Category 4 to 6 soils, permanent surface water <50 m down gradient, high rainfall area, high resource/environmental value	Surface water pollution hazard for low permeable soils, low lying or poorly draining areas	Downslope surface water >100m	Complies with Acceptable Solutions
С	Groundwater	Category 5 and 6 soils, low resource/environmental value	Category 1 and 2 soils, gravel aquifers, high resource/environmental value	Groundwater pollution hazard	Sandy Loam (category 2) soil No groundwater encountered	Low
D	Slope	0 – 6% (surface effluent application) 0 – 10% (subsurface effluent application)	 > 10% (surface effluent application), > 30% subsurface effluent application 	Off-site export of effluent, erosion	6% subsurface effluent	Low
Е	Position of land application area in landscape.	Downgradient of surface water, property boundary, recreational area	Upgradient of surface water, property boundary, recreational area	Surface water pollution hazard, off- site export of effluent	Downslope boundary minimum 4.5m	Complies with Acceptable Solutions
F	Drainage	Category 1 and 2 soils, gently sloping area	Category 6 soils, sites with visible seepage, moisture tolerant vegetation, low lying area	Groundwater pollution hazard	Sandy Loam (category 2) soil No visible seepage or moisture tolerant sp	Complies with Acceptable Solutions
G	Flood potential	Above 1 in 20 year flood contour	Below 1 in 20 year flood contour	Off-site export of effluent, system failure, mechanical faults	Above 1:20 year flood contour	Complies with Acceptable Solutions

SITE CONSTRAINT RATING (cont)

ltem	Site/system feature	Constraint scale (see Note 1) LOWER HIGHER Examples of constraint factors (see Note 2)		Sensitive features	Comment	Constraint Rating
н	Geology and soils	Category 3 and 4 soils, low porous regolith, deep, uniform soils	Category 1 and 6 soils, fractured rock, gravel aquifers, highly porous regolith	Groundwater pollution hazard for porous regolith and permeable soils	Sandy Loam (category 2) soil High permeability	Complies with Acceptable Solutions
I	Landform	Hill crests, convex side slopes, and plains	Drainage plains and incise channels	Groundwater pollution hazard, resurfacing hazard	side slope	Complies with Acceptable Solutions
J	Application method	Drip irrigation or subsurface application of effluent	Surface/above ground application of effluent	Off-site export of effluent, surface water pollution	Subsurface application	Low



AS1547:2012 – Loading Certificate – AWTS Design

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

Site Address: 98 Grant Street

System Capacity: 5 persons @ 120L/person/day

Summary of Design Criteria

DLR: 40mm/day.

area: 15m²

Reserve area location /use: Assigned

Water saving features fitted: Standard fixtures

Allowable variation from design flows: 1 event @ 200% daily loading per quarter

Typical loading change consequences: Expected to be minimal due to use of AWTS and large land area

Overloading consequences: Continued overloading may cause hydraulic failure of the absorption area and require upgrading/extension of the area. Risk considered acceptable due to monitoring through quarterly maintenance reports.

Underloading consequences: Lower than expected flows will have minimal consequences on system operation unless the house has long periods of non occupation. Under such circumstances additional maintenance of the system may be required. Long term under loading of the system may also result in vegetation die off in the absorption area and additional watering may be required. Risk considered acceptable due to monitoring through quarterly maintenance reports.

Lack of maintenance / monitoring consequences: Issues of underloading/overloading and condition of the irrigation area require monitoring and maintenance, if not completed system failure may result in unacceptable health and environmental risks. Monitoring and regulation by the permit authority required to ensure compliance.

Other considerations: Owners/occupiers must be made aware of the operational requirements and limitations of the system by the installer/maintenance contractor.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94 Section 106 Section 129 Section 155

To:	Carter & Ira Zigmantas	Owner name	25
	6 Conrad Court	Address	Form JJ
	Blackburn North 3130	Suburb/postc	ode
Designer detail	s:		
Name:	John-Paul Cumming	Categor	y: Bld. Srvcs. Dsgnr Hydraulic
Business name:	Geo-Environmental Solutions	Phone N	o: 03 6223 1839
Business address:	29 Kirksway Place		
	Battery Point 7004	Fax N	o: N/A
Licence No:	CC774A Email address: office@ge	osolutions.net.	au
Details of the p	roposed work:		
Owner/Applicant	Carter & Ira Zigmantas	Designer's p reference No	roject J8270
Address:	98 Grant Street	Lot	^{No:} 115262/1
	Falmouth 7215		
Type of work:	Building work	Plumbing wo	ork X (X all applicable)
Description of wor	rk:	1	
On-site wastewater	management system - design		(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

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

Certificate Type:	Certificate		Responsible Practitioner	
	☐ Building design		Architect or Building Designer	
	□ Structural design		Engineer or Civil Designer	
	☐ Fire Safety design		Fire Engineer	
	Civil design		Civil Engineer or Civil Designer	
	🗷 Hydraulic design		Building Services Designer	
	☐ Fire service design		Building Services Designer	
	Electrical design		Building Services Designer	
	☐ Mechanical design		Building Service Designer	
	Plumbing design		Plumber-Certifier; Architect, Building Designer or Engineer	
	☐ Other (specify)			
Deemed-to-Satisfy:	1	Performance S	Solution: (<i>X</i> the appropriate box)	
Other details:				
AWTS with modified ab	sorption bed			
Design documents	Design documents provided:			

Director of Building Control - date approved: 2 August 2017

The following documents are provided with this Certificate -

Document description: Prepared by: Geo-Environmental Solutions Date: Jan-25 Drawing numbers: Schedules: Prepared by: Date: Prepared by: Geo-Environmental Solutions Date: Jan-25 Specifications: Computations: Prepared by: Date: Performance solution proposals: Prepared by: Date: Test reports: Prepared by: Geo-Environmental Solutions Date: Jan-25

Standards, codes or guidelines relied on in design
process:
AS1547:2012 On-site domestic wastewater management.
AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

An	other	relevant	documenta	tion:
~ 11		1010 Vulle	accumenta	

Onsite Wastewater Assessment - 98 Grant Street Falmouth - Jan-25

Onsite Wastewater Assessment - 98 Grant Street Falmouth - Jan-25

Attribution as designer:

I John-Paul Cumming, am responsible for the design of that part of the work as described in this certificate;

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

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

	Name: (print)	Signed	Date
Designer:	John-Paul Cumming	J	06/01/2025
Licence No:	CC774A		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable. If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK. TasWater must then be contacted to determine if the proposed works are Certifiable Works. I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied: x The works will not increase the demand for water supplied by TasWater The works will not increase or decrease the amount of sewage or toxins that is to be removed by, х or discharged into, TasWater's sewerage infrastructure х The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure x The works will not damage or interfere with TasWater's works x The works will not adversely affect TasWater's operations x The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement x I have checked the LISTMap to confirm the location of TasWater infrastructure If the property is connected to TasWater's water system, a water meter is in place, or has been Х applied for to TasWater.

Certification:

I John-Paul Cumming....... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

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

	Name: (print)	Signed	Date
Designer:	John-Paul Cumming	J	06/01/2025
LED PROFES			







S O L U T I O N S

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GEO-TEXTILE COVER OVER GRAVEL

Sheet 1 of 2

Design notes:

1. Absorption bed dimensions of up to 15m long by 0.60m deep by 3.0m wide.

2. Base of bed to be excavated level min 200mm into natural soils and smearing and compaction avoided.

3. Lower 450mm of bed to be filled with 7-20mm clean washed gravel and drilled 40mm distribution pipes packed into upper 100mm of gravel.

4. 40mm distribution pipes drilled with sufficient 5mm holes in the top of the pipe (approx spacing 300mm) to distribute the effluent and half circle 90-100mm UPVC pipe, un-perforated, laid over each 40mm perforated lateral to direct water jet downwards.

5. One 5 mm hole at centre of invert of each pipe to allow for drainage between pump cycles.

6. Geotextile or filter cloth to be placed over the distribution pipes to prevent clogging of the pipes and aggregate - the sides of the bed should also be lined.

7. Final finished surface with sandy loam to be a minimum of 150 mm above aggregate with turf cover or mulched with appropriate vegetation (eg native grasses and small shrubs at 1 plant per 1 m2)

8. The turf or vegetation is an essential component of the system and must be maintained with regular mowing and or trimming as appropriate

9. The distribution pipe grid must be absolutely level to allow even distribution of effluent around the absorption area - it is recommended that the level be verified by running water into the system before backfilling and commissioning the trench

10.All works on site to comply with AS3500 and Tasmanian Plumbing code.

The pump must be capable of delivering the total flow rate required for all laterals whilst providing a 1.5m residual head (ie squirt height) at the highest orifice (with no more than 15% variation in squirt height across the whole bed).

For beds with individual laterals, no more than 15m long, it is acceptable to adopt a flow rate of 4-5L/min/lineal metre. Total dynamic head (including friction loss) will need to be determined on a site-specific basis.

Individual flush points must be installed for each lateral. This may be a screw cap fitting on a 90 degree elbow level with the bed surface or a pressure controlled flush valve inside an irrigation control box.



Kerry and Steve Whelan Date: 20/6/2017 Do not scale from these drawings 37 Frederick Henry Parade Dimensions to take precedence **CREMORNE TAS 7024** over scale.



Vents must terminate in accordance with AS/NZS 3500.2

ground vent in not recommended

Inspection openings must be located at the inlet to an on-site wastewater management system treatment unit and the point of connection to the land application system and must terminate as close as practicable to the underside of an approved inspection opening cover installed at the finished surface level

level

Do not scale from these drawings. Dimensions to take precedence over scale.		Tas Figure C2D6 Alternative Venting Arrangements
Dimensions to take precedence over scale.		



GEO-ENVIRONMENTAL

S O L U T I O N S 29 Kirksway Place, Battery Point T| 62231839 E| office@geosolutions.net.au

Tas Figure C2D6 Alternative Venting Arrangements

Alternative venting to be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last sanitary fixture or sanitary appliance and the on-site wastewater management system. Use of a

Access openings providing access for desludging or maintenance of on-site wastewater management system treatment unites must terminate at or above finished surface