

158 BADGER CORNER ROAD, LADY BARRON
NEW DWELLING, SHED EXTENSION AND ANCILLARY INFRASTRUCTURE

DEVELOPMENT APPLICATION SUPPORTING INFORMATION

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DEFINITION OF TERMS/ABBREVIATIONS

DA	Development Application
Development	The new dwelling, shed extension and ancillary infrastructure
(the) Land	Certificate of Title Volume 177522 Folio 1
LUPAA	<i>Land Use Planning and Approvals Act 1993</i>
(the) Scheme	Tasmanian Planning Scheme – Flinders island

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To the best of VDC's knowledge, the report presented herein represents the Client's intentions at the time of completing the document. However, the passage of time, manifestation of latent conditions or impacts of future events may result in changes to matters that are otherwise described in this document. In preparing this document VDC has relied upon data, surveys, analysis, designs, plans and other information provided by the client, and other individuals and organisations referenced herein. Except as otherwise stated in this document, VDC has not verified the accuracy or completeness of such data, surveys, analysis, designs, plans and other information.

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Document Status

REV	Author	Review	Date
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1	R Barnes C McCoull	W Jubb Stoney	3-4-2023
2	R Barnes C McCoull	R Barnes	4-4-2023
2	R Barnes C McCoull	W Jubb Stoney	4-4-2023

PREFACE

The documentation has been prepared to support a Development Application for the construction and use of a new dwelling, shed extension and associated ancillary infrastructure on land located at 158 Badger Corner Road, Flinders Island.

The document contains the following components –

Part A *Information about the applicant* of the development including their name and contact details.

Part B *Proposal Description* including details of the form and location of the new dwelling, shed extension and ancillary infrastructure.

Part C *Planning information* for use by the Planning Authority, in this case the Flinders Council, in assessing the development and use against the requirements of the Tasmanian Planning Scheme - Flinders.

Part D *Attachments* referenced in the DA.

PART A – APPLICANT INFORMATION

Name of applicant	Dr Richard Barnes
Contact details	Van Diemen Consulting PO Box 171 Brighton TAS 7030 M: 0438 588 695 E: rwbarnes73@gmail.com

PART B - PROJECT DESCRIPTION**B.1 PROPOSED DEVELOPMENT**

New Dwelling Attachment 1	A new dwelling (3 bedroom) is proposed which will have a carport and covered walkway.
Shed Extension Attachment 1	An existing shed will be extended with the extension including a toilet and hand basin. Solar panels will be fitted to the roof of the extension.
Ancillary Infrastructure Attachments 1 and 3	A new septic system which utilises sand trenches is proposed. A water tank for fire fighting purposes will be installed adjacent to the access road.

B.2 LOCATION AND PLANNING CONTEXT

Location and Access	158 Badger Corner Road. Access (existing) is from Badger Corner Road.
Land Title Attachment 2	Certificate of Title Volume 177522 Folio 1
PID	9532339

Planning Scheme	Tasmanian Planning Scheme – Flinders
Land zoning and overlays Figures 1 to 3	<p>Zoning</p> <ul style="list-style-type: none"> • Rural Living C <p>Overlays (Codes and General) intersected by part or all the Development –</p> <ul style="list-style-type: none"> • Bushfire prone areas • Coastal Inundation Hazard (Coastal inundation investigation area) • Priority Vegetation • Coastal Areas Specific Area Plan (SAP)
Use Class and Permissibility	<p>The land upon which the Development occurs is within the Rural Living zone of the Scheme. Residential use is a <u>No Permit Required</u> use in the Rural Living zone.</p> <p>Per Clause 6.6.1, a permit is not required to commence or carry out a use or development if:</p> <ol style="list-style-type: none"> (a) the use is within a Use Class specified in the applicable Use Table as being a use for which no permit is required; (b) the use or development complies with each applicable standard and does not rely on any Performance Criteria to comply with each applicable standard; (c) the use or development is not Discretionary under any other provision of this planning scheme; (d) the use or development is not Prohibited under any other provision of this planning scheme; and (e) a permit for such use and development is not required by a code. <p>Several aspects of the use and development do not comply with each applicable standard so there is reliance on Performance Criteria to comply with each applicable standard. Codes also apply. Hence, a permit is required.</p>

16.2.1 May 2023

C.T.177522/1

DEVELOPMENT APPLICATION

Figure 1: Tasmanian Planning Scheme Zones (Flinders Local Provisions Schedule)

TASMAP:
FISHER
5954

LGA:
FLINDERS

Base data by TASMAP. © State of Tasmania
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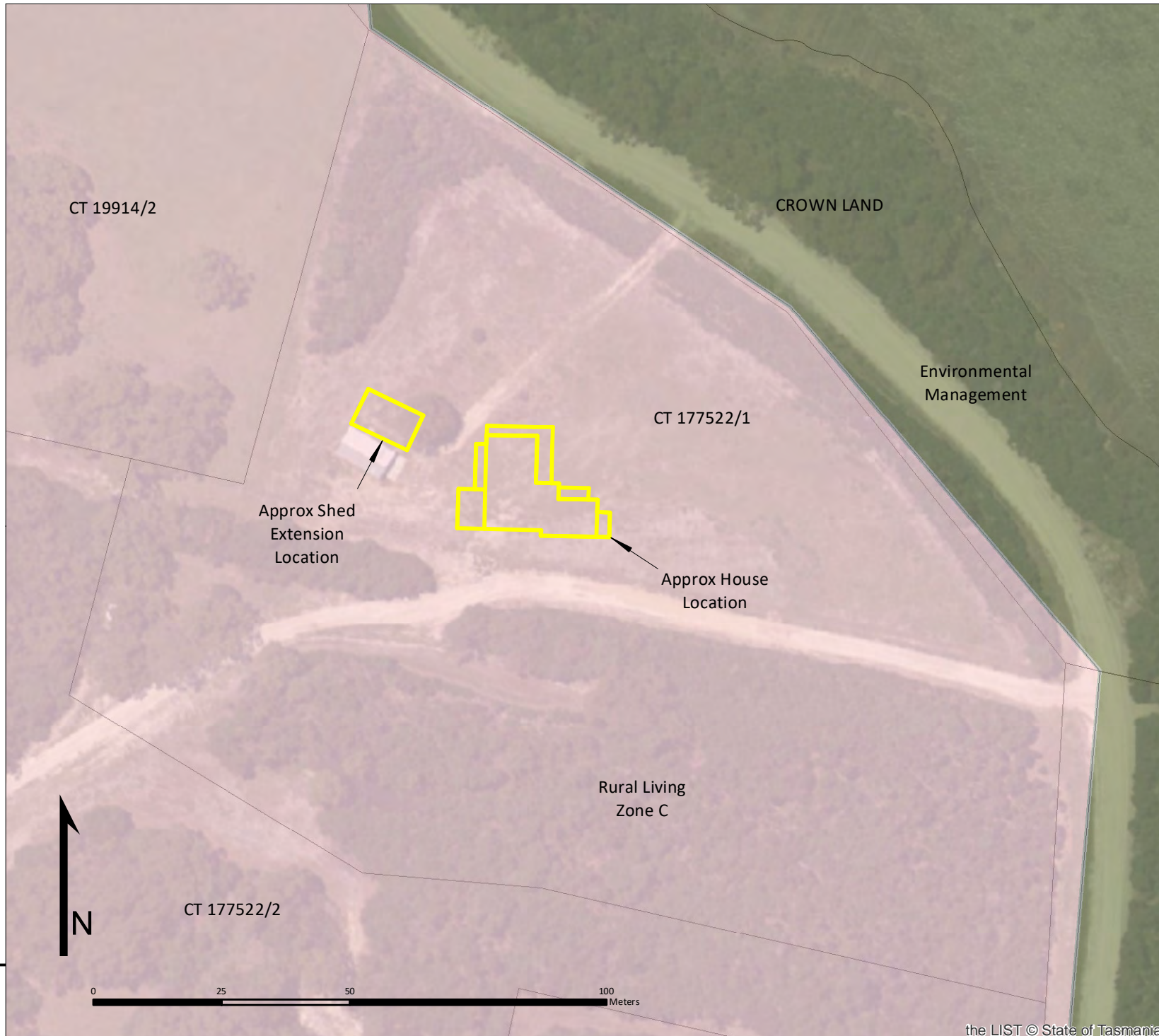
 **an Diemen Consulting**
PO Box 1 New Town TAS 7008



DATUM: GDA94
GRID: MGA ZONE 55
SCALE: @A4 - NA

CLIENT:
WENDY ANN JUBB-STONEY

DATE: 2 APRIL 2023



5546000

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Figure 2a: Tasmanian Planning Scheme Code Overlays (Flinders Local Provisions Schedule)

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Approx Shed
Extension
Location

Approx House
Location

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SCALE: @A4 - NA

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DATE: 2 APRIL 2023

-  Coastal inundation investigation area
-  Future coastal refugia area
-  Bushfire-prone areas

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0 25 50 100 Meters

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DEVELOPMENT APPLICATION

Figure 2b: Tasmanian Planning Scheme Code Overlays (Flinders Local Provisions Schedule)

TASMAP:
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LGA:
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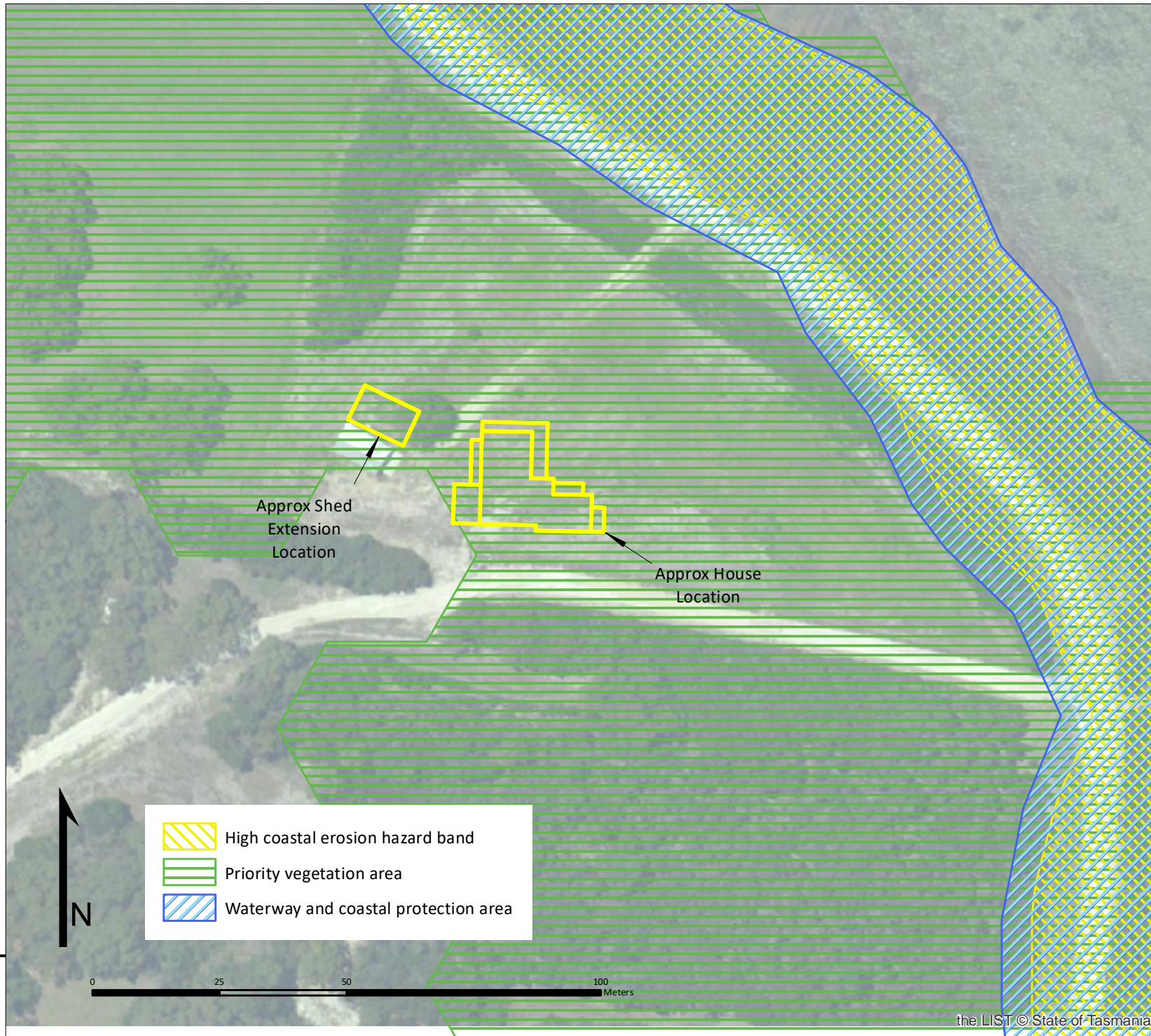
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Figure 3: Tasmanian Planning Scheme General Overlays (Flinders Local Provisions Schedule)

TASMAP:
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PART C – PLANNING SCHEME INFORMATION

C.1 CATEGORISATION OF USE/DEVELOPMENT

The Development is consistent with the definition of *Residential* in the Scheme –

‘... use of land for self-contained or shared accommodation. Examples include a secondary residence, boarding house, communal residence, home-based business, home-based child care, residential care facility, residential college, respite centre, assisted housing, retirement village and single or multiple dwellings.’

C.2 ZONING

C.2.1 ZONE PURPOSE

The purpose of the Rural Living zone is:

11.1.1	To provide for residential use or development in a rural setting where: (a) services are limited; or (b) existing natural and landscape values are to be retained.
11.1.2	To provide for compatible agricultural use and development that does not adversely impact on residential amenity.
11.1.3	To provide for other use or development that does not cause an unreasonable loss of amenity, through noise, scale, intensity, traffic generation and movement, or other off site impacts.
11.1.4	To provide for Visitor Accommodation that is compatible with residential character.

C.2.2 FLI-S3.0 COASTAL AREAS SPECIFIC AREA PLAN

The use and development are located partly within the Coastal Areas Specific Area Plan.

The SAP applies to the area of land designated as Coastal Areas Specific Area Plan on the overlay maps. In the area of land to which this plan applies, the provisions of the specific area plan are in substitution for, and are in addition to provisions of the Rural Living Zone.

The location of the overlay relative to the development and use is shown in maps A2, A3 and A13 of **Attachment 1**. The SAP only applies to part of the development.

The assessment of use and development standards per the Rural Living Zone is done in the tables below with the additional or substitution clauses prescribed by the SAP identified where relevant to the development in the overlay area.

C.3 USE STANDARDS

The following Use Standards were considered.

11.3.1 Discretionary use

Objective:	That Discretionary uses do not cause an unreasonable loss of amenity to adjacent sensitive uses.		Assessment of Development against Provision
Acceptable Solution	Performance Criterion		
<p>A1</p> <p>Hours of operation for a use listed as Discretionary, excluding Emergency Services or Resource Development, must be within the hours of:</p> <ul style="list-style-type: none"> (a) 8.00am to 6.00pm Monday to Friday; (b) 9.00am to 12.00 noon Saturday; and (c) nil on Sunday and public holidays. 	<p>P1</p> <p>Hours of operation for a use listed as Discretionary, excluding Emergency Services or Resource Development, must not cause an unreasonable loss of amenity to adjacent sensitive uses, having regard to:</p> <ul style="list-style-type: none"> (a) the timing, duration or extent of vehicle movements; and (b) noise, lighting or other emissions. 		<p>Provision not relevant, Residential is a No Permit Required Use in the Use Class Table for the Zone.</p> <p>No assessment required.</p>
<p>A2</p> <p>External lighting for a use listed as Discretionary:</p> <ul style="list-style-type: none"> (a) must be within the hours of 7.00pm to 7.00am, excluding any security lighting; and (b) security lighting must be baffled so that direct light does not extend into the adjoining property. 	<p>P2</p> <p>External lighting for a use listed as Discretionary, must not cause an unreasonable loss of amenity to adjacent sensitive uses, having regard to:</p> <ul style="list-style-type: none"> (a) the number of proposed light sources and their intensity; (b) the location of the proposed light sources; (c) the topography of the site; and 		

	(d) any existing light sources.	
<p>A3</p> <p>Commercial vehicle movements and the unloading and loading of commercial vehicles for a use listed as Discretionary, excluding Emergency Services, must be within the hours of:</p> <p>(a) 7.00am to 5.00pm Monday to Friday;</p> <p>(b) 9.00am to 12 noon Saturday; and</p> <p>(c) nil on Sunday and public holidays.</p>	<p>P3</p> <p>Commercial vehicle movements and the unloading and loading of commercial vehicles for a use listed as Discretionary, excluding Emergency Services, must not cause an unreasonable loss of amenity to adjacent sensitive uses, having regard to:</p> <p>(a) the extent and timing of traffic generation;</p> <p>(b) the dispatch of goods and materials; and</p> <p>(c) the existing levels of amenity.</p>	

11.3.2 Visitor Accommodation

Objective:	<p>That Visitor Accommodation:</p> <p>(a) is compatible with the character and use of the area;</p> <p>(b) does not cause an unreasonable loss of residential amenity; and</p> <p>(c) does not impact the safety and efficiency of local roads or rights of way.</p>	<p>Assessment of Development against Provision</p>
Acceptable Solution	Performance Criterion	
<p>A1</p> <p>Visitor Accommodation must:</p> <p>(a) accommodate guests in existing habitable buildings; and</p> <p>(b) have a gross floor area of not more than 200m² per lot.</p>	<p>P1</p> <p>Visitor Accommodation must be compatible with the character and use of the area and not cause an unreasonable loss of residential amenity, having regard to:</p> <p>(a) the privacy of adjoining properties;</p> <p>(b) any likely increase in noise to adjoining properties;</p>	<p>Not relevant.</p> <p>Visitor accommodation is not proposed.</p>

	<ul style="list-style-type: none"> (c) the scale of the use and its compatibility with the surrounding character and uses within the area; (d) retaining the primary residential function of an area; (e) the impact on the safety and efficiency of the local road network; and (f) any impact on the owners and users rights of way. 	
<p>A2 Visitor Accommodation is not for a strata lot that is part of a strata scheme where another strata lot within that strata scheme is used for a residential use.</p>	<p>P1 Visitor Accommodation within a strata scheme must not cause an unreasonable loss of residential amenity to long term residents occupying other strata lots within the strata scheme, having regard to:</p> <ul style="list-style-type: none"> (a) the privacy of residents; (b) any likely increase in noise; (c) the residential function of the strata scheme; (d) the location and layout of the strata lots; (e) the extent and nature of any other non-residential uses; and (f) any impact on shared access and common property. 	

C.4 DEVELOPMENT STANDARDS FOR BUILDINGS AND WORKS

11.4.1 Site Coverage

Objective:	That the site coverage: (a) is compatible with the character of existing development in the area; and (b) assists with the management of stormwater runoff.	Assessment of Development against Provision
Acceptable Solution	Performance Criterion	
A1 The site coverage must be not more than 400m ² .	P1 The site coverage must be consistent with that existing on established properties in the area, having regard to: (a) the topography of the site; (b) the capacity of the site to absorb runoff; (c) the size and shape of the site; (d) the existing buildings and any constraints imposed by existing development; (e) the need to remove vegetation; and (f) the character of development existing on established properties in the area.	Site coverage more than 400m ² . Performance Criterion applies. Site coverage is generally consistent with that existing on established properties in the area noting that there are not many ‘established’ properties in the Badger Corner (Cooma) area. The most notable established properties are Flinders Island Retreat and Partridge Farm which include sheds and dwellings. Water from roofed space will be collected for use in the house and shed like any other dwelling without reticulated water services. No native vegetation is to be removed – see I ages in Attachment 4 . Pasture grasses and exotic herbs will be removed. The buildings being setback from the road (rather than adjacent to it) and accessed by an unsealed driveway is consistent with other properties in the area.
A1¹	P1 No Performance Criterion.	Site (new dwelling) coverage is less than 300m ² where the development intersects the Coastal Areas SAP.

¹ Applies to the development in the Coastal Areas SAP mapped overlay per FLI-S3.7.2

The site coverage ² must be not more than 300m ² .		
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11.4.2 Building height, setback and siting

Objective:	<p>That height, setback and siting of buildings:</p> <ul style="list-style-type: none"> (a) is compatible with the character of the area; (b) does not cause an unreasonable loss of amenity; (c) minimises the impact on the natural values of the area; and (d) minimises the impact on adjacent uses. 	Assessment of Development against Provision
Acceptable Solution	Performance Criterion	
A1 Building height must be not more than 8.5m.	<p>P1</p> <p>Building height must be compatible with the character of the area and not cause an unreasonable loss of amenity to adjoining properties having regard to:</p> <ul style="list-style-type: none"> (a) the topography of the site; (b) the height, bulk and form of existing buildings on the site and adjoining properties; (c) the bulk and form of proposed buildings; (d) sunlight to habitable rooms and private open space in adjoining properties; and (e) any overshadowing of adjoining properties or public places. 	Complies. Building (new dwelling and shed extension) height is less than 8.5m where it is located outside the Coastal Areas SAP.
A1³ Building height must be not more than 5m.	<p>P1</p> <p>No Performance Criterion.</p>	Complies. Building (new dwelling) height is less than 5m where the

² means pre the TPS - Flinders 'the proportion of a site, excluding any access strip, covered by roofed buildings.'

³ Applies to the development in the Coastal Areas SAP mapped overlay per FLI-S3.7.1

		development intersects the Coastal Areas SAP.
<p>A2</p> <p>Buildings must have a setback from a frontage of not less than 20m.</p>	<p>P2</p> <p>Buildings must be sited to be compatible with the character of the area, having regard to:</p> <ul style="list-style-type: none"> (a) the topography of the site; (b) the setbacks of adjacent buildings; (c) the height, bulk and form of existing and proposed buildings; (d) the appearance when viewed from roads and public places; and (e) the retention of vegetation. 	<p>Complies.</p> <p>Building (new dwelling and shed extension) setback from the frontage exceeds 20m.</p>
<p>A3</p> <p>Buildings must have a setback from side and rear boundaries of not less than 10m.</p>	<p>P3</p> <p>Buildings must be sited to not cause an unreasonable loss of amenity to adjoining properties, having regard to:</p> <ul style="list-style-type: none"> (a) the topography of the site; (b) the size, shape and orientation of the site; (c) the setbacks of surrounding buildings; (d) the height bulk and form of existing and proposed buildings; (e) the character of the development existing on established properties in the area; and (f) any overshadowing of adjoining properties or public places. 	<p>Complies.</p> <p>Building (new dwelling and shed extension) setback from the side and rear boundaries exceeds 10m.</p>
<p>A4</p> <p>Buildings for a sensitive use must be separated from an Agriculture Zone or Rural Zone a distance of:</p> <ul style="list-style-type: none"> (a) not less than 200m; or (b) if the setback of an existing building is within 200m, not less than the existing building. 	<p>P4</p> <p>Buildings for a sensitive use must be sited so as to not conflict or interfere with uses in the Agriculture Zone or Rural Zone, having regard to:</p> <ul style="list-style-type: none"> (a) the size, shape and topography of the site; (b) the separation of any existing buildings for sensitive uses on adjoining properties; (c) the existing and potential use of adjoining properties; (d) any proposed attenuation measures; and (e) any buffers created by natural or other features. 	<p>Complies.</p> <p>Building for sensitive use (new dwelling) is located to be more than 200m from land in the Agriculture and Rural zones.</p>

11.4 Building Appearance⁴

Objective:	<p>That building design:</p> <ul style="list-style-type: none"> (a) minimises vegetation clearance, disturbance to landform and disruption of ecological processes; (b) minimises the prominence of flat expanses of walls; (c) features variations in wall and roof lines that complement the contours of the land; and (d) exhibits a character suitable for a coastal setting. 	Assessment of Development against Provision
Acceptable Solution	Performance Criterion	
<p>A1</p> <p>Buildings must be an alteration or extension to an existing building providing it is not more than the existing building height; or</p> <p>A habitable building must have:</p> <ul style="list-style-type: none"> (a) eaves that protrude with a width of not less than 1m located on the east, north or west face of the habitable building or (b) a pergola with an area of not less than 10m² located on the east, north or west face of the habitable building; or (c) a verandah with a width of not less than 2m and an area of not less than 40m² located on the east, north or west face of the habitable building. 	<p>P1</p> <p>Buildings must be designed to not have obtrusive impacts on the visual amenity of the site and coastal areas, having regard to:</p> <ul style="list-style-type: none"> (a) the impact on the coastal landscape; (b) the location of the building on the site; (c) the use of design elements to reduce the bulk, such as articulated floor plans, staggering of facades, and inclusion of eaves, pergolas or verandahs; (d) any screening provided by topography or vegetation to be retained on the site; (e) the visual obtrusiveness of the building to the site when viewed from public areas including foreshores or roads; and (f) a preference for single-storey low-hipped roof construction. 	<p>Complies with P1</p> <p>The dwelling is a new habitable building.</p> <p>The building is not obtrusive due to its colour, single-storey low-hipped roof construction, the use of design elements to reduce bulk through open decks, variable depth of building form from the frontage (staggered facades), and pier construction with open exposures.</p> <p>Only a portion of the decking and parts of the roofline are in the Coastal Area SAP overlay (Map A2 of Attachment 1).</p> <p>Vegetation retention (coastal tea-tree and swamp paperbark) along Badger Corner Road also aids shielding of the dwelling when seen from the road.</p>

⁴ Additional provision that applies to the development in the Coastal Areas SAP mapped overlay per FLI-S3.7.3

11.4 Exterior Finish⁵

Objective:	That exterior building finishes: (a) are not prominent or reflective; and (b) maintain the visual amenity of coastal areas.	Assessment of Development against Provision
Acceptable Solution	Performance Criterion	
A1 Exterior building finishes must be coloured using colours in tones of grey, green or brown.	P1 Exterior building finishes must be designed to not have obtrusive impacts on the character and visual amenity of the site and surrounding area, having regard to: (a) the nature of the exterior finishes; (b) the topography of the site; (c) the dominant colours of the vegetation and surrounding area; (d) the appearance of the building when viewed from roads, foreshores and other public places; (e) the character of the surrounding area; and (f) any other measures to mitigate impacts to the character and visual amenity of the surrounding area.	Complies with A1 The dwelling is a habitable building with exterior building finishes of grey, green and brown (see Attachment 1) – these colours are to be used the full development not just where it intersects the Coastal Areas SAP.
A2 Exterior building finishes must have a light reflectance value of not more than 40%.	P2 No Performance Criterion.	Complies with A2 Exterior building finishes (mostly rendered surfaces) will not have a light reflectance value of more than 40%.

⁵ Additional provision that applies to the development in the Coastal Areas SAP mapped overlay per FLI-S3.7.4

11.4 Site excavation and fill⁶

Objective:	<p>That:</p> <ul style="list-style-type: none"> (a) the extent of alterations to the existing land form are minimised; (b) the visual prominence of buildings and structures is reduced; (c) building design responds to the particular shape, contours and slope of the land; and (d) design minimises vegetation clearance, disturbance to landform and disruption of ecological processes. 	<p>Assessment of Development against Provision</p>
Acceptable Solution	Performance Criterion	
<p>A1</p> <p>Buildings and works must not include cut and fill greater than 0.5m above or below existing ground level.</p>	<p>P1</p> <p>Buildings and works must be located to minimise alteration to existing ground level, having regard to:</p> <ul style="list-style-type: none"> (a) minimisation of vegetation clearance, disturbance to landform and disruption of ecological processes; (b) the topography of the site; (c) the size and shape of the site; (d) any constraints imposed by existing development; (e) location of buildings or works; (f) the extent of any required cut or fill; (g) the location of driveways or access tracks, and <p>in any case, be only to minimise the visibility of buildings.</p>	<p>Complies with A1</p> <p>Buildings and works do not include cut and fill greater than 0.5m above or below existing ground level where the development intersects the Coastal Areas SAP.</p>

⁶ Additional provision that applies to the development in the Coastal Areas SAP mapped overlay per FLI-S3.7.5

C.3 CODES

Table 1 provides a summary of which Codes apply to the Development.

Table 1. Development applicable Codes in the *Tasmanian Planning Scheme – Flinders*

Code Number and Name	Application to the Development
C1.0 Signs	Not applicable; no signage proposed.
C2.0 Parking and Sustainable Transport	Applies
C3.0 Road and Railway Assets	Applies; use intensifies the existing access.
C4.0 Electricity Transmission Infrastructure Protection	Not applicable; use and development not within the stipulated buffer areas.
C5.0 Telecommunications	Not applicable; no telecommunications infrastructure is proposed.
C6.0 Local Historic Heritage	Not applicable; use or development of land is not: <ul style="list-style-type: none"> a) within a Heritage Precinct; b) a local heritage place; or c) a place of identified archaeological significance.
C7.0 Natural Assets	Applies; development intersects the <i>priority vegetation</i> overlay.
C8.0 Scenic Protection	Not applicable; use and development does not occur in a scenic protection area or within a scenic road corridor.
C9.0 Attenuation	Not applicable.
C10.0 Coastal Erosion Hazard	Not applicable; use and development not within a coastal erosion hazard area.
C11.0 Coastal Inundation Hazard	Applies; Coastal inundation investigation area applies.
C12.0 Flood-Prone Areas Hazard	Not applicable; sensitive use or conversion of a building into a habitable building are not proposed.
C13.0 Bushfire-Prone Areas	Not applicable; not a hazardous or vulnerable use and subdivision not proposed.
C14.0 Potentially Contaminated Land	Not applicable; not potentially contaminated land.

C15.0 Landslip Hazard	Not applicable; Development doesn't intersect overlay.
C16.0 Safeguarding of Airports	Not applicable; use and development is not a sensitive use within an airport noise exposure area; and development within an airport obstacle limitation area.

C.3.1 APPLICABLE CODES

As noted in **Table 1**, the following Codes apply –

- C2.0 Parking and Sustainable Transport Code
- C3.0 Road and Railway Assets Code
- C7.0 Natural Assets
- C11.0 Coastal Inundation Hazard

C2.0 Parking and Sustainable Transport Code

The purpose of the Parking and Sustainable Transport Code is:

- C2.1.1 To ensure that an appropriate level of parking facilities is provided to service use and development.
- C2.1.2 To ensure that cycling, walking and public transport are encouraged as a means of transport in urban areas.
- C2.1.3 To ensure that access for pedestrians, vehicles and cyclists is safe and adequate.
- C2.1.4 To ensure that parking does not cause an unreasonable loss of amenity to the surrounding area.
- C2.1.5 To ensure that parking spaces and accesses meet appropriate standards.
- C2.1.6 To provide for parking precincts and pedestrian priority streets.

Unless stated otherwise in a particular purpose zone, or sub-clause C2.2.2, C2.2.3 or C2.2.4, this code applies to all use and development.

Clause 2.5.3, 2.5.4 and 2.5.5 do not apply as the Use Class is **Residential**.

Use Standards

Clause C2.5.1 Car parking numbers

Objective:	That an appropriate level of car parking spaces are provided to meet the needs of the use	
	Acceptable Solution	Comments in relation to Development
A1	<p>The number of on-site car parking spaces must be no less than the number specified in Table C2.1, excluding if:</p> <ul style="list-style-type: none"> (a) the site is subject to a parking plan for the area adopted by council, in which case parking provision (spaces or cash-in-lieu) must be in accordance with that plan; (b) the site is contained within a parking precinct plan and subject to Clause C2.7; (c) the site is subject to Clause C2.5.5; or (d) it relates to an intensification of an existing use or development or a change of use where: <ul style="list-style-type: none"> (i) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is greater than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case no additional on-site car parking is required; or (ii) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is less than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case on-site car parking must be calculated as follows: <p style="margin-left: 20px;">$N = A + (C - B)$</p> <p style="margin-left: 20px;">N = Number of on-site car parking spaces required</p> <p style="margin-left: 20px;">A = Number of existing on-site car parking spaces</p> <p style="margin-left: 20px;">B = Number of on-site car parking spaces required for the existing use or development specified in Table C2.1</p> <p style="margin-left: 20px;">C = Number of on-site car parking spaces required for the proposed use or development specified in Table C2.1.</p> 	<p>Complies.</p> <p>Two car spaces are required⁷ for <i>Residential</i> use.</p> <p>Two car spaces are provided in the shed (lock up garage) and a further car space is provided at the carport of the dwelling.</p>

C2.5.2 Bicycle parking numbers

Objective:	That an appropriate level of bicycle parking spaces are provided to meet the needs of the use.	
	Acceptable Solution	Comments in relation to Development

⁷ Table C2.1 Parking Space Requirements. Residential. If a 2 or more bedroom dwelling in the General Residential Zone (including all rooms capable of being used as a bedroom).

<p>A1</p> <p>Bicycle parking spaces must:</p> <p>(a) be provided on the site or within 50m of the site; and</p> <p>(b) be no less than the number specified in Table C2.1.</p>	<p>Provision not relevant.</p> <p>There are no bicycle parking requirements for <i>Residential</i> use in Table C2.1.</p>
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C2.5.3 Motorcycle parking numbers

Objective:	That the appropriate level of motorcycle parking is provided to meet the needs of the use.	
Acceptable Solution	Comments in relation to Development	
<p>A1</p> <p>The number of on-site motorcycle parking spaces for all uses must:</p> <p>(a) be no less than the number specified in Table C2.4; and</p> <p>(b) if an existing use or development is extended or intensified, the number of on-site motorcycle parking spaces must be based on the proposed extension or intensification, provided the existing number of motorcycle parking spaces is maintained.</p>	<p>Provision not relevant.</p> <p>There are no motorcycle parking requirements for <i>Residential</i> use in Table C2.1.</p>	

C2.5.4 Loading Bays

Objective:	That adequate access for goods delivery and collection is provided, and to avoid unreasonable loss of amenity and adverse impacts on traffic flows.	
Acceptable Solution	Comments in relation to Development	
<p>A1</p> <p>A loading bay must be provided for uses with a floor area of more than 1000m² in a single occupancy.</p>	<p>Provision not relevant.</p> <p>Floor area in single occupancy does not exceed 1000m².</p>	

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

Objective:	<p>To:</p> <p>(a) facilitate the reuse of existing non-residential buildings within the General Residential Zone and Inner Residential Zone; and</p> <p>(b) to not cause an unreasonable impact on residential amenity by the car parking generated by that reuse.</p>	
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Acceptable Solution	Comments in relation to Development
<p>A1</p> <p>Within existing non-residential buildings in the General Residential Zone and Inner Residential Zone, on-site car parking is not required for:</p> <p>(a) Food Services uses up to 100m² floor area or 30 seats, whichever is the greater; and</p> <p>(b) General Retail and Hire uses up to 100m² floor area, provided the use complies with the hours of operation specified in the relevant Acceptable Solution for the relevant zone.</p>	<p>Provision not relevant.</p> <p>There is no use in the General Residential Zone and Inner Residential Zone.</p>

Development Standards

C2.6.1 Construction of parking areas

Objective:	That an appropriate level of bicycle parking spaces are provided to meet the needs of the use.	
Performance Criterion	Comments in relation to Development	
<p>P1</p> <p>All parking, access ways, manoeuvring and circulation spaces must be readily identifiable and constructed so that they are useable in all weather conditions, having regard to:</p> <p>(a) the nature of the use;</p> <p>(b) the topography of the land;</p> <p>(c) the drainage system available;</p> <p>(d) the likelihood of transporting sediment or debris from the site onto a road or public place;</p> <p>(e) the likelihood of generating dust; and</p> <p>(f) the nature of the proposed surfacing.</p>	<p>Complies with P1.</p> <p>Attachment 1 contains Drawing A3 which shows the location and form of the access from Badger Corner Road to the new dwelling and shed extension.</p> <p>The road will be constructed per the BHMP (Attachment 4) requirements outlined below:</p> <p>a) All weather construction;</p> <p>b) Load capacity of at least 20 tonnes, including for bridges and culverts;</p> <p>c) Minimum carriageway width of 4 metres;</p> <p>d) Minimum vertical clearance of 4 metres;</p> <p>e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;</p> <p>f) Cross falls of less than 3 degrees (1:20 or 5%);</p> <p>g) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;</p> <p>h) Curves with a minimum inner radius of 10 metres;</p> <p>i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and</p>	

	<p>j) Terminate with a turning area for fire appliances provided by one of the following:</p> <ul style="list-style-type: none"> i. A turning circle with a minimum inner radius of 10 metres; ii. A property access encircling the building; or iii. A hammerhead “T” or “Y” turning head 4 metres wide and 8 metres long.
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C2.6.2 Design and layout of parking areas

Objective:	That parking areas are designed and laid out to provide convenient, safe and efficient parking.	
	Performance Criterion	Comments in relation to Development
	<p>P1</p> <p>All parking, access ways, manoeuvring and circulation spaces must be designed and readily identifiable to provide convenient, safe and efficient parking, having regard to:</p> <ul style="list-style-type: none"> (a) the characteristics of the site; (b) the proposed slope, dimensions and layout; (c) useability in all weather conditions; (d) vehicle and pedestrian traffic safety; (e) the nature and use of the development; (f) the expected number and type of vehicles; (g) the likely use of the parking areas by persons with a disability; (h) the nature of traffic in the surrounding area; (i) the proposed means of parking delineation; and (j) the provisions of Australian Standard AS 2890.1:2004 Parking facilities, Part 1: Off-street car parking and AS 2890.2-2002 Parking facilities, Part 2: Offstreet commercial vehicle facilities. 	<p>Complies with P1.</p> <p>Attachment 1 contains Drawing A3 which shows the location and form of the access from Badger Corner Road to the new dwelling and shed extension.</p> <p>The road will be constructed per the BHMP (Attachment 4) requirements outlined below:</p> <ul style="list-style-type: none"> a) All weather construction; b) Load capacity of at least 20 tonnes, including for bridges and culverts; c) Minimum carriageway width of 4 metres; d) Minimum vertical clearance of 4 metres; e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway; f) Cross falls of less than 3 degrees (1:20 or 5%); g) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; h) Curves with a minimum inner radius of 10 metres; i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and j) Terminate with a turning area for fire appliances provided by one of the following: <ul style="list-style-type: none"> iv. A turning circle with a minimum inner radius of 10 metres;

	v. A property access encircling the building; or A hammerhead “T” or “Y” turning head 4 metres wide and 8 metres long.
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C2.6.3 Number of accesses for vehicles

Objective:	That: (a) access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses; (b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and (c) the number of accesses minimise impacts on the streetscape.	
	Acceptable Solution	Comments in relation to Development
A1	The number of accesses provided for each frontage must: (a) be no more than 1; or (b) no more than the existing number of accesses, whichever is the greater.	Complies. There is one access for the frontage.
A2	Within the Central Business Zone or in a pedestrian priority street no new access is provided unless an existing access is removed.	Provision not relevant. The Development is not within the Central Business Zone.

C2.6.4 Lighting of parking areas within the General Business Zone and Central Business Zone

Objective:	That parking and vehicle circulation roads and pedestrian paths within the General Business Zone and Central Business Zone, which are used outside daylight hours, are provided with lighting to a standard which: (a) enables easy and efficient use; (b) promotes the safety of users; (c) minimises opportunities for crime or anti-social behaviour; and (d) prevents unreasonable light overspill impacts.	
	Acceptable Solution	Comments in relation to Development
A1	In car parks within the General Business Zone and Central Business Zone, parking and vehicle circulation roads and pedestrian paths serving 5 or more car parking spaces, which are used outside daylight hours, must be provided with lighting in accordance with Clause 3.1 “Basis of Design” and Clause 3.6 “Car Parks” in Australian Standard/New Zealand Standard AS/NZS 1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting – Performance and design requirements.	Provision not relevant. There are no relevant zones present.

C2.6.5 Pedestrian access

Objective:	That pedestrian access within parking areas is provided in a safe and convenient manner.	
	Acceptable Solution	Comments in relation to Development
A1.1	Uses that require 10 or more car parking spaces must: <ul style="list-style-type: none"> (a) have a 1m wide footpath that is separated from the access ways or parking aisles, excluding where crossing access ways or parking aisles, by: <ul style="list-style-type: none"> (i) a horizontal distance of 2.5m between the edge of the footpath and the access way or parking aisle; or (ii) protective devices such as bollards, guard rails or planters between the footpath and the access way or parking aisle; and (b) be signed and line marked at points where pedestrians cross access ways or parking aisles. 	<p>Provision not relevant.</p> <p>There is no requirement to provide 10 or more car parking spaces nor a parking area containing accessible car parking spaces for use by persons with a disability.</p>
A1.2	In parking areas containing accessible car parking spaces for use by persons with a disability, a footpath having a width not less than 1.5m and a gradient not steeper than 1 in 14 is required from those spaces to the main entry point to the building.	

C2.6.6 Loading bays

Objective:	That the area and dimensions of loading bays are adequate to provide safe and efficient delivery and collection of goods.	
	Acceptable Solution	Comments in relation to Development
A1	The area and dimensions of loading bays and access way areas must be designed in accordance with Australian Standard AS 2890.2–2002, Parking facilities, Part 2: Offstreet commercial vehicle facilities, for the type of vehicles likely to use the site.	<p>Provisions not relevant.</p> <p>There is no requirement to provide loading bays.</p>
A2	The type of commercial vehicles likely to use the site must be able to enter, park and exit the site in a forward direction in accordance with Australian Standard AS 2890.2 – 2002, Parking Facilities, Part 2: Parking facilities Offstreet commercial vehicle facilities.	

C2.6.7 Bicycle parking and storage facilities within the General Business Zone and Central Business Zone

Objective:	That the area and dimensions of loading bays are adequate to provide safe and efficient delivery and collection of goods.	
	Acceptable Solution	Comments in relation to Development
A1	Bicycle parking for uses that require 5 or more bicycle spaces in Table C2.1 must: <ul style="list-style-type: none"> (a) be accessible from a road, cycle path, bicycle lane, shared path or access way; (b) be located within 50m from an entrance; (c) be visible from the main entrance or otherwise signed; and (d) be available and adequately lit during the times they will be used, in accordance with Table 2.3 of Australian/New Zealand Standard AS/NZS 1158.3.1: 2005 Lighting for roads and public spaces Pedestrian area (Category P) lighting Performance and design requirements. 	Provisions not relevant. No bicycle parking is required.
A2	Bicycle parking spaces must: <ul style="list-style-type: none"> (a) have dimensions not less than: <ul style="list-style-type: none"> (i) 1.7m in length; (ii) 1.2m in height; and (iii) 0.7m in width at the handlebars; (b) have unobstructed access with a width of not less than 2m and a gradient not steeper than 5% from a road, cycle path, bicycle lane, shared path or access way; and (c) include a rail or hoop to lock a bicycle that satisfies Australian Standard AS 2890.3-2015 Parking facilities Part 3: Bicycle parking. 	

Clause C2.6.8 Siting of parking and turning areas

Objective:	That the siting of vehicle parking and access facilities in an Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone or Central Business Zone does not cause an unreasonable visual impact on streetscape character or loss of amenity to adjoining properties.	
	Acceptable Solution	Comments in relation to Development

<p>A1</p> <p>Within an Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone or General Business Zone, parking spaces and vehicle turning areas, including garages or covered parking areas must be located behind the building line of buildings, excluding if a parking area is already provided in front of the building line.</p>	<p>Provision not relevant.</p> <p>The Development is not in the Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone, or Central Business Zone.</p>
<p>A2</p> <p>Within the Central Business Zone, on-site parking at ground level adjacent to a frontage must:</p> <ul style="list-style-type: none"> (a) have no new vehicle accesses, unless an existing access is removed; (b) retain an active street frontage; and (c) not result in parked cars being visible from public places in the adjacent roads. 	

C3.0 Road and Rail Assets Code

The purpose of this provision is to:

- C3.1.1 To protect the safety and efficiency of the road and railway networks; and
- C3.1.2 To reduce conflicts between sensitive uses and major roads and the rail network.

This code applies to a use or development that:

- (a) will increase the amount of vehicular traffic or the number of movements of vehicles longer than 5.5m using an existing vehicle crossing or private level crossing;
- (b) will require a new vehicle crossing, junction or level crossing; or
- (c) involves a subdivision or habitable building within a road or railway attenuation area if for a sensitive use.

Use Standards

C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

Objective:	To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.	
	Acceptable Solution	Comments in relation to Development
A1.1	For a category 1 road or a limited access road, vehicular traffic to and from the site will not require: <ul style="list-style-type: none"> (a) a new junction; (b) a new vehicle crossing; or (c) a new level crossing. 	Not relevant. Badger Corner Road is not a category 1 or limited access road.
A1.2	For a road, excluding a category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.	Not relevant. The access is existing.
A1.3	For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.	Not relevant. The rail network is not relevant.
A1.4	Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than: <ul style="list-style-type: none"> (a) the amounts in Table C3.1; or 	Complies. Additional traffic will comply with Table C3.1.

(b) allowed by a licence issued under Part IVA of the <i>Roads and Jetties Act 1935</i> in respect to a limited access road.	
A1.5 Vehicular traffic must be able to enter and leave a major road in a forward direction.	Not relevant. Badger Corner Road is not a major road.

Development Standards

C3.6.1 Habitable buildings for sensitive uses within a road or railway attenuation area

Objective:	To minimise the effects of noise, vibration, light and air emissions on sensitive uses within a road or railway attenuation area, from existing and future major roads and the rail network.	
Acceptable Solution	Comments in relation to Development	
<p>A1</p> <p>Unless within a building area on a sealed plan approved under this planning scheme, habitable buildings for a sensitive use within a road or railway attenuation area, must be:</p> <ul style="list-style-type: none"> (a) within a row of existing habitable buildings for sensitive uses and no closer to the existing or future major road or rail network than the adjoining habitable building; (b) an extension which extends no closer to the existing or future major road or rail network than: <ul style="list-style-type: none"> (i) the existing habitable building; or (ii) an adjoining habitable building for a sensitive use; or (c) located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the <i>Noise Measurement Procedures Manual, 2nd edition, July 2008</i>. 	<p>Complies.</p> <p>New dwelling is not within a road or railway attenuation area.</p>	

C7.0 Natural Assets Code

The purpose of this provision is to:

- C7.1.1 To minimise impacts on water quality, natural assets including native riparian vegetation, river condition and the natural ecological function of watercourses, wetlands and lakes.
- C7.1.2 To minimise impacts on coastal and foreshore assets, native littoral vegetation, natural coastal processes and the natural ecological function of the coast.
- C7.1.3 To protect vulnerable coastal areas to enable natural processes to continue to occur, including the landward transgression of sand dunes, wetlands, saltmarshes and other sensitive coastal habitats due to sea-level rise.
- C7.1.4 To minimise impacts on identified priority vegetation.
- C7.1.5 To manage impacts on threatened fauna species by minimising clearance of significant habitat.

There are no use standards for this Code.

Development Standards for Buildings and Works

C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia area

Objective:	That buildings and works within a waterway and coastal protection area or future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets.	
	Acceptable Solution	Comments in relation to Development
A1	Buildings and works within a waterway and coastal protection area must: <ul style="list-style-type: none"> (a) be within a building area on a sealed plan approved under this planning scheme; (b) in relation to a Class 4 watercourse, be for a crossing or bridge not more than 5m in width; or (c) if within the spatial extent of tidal waters, be an extension to an existing boat ramp, car park, jetty, marina, marine farming shore facility or slipway that is not more than 20% of the area of the facility existing at the effective date. 	<p>Not relevant.</p> <p>No buildings or works are located within a waterway or coastal protection area.</p>
A2	Buildings and works within a future coastal refugia area must be located within a building area on a sealed plan approved under this planning scheme.	<p>Not relevant.</p> <p>No buildings or works are located within a future coastal refugia.</p>

<p>A3</p> <p>Development within a waterway and coastal protection area or a future coastal refugia area must not involve a new stormwater point discharge into a watercourse, wetland or lake.</p>	<p>Not relevant.</p> <p>No buildings or works are located within a waterway and coastal protection area or a future coastal refugia area.</p>
<p>A4</p> <p>Dredging or reclamation must not occur within a waterway and coastal protection area or a future coastal refugia area.</p>	<p>Not relevant.</p> <p>No buildings or works are located within a waterway and coastal protection area or a future coastal refugia area.</p> <p>Dredging is not proposed.</p>
<p>A5</p> <p>Coastal protection works or watercourse erosion or inundation protection works must not occur within a waterway and coastal protection area or a future coastal refugia area.</p>	<p>Not relevant.</p> <p>No buildings or works are located within a waterway and coastal protection area or a future coastal refugia area.</p>

C7.6.2 Clearance within a priority vegetation area

Objective:	<p>That clearance of native vegetation within a priority vegetation area:</p> <ul style="list-style-type: none"> (a) does not result in unreasonable loss of priority vegetation; (b) is appropriately managed to adequately protect identified priority vegetation; and (c) minimises and appropriately manages impacts from construction and development activities. 	
Performance Criterion		Comments in relation to Development
<p>P1.1</p> <p>Clearance of native vegetation within a priority vegetation area must be for:</p> <ul style="list-style-type: none"> (a) an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmania Fire Service or an accredited person; (b) buildings and works associated with the construction of a single dwelling or an associated outbuilding; (c) subdivision in the General Residential Zone or Low Density Residential Zone; (d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design; 	<p>Not relevant.</p> <p>Buildings and works are proposed to be within the mapped priority vegetation overlay. However, no native vegetation⁸ exists within the area to be used for the buildings (shed and dwelling) so there is no clearing of native vegetation.</p> <p>Notwithstanding the lack of native vegetation clearance, the development is a building and works associated with the construction of a single dwelling and an associated outbuilding.</p>	

⁸ means plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes.

<p>(e) clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or</p> <p>(f) the clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site.</p>	
<p>P1.2</p> <p>Clearance of native vegetation within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:</p> <p>(a) the design and location of buildings and works and any constraints such as topography or land hazards;</p> <p>(b) any particular requirements for the buildings and works;</p> <p>(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings;</p> <p>(d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;</p> <p>(e) any on-site biodiversity offsets; and</p> <p>(f) any existing cleared areas on the site.</p>	<p>Not relevant.</p> <p>Buildings and works are proposed to be within the mapped priority vegetation overlay. However, no native vegetation⁹ exists within the area to be used for the buildings (shed and dwelling) so there is no clearing of native vegetation.</p>

⁹ means plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes.

C7.0 Coastal Inundation Hazard Code

The purpose of this provision is to:

To ensure that use or development subject to risk from coastal inundation is appropriately located and managed so that:

- C11.1.1 (a) people, property and infrastructure are not exposed to an unacceptable level of risk;
- (b) future costs associated with options for adaptation, protection, retreat or abandonment of property and infrastructure are minimised;
- (c) it does not increase the risk from coastal inundation to other land or public infrastructure; and
- (d) works to protect land from coastal inundation are undertaken in a way that provides appropriate protection without increasing risks to other land.

- C11.1.2 To provide for appropriate use or development that relies upon a coastal location to fulfil its purpose.

Per Clause C11.4.1 use or development is **exempt** from this Code if it is:

- (a) development that requires authorisation under the *Building Act 2016*, excluding:
 - (i) a critical use, hazardous use, or vulnerable use;
 - (ii) if located within a high coastal inundation hazard band;
 - (iii) located within a non-urban zone and within a medium coastal inundation hazard band; or
 - (iv) coastal protection works;

The development and use requires authorisation under the *Building Act 2016* and is not a critical, hazardous or vulnerable use. It is not located within any hazard band rather it is in the investigation area only. Coastal protection works are not proposed.

On this basis, the use and development is exempt from this Code.

PART D – ATTACHMENTS

ATTACHMENT 1. ARCHITECTURAL DRAWINGS






TOWN PLANNING

PROPOSED NEW DWELLING & SHED EXTENSION

FOR - 158 BADGER CORNER ROAD
FLINDERS ISLAND 7255

C.T. 177552
LOT 1



-  ROOFS, GUTTERS, DOWN PIPES & WINDOWS FRAMES. ROOF-CUSTOM ORB 'ACCENT 48 FROM LYSAGHT CORRUGATED IRON. MATT FINISH.
-  SOFFITS & EAVES 6MM FC SHEET
-  GROUND FLOOR EXTERNAL WALLS TIMBER VENEER UNITEX BASE BOARD, 75MM BAL29 RENDERED ON 30MM BATTENS POLYSTYRENE BAL 19 RATED
-  WINDOW & DOORS TRIMS. DOUBLE GLAZED TO THE ENERGY RATERS SPECIFICATIONS.
-  EXTERNAL BASE WALLS, REINFORCED BLOCKWORK 190MM RENDERED MATT FINISH TO THE

EXTERNAL COLOUR SCHEME

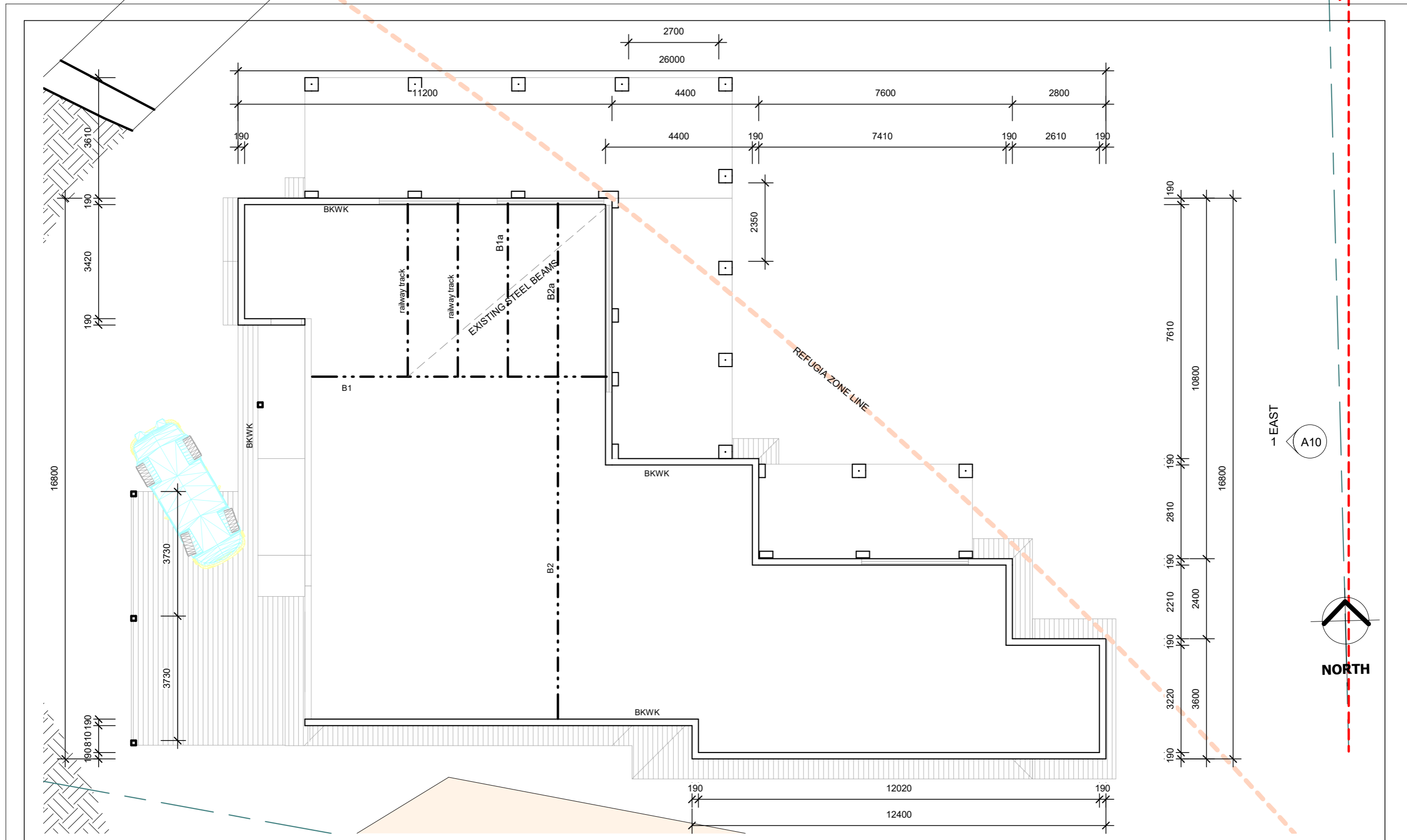

Sheet List	
Sheet Number	Sheet Name
A1	TITLE PAGE
A2	DWELLING BASE PLAN
A3	PROPOSED SITE PLAN
A4	PROPOSED SHED EXTENSION FLOOR PLAN
A5	PROPOSED SHED ELEVATIONS

Sheet List	
Sheet Number	Sheet Name
A6	PROPOSED SHED ROOF PLAN & SHED SECTIONS
A7	PROPOSED HOUSE FLOOR PLAN
A8	PROPOSED ROOF OVER WALLS OF DWELLING
A9	PROPOSED NORTH SOUTH ELEVATIONS
A10	PROPOSED EAST WEST ELEVATIONS
A11	HOUSE ROOF HEIGHT SECTIONS
A12	PROPOSED AREA ANALYSIS
A13	PROPOSED SEWER PLAN

Jubb Stoney

Jubb Stoney House PLANNING



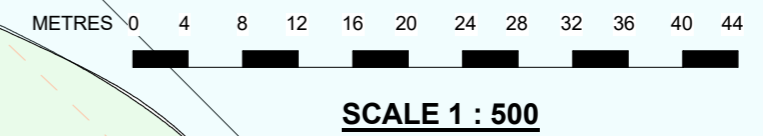
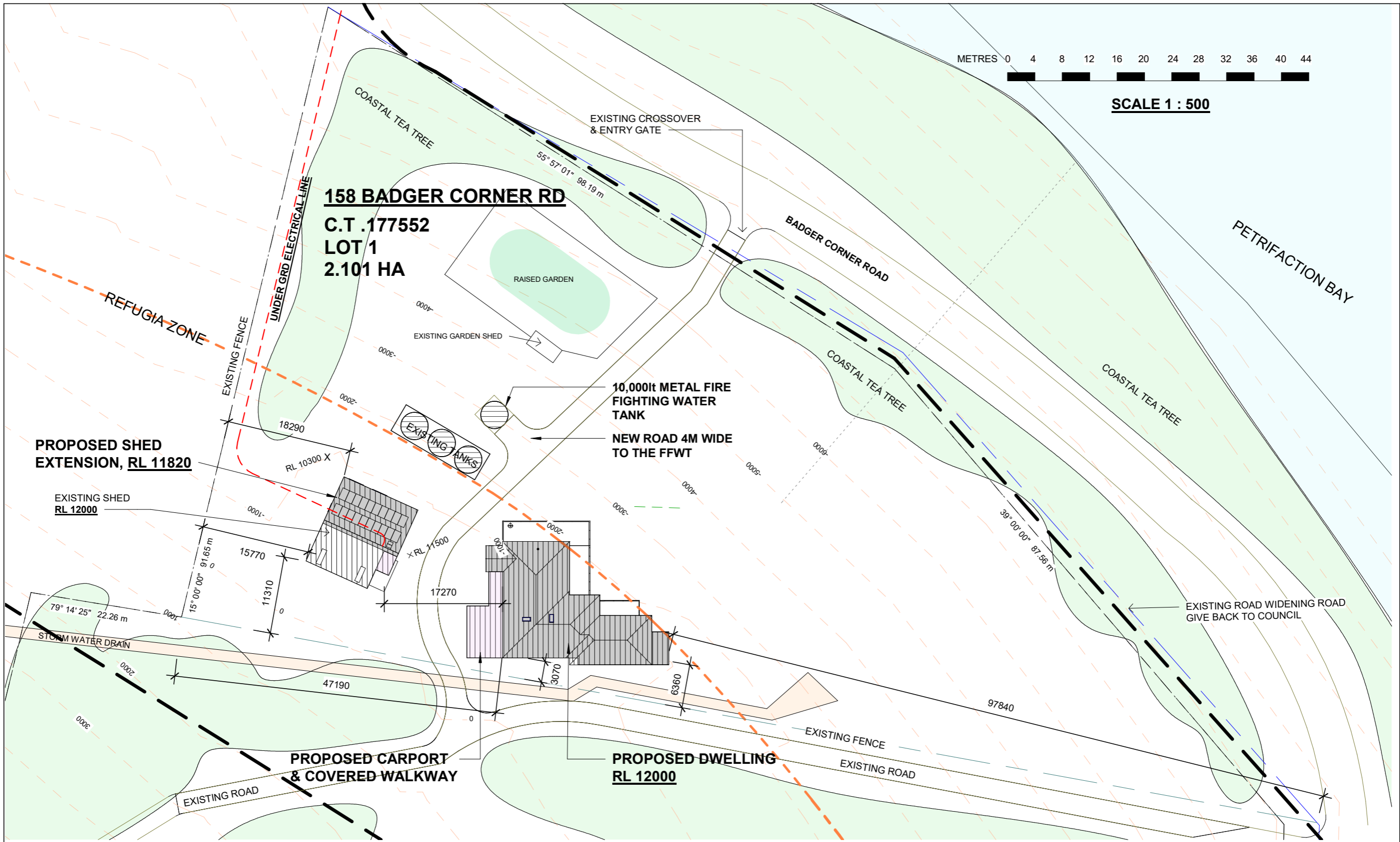




BILL JUBB
 18 ARUNDEL COURT
 MT ELIZA PH 9787 7767
 bill@jubbdesignandbuild.com.au

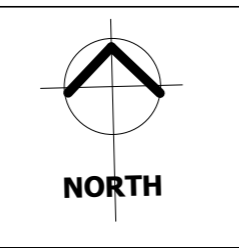
No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

DWELLING BASE PLAN		A2
Project number	148	
Date	1/3/2023	
Drawn by	Author	
Checked by	Checker	
Scale	1 : 100	

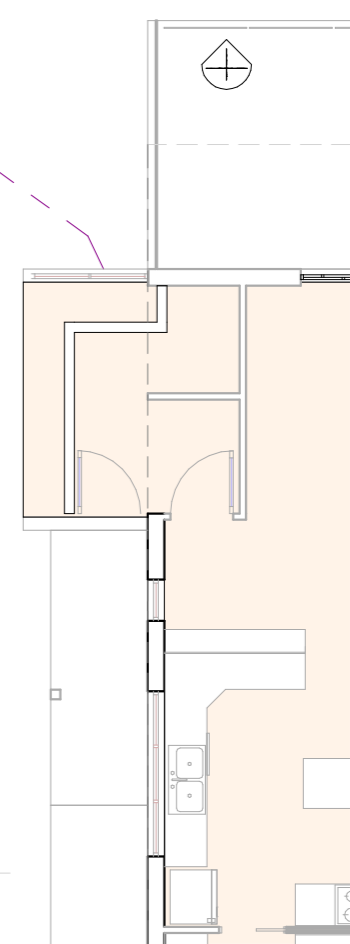
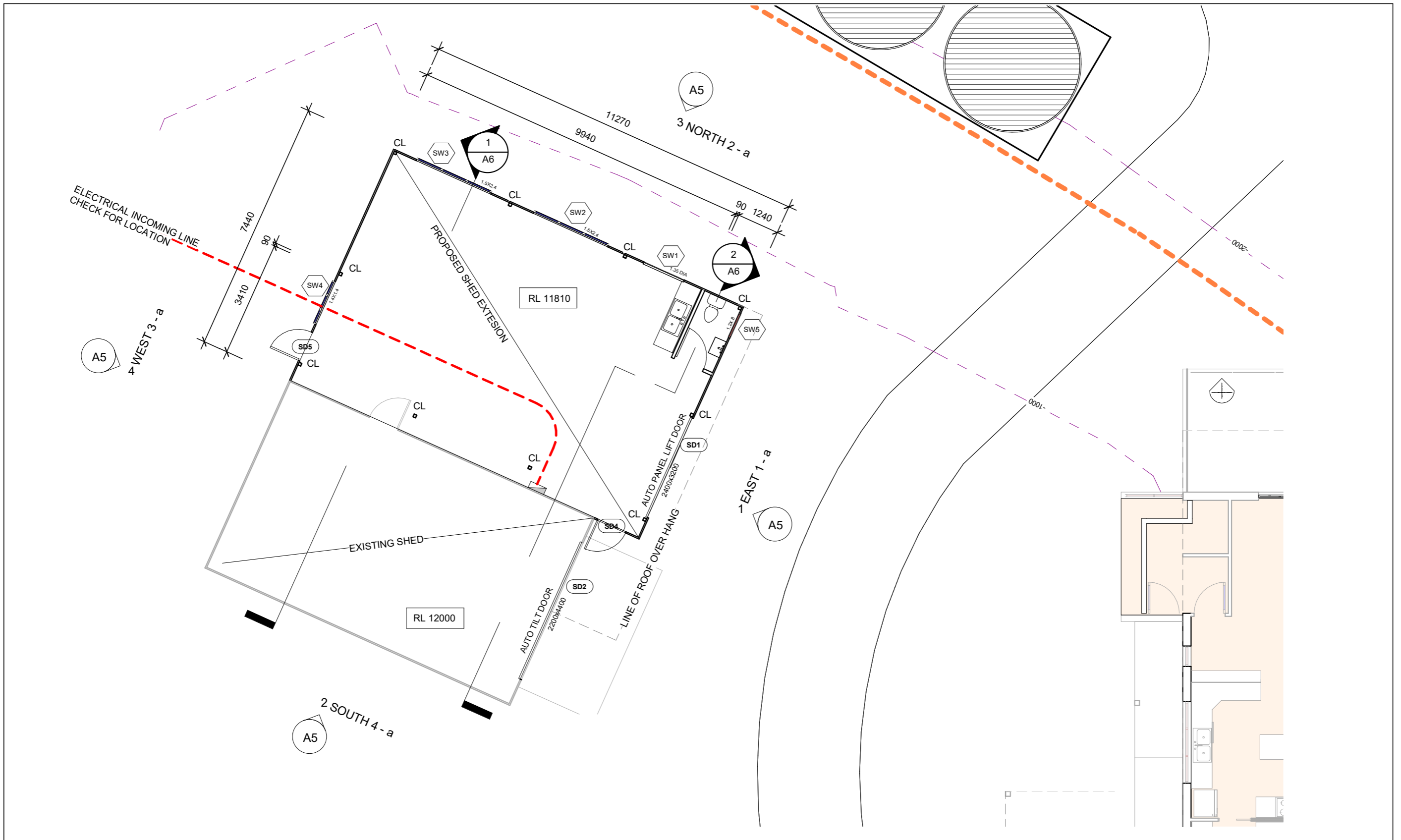
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No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

PROPOSED SITE PLAN		A3
Project number	148	
Date	1/3/2023	
Drawn by	BJ	
Checked by	Checker	
Scale	1 : 500	

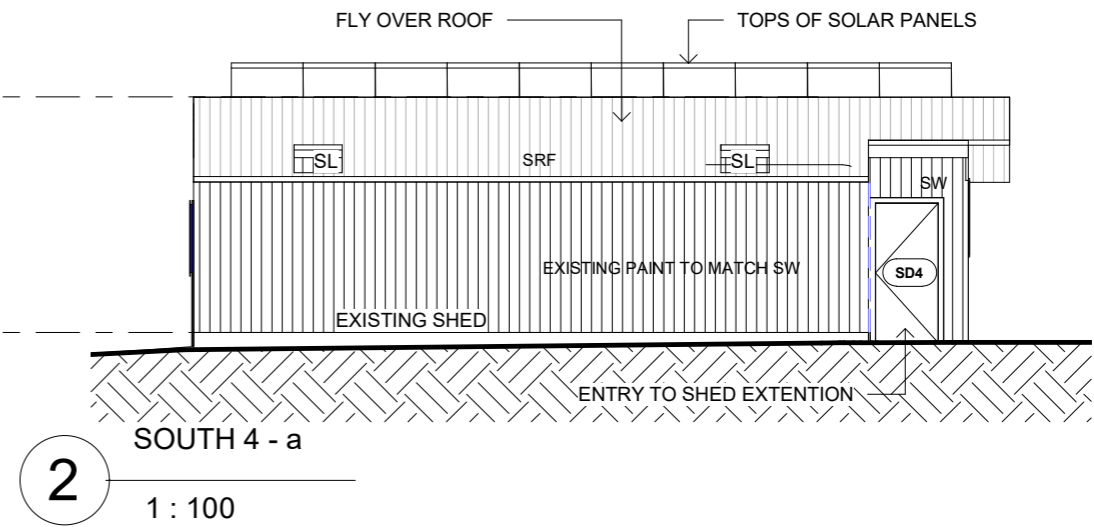
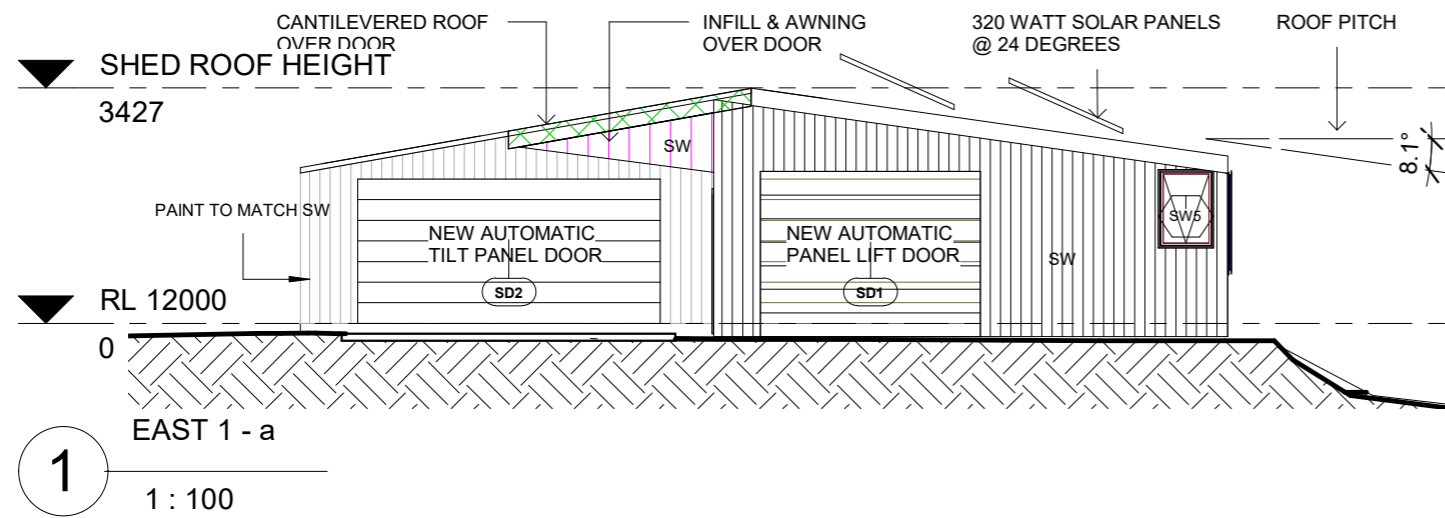


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 bill@jubbdesignandbuild.com.au

No.	Description	Date

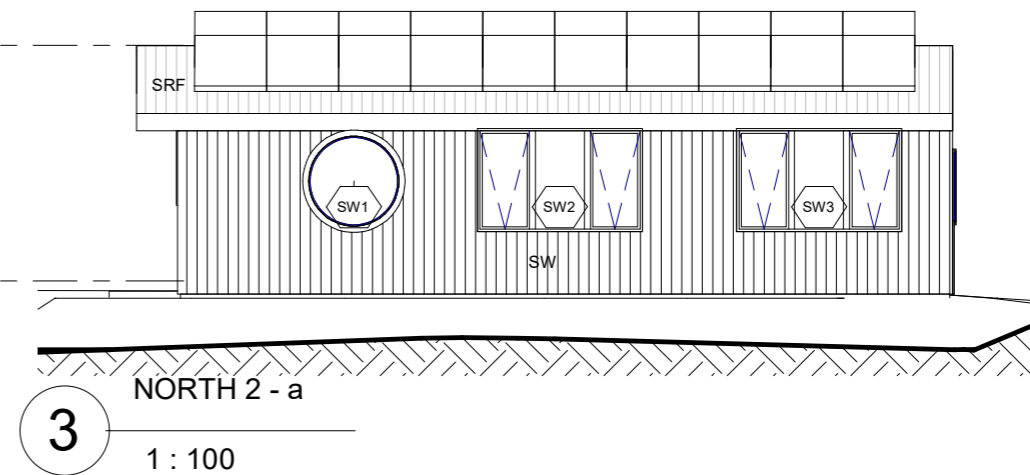
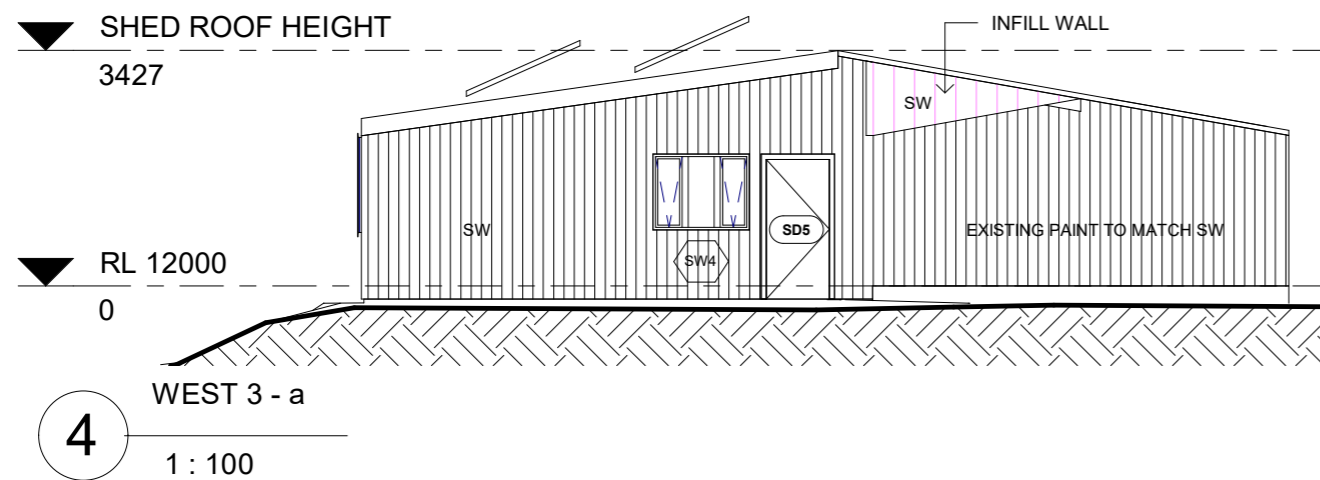
Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

PROPOSED SHED EXTENSION FLOOR PLAN		
Project number	148	A4
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	
		1 : 100



SCHEDULE FOR EXTERNAL MATERIAL COLOURS & BUILDING FABRIC

RBWK	BASE FOOTINGS, 190MM REINFORCED BLOCKWORK. 3.3.5.7 DAMP-PROOF COURSES AND FLASHINGS, MORTAR MIX 1:4. RENDER COLOUR -MONUMENT.	RF	ROOFS, METAL GUTTERS, DOWN PIPES. ROOF - CUSTOM ORB 'ACCENT' .48 CORRUGATED IRON FROM LYSAGHT. MONUMENT MATT FINISH. R1.5 ROOF BLANKET, 75X35 MPG 10 BATTENS@ 900 CENETERS, TRUSSES @ 600 CENTERS CEILING INSULATION R4
BL	BALCONIES, H3 TIMBER, MODWOOD COLOUR TBA, ALL SS OR GAL FIXINGS, SS BOOTS & STAPS, GAL BRACKETS AND BOLTS, ALL TO BAL 19 REQUIREMENTS, 12MM BALUSTRADE TOUGHENED GLASS ON SS SPRIGETS. 25MM SS TOP RAIL	SW	SHED WALLS MULTICLAD® FROM LYSARGHT SHEDS. BUILDING INSUALTION BRADFORD THERMOSEAL BREATHER. COLOUR MONUMENT MATT FINISH. EXISTING WALLS PAINTED TO MATCH MONUMENT MATT FINISH
EWL	EXTERNAL WALLS, 45 X 90 MGP 10 STUDS @ 600 CENTERS WITH 2.5 WALL INSULATION, BUILDING INSUALTION BRADFORD THERMOSEAL BREATHER. 30MM BATTENS WITH UNITEX BASE BOARD WITH 75MM BAL29 RATED POLYSTYRENE CLADDING, TIES 316, RENDERED WITH UNITEX, COLOUR - MANGROVE	SRF	SHED ROOF, CUSTOM ORB 'ACCENT' .48 CORRUGATED IRON FROM LYSAGHT SHEDS. MONUMENT MATT FINISH, R1.5 ROOF BLANKET INSULATION WITH SAFTEY WIRE. ROOF LIGHTS- LASERLITE® 3000 POLYCARBONATE AS DETAILED COLOUR TBA
WD & TR	WINDOWS & DOORS TRIMS. DOUBLE GLAZED TO THE ENERGY RATERS SPECIFICATIONS. COLOUR-EVENNG HAZE		

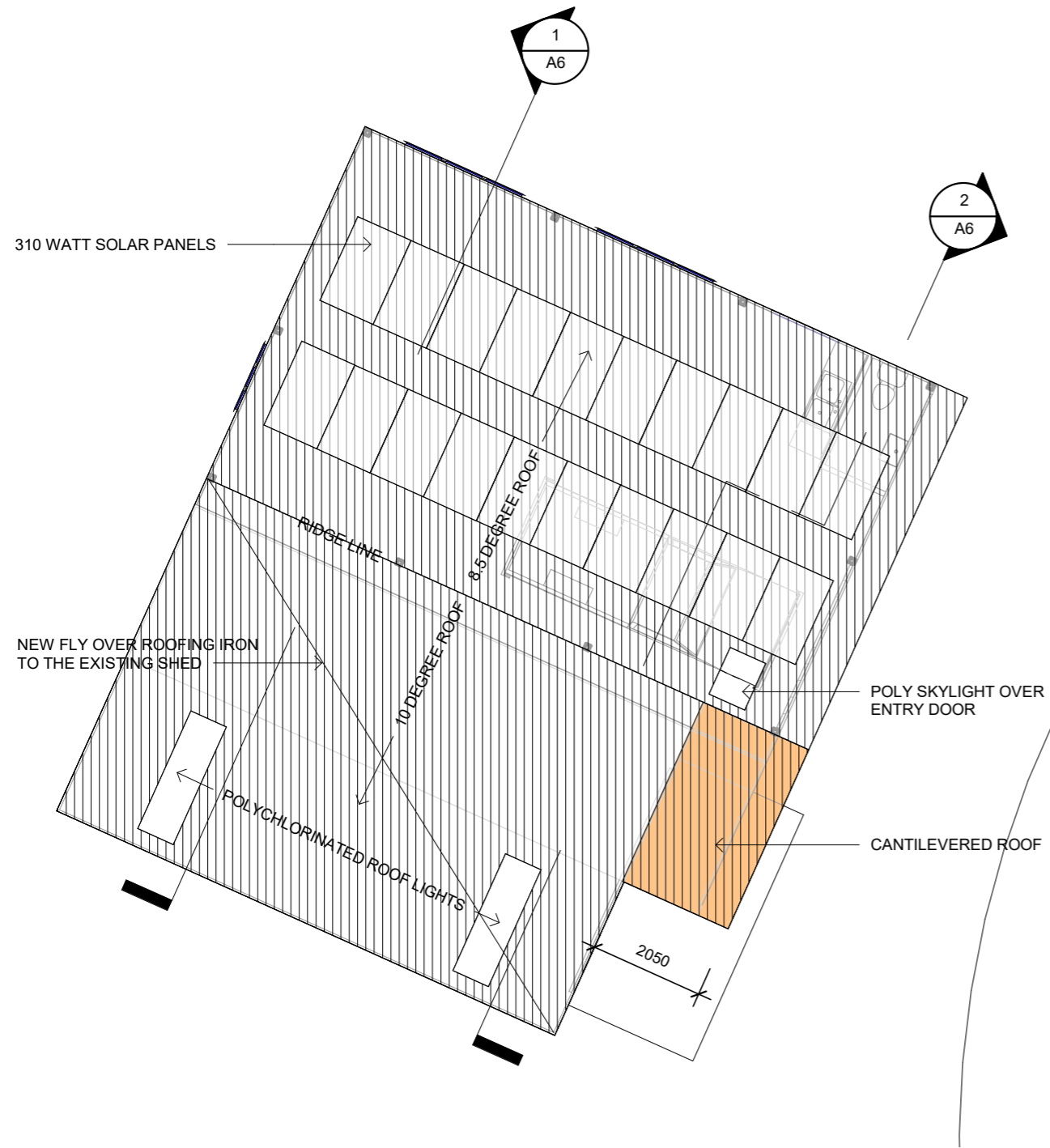


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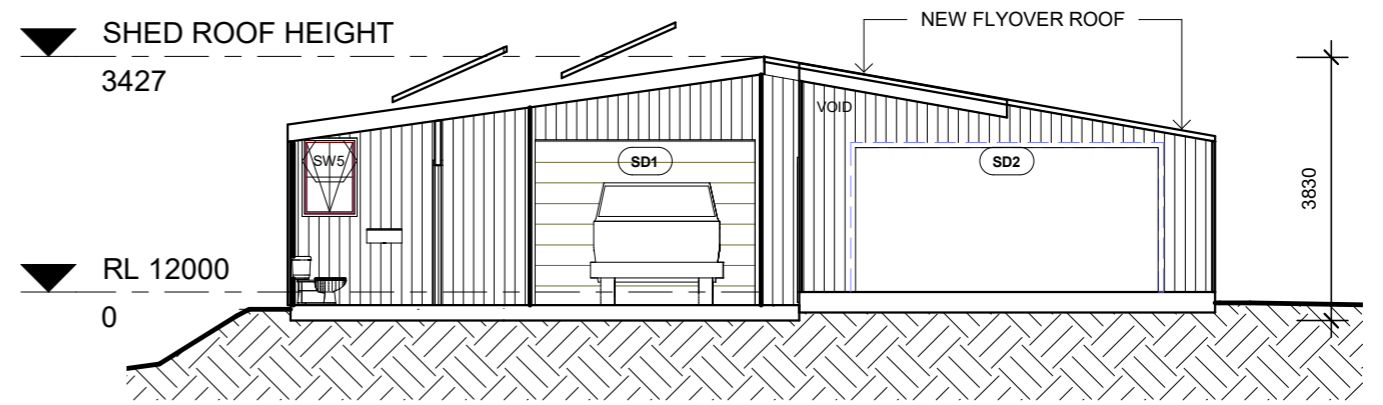
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 Jubb Stoney House

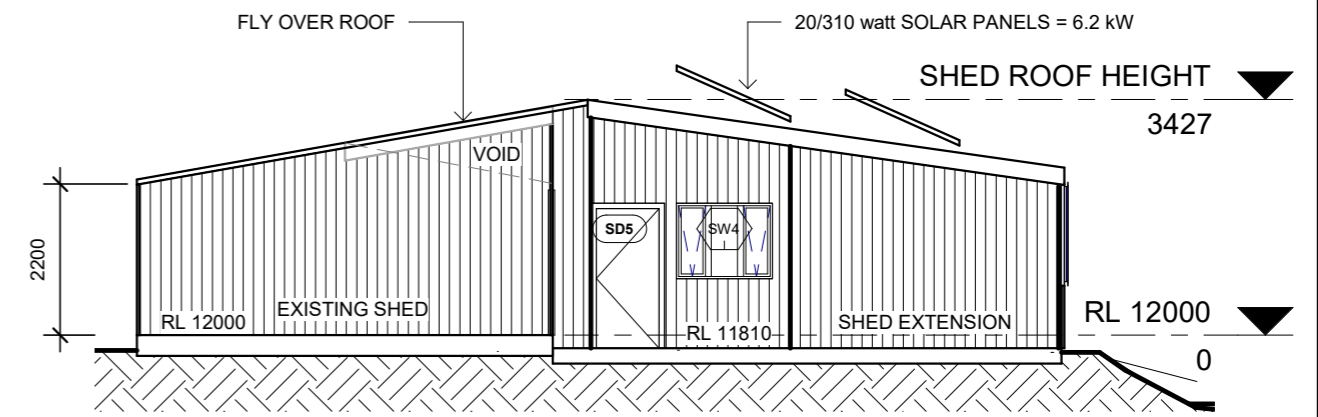
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Project number	148	A5
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	
		1 : 100



3 4 - SHED ROOF PLAN
1 : 100



2 SHED WC & PANEL LIFT & TILT DOOR
1 : 100



1 SHED REAR EXIT DOOR
1 : 100

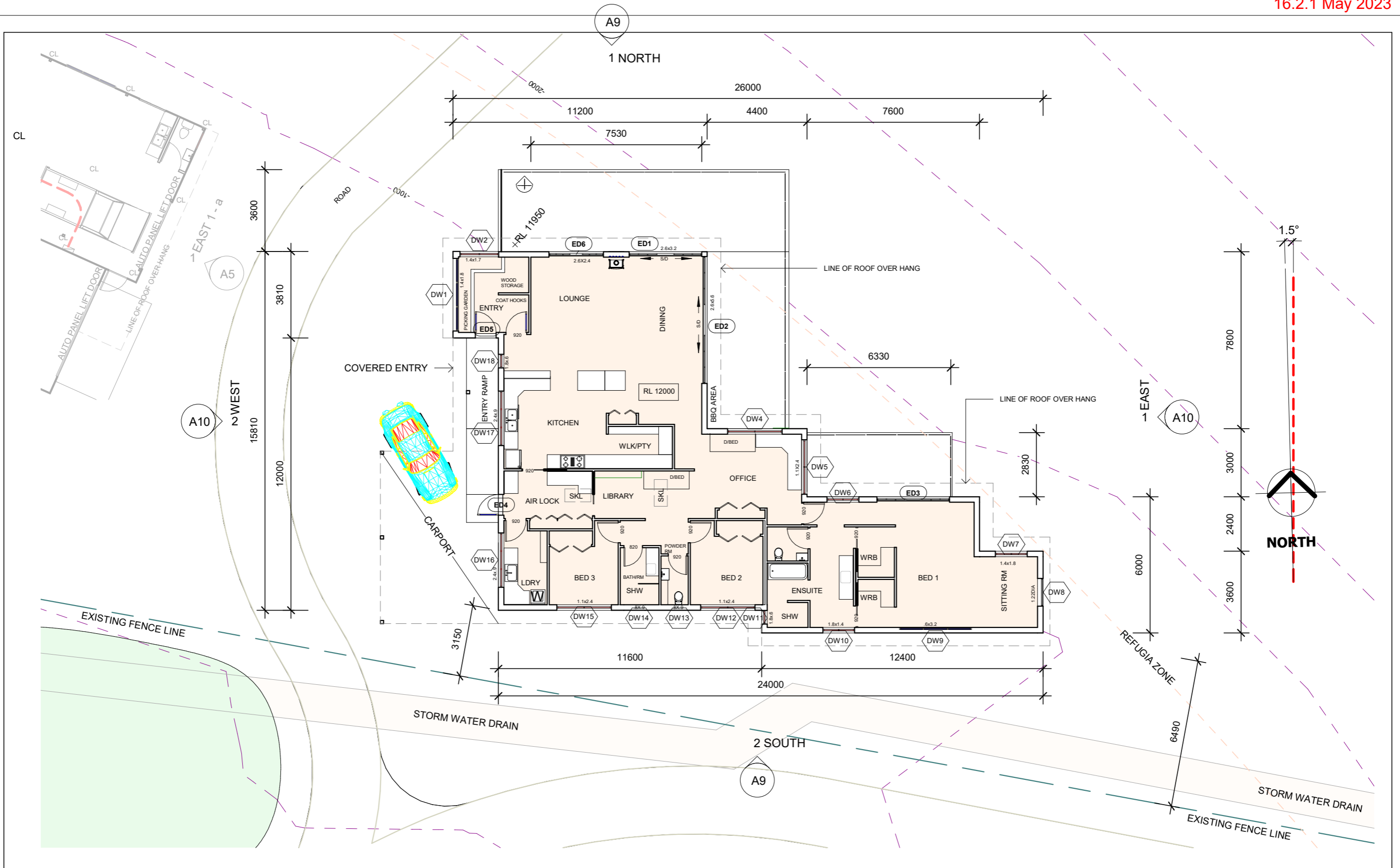


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No.	Description	Date

Jubb Stoney
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PROPOSED SHED ROOF PLAN & SHED SECTIONS		
Project number	148	A6
Date	1/3/2023	
Drawn by	BJ	Scale 1 : 100
Checked by	Checker	

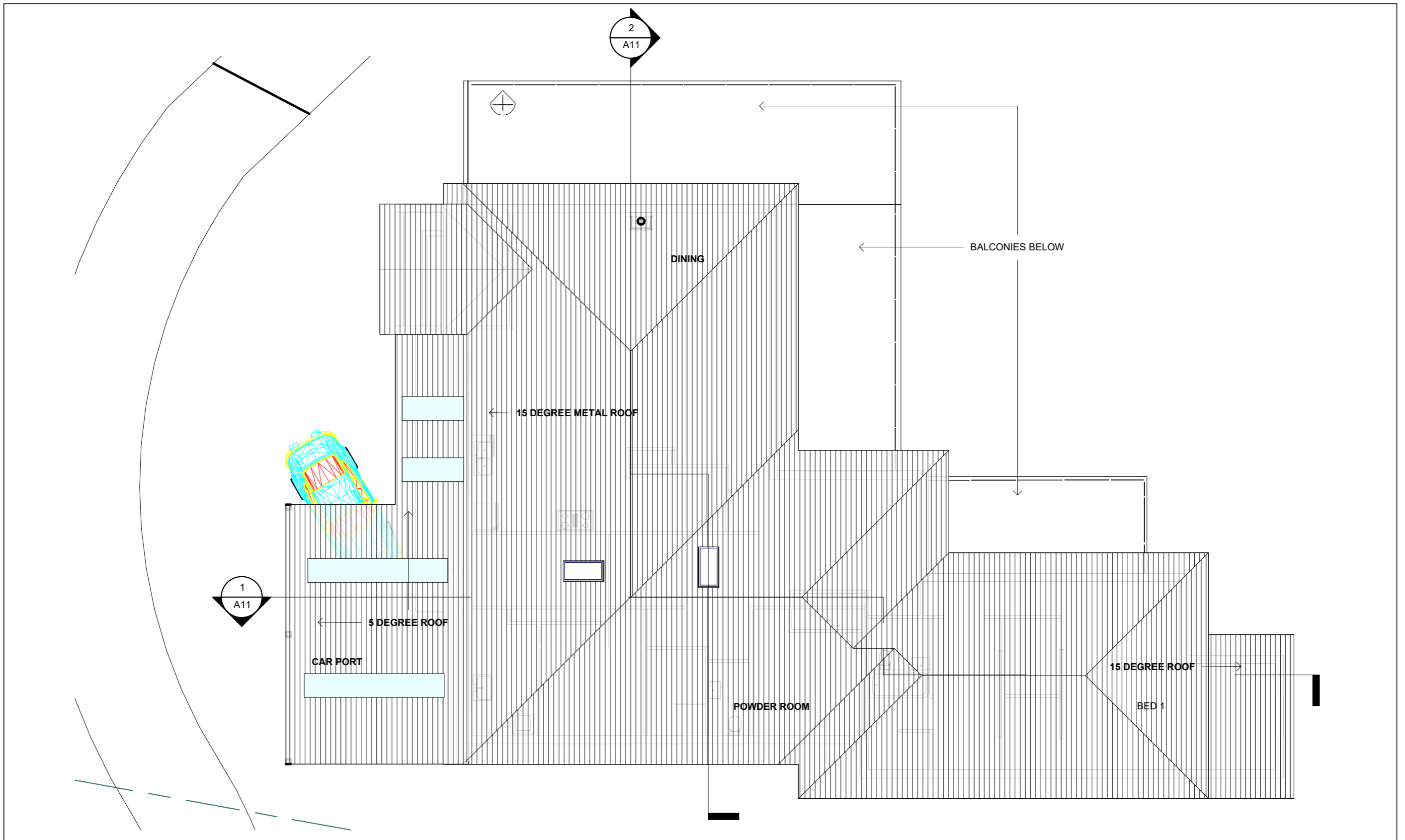


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No.	Description	Date

Jubb Stoney
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 Jubb Stoney House

PROPOSED HOUSE FLOOR PLAN		
Project number	148	A7
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	
		1 : 150



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No.	Description	Date

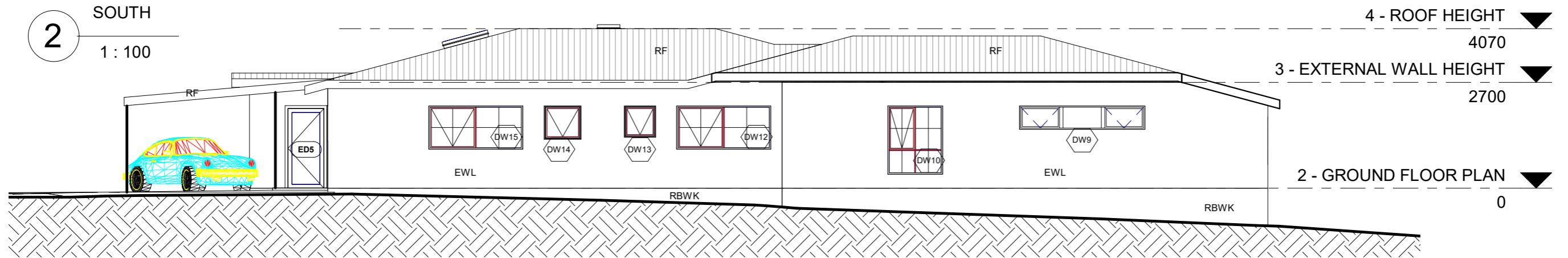
Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

PROPOSED ROOF OVER WALLS OF DWELLING		
Project number	148	A8
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	
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SCHEDULE FOR EXTERNAL MATERIAL COLOURS & BUILDING FABRIC

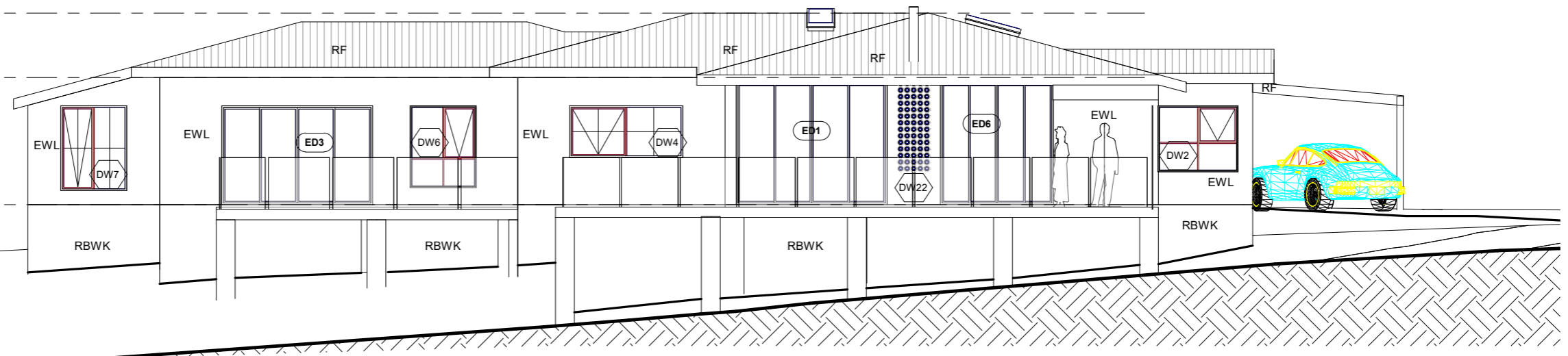
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BL	BALCONIES, H3 TIMBER, MODWOOD COLOUR TBA, ALL SS OR GAL FIXINGS, SS BOOTS & STAPS, GAL BRACKETS AND BOLTS, ALL TO BAL 19 REQUIREMENTS, 12MM BALUSTRADE TOUGHENED GLASS ON SS SPRIGETS. 25MM SS TOP RAIL	SW	SHED WALLS MULTICLAD® FROM LYSARGHT SHEDS. BUILDING INSUALTION BRADFORD THERMOSEAL BREATHER. COLOUR MONUMENT MATT FINISH. EXISTING WALLS PAINTED TO MATCH MONUMENT MATT FINISH
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WD & TR	WINDOWS & DOORS TRIMS. DOUBLE GLAZED TO THE ENERGY RATERS SPECIFICATIONS. COLOUR-EVENNG HAZE		

2 SOUTH
1 : 100



4 - ROOF HEIGHT
4070
3 - EXTERNAL WALL HEIGHT
2700
2 - GROUND FLOOR PLAN
0

1 NORTH
1 : 100



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No.	Description	Date

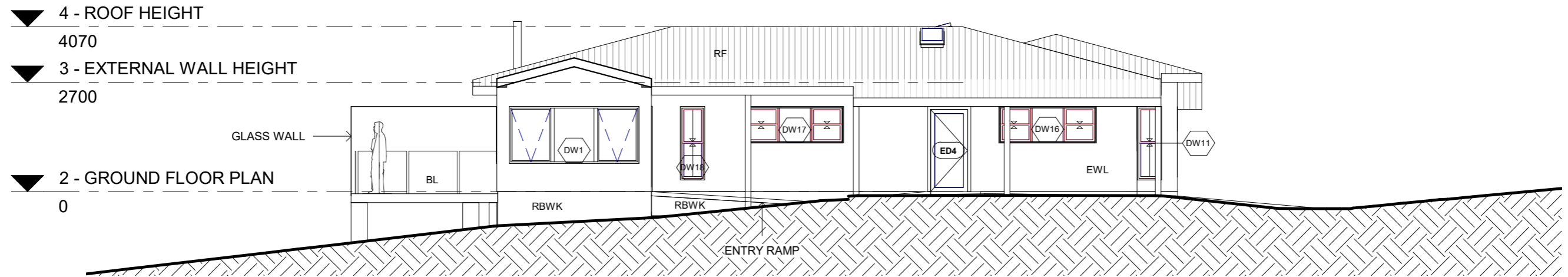
Jubb Stoney
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Jubb Stoney House

PROPOSED NORTH SOUTH ELEVATIONS

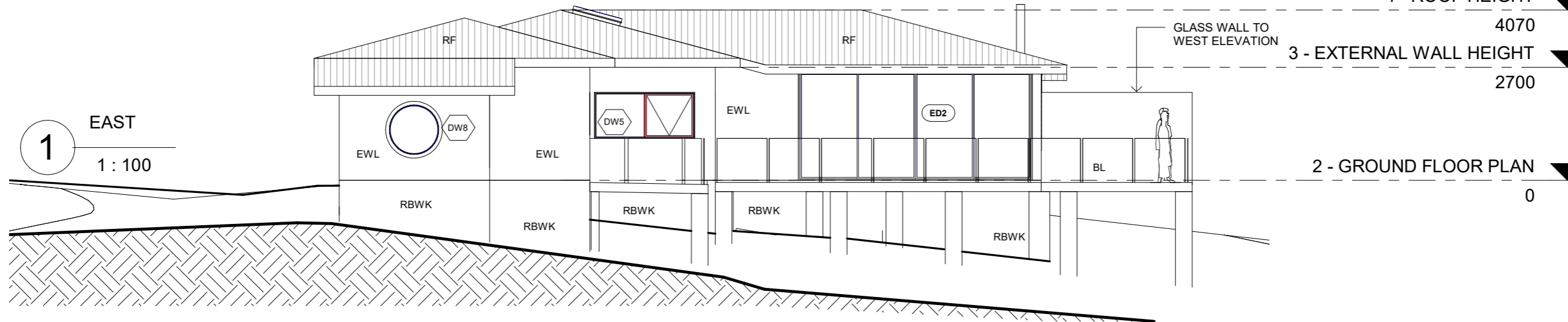
Project number	148	A9
Date	1/3/2023	
Drawn by	BJ	
Checked by	Checker	Scale
		1 : 100

SCHEDULE FOR EXTERNAL MATERIAL COLOURS & BUILDING FABRIC


RBWK	BASE FOOTINGS, 190MM REINFORCED BLOCKWORK. 3.3.5.7 DAMP-PROOF COURSES AND FLASHINGS, MORTAR MIX 1:4. RENDER COLOUR -MONUMENT.	RF	ROOFS, METAL GUTTERS, DOWN PIPES. ROOF - CUSTOM ORB 'ACCENT .48 CORRUGATED IRON FROM LYSAGHT. MONUMENT MATT FINISH. R1.5 ROOF BLANKET, 75X35 MPG 10 BATTENS@ 900 CENETERS, TRUSSES @ 600 CENTERS CEILING INSULATION R4 METAL FASCIA & GUTTERS, TYPE 17 FIXINGS. SKY LIGHTS BY OWNER AS DETAILED, ROOF LIGHTS- LASERLITE® 3000 POLYCARBONATE AS DETAILED COLOUR TBA
BL	BALCONIES, H3 TIMBER, MODWOOD COLOUR TBA, ALL SS OR GAL FIXINGS, SS BOOTS & STAPS, GAL BRACKETS AND BOLTS, ALL TO BAL 19 REQUIREMENTS, 12MM BALUSTRADE TOUGHENED GLASS ON SS SPRIGETS. 25MM SS TOP RAIL	SW	SHED WALLS MULTICLAD® FROM LYSARGHT SHEDS. BUILDING INSUALTION BRADFORD THERMOSEAL BREATHER. COLOUR MONUMENT MATT FINISH. EXISTING WALLS PAINTED TO MATCH MONUMENT MATT FINISH
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WD & TR	WINDOWS & DOORS TRIMS. DOUBLE GLAZED TO THE ENERGY RATERS SPECIFICATIONS. COLOUR-EVENNG HAZE		



2 WEST
1 : 100



1 EAST
1 : 100



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No.	Description	Date

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Jubb Stoney House

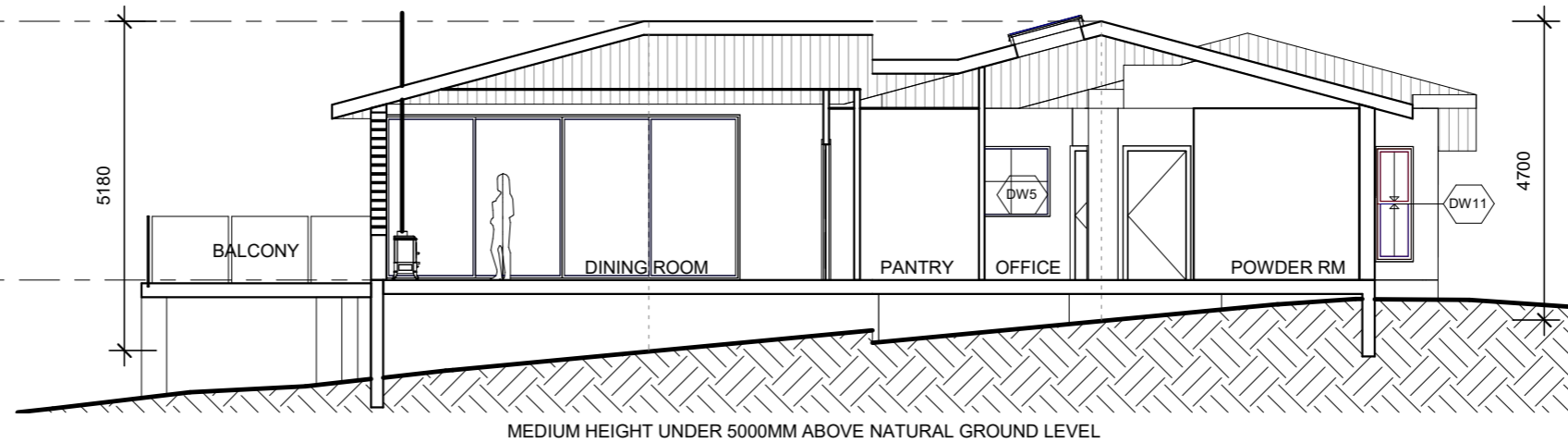
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Project number	148	A10
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	

4 - ROOF HEIGHT

4070

2 - GROUND FLOOR PLAN

0



PN

2

NORTH SOUTH ROOF HEIGHT SECTIONS

1 : 100

4 - ROOF HEIGHT

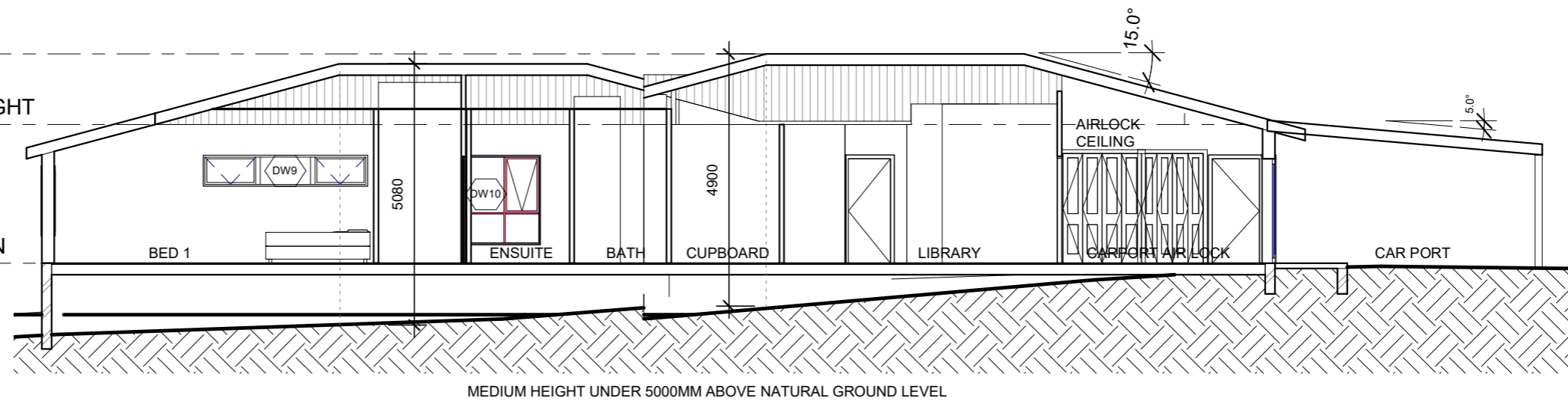
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3 - EXTERNAL WALL HEIGHT

2700

2 - GROUND FLOOR PLAN

0



1

EAST WEST ROOF HEIGHT SECTIONS

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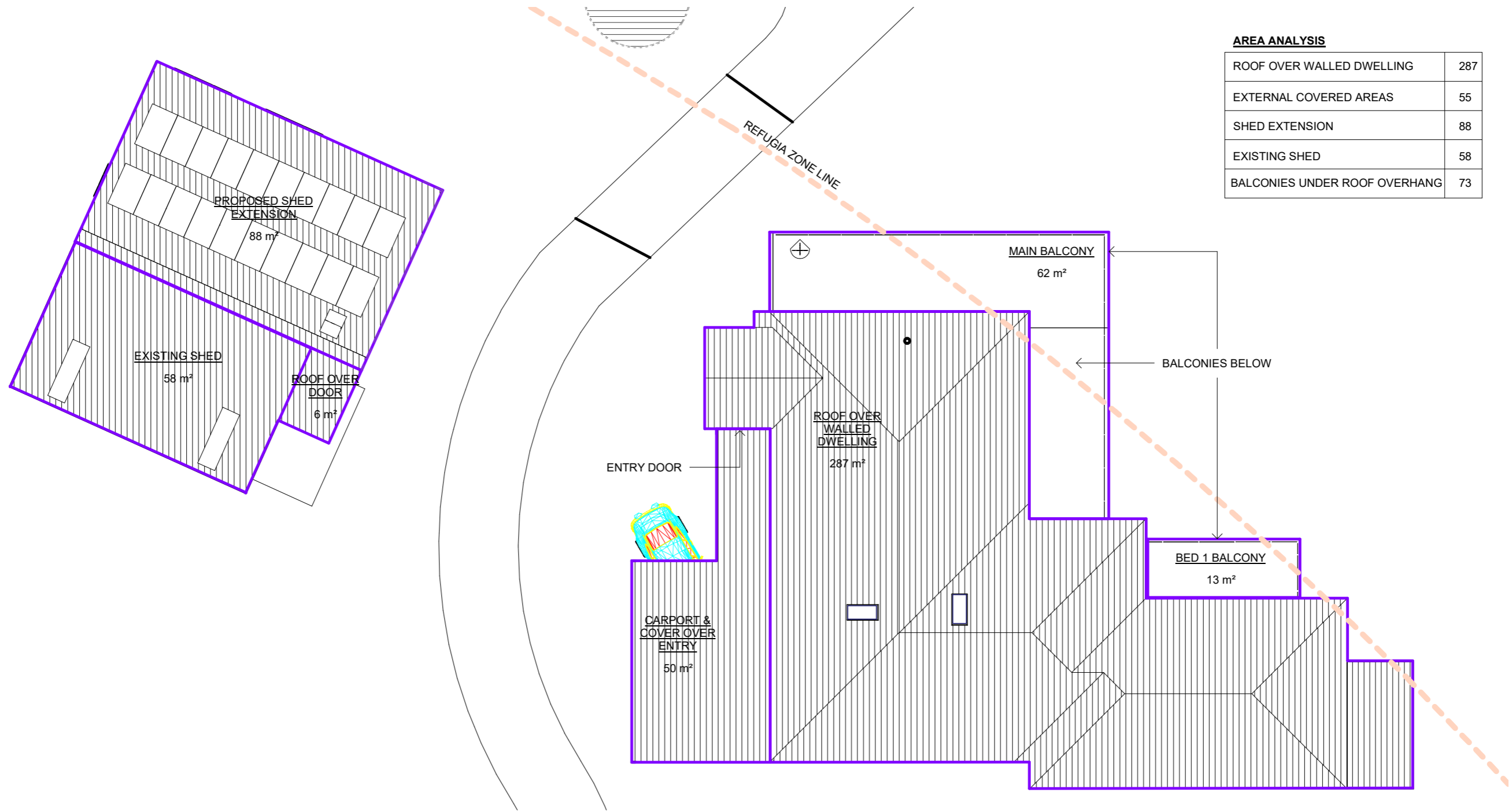
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No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

HOUSE ROOF HEIGHT SECTIONS

Project number	148	A11
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	

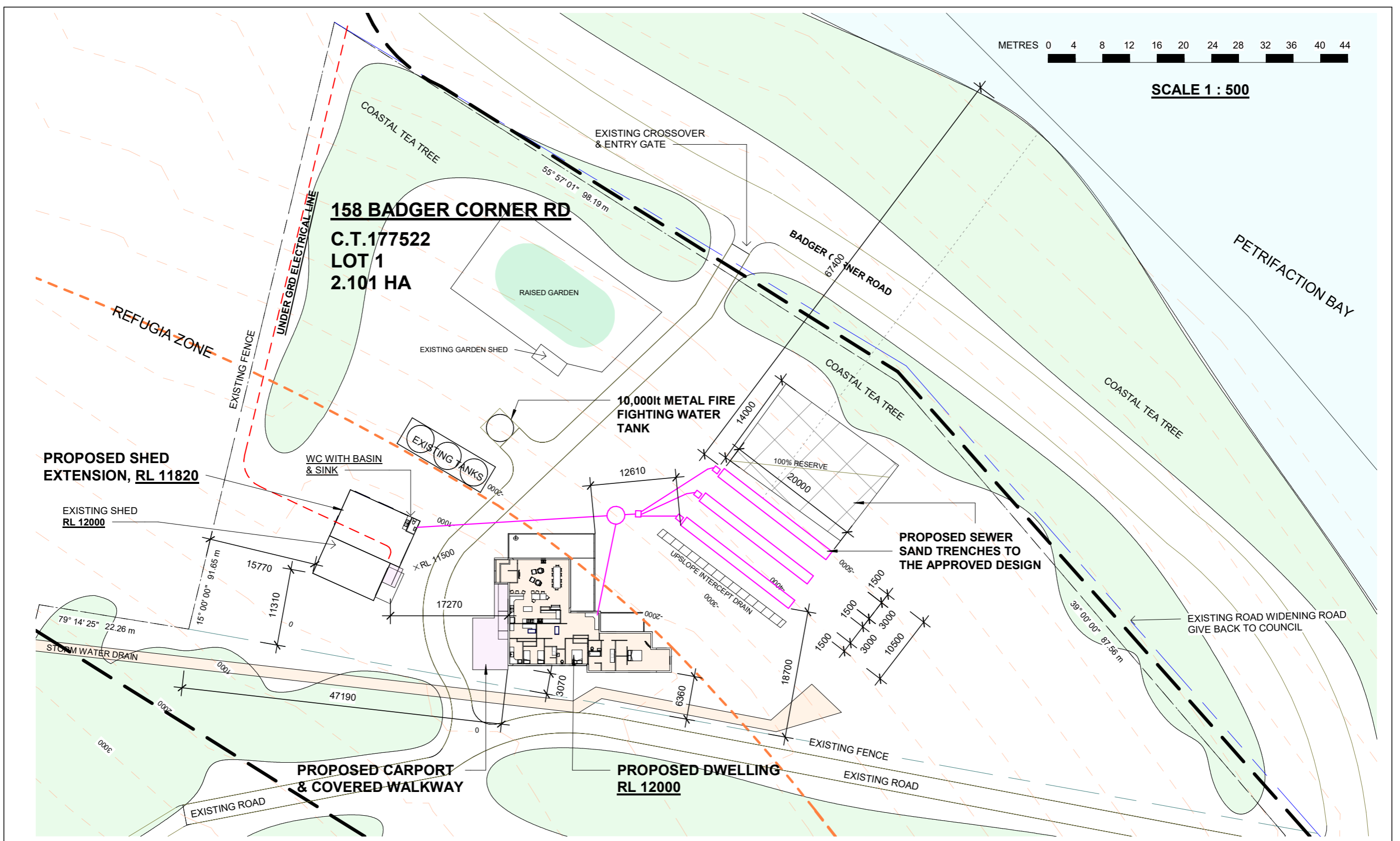


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No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

PROPOSED AREA ANALYSIS		
Project number	148	A12
Date	1/3/2023	
Drawn by	BJ	Scale
Checked by	Checker	
		1 : 150



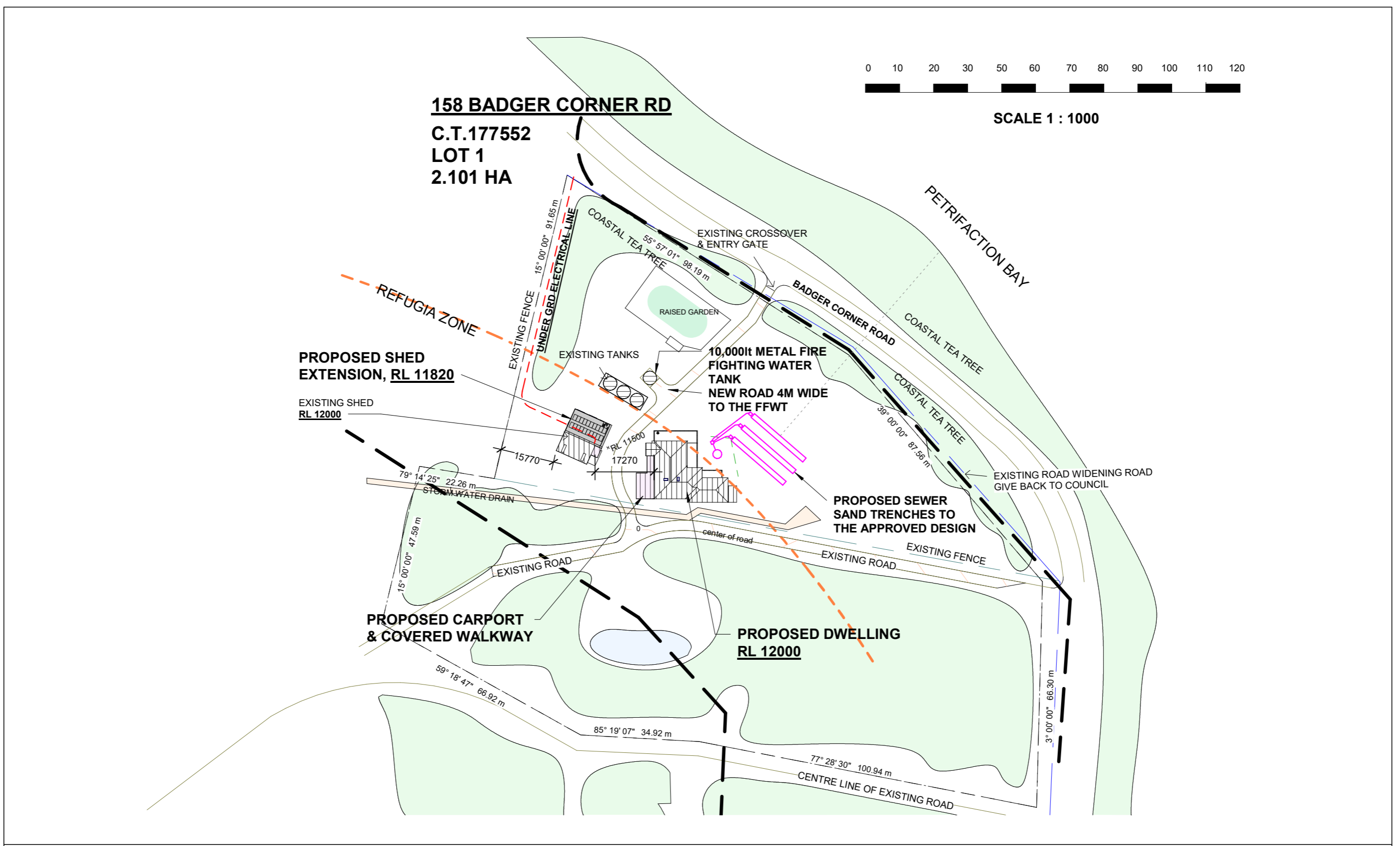
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 MT ELIZA PH 9787 7767
 bill@jubbdesignandbuild.com.au

No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

PROPOSED SEWER PLAN	
Project number	148
Date	1/3/2023
Drawn by	BJ
Checked by	Checker
Scale	1 : 500

A13



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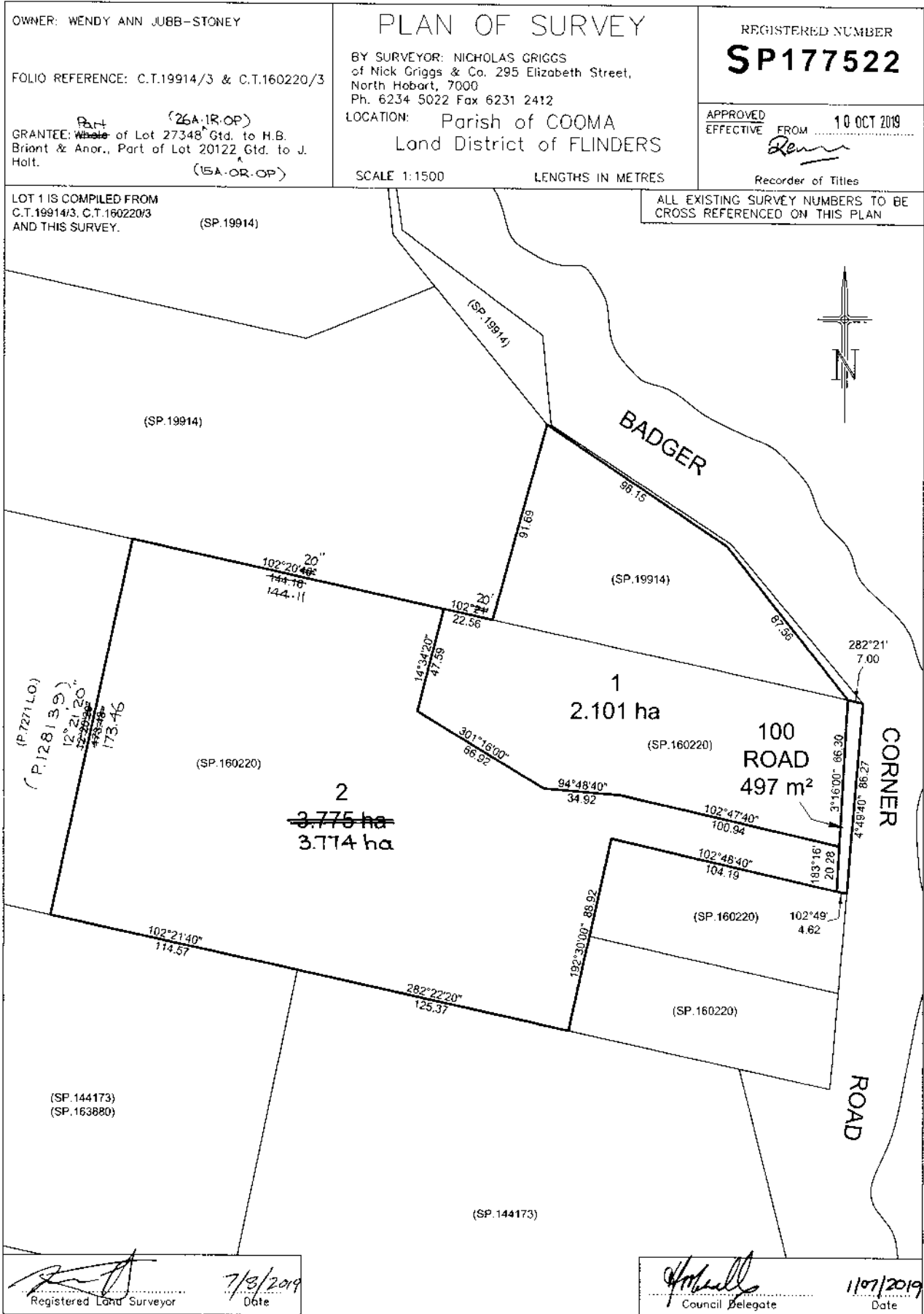
No.	Description	Date

Jubb Stoney
 TOWN PLANNING
 Jubb Stoney House

BAL ASSESSMENT PLAN	
Project number	148
Date	1/3/2023
Drawn by	BJ
Checked by	Checker
Scale	1 : 1000

A14

ATTACHMENT 2. LAND TITLE



SEARCH OF TORRENS TITLE

VOLUME 177522	FOLIO 1
EDITION 1	DATE OF ISSUE 10-Oct-2019

SEARCH DATE : 06-Mar-2023

SEARCH TIME : 05.04 PM

DESCRIPTION OF LAND

Parish of COOMA Land District of FLINDERS
 Lot 1 on Sealed Plan 177522
 Derivation : Part of Lot 27348, (26A-1R-0P) Gtd. to H.B.
 Briant & Anor. and Part of Lot 20122, (15 Acres) Gtd. to J.
 Holt
 Prior CTs 19914/3 and 160220/3

SCHEDULE 1

C217264, M729797 & M766627 WENDY ANN JUBB-STONEY

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 SP177522 FENCING COVENANT in Schedule of Easements
 SP19914 & SP160220 FENCING COVENANT in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP 1775 22

PAGE 1 OF 1 PAGE/S

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

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

Each lot on the plan is subject to:-

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

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

FENCING COVENANT

The Owners of each Lot on the Plan hereby covenant with the Vendor, Wendy Anne Jubb-Stoney that the Vendor shall not be required to fence.

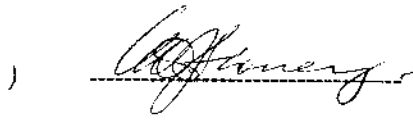
SIGNED by WENDY ANNE JUBB-STONEY

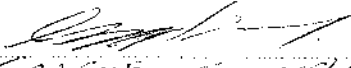
the Registered Proprietor of the land comprised in

Certificate of Title Volume 19914 Folio 3 and

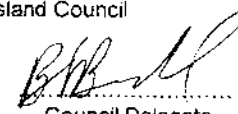
Certificate of Title Volume 160220 Folio 3

in the presence of.



WITNESS SIGNATURE 
 WITNESS NAME WENDY ANNE STONEY
 ADDRESS 50 SIRIUS ST HENGLVA HILLS 3723.
 OCCUPATION FARMER

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Wendy Anne Jubb-Stoney FOLIO REF: Certificates of Title Volume 19914 Folio 3 and Volume 160220 Folio 3 SOLICITOR & REFERENCE: Ritchie & Parker Alfred Green & Co	PLAN SEALED BY: Flinders Island Council DATE: <u>3/10/2019</u> <u>DA2019/011</u> REF NO.  Council Delegate
<p>NOTE: The Council Delegate must sign the Certificate for the purposes of identification.</p>	

ATTACHMENT 3. ONSITE WASTEWATER SYSTEM DESIGN FOR 158 BADGER CORNER ROAD



strata
geoscience and environmental

Onsite Wastewater System Design for

**158 Badger Corner Road
Lady Barron**

March 2023

Important Notes:

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Strata Geoscience and Environmental reserves the right to submit this report the relevant regulatory agencies where it has a responsibility to do so.

1. Introduction

Strata Geoscience and Environmental Pty Ltd was commissioned to perform a limited scope geotechnical and environmental investigation for:

Client and Site Details	
Client Name	Graham Stoney
Site Address	158 Badger Corner Road Lady Barron
Proposed Development	New system

The investigation was reference to AS1547-2012 Onsite Domestic Wastewater Management and also follows the principles outlined in AS1726-1993 Geotechnical Site Investigations.

2. Summary of Investigation

The investigation's key findings were:

SSE and Design Outcomes	
Key Site and Soil Limitations to Wastewater System Design	Variable soils, rock
Summary of Proposed System Specification	Primary Treatment: Septic Tank Secondary Treatment: Trench Land Application: Trench

3. Project Specific Criteria

Site plans (if available) are presented in Appendix 1.

4. Investigation

Please refer to Appendix 4 for the results of field investigation including bore logs and other relevant data.

5. Interpretation

The site is underlain by variable sands, developing from inferred Devonian aged Granite.

With respect to the sustainability of long term disposal of wastewater within the site boundaries the following comments are made:

Soils – Natural soils will have a low to moderate permeability for the acceptance of wastewater flows and will show a moderate to high cation exchange complex for the absorption of nutrients from effluent.

Environmental Sensitivities – The development area is gently sloping with nearest surface water body located approximately 100+ m down slope of the proposed residence. Groundwater was not intersected throughout geotechnical investigation and is anticipated to be several meters beneath the existing ground surface.

Climate - the nearest weather station with long term data is the Whitemark Station with a mean annual rainfall of 715.4 mm (BOM 2022) and no evaporation data.

Title Searches – Searches of the Land Title did not show any easements or right of ways which have affected the positioning of the wastewater land application system.

Given the above, the general environmental and public health risk associated with the site is regarded as low provided adequate setback distances and other controls are adopted. Please refer to specific design notes and diagrams contained within this report for further information regarding the issues raised above.

6. Onsite Wastewater Flow and Land Application Area Modelling

6.1 Site and Soil Considerations

Results of the SSE (Appendix 4) found the following typical soil profile on site:

	Topsoils (A1-A3)	Subsoils (B1-B3)
Description	SAND (SP/SW/SM)	CLAYEY SANDS (SC)/SANDY CLAYS (CL)
Soil Category (AS1547-2011)	1	5
Indicative Permeability (m/d)	2.0	0.5
Recommended DIR (mm/d)/DLR (L/D)	30	8
pH	6.1	5.1
EC	2.1	4.8
Emmerson Class	8	5

6.2 Risk Management of Site and Soil Constraints

Key site and soil constraints as well as their risk management:

Site/Soil Constraint	Risk Mitigation Measure
Proximal sensitive receiving environments	<ul style="list-style-type: none"> Appropriate setbacks
Runoff	<ul style="list-style-type: none"> Appropriate scaling of trench

6.3 Proposed Wastewater System Concept Design

It is therefore recommended that the following system be adopted:

Treatment Train Component	Proposed Concept Design
Primary Treatment	<ul style="list-style-type: none"> • Septic tank
Secondary Treatment	<ul style="list-style-type: none"> • Trench
LAA Design	<ul style="list-style-type: none"> • Trench

6.4 Effluent Flow and Land Application Area Modelling

The development proposal is for the construction of a new three bedroom equivalent house on tank water with standard water savings fixtures. Therefore under AS1547-2012 the calculated effluent flows and required disposal area is as follows:

Wastewater System Modelling – Main Dwelling	
Number of Proposed Bedrooms	3
Number of Equivalent Persons	5
Water Source (Tank/Mains)	Tank
Daily Loading (L/per person/D)	120
Total Daily Loading (L/D)	600
Adopted Amended Soil Category (AS1547-2012)*	5
Indicative Permeability (m/d)	0.5
Adopted Amended DLR/DIR (mm/d OR L/m ² /d)*	7
Required LAA (m ²)	85

The absorption area could be catered for by three 20m x 1.5 m gravity dosed trenches installed as shown on the site plan with adequate room for a 100%

reserve if required (see Appendix 1). Refer to Appendix 2/3 for more detailed calculations as well as specific design and construction notes.

6.5 System Specification

The system has the following specification (see Appendix 1-3 for further details):

- Min DN100 gravity fed sewer pipe
- Min 3000L Dual Purpose Septic Tank (with outlet filter)
- Min three 20 m x 1.5 m trench dosed with three drainwaves
- Provision for 100% reserve area (must remain free from development)

6.6 Performance Requirements

Nutrient, bacterial and viral reduction performance should be inline with the prescriptions of AS1547-2012 for primary treated effluent. It is noteworthy that the high CEC of the soils plus distances from ephemeral drainage lines will all serve to further reduce the risk of residual nutrients, bacterial or viruses entering any waterway.

6.7 Management Requirements

It is imperative that regular servicing of the treatment unit compliant with the prescriptions of the manufacturer and Council permit occur.

To ensure that the treatment system functions adequately and provides effective treatment and disposal of effluent over its design life, asset owners have the following responsibilities:

- Suitably qualified maintenance contractors must be engaged to service the system, as required by Council under the approval to operate.
- Keep as much fat and oil out of the system as possible; and
- Conserve water.

To ensure that the land application area (LAA) functions adequately and provides effective treatment and disposal of effluent over its design life, asset owners have the following responsibilities:

- LAA should be checked regularly to ensure that effluent is draining freely, including flushing of lines and cleaning of inline filters (if fitted).
- All vehicles, livestock and large trees should be excluded from around the irrigation area.
- Low sodium/phosphorous based detergents should be used to increase the service life of irrigation area.
- Regularly harvest (mow) vegetation within the LAA and remove this to maximise uptake of water and nutrients;
- Not to erect any structures over the LAA;
- Ensure that the LAA is kept level by filling any depressions with good quality topsoil (not clay).

Excessive surface dampness, smell or growth of vegetation around the LAA may indicate sub-optimal performance and professional advice should be sort.

7. Conclusions and Further Recommendations

In conclusion the following comments and recommendations are made:

- The maximum wastewater flow rate (MWWF) modelling conducted in this report shows that the generated flows from the main dwelling and auxiliary units are likely to be no more than 600 L/day respectively
- Modelled flows will require a land application area comprising 90 m². Such flows should be treated to primary levels through trenches.
- It is likely that peak flows associated with the modelled development should be within the buffering capacity of proposed system both in terms of the system sizing as well as for their acceptance into the disposal area if the above recommendations are adopted.
- If the hydraulic capacity of soils underlying disposal areas is exceeded by effluent water flows, the disposal area has the capacity to be increased by up to 100%.
- **If the prescriptions of this report are followed the likely human and environmental health risks associated with effluent disposal for the proposed development is rated as low.**



S Nielsen MEngSc CPSS-2
Director
Strata Geoscience and Environmental Pty Ltd
E:sven@strataconsulting.com.au



8. References

- AS1726-1993- Geotechnical Site Investigations
- AS 1547-2012 Onsite Wastewater Disposal
- Bureau of Meteorology Website- Monthly Climate Statistics

Appendix 1 Detailed Wastewater Design Calculations

Wastewater Loading Certificate* - Main Dwelling	
System Capacity	5 EP at 120L/person/day = 600 L/D
Design Summary	
<ul style="list-style-type: none"> • Effluent Quality 	Primary
<ul style="list-style-type: none"> • Adopted Soil category 	5
<ul style="list-style-type: none"> • Amended Adopted Soil Category 	NA
<ul style="list-style-type: none"> • Adopted DLR/DIR (mm/d OR L/m²/d) 	7
<ul style="list-style-type: none"> • LAA Design 	Trenches
<ul style="list-style-type: none"> • Primary LAA Requirement 	90 m ²
<ul style="list-style-type: none"> • Reserve Area 	Min 100% reserve LAA must be maintained in an undeveloped state near the primary system as identified on the site plan
Fixtures	Assumes Std Water saving fixtures inc 6/3L dual flush toilets, aerator forccets, Washing/dishwashing machines with min WELS rating 4.5 star
Consequences of Variation in Effluent Flows	
<ul style="list-style-type: none"> • High Flows 	The system should be capable of buffering against flows of up to 10% above modelled in a 24 hr period. System not rated for spa/bath installation.
<ul style="list-style-type: none"> • Low Flows 	Should not affect system performance
Consequences of Variation in Effluent Quality	Residence to avoid the installation of sink disposal systems (eg "sinkerators"), or the addition of large amounts of household cleaning products or other solvents. These can overload system BOD or affect effluent treatment by system biota.
Consequences of Lack of Maintenance and Monitoring Attention	<p>Owners should maintain the system in compliance with Home Owners Manual.</p> <p>All livestock, vehicles and persons to be excluded from the LAA.</p> <p>Failure to ensure the above may lead to infection of waterways, bores or the spread of disease, as well as production of foul odours, attraction of pests and excessive weed growth.</p>

Septic Trench Design and Construction Notes

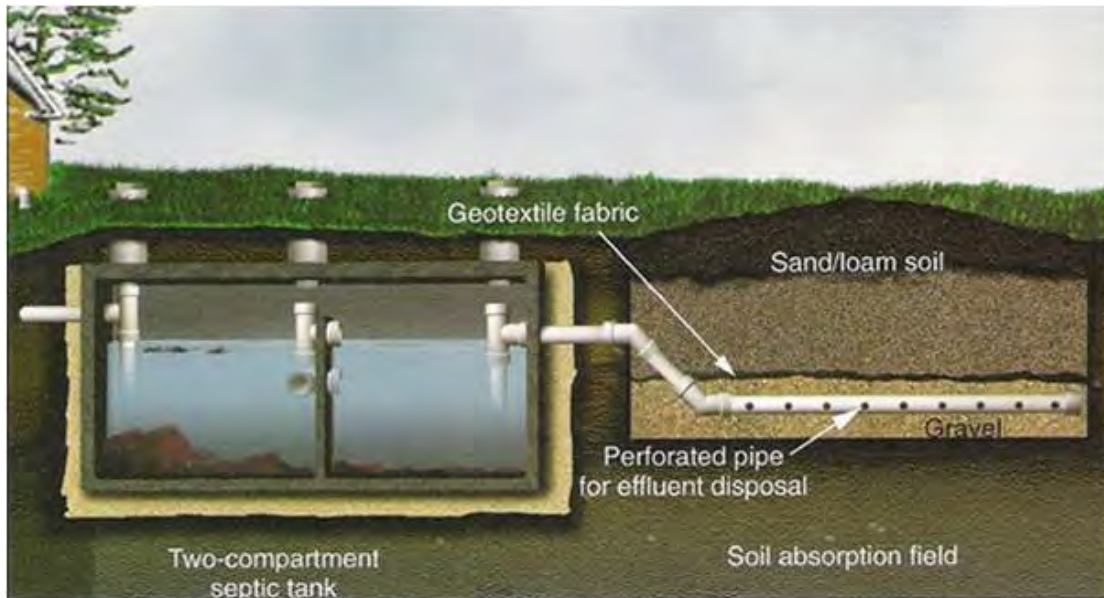


Figure 1 Septic Tank and Trench cross section

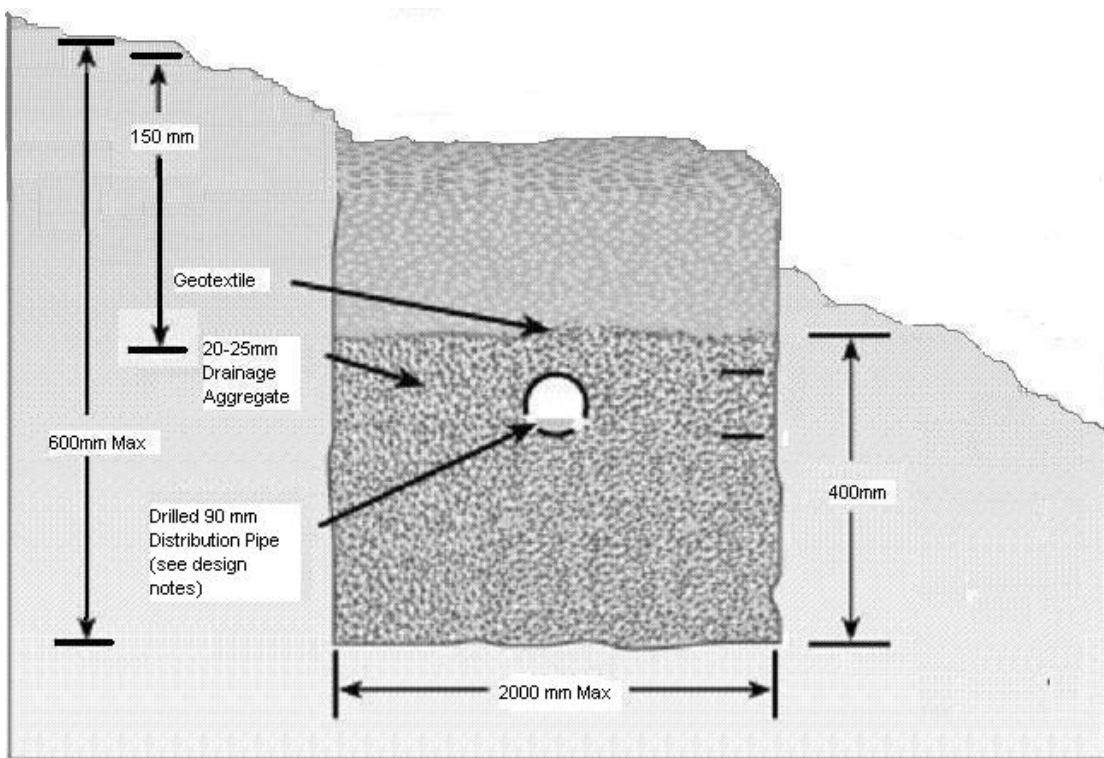


Figure 2 Septic Trench cross section showing key dimensions

Septic Tank Installation

1. Septic Tanks should be installed in firm ground and/or on a uniform layer of sand of minimum thickness 100mm.
2. Septic Tanks should be surrounded by sand or compacted soil by watering and tamping to the firmness of the surrounding soil.
3. The influent pipe should be installed with a minimum grade of 1.65% or 1 in 60.
4. It is recommended that septic tanks are installed a minimum of 3 meters from foundations and for systems utilising a pump well, away from bedrooms.
5. Fiberglass or plastic tanks set in urban or Aboriginal Housing in Remote Area Communities shall be fitted with concrete lids or collars.
6. All vehicles and livestock should be excluded from septic tank areas.

Septic Trench Design and Construction Notes (cont)

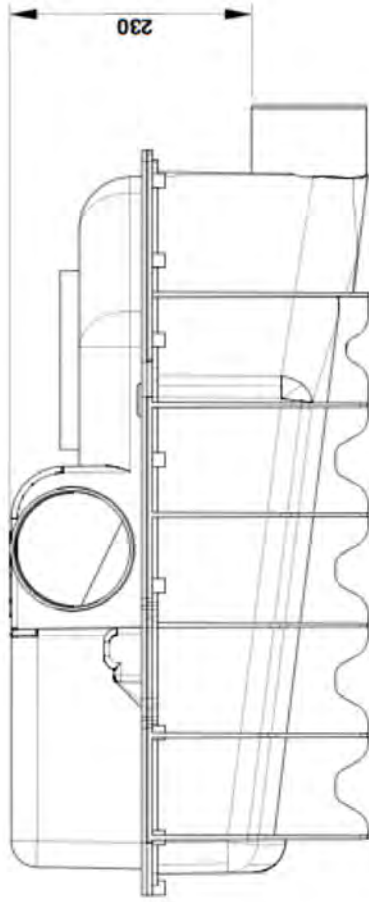
1. Each trench has the dimensions of 20m X 1.5m X 0.6 m.
2. There are three trench in total as located on site plan giving a total trench area of 90 m² (See Appendix 1)
3. The base of the trench **MUST** be excavated evenly and level. In clay soils smearing of walls and floors of bed **MUST** be avoided.
4. Gypsum **MUST** be added to the base of the excavated trench at a rate of 1Kg/5m². This should be applied directly to the soil and **SHOULD NOT** be tilled in.
5. The lower 400mm is to be filled with 20-25mm aggregate.
6. 100mm PVC pipes **with a single 8mm de-burred hole drilled at 500mm centres** along the bottom of the pipes to be placed on top of aggregate as shown.
7. Each pipe must be dosed via a “**Drainwave**” dosing box (specs overleaf). These devices are stand-alone units which should be plumbed to ensure the outlet is level with the trench pipe. Elbows, t-sections or flow restrictors **MUST NOT** be used as this will inhibit the correct functioning of this device.
8. The distribution pipe **MUST** be level to ensure flow of effluent to all areas of the trench. Failure to ensure this may cause preferential overloading of the trench and the potential for bed overflow.
9. A further 50mm of aggregate can be added around/over the grid before overlaying with geo-textile to prevent soil from clogging gravels/lateral slots. For sandy soils the sides of the trench should also be lined.
10. Backfilling of the bed to 50 - 75mm above original ground surface level with endemic topsoil (if a sand/loam) or imported loam should proceed. Do not mechanically compact this layer.
11. An inspection outlet and a “**Drainwave**” or similar device should be placed on each distribution pipe.
12. Slight adjustments to the location of Septic Tank/Flow Diverter/Trenches are permitted to achieve correct fall to levelled trench bases.
13. Vehicles and livestock should be excluded from trench area.

1 2 3 4 5 6 7 8

DRAINWAVE ISOMETRIC VIEW

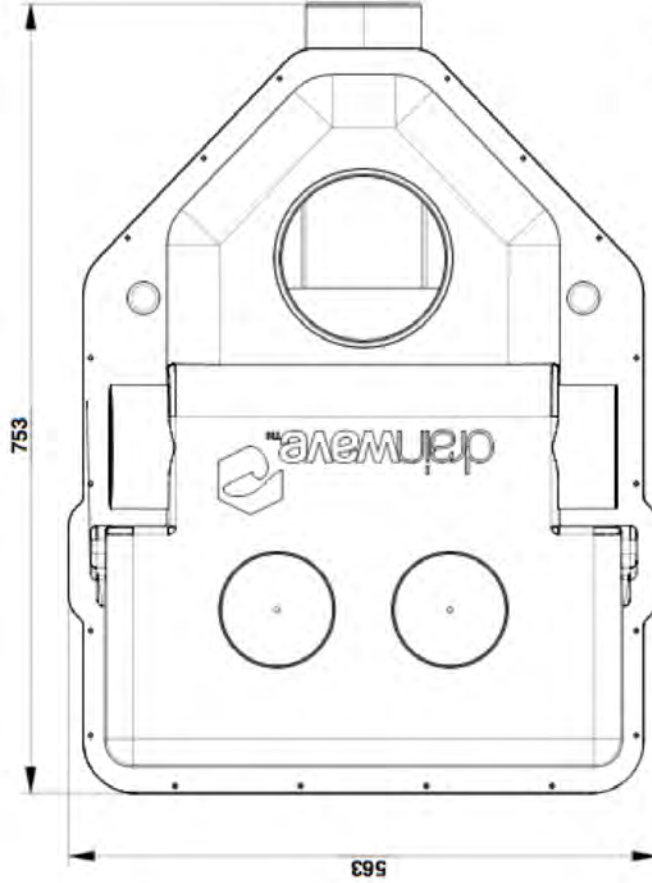


A



B

C



D

E

F

ALL DIMENSIONS IN mm

ALL INTELLECTUAL PROPERTY REMAINS WITH DUCANE RESEARCH AND DEVELOPMENT PTY LTD

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Drawn by	Checked by	Approved by - date	Date
D FISHER		0600-08	03/12/2009
		File name	Scale
		0600-08	1 / 5

DRAINWAVE 9 L

Edition	Sheet
REV01	1

1 2 3 4 5 6 7 8



Appendix 3 Site and Soil Evaluation

Table 3 Site Features	
Climate	The nearest weather station with long term data is the Whitemark Station with a mean annual rainfall of 715 mm (BOM 2022) and no evaporation data. The region has a near Mediterranean climate with maximum temperatures and minimum rainfall in the summer.
Exposure	The site is relatively unshielded with exposure to winds which predominate from the NW/SW directions
Vegetation	Grass
Landform	Slope
Slope	Slight slopes
Fill	No fill evident
Rocks and Rock Outcrops	None
Erosion Potential	None known
Surface Water	100m+
Flood Potential	<1:100 AEP
Stormwater Run-on and Upslope Seepage	The dwelling and land application areas are expected to receive on minor amounts of stormwater run-on or groundwater recharge.
Groundwater	No groundwater was encountered throughout site reconnaissance and is likely to be several meters under the ground surface contained within rock.
Site Drainage and Subsurface Drainage	The site receives minimal run on and does not show signs of springs or other areas of ephemeral subsurface water retention. Given clay subsoils perched watertable may exist in some areas of the site
Recommended Buffer Distances	Given the significant land area, all buffer distances are achievable.
Available Land Application Area	There is surplus space to land application area requirements (including reserves).



Appendix 4 Terms and Conditions

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These Terms and Conditions apply to any services provided to you ("the Client") by Strata Geoscience and Environmental Pty Ltd ("Strata"). By continuing to instruct Strata to act after receiving the Terms and Conditions or by using this report and its findings for design and/or permit application processes and not objecting to any of the Terms and Conditions the Client agrees to be bound by these Terms and Conditions, and any other terms and conditions supplied by Strata from time to time at Strata's sole and absolute discretion. The scope of the services provided to the Client by Strata is limited to the services and specified purpose agreed between Strata and the Client and set out in the correspondence to which this document is enclosed or annexed ("the Services"). Strata does not purport to advise beyond the Services.

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The Client is responsible for the provision of all legal, survey and other particulars concerning the site on which Strata is providing the Services, including particulars of existing structures and services and features for the site and for adjoining sites and structures. The Client is also responsible for the provision of specialised services not provided by Strata. If Strata obtains these particulars or specialised services on the instruction of the Client, Strata does so as agent of the Client and at the Client's expense. Strata is not obliged to confirm the accuracy and completeness of information supplied by the Client or any third party service provider. The Client is responsible for the accuracy and completeness of all particulars or services provided by the Client or obtained on the Client's behalf. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person or entity resulting from the failure of the Client or third party to provide accurate and complete information. In the event additional information becomes available to the Client, the Client must inform Strata in writing of that information as soon as possible. Further advice will be provided at the Client's cost. Any report is prepared on the assumption that the instructions and information supplied to Strata has been provided in good faith and is all of the information relevant to the provision of the Services by Strata. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if Strata has been supplied with insufficient, incorrect, incomplete, false or misleading information.

Integrity

Any report provided by Strata presents the findings of the site assessment. While all reasonable care is taken when conducting site investigations and reporting to the Client, Strata does not warrant that the information contained in any report is free from errors or omissions. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from errors in a report. Any report should be read in its entirety, inclusive of any summary and annexures. Strata does not accept any responsibility where part of any report is relied upon without reference to the full report.

Project Specific Criteria

Any report provided by Strata will be prepared on the basis of unique project development plans which apply only to the site that is being investigated. Reports provided by Strata do not apply to any project other than that originally specified by the Client to Strata. The Report must not be used or relied upon if any changes to the project are made. The Client should engage Strata to further advise on the effect of any change to the project. Further advice will be provided at the Client's cost. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever where any change to the project is made without obtaining a further written report from Strata. Changes to the project may include, but are not limited to, changes to the investigated site or neighbouring sites, for instance, variation of the location of proposed building envelopes/footprints, changes to building design which may impact upon building settlement or slope stability, or changes to earthworks, including removal (site cutting) or deposition of sediments or rock from the site.

Classification to AS2870-2011

It must be emphasised that the site classification to AS2870-2011 and recommendations referred to in this report are based solely on the observed soil profile at the time of the investigation for this report and account has been taken of Clause 2.1.1 of AS2870 - 2011. Other abnormal moisture conditions as defined in AS2870 - 2011 Clause 1.3.3 (a) (b) (c) and (d) may need to be considered in the design of the structure. Without designing for the possibility of all abnormal moisture conditions as defined in Clause 1.3.3, distresses will occur and may result in non "acceptable probabilities of serviceability and safety of the building during its design life", as defined in AS2870 - 2011, Clause 1.3.1. Furthermore the classification is preliminary in nature and needs verification at the founding surface inspection phase. The classification may be changed at this time based upon the nature of the founding surface over the entire footprint of the project area. Any costs associated with a change in the site classification are to be incurred by the client. Furthermore any costs associated with delayed works associated with a founding surface inspection or a change in classification are to be borne by the client. Where founding surface inspections are not commissioned the classifications contained within this report are void. Classification is based upon a range of expected ground surface movement as indicated in AS2870-2011. Where the range of movement exceeds the stipulations for the nominated classification Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person.

Slope Instability Risks

Where comment, modelling or treatment options are suggested to limit the risk of slope instability Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from actual slope instability or mass movement over the site at any point over the design life of any structures or neighbouring structures.

Subsurface Variations with Time

Any report provided by Strata is based upon subsurface conditions encountered at the time of the investigation. Conditions can and do change significantly and unexpectedly over a short period of time. For example groundwater levels may fluctuate over time, affecting

Wastewater System Design 158 Badger Corner Road Lady Barron

latent soil bearing capacity and ex-situ/insitu fill sediments may be placed/removed from the site. Changes to the subsurface conditions that were encountered at the time of the investigation void all recommendations made by Strata in any report. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any change to the subsurface conditions that were encountered at the time of the investigation. In the event of a delay in the commencement of a project or if additional information becomes available to the Client about a change in conditions becomes available to the Client, the Client should engage Strata to make a further investigation to ensure that the conditions initially encountered still exist. Further advice will be provided at the Client's cost. Without limiting the generality of the above statement, Strata does not accept liability where any report is relied upon after three months from the date of the report, (unless otherwise provided in the report or required by the Australian Standard which the report purports to comply with), or the date when the Client becomes aware of any change in condition. Any report should be reviewed regularly to ensure that it continues to be accurate and further advice requested from Strata where applicable.

Interpretation

Site investigation identifies subsurface conditions only at the discrete points of geotechnical drilling, and at the time of drilling. All data received from the geotechnical drilling is interpreted to report to the Client about overall site conditions as well as their anticipated impact upon the specific project. Actual site conditions may vary from those inferred to exist as it is virtually impossible to provide a definitive subsurface profile which accounts for all the possible variability inherent in earth materials. This is particularly pertinent to some weathered sedimentary geologies or colluvial/alluvial clast deposits which may show significant variability in depth to refusal over a development area. Rock incongruities such as joints, dips or faults may also result in subsurface variability. Soil depths and composition can vary due to natural and anthropogenic processes. Variability may lead to differences between the design depth of bored/driven piers compared with the actual depth of individual piers constructed onsite. It may also affect the founding depth of conventional strip, pier and beam or slab footings, which may result in increased costs associated with excavation (particularly of rock) or materials costs of foundations. Founding surface inspections should be commissioned by the Client prior to foundation construction to verify the results of initial site characterisation and failure to insure this will void the classifications and recommendations contained within this report. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any variation from the site conditions inferred to exist.

Strata is not responsible for the interpretation of site data or report findings by other parties, including parties involved in the design and construction process. The Client must seek advice from Strata about the interpretation of the site data or report.

Report Recommendations

Any report recommendations provided by Strata are only preliminary. A report is based upon the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete. Where variations in conditions are encountered, Strata should be engaged to provide further advice. Further advice will be provided at the Client's cost. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if the results of selective point sampling are not indicative of actual conditions throughout an area or if the Client becomes aware of variations in conditions and does not engage Strata for further advice.

Geo-environmental Considerations

Where onsite wastewater site investigation and land application system designs are provided by Strata, reasonable effort will be made to minimise environmental and public health risks associated with the disposal of effluent within site boundaries with respect to relevant Australian guidelines and industry best practise at the time of investigation. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from:

- (i) changes to either the project or site conditions that affect the onsite wastewater land application system's ability to safely dispose of modelled wastewater flows; or
- (ii) seepage, pollution or contamination or the cost of removing, nullifying or clearing up seepage, polluting or contaminating substances; or
- (iii) poor system performance where septic tanks have not been de-sludged at maximum intervals of 3 years or AWTs systems have not been serviced in compliance with the manufacturers recommendations; or
- (iv) failure of the client to commission both interim and final inspections by the designer throughout the system construction; or
- (v) the selection of inappropriate plants for irrigation areas; or
- (vi) damage to any infrastructure including but not limited to foundations, walls, driveways and pavements; or
- (vii) land instability, soil erosion or dispersion; or
- (viii) design changes requested by the Permit Authority.

Furthermore Strata does not guarantee septic trench and bed design life beyond 2 years from installation, given the influence various household chemicals have on soil structural decline and premature trench failure in some soil types

Strata does not consider site contamination, unless the Client specifically instructs Strata to consider the site contamination in writing. If a request is made by the Client to consider site contamination, Strata will provide additional terms and conditions that will apply to the engagement.

Copyright and Use of Documents

Copyright in all drawings, reports, specifications, calculations and other documents provided by Strata or its employees in connection with the Services remain vested in Strata. The Client has a licence to use the documents for the purpose of completing the project. However, the Client must not otherwise use the documents, make copies of the documents or amend the documents unless express approval in writing is given in advance by Strata. The Client must not publish or allow to be published, in whole or in part, any document provided by Strata or the name or professional affiliations of Strata, without first obtaining the written consent of Strata as to the form and context in which it is to appear.

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- (i) the Client must not use, infringe or otherwise appropriate the same other than for the purpose of the project without first obtaining the written consent of Strata; and
- (ii) the Client is entitled to a royalty free licence to use the same during the life of the works comprising the project.

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If any report is provided to the Client in an electronic copy except directly from Strata, the Client should verify the report contents with Strata to ensure they have not been altered or varied from the report provided by Strata.

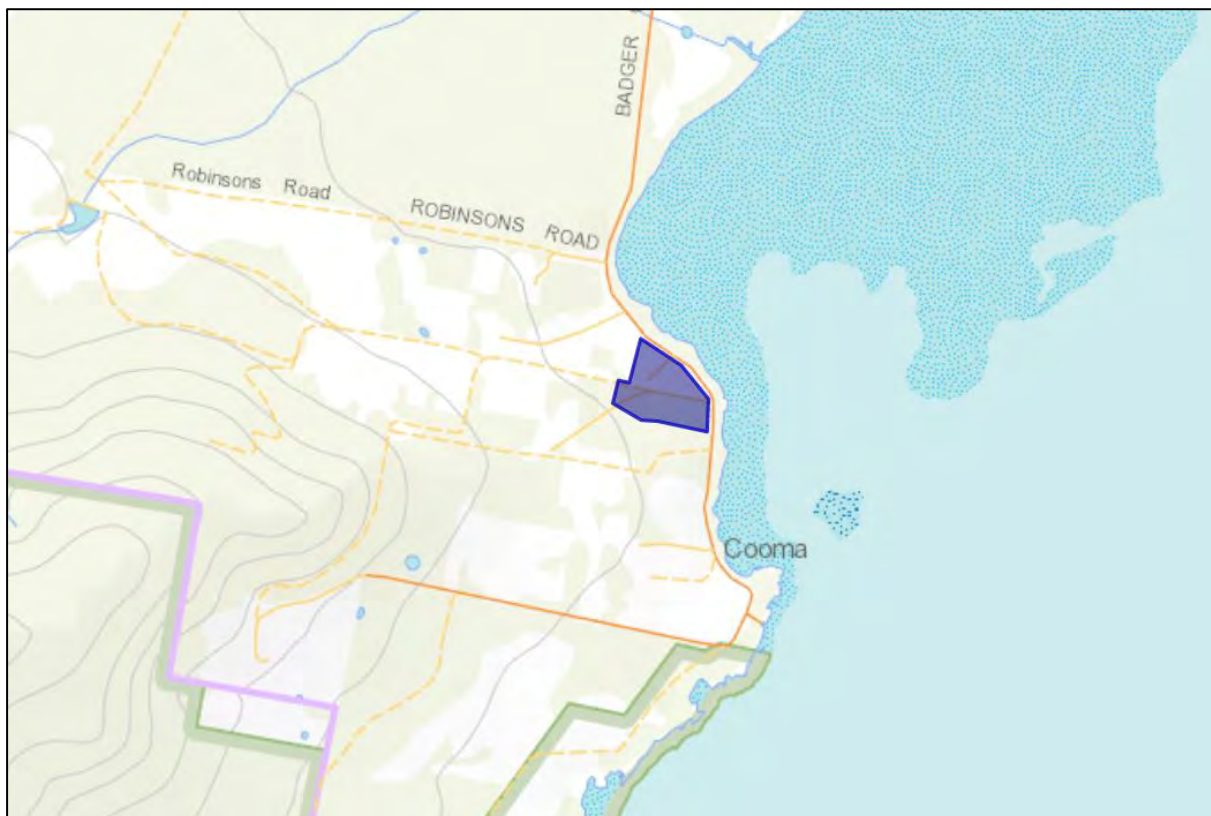
ATTACHMENT 4. BUSH FIRE RISK ASSESSMENT REPORT, NEW CLASS 1A DWELLING

BUSH FIRE RISK ASSESSMENT REPORT

NEW CLASS 1A DWELLING

158 BADGER CORNER ROAD – LADY BARRON

02ND MARCH 2023



Disclaimer: The information in this report is ensuring compliance with the Tasmanian Planning Scheme, Flinders Local Provision Schedule, and consistent with, the Director’s Determination 12th April 2021 – Bushfire Hazard Areas V1.1, *Building Act 2016 & Building Regulations 2016* (Part 5 Division 6). The information stated within this report is also based on the instructions of *AS 3959 – 20018 – Construction of buildings in bush fire-prone areas*. The purpose of this code is to ensure that use and development is appropriately designed, located, serviced, and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

“It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions”.

GPM P/L has taken all reasonable steps to ensure that the information and data collected in the preparation of this assessment is accurate and reflects the conditions on and adjoining the site and allotment on the date of assessment. GPM P/L do not warrant or represent that the information contained within this assessment report is free from errors or omissions and accepts no responsibility for any loss, damage, cost or expense (direct or indirect) incurred as result of a person taking action in respect to any representation, statement or advice referred to in this report. This report is only to be used for the purpose of which it was commissioned.

Document Version: 01 – 02nd March 2023 V2.0

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EXECUTIVE SUMMARY

The proposed development consists of a new Class 1A Dwelling and an existing Class 10A Shed Extension. Please note that the Class 10A Extension is not assessed for bushfire risk as it is >6m from the proposed new Class 1A Dwelling. The development is located in a coastal area with surrounding scrubland and forested vegetation and some areas of adjoining managed ground, at Badger Corner, approximately 5km to the southwest of the Lady Barron settlement. The development site is surrounded to the west by patches of forest. Adjoining to the north, east and south are patches of coastal scrub. The actual site of development can be considered as managed. Badger Corner Road adjoins to the northern boundary of the subject allotment.

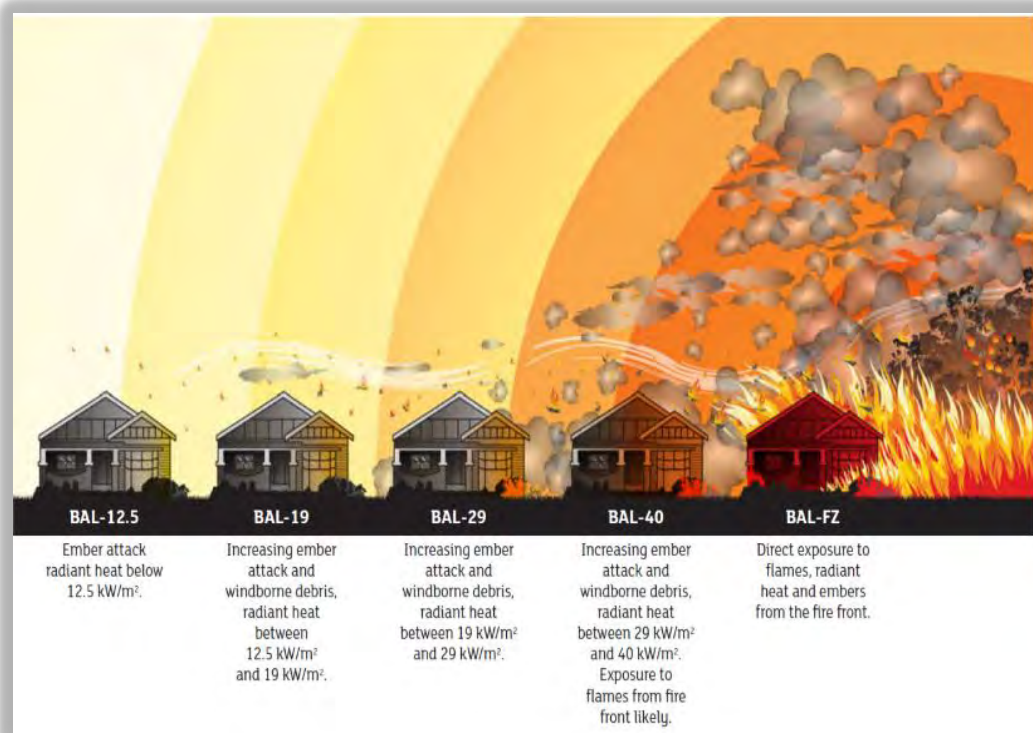
Assessment of the allotment has concluded that there is a risk of bushfire associated with the development due to the location of the bushfire prone scrubland and forest vegetation communities that exists surrounding the development site in all directions, within 100m of the proposal.

The proposed development is located within an area of Rural Residential Zoning. The lot size is 2.101ha.

Using ASA3959 – 2018 Simplified procedure (Method 1), the Bushfire Attack Level of the site and the associated construction requirements will be classified as BAL 19. BAL – 19 is described as being exposed to “Increasing ember attack, windborne debris and radiant heat between 12.5 kW/m² and 19 kW/m²”.

The BAL classification provided provides specifications for construction standards and the determination of the hazard management area defined in the Bushfire Hazard Management Plan (BHMP). A BAL 19 solution has been designated and the development does not require the clearing of vegetation from neighbouring properties as acceptable distances for the proposed hazard management area can be met within the property boundaries or by utilising adjoining managed ground.

The Bushfire Attack Level (BAL) Report and Bushfire Hazard Management Plan (BHMP) has been prepared under the *Building Act 2016 & Building Regulations 2016 (Part 5 Division 6)* and Director’s Determination 12th April 2021 – Bushfire Hazard Areas V1.1.



INTRODUCTION

Clients: Wendy & Graeme Stoney

Development Type / BCA Classification: New Class 1A Dwelling.

Dwelling Floor Plan: As per attachment.

Area Schedule: Unknown

Construction Materials:

- Will be required to achieve BAL 19 rating standard.
- As per elevation drawings.

Date of Site Inspection: 03rd May 2022

Inspected by: Justin Cashion – Ground Proof Mapping P/L

This proposal will ensure that “use and development is appropriately designed, located, serviced and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires”.

This Bushfire Risk assessment report will define the sites Bushfire Attack Level classification and determine its compliance with the requirements of the National Construction Code (NCC), 2019 and AS3959 – Construction of Buildings in Bushfire Prone Areas 2018.

This report will satisfy associated Council Building Requirements.

DESCRIPTION OF PROPOSAL

Proposal: New Class 1A Dwelling

Applicants Name: Wendy & Graeme Stoney

Location: 158 Badger Corner Road – Lady Barron

Property ID: 9532339

Title Reference: 177522/1

Lot Size: 2.101ha

Zoning: Rural Living

Code Overlay:

Bushfire Prone Areas Code

Coastal Inundation Code

Natural Assets Code

Council: Flinders

Defendable Space – Maintain the vegetation in a “low fuel” state within the required distance set out in this report (as shown on the Bushfire Hazard Management Plan) to satisfy ongoing compliance.

Access – Proposed access is onto Badger Corner Road (Council maintained street/road). Further requirements to satisfy access and egress as outlined further in this report.

Water Supply – No current bushfire firefighting water supply. Further requirements to satisfy water supply as outlined further in this report.

Construction – Construct and maintain the proposed dwelling to a minimum specification complying with BAL – 19 in accordance with AS3959 2018, Sections 3 and 6.

Surrounding Area - The site is surrounded by a combination of managed ground, scrubland and forest, interspersed with areas of grassland.

Predominant Fire Direction – The predominant fire direction during the summer period is from the North and North West, however as this is an island, fire weather can be expected from any direction. Coastal sea breeze may also contribute to fire weather conditions. The vegetation that triggers the assessment provides a realistic fire threat under any conditions.

BUSHFIRE SITE ASSESSMENT

Vegetation

Classifiable bushfire prone vegetation within 100m of the site of development is Coastal Heathland (SCH) with a scrub classification and *Eucalyptus nitida* Furneaux Forest (DNF). Further vegetation clearing and or modification or maintenance is required within the defined HMA for this development to comply with hazard management area specifications and the ongoing maintenance of this hazard management area should continue in perpetuity. The maintenance management requirements are specified further in this report.

Slope / Aspect

The slope class across the development site is within the 0 - 5° range whilst the surrounding areas within 100m of the development are also within the 0 - 5° range. The aspect is predominantly north easterly. The altitude for the proposed dwelling is at ±10m.

Distances to Vegetation

Appropriate distances to assessable vegetation from the all façades, allows for the construction standards for the dwelling to be classified within those required for a BAL rating of 19, if proposed hazard management areas are maintained in perpetuity. The required HMA for BAL 19 rating is shown on the attached BHMP map. A purple line delineated on the attached BHMP map shows the extent of the assessment area (e.g. all vegetation with 100m of each façade of the proposed dwelling).

Assessment and HMA

The proposed development is located in a forested interface and the risk of bushfire attack is considered to be a realistic threat. Using AS3959-2018 Simplified Procedure (Method 1) the Bushfire Attack Level of the site and the associated construction requirements will be classified as BAL – 19.

Bushfire Attack Level (BAL) – Steps 1 to 5 Summary Results

For calculations based on Tasmania’s FDI of 50, please refer to Table 1 below:

	North	East	South	West
Vegetation to 100m	Scrub	Scrub	Scrub	Forest
Vegetation Classification	D	D	D	A
Slope	Downslope 0 - 5°	Downslope 0 - 5°	Level/Upslope	Level/Upslope
Current BAL	BAL FZ	BAL FZ	BAL FZ	BAL FZ
Proposed BAL	BAL 19	BAL 19	BAL 19	BAL 19
HMA for BAL 19	22m+	22m+	19m+	23m+

*2.2.3.2:

(e) Exclusions – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.

(f) Exclusions—Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and windbreaks.

HMA Requirements

As per Director's Determination – Bushfire Hazard Areas, Table 4, Requirements for Hazard Management Area:

Element A: Hazard management areas for new buildings on lots provided with a BAL at the time of subdivision.

Requirement: A new building must:

- (a) be located on the lot so as to be provided with a HMA no smaller than the required separation distances for the BAL determined at the time of subdivision; and
- (b) have a HMA established in accordance with a certified bushfire hazard management plan.

Please note that the HMA should be installed prior to Occupancy Certification.

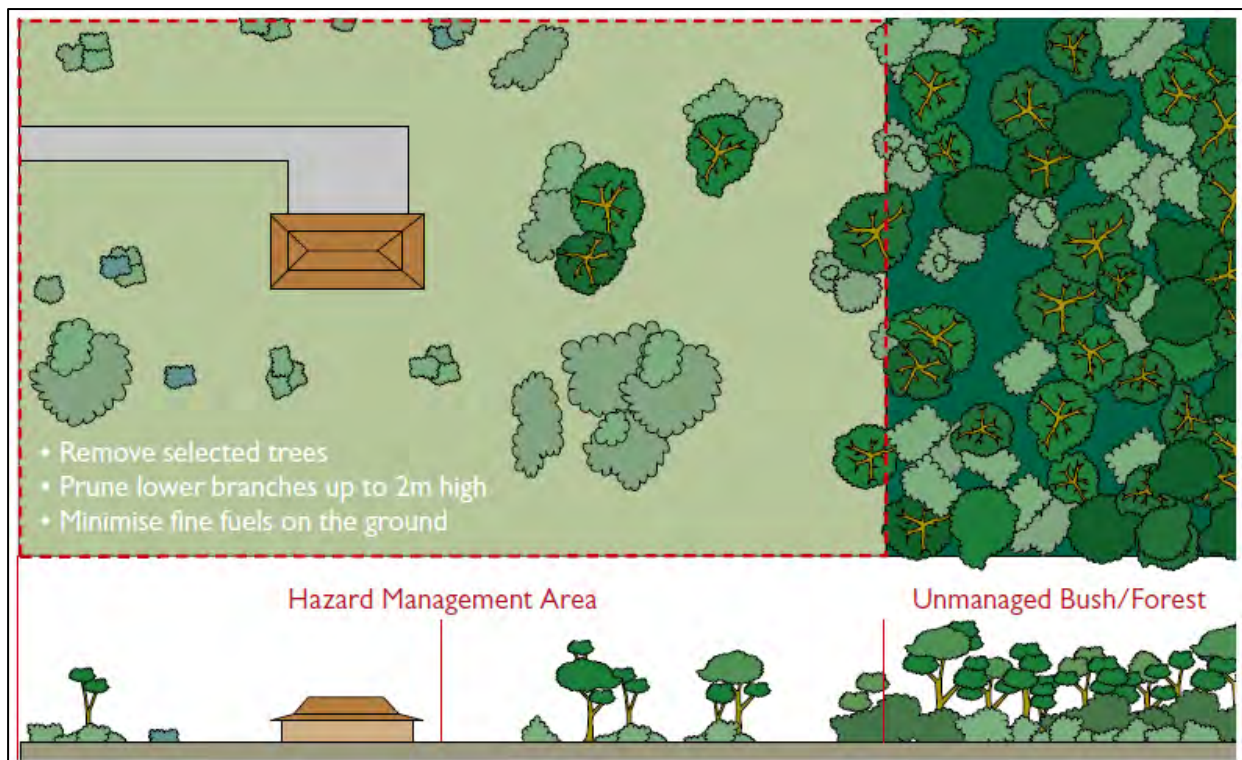
HMA Guidelines

The HMA requirements listed in Table 1 are the minimum distances required to achieve a compliance rating of BAL – 19. The HMA (defendable space area), should have significant fuel reduction carried out to ensure compliance with low threat vegetation classification. This single zone hazard management area must be managed and kept in a minimum fuel condition at all times “where fine fuels are minimised to the extent that the passage of fire will be restricted, e.g. short green lawns, paths, driveways etc.”. All grassed areas within this zone need to be short cropped and kept to a nominal height of 100mm.

The four design principles for this area are to:

- (1) Create space
- (2) Remove flammable objects or materials
- (3) Separate fuel
- (4) Selection, location and maintenance of trees

The diagram below explains this requirement.



Other recommendations Include:

- Trees and large shrubs should be pruned to remove branches within 2 m of the ground.
- Use only mown lawn, bare ground (driveways, paths etc.) or non-flammable native succulent ground cover plants immediately adjacent to buildings (within 2 metres).
- Total understorey canopy cover should be less than 20%.
- Total eucalypt overstorey to be <5%.
- Separate tree crowns by four metres.
- Shrubs should be isolated or in small clumps; avoid continuous canopies.
- New trees should not be planted closer to buildings than their expected full height.
- Avoid planting or retaining trees and shrubs with rough fibrous bark, or which retain shed bark in long strips (ribbon bark) (e.g. any of the stringy bark group of eucalypts).
- Avoid planting or retaining trees and shrubs that retain dead material in their canopies (e.g. most conifers, and most *Melaleuca* and *Leptospermum* species).
- Avoid planting or retaining shrubs under trees.
- Canopies of trees and shrubs should not touch walls or overhang buildings.
- Avoid planting or retaining trees and shrubs that deposit large quantities of litter in a short period, particularly in spring and summer.
- Combustible mulches should not be used, except in very limited quantities around the base of shrubs; use non-combustible mulches, such as pebble, scoria or gravel, or mown grass.
- Shrubs should not be allowed to grow to within 2 m of windows with annealed (standard) glass, or within 1 m of windows with heat toughened glass or walls with timber cladding.
- Locate any combustible materials, such as woodpiles, flammable fuel stores etc., outside the Hazard Management Area.



Figure 1: This photo illustrates a maintained hazard management zone in the foreground with unmanaged vegetation in the background.

Some thought should be given to other landscaping alternatives using such plants as described in the “Fire Resisting Garden Plants” booklet produced by the Tasmania Fire Service (TFS) available on the website @ www.fire.tas.gov.au

Access/Egress

The primary principles for specifications in regards to access and egress, is to provide safe access to properties for residents, and to allow emergency service vehicles access to assist with firefighting and protection of buildings. This also enables emergency personnel to evacuate residents when required and provide access to the water supply for firefighting purposes. Proposed access is onto Badger Corner Road (Council maintained street/road), via $\pm 70\text{m}$ of private access, which is pre-existing, with the exception being the small part of the access to the BAL firefighting water supply. As per Director's Determination – Bushfire Hazard Areas, Table 2 Requirements for Property Access:

Element B: Property access length is 30m or greater; or access is for a fire appliance to a firefighting water point.

Requirement: The following design and construction requirements apply to property access:

- a) All weather construction;
- b) Load capacity of at least 20 tonnes, including for bridges and culverts;
- c) Minimum carriageway width of 4 metres;
- d) Minimum vertical clearance of 4 metres;
- e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- f) Cross falls of less than 3 degrees (1:20 or 5%);
- g) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
- h) Curves with a minimum inner radius of 10 metres;
- i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and
- j) Terminate with a turning area for fire appliances provided by one of the following:
 - i. A turning circle with a minimum inner radius of 10 metres;
 - ii. A property access encircling the building; or
 - iii. A hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.

Please note that the implementation of the compliant access/egress must comply prior to occupancy certification.

Water Supply

A new building constructed in a bushfire-prone area, must be provided with a water supply dedicated for firefighting purposes.

Reticulated Water Supply for Firefighting: **Not applicable.**

Static Water Supply for Firefighting: **Applicable as per below.**

As per Director's Determination – Requirements for Building in Bushfire-Prone Area, Table 3B, Requirements for Static Water Supply for Firefighting:

Element A: Distance between building area to be protected and water supply

Requirement: The following requirements apply:

- (a) The building area to be protected must be located within 90 metres of the water connection point of a static water supply; and
- (b) The distance must be measured as a hose lay, between the water connection point and the furthest part of the building area.



Element B: Static Water Supplies

Requirement: A static water supply:

- (a) May have a remotely located offtake connected to the static water supply;
- (b) May be a supply for combined use (firefighting and other uses) but the specified minimum quantity of firefighting water must be available at all times;
- (c) Must be a minimum of 10,000 litres per building area to be protected. This volume of water must not be used for any other purpose including firefighting sprinkler or spray systems;
- (d) Must be metal, concrete or lagged by non-combustible materials if above ground; and
- (e) If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS 3959-2009, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by:
 - (i) metal;
 - (ii) non-combustible material; or
 - (iii) fibre-cement a minimum of 6 mm thickness.

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

Requirement: Fittings and pipework associated with a water connection point for a static water supply must:

- (a) Have a minimum nominal internal diameter of 50mm;
- (b) Be fitted with a valve with a minimum nominal internal diameter of 50mm;
- (c) Be metal or lagged by non-combustible materials if above ground;
- (d) Where buried, have a minimum depth of 300mm (compliant with AS/NZS 3500.1-2003 Clause 5.23);
- (e) Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to firefighting equipment;
- (f) Ensure the coupling is accessible and available for connection at all times;
- (g) Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length);
- (h) Ensure underground tanks have either an opening at the top of not less than 250 mm diameter or a coupling compliant with this Table; and
- (i) Where a remote offtake is installed, ensure the offtake is in a position that is:
 - (i) Visible;
 - (ii) Accessible to allow connection by firefighting equipment;
 - (iii) At a working height of 450 – 600mm above ground level; and
 - (iv) Protected from possible damage, including damage by vehicles.

Element D: Signage for static water connections

Requirement: The firefighting water point for a static water supply must be identified by a sign permanently fixed to the exterior of the assembly in a visible location. The sign must comply with the Tasmanian Fire Service Water Supply Signage Guideline published by the Tasmania Fire Service.

This document is attached as an appendix to this report.

Element E: Hardstand



Requirement: A hardstand area for fire appliances must be provided:

- (a) No more than three metres from the water connection point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);
- (b) No closer than six metres from the building area to be protected;
- (c) With a minimum width of three metres constructed to the same standard as the carriageway; and
- (d) Connected to the property access by a carriageway equivalent to the standard of the property access.

Please note that the proposed location for the new static water supply is shown on the attached BHMP map.

Please note that the implementation of the compliant static water supply must comply prior to occupancy certification.

Construction

The dwelling and elements shall be designed, constructed, and maintained in accordance with Construction Sections 3 and 6 of AS 3959-2018 *Construction of Buildings in Bushfire Prone Areas* for BAL – 19.

	BAL-LOW	BAL-12.5	BAL-19
SUBFLOOR SUPPORTS	No special construction requirements	As for BAL-19	Enclosure by external wall or by steel, bronze or aluminum mesh. (Amendment 2 will likely fix the omission of the BAL-29 construction requirements for <u>unenclosed</u> subfloors)
FLOORS	No special construction requirements	As for BAL-19	Concrete slab on ground or enclosure by external wall, metal mesh as above or flooring less than 400 mm above ground level to be non-combustible, naturally fire resistant timber or protected on the underside with sarking or mineral wool insulation
EXTERNAL WALLS	No special construction requirements	As for BAL-19	External walls – Parts less than 400 mm above ground or decks etc to be of non-combustible material, 6 mm fibre cement clad or bushfire resistant/naturally fire resistant timber
EXTERNAL WINDOWS	No special construction requirements	4mm Grade A Safety Glass or glass blocks within 400 mm of ground, deck etc with Openable portion metal screened with frame of metal or metal reinforced PVC-U or bushfire resisting timber	5mm toughened glass or glass blocks within 400 mm of ground, deck etc with Openable portion metal screened with frame of metal or metal reinforced PVC-U or bushfire resisting timber. Above 400mm annealed glass can be used with all glass screened
EXTERNAL DOORS	No special construction requirements	As for BAL-19 except that door framing can be naturally fire resistant (high density) timber	Screened with steel, bronze or aluminum mesh or glazed with 5mm toughened glass, non-combustible or 35mm solid timber for 400 mm above threshold, metal or bushfire resisting timber framed for 400 mm above ground, decking, etc, tight-fitting with weather strips at base
ROOFS	No special construction requirements	As for BAL-19 (including roof to be fully sarked)	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked
VERANDAS DECKS ETC.	No special construction requirements	As for BAL-19	Enclosed sub-floor space – no special requirement for materials except within 400 mm of ground. No special requirements for supports or framing. Decking to be non-combustible or bushfire resistant within 300 mm horizontally and 400 mm vertically from a glazed element

OTHER CONSIDERATIONS

Natural and Cultural Values

No natural or cultural values were identified on site or through desktop assessments, which would prevent the clearing and or maintenance of vegetation communities within the Hazard Management Area for achieving a BAL – 19 solution.

The following resources were checked as part of the desktop assessment;

- Natural Values Atlas – DPIPWE 2021
- TasVeg 4.0 – Tasmanian Government / DPIPWE 2020
- The List – DPIPWE 2021

Other Environmental or Planning Issues

No environmental or planning issues were identified on site or through desktop assessments, including review of the Tasmanian Planning Scheme - Flinders Local Provision Schedule.

CONCLUSIONS / RECOMMENDATIONS

This assessment covers the minimum requirements for the construction of a new Class 1A dwelling. It is important to note that the assessment covers only the requirements from a bushfire perspective and not any other building regulations.

The development site is located in a coastal vegetated setting, within 100m of a potentially flammable bushfire prone scrub and forest vegetation communities. The risk of bushfire attack needed to be considered as the site is classified as being in a Bushfire Prone Area and may be susceptible to bushfires in the future.

By building to construction standards of a BAL – 19 rating, the hazard management area distances are specified. The management and ongoing maintenance of this hazard management area in a low fuel state, in perpetuity, as prescribed in this plan is of upmost priority in regards to bushfire risk. Private access and egress specifications have been specified to ensure full compliance with requirements. Static firefighting water requirements have also been specified to ensure that there is a satisfactory bushfire firefighting water capacity. When the development is built following the construction guidelines of AS3959 – 2018 and other recommendations outlined in this report, it will ensure compliance with the *Building Act 2016* & *Building Regulations 2016*.

This report should be considered in conjunction with all other planning documents for this proposed development in case of conflict. It is the client's responsibility to provide this report to all relevant parties that are involved with the planning, development or construction of this proposed extension. Any changes in relation to these functions that may alter the proposed BAL rating, need to be addressed with GPM P/L as there may be a necessity for a new assessment to be undertaken.

Other valuable resources in regards to bushfires and planning and preparation are available on the Tasmania Fire Service (TFS) website @ www.fire.tas.gov.au



REPORT PREPARATION & CERTIFICATION

This Bushfire Risk Assessment Report was prepared by:

Justin Cashion – Ground Proof Mapping P/L.

Signature: *Justin Cashion*

Date: 02/03/2023

This Bushfire Risk Assessment Report is certified by:

Justin Cashion – Ground Proof Mapping P/L.

Signature: *Justin Cashion*

Date: 02/03/2023

Accredited Person under part 4A of the Fire Service Act 1979: Accreditation No: **BFP-112**

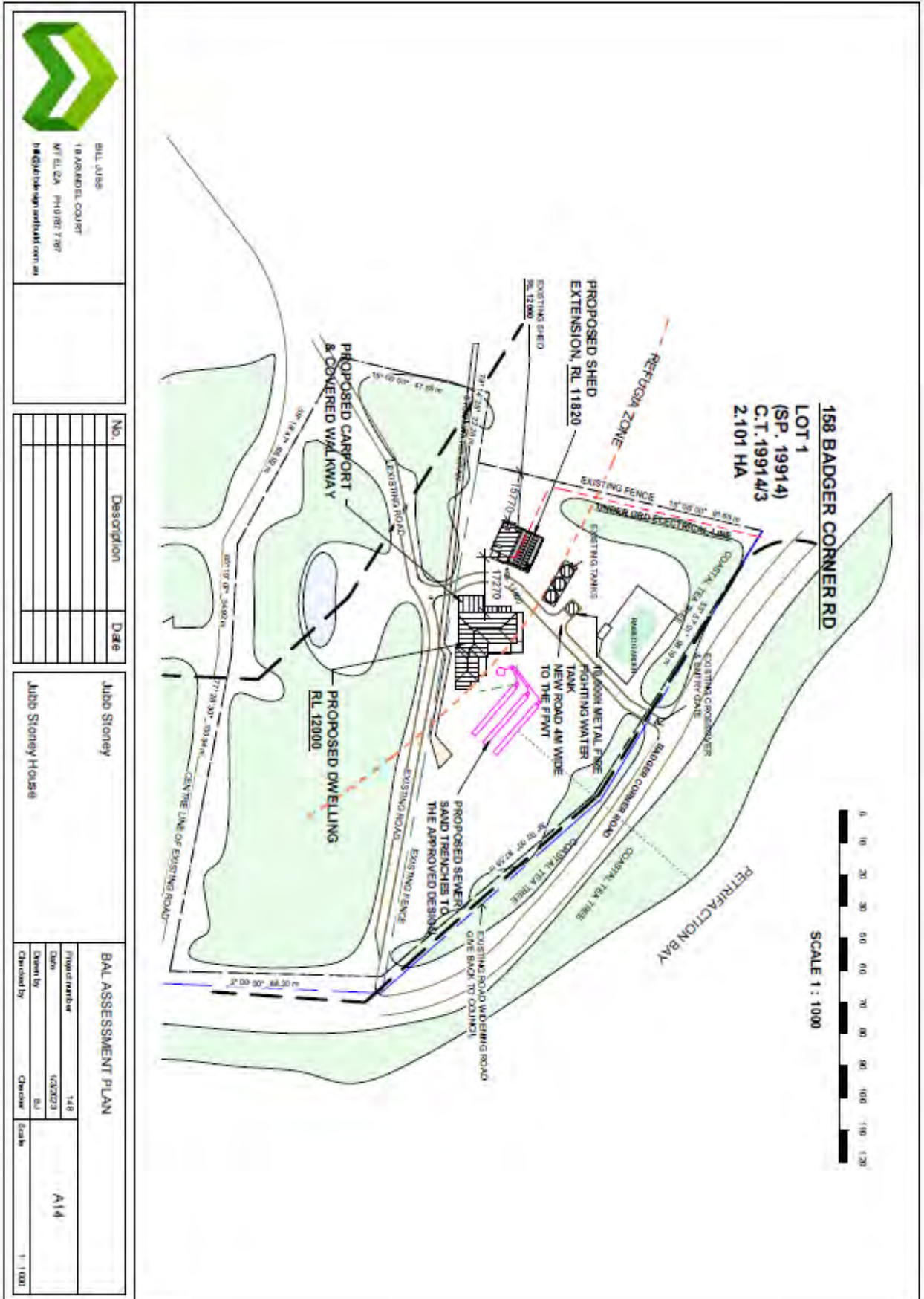
Certificate: **GPM 22 – 035 V2.0**

DEFINITIONS

Term	Definition
accredited person	Means as defined in the act
BAL	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per square metre, which is the basis for establishing the requirements for construction to improve protection of building elements from attack by a bushfire (AS 3959-2018).
BAL ratings	Used as the basis for establishing the requirements for construction to improve protection of a (proposed) building from bushfire attack. There are 6 BAL ratings; low, 12.5, 19, 29, 40 and FZ.
bushfire hazard management plan	Means as defined in the Act
bushfire-prone area	Means: land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; and where there is no overlay on a planning scheme map, or where the land is outside the boundary of a bushfire-prone area shown on an overlay on such a map, land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1 hectare.
bushfire-prone vegetation	Means contiguous vegetation including grasses and shrubs but not including maintained lawns, parks and gardens, nature strips, plant nurseries, golf courses, vineyards, orchards or vegetation on land that is used for horticultural purposes.
contiguous	Means separated by less than 20m.
defendable space	An area of land around a building where vegetation is modified and managed to reduce the effects of flame contact and radiant heat associated with a bushfire.
hazard management zone / area	Means the zone / area, between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.
Part 5 agreement	Means as defined in the Act.
TFS	Means the Tasmanian Fire Service.
slope	The slope under the classified vegetation in relation to the (proposed) building.
static water supply	Means water stored in a tank, swimming pool, dam, or lake that is available for firefighting purposes at all times.
vegetation	The vegetation that presents a bushfire hazard within 100 metres of the development and is classified in accordance with Clause 2.2.3 of AS 3959-2018.

REFERENCES

- Standards Australia Limited. (2011). *AS 3959 – 2018 – Construction of buildings in bush fire-prone areas.*
- Tasmanian Planning Scheme, Flinders Local Provision Schedule.
- Australian Building Codes Board. (2019). *National Construction Code - ABCB.*
- *Building Act 2016 & Building Regulations 2016* (Part 5 Division 6).
- UTS:CLG / TFS. Development and Building in Bushfire Prone Areas course resources.
- Jubb Design & Building Drawings, Project No. 148, 01/03/2023.



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Figure 2: Site Plan.

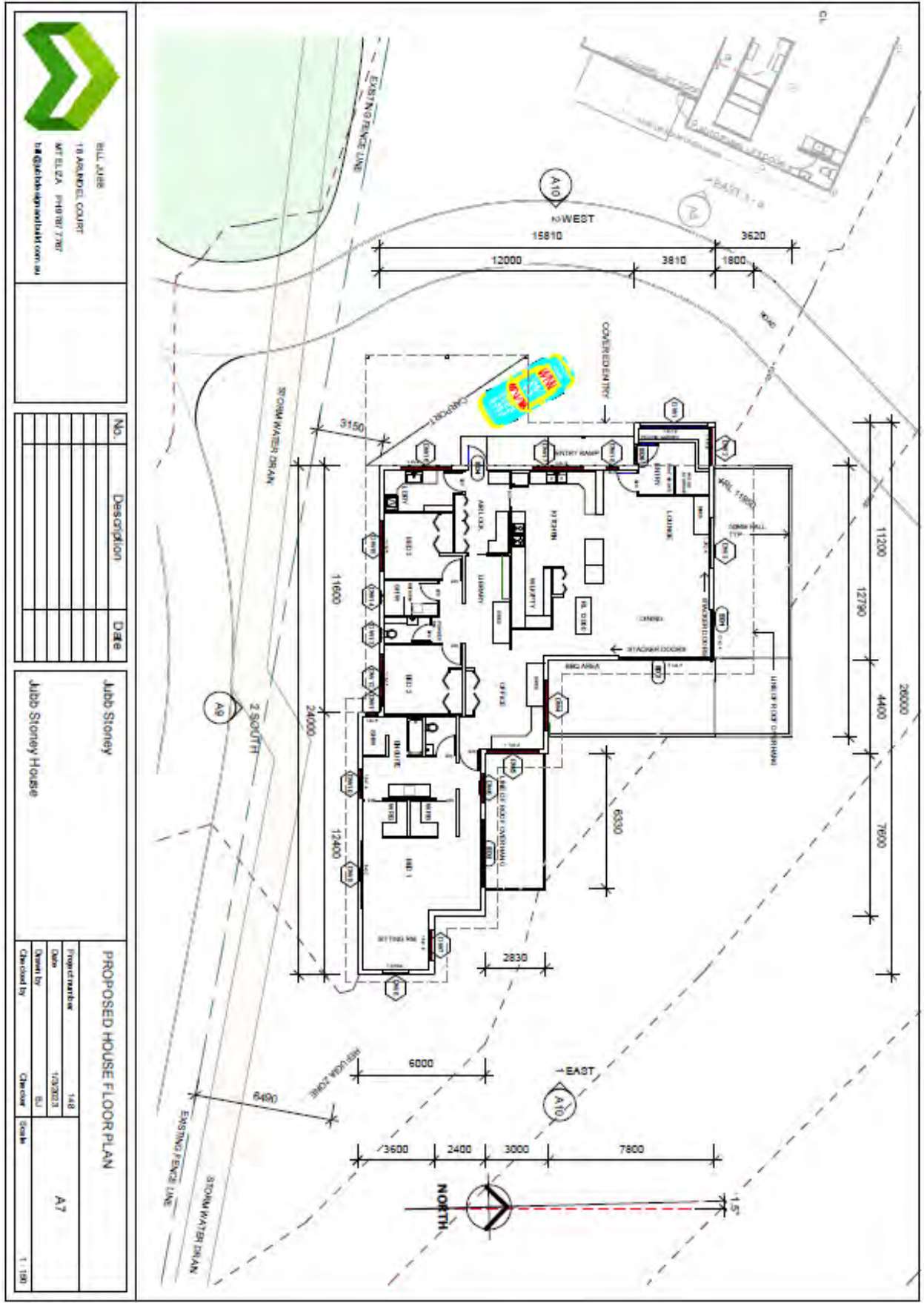
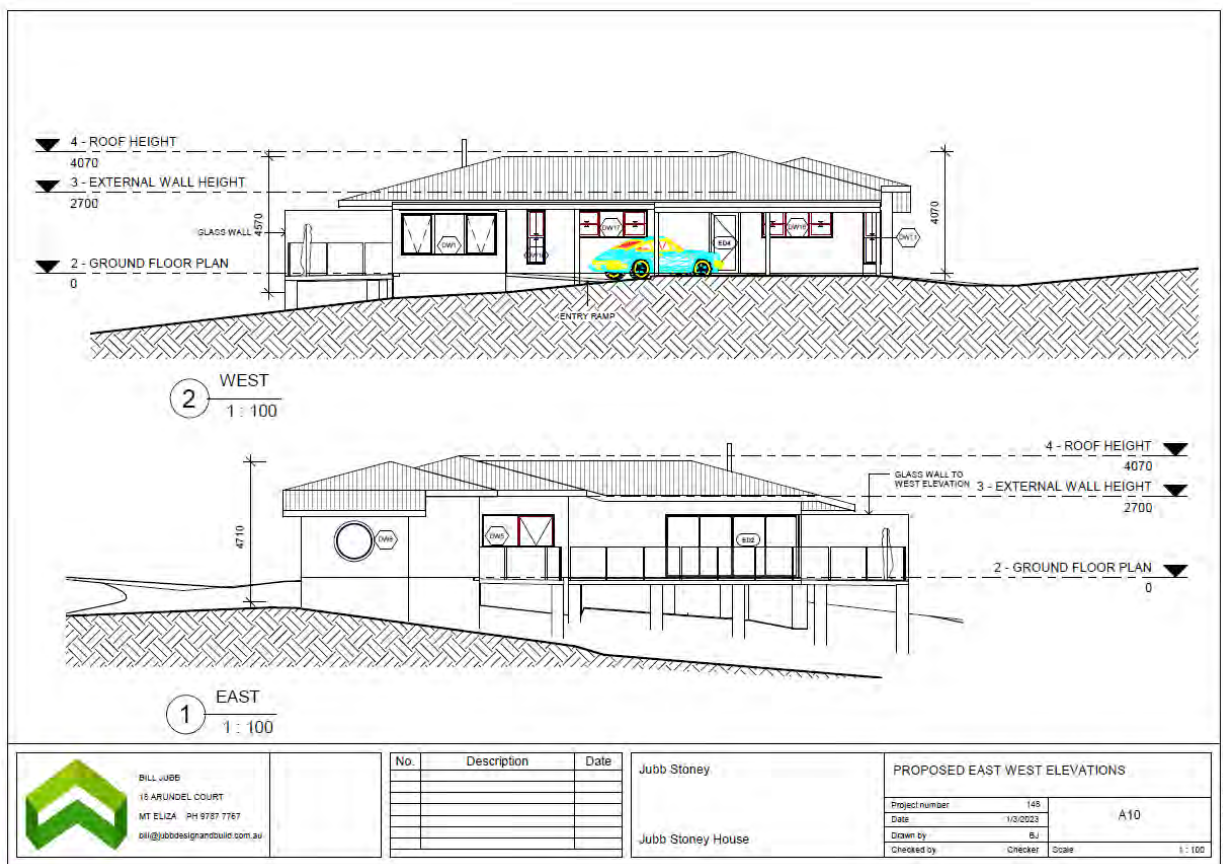
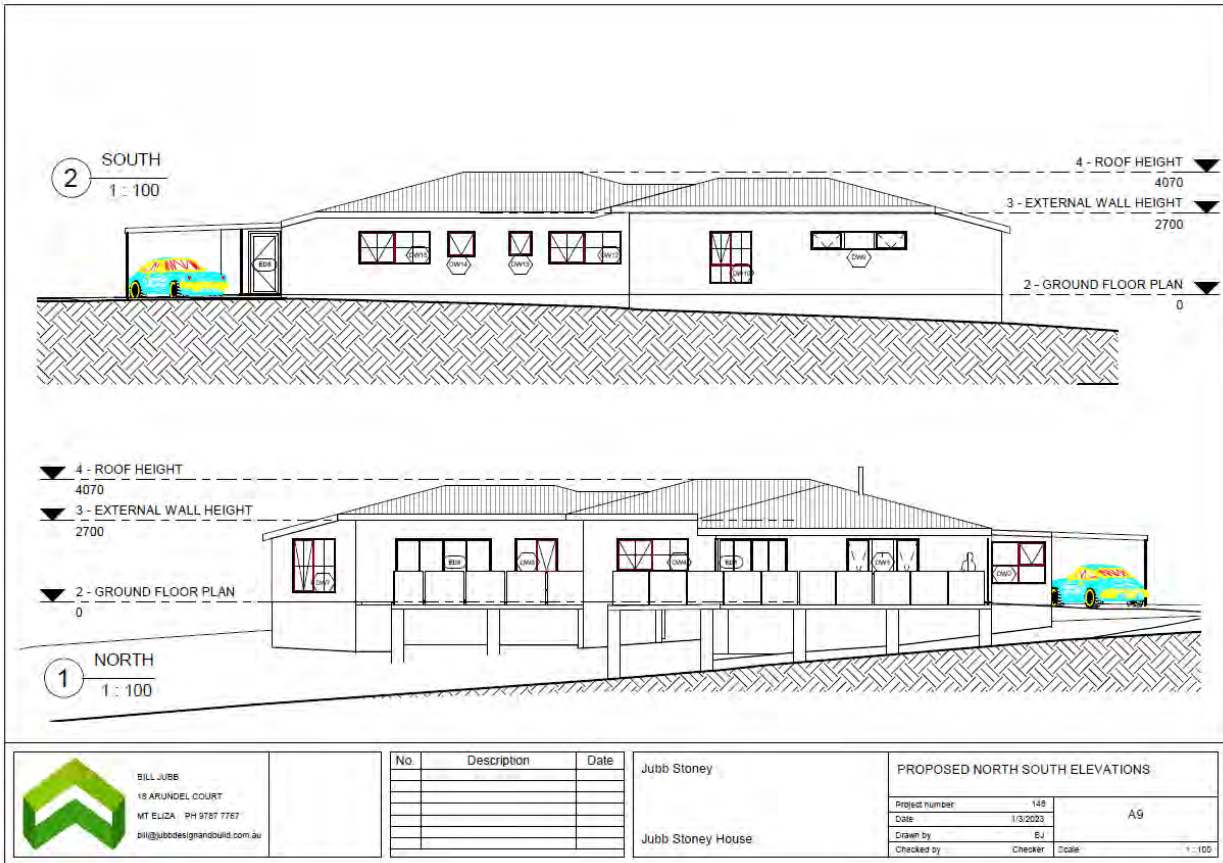


Figure 3: Floor Plan.



Figures 4a & 4b: Elevation Plans.



Figure 5: Aerial View of allotment.

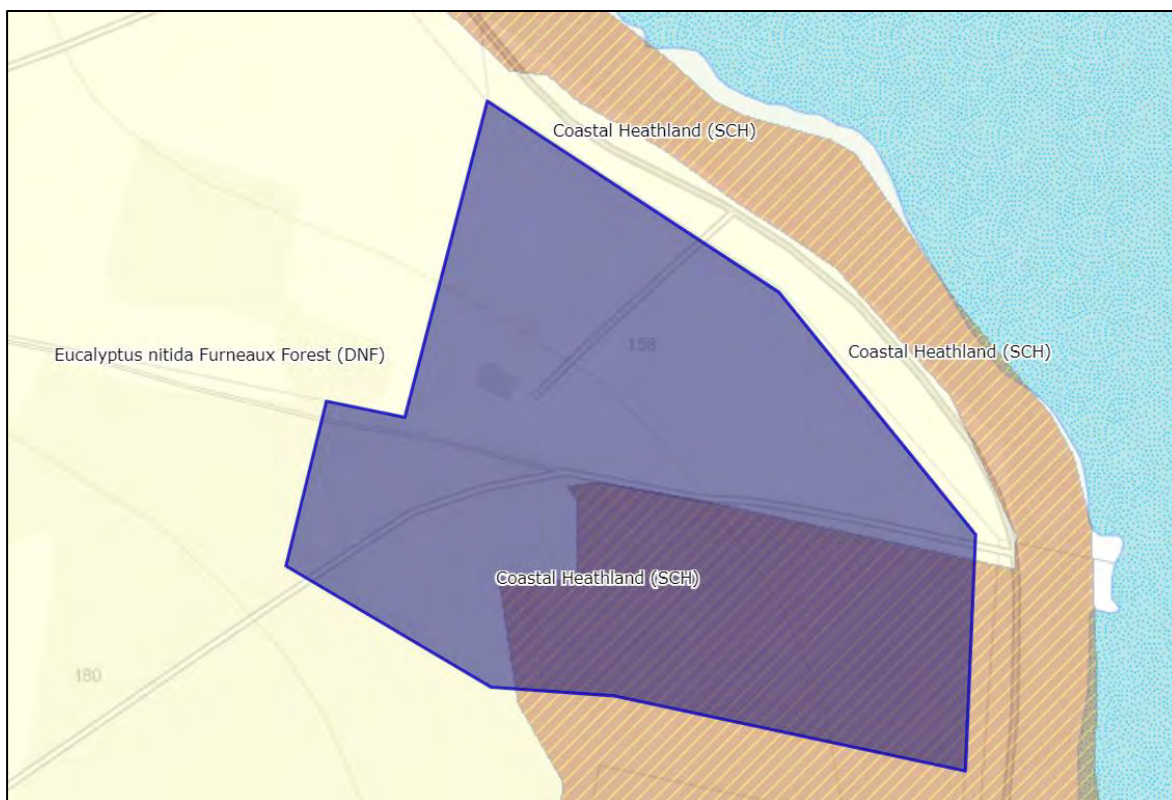


Figure 6: TasVeg 4.0 Map (updated to onsite findings).

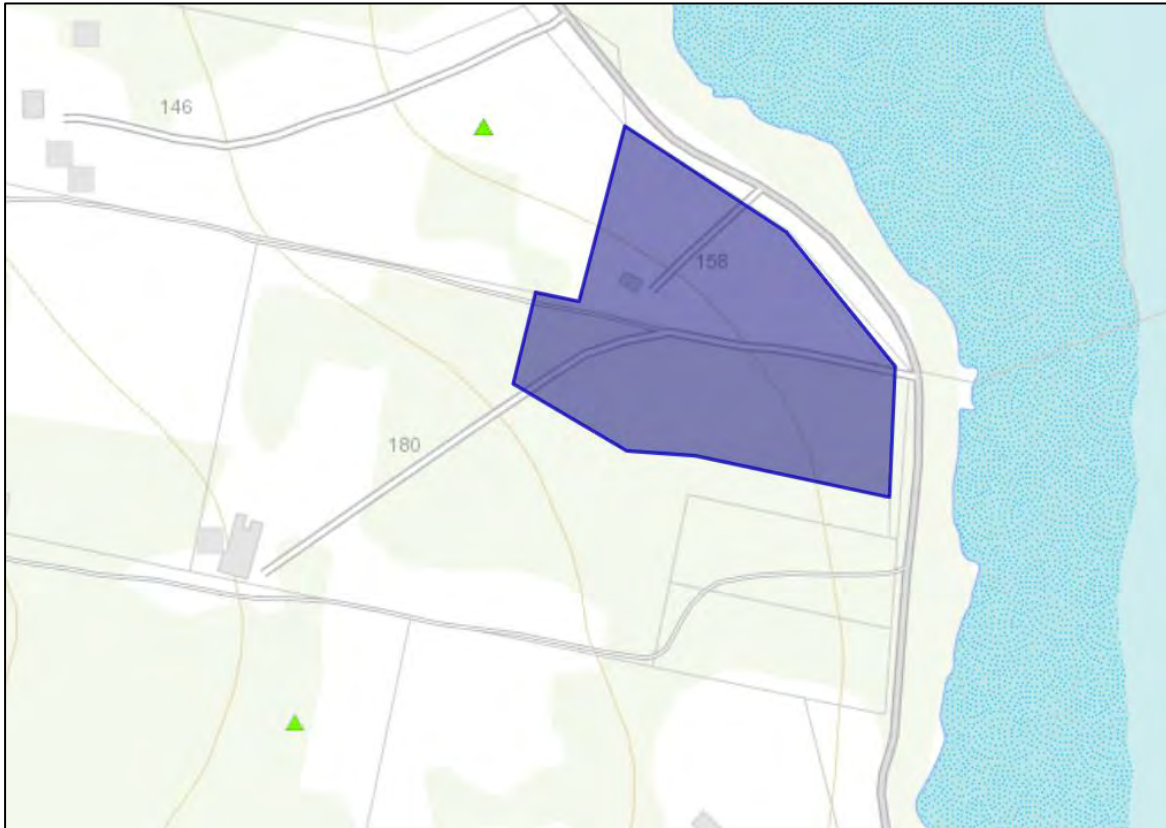


Figure 7: Natural & Cultural Values Map (nothing identified on subject allotment).



Figure 8: Photo of development site.



Figure 9: Photo to the north.



Figure 10: Photo to the east.



Figure 11: Photo to the south.



Figure 12: Photo to the west.



Tasmania Fire Service

Bushfire Hazard Practitioner Accreditation Certificate

In accordance with Section 60D of the *Fire Service Act 1979*

Justin Cashion

Accreditation No: BFP - 112

Accreditation Category: 2

is hereby granted accreditation to perform the functions of an Accredited Person under Part 4A of the *Fire Service Act 1979* with the following conditions and restrictions:

	Scope of Work	Status
1	Certify a Bushfire Hazard Management Plan for the purposes of the <i>Building Act 2016</i> .	Accredited
2	Certify an Exemption from a Bushfire Hazard Management Plan for the purposes of the <i>Building Act 2016</i> or the <i>Land Use Planning and Approvals Act 1993</i> .	Accredited
3A	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for Vulnerable Uses and Hazardous Uses for the purposes of the <i>Land Use Planning and Approvals Act 1993</i> .	Accredited
3B	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for small subdivisions (less than 10 lots) for the purposes of the <i>Land Use Planning and Approvals Act 1993</i> .	Accredited
3C	Certify a Bushfire Hazard Management Plan meets the Acceptable Solutions for large subdivisions (more than 10 lots, or multiple stages) for the purposes of the <i>Land Use Planning and Approvals Act 1993</i> .	Accredited
4	Certify an Emergency Management Strategy or Bushfire Emergency Plan for all uses and classes of building for the purposes of the <i>Building Act 2016</i> or the <i>Land Use Planning and Approvals Act 1993</i> .	Not Accredited

Conditions

Conform with requirements of the *Chief Officer's Scheme for the Accreditation of Bushfire Hazard Practitioners*, and Bushfire Hazard Advisory Notes issued by the Chief Officer.

This accreditation remains valid until such time that it is surrendered, varied, suspended or revoked.



Jeff Harper AFSM
A/CHIEF OFFICER

1 May 2018

Figure 13: Accreditation Documentation.



Michael Sims
Client Relationship Manager

Marsh Pty Ltd
ABN 31 061 358 303
85 York Street,
Launceston TAS 7250
Michael.Sims@marsh.com

Justin Cashion
Ground Proof Mapping Pty Ltd
81 Elizabeth Street TAS 7250

13 May 2022

Dear Justin,

Confirmation of Cover Ground Proof Mapping Pty Ltd

This letter is to certify that the below mentioned policies are current.

INSURANCE CLASS	INSURER	POLICY NO	COVERAGE	POLICY PERIOD
Public & Products Liability	CGU Insurance - GC	AGLIAB-0000-0005-3975	\$20,000,000 any one claim \$5,000,000 bushfire sub-limit	2/05/2022 - 1/04/2023
Cyber Liability	Lloyd's of London through Dual Australia Pty Ltd	AU00021813-000	\$500,000 any one claim \$500,000 in the aggregate	1/04/2022 - 1/04/2023
Professional Indemnity	Lloyd's of London through CFC Underwriting Ltd	2754108	\$1,000,000 any one claim \$2,000,000 in the aggregate	10/05/2022 - 10/05/2023
Motor Vehicle	Allianz Australia Insurance Ltd	1380V00520VSD	Toyota LANDCRUISER – J47MR - Comprehensive Audi Q5 – 140UJ - Comprehensive	1/04/2022 - 1/04/2023
Workers' Compensation	Allianz Australia Insurance Ltd	LWL0016802	Covering all Employees	1/04/2022 - 1/04/2023

*Inclusive of FSL/ESL, Statutory Charges and Fees.

Occupations including but not limited to:

- Bushfire Management & Mitigation Planning
- Bushfire Attack Level (BAL), Bushfire Hazard Management Plans (BHMP's), Bushfire Emergency Plans, Bushfire Evacuation & Action Plans
- Planning, Supervision and Operational undertaking of Low & High Intensity Burn Programs
- Unplanned Bushfire Suppression under direction/supervision of one of Tasmania's 3 Fire Agency bodies; Tasmanian Fire Service (TFS), Sustainable Timber Tasmania (STT) and Parks and Wildlife Service/DPIPWE (PWS). Sole Fire Management Services Provider for PWS.
- Providing Nationally Accredited Fire Training under qualification for specific fire management modules
- Vegetation assessments & plans
- Ecological assessments & plans
- Post Fire Regeneration and Rehabilitation Plans

Confirmation of Cover

Figure 14: Copy of Insurance.