

# NOTICE OF PROPOSED DEVELOPMENT

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

**SITE: 10 Inverness Street, Midway Point**

**PROPOSED DEVELOPMENT:  
DWELLING AND OUTBUILDING**

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website at [www.sorell.tas.gov.au](http://www.sorell.tas.gov.au) until **Tuesday 28<sup>th</sup> January 2025**.

Any person may make representation in relation to the proposal by letter or electronic mail ([sorell.council@sorell.tas.gov.au](mailto:sorell.council@sorell.tas.gov.au)) addressed to the General Manager. Representations must be received no later than **Tuesday 28<sup>th</sup> January 2025**.

**APPLICANT: P J Chamberlain**

**APPLICATION NO: DA 2024 / 308 - 1**  
**DATE: 09 January 2025**

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

Full description of Proposal:	Use:
	Development:
	<i>Large or complex proposals should be described in a letter or planning report.</i>

Design and construction cost of proposal:	\$ .....
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Is all, or some the work already constructed:	No: <input type="checkbox"/> Yes: <input type="checkbox"/>
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Location of proposed works:	Street address: .....
	Suburb: ..... Postcode: .....
	Certificate of Title(s) Volume: ..... Folio: .....

Current Use of Site	.....
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Current Owner/s:	Name(s).....
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Is the Property on the Tasmanian Heritage Register?	No: <input type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please provide written advice from Heritage Tasmania</i>
Is the proposal to be carried out in more than one stage?	No: <input type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please clearly describe in plans</i>
Have any potentially contaminating uses been undertaken on the site?	No: <input type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please complete the Additional Information for Non-Residential Use</i>
Is any vegetation proposed to be removed?	No: <input type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please ensure plans clearly show area to be impacted</i>
Does the proposal involve land administered or owned by either the Crown or Council?	No: <input type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please complete the Council or Crown land section on page 3</i>

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



**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

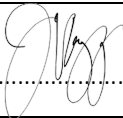
**Part B continued: Please note that Part B of this form is publicly exhibited**

**Declarations and acknowledgements**

- I/we confirm that the application does not contradict any easement, covenant or restriction specified in the Certificate of Title, Schedule of Easements or Part 5 Agreement for the land.
- I/we consent to Council employees or consultants entering the site and have arranged permission and/or access for Council’s representatives to enter the land at any time during normal business hours.
- I/we authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation and have permission of the copyright owner for such copies.
- I/we declare that, in accordance with s52(1) of the *Land Use Planning and Approvals Act 1993*, that I have notified the owner(s) of the intention to make this application.
- I/we declare that the information in this application is true and correct.

*Details of how the Council manages personal information and how you can request access or corrections to it is outlined in Council’s Privacy Policy available on the Council website.*

- I/we acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process, for display purposes during public exhibition, and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.
- Where the General Manager’s consent is also required under s.14 of the *Urban Drainage Act 2013*, by making this application I/we also apply for that consent.

<b>Applicant Signature:</b>	Signature: .....  ..... Date: .....
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**Crown or General Manager Land Owner Consent**

If the land that is the subject of this application is owned or administered by either the Crown or Sorell Council, the consent of the relevant Minister or the Council General Manager whichever is applicable, must be included here. This consent should be completed and signed by either the General Manager, the Minister, or a delegate (as specified in s52 (1D-1G) of the *Land Use Planning and Approvals Act 1993*).

Please note:

- If General Manager consent is required, please first complete the General Manager consent application form available on our website [www.sorell.tas.gov.au](http://www.sorell.tas.gov.au)
- If the application involves Crown land you will also need a letter of consent.
- Any consent is for the purposes of making this application only and is not consent to undertaken work or take any other action with respect to the proposed use or development.

I \_\_\_\_\_ being responsible for the administration of land at \_\_\_\_\_

declare that I have given permission for the making of this application for \_\_\_\_\_



<b>Signature of General Manager, Minister or Delegate:</b>	Signature: ..... Date: .....
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# **AS2870:2011 SITE ASSESSMENT**

**10 Inverness Street**

**Midway Point**

**November 2024**



GEO-ENVIRONMENTAL  

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S O L U T I O N S

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.

## **Investigation Details**

<b>Client:</b>	James Vagg
<b>Site Address:</b>	10 Inverness Street, Midway Point
<b>Date of Inspection:</b>	21/11/2024
<b>Proposed Works:</b>	New house
<b>Investigation Method:</b>	Geoprobe 540UD - Direct Push
<b>Inspected by:</b>	C. Cooper

## **Site Details**

<b>Certificate of Title (CT):</b>	184962/91
<b>Title Area:</b>	Approx. 1091 m <sup>2</sup>
<b>Applicable Planning Overlays:</b>	Bushfire-prone areas, Airport obstacle limitation area, Waterway and Coastal Protection Areas
<b>Slope &amp; Aspect:</b>	10° W facing slope
<b>Vegetation:</b>	Grass & Weeds Disturbed

## **Background Information**

<b>Geology Map:</b>	MRT
<b>Geological Unit:</b>	Triassic Sandstone
<b>Climate:</b>	Annual rainfall 400mm
<b>Water Connection:</b>	Mains
<b>Sewer Connection:</b>	Serviced-Mains
<b>Testing and Classification:</b>	AS2870:2011, AS1726:2017 & AS4055:2021

## 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)	USCS	Description
0.00-0.30	0.00-0.20	SM	<b>Silty SAND:</b> grey, brown, slightly moist, medium dense
0.30-0.90	0.20-1.10	CI	<b>Silty CLAY:</b> medium plasticity, grey, brown, slightly moist, stiff,
0.90-1.00	1.10-1.50	SC	<b>Clayey SAND:</b> with gravels, yellow, brown, slightly moist dense, refusal.

## Site Notes

Soils on the site are developing from Triassic Sandstone. The clay fraction is likely to show moderate ground surface movement.

## Site Classification

The site has been assessed and classified in accordance with AS2870:2011 “*Residential Slabs and Footings*”.

The site has been classified as:

### **Class M**

Y<sup>s</sup> range: **20-40mm**

Notes: that is a moderately reactive clay.

**Wind Loading Classification**

According to “AS4055:2021 - Wind Loads for Housing” the house site is classified below:

<b>Wind Classification:</b>	<b>N3</b>
Region:	A
Terrain Category:	1.0
Shielding Classification:	PS
Topographic Classification:	T1
Wind Classification:	N3
Design Wind Gust Speed – m/s ( $V_{h,u}$ ):	50

**Construction Notes & Recommendations**

The site has been classified as **Class M** - Moderately reactive clay or silt site, which may experience moderate ground movement from moisture changes.

It is recommended the foundations be placed on the underlying bedrock to minimise the potential for foundation movement.

All earthworks on site must comply with AS3798:2012, and I further recommend that consideration be given to drainage and sediment control on site during and after construction. Care should also be taken to ensure there is adequate drainage in the construction area to avoid the potential for weak bearing and foundation settlement associated with excessive soil moisture.

I also recommend that during construction that I and/or the design engineer be notified of any major variation to the foundation conditions as predicted in this report.

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

*Director*

## Explanatory Notes

### 1 Scope of Works

The methods of description and classification of soils used in this report are based largely on Australian Standard 1726 – Geotechnical Site Investigations (AS1726:2017), with reference to Australian Standard 1289 – Methods for testing soils for engineering purposes (AS1289), for eventual Site Classification according to Australian Standard 2870 (AS2870:2011) – Residential Slabs and Footings and Australian Standard 1547 (AS1547:2012) On-site domestic wastewater management.

#### 1.1 Site Classification AS2870:2011

Site classification with reference to the above Australian Standards are based on site reactivity.

Class	Foundation Conditions	Characteristic Surface Movement
A	Most sand and rock sites with little or no ground movement from moisture changes.	0mm
S	Slightly reactive clay sites, which may experience only slight ground movement from moisture changes.	0 – 20mm
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes.	20 – 40mm
H-1	Highly reactive clay sites, which may experience high ground movement from moisture changes.	40 – 60mm
H-2	Highly reactive clay sites, which may experience very high ground movement from moisture changes.	60 – 75mm
E	Extremely reactive sites, which may experience extreme ground movement from moisture changes.	>75mm

*Note: Soils where foundation performance may be significantly affected by factors other than reactive soil movement are classified as **Class P**.*

A site is classified as **Class P** when:

- The bearing capacity of the soil profile in the foundation zone is generally less than 100kpa
- If excessive foundation settlement may occur due to loading on the foundation.
- The site contains uncontrolled fill greater than 0.8m in depth for sandy sites and 0.4m in depth for other soil materials.
- The site is subject to mine subsistence, landslip, collapse activity or coastal erosion.
- The site is underlain by highly dispersive soils with significant potential for erosion
- If the site is subject to abnormal moisture conditions which can affect foundation performance



## 1.2 Soil Characterisation

This information explains the terms of phrase used within the soil description area of the report.

It includes terminology for cohesive and non-cohesive soils and includes information on how the Unified Soil Classification Scheme (USCS) codes are determined.

<b>NON COHESIVE – SAND &amp; GRAVEL</b>		
<b>Consistency Description</b>	<b>Field Test</b>	<b>Dynamic Cone Penetrometer blows/100 mm</b>
Very loose (VL)	Easily penetrated with 13 mm reinforcing rod pushed by hand.	0 - 1
Loose (L)	Easily penetrated with 13 mm reinforcing rod pushed by hand. Can be excavated with a spade; 50 mm wooden peg can be easily driven.	1 - 3
Medium dense (MD)	Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, - hard shovelling.	3 - 8
Dense (D)	Penetrated 300 mm with 13 mm reinforcing rod driven with 2 kg hammer, requires pick for excavation: 50 mm wooden peg hard to drive.	8 - 15
Very dense (VD)	Penetrated only 25 - 50 mm with 13 mm reinforcing rod driven with 2 kg hammer.	>15

<b>COHESIVE - SILT &amp; CLAY</b>		
<b>Consistency Description</b>	<b>Field Test</b>	<b>Indicative undrained shear strength kPa</b>
Very soft	Easily penetrated >40 mm by thumb. Exudes between thumb and fingers when squeezed in hand.	<12
Soft	Easily penetrated 10 mm by thumb. Moulded by light finger pressure	>12 and <25
Firm	Impression by thumb with moderate effort. Moulded by strong finger pressure	>25 and <50
Stiff	Slight impression by thumb cannot be moulded with finger.	>50 and <100
Very Stiff	Very tough. Readily indented by thumbnail.	>100 and <200
Hard	Brittle. Indented with difficulty by thumbnail.	>200

### 1.3 USCS Material Descriptions

Soils for engineering purposes are the unconsolidated materials above bedrock, they can be residual, alluvial, colluvial or aeolian in origin.

Major Divisions		Particle size mm	USCS Group Symbol	Typical Names	Laboratory Classification				NOTES	
COARSE GRAINED SOILS (more than half of material less than 63 mm & larger than 0.075 mm)	BOULDERS	200			% < 0.075 mm (2)	Plasticity of fine fraction	$C_u = \frac{D_{60}}{D_{30}}$	$C_c = \frac{(D_{30})^3}{(D_{10})(D_{60})}$		
	COBBLES	63								
	GRAVELS (more than half of coarse fraction is larger than 2.36 mm)	coarse	20	GW	Well graded gravels and gravel-sand mixtures, little or no fines	0-5	—	>4		Between 1 and 3
		medium	6	GP	Poorly graded gravels and gravel-sand mixtures, little or no fines, uniform gravels	0-5	—	Fails to comply with above		
		fine	2.36	GM	Silty gravels, gravel-sand-silt mixtures (1)	12-50	Below 'A' line or PI<4	—		—
				GC	Clayey gravels, gravel-sand-clay mixtures (1)	12-50	Above 'A' line and PI>7	—		—
	SANDS (more than half of coarse fraction is smaller than 2.36 mm)	coarse	0.6	SW	Well graded sands and gravelly sands, little or no fines	0-5	—	>6		Between 1 and 3
		medium	0.2	SP	Poorly graded sands and gravelly sands, little or no fines	0-5	—	Fails to comply with above		
		fine	0.075	SM	Silty sands, sand silt mixtures (1)	12-50	Below 'A' line or PI<4	—		—
				SC	Clayey sands, sand-clay mixtures (1)	12-50	Above 'A' line and PI>7	—		—
FINE GRAINED SOILS (more than half of material less than 63 mm is smaller than 0.075 mm)	SILTS & CLAYS (Liquid Limit ≤50%)	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity		Use the gradation curve of material passing 63 mm for classification of fractions according to the criteria given in 'Major Divisions'	<p style="text-align: center;"><b>Plasticity Chart</b> For classification of fine grained soils and fine fraction of coarse grained soils.</p>				
		CL CI	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays							
		OL	Organic silts and clays of low plasticity							
	SILTS & CLAYS (Liquid Limit >50%)	MH	Inorganic silts, mic-aceous or diato-maceous fine sands or silts, elastic silts							
		CH	Inorganic clays of high plasticity, fat clays							
		OH	Organic silts and clays of high plasticity							
	HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils							

Grain size analysis is performed by two processes depending on particle size. Sand silt and clay particles are assessed using a standardised hydrometer test, and coarse sand and larger is assessed through sieving by USCS certified sieves. For more detail see the following section.

Soil Classification	Particle Size
Clay	Less than 0.002mm
Silt	0.002 – 0.06mm
Fine/Medium Sand	0.06 – 2.0mm
Coarse Sand	2.0mm – 4.75mm
Gravel	4.75mm – 60.00mm

#### 1.4 Bearing Capacities and DCP testing.

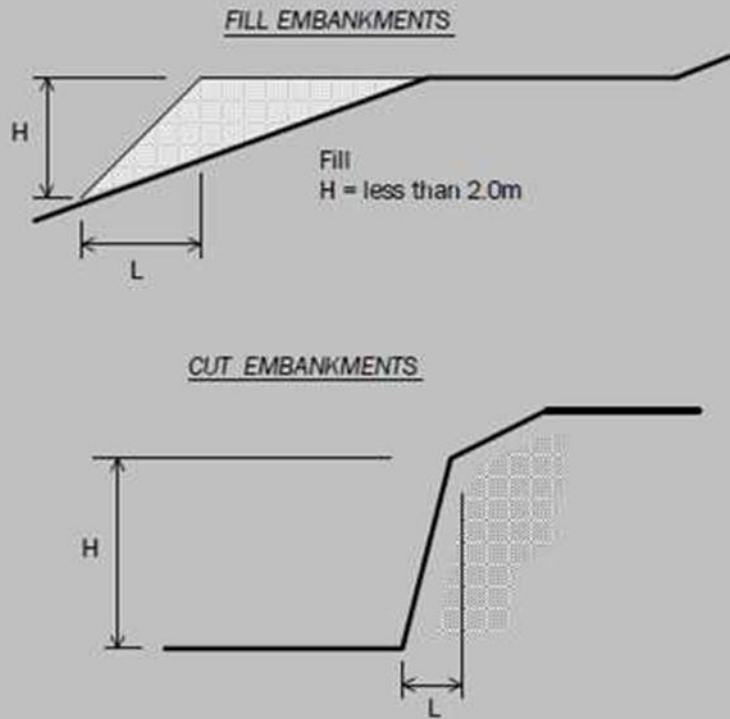
DCP and PSP weighted penetrometer tests – Dynamic Cone Penetrometer (DCP) and Perth Sand Penetrometer (PSP) tests are carried out by driving a rod into the ground with a falling weight hammer and measuring the blows for successive 100mm increments of penetration. Normally, there is a depth limitation of 1.2m but this may be extended in certain conditions by the use of extension rods. The methods for the two tests are quite similar.

- Dynamic Cone Penetrometer – a 16mm rod with a 20mm diameter cone end is driven with a 9kg hammer dropping 510mm (AS 1289, Test 6.3.2).
- Perth Sand Penetrometer – a 16mm diameter flat-ended rod is driven with a 9kg hammer, dropping 600mm (AS 1289 Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.

Site Anomalies – During construction GES will need to be notified of any major variation to the foundation conditions as predicted in this report.

**1.5 Batter Angles for Embankments (Guide Only)**

Note : Retaining walls or other form of soil retaining methods must be adopted where the slope ratio is greater than that indicated in the table below :-



MATERIAL TYPE (refer soils report)	EMBANKMENT SLOPES (Height : Length)		
	Compacted Fill	Cutting	
Stable Rock (A*)	2 : 3	6 : 1	
Sand (A*)	1 : 2	2 : 3	
Silt (P*)	1 : 4	1 : 4	
Clay	Firm Clay	1 : 2	1 : 1
	Soft Clay	Not Suitable	2 : 3
Soft Soils (P*)	Not Suitable	Not Suitable	

## Glossary of Terms

**Bearing Capacity** – Maximum bearing pressure that can be sustained by the foundation from the proposed footing system under service loads which should avoid failure or excessive settlement.

**Clay** – (Mineral particles less than 0.002mm in diameter). Fine grained cohesive soil with plastic properties when wet. Also includes sandy clays, silty clays, and gravelly clays.

**Dynamic Cone Penetrometer (DCP)** – Field equipment used to determine underlying soil strength and therefore bearing capacity (kPa) by measuring the penetration of the device into the soil after each hammer blow.

**Dispersive soil** – A soil that has the ability to pass rapidly into suspension in water.

**Footing** – Construction which transfers the load from the building to the foundation.

**Foundation** – Ground which supports the building

**Landslip** – Foundation condition on a sloping site where downhill foundation movement or failure is a design consideration.

**Qualified Engineer** – A professional engineer with academic qualifications in geotechnical or structural engineering who also has extensive experience in the design of the footing systems for houses or similar structures.

**Reactive Site** – Site consisting of clay soil which swells on wetting and shrinks on drying by an amount that can damage buildings on light strip footings or unstiffened slabs. Includes sites classified as S, M, H-1, H-2 & E in accordance with AS2870-2011.

**Sand** – (Mineral particles greater than 0.02mm in diameter). Granular non-cohesive, non-plastic soil that may contain fines including silt or clay up to 15%.

**Services** – Means all underground services to the site including but not limited to power, telephone, sewerage, water & storm water.

**Silt** – (Mineral particles 0.002 – 0.02mm in diameter). Fine grained non-cohesive soil, non-plastic when wet. Often confers a silky smoothness of field texture, regularly includes clay and sand to form clayey silts, sandy silts and gravelly silts.

**Site** – The site title, as denoted by address, lot number, or Certificate of Title (CT) number, or Property Identification Number (PID).

**Surface Movement (Ys)** – Design movement (mm) at the surface of a reactive site caused by moisture changes.

## **Disclaimer**

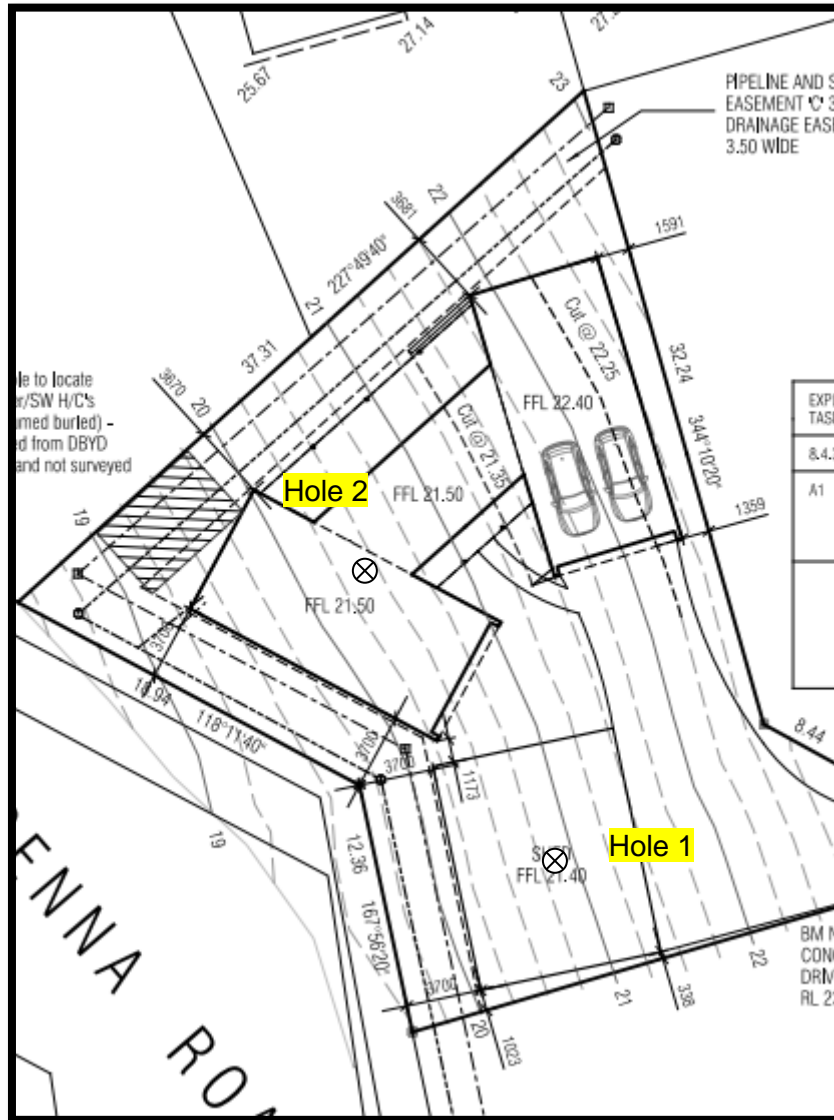
This Report has been prepared in accordance with the scope of services between Geo-Environmental Solutions Pty. Ltd. (GES) and the Client. To the best of GES's knowledge, the information presented herein represents the client's requirements at the time of printing of the Report. However, the passage of time, manifestation of latent conditions or impacts of future events may result in findings differing from that discussed in this Report. In preparing this Report, GES has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations referenced herein. Except as otherwise stated in this Report, GES has not verified the accuracy or completeness of such data, surveys, analyses, designs, plans and other information.

The scope of this study does not allow for the review of every possible geotechnical parameter or the soil conditions over the whole area of the site. Soil and rock samples collected from the investigation area are assumed to be representative of the areas from where they were collected and not indicative of the entire site. The conclusions discussed within this report are based on observations and/or testing at these investigation points.

This report does not purport to provide legal advice. Readers of the report should engage professional legal practitioners for this purpose as required.

No responsibility is accepted for use of any part of this report in any other context or for any other purpose by third a party.

**Site Plan**



# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To:  Owner /Agent  
 Address  
  Suburb/postcode

## Qualified person details:

Qualified person:   
Address:  Phone No:   
  Fax No:   
Licence No:  Email address:

Qualifications and Insurance details:  (description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Speciality area of expertise:  (description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

## Details of work:

Address:  Lot No:   
  Certificate of title No:

The assessable item related to this certificate:  (description of the assessable item being certified)  
Assessable item includes –  
- a material;  
- a design  
- a form of construction  
- a document  
- testing of a component, building system or plumbing system  
- an inspection, or assessment, performed

## Certificate details:

Certificate type:  (description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)

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 certificate the following matters are relevant –

Documents:	The attached soil report for the address detailed above in 'details of work'
Relevant calculations:	Reference the above report.
References:	AS2870:2011 residential slabs and footings AS1726:2017 Geotechnical site investigations CSIRO Building technology file – 18.

*Substance of Certificate: (what it is that is being certified)*

Site Classification consistent with AS2870-2011.

*Scope and/or Limitations*

The classification applies to the site as inspected and does not account for future alteration to foundation conditions as a result of earth works, drainage condition changes or variations in site maintenance.

**I, John-Paul Cumming certify the matters described in this certificate.**

Qualified person:

*Signed:*

*Certificate No:*

*Date:*

J11111

26/11/2024



A handwritten signature in black ink, appearing to read 'John Paul Cumming', written over a light grey background.

# **DISPERSIVE SOIL ASSESSMENT**

**10 Inverness Street**

**Midway Point**

**November 2024**



GEO-ENVIRONMENTAL  
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.

## **Investigation Details**

<b>Client:</b>	James Vagg
<b>Site Address:</b>	10 Inverness Street, Midway Point
<b>Date of Inspection:</b>	21/11/2024
<b>Proposed Works:</b>	New house
<b>Investigation Method:</b>	Geoprobe 540UD - Direct Push
<b>Inspected by:</b>	C. Cooper

## **Site Details**

<b>Certificate of Title (CT):</b>	184962/91
<b>Title Area:</b>	Approx. 1091 m <sup>2</sup>
<b>Applicable Planning Overlays:</b>	Bushfire-prone areas, Airport obstacle limitation area, Waterway and Coastal Protection Areas
<b>Slope &amp; Aspect:</b>	10° W facing slope
<b>Vegetation:</b>	Grass & Weeds, Disturbed

## **Background Information**

<b>Geology Map:</b>	MRT
<b>Geological Unit:</b>	Triassic Sandstone
<b>Climate:</b>	Annual rainfall 400mm
<b>Water Connection:</b>	Mains
<b>Sewer Connection:</b>	Serviced-Mains
<b>Testing and Classification:</b>	AS2870:2011, AS1726:2017 & AS4055:2021

## 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)	USCS	Description
0.00-0.30	0.00-0.20	SM	<b>Silty SAND:</b> grey, brown, slightly moist, medium dense
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0.90-1.00	1.10-1.50	SC	<b>Clayey SAND:</b> with gravels, yellow, brown, slightly moist dense, refusal.

## Site Notes

The soil on site has formed from Triassic sandstone. The subsoil was tested for dispersion using the Emerson Test and was found to be slightly dispersive Class 2(2) -obvious milkiness, <50% of the aggregate affected.

## Dispersive Soil Assessment

The dispersive soil assessment of the property considers the proposed construction area.

Potential for dispersive soils

The site has been identified as an area subject to a tunnel erosion hazard according to 'Dispersive Soils and Their Management: Technical Reference Manual'. This is due to the soils present on site that developed from Triassic Sandstone that contain considerable fine sand/silt content and medium plastic clays. Triassic Sandstone in the local area is known to produce soils with an excess of sodium on the soil exchange complex, which can cause soil dispersion. Under some circumstances the presence of dispersive soils can also lead to significant erosion, and in particular tunnel erosion. Based upon field survey of the property, no visible tunnel or gully erosion was identified. However, a soil sampling program was undertaken to identify the presence of dispersive soils in the proposed development areas.

**Soil sampling and testing**

Samples were taken at the site for assessment of dispersion. An Emerson (1968) Dispersion test was conducted to determine if these samples were dispersive.

The soil samples taken from site were found to be Slightly dispersive Class 2(2) -obvious milkiness, <50% of the aggregate affected.

**Management Recommendations**

A number of site and soil management measures are recommended for development on the site.

The proposed site cut/fill and driveway areas must be managed by:

- Applying a geo-fabric, jute mesh or similar material to the exposed batters of any cutting on site and revegetating the slope
- Applying a surface layer of at least 50mm of suitable crushed rock/gravel to the driveway surface (and any proposed house pad), with adequate compaction to ensure a relatively impervious surface to maintain site surface stability
- Vegetation on any fill batters must be established and maintained, if any bare area of soil on the batter develops then it must be top-dressed with suitable topsoil and additional vegetation planted

The risk of erosion and tunnel erosion associated with construction must be minimized by:

- Any new water, power, or other service trenches within the property must ensure recommendations for dispersive soils are followed:
  - o Where possible trenches to be placed shallow in topsoil and mounded over to achieve the required cover depth
  - o If buried the trench must be backfilled in layers of no more than 200mm with clay with 5% by weight gypsum added (the clay must be sufficiently moist to allow good compaction).
  - o The trench must be finished with at least 150mm depth of non-dispersive suitable topsoil and finished to a level at least 75mm above natural ground to allow for possible settlement
- Vegetation cover must be maintained wherever possible on the property
- Foundations may be placed into the natural soil; however, care must be taken to ensure all exposed soil in the foundation area is compacted and 1Kg/m<sup>2</sup> of gypsum is applied. Excavated fill from the construction area is not recommended for reuse on site in landscaping unless it is appropriately treated with

gypsum, compacted, and capped with topsoil with natural soil and gypsum

- All stormwater runoff from the dwelling to be directed to mains connection (all the drains are to be adequately treated with gypsum)
- Drainage of any site cut must not employ conventional rock drain construction; it must adhere to recommendations for dispersive soils (unless founded entirely in rock)
- All excavation works on site should be monitored for signs of soil dispersion and remedial action taken as required – any excavated fill from the construction area is not recommended for reuse on site in landscaping unless it is appropriately treated with gypsum, compacted, and capped with topsoil

## **Conclusions**

There is a low risk associated with dispersive soils and potential erosion on the site provided the recommendations in this report are adhered to. Efforts should be made to cover all exposed soils on cut/fill batters with topsoil and seeded with well suited pasture species to avoid rainwater, runoff, surface water flows from intercepting exposed subsoils.

A number of site management recommendations have been made in this report and further information can also be found in the publication “Dispersive soils and their management – Technical manual” (DPIWE Tas 2009)

It is recommended that during construction that GES be notified of any variation to the soil conditions as outlined in this report.



Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD  
Environmental and Engineering Soil Scientist

**Appendix 1– Soil test results**

# Laboratory Test Results

**Sample Submitted By:** C Cooper  
**Date Submitted:** 25/11/2024  
**Sample Identification:** 2 samples – 10 Inverness Street, Midway Point  
**Soil to be tested:** Emerson soil dispersion test

**Result:**

Sample	Texture	Emerson class	Description
Sample 1	clay	Class 2 (2)	Some dispersion <50% affected
Sample 2	clay	Class 2 (2)	Some dispersion <50% affected

Notes: Some dispersion with obvious milkiness affecting <50% of the aggregate.

**Sample Tested by:** J Cumming  
25/11/2024

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# **DISPERSIVE SOIL ASSESSMENT**

**10 Inverness Street**

**Midway Point**

**November 2024**



**Sorell Council**

Development Application:5.2024.308.1 -  
Request for information - 10 Inverness  
Street, Midway Point - P3.pdf  
Plan Reference:P2

Date received:23/12/2024



GEO-ENVIRONMENTAL  

---

S O L U T I O N S

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.

## **Investigation Details**

<b>Client:</b>	James Vagg
<b>Site Address:</b>	10 Inverness Street, Midway Point
<b>Date of Inspection:</b>	21/11/2024
<b>Proposed Works:</b>	New house
<b>Investigation Method:</b>	Geoprobe 540UD - Direct Push
<b>Inspected by:</b>	C. Cooper

## **Site Details**

<b>Certificate of Title (CT):</b>	184962/91
<b>Title Area:</b>	Approx. 1091 m <sup>2</sup>
<b>Applicable Planning Overlays:</b>	Bushfire-prone areas, Airport obstacle limitation area, Waterway and Coastal Protection Areas
<b>Slope &amp; Aspect:</b>	10° W facing slope
<b>Vegetation:</b>	Grass & Weeds, Disturbed

## **Background Information**

<b>Geology Map:</b>	MRT
<b>Geological Unit:</b>	Triassic Sandstone
<b>Climate:</b>	Annual rainfall 400mm
<b>Water Connection:</b>	Mains
<b>Sewer Connection:</b>	Serviced-Mains
<b>Testing and Classification:</b>	AS2870:2011, AS1726:2017 & AS4055:2021

## 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)	USCS	Description
0.00-0.30	0.00-0.20	SM	<b>Silty SAND:</b> grey, brown, slightly moist, medium dense
0.30-0.90	0.20-1.10	CI	<b>Silty CLAY:</b> medium plasticity, grey, brown, slightly moist, stiff,
0.90-1.00	1.10-1.50	SC	<b>Clayey SAND:</b> with gravels, yellow, brown, slightly moist dense, refusal.

## Site Notes

The soil on site has formed from Triassic sandstone. The subsoil was tested for dispersion using the Emerson Test and was found to be slightly dispersive Class 2(2) -obvious milkiness, <50% of the aggregate affected.

## Dispersive Soil Assessment

The dispersive soil assessment of the property considers the proposed construction area.

Potential for dispersive soils

The site has been identified as an area subject to a tunnel erosion hazard according to 'Dispersive Soils and Their Management: Technical Reference Manual'. This is due to the soils present on site that developed from Triassic Sandstone that contain considerable fine sand/silt content and medium plastic clays. Triassic Sandstone in the local area is known to produce soils with an excess of sodium on the soil exchange complex, which can cause soil dispersion. Under some circumstances the presence of dispersive soils can also lead to significant erosion, and in particular tunnel erosion. Based upon field survey of the property, no visible tunnel or gully erosion was identified. However, a soil sampling program was undertaken to identify the presence of dispersive soils in the proposed development areas.

**Soil sampling and testing**

Samples were taken at the site for assessment of dispersion. An Emerson (1968) Dispersion test was conducted to determine if these samples were dispersive.

The soil samples taken from site were found to be Slightly dispersive Class 2(2) -obvious milkiness, <50% of the aggregate affected.

**Management Recommendations**

A number of site and soil management measures are recommended for development on the site.

The proposed site cut/fill and driveway areas must be managed by:

- Applying a geo-fabric, jute mesh or similar material to the exposed batters of any cutting on site and revegetating the slope
- Applying a surface layer of at least 50mm of suitable crushed rock/gravel to the driveway surface (and any proposed house pad), with adequate compaction to ensure a relatively impervious surface to maintain site surface stability
- Vegetation on any fill batters must be established and maintained, if any bare area of soil on the batter develops then it must be top-dressed with suitable topsoil and additional vegetation planted

The risk of erosion and tunnel erosion associated with construction must be minimized by:

- Any new water, power, or other service trenches within the property must ensure recommendations for dispersive soils are followed:
  - o Where possible trenches to be placed shallow in topsoil and mounded over to achieve the required cover depth
  - o If buried the trench must be backfilled in layers of no more than 200mm with clay with 5% by weight gypsum added (the clay must be sufficiently moist to allow good compaction).
  - o The trench must be finished with at least 150mm depth of non-dispersive suitable topsoil and finished to a level at least 75mm above natural ground to allow for possible settlement
- Vegetation cover must be maintained wherever possible on the property
- Foundations may be placed into the natural soil; however, care must be taken to ensure all exposed soil in the foundation area is compacted and 1Kg/m<sup>2</sup> of gypsum is applied. Excavated fill from the construction area is not recommended for reuse on site in landscaping unless it is appropriately treated with

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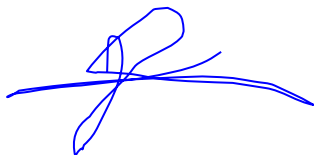
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## **Conclusions**

There is a low risk associated with dispersive soils and potential erosion on the site provided the recommendations in this report are adhered to. Efforts should be made to cover all exposed soils on cut/fill batters with topsoil and seeded with well suited pasture species to avoid rainwater, runoff, surface water flows from intercepting exposed subsoils.

A number of site management recommendations have been made in this report and further information can also be found in the publication “Dispersive soils and their management – Technical manual” (DPIWE Tas 2009)

It is recommended that during construction that GES be notified of any variation to the soil conditions as outlined in this report.



Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD  
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**To:** Sorell council, Planning Team

**Date:** 16/12/2024

**RE:** Justification for Shed Height and Location (Outside Building Envelope)

(Lot 91) 10 Inverness Street Midway Point

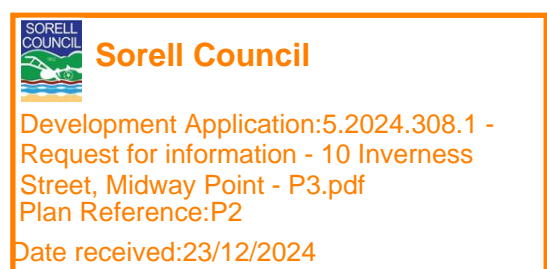
The proposed shed is designed to be 4.4 meters in height affl on the front wall. This allows for a 4-meter opening for the largest roller door, due to its intended use for storing the property owners caravan, which requires a higher clearance than a typical vehicle storage structure. The extra height is necessary to accommodate these items safely and effectively, ensuring that there is sufficient space for both accessibility and proper storage. The shed's design also accounts for factors such as ventilation and internal lighting, which are best achieved with the proposed height. Because the roof line is raked, falling towards the rear, clearance towards the rear of the shed is a lot lower affl, approx. 3.4 meters. Minimum clearance for a typical caravan or cabined boat are 3.2 meters.

Additionally, the location of the shed has been chosen to maximise safety and ease of use. The lot is an internal block with an approximately 60-meter-long driveway of limited width. The proposed shed is positioned in a way that maintains straight-line access into the shed from the driveway. The overall aesthetic and functionality of the property would be compromised if the shed couldn't be built in line with the driveway given the layout of the lot. This is restricted heavily by the existence of two TasWater easements which limit shed placement. Furthermore, the block has a 5-meter height restriction through a covenant that exists, thus meaning the main dwelling can not be designed as a two-story structure to free up any more block space for the shed in an alternate location.

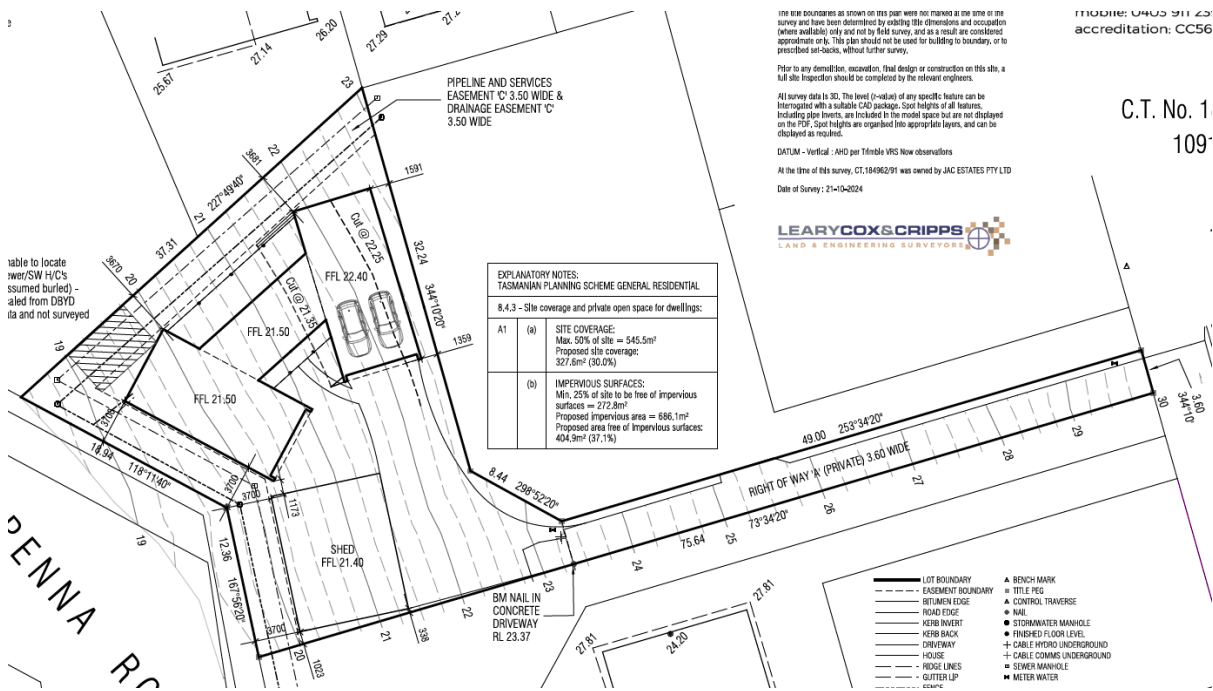
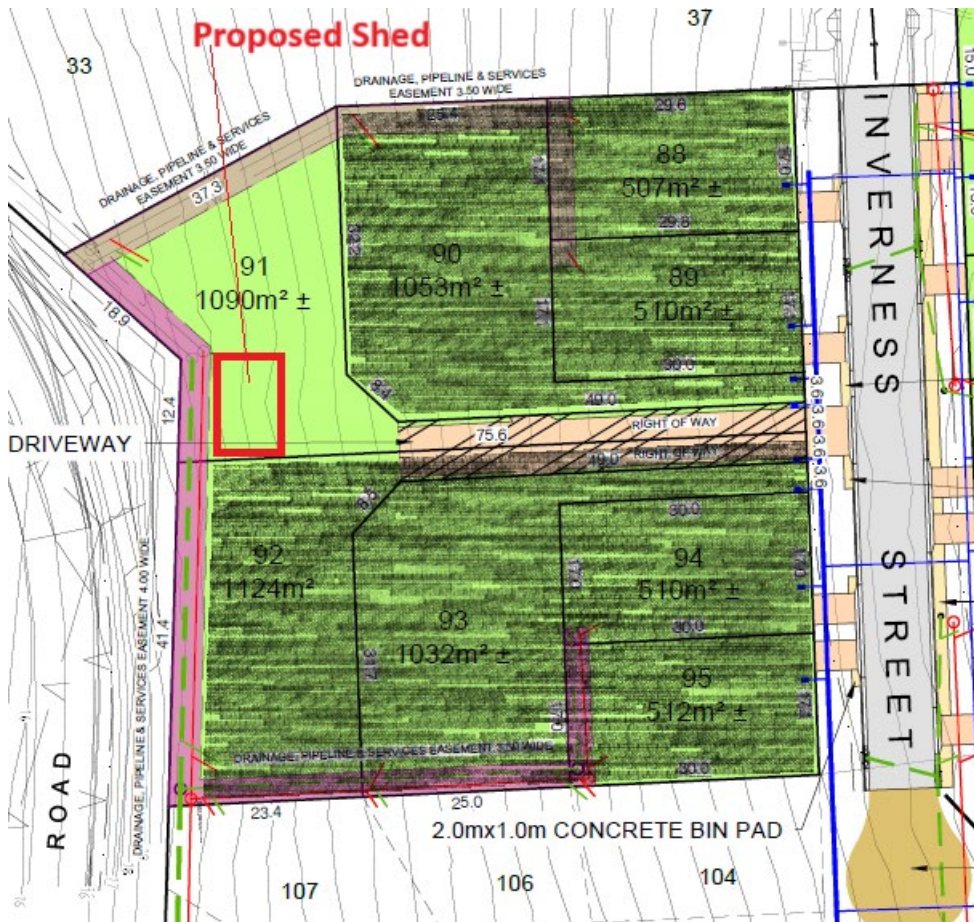
Overall, the requested height and location are critical for the practical use of the shed, while still considering the broader objectives of preserving the character and functionality of the property and the surrounding environment.

Shadow modelling has been undertaken as a proactive measure and included with the submitted plan drawings. Modelling shows minimal impact to be expected.

See diagrams on next page for reference.







MODULE: 0405 911 23  
accreditation: CC56

C.T. No. 1  
109



**SORELL COUNCIL**  
**Sorell Council**

Development Application: 5.2024.308.1 -  
Request for information - 10 Inverness  
Street, Midway Point - P3.pdf  
Plan Reference: P2  
Date received: 23/12/2024



# STAGE 5

SCALE 1: 800 (A3)  
 0 8 16 24 32 40  
 Metres

- KEY:**
- Stage 5 Lot boundary - 14 Lots
  - Existing boundary
  - Proposed Easement
  - Proposed Right of way
  - Proposed Cut/ Fill Batters
  - Water Line
  - Sewer Line
  - Stormwater Line

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

### ADDITIONAL NOTES:

- This plan shows only the conceptual design location of Drainage and Water reticulation infrastructure. It is the purchaser's responsibility to ascertain the design location of all other service infrastructure from relevant authorities Access and servicing locations for each lot subject to change prior to council approval of engineering design.
- Mature trees (condition yet to be determined) to be planted in road reservation by developer.



**SALE PLAN**  
 Measurements, Areas and Easements are subject to change until such time as the plan of subdivision is registered by the Land Titles Office.

**PRELIMINARY ONLY**  
 Subject to exact service location being approved by the various regulatory authorities including, Sorell Council, TasWater and TasNetworks

<b>PDA Surveyors</b> <small>Incorporating WALTER SURVEYS</small> Surveying, Engineering & Planning <small>ABN 91 217 806 025</small>		<small>6 Freeman Street        Kingston, Tasmania, 7050        www.pda.com.au        PHONE: +61 03 6229 2131        FAX: +61 03 6229 3901        EMAIL: pda.km@pda.com.au</small>								
<b>SALE PLAN - STAGE 5 (14 LOTS)</b> <b>"THE PENINSULA AT MIDWAY POINT"</b> <b>PENNA ROAD, MIDWAY POINT</b> <b>for JAC ESTATES PTY LTD</b>		<table border="1"> <tr> <td>SCALE</td> <td>PAPER</td> </tr> <tr> <td>1 : 800</td> <td>(A3)</td> </tr> <tr> <td>JOB NUMBER</td> <td>DRAWING</td> </tr> <tr> <td>47873LM-SP5</td> <td></td> </tr> </table>	SCALE	PAPER	1 : 800	(A3)	JOB NUMBER	DRAWING	47873LM-SP5	
SCALE	PAPER									
1 : 800	(A3)									
JOB NUMBER	DRAWING									
47873LM-SP5										
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SURVEYOR	MS	DRAWN	RD	DATE	06 SEPTEMBER 2021					

# 138 - Proposed Dwelling, VAGG

## AT 10 INVERNESS STREET, MIDWAY POINT

Architectural Drawing No.	Description
01	Site Plan
02	Drainage Plan
02a	Shed Plans
02b	Shadow Diagrams
02c	Isometric Shadow Diagrams
02d	Solar Access Diagram
03	Floor Plan
04	Elevations Sheet 1 of 2
04a	Elevations Sheet 2 of 2
05	Section
06	Roof Plan
07	Electrical Plan
08	Flooring Layout Plan
09	Lighting Calculations, Insulation & Window Schedule
10	Compliance Notes
10a	Liveable Housing Notes Sheet 1 of 3
10b	Liveable Housing Notes Sheet 2 of 3
10c	Liveable Housing Notes Sheet 3 of 3
11	Wet Area Specifications
11a	Stair Notes
11b	Balustrade Notes
12	Vegetation Overlay
13	BAL Construction Requirements

Climate Zone - 7  
 C.T. No. 184962/91  
 Wind Speed - N? (tbc)  
 Corrosion Environment - SEVERE  
 Soil Classification - ? (tbc)  
 Floor Area = 226.8m<sup>2</sup>  
 = 24.4 sq

### PROTECTIVE COATINGS FOR STEELWORK

ENVIRONMENT	LOCATION	MINIMUM PROTECTIVE COATING	
		General structural steel members	Lintels in masonry
SEVERE  Within 1km of breaking surf or within 100m of salt water not subject to breaking surf or heavy industrial areas.	INTERNAL	Option 1 Option 2	2 coats alkyd primer; or 2 coats alkyd gloss
	EXTERNAL	Option 1 Option 2 Option 3	Inorganic zinc primer plus 2 coats vinyl gloss finishing coats Hot dip galvanise 300 g/m <sup>2</sup> min. Hot dip galvanise 100 g/m <sup>2</sup> min. plus - (a) 2 coats solvent based vinyl primer; or (b) 2 coats vinyl gloss or alkyd

- NOTES:
1. Heavy industrial areas means industrial environments around major industrial complexes. There are only a few such regions in Australia, examples of which occur around Port Pirie and Newcastle.
  2. The outer leaf and cavity of an external masonry wall of a building, including walls under open carports are considered to be external environments. A part of an internal leaf of an external masonry wall which is located in the roof space is considered to be in an internal environment.
  3. Where a paint finish is applied the surface of the steel work must be hand or power tool cleaned to remove any rust immediately prior to painting.
  4. All zinc coatings (including inorganic zinc) require a barrier coat to stop conventional domestic enamels from peeling.
  5. Refer to the paint manufacturer where decorative finishes are required on top of the minimum coating specified in the table for protection of the steel against corrosion.
  6. Internal locations subject to moisture, such as in close proximity to kitchen or bathroom exhaust fans are not considered to be in a permanently dry location and protection as specified for external locations is required.
  7. For applications outside the scope of this table, seek specialist advice.



REVISION	DATE	SHEETS	DESCRIPTION

**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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 Drafted by Phil Chamberlain, Accreditation CC5652Y

DRAWING: COVER SHEET  
 DATE: 19/11/24  
 FILE NAME: 138 DA 021024.dgn  
 DRAWN BY: PC

DWG No: **COVER SHEET**

12 NOVEMBER 2023 ● Preliminary drawings

19 NOVEMBER 2023 ● Development application drawings (DA)

○ Preliminary construction drawings  
 Engineer not to sign this copy, only  
 provide notes, additions & amendments

○ Final construction drawings (BA)

○ Approved by Engineer

○ Approved by Building Surveyor

**IMPORTANT NOTES:**

The builder shall ensure that all downpipes are connected to the stormwater drainage system as soon as possible to prevent any erosion, swelling or saturation of susceptible foundation soils.

Batter slopes to be in accordance with BCA Table 3.1.1.1. Provide retaining walls as required to comply with BCA requirements.

**NOTES:**

While all reasonable effort has been made to locate all visible above ground services, there may be other services which were not located during the field survey.

The title boundaries as shown on this plan were not marked at the time of the survey and have been determined by existing title dimensions and occupation (where available) only and not by field survey, and as a result are considered approximate only. This plan should not be used for building to boundary, or to prescribed set-backs, without further survey.

Prior to any demolition, excavation, final design or construction on this site, a full site inspection should be completed by the relevant engineers.

All survey data is 3D. The level (z-value) of any specific feature can be interrogated with a suitable CAD package. Spot heights of all features, including pipe inverts, are included in the model space but are not displayed on the PDF. Spot heights are organised into appropriate layers, and can be displayed as required.

DATUM - Vertical : AHD per Trimble VRS Now observations

At the time of this survey, CT.184962/91 was owned by JAC ESTATES PTY LTD

Date of Survey : 21-10-2024

**re:design**

residential design & drafting

phil.chamberlain@bigpond.com

mobile: 0403 911 239

accreditation: CC5652Y

C.T. No. 184962/91

1091m<sup>2</sup>

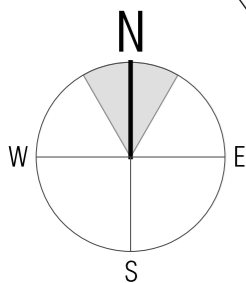
**LEARY COX & CRIPPS**  
LAND & ENGINEERING SURVEYORS

EXPLANATORY NOTES:  
TASMANIAN PLANNING SCHEME GENERAL RESIDENTIAL

8.4.3 - Site coverage and private open space for dwellings:

A1	(a)	SITE COVERAGE: Max. 50% of site = 545.5m <sup>2</sup> Proposed site coverage: 327.6m <sup>2</sup> (30.0%)
	(b)	IMPERVIOUS SURFACES: Min. 25% of site to be free of impervious surfaces = 272.8m <sup>2</sup> Proposed impervious area = 686.1m <sup>2</sup> Proposed area free of impervious surfaces: 404.9m <sup>2</sup> (37.1%)

- LOT BOUNDARY
- - - EASEMENT BOUNDARY
- BITUMEN EDGE
- ROAD EDGE
- KERB INVERT
- KERB BACK
- DRIVEWAY
- HOUSE
- RIDGE LINES
- GUTTER LIP
- FENCE
- - - SEWER MAIN
- - - STORMWATER MAIN
- ▲ BENCH MARK
- TITLE PEG
- ▲ CONTROL TRAVERSE
- NAIL
- STORMWATER MANHOLE
- FINISHED FLOOR LEVEL
- + CABLE HYDRO UNDERGROUND
- + CABLE COMMS UNDERGROUND
- SEWER MANHOLE
- METER WATER



Scale 1:300

PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
Development Application: 5.2024.308.1 - 10  
Inverness Street, Midway Point  
Plans Reference: P1  
Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: SITE PLAN  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

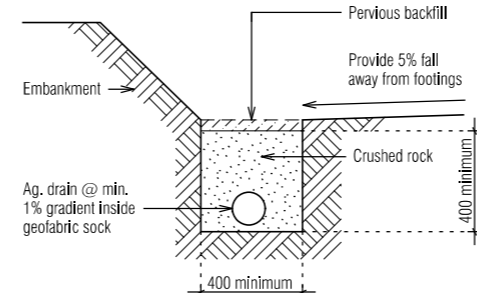
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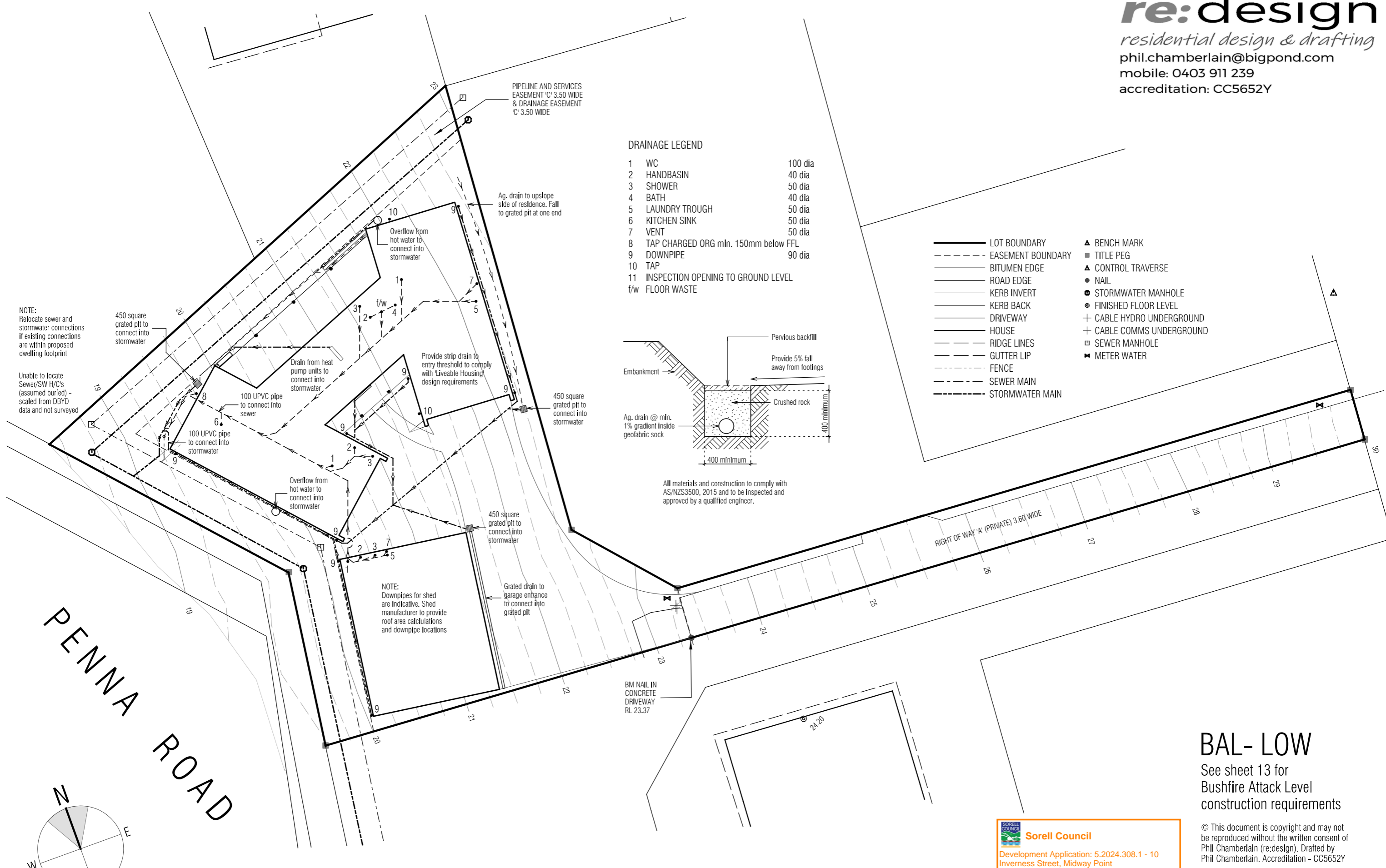
**DRAINAGE LEGEND**

- |     |                                      |         |
|-----|--------------------------------------|---------|
| 1   | WC                                   | 100 dia |
| 2   | HANDBASIN                            | 40 dia  |
| 3   | SHOWER                               | 50 dia  |
| 4   | BATH                                 | 40 dia  |
| 5   | LAUNDRY TROUGH                       | 50 dia  |
| 6   | KITCHEN SINK                         | 50 dia  |
| 7   | VENT                                 | 50 dia  |
| 8   | TAP CHARGED ORG min. 150mm below FFL |         |
| 9   | DOWNPIPE                             | 90 dia  |
| 10  | TAP                                  |         |
| 11  | INSPECTION OPENING TO GROUND LEVEL   |         |
| f/w | FLOOR WASTE                          |         |

- |  |                   |  |                         |
|--|-------------------|--|-------------------------|
|  | LOT BOUNDARY      |  | BENCH MARK              |
|  | EASEMENT BOUNDARY |  | TITLE PEG               |
|  | BITUMEN EDGE      |  | CONTROL TRAVERSE        |
|  | ROAD EDGE         |  | NAIL                    |
|  | KERB INVERT       |  | STORMWATER MANHOLE      |
|  | KERB BACK         |  | FINISHED FLOOR LEVEL    |
|  | DRIVEWAY          |  | CABLE HYDRO UNDERGROUND |
|  | HOUSE             |  | CABLE COMMS UNDERGROUND |
|  | RIDGE LINES       |  | SEWER MANHOLE           |
|  | GUTTER LIP        |  | METER WATER             |
|  | FENCE             |  |                         |
|  | SEWER MAIN        |  |                         |
|  | STORMWATER MAIN   |  |                         |



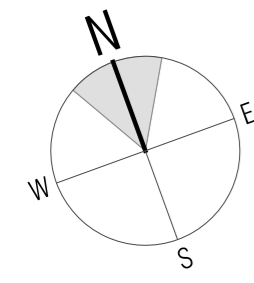
All materials and construction to comply with AS/NZS3500, 2015 and to be inspected and approved by a qualified engineer.



NOTE: Relocate sewer and stormwater connections if existing connections are within proposed dwelling footprint

Unable to locate Sewer/SW H/C's (assumed buried) - scaled from DBYD data and not surveyed

PENNA ROAD



Scale 1:250

**PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT**

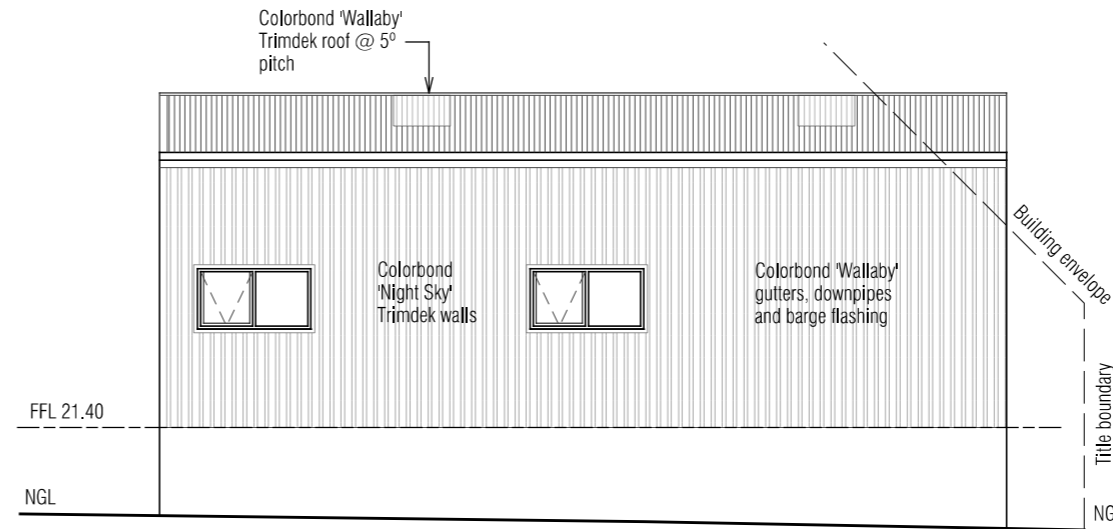
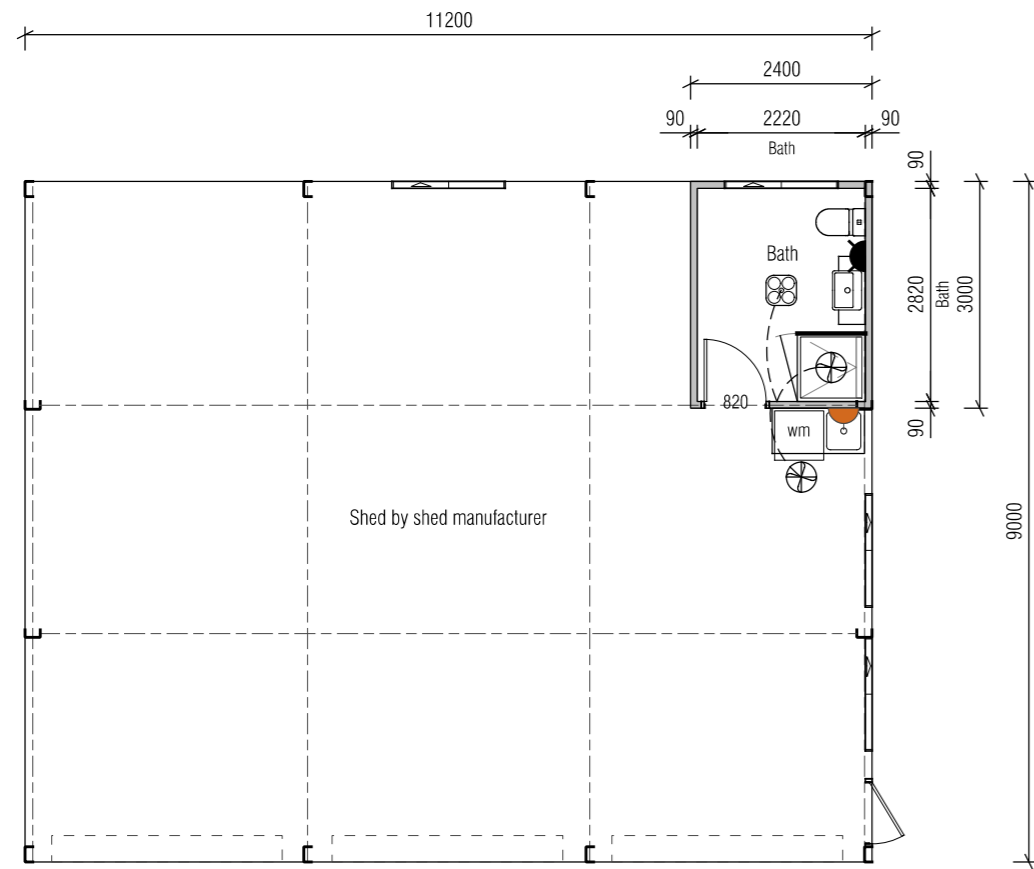
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 Bushfire Attack Level  
 construction requirements

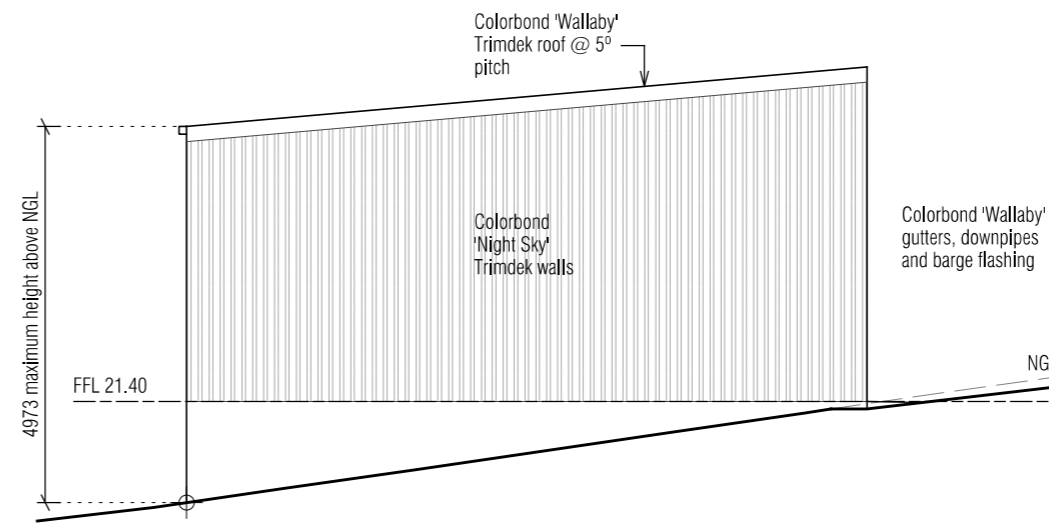
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DRAWING: DRAINAGE PLAN  
 DATE: 19/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

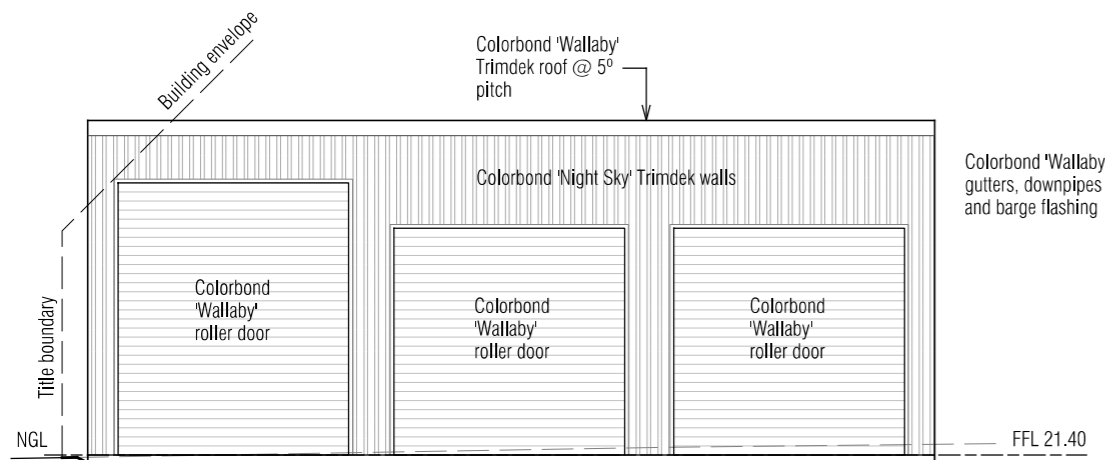
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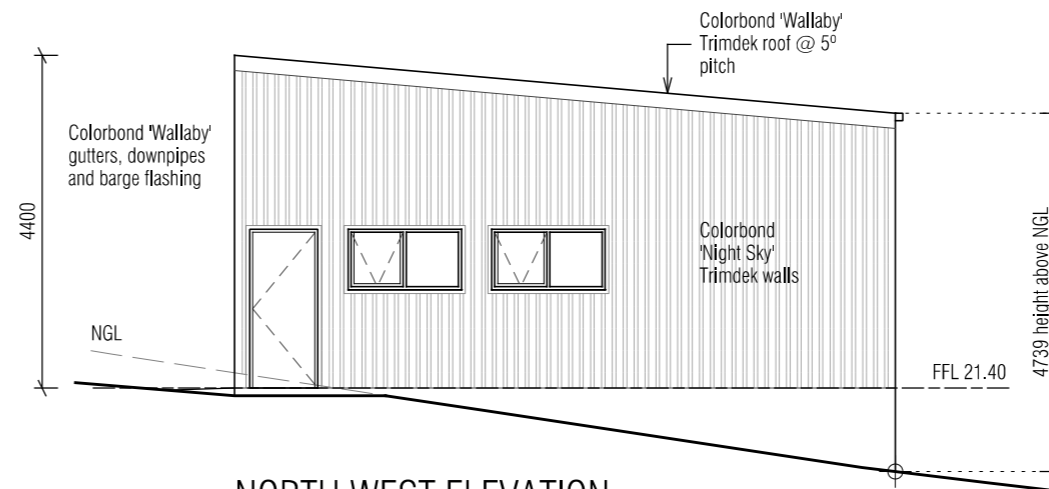
SOUTH WEST ELEVATION



SOUTH EAST ELEVATION



NORTH EAST ELEVATION



NORTH WEST ELEVATION

NOTE:  
 These shed elevations are for planning purposes only. See shed manufacturer's design & specifications for construction details.

**BAL- LOW**

See sheet 13 for Bushfire Attack Level construction requirements

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DRAWING: SHED PLANS  
 DATE: 19/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

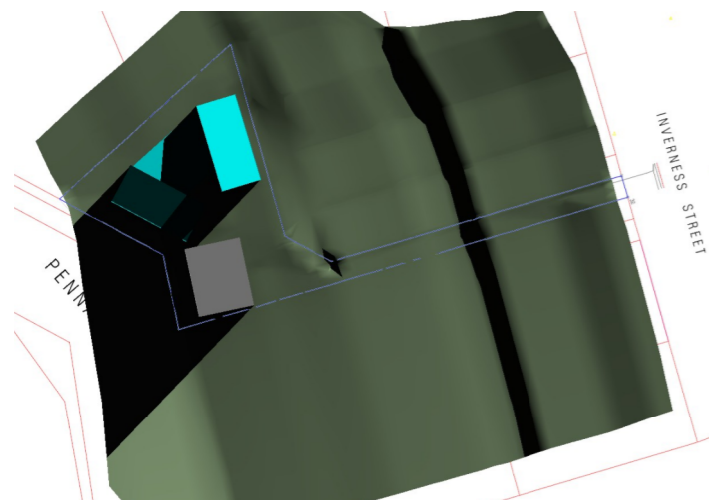
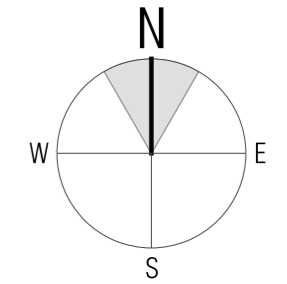
DWG No:

02a

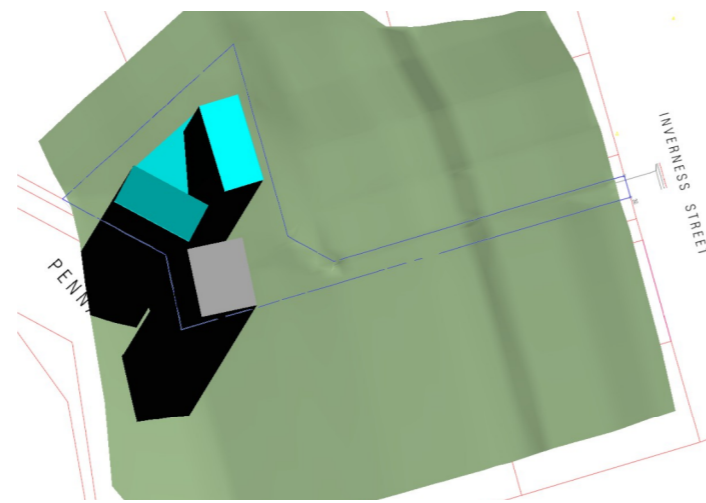
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PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

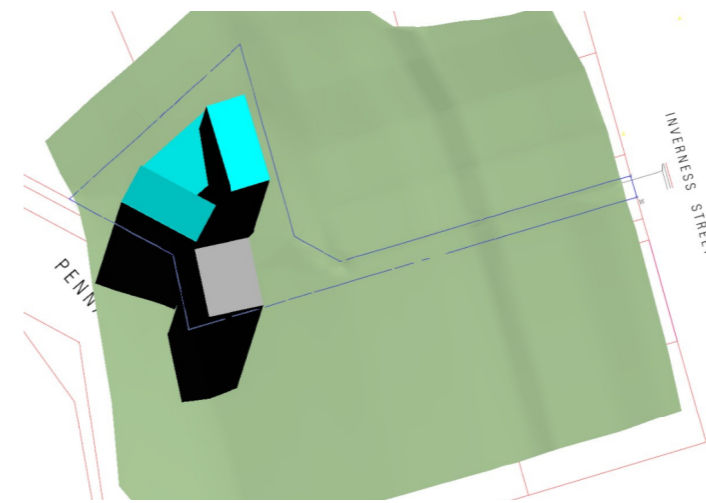
**Sorell Council**  
 Development Application: 5.2024.308.1 - 10 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024



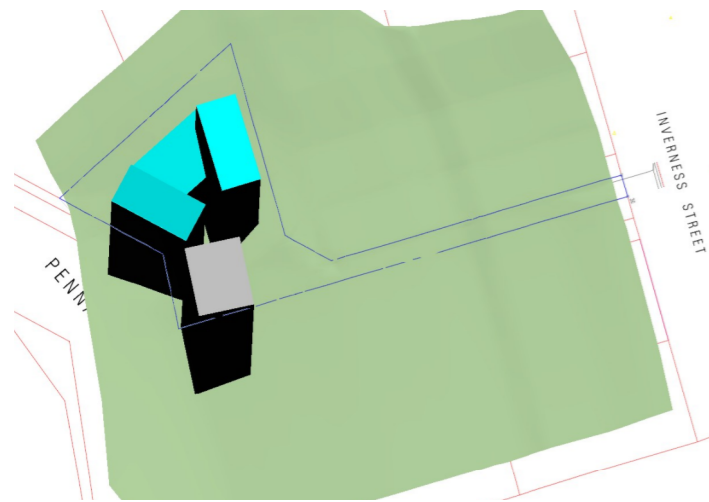
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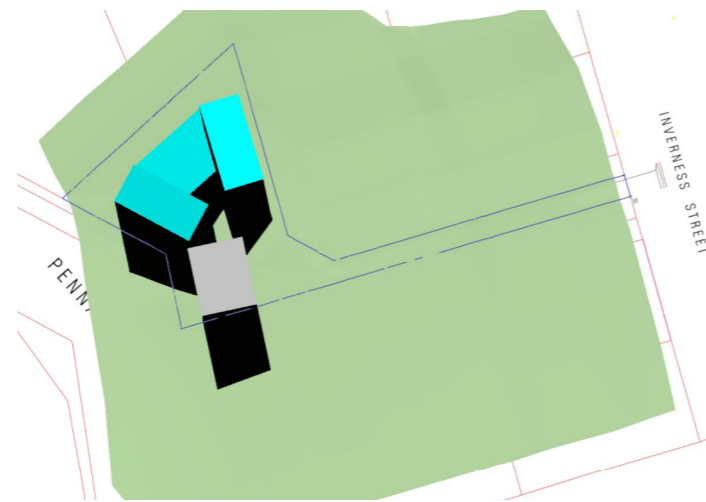
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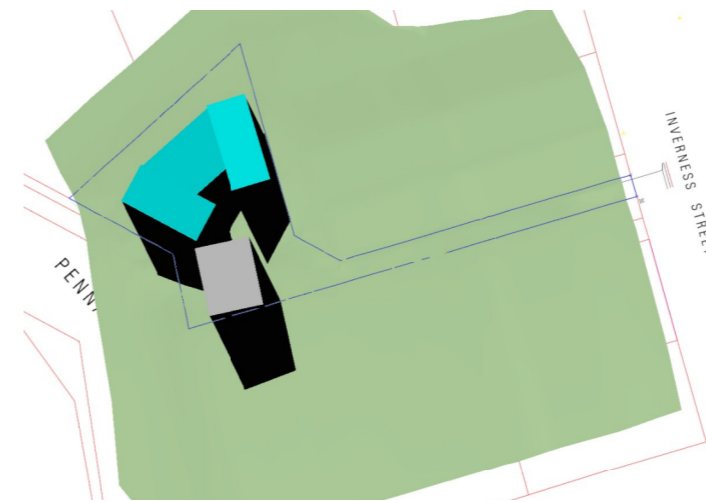
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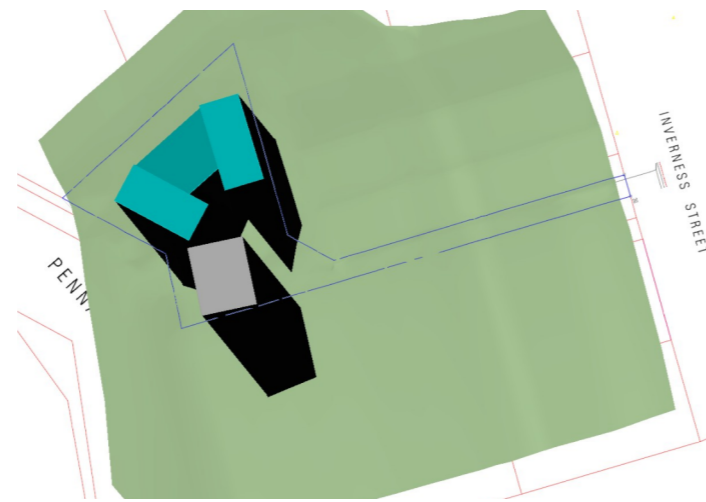
12:00 p.m.



1:00 p.m.



2:00 p.m.



3:00 p.m.

Shadow diagrams  
 for 10 Inverness Street,  
 MIDWAY POINT  
 between 9:00am and  
 3:00pm on 21 June.  
 42° 47' 20" South  
 147° 31' 20" East

Scale 1:100

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

 **Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

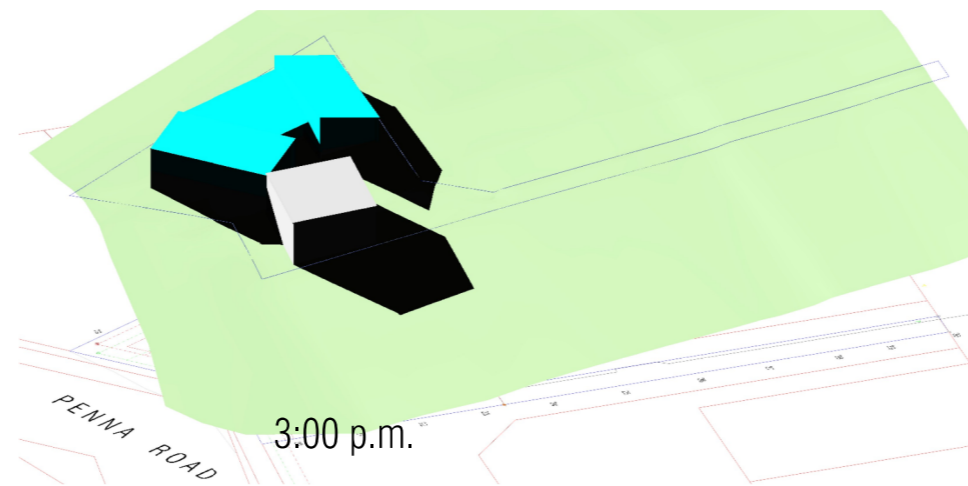
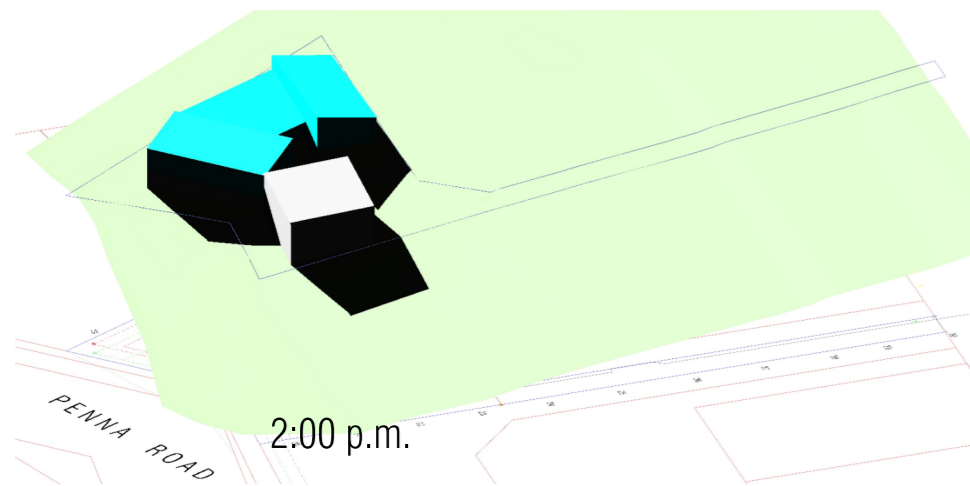
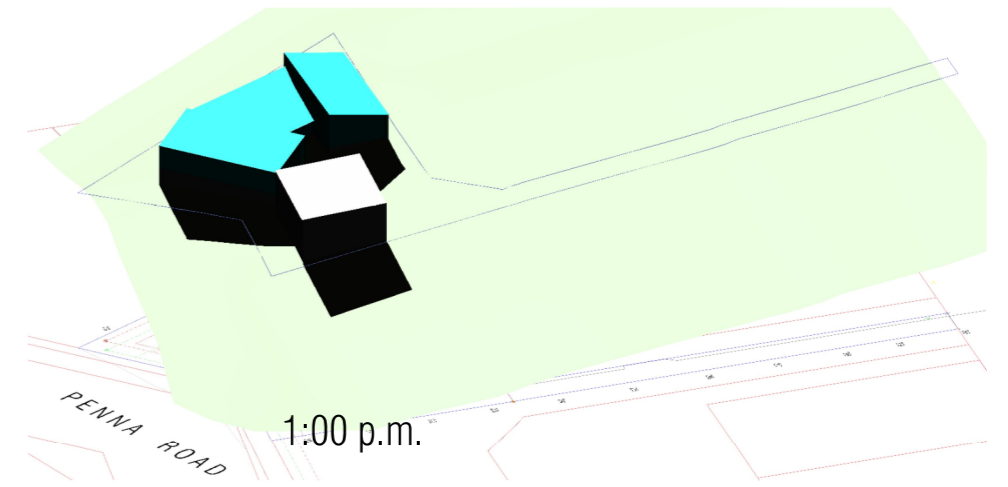
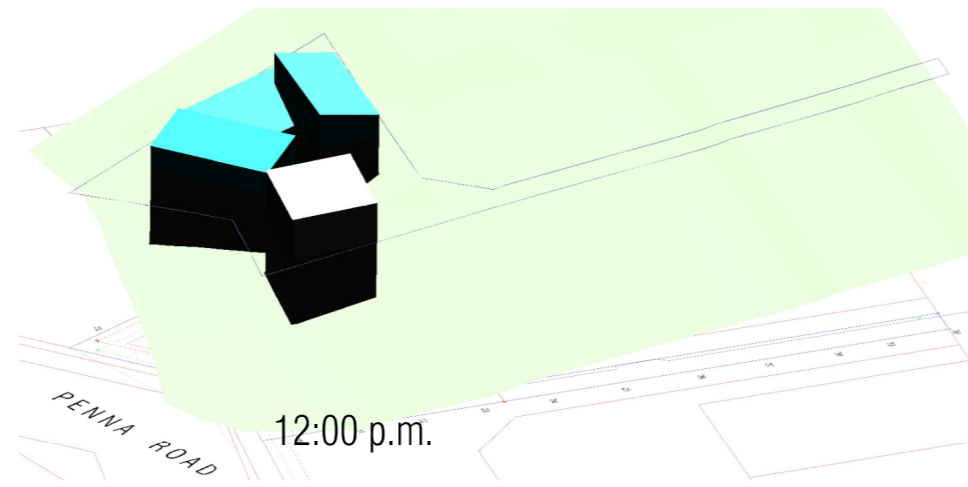
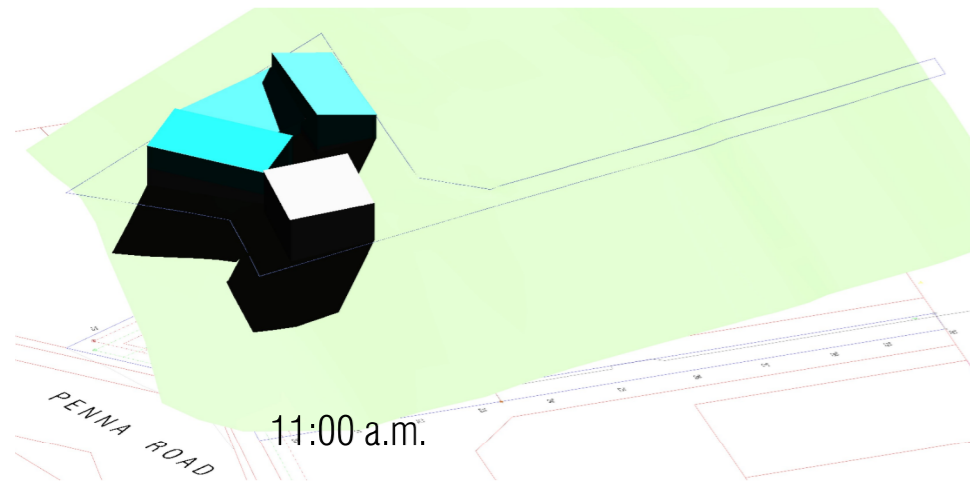
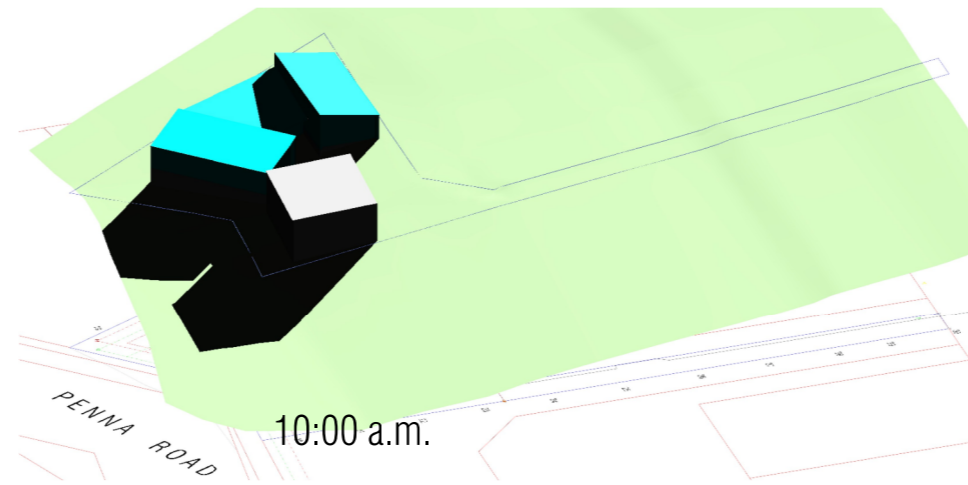
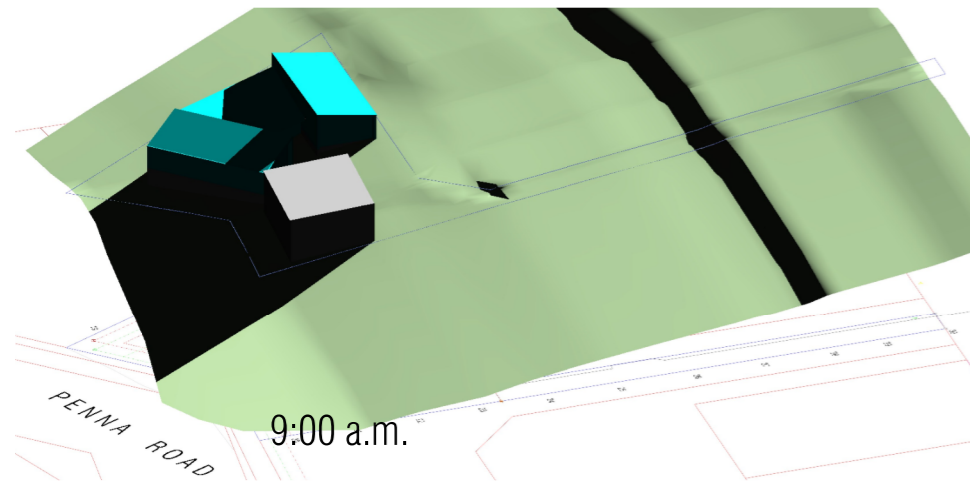
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DRAWING: SHADOW DIAGRAMS  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

DWG No:

02b

Isometric shadow diagrams  
 for 10 Inverness Street,  
 MIDWAY POINT  
 between 9:00am and  
 3:00pm on 21 June.  
 42° 47' 20" South  
 147° 31' 20" East



Scale 1:100

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

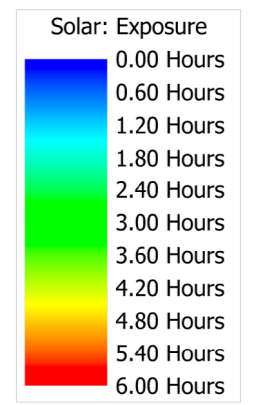
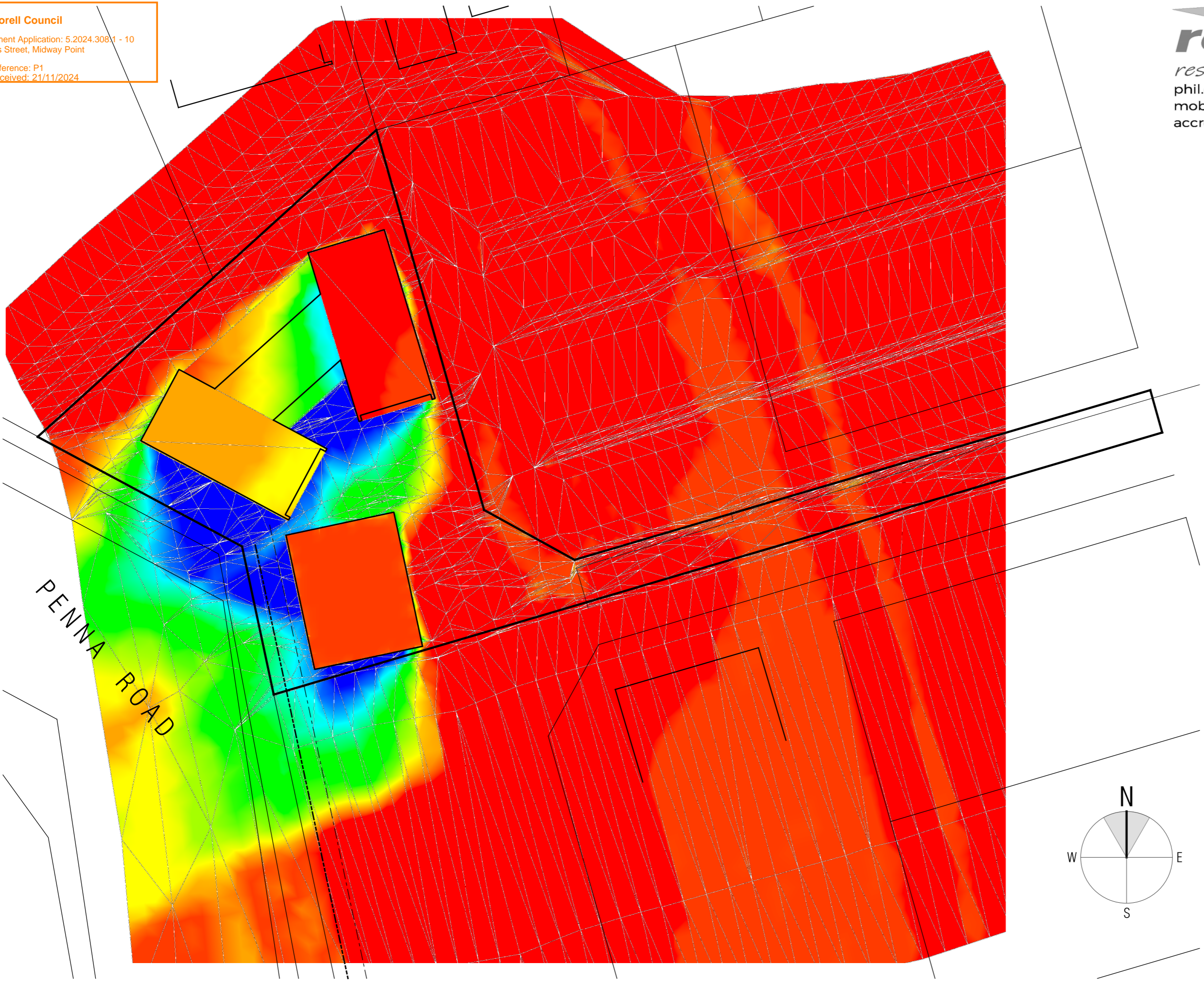
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DRAWING: ISOMETRIC SHADOW DIAGRAMS  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

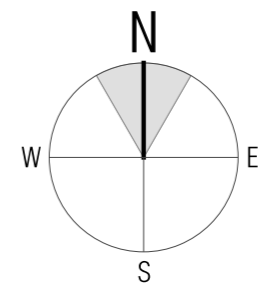
DWG No:

02c





Solar access diagram  
 for 10 Inverness Street,  
 MIDWAY POINT  
 between 9:00am and  
 3:00pm on 21 June.  
 42° 47' 20" South  
 147° 31' 20" East



**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: SOLAR ACCESS  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

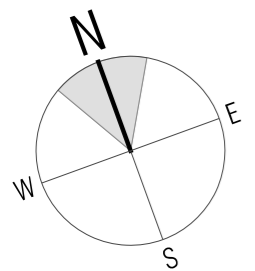
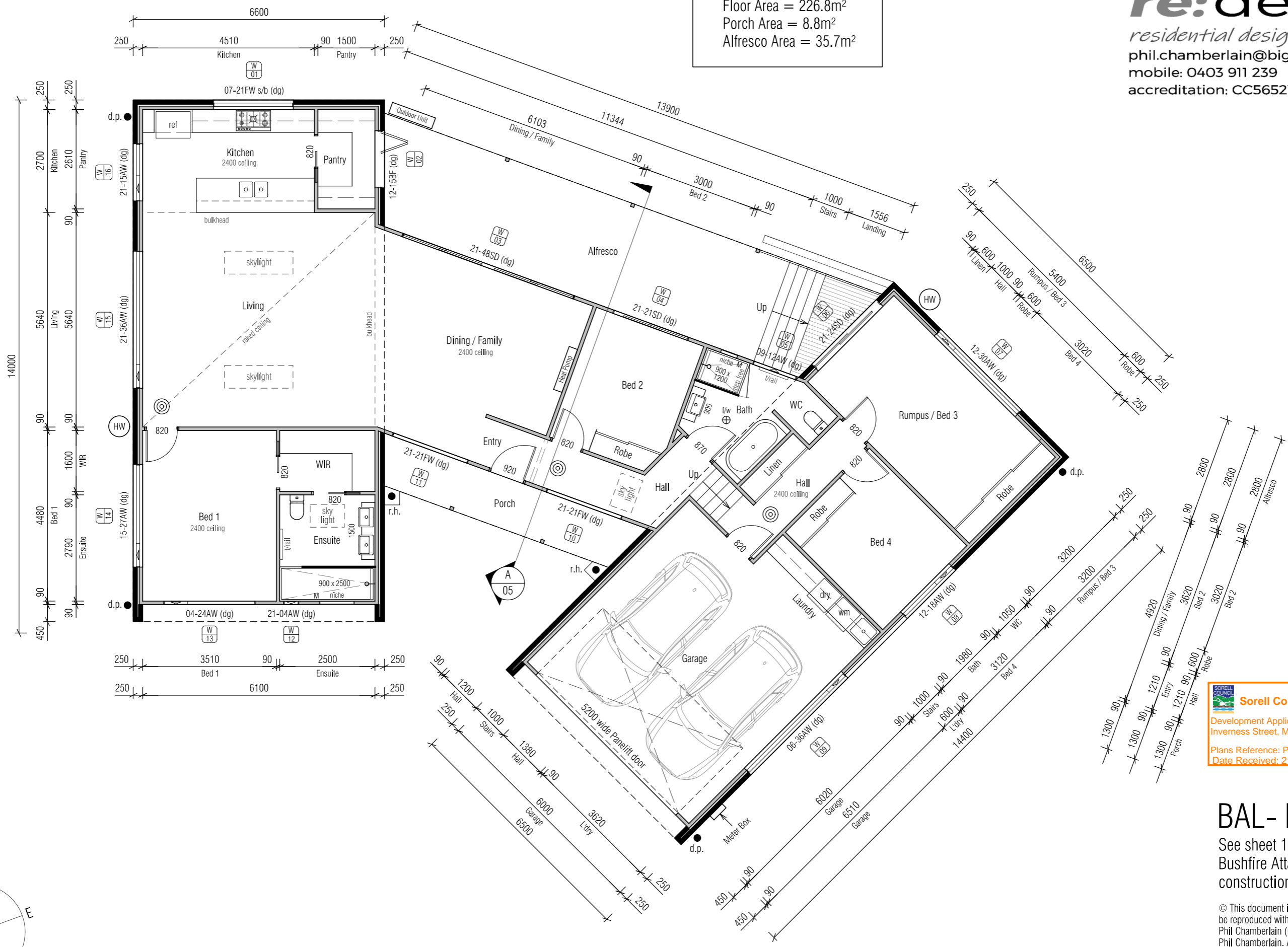
Scale 1:100

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

DWG No:

02d

Floor Area = 226.8m<sup>2</sup>  
 Porch Area = 8.8m<sup>2</sup>  
 Alfresco Area = 35.7m<sup>2</sup>



Scale 1:100

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

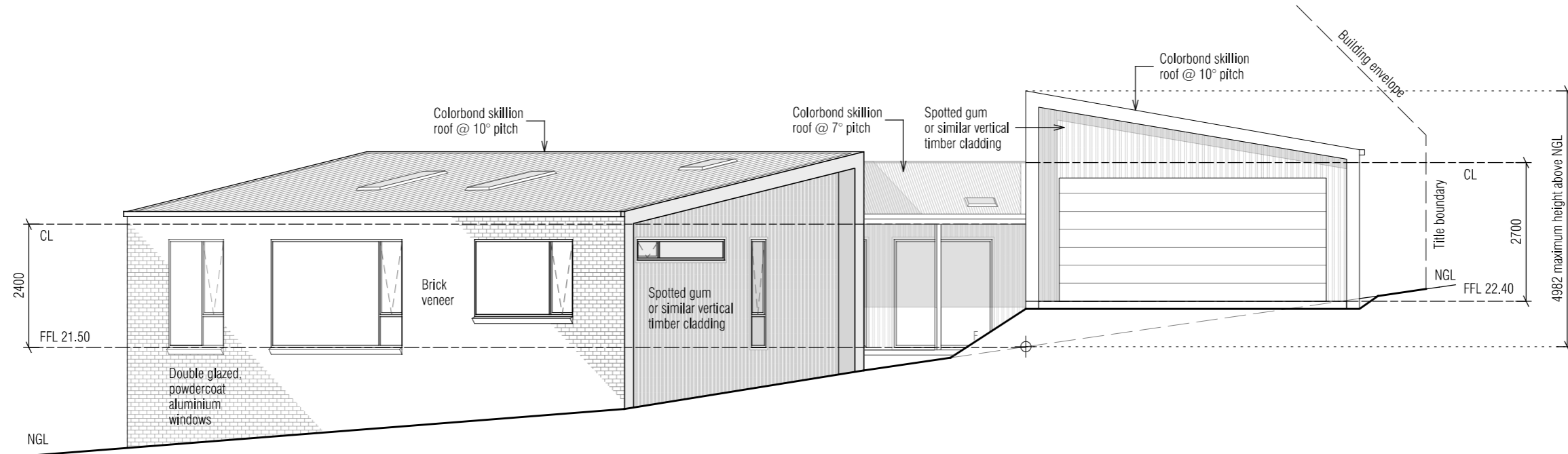
**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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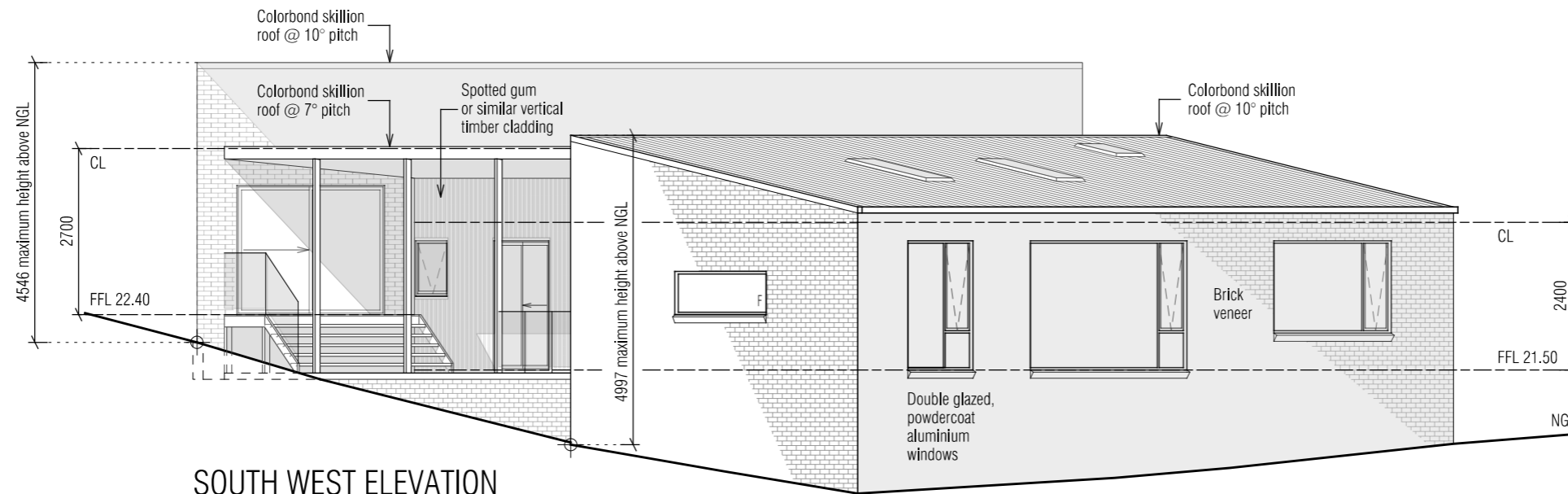
DRAWING: FLOOR PLAN  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

DWG No:

**IMPORTANT NOTE:**  
Cladding to be installed over min. 10mm battens to provide airflow between cladding and vapour permeable membrane.



**SOUTH EAST ELEVATION**



**SOUTH WEST ELEVATION**

**SORELL COUNCIL**  
**Sorell Council**  
Development Application: 5.2024.308.1 - 10  
Inverness Street, Midway Point  
Plans Reference: P1  
Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: ELEVATIONS Sheet 1 of 2  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

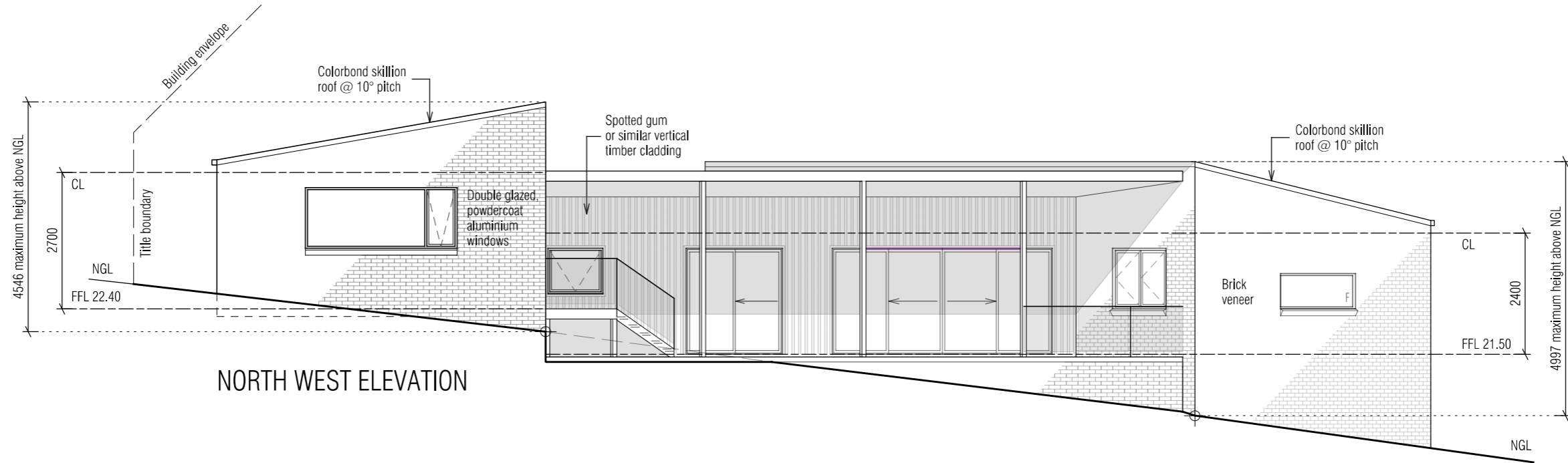
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**PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT**

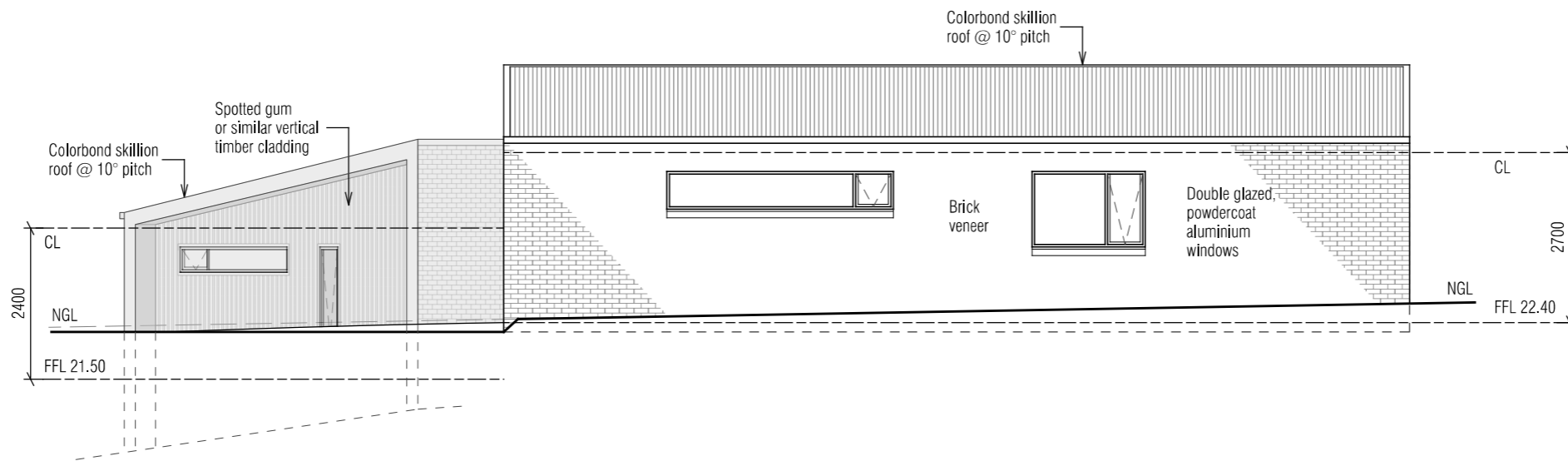
DWG No:

**04**

**IMPORTANT NOTE:**  
Cladding to be installed over min. 10mm battens to provide airflow between cladding and vapour permeable membrane.



NORTH WEST ELEVATION



NORTH EAST ELEVATION

**Sorell Council**  
Development Application: 5.2024.308.1 - 10  
Inverness Street, Midway Point  
Plans Reference: P1  
Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: ELEVATIONS Sheet 2 of 2  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

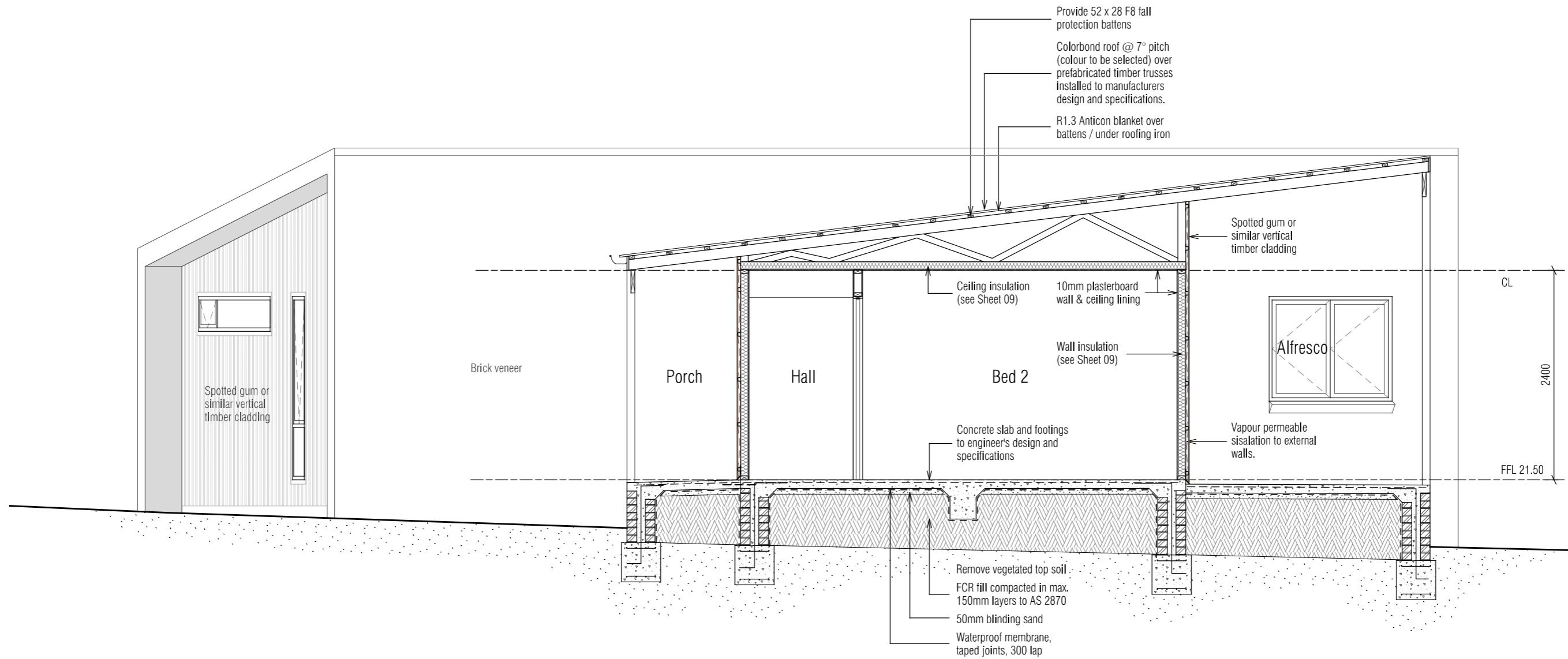
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PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

DWG No:

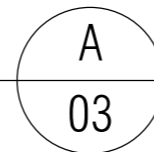
04a

**IMPORTANT NOTE:**  
Cladding to be installed over min. 10mm battens to provide airflow between cladding and vapour permeable membrane.



**SECTION**

Scale 1:50



Scale 1:50

PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
Development Application: 5.2024.308.1 - 10  
Inverness Street, Midway Point  
Plans Reference: P1  
Date Received: 21/11/2024

**BAL- LOW**

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: SECTION  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

DWG No:

**ROOF VENTILATION CALCULATIONS**  
 (Roof 'A' 10° skillion roof)

200 x 400 eaves vents (0.08m<sup>2</sup>)  
 Ceiling area = 78.8m<sup>2</sup> / 150 = 0.525m<sup>2</sup>  
 30% of 0.525m<sup>2</sup> = 0.158m<sup>2</sup>  
 0.158m<sup>2</sup> / 0.08m<sup>2</sup> = 2.0 (x 2) = 4 ridge vents  
 70% of 0.525m<sup>2</sup> = 0.368m<sup>2</sup>  
 0.368m<sup>2</sup> / 0.08m<sup>2</sup> = 4.5 (x 2) = 9 eaves vents

**RV** 200 x 400 ridge vent (50% opening)  
**EV** 200 x 400 eaves vent (50% opening)

**ROOF VENTILATION CALCULATIONS**  
 (Roof 'B' 7° skillion roof)

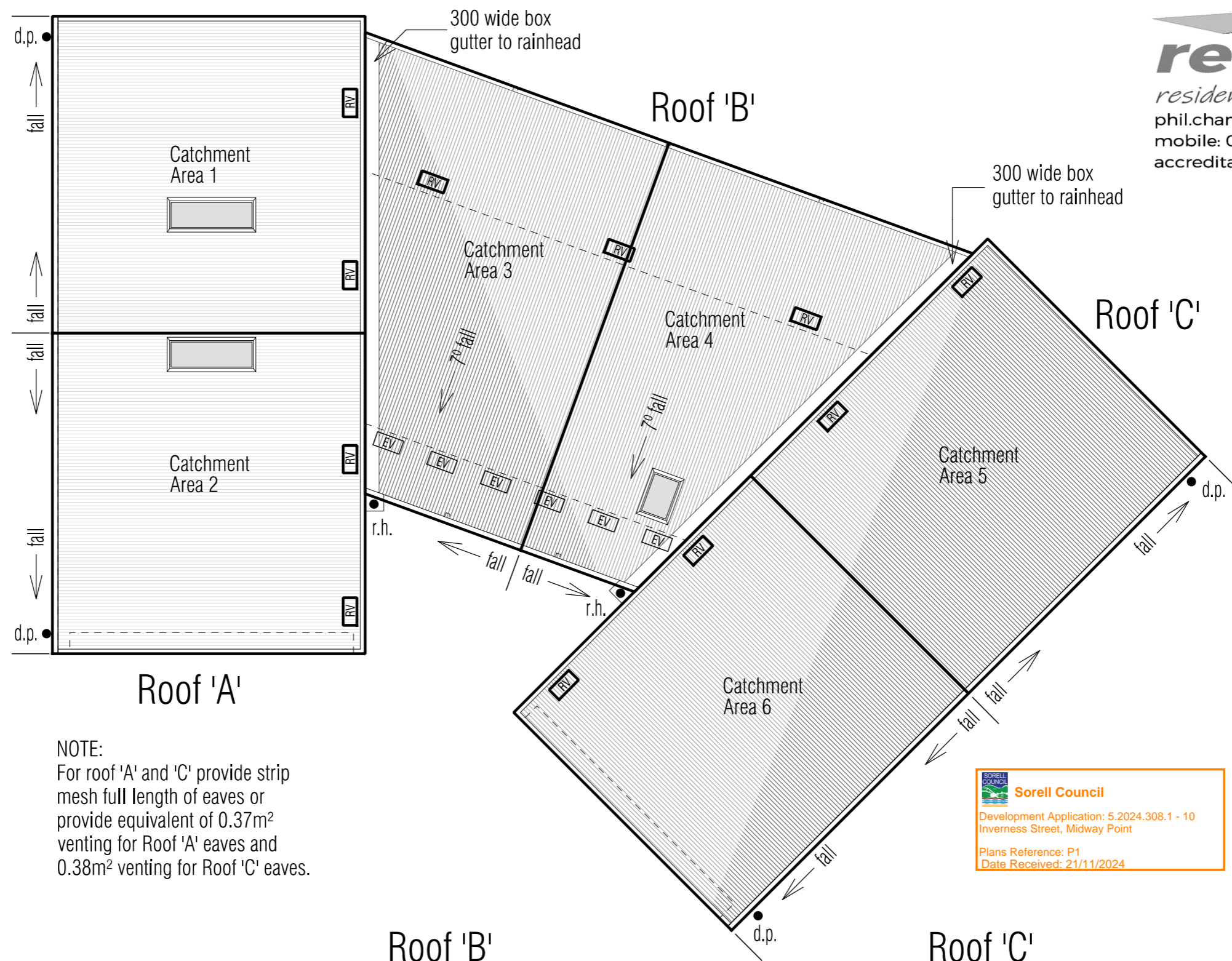
200 x 400 eaves vents (0.08m<sup>2</sup>)  
 Ceiling area = 46.5m<sup>2</sup> / 150 = 0.310m<sup>2</sup>  
 30% of 0.310m<sup>2</sup> = 0.093m<sup>2</sup>  
 0.093m<sup>2</sup> / 0.08m<sup>2</sup> = 1.2 (x 2) = 3 ridge vents  
 70% of 0.310m<sup>2</sup> = 0.217m<sup>2</sup>  
 0.217m<sup>2</sup> / 0.08m<sup>2</sup> = 2.7 (x 2) = 6 eaves vents

**RV** 200 x 400 ridge vent (50% opening)  
**EV** 200 x 400 eaves vent (50% opening)

**ROOF VENTILATION CALCULATIONS**  
 (Roof 'C' 10° skillion roof)

200 x 400 eaves vents (0.08m<sup>2</sup>)  
 Ceiling area = 81.7m<sup>2</sup> / 150 = 0.545m<sup>2</sup>  
 30% of 0.545m<sup>2</sup> = 0.163m<sup>2</sup>  
 0.163m<sup>2</sup> / 0.08m<sup>2</sup> = 2.0 (x 2) = 4 ridge vents  
 70% of 0.545m<sup>2</sup> = 0.382m<sup>2</sup>  
 0.382m<sup>2</sup> / 0.08m<sup>2</sup> = 4.8 (x 2) = 10 eaves vents

**RV** 200 x 400 ridge vent (50% opening)  
**EV** 200 x 400 eaves vent (50% opening)



**CATCHMENT AREA NOTES:**  
 Roof 'A' skillion roof @ 10° pitch  
 CATCHMENT AREA 1 = 49.8m<sup>2</sup>  
 CATCHMENT AREA 2 = 50.5m<sup>2</sup>

**CATCHMENT AREA NOTES:**  
 Roof 'B' skillion roof @ 7° pitch  
 CATCHMENT AREA 3 = 51.9m<sup>2</sup>  
 CATCHMENT AREA 4 = 47.2m<sup>2</sup>

**CATCHMENT AREA NOTES:**  
 Roof 'C' skillion roof @ 10° pitch  
 CATCHMENT AREA 5 = 52.0m<sup>2</sup>  
 CATCHMENT AREA 6 = 52.0m<sup>2</sup>

- r.h. denotes rain head
- denotes roof area
- d.p. denotes downpipe
- denotes direction of fall
- RV** denotes 200 x 400 ridge vent
- EV** denotes 200 x 400 eaves vent

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**IMPORTANT NOTES:**  
 The position and quantity of downpipes are not to be altered without consulting with designer. Areas shown are surface / catchment areas NOT plan areas. All roof areas shown are indicative only and not to be used for any other purpose. Roof space must be vented. Eave vents must be fitted to the soffit with BAL compliant, non-combustible ember mesh installed. Vents must be in accordance with the NCC, BCA 2022, Volume 2, Part 10.8.3 'Ventilation of Roof Spaces' and AS 3959.

Roof 'A'

Roof 'B'

Roof 'C'

DOWNSPIPE & ROOF CATCHMENT AREA CALCULATIONS (as per NCC Part 3.5.2)		
Ah	92.1	Area of roof (including 115mm Quad Gutter) (m <sup>2</sup> )
Ac	100.4	Ah x slope factor (determined from Table 3.2 from AS/NZS 3500.3) (m <sup>2</sup> )
Gutter type	A	Cross sectional area 6500mm <sup>2</sup> (determined from NCC Table 3.5.2.2)
DRI	85	Design Rainfall Intensity Hobart (determined from NCC Table 3.5.2.1)
Acdp	70	Catchment area per 90mm downpipe (determined from NCC Table 3.5.2.2)
Downpipes Required	2	$\frac{Ac}{Acdp}$
Downpipes Provided	2	

DOWNSPIPE & ROOF CATCHMENT AREA CALCULATIONS (as per NCC Part 3.5.2)		
Ah	93.5	Area of roof (including 115mm Quad Gutter) (m <sup>2</sup> )
Ac	99.1	Ah x slope factor (determined from Table 3.2 from AS/NZS 3500.3) (m <sup>2</sup> )
Gutter type	A	Cross sectional area 6500mm <sup>2</sup> (determined from NCC Table 3.5.2.2)
DRI	85	Design Rainfall Intensity Hobart (determined from NCC Table 3.5.2.1)
Acdp	70	Catchment area per 90mm downpipe (determined from NCC Table 3.5.2.2)
Downpipes Required	2	$\frac{Ac}{Acdp}$
Downpipes Provided	2	

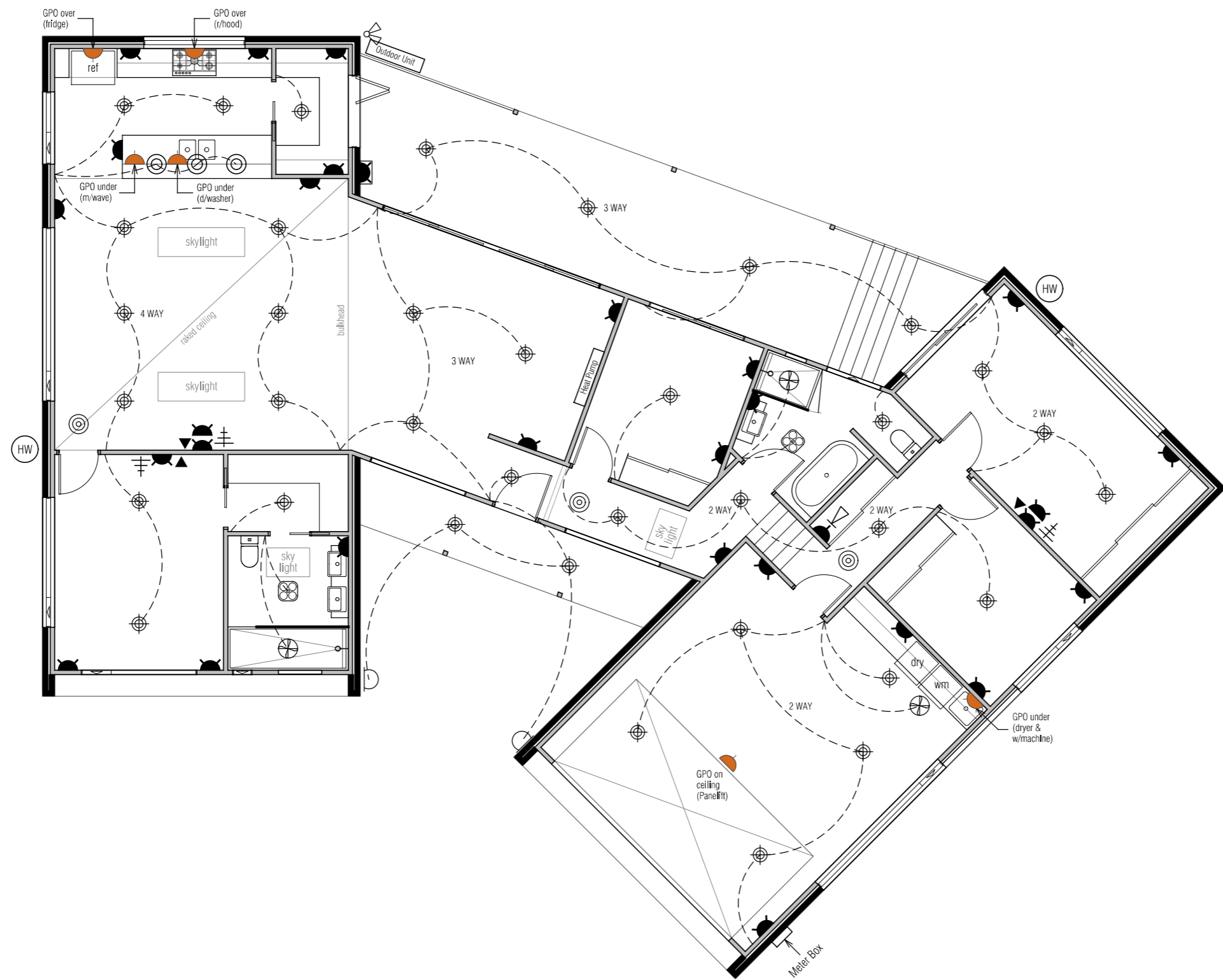
DOWNSPIPE & ROOF CATCHMENT AREA CALCULATIONS (as per NCC Part 3.5.2)		
Ah	95.3	Area of roof (including 115mm Quad Gutter) (m <sup>2</sup> )
Ac	103.9	Ah x slope factor (determined from Table 3.2 from AS/NZS 3500.3) (m <sup>2</sup> )
Gutter type	A	Cross sectional area 6500mm <sup>2</sup> (determined from NCC Table 3.5.2.2)
DRI	85	Design Rainfall Intensity Hobart (determined from NCC Table 3.5.2.1)
Acdp	70	Catchment area per 90mm downpipe (determined from NCC Table 3.5.2.2)
Downpipes Required	2	$\frac{Ac}{Acdp}$
Downpipes Provided	2	

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**BAL-LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: ROOF PLAN  
 DATE: 15/11/24  
 FILE NAME: PC 138 DA 011024dgn  
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- Fluorescent light (19 W)
- Ducted exhaust fan
- LED spotlight (sensor)
- 4-light Tastic (10W centre light only)
- Pendant light (28W)
- LED downlight (12W)
- Single GPO
- Double GPO
- Double GPO (exterior)
- Smoke alarm
- Phone / NBN point
- TV point
- Data point

**IMPORTANT NOTES:**  
 Smoke alarms are to be interconnected where more than one alarm is installed.  
 Toilet & bathroom fans to be min. 25L/s and to be ducted directly to outside where possible.  
 Kitchen & laundry fans to be min. 40L/s and to be ducted directly to outside where possible.  
 All downlights are to be sealed and IC-F rated.

**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

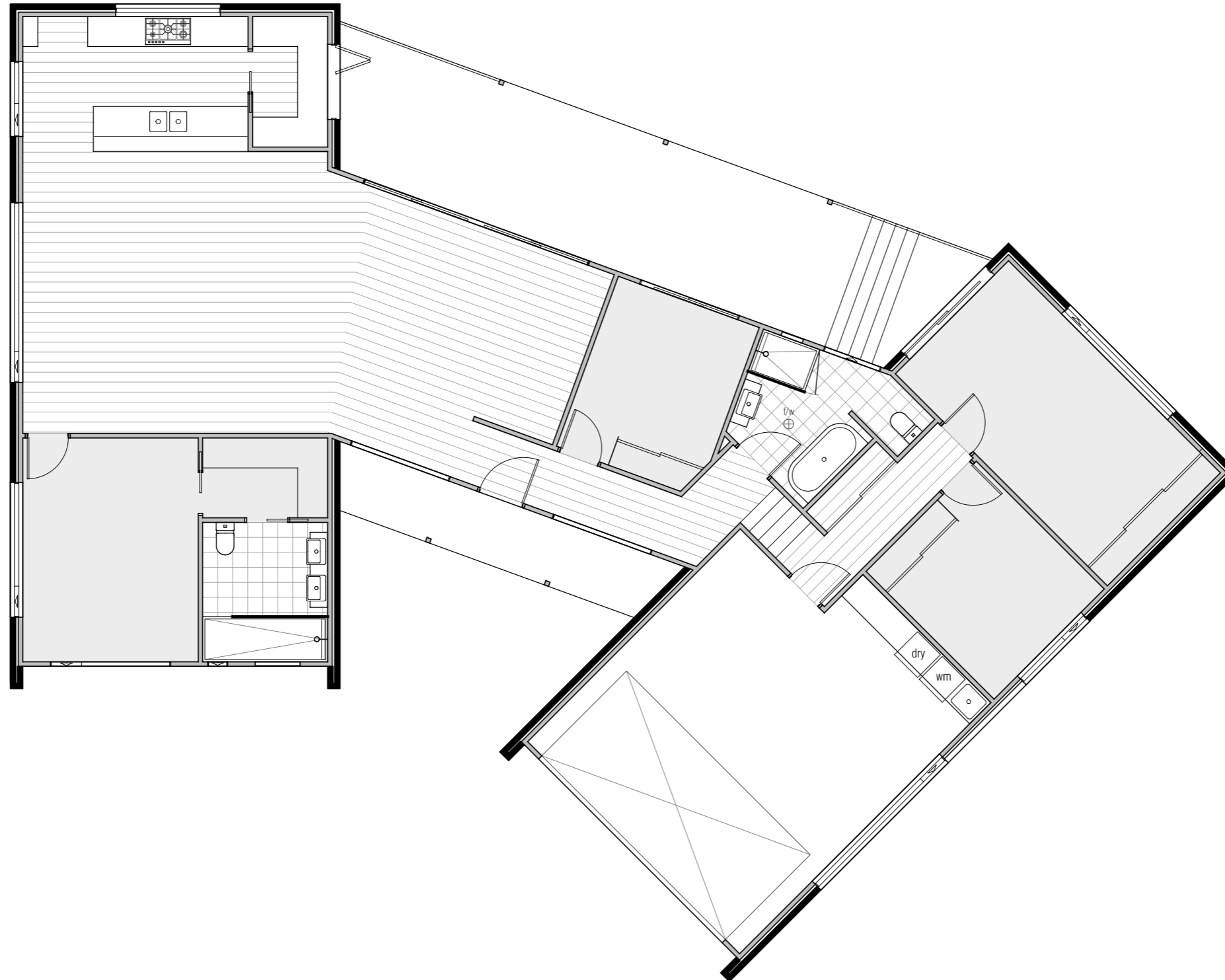
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DRAWING: ELECTRICAL PLAN  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

Scale 1:100

**PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT**

DWG No: **07**



**FLOORING LEGEND**

Floating Flooring	
Carpet	
Tiles	

Scale 1:100

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: FLOORING LAYOUT PLAN  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

DWG No:



# LIGHTING CALCULATIONS

# WINDOW SCHEDULE

# INSULATION

## Lighting

Class 1 & 10a buildings

Calculator

<b>Building name/description</b>	<b>Classification</b>
10 Inverness Street, MIDWAY POINT	Class 1
<b>Number of rows preferred in table below</b>	14 <small>(as currently displayed)</small>

Separate aggregate allowances are calculated for Class 1 cases; for a verandah or balcony; or for a Class 10 building. The % of allowance used\* outcomes refer to these aggregate allowances.

ID	Description	Type of space	Floor area of the space	Design lamp or illumination power load	Location	Adjustment factor			SATISFIES PART 13.7.6		
						Adjustment factors	Dimming % area	Dimming % of full power	Design lumen depreciation factor	Lamp or illumination power density	System share of % of aggregate allowance used
1	Living, Dining & Kitchen	Living Room	70.0 m <sup>2</sup>	180 W	Class 1 building				5.0 W/m <sup>2</sup>	2.6 W/m <sup>2</sup>	10% of 40%
2	Pantry	Other	3.9 m <sup>2</sup>	12 W	Class 1 building				5.0 W/m <sup>2</sup>	3.1 W/m <sup>2</sup>	12% of 40%
3	Bed 1	Bedroom	15.7 m <sup>2</sup>	24 W	Class 1 building				5.0 W/m <sup>2</sup>	1.5 W/m <sup>2</sup>	6% of 40%
4	WIR	Other	4.0 m <sup>2</sup>	12 W	Class 1 building				5.0 W/m <sup>2</sup>	3.0 W/m <sup>2</sup>	12% of 40%
5	Ens.	Bathroom	7.0 m <sup>2</sup>	10 W	Class 1 building				5.0 W/m <sup>2</sup>	1.4 W/m <sup>2</sup>	6% of 40%
6	Bed 2	Bedroom	10.7 m <sup>2</sup>	12 W	Class 1 building				5.0 W/m <sup>2</sup>	1.1 W/m <sup>2</sup>	4% of 40%
7	Hall	Corridor	8.0 m <sup>2</sup>	24 W	Class 1 building				5.0 W/m <sup>2</sup>	3.0 W/m <sup>2</sup>	12% of 40%
8	Bath	Bathroom	7.9 m <sup>2</sup>	22 W	Class 1 building				5.0 W/m <sup>2</sup>	2.8 W/m <sup>2</sup>	11% of 40%
9	Garage	Other	40.1 m <sup>2</sup>	60 W	Class 1 building				5.0 W/m <sup>2</sup>	1.5 W/m <sup>2</sup>	6% of 40%
10	Bed 4	Bedroom	11.3 m <sup>2</sup>	12 W	Class 1 building				5.0 W/m <sup>2</sup>	1.1 W/m <sup>2</sup>	4% of 40%
11	Bed 3 / Rumpus	Bedroom	19.2 m <sup>2</sup>	36 W	Class 1 building				5.0 W/m <sup>2</sup>	1.9 W/m <sup>2</sup>	8% of 40%
12	Hall	Corridor	5.6 m <sup>2</sup>	12 W	Class 1 building				5.0 W/m <sup>2</sup>	2.1 W/m <sup>2</sup>	8% of 40%
13	Alfresco	Verandah or balcony	35.7 m <sup>2</sup>	48 W	Verandah or balcony				4.0 W/m <sup>2</sup>	1.3 W/m <sup>2</sup>	33% of 40%
14	Porch	Verandah or balcony	8.8 m <sup>2</sup>	24 W	Verandah or balcony				4.0 W/m <sup>2</sup>	2.7 W/m <sup>2</sup>	68% of 40%

<b>247.9 m<sup>2</sup></b>	<b>488 W</b>	<b>Class 1 building</b>	<b>5.0 W/m<sup>2</sup></b>	<b>2.0 W/m<sup>2</sup></b>
		<b>Verandah or balcony</b>	<b>4.0 W/m<sup>2</sup></b>	<b>1.6 W/m<sup>2</sup></b>

if inputs are valid

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WINDOW MANUFACTURER: GLASS SUPPLIES						
Window Number	Type	ID	Size	Glass	Uw	SHGC
W01	FW	AWS-067-08	07-21	Clear	3.20	0.68
W02	BF	AWS-017-01	12-15	Clear	4.30	0.51
W03	SD	AWS-013-01	21-48	Clear	4.00	0.61
W04	SD	AWS-013-01	21-21	Clear	4.00	0.61
W05	AW	AWS-008-01	09-12	Opaque	4.30	0.55
W06	SD	AWS-013-01	21-24	Clear	4.00	0.61
W07	AW	AWS-008-01	12-30	Clear	4.30	0.55
W08	AW	AWS-008-01	12-18	Clear	4.30	0.55
W09	AW	AWS-008-01	06-36	Clear	4.30	0.55
W10	FW	AWS-067-08	21-21	Clear	3.20	0.68
W11	FW	AWS-067-08	21-21	Clear	3.20	0.68
W12	AW	AWS-008-01	21-04	Opaque	4.30	0.55
W13	AW	AWS-008-01	04-24	Clear	4.30	0.55
W14	AW	AWS-008-01	15-27	Clear	4.30	0.55
W15	AW	AWS-008-01	21-36	Clear	4.30	0.55
W16	AW	AWS-008-01	21-15	Clear	4.30	0.55

LEGEND:  
SW = Sliding window, AW = Awning window, FW = Fixed window, SD = Sliding door, BF = Bi-fold Door or Window, FD = French door, TW = Transom Window

NOTE:  
Windows supplied MUST HAVE Uw, SHGC & Air infiltration performance values EQUAL TO or BETTER THAN those specified above.  
\* Glass specification may change to comply with BAL requirements (Refer to sheet 13)

INSULATION SCHEDULE	
AREA	INSULATION DETAILS
Roof	R1.3 anticon blanket under iron / over battens.
Ceiling	R4.0 bulk insulation (or equivalent).
Walls (external)	R2.0 bulk insulation (or equivalent) with 1 layer of vapour permeable sisalation.
Walls (internal)	R2.0 bulk insulation (or equivalent) to all internal walls adjoining unconditioned spaces.
Floors	R2.0 bulk insulation (or equivalent) to all timber floors above sub-floor and other unconditioned spaces below.

NOTE:  
Clearance is required for uncompressed installation of bulk insulation and timbers should be sized accordingly;  
210mm for R4.0 bulk insulation;  
240mm for R4.0 bulk insulation;  
260mm for R4.0 bulk insulation.  
These dimensions are nominal and may vary depending on the type of insulation to be installed.

## BAL- LOW

See sheet 13 for Bushfire Attack Level construction requirements

**Sorell Council**

Development Application: 5.2024.308.1 - 10 Inverness Street, Midway Point

Plans Reference: P1  
Date Received: 21/11/2024

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DRAWING: LIGHTING CALCULATIONS, INSULATION & WINDOW SCHEDULE  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

DWG No:

09

PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

- NOTES:  
3.12.5.5 - ARTIFICIAL LIGHTING
- \* Lamp power density or illumination power density of artificial lighting, excluding heaters that emit light, must not exceed the allowance of:
    - (i) 5W per m<sup>2</sup> in Class 1 building;
    - (ii) 4W per m<sup>2</sup> on a verandah, balcony or the like attached to a Class 1 building (not including eave perimeter lights);

(iii) 3W per m<sup>2</sup> in a Class 10a building associated with a Class 1 building.

\* The illumination power density allowance must be increased by dividing it by the illumination power density adjustment factor for a control device as per BCA 2014 Table 3.12.5.3.

# NCC VOLUME 2, CLASS 1 & 1a COMPLIANCE NOTES

## SITE PREPARATION

Excavation and filling of site to be in accordance with NCC Part 3.1 and AS 2870.

Drainage works to be in accordance with NCC Part 3.1 & AS 3500.3.2.

Surface drainage - finished ground to fall away from building 50mm in 1000mm.

Finished slab level to be:

Minimum 150 above finished ground;

Minimum 50 above paved surfaces;

Prevent ponding of water under suspended floors.

All embankments that are left exposed must be stabilised with vegetation or similar to prevent erosion.

Embankments cannot exceed 2.0m in height without the aid of retaining walls or other approved types of soil retaining methods.

All unprotected embankments must comply with the slope ratios for soil type in NCC Table 3.2.1.

SOIL TYPE / CLASSIFICATION	EMBANKMENT SLOPE	
	Cut	Compacted Fill
STABLE ROCK (A)	8:1	3:3
SAND (A)	1:2	1:2
FIRM CLAY (M-E)	1:1	1:2
SOFT CLAY (M-E)	2:3	Not Suitable

## FOOTINGS AND SLABS

Generally to be in accordance with NCC Part 4.2 (H1D4) and AS 2870.

Preparation for placement of concrete and reinforcement to be to AS 2870.

Concrete & steel reinforcement to be in accordance with AS 2870 & AS/NZS 3500.

The site classification to be in accordance with AS 2879.

Alternatively, footings & slabs to be in accordance with structural engineers design & specifications.

## MASONRY

Generally masonry walls to be constructed in accordance with NCC Part 5 & AS 3700.

Un-reinforced masonry to NCC 5.2 & 5.3;

Reinforced masonry to NCC 5.4;

Masonry accessories to NCC 5.6;

Vertical articulation joints to NCC 5.6.8;

Weatherproofing of to NCC 5.7.

## FRAMING

Timber framing to be in accordance with AS 1684.

Manufactured timber members to be in accordance with prescribed framing manual.

Sub-floor ventilation in accordance with NCC 6.2.

Sub-floor area to be clear of organic materials & rubbish.

Provide vent openings in substructure walls at a rate of not less than 6000mm<sup>2</sup>/per meter of wall length, with vents not more than 600mm from corners.

150mm clearance required to underside of floor framing members unless specified otherwise by flooring material specification.

Tie down and bracing of frame to be in accordance with AS 1684 & AS 4055.

Structural steel framing to be in accordance with NCC 6.3, AS 1250, AS 4100 & structural engineers design & specifications.

## ROOF AND WALL CLADDING

Generally to be in accordance with NCC 3.5.

Roof cladding to be in accordance with NCC 3.5.1 and;

Roof tiles to AS 2049 & AS 2050;

Metal sheet roofing to AS 1562.1;

Plastic sheet roofing to AS 4256.1, .2, .3 & .5 and AS 1562.3;

Gutters and downpipes, generally to be in accordance with NCC 7.4 & AS 3500.3.2 and The Tasmanian Plumbing Code.

Eaves, internal and valley guttering to have cross sectional area of 6500mm<sup>2</sup>.

Roof space must be vented. Eave vents must be fitted to the soffit with BAL compliant, non-combustible ember mesh installed. Vents must be in accordance with the NCC 10.8.3 'Ventilation of Roof Spaces' and AS 3959.

Wall cladding to be installed in accordance with NCC 7.5 and manufacturer's specification. Flashings and cappings to NCC 7.2.7.

## GLAZING

Generally glazing to be in accordance with NCC Part 8 and AS 1288.

Refer to window legend for sizes and type.

Windows to comply with NCC 8.4 'Protection of Openable Windows'.

Glazing to comply with NCC (H1D8) 8.2, 8.3 & 8.4.

BAL REQUIREMENTS:

Glazing to comply with AS 3959 - 2009 Section 3.9 'Construction of Buildings in Bushfire-prone Areas' where applicable. Window weatherproofing to AS 2047.

## FIRE SAFETY

Generally to be in accordance with NCC Part 9.

Fire separation to be in accordance with NCC 9.2. External walls and gable ends constructed within 900 of boundary are to extend to underside of non-combustible roofing / eaves and are to be constructed of a masonry skin 90 thick with FRL of 60/60/60.

Sarking to have a flammability index less than 5.

Roof lights not to be placed closer than 900 from boundary.

Smoke alarm installations to be in accordance with NCC 9.5. Locations indicated on the floor plan.

Smoke alarms are to be interconnected where more than 1 smoke alarm is installed.

Installation locations;

CEILINGS - 300 away from wall junction;

CATHEDRAL CEILINGS - 500 down from apex;

WALLS - 300 down from ceiling junction.

Heating appliances generally to NCC 12.4 and to be in compliance with AS 2918, Also refer to manufacturer's details and specifications for setbacks to adjacent combustible surfaces, flue installation and required hearth dimensions.

Construction in Bush Fire Area to be in accordance with AS 3959.

## HEALTH AND AMENITY

Generally wet area waterproofing to be in accordance with NCC 10.2 and AS 3740.

Ceiling heights to be in accordance with NCC 10.3.

Construction of sanitary compartments to NCC 10.4.2.

Required facilities to NCC 10.4.1.

Provision of natural light to be in accordance with NCC 10.5.1. Windows / roof lights to provide light transmission area equal to 10% of the floor area of the room

Artificial lighting to NCC 10.5.2.

Ventilation generally to NCC Part 10.6. Exhaust fan from kitchen, laundry, bathroom & WC to be vented to outside for steel roof and to roof space for tile roof. Natural ventilation to be provided at a rate of 5% of room floor area, in accordance with NCC 10.6.2.

Mechanical ventilation to be in accordance with NCC 10.6.3 (b) & 10.8.2 or AS 1668.2

Sound insulation requirements generally to NCC Part 10.7.

## SAFE MOVEMENT AND ACCESS

Stair and ramp construction to be in accordance with NCC 11.2.

Maximum of 18 risers to each flight; Riser opening to be less than 125;

Treads to have non-slip surface or nosing;

RISERS - min. 115, max. 190;

TREADS min. 240, max. 355.

Balustrade is generally in accordance with NCC 11.3.

Balustrade is required where area is not bounded by a wall or where level exceeds 1000 above floor level or ground level. 865 high on stairs, measured from line of stair nosing. 1000 high above floor or landing. Openings between balusters / infill members to be constructed so as not to allow 125 sphere to pass between members. Where floor level exceeds 4000 above lower level, infill members between 150 and 760 above floor level, to be constructed so as to restrict climbing.

Protection from openable windows for rooms other than bedrooms to NCC 11.3.8.

## ANCILLARY PROVISIONS

Generally in accordance with NCC Part 12.

Heating appliances, fireplaces, chimneys and flues to NCC Part 12.4.

OPEN FIREPLACE CONSTRUCTION to NCC 12.4.2;

CHIMNEY CONSTRUCTION to NCC 12.4.3;

INSERT FIREPLACES AND FLUES to NCC 12.4.4;

FREESTANDING HEATING APPLIANCES to NCC 12.4.5

## ENERGY EFFICIENCY

Generally in accordance with BCA 2019 Part 3.12

Climate Zone 7 applicable to Tasmania (Zone 8 applicable to Alpine areas)

BUILDING FABRIC INSULATION-

Insulation to be fitted to form continuous barrier to roof / ceiling, walls and floors.

REFLECTIVE BUILDING MEMBRANE-

To be 'vapour permeable' with a minimum value of 4ug/Ns, installed to form 20mm airspace between reflective faces and external lining/ cladding, fitted closely up to penetrations/ openings, adequately supported and joints to be lapped minimum 150.

BULK INSULATION-

To maintain thickness and position after installation. Continuous cover without voids except around services/fittings.

ROOF INSULATION-

Roof construction to achieve minimum additional R Value of R4.0 unless noted otherwise. Roof lights to comply with 3.12.1.3.

EXTERNAL WALLS-

External wall construction to achieve minimum additional R Value of R2.5 unless noted otherwise. Wall surface density minimum - 220kg/m<sup>2</sup>

FLOORS-

Generally in accordance with 3.12.1.5. Suspended floor with an unenclosed perimeter required to achieve a minimum Total R Value of R2.0. Concrete slab on ground with an in slab heating system to be insulated to R1.0 around vertical edge of slab perimeter.

ATTACHED CLASS 10a BUILDING-

External wall or separating wall between Class 1 building is required to achieve minimum Total R-Value of R1.9.

All hot water plumbing to be insulated in accordance with AS/NZS 3500:

Plumbing and Drainage, Part 4 Heated Water Services.

Thermal insulation for central heating piping to NCC 13.7.2 and 13.7.3.

Heating and cooling ductwork to NCC 13.7.4

Chimneys or flues to be fitted with sealing damper or flap. Roof lights to habitable rooms to be fitted with operable or permanent seal to minimise air leakage.

External windows & doors to habitable rooms / conditioned spaces to be fitted with air seal to restrict air infiltrations. Exhaust fans to habitable rooms / conditioned spaces to be fitted with self-closing damper or filter.

Building envelope to be constructed to minimise air leakage. Construction joints and junctions or adjoining surfaces to be tight fitting and sealed by caulking, skirting, architraves and cornices.

Windows and external door weatherproofing to AS 2047.



PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

## BAL- LOW

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: COMPLIANCE NOTES  
DATE: 15/11/24  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

DWG No:

**STEP-FREE ACCESS PATH**

A continuous path to a dwelling entrance door must be provided from -

- (1) The pedestrian entry at the allotment boundary from the ground level of the adjoining land; or
  - (a) an appurtenant Class 10a garage or carport; or
  - (b) a car parking space within the allotment that is provided for the exclusive use of the occupants of the dwelling.
- (c) Access for the purposes of (1) must be -
- (2) via a pathway that -
  - (a) has no steps; and
    - (i) except for a step ramp provided under (5), has a maximum gradient of 1:14 in the direction of travel; and
    - (ii) if crossfall is provided, has a crossfall not more than 1:40; and
    - (iii) has a minimum width of 1000mm; and
    - (iv) if it incorporates a section suspended above finished ground level, is able to take loading forces in accordance with AS/NZS 1170.1; and
    - (v) connects to a dwelling entrance door that complies with Section 2; or
    - (vi) provided directly from an attached Class 10a garage or carport, via a door complying with the requirements of Section 2, other than Clause 2.3.
- (3) For the purposes of (2), the following applies:
  - (a) Any gates along the access path must have a minimum clear opening width of 820mm, measured as if the gate were an entrance door.
  - (b) A deck or boardwalk-style path constructed in accordance with AS 1684 or NASH Standard – Residential and Low-rise Steel Framing would satisfy the requirements of (2)(a)(v).
- (4) Where one or more ramps are used, the following applies:
  - (a) The aggregate length of ramping (excluding landings) must not be more than—
    - (i) 9 m for a 1:14 gradient; or
    - (ii) 15 m for a 1:20 gradient; or
    - (iii) a length determined by linear interpolation for ramps with a gradient between 1:14 and 1:20.
  - (b) The minimum width of the ramp must be maintained at 1000mm between any handrails and/or kerbs (if provided) at each side of the ramp.
  - (c) At each end of a ramp there must be a landing that is -
    - (i) not less than 1200mm long; and
    - (ii) at least as wide as the ramp to which it connects; and
    - (iii) level, or has a gradient not more than 1:40 if a gradient is necessary for drainage.
  - (d) A landing area required by Clause 2.3 may also be counted as a landing for the purposes of (c).
- (5) The access path may incorporate one step ramp having a -
  - (a) height of not more than 190mm; and
  - (b) gradient not more than 1:10; and
  - (c) width of at least 1000mm or equivalent to that of the access path, whichever is the greater; and
  - (d) maximum length of 1900mm.

**THRESHOLD NOTES:**

The threshold of an entrance door must -

- (a) be level; or
- (b) have a sill height of not more than 5mm if the lip is rounded or bevelled; or
- (c) have a ramped threshold that -
  - (i) does not extend beyond the depth of the door jamb; and
  - (ii) has a gradient not steeper than 1:8; and
  - (iii) is at least as wide as the minimum clear opening width of the entrance door; and
  - (iv) does not intrude into the minimum dimensions of the required landing area; or
- (d) where the requirements of (a), (b) or (c) cannot meet the weatherproofing requirements of the NCC for external entrance doors containing a raised door sill -
  - (i) have no lip or upstand greater than 15mm within the sill profile; and
  - (ii) have no more than 5mm height difference between the edge of the top surface of the sill and the adjoining finished surface.

**LANDING AREA NOTES:**

An entrance door must have a space of at least 1200mm x 1200mm on the external (arrival) side of the door that is -

- (a) unobstructed (other than by a gate or a screen door); and
- (b) level, or has a gradient of not more than 1:40 if a gradient is necessary to allow for drainage.

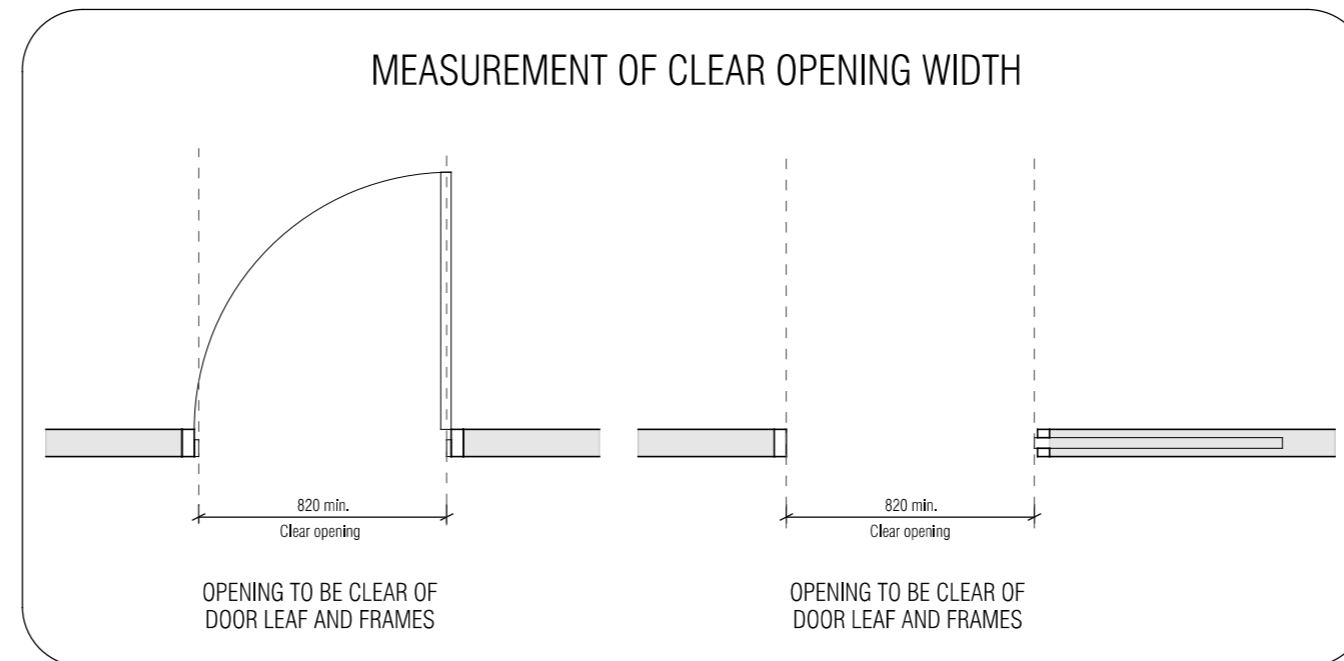
**WEATHERPROOFING FOR EXTERNAL STEP-FREE ENTRANCE**

Weatherproofing for an external step-free entrance must be provided in accordance with one or a combination of the following:

- (a) where the external surface is concrete or another impermeable surface, a channel drain that meets the requirements of Volume Two H2D2 is to be provided for within the entrance.
- (b) Where the external trafficable surface is decking or another raised permeable surface, a drainage surface below the trafficable surface is provided that meets the requirements of Volume T20 H2D2, and drainage gaps in the trafficable surface, such as those between decking boards, are no greater than -
  - (i) 8mm; or
  - (ii) in a 'designated bushfire prone area' that is permitted by AS 3959.
- (c) A roof covering an area no smaller than 1200mm by 1200mm, where the area is provided with a fall away from the building not greater than 1:40.

**LIVEABLE HOUSING NOTES**

Internal doorways must provide a minimum clear opening width of 820mm.  
 At least one shower must have a hobless and step-free entry. A lip not more than 5mm in height may be provided for water retention purposes.  
 Internal corridors, hallways, passageways or the like, if connected to a door that is subject to Clause 3.1, must have a minimum clear width of 1000mm, measured between the finished surfaces of opposing walls.



**PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT**

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

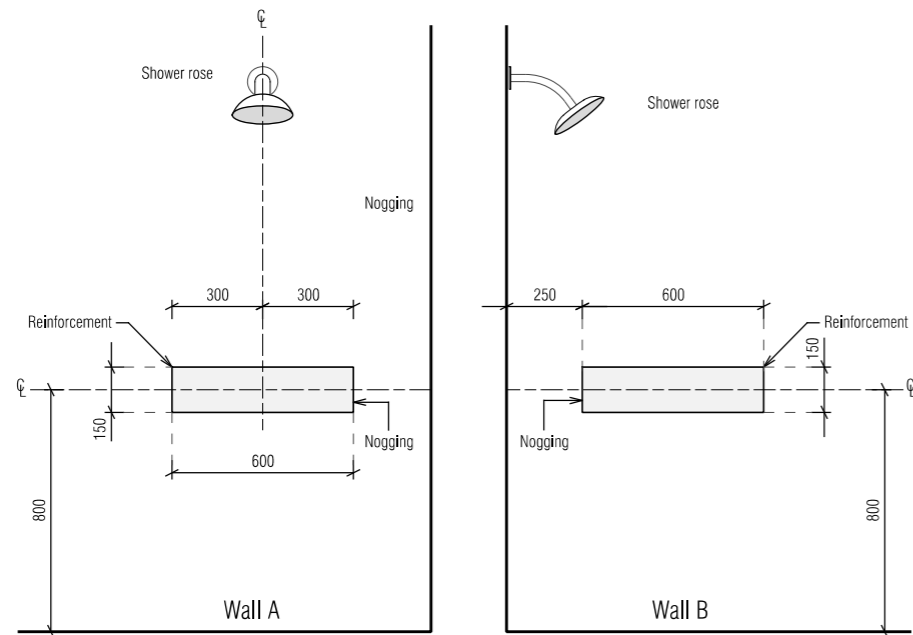
**BAL- LOW**

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

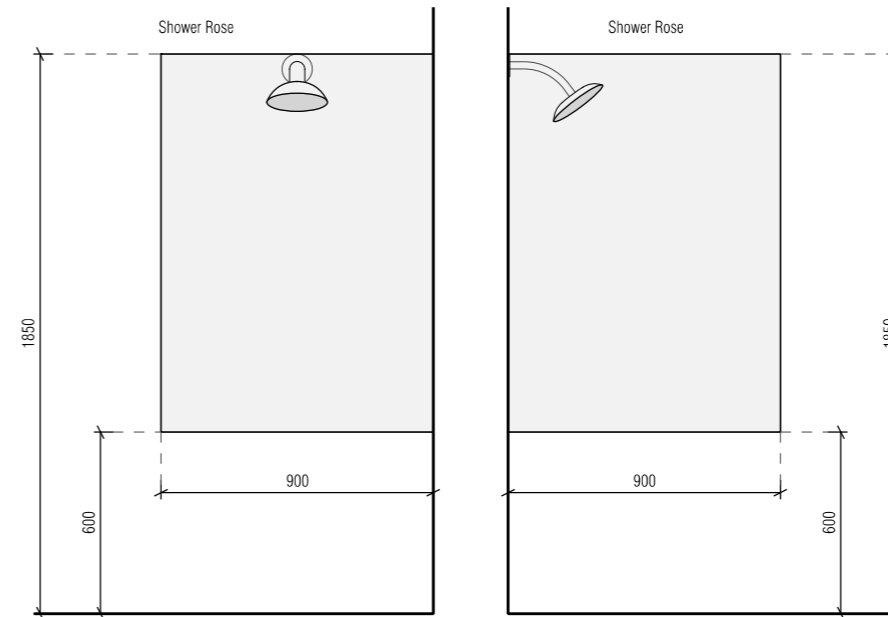
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DRAWING: LIVEABLE HOUSING NOTES 1 of 3  
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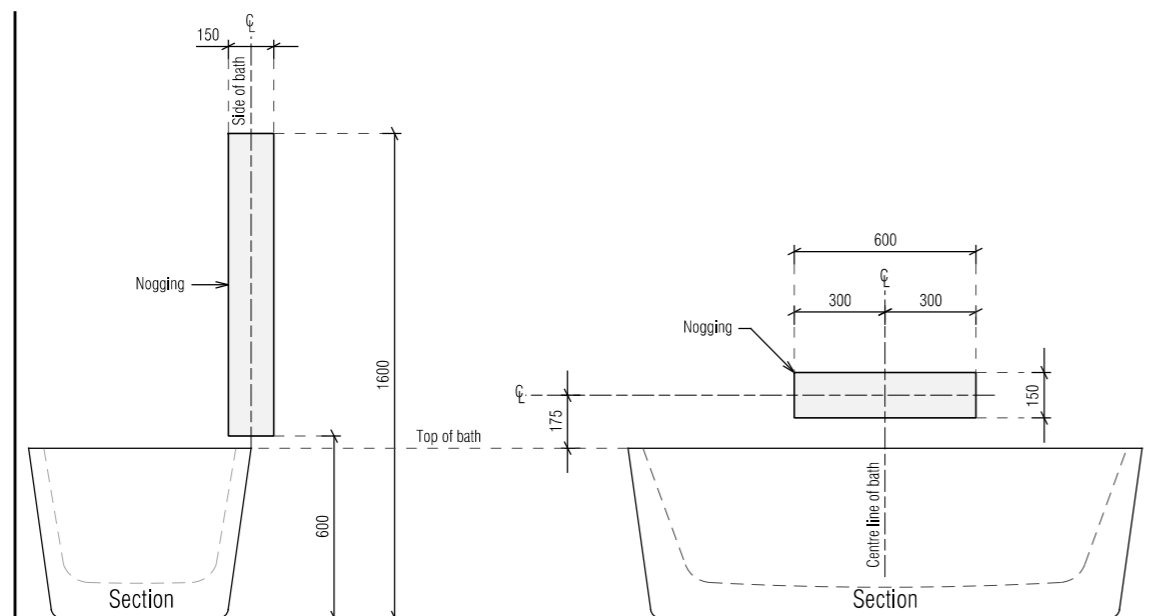
DWG No:



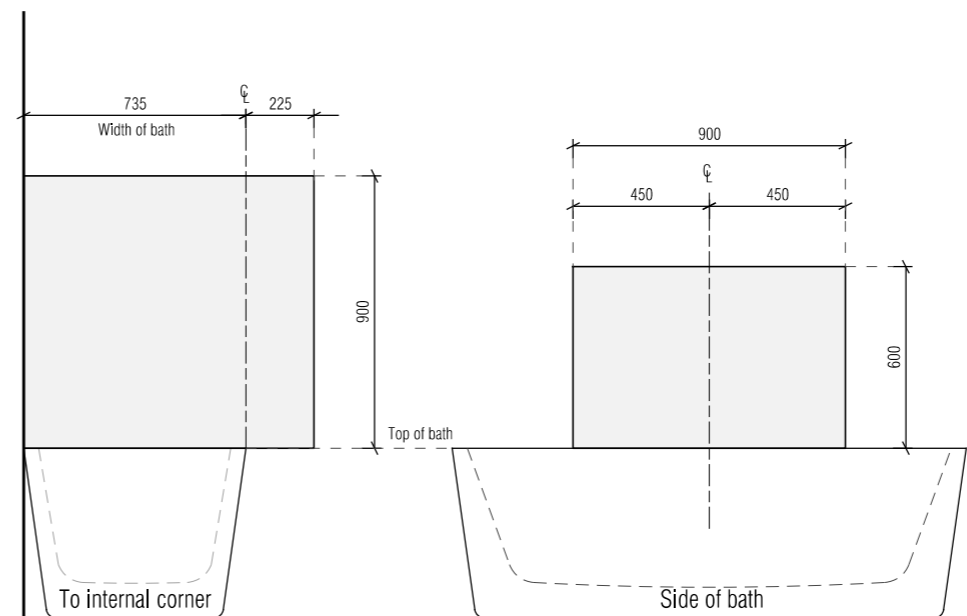
LOCATION OF NOGGINGS FOR SHOWER WALLS



LOCATION OF SHEETING FOR SHOWER WALLS



LOCATION OF NOGGINGS FOR WALLS SURROUNDING A BATH



LOCATION OF SHEETING FOR WALLS SURROUNDING A BATH

**BAL- LOW**

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

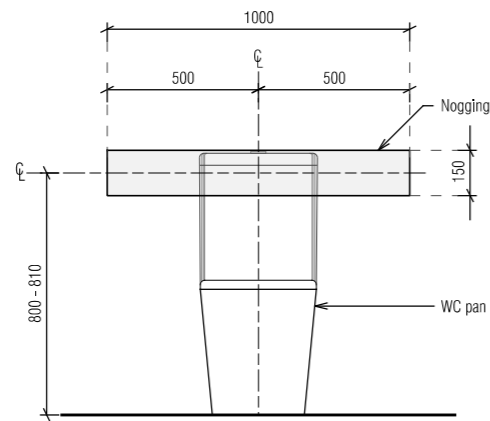
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 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

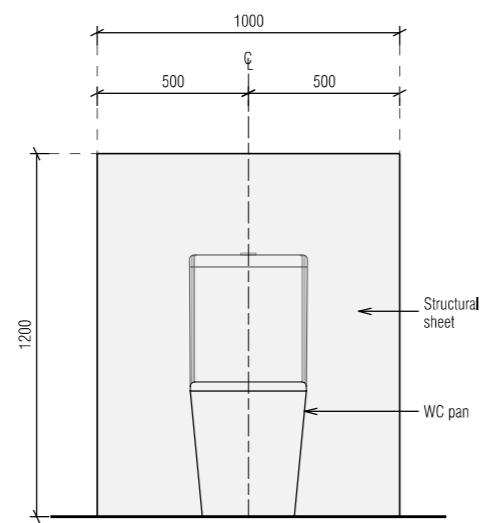
DRAWING: LIVEABLE HOUSING NOTES 2 of 3  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
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DWG No:

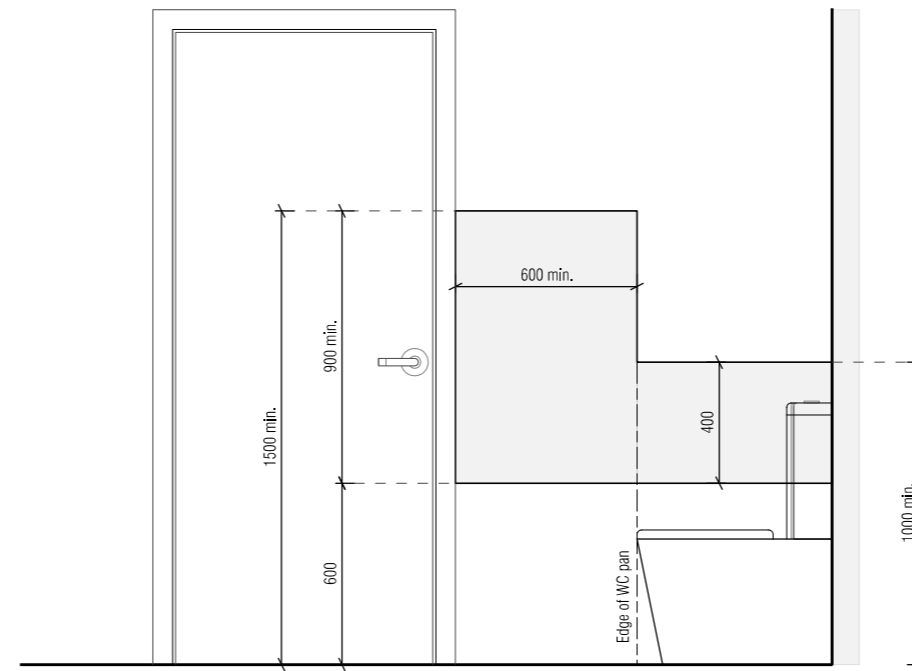
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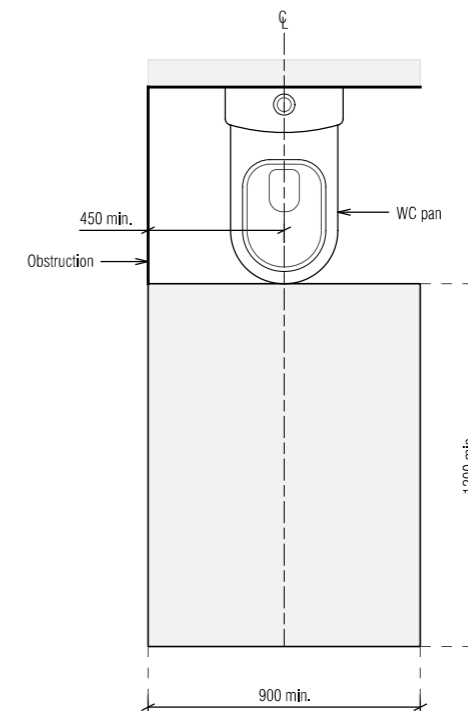
LOCATION OF NOGGINGS FOR A WALL BEHIND TOILET PAN



LOCATION OF SHEETING BEHIND TOILET PAN



MINIMUM EXTENT OF SHEETING FOR A WALL ADJACENT TO A TOILET PAN



CIRCULATION SPACE FOR A TOILET PAN

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
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**BAL- LOW**

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

DWG No:

10c

Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Penetrations
Enclosed shower with hob	Waterproof entire enclosed shower area, including hob.	Waterproof to not less than 150mm above the shower floor substrate or not less than 25mm above the maximum retained water level which ever is the greater with the remainder being water resistant to a height of not less than 1800mm above the finished floor level.	Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction.	Waterproof all penetrations.
Enclosed shower without hob	Waterproof entire enclosed shower area, including waterstop.	Waterproof to not less than 150mm above the shower floor substrate with the remainder being water resistant to a height of not less than 1800mm above the finished floor level.	Waterproof internal and external corners and horizontal joints within height of 1800mm above the floor level with not less than 40mm width either side of the junction.	Waterproof all penetrations.
Enclosed shower with step down	Waterproof entire enclosed shower area, including the step down.	Waterproof to not less than 150mm above the shower floor substrate or not less than 25mm above the maximum retained water level whichever is the greater with the remainder being water resistant to a height of not less than 1800mm above the finished floor level.	Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction.	Waterproof all penetrations.
Enclosed shower with preformed shower base	N/A	Water resistant to a height of not less than 1800mm above finished floor level.	Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction.	Waterproof all penetrations.
Unenclosed showers	Waterproof entire enclosed shower area.	Waterproof to not less than 150mm above the shower floor substrate or not less than 25mm above the maximum retained water level which ever is the greater with the remainder being water resistant to a height of not less than 1800mm above the finished floor level.	Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction.	Waterproof all penetrations.
Areas outside the shower area for concrete and compressed fibre cement sheet flooring	Water resistant to entire floor	N/A	Waterproof all wall / floor junctions. Where a flashing is used the horizontal leg must be not less than 40mm.	N/A
Areas outside the shower area for timber floors including particleboard, plywood and other timber based flooring materials	Waterproof entire floor.	N/A	Waterproof all wall / floor junctions. Where a flashing is used the horizontal leg must be not less than 40mm.	N/A

Vessels or area where the fixture is installed	Floors and horizontal surfaces	Walls	Wall junctions and joints	Penetrations
Areas adjacent to baths and spas for concrete and compressed fibre cement sheet flooring.	Water resistant to entire floor.	Water resistant to a height of not less than 150mm above the vessel and exposed surfaces below the vessel lip to floor level.	Waterproof edges of the vessel and junction of bath enclosure with floor. Where the lip of the bath is supported by a horizontal surface, this must be waterproof for showers over bath and water resistant for all other cases.	Waterproof all tap and spout penetrations where they occur in a horizontal surface.
Areas adjacent to baths and spas (see note 1) for timber floors including particleboard, plywood and other timber based flooring materials.	Waterproof entire floor.	Water resistant to a height of not less than 150mm above the vessel and exposed surfaces below the vessel lip to floor level.	Waterproof edges of the vessel and junction of bath enclosure with floor. Where the lip of the bath is supported by a horizontal surface, this must be waterproof for showers over bath and water resistant for all other cases.	Waterproof all tap and spout penetrations where they occur in a horizontal surface.
Inserted baths	N/A for floor under bath. Waterproof entire shelf area, incorporating waterstop under the bath lip and project not less than 5mm above the tile surface.	N/A for wall under bath. Waterproof to not less than 150mm above the lip of the bath.	N/A for wall under bath.	Waterproof all tap and spout penetrations where they occur in a horizontal surface.
Walls adjoining other vessels (eg. sinks, laundry tubs and basins)	N/A	Water resistant to a height of not less than 150mm above the vessel if the vessel is within 75mm of the wall.	Where the vessel is fixed to a wall, waterproof edges for extent of vessel.	Waterproof all tap and spout penetrations where they occur in a horizontal surface.
Laundries and WCs	Water resistant to entire floor.	Waterproof all wall / floor junctions to not less than 25mm above the finished floor level, sealed to floor.	Waterproof all wall / floor junctions. Where a flashing is used the horizontal leg must be not less than 40mm.	N/A

**IMPORTANT NOTES:**

- If a shower is included above a bath, refer to the requirements for shower area walls and penetrations.
- N/A means not applicable. Wet areas waterproofing by licensed and accredited installer (eg Wet Seal).
- Certification to be provided to the Building Surveyor.
- Contractor or builder to determine the appropriate waterproofing in accordance with NCC Volume 2, H4D2 & H4D3 and to notify the Building Surveyor for inspection arrangements during installation.
- The above information is for general guidance and is indicative only. Waterproofing installers to comply with all current codes of legislation which takes precedence over this specification.

**NOTES TO THE OCCUPANT**

- Due to potential problems with condensation in residential buildings which can lead to structural damage over time and which may also be detrimental to the health of the occupants, the following strategies are recommended:
- Open windows every day for a few minutes especially when showering and cooking. Not every window needs to be opened, just those required to provide cross ventilation and extraction of moisture laden air;
  - Ensure extractor fans are used every time when bathing;
  - Ensure extractor fans are ducted to the outside; \*
  - Ensure non-condensing clothes dryers are ducted to the outside; \*\*
  - Install a rangehood or limit steam from cooking activities. i.e. by keeping lids on pots etc;
  - Avoid the use of unflued gas heaters;
  - Do not store large quantities of firewood inside the home in unventilated spaces;
  - Avoid plants and water features in unventilated spaces;
  - Ensure covers are kept on aquariums;
  - Dry clothes in rooms that are warm, have adequate ventilation and are separated from the main house;
- \* these details are also noted on the plans for the builders.  
 \*\* or install separate air extractor on ceiling. However, direct ducting is recommended.

## BAL- LOW

See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: WET AREA SPECIFICATIONS  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
 DRAWN BY: PC

DWG No:



**TIMBER DECKING SPECIFICATIONS**

TIMBER TYPE	THICKNESS (mm)	RECOMMENDED MAXIMUM JOIST SPACING (mm)
Kwila, jarrah, other hardwoods	19	500
Treated pine	22 dressed	450
	19 sawn (25 actual thickness)	500
Cypress	21	400
	25	500

**BOLTS FOR BEARER TO STUMP/POST CONNECTIONS**

BOLT TYPE	MAXIMUM ALLOWABLE DECK AREA SUPPORTED PER BOLT (m <sup>2</sup> ) - REFER NOTES			
	Seasoned Hardwood (F17) Minimum timber thickness: 35mm		Treated Pine (F5) Minimum timber thickness: 35mm	
	Bearer to one side only (fig. 18)	Spaced Bearer (fig. 19)	Bearer to one side only (fig. 18)	Spaced Bearer (fig. 19)
M10	1.0	1.7	0.8	1.3
M12	1.3	2.0	1.0	1.5
M16	1.7	2.7	1.2	2.0
M20	2.1	3.4	1.5	2.5

**TIMBER STAIR TREADS**

TIMBER TYPE	STAIR WIDTH (mm)				
	750	1000	1200	1500	1800
	RECOMMENDED THICKNESS OF TREAD (mm)				
Treated Pine, Cypress	45	50	55	65	80
Jarra, other hardwoods	45	45	45	55	60
	SCREW TYPE / NUMBER				
	3#10	3#10	3#10	3#12	3#12

**STRINGER TO WALL FIXING**

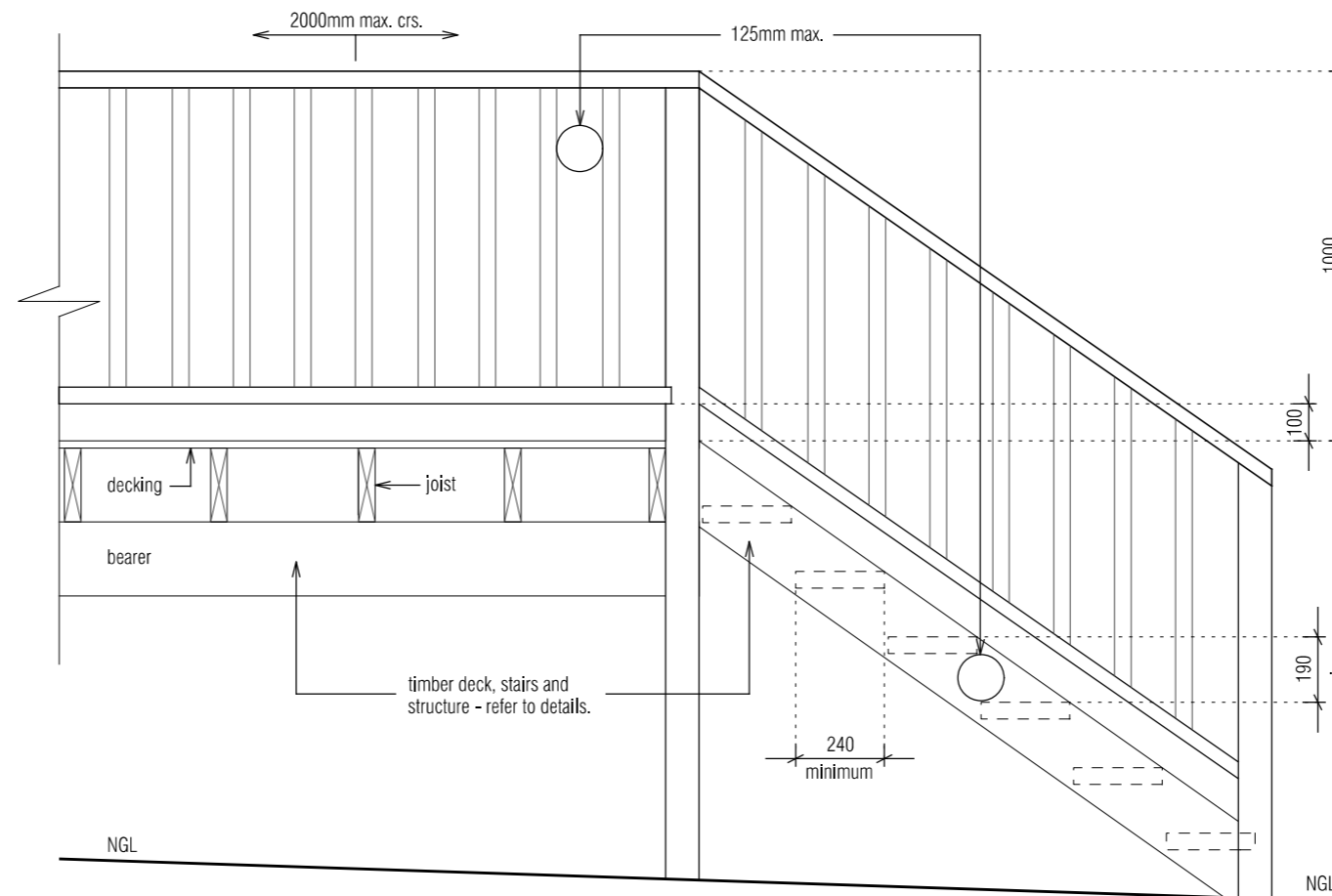
INTERNAL	14 gauge, 75mm bugle screws into wall studs
EXTERNAL	M10 masonry anchors into masonry @ 600 centres

**19mm THICK DECKING BOARD FIXING REQUIREMENTS**

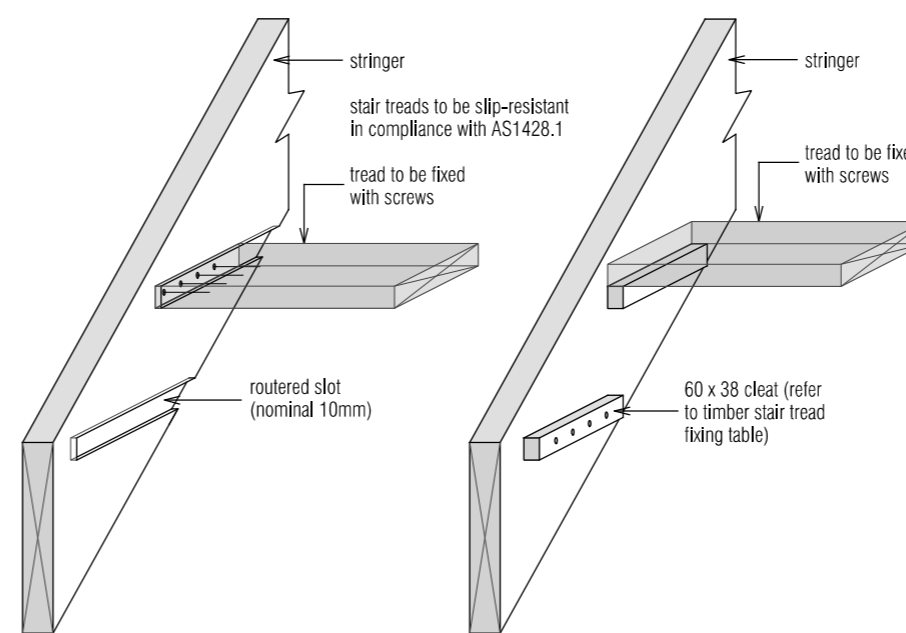
DECKING SPECIES	JOIST SPECIES	NAILING			
		Machine Driven		Hand Driven	
Hardwood, Cypress	Hardwood, Cypress	50 x 2.5 Flat Head		50 x 2.8 Flat Head	
	Seasoned Treated Pine, Oregon	50 x 2.5 DS Flat Head	65 x 2.5 Flat Head	50 x 2.8 DS Flat Head	65 x 2.8 Flat Head
Seasoned Treated Pine	Hardwood, Cypress	50 x 2.5 Flat Head		50 x 2.8 Flat Head	
	Seasoned Treated Pine, Oregon	50 x 2.5 DS Flat Head	65 x 2.5 Flat Head	50 x 2.8 DS Flat Head	65 x 2.8 Flat Head

**NOTES:**

- DS - Deformed shank
- 1. Nails to be hot dipped galvanised or stainless steel (mechanical galvanised plated not recommended).
- 2. In areas subjected to extreme wetting and drying conditions (e.g. around swimming pools), consideration should be given to increasing the nail diameter and/or length.
- 3. Dome head nails may be used in lieu of flat head nails.



**TREAD TO STRINGER FIXING OPTIONS**



PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

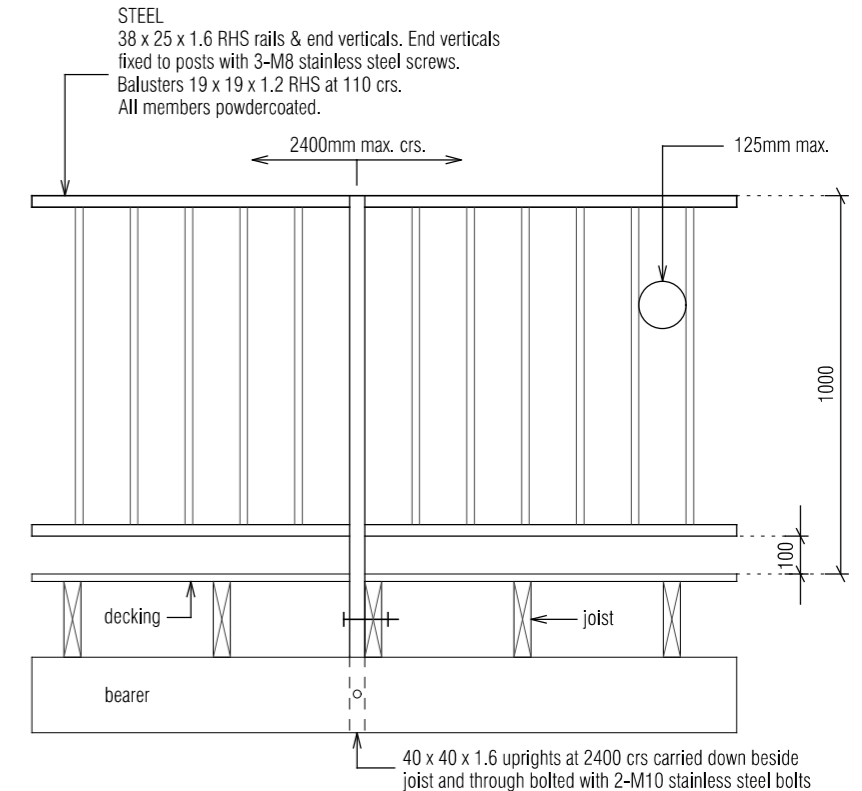
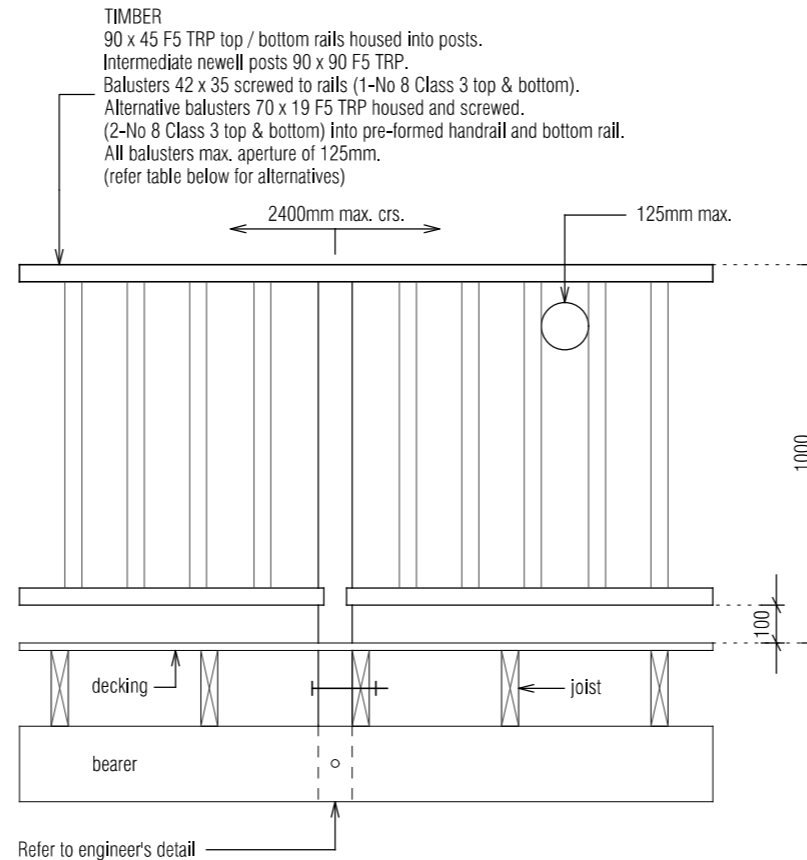
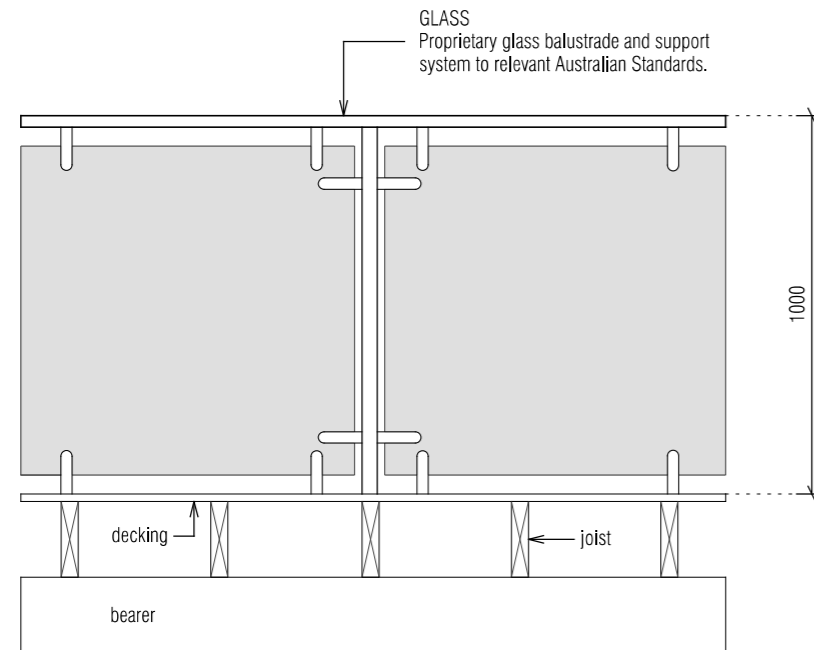
**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: STAIR NOTES  
 DATE: 15/11/24  
 FILE NAME: 138 DA 011024dgn  
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DWG No:



**TIMBER STRINGERS**

TIMBER TYPE	SECTION* SIZES (mm)	STAIR WIDTH (mm)				
		750	1000	1200	1500	1800
Treated Pine, Cypress	190 x 35	10	8	8	7	6
	190 x 45	11	10	9	8	7
	240 x 35	12	11	10	9	8
	240 x 45	14	12	11	10	9
	290 x 35	15	13	12	11	10
	290 x 45	17	15	14	12	11
Jarrah, other hardwoods or Kwila	190 x 35	13	12	11	10	10
	190 x 45	14	13	12	11	11
	240 x 35	16	15	14	13	12
	240 x 45	18	16	15	14	13
	290 x 35	18	18	17	16	15
	290 x 45	18	18	8	17	16

\* Sizes stated are minimum sizes.

NOTE:  
 The building regulations limit the number of risers in a single flight of stairs to a maximum of 18.

**SIZES OF HANDRAILS**

HANDRAIL TIMBER	SUPPORT SPACING (mm)				
	900	1200	1500	1800	2400
Treated Pine, Cypress	70 x 35	120 x 35	170 x 35	290 x 35	240 x 45
	70 x 45	70 x 45	70 x 45	140 x 45	
Jarrah, other hardwoods	70 x 35	70 x 35	90 x 35	170 x 35	290 x 35
	70 x 45	70 x 45	70 x 45	90 x 45	140 x 45
Kwila	70 x 35	70 x 35	70 x 35	170 x 35	290 x 35
	70 x 45	70 x 45	70 x 45	70 x 45	120 x 45

\*Section sizes can be used in either a vertical or horizontal position.

**NOTES:**

1. Handrails for 900, 1200 and 1500mm support spacings have been designed as continuous over two spans (continuous lengths of 1800, 2400 and 3000mm respectively).
2. The sizes shown are minimum allowable dressed sections sizes. Sections sizes shall not be less than those stated.

\* WIRE HANDRAILS AS PER NCC 11.3.6  
 \* STAIR BALUSTRADES MIN 865mm ABOVE NOSE OF STAIR TREAD

**TYPICAL SHRINKAGE VALUES FOR DECKING BOARDS**

TIMBER TYPE	BOARD WIDTH (mm)	APPROXIMATE SHRINKAGE (mm)
Kwila	70	2 (unseasoned)
		0 (seasoned)
Jarrah	65	5 (unseasoned)
		0 (seasoned)
Treated Pine	70	0 (seasoned)
Cypress	70	2 (unseasoned)

**EXAMPLE:**

For a 6mm final gap using 70mm Kwila decking boards, the required spacer thickness would be  $6 - 2 = 4$ mm

**BAL- LOW**

See sheet 13 for Bushfire Attack Level construction requirements

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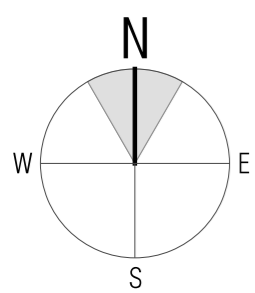
**Sorell Council**  
 Development Application: 5.2024.308.1 - 10 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

DRAWING: BALUSTRADE NOTES  
 DATE: 15/11/24  
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DWG No:

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT





Scale 1:1000

PROPOSED DWELLING FOR VAGG  
 AT 10 INVERNESS STREET, MIDWAY POINT

**Sorell Council**  
 Development Application: 5.2024.308.1 - 10  
 Inverness Street, Midway Point  
 Plans Reference: P1  
 Date Received: 21/11/2024

**BAL- LOW**  
 See sheet 13 for  
 Bushfire Attack Level  
 construction requirements

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DRAWING: VEGETATION OVERLAY  
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CONSTRUCTION SCHEDULE BAL- LOW

There are no special construction requirements for BAL- LOW



## BAL- LOW

See sheet 13 for  
Bushfire Attack Level  
construction requirements

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DRAWING: BUSHFIRE ATTACK LEVEL  
DATE: 15/11/24 CONSTRUCTION REQUIREMENTS  
FILE NAME: 138 DA 011024dgn  
DRAWN BY: PC

PROPOSED DWELLING FOR VAGG  
AT 10 INVERNESS STREET, MIDWAY POINT

DWG No: