DEVELOPMENT APPLICATION

PDPLANPMTD-2026/060656

PROPOSAL: Secondary Residence (Single Dwelling)

LOCATION: 384 Dorans Road, Sandford

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 13/05/2026 00:00:00

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 13/05/2026 00:00:00. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 13/05/2026 00:00:00.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.

Clarence City Council

Clarence... a brighter place

APPLICATION FOR DEVELOPMENT / USE OR SUBDIVISION

*The personal information on this form is required by Council for the development of land under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and other related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our **Privacy Policy**, which is available at www.ccc.tas.gov.au or at Council offices.*

Proposal: New Secondary Residence

Location:

Address 384 Dorans Road

Suburb/Town Sandford *Postcode* 7020

Current Owners/s:

Applicant:

Personal Information Removed

Tax Invoice for application fees to be in the name of:
(if different from applicant)

Is the property on the Tasmanian Heritage Register? Yes [ ] No [X]

(if yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as exemptions may apply which may save you time on your proposal)

If you had pre-application discussions with a Council Officer, please give their name	
Current Use of Site:	Single Dwelling

Does the proposal involve land administered or owned by the Crown or Council?	Yes		No	X

Declaration:

- *I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.*
- *I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application*
- *I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached. Where the application is submitted under Section 43A, the owner's consent is attached.*
- *I declare that the information in this declaration is true and correct.*

Acknowledgement:

- *I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.*

Applicant's Signature:

Personal Information Removed

PLEASE REFER TO THE DEVELOPMENT/USE AND SUBDIVISION CHECKLIST ON THE FOLLOWING PAGES TO DETERMINE WHAT DOCUMENTATION MUST BE SUBMITTED WITH YOUR APPLICATION.

Clarence City Council

DEVELOPMENT/USE OR SUBDIVISION CHECKLIST

Clarence... a brighter place

Documentation required:

1. **MANDATORY DOCUMENTATION**

This information is required for the application to be valid. An application lodged without these items is unable to proceed.

- ❑ Details of the location of the proposed use or development.
- ❑ A copy of the current Certificate of Title, Sealed Plan, Plan or Diagram and Schedule of Easements and other restrictions for each parcel of land on which the use or development is proposed.
- ❑ Full description of the proposed use or development.
- ❑ Description of the proposed operation.
  May include where appropriate: staff/student/customer numbers; operating hours; truck movements; and loading/unloading requirements; waste generation and disposal; equipment used; pollution, including noise, fumes, smoke or vibration and mitigation/management measures.
- ❑ Declaration the owner has been notified if the applicant is not the owner.
- ❑ Crown or Council consent (if publically-owned land).
- ❑ Any reports, plans or other information required by the relevant zone or code.
- ❑ Fees prescribed by the Council.

  Application fees (please phone 03 6217 9550 to determine what fees apply). An invoice will be emailed upon lodgement.

2. **ADDITIONAL DOCUMENTATION**

In addition to the mandatory information required above, Council may, to enable it to consider an application, request further information it considers necessary to ensure that the proposed use or development will comply with any relevant standards and purpose statements in the zone, codes or specific area plan, applicable to the use or development.

- ❑ **Site analysis plan and site plan**, including where relevant:
  - *Existing and proposed use(s) on site.*
  - *Boundaries and dimensions of the site.*
  - *Topography, including contours showing AHD levels and major site features.*
  - *Natural drainage lines, watercourses and wetlands on or adjacent to the site.*
  - *Soil type.*
  - *Vegetation types and distribution, and trees and vegetation to be removed.*
  - *Location and capacity of any existing services or easements on/to the site.*
  - *Existing pedestrian and vehicle access to the site.*
  - *Location of existing and proposed buildings on the site.*
  - *Location of existing adjoining properties, adjacent buildings and their uses.*
  - *Any natural hazards that may affect use or development on the site.*
  - *Proposed roads, driveways, car parking areas and footpaths within the site.*
  - *Any proposed open space, communal space, or facilities on the site.*
  - *Main utility service connection points and easements.*
  - *Proposed subdivision lot boundaries.*

- ❑ Where it is proposed to erect buildings, **detailed plan**s with dimensions at a scale of 1:100 or 1:200 showing:
  - *Internal layout of each building on the site.*
  - *Private open space for each dwelling.*
  - *External storage spaces.*
  - *Car parking space location and layout.*
  - *Major elevations of every building to be erected.*
  - *Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.*
  - *Relationship of the elevations to natural ground level, showing any proposed cut or fill.*
  - *Materials and colours to be used on rooves and external walls.*
- ❑ Where it is proposed to erect buildings, a plan of the proposed **landscaping** showing:
  - *Planting concepts.*
  - *Paving materials and drainage treatments and lighting for vehicle areas and footpaths.*
  - *Plantings proposed for screening from adjacent sites or public places.*
- ❑ Any additional reports, plans or other information required by the relevant zone or code.

This list is not comprehensive for all possible situations. If you require further information about what may be required as part of your application documentation, please contact Council's Planning Officers on (03) 6217 9550 who will be pleased to assist.

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
132517	4
EDITION	DATE OF ISSUE
7	01-May-2023

SEARCH DATE : 04-Feb-2025
SEARCH TIME : 09.00 AM

DESCRIPTION OF LAND

City of CLARENCE
Lot 4 on Sealed Plan 132517
Derivation : Part of 30 Acres Located to Risby and Part of 50 Acres Located to Risby
Prior CT 47733/1

SCHEDULE 1

N122306 TRANSFER to HANNAH ROSLYN VASICEK Registered 01-May-2023 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP 132517 COVENANTS in Schedule of Easements
SP 132517 FENCING PROVISION in Schedule of Easements
SP 132517 COUNCIL NOTIFICATION under Section 83(5) of the Local Government (Building and Miscellaneous Provisions) Act 1993.
E341919 MORTGAGE to Commonwealth Bank of Australia Registered 01-May-2023 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

E155387 DISCHARGE OF MORTGAGE E341919 Lodged by WMM LAW on 21-Jan-2025 BP: E155387

OWNER ~~MARGRET ARNOTT CHANCELLOR~~ JOHN DOUGLAS SAUL

FOLIO REFERENCE CT 47733-1, CT 47733-2

GRANTEE PART OF 50-0-0 LOC. to RISBY & PART OF 50-0-0 LOC. to RISBY

PLAN OF SURVEY

BY SURVEYOR Craig McDowall Terry of PEACOCK, DARCEY & ANDERSON PTY LTD AUTHORISED SURVEYORS 127 BATHURST STREET, HOBART

LOCATION CITY OF CLARENCE

SCALE 1: 2000 LENGTHS IN METRES

REGISTERED NUMBER

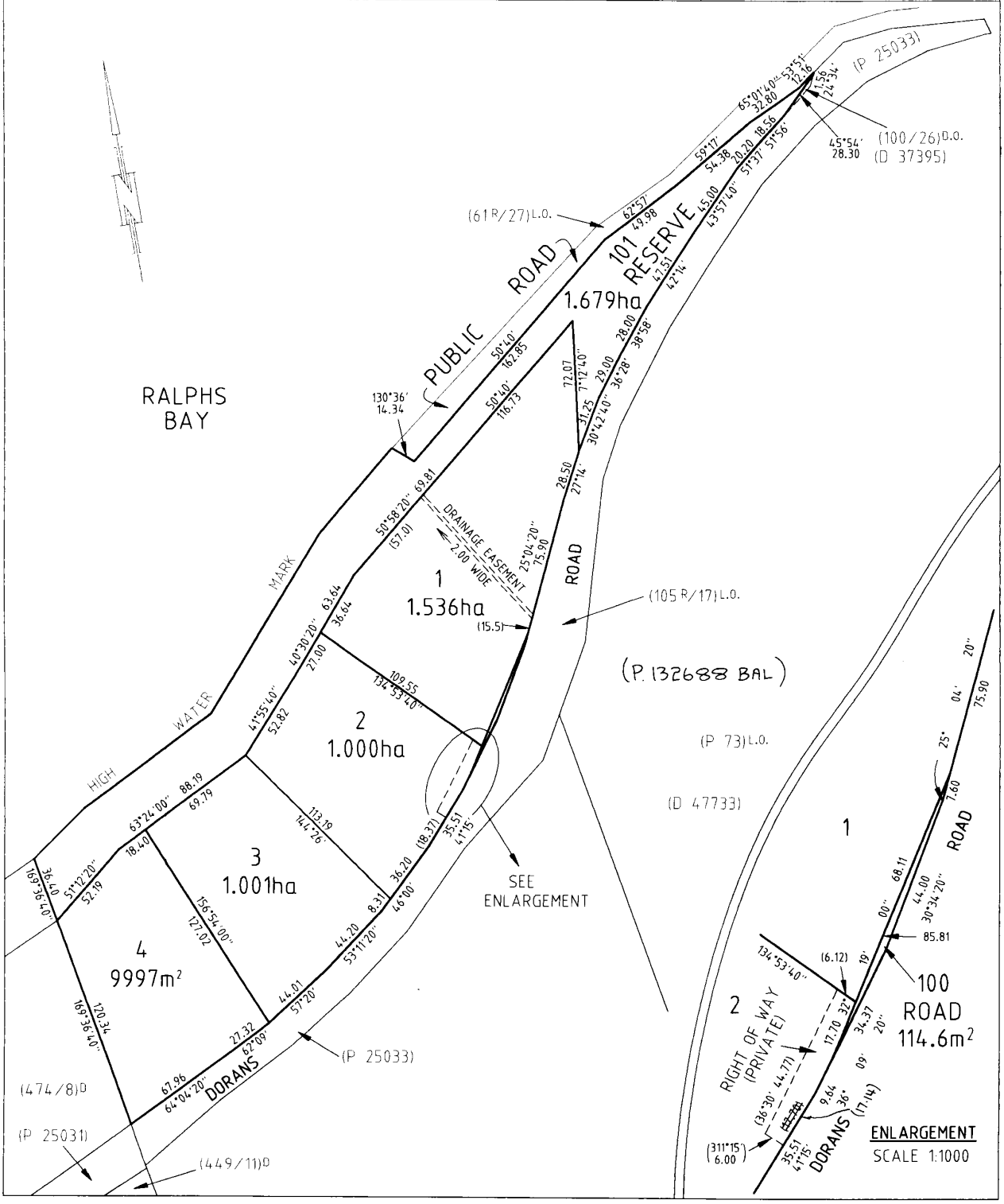
SP132517

APPROVED - 8 SEP 1999

EFFECTIVE FROM .....

Recorder of Titles

MAPSHEET MUNICIPAL CODE No 107 (5224-2S) ~~##~~	LAST UPI No 1400564 1400567	LAST PLAN No D47733	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



SCHEDULE OF EASEMENTS	REGISTERED NUMBER
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP132517

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.
Lot 1 on the Plan is SUBJECT TO a right of drainage for Clarence City Council over the Drainage Easement 2.00 wide shown on the plan passing through such lot.

Lot 1 on the Plan is:

Together with a right of carriageway over the Right of Way (Private) shown on the Plan.

Lot 2 on the Plan is:

Subject to a right of carriageway (apppurtenant to Lot 1 on the Plan) over the Right of Way (Private) shown on the Plan passing through such Lot.

COVENANTS:

The owner of each Lot shown on the Plan covenants with the Vendor (John Douglas Saul) and with the owner for the time being of every other Lot shown on the Plan to the intent that the burden of this covenant may run with and bind the covenantor's Lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every part of every other Lot shown on the Plan to observe the following stipulations:

1. In relation to any aboriginal relic found within Lots 1, 2, 3 and 4 on the Plan, except as otherwise provided in the Aboriginal Relics Act 1975, not to:

   (a) destroy, damage, deface, conceal or otherwise interfere with a relic;

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: JOHN DOUGLAS SAUL FOLIO REF: VOLUME 47733 FOLIO 1 and VOLUME 47733 FOLIO 2 SOLICITOR & REFERENCE: CREESE, CRISP & FAY ROBERT FAY	PLAN SEALED BY: CLARENCE CITY COUNCIL DATE: 10/8/99 REF NO. SD 980565 Council Delegate CORPORATE SECRETARY
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.	

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 3 PAGE/S	Registered Number SP 132517
SUBDIVIDER: JOHN DOUGLAS SAUL FOLIO REFERENCE: VOLUME 47733 FOLIO 1 and VOLUME 47733 FOLIO 2	

(b) make a copy or replica of a carving or engraving that is a relic by rubbing, tracing, casting or other means that involves direct contact with the carving or engraving;

(c) remove a relic from the place where it is found or abandoned;

(d) sell or offer or expose for sale, exchange or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;

(e) take a relic or cause or permit a relic to be taken out of this State; or

(f) cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic.

2. Not to erect or place on such Lot any dwelling house, building or structure using any exterior building material that contrasts with the rural environment.

3. Not to remove from such Lot any tree or trees without the prior consent of the Clarence City Council.

4. Not to further subdivide such Lot.

5. Not to plant any tree or shrub within 5.00 metres of any road boundary of Lots 2, 3 or 4 on the Plan.

FENCING PROVISION:

In respect of each Lot shown on the Plan the Vendor (John Douglas Saul) shall not be required to fence.

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

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 3 OF 3 PAGE/S	Registered Number SP 132517
SUBDIVIDER: JOHN DOUGLAS SAUL FOLIO REFERENCE: VOLUME 47733 FOLIO 1 and VOLUME 47733 FOLIO 2	

SIGNED by JOHN DOUGLAS SAUL the registered proprietor of the land in Folios of the Register Volume 47733 Folios 1 and 2 in the presence of:

Solicitor, Hobart.

SIGNED by DAVID WHITFIELD HANN and GEOFFREY RICHARD PICKARD as Mortgagees under Mortgages Registered Nos. B404348A, B493651, B768944 and B898599 in the presence of:

Town Clerk Hobart.

SIGNED by DAVID WHITFIELD HANN and TIMOTHY JOHN WILLIAMS as Mortgagees under Mortgage Registered No. C115053 in the presence of:

Town Clerk Hobart.

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

Sheet List				
Sheet Number	Sheet Name	Project Status	Current Revision	Revision Date
1 G-01	COVER	DA	R9	13/04/2026
1 G-02	GENERAL NOTES	DA	R9	13/04/2026
2 A-00	SITE SURVEY	DA	R9	13/04/2026
2 A-01	SITE PLAN	DA	R9	13/04/2026
2 A-01.1	SITE AWTS	DA	R9	13/04/2026
2 A-02	FLOOR PLAN	DA	R9	13/04/2026
2 A-03	ELEVATIONS	DA	R9	13/04/2026
2 A-04	ROOF PLAN	DA	R9	13/04/2026

BEFORE YOU DIG
www.byda.com.au

WARNING:
IT IS THE RESPONSIBILITY OF THE BUILDER TO COMPLETE BYD AND WORK WITH AUTHORITIES TO LOCATE ALL UNDERGROUND SERVICES.

General Information

Designer: Daniel Bastin CC6836
Classification: 1a
Title Reference: 132517/4
Design Wind Speed: N3
Soil Classification: H-1
Climate Zone: 7
BAL: 12.5
Corrosion Environment: HIGH
Known Hazards: BUSHFIRE PRONE AREA
Floor Area: 54.10m²
Deck: 5.23m²

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary
384 Dorans Rd, Sandford
Hannah Vasicek

COVER

Project number		5292
Drawing Status		DA
Current Revision	13/04/2026	R9

1 G-01
Scale on A3

13/04/2026 12:15:28 PM

ISSUE

GENERAL NOTES:

Check all dimensions, boundaries, easements and service locations on site.
All work shall comply with the Tasmanian Building Regulations 2016, National Construction Codes and relevant current Australian Standards.

Check carefully all aspects of these documents before commencing work.
Any errors or anomalies to be reported to the drawer before work is continued.
Confirm all sizes and heights on site. Do not scale off plan.

All framing to comply with AS 1684 Residential Timber-Framed Construction.
Note: All timber sizes specified are minimum requirement only.
Substitutes may be used as long as verification of equal performance is obtained.

All construction is to comply with the National Construction Codes and all relevant Australian Standards.

These documents to be used with specifications, soil tests and all documentation prepared by an engineer.

These documents are intended for council applications and normal construction.

SITE NOTES:
All site works shall be in accordance with NCC CSIRO BTF 18, 19, 22 and AS 2870

Minimal site disturbance is to be carried out.
Sediment control; 'geolab' silt fence 1000 or similar.
Topsoil stockpiles remaining on the site to be covered with plastic, adequately retained along all edges. Unused stockpiles to be removed from site or used for future landscaping.

SITE PREPARATION AND EXCAVATION:
In accordance with ABCB Housing Provisions Standard Part 3 and to local council requirements.

FOOTINGS:
Concrete footings and slabs in accordance with ABCB Housing Provisions Standard Part 4, AS 2870.1 and engineer's specifications.

BRICK AND BLOCK:
In accordance with ABCB Housing Provisions Standard Part 5, AS 4773 and AS 3700

SUB-FLOOR VENTILATION:
In accordance with ABCB Housing Provisions Standard part 6

DAMP PROOFING:
In accordance with ABCB Housing Provisions Standard part 5 and AS/NZS 2904.

TIMBER FRAMING:
Timber framing, tie down and wind bracing details to ABCB Housing Provisions Standard Part 6 and AS 1684.2.and AS4055.

WALL CLADDING:
In accordance with ABCB Housing Provisions Standard Part 7 and manufacturer's specifications.

ROOF CLADDING, GUTTERING AND DOWNPIPES:
In accordance with ABCB Housing Provisions Standard Part 7 and AS/NZS 3500.5.
Installation to be in accordance with manufacturer's specifications and recommendations.

WINDOWS & GLAZING:
All windows and glazing to AS 2047 and AS 1288 and ABCB Housing Provisions Standard Part 8.
Manufacturer to provide certification of compliance.
All window measurement shown are nominal only and are to be verified on site, prior to ordering.

CONDENSATION MANAGEMENT NOTES:

All condensation management in accordance with ABCB Housing Provisions Standard Part 10.8

VENTILATION OF ROOF SPACES:
In accordance with ABCB Housing Provisions Standard Part 10.

HYDRAULIC:
Stormwater to be in accordance with AS/NSZ 3500
Wastewater to be in accordance with AS/NSZ 3500 and/or AS 1547
Water supply to be in accordance with AS/NSZ 3500

ELECTRICAL:
All wiring and electrical installation to be in accordance with AS 3000
Smoke alarm/s - a 240 volt hard wired smoke alarm complying with AS 3768 should be located near sleeping areas on every story and as per ABCB Housing Provisions Standard Part 9.

INTERIOR NOTES:

Plasterboard;
All internal plasterboard finishes to be in accordance with AS/NZS 2588

Joinery;
- Hardwood in accordance with AS 2796
- Softwood in accordance with AS 4785
- Plywood in accordance with AS/NZS 2270 and AS/NZS 2271

Domestic Kitchen Assemblies;
In accordance with AS/NZS 4386

Ceramic Tiling;
In accordance with AS 4662, AS 2358 and AS 4992

WATERPROOFING / WET AREAS:
In accordance with ABCB Housing Provisions Standard Part 10.2 and AS 3740
Waterproofing membrane and substrates to be installed to floors, walls and wall/floor junctions in accordance with AS 3740 Waterproofing of Domestic wet areas.

BEFORE YOU DIG www.byda.com.au

WARNING:
IT IS THE RESPONSIBILITY OF THE BUILDER TO COMPLETE BYD AND WORK WITH AUTHORITIES TO LOCATE ALL UNDERGROUND SERVICES.

PROTECTIVE COATINGS FOR STEELWORK - HIGH

STRUCTURAL STEEL TO BE COATED IN ACCORDANCE WITH ABCB HOUSING PROVISIONS TABLES 6.3.9a, 6.3.9b AND 6.3.9c FOR CORROSION ENVIRONMENT: HIGH

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary
384 Dorans Rd, Sandford
Hannah Vasicek

GENERAL NOTES

Project number		5292	1 G-02
Drawing Status		DA	
Current Revision	13/04/2026	R9	Scale on A3 1 : 1

13/04/2026 12:15:29 PM

ROGERSON & BIRCH SURVEYORS

UNIT 1, 2 KENNEDY DRIVE
CAMBRIDGE 7170
PHONE: (03)6248 5898
EMAIL: admin@rbsurveyors.com
WEB: www.rbsurveyors.com

0m 10m 20m 30m 40m 50m
1:500

NOTES:

This plan and associated digital model is prepared for EMAC Systembuilt Group from a combination of field survey and existing records for the purpose of designing new constructions on the land and should not be used for any other purpose.

The title boundaries as shown on this plan were not marked at the time of the survey and have been determined by plan dimensions only and not by field survey. No measurements or offsets are to be derived between the features on this plan and the boundary layer. The relationship between the features in this model and the boundary layers cannot be used for any set out purposes or to confirm the position of the title boundaries on site.

Due to the nature of the title boundary information, if any structures are designed on or near a boundary we would recommend a re-mark survey be completed and lodged with the Land Titles Office to support the boundary definition.

Services shown have been located where visible by field survey. Services denoted as being "Per DBYD only" are approximate and for illustrative purposes only. Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

This note forms an integral part of the Plan/Data. Any reproduction of this plan/model without this note attached will render the information shown invalid.

18.40
52.19
120.34
67.96
27.31
127.02

Pipe
RL: 9.31

Spike
RL: 15.58

Spike
RL: 14.03

Spike
RL: 20.67

R/S in bit.
RL: 19.73

Y-Bar
RL: 28.80

Septic Tank
Cubby House
Deck
Existing Dwelling No.384
FFL = 18.31
FFL = 18.75
FFL = 18.80
FFL = 18.94
Bit. Drive
Gravel Drive
Conc. Apron

4
9997m²

DORANS ROAD

LEGEND

- RF — Floor Level
- ● — Bench Mark
- Property Boundary
- Fence

HORIZONTAL DATUM is GDA2020, Coordinates are Plane
Coordinate Origin: SPM9676
E 538132.352 N 5247510.787 PER SURCOM

REV	AMENDMENTS	DRAWN	DATE	APPR.
E				
D				
C				
B				
A				

Contour & Detail Plan

FOR: EMAC SYSTEMBUILT GROUP

LOCATION: 384 DORANS ROAD SANDFORD

Date: 11-02-2025	Contour interval: 0.250m	Reference: EMAC172 15958-01
Drawn: NC	Scale: 1:500 (A3)	Bearing Datum: MGA2020 per RTK GPS
Approved: NC	C.T. Reference: C.T.132517/4	Vertical Datum: AHD83 per SPM9676

Construction and materials in accordance with current NCC requirements and all relevant Australian Standards - See General Notes
Construction in accordance with AS3959 = BAL 12.5

ISSUE

AH 8141 AS PER REPORT

AH 8141 AS PER REPORT

Spike
RL 15.58

LINE OF CUBBY FOR REFERENCE

EXISTING FENCE

3510

2200

2565

2092

2200

PROPOSED
ANCILLARY
DWELLING
FFL 19.735

SEPTIC
TANK

CURRENT WASTEWATER
ABSORPTION AREA

Spike
RL 14.03

EXISTING DECK

EXISTING DWELLING

127.02 m

Spike
RL 20.67

EXISTING
TANK

EXISTING
TANK

EXISTING 25000L TANKS

BITUMEN DRIVEWAY

BEFORE YOU DIG
www.byda.com.au

WARNING:
IT IS THE RESPONSIBILITY OF THE BUILDER TO COMPLETE BYD AND WORK WITH AUTHORITIES TO LOCATE ALL UNDERGROUND SERVICES.

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary

384 Dorans Rd, Sandford

Hannah Vasicek

SITE PLAN

Project number		5292	
Drawing Status		DA	
Current Revision	13/04/2026	R9	

2 A-01

Scale on A3 1 : 200

13/04/2026 12:15:30 PM

Construction and materials in accordance with current NCC requirements and all relevant Australian Standards - See General Notes
Construction in accordance with AS3959 = BAL 12.5

ISSUE

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary

384 Dorans Rd, Sandford

Hannah Vasicek

SITE AWTS

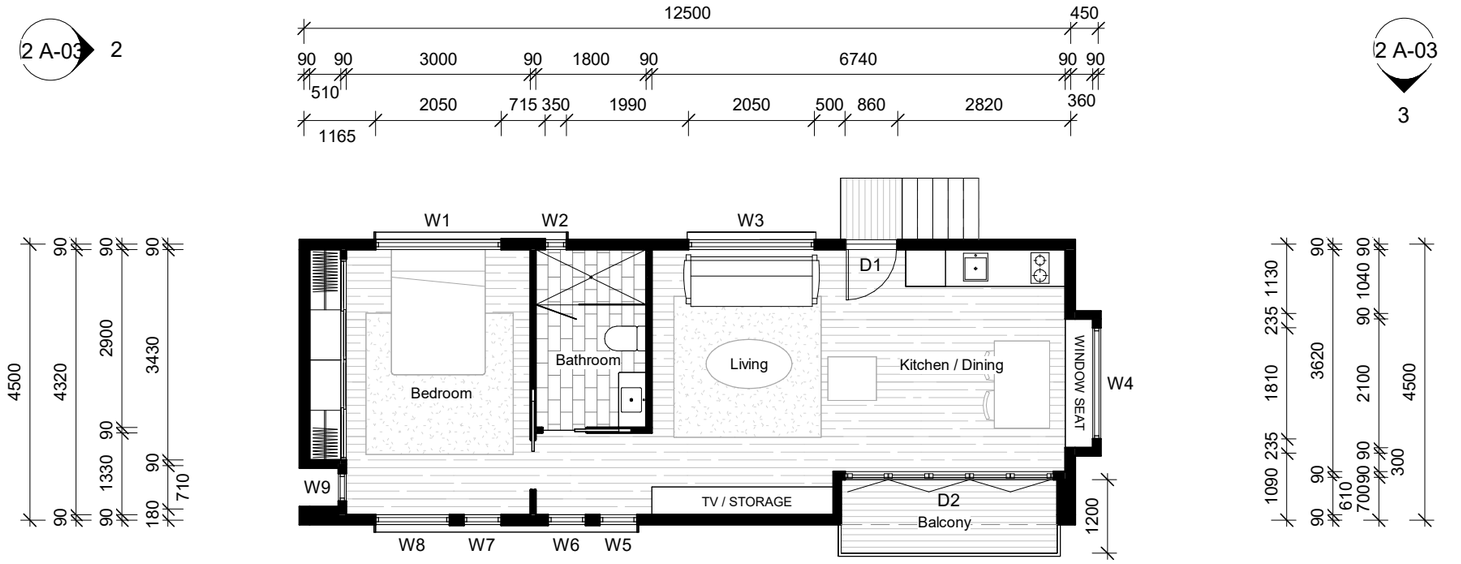
Project number	5292		
Drawing Status	DA		
Current Revision	13/04/2026	R9	Scale on A3 1 : 500

2 A-01.1

13/04/2026 12:15:31 PM

ISSUE

Construction and materials in accordance with current NCC requirements and all relevant Australian Standards - See General Notes
Construction in accordance with AS3959 = BAL 12.5



Area Schedule	
House	54.10 m²
Deck / Landings	5.23 m²

Glazing Schedule - Single Glazed - Shale Grey - BAL 12.5

Mark	Height	Width	Head Height	Description	Comments	Count
D1	2100	820	2100	Hinged Door	White Trans	1
D2	2100	3400	2100	Aluminium Bi-Fold Doors	Clear	1
W1	600	2050	2100	Awning Window	Clear	1
W2	1800	350	2100	Awning Window	White Trans	1
W3	600	2050	2100	Awning Window	Clear	1
W4	1200	1810	1850	Awning Window	Clear	1
W5	1800	610	2100	Awning Window	Clear	1
W6	1800	610	2100	Awning Window	Clear	1
W7	1800	610	2100	Awning Window	Clear	1
W8	1800	1210	2100	Awning Window	Clear	1
W9	1800	450	2100	Awning Window	Clear	1

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary

384 Dorans Rd, Sandford

Hannah Vasicek

FLOOR PLAN

Project number	5292	
Drawing Status	DA	
Current Revision	13/04/2026	R9

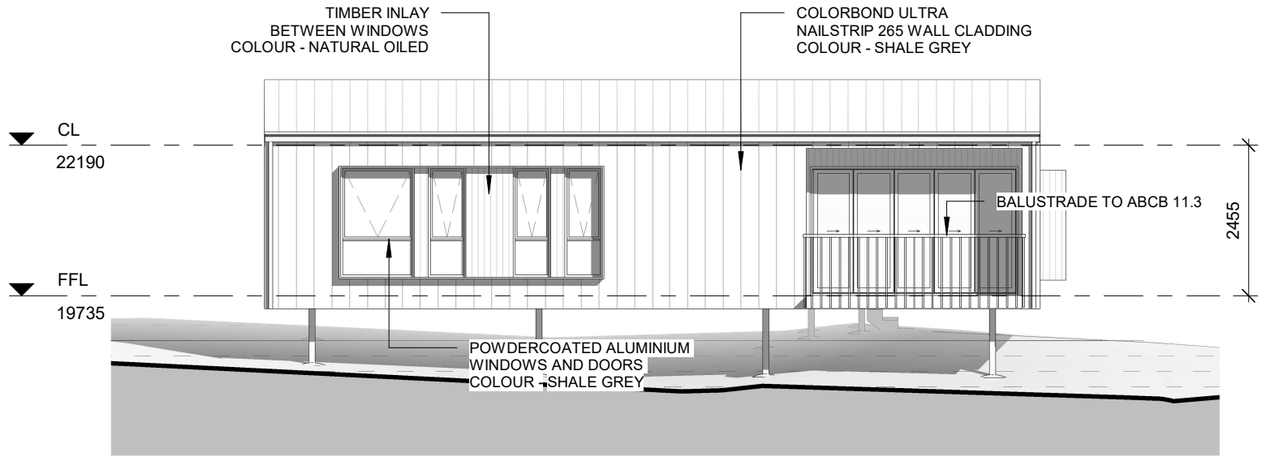
2 A-02

Scale on A3 1 : 100

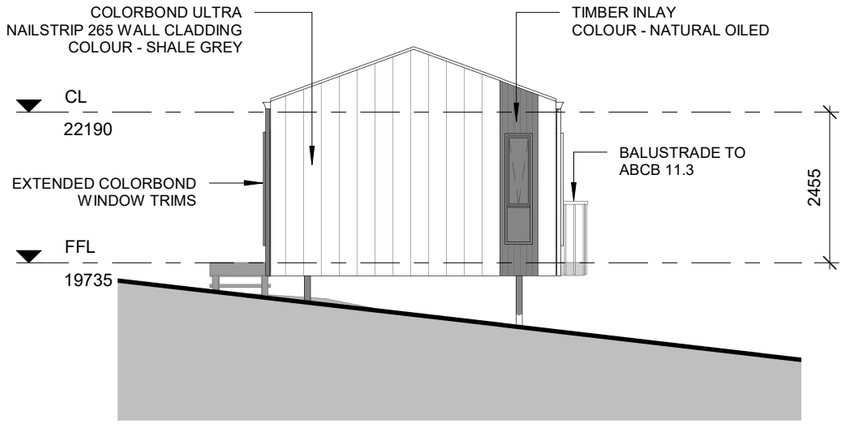
13/04/2026 12:15:31 PM

ISSUE

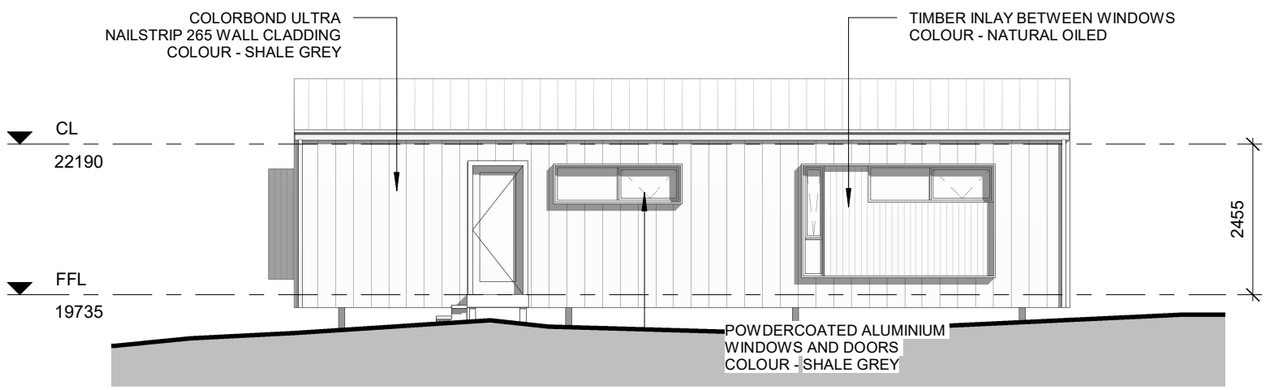
Construction and materials in accordance with current NCC requirements and all relevant Australian Standards - See General Notes
Construction in accordance with AS3959 = BAL 12.5



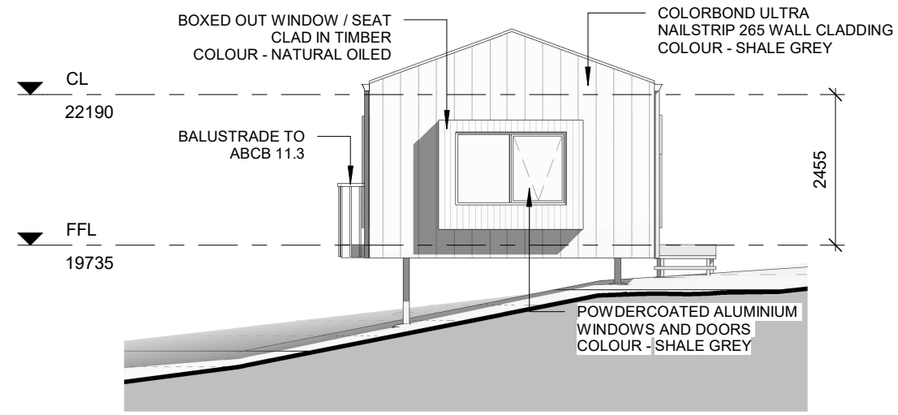
1 NORTH ELEVATION
1 : 100



2 EAST ELEVATION
1 : 100



3 SOUTH ELEVATION
1 : 100



4 WEST ELEVATION
1 : 100

NOTE:
ALL STEEL ROOF AND WALL CLADDING MATERIALS TO HAVE A MINIMUM AM150 COATING.
USE ONLY COMPATIBLE FIXINGS AND INSTALL AS PER MANUFACTURERS SPECIFICATIONS.

General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary
384 Dorans Rd, Sandford
Hannah Vasicek

ELEVATIONS

Project number	5292		2 A-03
Drawing Status	DA		
Current Revision	13/04/2026	R9	Scale on A3 1 : 100

13/04/2026 12:15:33 PM

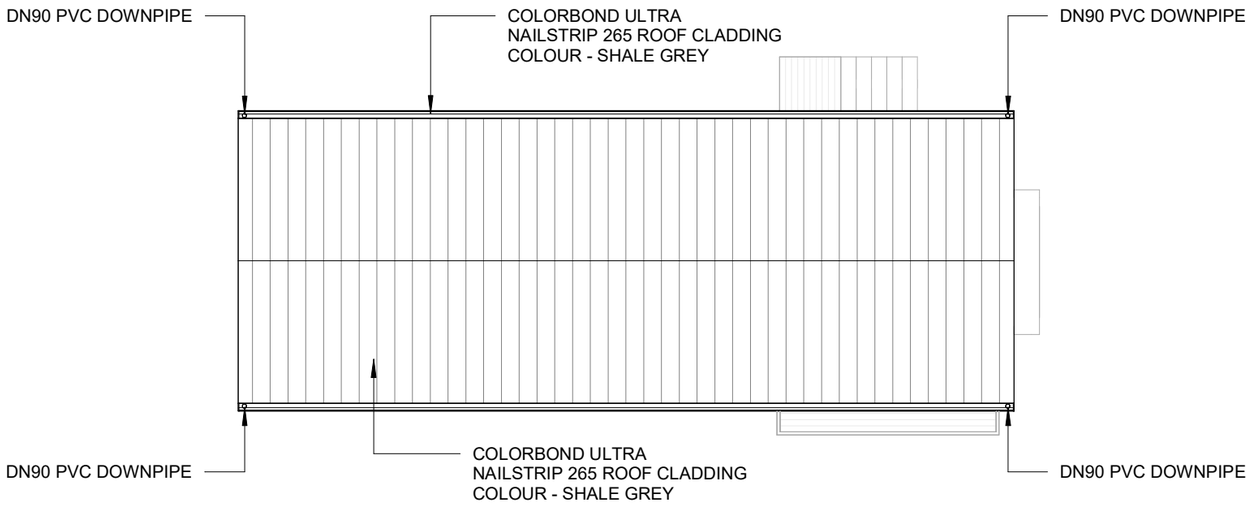
ISSUE

Construction and materials in accordance with current NCC requirements and all relevant Australian Standards - See General Notes
Construction in accordance with AS3959 = BAL 12.5

ROOF CLADDING, GUTTERING AND DOWNPIPES:
In accordance with ABCB Housing Provisions Standard Part 7 and AS/NZS 3500.5.
Installation to be in accordance with manufacturer's specifications and recommendations.

VENTILATION OF ROOF SPACES:
In accordance with ABCB Housing Provisions Standard Part 10.

HYDRAULIC:
Stormwater to be in accordance with AS/NSZ 3500
Wastewater to be in accordance with AS/NSZ 3500 and/or AS 1547
Water supply to be in accordance with AS/NSZ 3500



General Notes
Do not scale plans, use written dimensions only. The owner/builder subcontractor shall verify all dimensions, levels, setbacks and specifications prior to commencing works or ordering materials and shall be responsible for ensuring that all building works conform to the current NCC and Australian standards, building regulations and town planning requirements.
Report any discrepancies to this office.

systembuilt
designed for living
1063 Cambridge Road
Cambride, TAS 7170 (03) 6214 8888

Vasicek Ancillary
384 Dorans Rd, Sandford
Hannah Vasicek

ROOF PLAN

Project number		5292	
Drawing Status		DA	
Current Revision	13/04/2026	R9	

2 A-04

Scale on A3 1 : 100

13/04/2026 12:15:34 PM

BUSHFIRE HAZARD REPORT

Proposed ancillary dwelling
384 Dorans Road
Sandford, 7020

Dated 30th August 2025
Report by David Lyne BFP-144

11 Granville Avenue
Geilston Bay, 7015
M: 0421 852 987
dave_lyne@hotmail.com

Contents

Appendix A – Site analysis with Cadastral & Contour Overlay - indicates subject site
Appendix B – Site photos and designers site plan
Appendix C – Bushfire Hazard Management Plan, by David Lyne – certified date 30.08.2025; Certificate of Others (Form 55) 1704/25

1. Introduction

I have been engaged by Systembuilt Homes to prepare a bushfire report and plan for a new ancillary dwelling in the suburb of Sandford. The intent of this report is to confirm the suitability of the bushfire prone parcel of land to be successfully developed for the dwelling in accordance with the Directors Determination – bushfire hazard areas v1.2.

The assessment describes the site and surrounding area, classifying the vegetation, assessing the slope and environmental features. This report should be included with approval documentation forming part of the certified documentation intended to satisfy the Directors Determination. The body of the report describes the site and assesses the requirements to be implemented to satisfy the requirements of the Directors Determination.

2. Limitation of Report

This report has been prepared for the above mentioned clients for their use and distribution only. The intent of the report is to provide supporting documentation for the Development Application (specifically vegetation clearance/maintenance distances) and the Building Application. Should submitted Application Plans differ from the Certified Plans in this report then an amended design review should be conducted to determine the suitability of any amendments in relation to the Bushfire Prone Area Requirements of AS3959-2018.

It is also to be noted that the assessment has been conducted according to the site inspection being conducted in August 2025 and does not take into account the possibility of altered site conditions either naturally occurring or where currently maintained or excluded vegetation conditions change due to a lack of ongoing maintenance.

It should be noted that compliance with the recommendations contained in this assessment does not mean that there is no residual risk to life safety or property as a result of bushfire. A residual level of risk remains which recognizes that removing the risk to life and property in absolute terms is not achievable while people continue to build in bushfire prone areas. This limitation is expressed in the following extract from AS 3959 (2018) which states (in the forward), *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.*

This level of residual risk is inherent in all bushfire standards and also applies to this assessment.

3. Site Description and Background

384 Dorans Road Sandford is an existing land parcel located in the municipality of the Clarence Council. The property is currently low threat vegetation, with an established dwelling and associated outbuildings present. Neighbouring properties are currently low threat vegetation with established dwellings to the south, east and west; and a crown owned strip of land to the north between this allotment and Ralphs Bay.

The site has access to a sealed public road – Dorans Road, which links to South Arm Road. This allotment is not provided with a reticulated hydrant water supply for firefighting.

3.1 Property Details

Address: 384 Dorans Road, Sandford 7020

Municipality: Clarence Council

Zoned: Rural Living

Lot Number: 132517/4

Type of Development: New ancillary dwelling

Classified BAL: **BAL-12.5**

Appendix A: Photo 1 – Site analysis with Cadastral Overlay – Subject site highlighted blue.

3.2 Classification of Vegetation

The vegetation affecting the site has been classified in accordance with Clause 2.2.3 of AS 3959-2018. The Bushfire-Prone vegetation affecting the site is predominantly ***Grassland – Group G*** in accordance with AS3959-2018.

In this case, in accordance with Clause 2.2.2 of AS 3959-2018, the relevant Fire Danger Index for Tasmania of 50 (FDI 50).

When considering the definition of Bushfire Prone Area under the Directors Determination it is evident the proposed dwelling location is within 100 metres of greater than 1 hectare of vegetation classified in accordance with AS 3959-2018 and is therefore considered '*Bushfire Prone*'. It should be also noted that Clauses C2.2.3.1 and C2.2.5 of AS3959-2018 state that a sufficient level of distance must be used to determine the vegetation classification and the effective slope which may necessitate the consideration of vegetation out to distances in excess of 100m from the site. As such the classified vegetation and effective slope under the vegetation has been assessed over a distance of 140m of the site.

From the proposed dwelling site a 360° survey has been conducted to determine the vegetation type, proximity and slope under the vegetation which is of the highest hazard rating. In this case the ***Grassland*** is the highest hazard vegetation surrounding the proposed dwelling.

Note: in a bushfire there is a possibility of fire attack from any direction, not just the direction of the highest hazard. Photo 1, above indicates the Bushfire Prone Vegetation described. Refer to Appendix B for current conditions as at time of inspection.

3.3 Slope

The Effective slope of the land under the classified vegetation is determined in accordance with Clause 2.2.5 of AS 3959- 2018.

The *effective* slope under the bushfire prone vegetation is generally Upslope/Flatland to the south; and downslope 0-5° to the north, east and west.

Refer to Appendix A Image for topographic contour information.

4. Bushfire Assessment

In accordance with Clause 2.2 of AS 3959-2018, the Simplified Procedure has been applied to determine the Bushfire Attack Level (BAL) for the proposed dwelling site. In accordance with the Directors Determination, fire-fighting water supply and vehicle access are also considered and discussed in relation to the proposed dwelling.

It should be noted that AS3959 Table 2.6 only provides BAL ratings for separation distance up to and including 50m from grassland. Therefore, grassland less than 100m but greater than 50m separation from the site has been excluded from assessment.

4.1 Bushfire Attack Level

Considering the current conditions, in accordance with AS3959-2018 the dwelling site is capable of achieving **BAL-12.5** (the minimum required standard being BAL-29 required by the Directors Determination).

The desired BAL rating to be applied in this instance will be **BAL-12.5**. The vegetation within the Hazard Management Area (HMA) is to be continually maintained in a minimal fuel condition and in which there are no other hazards present which significantly contribute to the spread of a fire.

Table 1 – Bushfire Attack Level Assessment Summary and Notes

Property Details

Applicants Name	Systembuilt Homes		**Phone**	03 6214 8888	
Municipality	Clarence Council		**Zoning**	Rural Living	
Certificate of Title/Lot No.	132517/4	**Lot Size**	9997m²		
Address	384 Dorans Road, Sandford 7020				

Type of Building Work

New Class 1a Buildings	x
New Class 10a Building	
New Class 2 Building	
New Class 3 Building	
Alteration/Additions to an existing building	

Description of building work: e.g. *single dwelling with attached garage*
New ancillary dwelling

Bush Fire Attack Level (BAL)

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

Assess the vegetation within 100m in all directions (tick relevant group)
Note 1: Refer to table 2.3 and figures 2.3 & 2.4 for description and classification of vegetation.
Note 2: If there is no classified vegetation within 100m of the site then the BAL is LOW for that part of the site.

Vegetation Classification (See Table 2.3	North X	South X	East X	West X
	North East	South-West	South-East	North-West
Group -	Grassland	Grassland 100-180m Forest 180m+	Low threat veg.	Low threat veg.

Exclusions (where applicable)	Circle relevant paragraph descriptor from clause 2.2.3.2			
	(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)

Distance of the site from classified vegetation (see clause 2.2.4)

Distance to classified vegetation	Show distances in meters			
	35m	>100m	N/A	N/A

Effective Slope	Upslope			
Slope under the classified vegetation	Upslope/0°	Upslope/0° X	Upslope/0°	Upslope/0°
	Downslope			
	>0 to 5° X	>0 to 5° ☐	>0 to 5° X	>0 to 5° X
	>5 to 10° ☐	>5 to 10° ☐	>5 to 10° ☐	>5 to 10° ☐
	>10 to 15° ☐	>10 to 15° ☐	>10 to 15° ☐	>10 to 15° ☐
	>15 to 20° ☐	>15 to 20° ☐	>15 to 20° ☐	>15 to 20° ☐

BAL value for each side of the site	BAL-12.5	BAL-LOW	BAL-LOW	BAL-LOW
Separation to achieve BAL-29	6-<10m	N/A	N/A	N/A
Separation to achieve BAL-19	10-<14m	N/A	N/A	N/A
Separation to achieve BAL-12.5	14-50m	N/A	N/A	N/A

Construction Requirements
For this particular development a BAL-12.5 rating would suit all directions of this site, construction will be generally compliant with AS3959 -2018 Sections 3 and 5.

4.2 Road / Vehicle Access

The primary access to the lot is from a sealed public road – Dorans Road, which connects to South Arm Road. There is an existing driveway and access for the existing dwelling on site, that is compliant with adequate turning areas. There is no requirement to upgrade the driveway or access.

4.3 Water supply for firefighting

As the proposed development does not have access to a reticulated water supply suitable for firefighting, a static water supply of minimum 10,000 litres must be provided solely for firefighting for this particular site. The water supply must include a water connection point within 3.0 m of a vehicle hardstand that is at least 6.0 m from the building. The hardstand must be connected to the property access. The water supply must comply with Table 3B of the Director's Determination:

Table 3B Static Water Supply for Fire fighting

A. Distance between building area to be protected and water supply

The following requirements apply:

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

B. Static Water Supplies

A static water supply:

1. May have a remotely located offtake connected to the static water supply;
2. 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;
3. 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;
4. Must be metal, concrete or lagged by non-combustible materials if above ground; and
5. If a tank can be located so it is shielded in all directions in compliance with Section 3.5 of AS 3959, the tank may be constructed of any material provided that the lowest 400 mm of the tank exterior is protected by:

   (a) metal;

   (b) non-combustible material; or

   (c) fibre-cement a minimum of 6 mm thickness.

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

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

1. Have a minimum nominal internal diameter of 50mm;
2. Be fitted with a valve with a minimum nominal internal diameter of 50mm;
3. Be metal or lagged by non-combustible materials if above ground;
4. Where buried, have a minimum depth of 300mm;
5. Provide a DIN or NEN standard forged Storz 65 mm coupling fitted with a suction washer for connection to firefighting equipment;
6. Ensure the coupling is accessible and available for connection at all times;
7. Ensure the coupling is fitted with a blank cap and securing chain (minimum 220 mm length);
8. 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
9. Where a remote offtake is installed, ensure the offtake is in a position that is:

   (a) Visible;

   (b) Accessible to allow connection by firefighting equipment;

   (c) At a working height of 450 – 600mm above ground level; and

   (d) Protected from possible damage, including damage by vehicles.

D. Signage for static water connections

1. The water connection 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: Water tank signage requirements within AS 2304 *Water storage tanks for fire protection systems; or*
2. The following requirements:

   (a) Be marked with the letter "W" contained within a circle with the letter in upper case of not less than 100 mm in height;

(b) Be in fade-resistant material with white reflective lettering and circle on a red background; (c) Be located within one metre of the water connection point in a situation which will not impede access or operation; and (d) Be no less than 400 mm above the ground.
E. Hardstand
A hardstand area for fire appliances must be provided: 1. 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); 2. No closer than six metres from the building area to be protected; 3. With a minimum width of three metres constructed to the same standard as the carriageway; and 4. Connected to the property access by a carriageway equivalent to the standard of the property access.

4.4 Hazard management area

The minimum extents of the Hazard Management Area (HMA) are for the entirety of the residential allotment to be managed and treated as HMA. Management prescriptions for the proposed HMA are provided in Table 2.

Table 2 - Hazard Management Area Prescriptions

Within 10m of habitable buildings	• No storage of flammable materials (e.g. firewood); • Avoid locating flammable garden materials near vulnerable building elements such as glazed windows/doors, decks and eaves (e.g. non-fire-retardant plants and combustible mulches); • Non-flammable features such as paths, driveways and paved areas are encouraged around habitable buildings.
Trees within HMA	• Maintain canopy separation of approximately 2.0m; • Ensure no branches overhang habitable buildings; • Remove tree branches within 2.0m of the ground level below; • Locate any new tree plantings 1.5 x their mature height from buildings; • Avoid planting trees with loose, stringy or ribbon bark.
Understory vegetation within HMA	• Maintain grass cover at <100mm; • Maintain shrubs to <2.0m height; • Shrubs are to be maintained in clumps so as to not form contiguous vegetation (i.e. clumps up to 10sqm in area, separated from each other by at least 10m); • Avoid locating shrubs directly underneath trees; • Periodically remove dead leaves, bark and branches from underneath trees and around habitable buildings.

5. Conclusion

The site has been classified as **BAL-12.5** as per the assessment processes outlined in AS3959-2018. The separation distances shown above are the areas to be maintained and kept in a way to reduce the fuel loads present in order to achieve lower BAL ratings. For this particular site and for where the proposed building is to be constructed, a **BAL-12.5** rating is easily achieved and would suit all directions of the site.

6. References

- Directors Determination – Bushfire hazard areas v1.2

- LIST map version. Aerial Photograph [online]. Available from: http://www.thelist.tas.gov.au/listmap/listmap

- Standards Australia 2018, *Construction of buildings in bushfire prone areas*, AS 3959-2018.

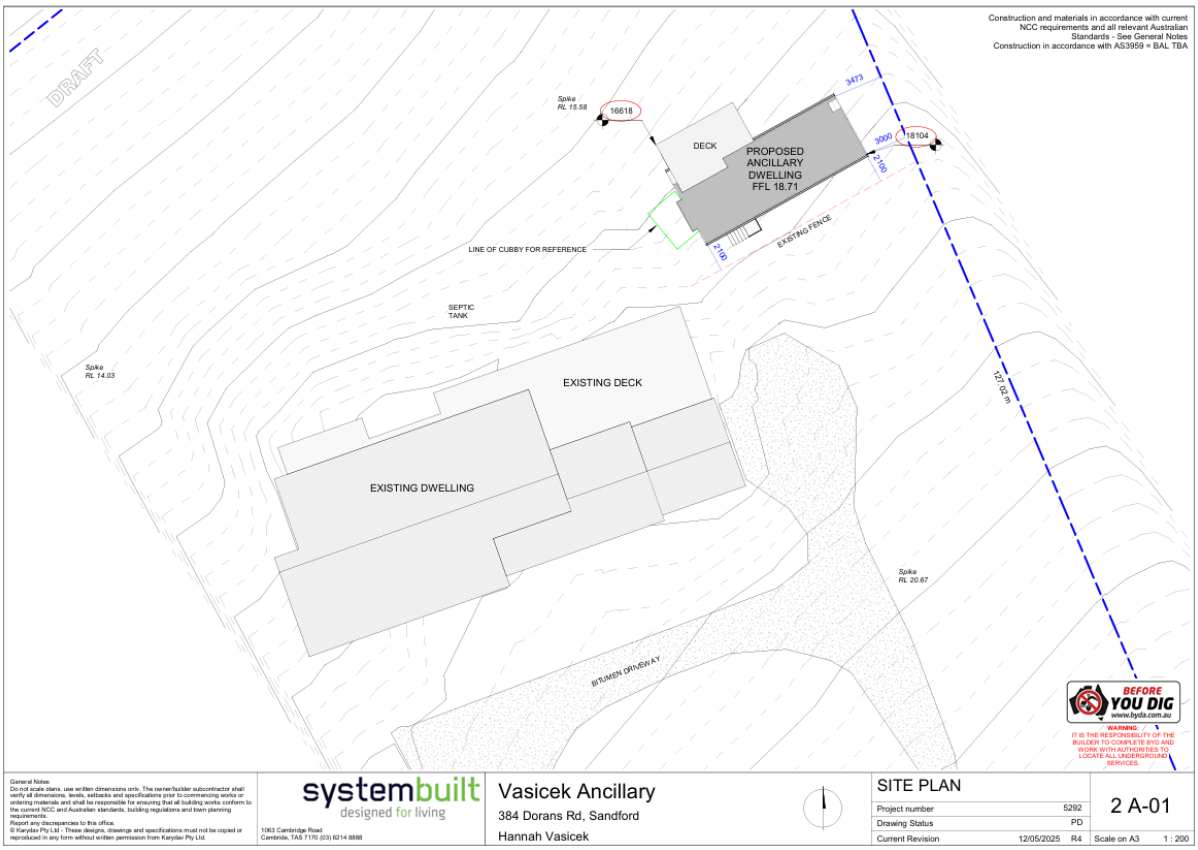
Statement

I have taken all reasonable steps to ensure that the information provided in this assessment is accurate and reflects the conditions on and around the site and allotment on the date of this assessment.
It should be noted that this report does not take into account the possibility of altered site conditions either naturally occurring or where currently maintained or excluded vegetation conditions change due to lack of ongoing maintenance. Compliance with the recommendations contained in this assessment does not mean that there is no residual risk to safety of life or property as a result of bushfire.

Signed: .....

Date: 30/08/2025.....

Appendix B – Site photos and designers site plan



Looking North

Looking South

Looking East

Looking West

HAZARD MANAGEMENT AREAS – HMA

Hazard Management Area includes the area to protect the Building as well as the access and water supplies. Vegetation in the Hazard Management area is to be managed and maintained in a minimum fuel condition.

The HMA is determined from the unmanaged vegetation on this allotment and neighbouring allotments, and should the level of the unmanaged vegetation increase the BHMP and HMA should be reviewed to determine the ongoing suitability of the BHMP and HMA associated with the development.

MAINTENANCE SCHEDULE

- Removal of fallen limbs, leaf and bark litter;
- Cut lawns short (less than 100mm) and maintain;
- Remove pine bark and other garden mulch;
- Complete under–brushing and thin out the under storey;
- Prune low hanging trees to ensure separation from ground litter;
- Prune larger trees to establish and maintain horizontal and vertical canopy separation;
- Maintain storage of petroleum fuels;
- Maintain access to the dwelling and water storage area Remove fallen limbs, leaf and bark litter from roofs, gutters and around the building;
- Ensure that 10,000 litres of dedicated water supply for fire fighting purposes is available at all times.

BUSHFIRE PROTECTION MEASURES

To reduce the risk of bushfire attack, continual maintenance of bushfire protection measures including building maintenance, managed vegetation areas, water supply and road construction are to be undertaken by successive owners for perpetuity.

WATER SUPPLY

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

- Have a minimum nominal internal diameter of 50mm
- Be fitted with a valve with a minimum nominal internal diameter of 50mm
- Be metal or lagged by non–combustable materials if above ground
- Where buried, have a minimum depth of 300mm (compliant with AS/NZS 3500.1–2003 Clause 5.23)
- Provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment
- Ensure the coupling is accessible and available for connection at all times
- Ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length)
- Ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this table; and
- Where a remote offtake is installed, ensure the offtake is in a position that is:

a. Visible
b. Accessible to allow connection to by fire fighting equipment
c. At a working height of 450–600mm above ground level; and
d. Protected from possible damage, including damage by vehicles

SIGNAGE FOR STATIC WATER CONNECTIONS

The water connection points 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: –

- Water tank signage requirements within AS2304 Water storage tanks for fire protection systems; or
- The following requirements:

a. Be marked with the letter "W" contained within a circle with the letter in upper case of not less than 100mm in height;
b. Be in fade–resistant material with white reflective lettering and circle on a red background;
c. Be located within one metre of the water connection point in a situation which will not impede access or operation; and
d. Be no less than 400mm above ground.

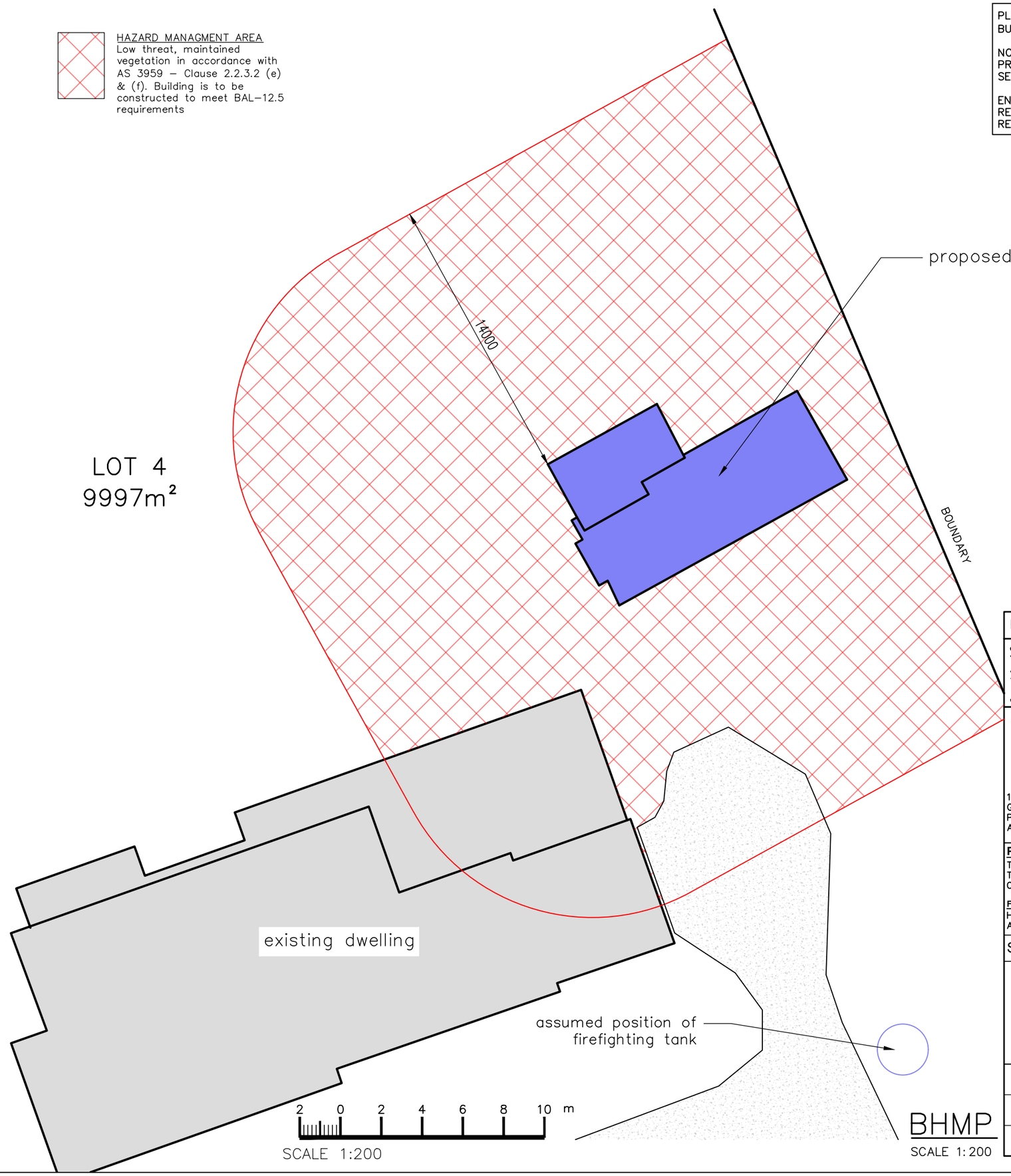
SITE PLAN NTS

HAZARD MANAGMENT AREA
Low threat, maintained vegetation in accordance with AS 3959 – Clause 2.2.3.2 (e) & (f). Building is to be constructed to meet BAL–12.5 requirements

PLAN TO BE READ IN CONJUNCTION WITH BUSHFIRE ATTACK LEVEL (BAL) REPORT

NOTIFY COUNCIL AND CERTIFYING BUSHFIRE PRACTITIONER IF ANY VARIATION IN BUILDING SETOUT OR VEGETATION HAZARDS OCCUR

ENSURE THIS PLAN AND ACCOMPANYING REPORT DO NOT CONFLICT WITH OTHER RELEVANT REPORTS AND ASSESSMENTS



Prepared By David Lyne – BFP 144

Systembuilt Homes
384 Dorans Road, Sandford
Tasmania 7020
Job No: 1704

N

11 GRANVILLE AVENUE
GEILSTON BAY, TASMANIA 7015
PH: 0421 852 987 EMAIL: dave_lyne@hotmail.com
Accredited Designer: David Lyne CC7063

PLEASE READ CAREFULLY

THIS PLAN CERTIFIED CORRECT IS THE ONE REFERRED TO IN THE BUILDING CONTRACT AND I UNDERSTAND CHANGES HEREAFTER MAY NOT BE POSSIBLE.

FINAL PLAN: ANY REQUESTED VARIATIONS TO YOUR HOUSE PLAN WILL INCUR AN AMENDMENT / ADMINISTRATION MINIMUM FEE

SIGNATURES

CLIENT:..... DATE:.....

CLIENT:..... DATE:.....

BUILDER:.....DATE:.....

DWG NO: 1704		SHEET: 01
SCALE AT A3: 1:200		DATE:30.08.2025
DRAWN:DL	CHECK:DL	REV 0

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Systembuilt Homes *Owner /Agent*

Address

Suburb/postcode

Form **55**

Qualified person details:

Qualified person: David Lyne

Address: 11 Granville Avenue

Geilston Bay TAS 7015

Phone No: 0421 852 987

Fax No:

Licence No: BFP-144

Email address: dave_lyne@hotmail.com

Qualifications and Insurance details: Accredited to report on bushfire hazards under Part IVA of the Fire Service Act 1979

(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items

Speciality area of expertise: Analysis of hazards in bushfire-prone areas

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

Details of work:

Address: 384 Dorans Road

Sandford 7020

Lot No: 4

Certificate of title No: 132517

The assessable item related to this certificate: Assessment – BAL Ratings

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

Certificate details:

Certificate type: Bushfire Hazard
Bushfire Hazard Management Plan

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

This certificate is in relation to the above assessable items, at any stage, as part of – *(tick one)*

◉ building work, plumbing work or plumbing installation or demolition work

OR

○ a building, temporary structure or plumbing installation

In issuing this certificate the following matters are relevant

Documents:	Bushfire Hazard Report – New ancillary dwelling Bushfire Hazard Management Plan
Relevant calculations:	• In Accordance with AS3959-2018; and • the Building Regulations (TAS).
References:	• AS3959-2018; • the Building Regulations (TAS); and • Building Code of Australia (BCA).

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

The above mentioned report concludes that a BAL-12.5 rating is achievable and easily maintained for this site

Scope and/or Limitations

The assessment has been conducted according to information provided by the designer/client and freely available historical data and does not take into account the possibility of altered site conditions from the data relied upon.
It should be noted compliance with the recommendations contained in the certified documents does not mean that there is no residual risk to life safety and property as a result of bushfire. The limitation is expressed in the following extract from AS3959-2018, which states:

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.

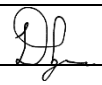
The level of residual risk is inherent in all bushfire standards and also applies to this certification.

The assessment has been undertaken and certification provided on the understanding that; -

1. The certificate only deals with the potential bushfire risk all other statutory assessments are outside the scope of this report.

2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.
Impacts of future development and vegetation growth have not been considered.

I certify the matters described in this certificate.

	Signed:	*Certificate No:*	*Date:*
Qualified person:		1704/25	30/08/2025

strata
geoscience and environmental

Site and Soil Evaluation and Onsite Wastewater System Design

384 Dorans Road

Sandford

February 2026

Important Notes:

The author, Strata Geoscience and Environmental, gives permission for this report to be copied and distributed to interested parties only if it is reproduced in colour and in full including all appendicies. No responsibility is taken for the contents and recommendations of this report if it is not reproduced as requested.

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 conduct an onsite wastewater system design for:

Client and Site Details	
Client/Agent Name	Systembuilt
Site Address	384 Dorans Road Sandford
Proposed Development	New system for proposed dwelling

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

2. Summary of Site and Soil Evaluation and Design Outcomes

The investigation's key findings were:

SSE and Design Outcomes	
General Comments	Site suitable for disposal of secondary treatment
Key Site and Soil Limitations to System Design	• Low permeability soils • Site Drainage • Rocky profiles
Summary of Proposed System Specification	Primary Treatment: AWTS Secondary Treatment: AWTS Land Application: SUBSURFACE IRRIGATION

3. Investigation

Please refer to Appendix 4 for bore logs, permeability data (where tested) and other relevant site information.

4. Interpretation

The site is situated on a slight simple slope underlain by shallow clays derived from inferred Permian aged Bedrock.

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 permeability for the acceptance of wastewater flows and will show a low cation exchange complex for the absorption of nutrients from effluent.

Environmental Sensitivities – The development area is slightly sloping with nearest surface water body located approximately 100+ m downslope of the proposed LAA. 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 Clifton Beach Station with a mean annual rainfall of 561 mm (BOM 2026) and no evaporation data. A net rainfall deficit would likely exist for the site.

Title Searches – Searches of the Land Title did not show any easements or right of ways which would affect 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.

5. Onsite Wastewater System Design

5.1 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	CLAYEY SILT (ML)	CLAY (CL/CH)
Soil Category (AS1547-2012)	4	5
Indicative Permeability (m/d)	0.75	0.1
Recommended DIR (mm/d)/DLR (L/D)	3.5	3
pH	6.1	5.8
EC	2.2	4.2
Emmerson Class	8	5

5.2 Risk Management of Site and Soil Constraints

Risk identification and reduction measures compliant with AS1547 – 2012 Clause A3.2 is presented below:

Risk	Factors that Increase Risk Likelihood	Design Risk Reduction Measures
Hydraulic Overloading of System	• Under scaled system • Prolonged overuse • Leaking taps • Shock Loading • Excessive solid disposal	• Scale to peak potential loading • Use Conservative DLR/DIR • Use water conservation practices eg water reduction fixtures
Biological Failure	• Overuse of household chemicals • Shock loading	• Limit detergents and bleach use where practical • System not fit for spa or sinkerator installation
Marginal Soil Conditions	• low soil hydraulic conductivity • Dispersive soils • Poor aspect/drainage	• Use appropriate DLR/DIR, avoid trenching • Treat with gypsum, manage sodium inputs
Site Constraints	• Drainage • Variable slopes • Very low permeability clays	• Use irrigation into topsoils on flatter areas

Risk	Factors that Increase Risk Likelihood	Design Risk Reduction Measures
High Rainfall/Torrential Rainfall	• Inappropriate LAA Scaling • Stormwater impacts	• Use suitable hydraulic scaling • Stormwater Diversion around LAA if required
Clogged Outlet Filter	• Overloading • Infrequent cleaning	• Clean monthly
Pipe Blockages	• Overloading • Infrequent de-sludging	• Reduce solids inflows • De-sludge septic max 3 year intervals • Check IO's regularly
Sludge transport to LAA	• Infrequent de-sludging • Clogged outlet filter • High organic loading	• De-sludge septic max 3 year intervals • Clean filter monthly • No sinkerator installation
Broken pipes in LAA	• Stock/vehicles	• Exclude stock/vehicles

5.3 Proposed Wastewater System Concept Design

It is therefore recommended that the following system be adopted:

Treatment Train Component	Proposed Concept Design
Primary Treatment	• AWTS
Secondary Treatment	• Irrigation
LAA Design	• Irrigation

5.4 Effluent Flow and Land Application Area Modelling

The development proposal is for the construction of a new wastewater system to service:

Maximum Daily Hydraulic and BOD Loadings			
Segment	**Loading (L/D)**	**Maximum Daily Hydraulic Loading (L/D)**	**Maximum Daily BOD Loading (g/D)**
Existing 4 Bedroom Dwelling 6 EP	6 EP at 120L/D*[1] 6 EP at 60g BOD/EP/D*[1]	720	360
Proposed 1 Bedroom Auxiliary Dwelling 2 EP	2 EP at 120L/D*[1] 2 EP at 60g BOD/EP/D*[1]	240	120
Totals		**960**	**480**
Irrigation Area Requirement m^2 (based upon DLR of 3 mm/d)		**320**	

*[1] Specific Flow Rate Modelling Notes taken from AS1547-2012

The absorption area could be catered for by one 320 m^2 subsurface irrigation installed as shown on the site plan with adequate room for a 100% reserve if required (see Appendix 2). Refer to Appendix 2/3 for more detailed calculations as well as specific design and construction notes.

5.5 System Specifications

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

- Min DN100 gravity fed sewer pipe
- Existing AWTS. **(Note if adequate fall between auxiliary plumbing out lets and the existing AWTS cannot be achieved then fit a 500L Pump well with macerator pump at the clients expense).**
- Min 320m^2 Subsurface irrigation
- Provision for 100% reserve area (must remain free from development)

*** System sizing assumes outsourced laundry if property used for commercial purposes. Inhouse laundry will require an augmented system in consultation with Strata. Inhouse laundry usage will void the design specifications for such uses.**

5.6 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.

Minimum servicing schedule:

Treatment Train Component	Service Interval
AWTS	• SERIVES AS PER MANUFACTURERS RECOMMENDATIONS WITH QUALIFIED TECHNICIAN, RETAIN ALL RECORDS
IRRIGATION	• ENSURE ADEQUATE PLANTINGS OF 1 PLANT PER 4M^2 AT INSTALLATION. • ENSURE MULCH COVERING IS MAINTAINED AND KEPT WEED FREE • ENSURE UPSLOPE INTERCEPTOR (WHERE RECOMMENDED) IS INSTALLED.

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.
- 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.

5.7 Compliance Requirements

The setbacks as indicated on the site plan conform with Acceptable Solutions or Performance Criteria for setback distance outlined in the Tasmanian Building Code 2016.

Acceptable Solutions	Performance Criteria	Compliance
A1 Horizontal separation distance from a building to a land application area must comply with one of the following: a. be no less than 6m: b. be no less than: (i) 3m from an upslope or level building. (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building (iii) If secondary treatment and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building	P1 a. The land application area is located so that the risk of wastewater reducing the bearing capacity of the buildings foundations is acceptably low	Complies with b(iii)
A2 Horizontal separation distance from downslope water to a land application area must comply with (a) or (b). a) be no less than 100m b) be no less than the following: i) If primary treated effluent to be no less than 15m plus 7m for every degree of average gradient from a downslope surface water, or; ii) if secondary treatment and subsurface application, no less than 15m plus 2 m for every degree of average gradient from a downslope surface water	P2 Horizontal separation distance from downslope water to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable	Complies with A2 (bii)
A3 Horizontal separation distance from a property boundary to a land application area must comply with either of the following: a) be no less than 40m from a property boundary b) be no less than (i) 1.5m from an upslope or level property boundary; ar (ii) if primary treated effluent 2m for every degre gradient from a downslope property boundary; c	P3 Horizontal separation distance from the boundary to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R, and b) A risk assessment in accordance with	Complies with A3 (B) (I and III)

(iii) if secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary.	Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable	
A4 Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 300m and not be within the zone of influence of the bore whether up or down gradient	P4 Horizontal separation distance from a downslope bore to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R, and b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable	Complies with A4
A5 Vertical separation distance between groundwater and a land application area must be no less than1.5m	P5 Vertical separation distance between groundwater to a land application area must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R, and b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable	Complies with A5
A6 Vertical separation distance between a limiting layer and a land application area must be no less than 1.5m	P6 Vertical setback must be consistent with AS/NZS 1547 Appendix R,	Complies with A6

A7 The arrangement of a land application area must comply with both of the following: (a) not include areas beneath buildings, driveways or otl areas; (b) have a minimum horizontal dimension of 3m.	P7 No performance criteria	Complies with A7(a/b)

6. 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 are likely to be no more than 960 L/day.

- That such flows will require a land application area (LAA) comprising one 320 m^2 Subsurface Irrigation.

- It is likely that peak flows associated with the development should be within the buffering capacity of the system both in terms of the system sizing as well as for their acceptance into the disposal area.

- 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 onsite is rated as low.**

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

7. References

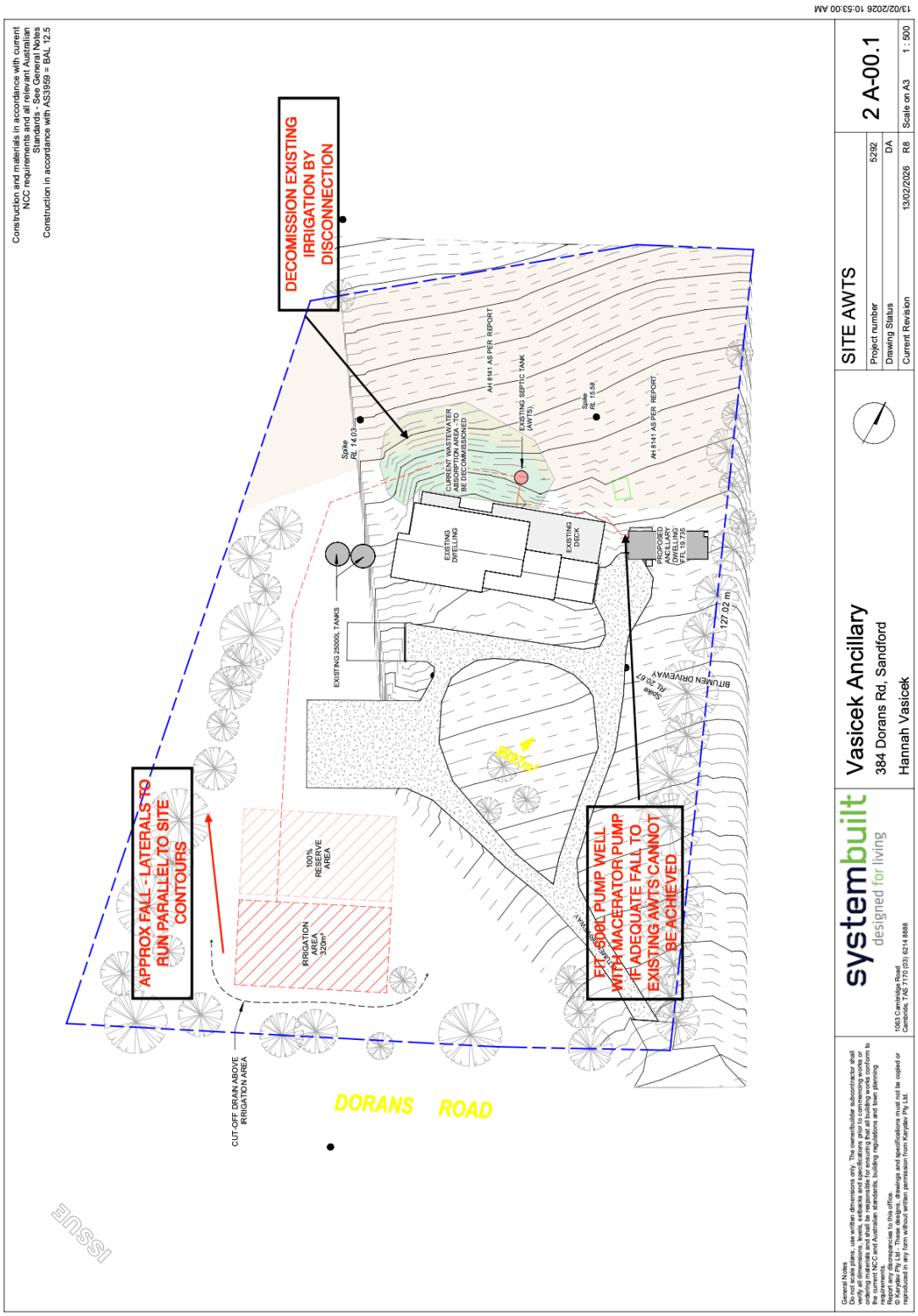
- AS1726-1993- Geotechnical Site Investigations
- AS1547-2012 Onsite Domestic Wastewater Management
- Bureau of Meteorology Website- Monthly Climate Statistics

Appendix 1 Detailed Design Calculations

Wastewater Loading Certificate*	
System Capacity	960 L/D
Design Summary	
• Effluent Quality	Secondary
• Adopted Soil category	5
• Amended Adopted Soil Category	Not amended
• Adopted DLR/DIR (mm/d OR L/m^2/d)	3
• LAA Design	Irrigation
• Primary LAA Requirement	320m^2
• Reserve Area	Min 100% reserve LAA must be maintained in an undeveloped state near the primary LAA as identified on the site plan
Fixtures	Assumes std water saving fixtures inc 6/3L dual flush toilets, aerator forcets, Washing/dishwashing machines with min WELSS rating 4.5 star
Consequences of Variation in Effluent Flows	
• High Flows	The system should be capable of buffering against flows of up to 10 % in a 24 hr period or 5% over a 7 day period. System not rated for spa installation.
• 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	Owners should maintain the system in compliance with systems Home Owners Manual and council permit. All livestock, vehicles and persons to be excluded from the LAA. 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.

***** In accordance with Clause 7.4.2(d) of AS/NZS 1547.2012.

Appendix 2 Land Application Design and Construction Notes



IRRIGATION DOWNSLOPE SETBACK DISTANCES	
Feature	**Distance**
SURFACE WATER	• 50M
FOUNDATIONS	• 6M
BOUNDARIES	• 5M

Irrigation Design

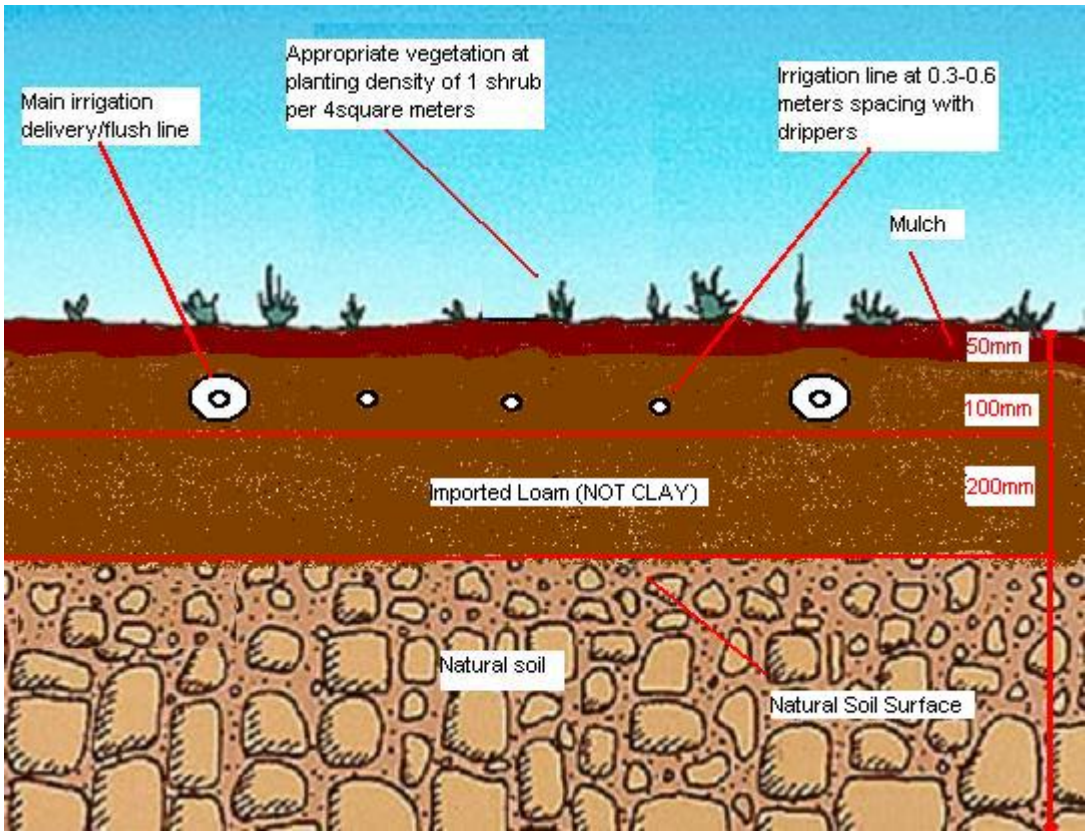


Figure 1 Irrigation cross section showing major delivery/flush lines and irrigation lines.

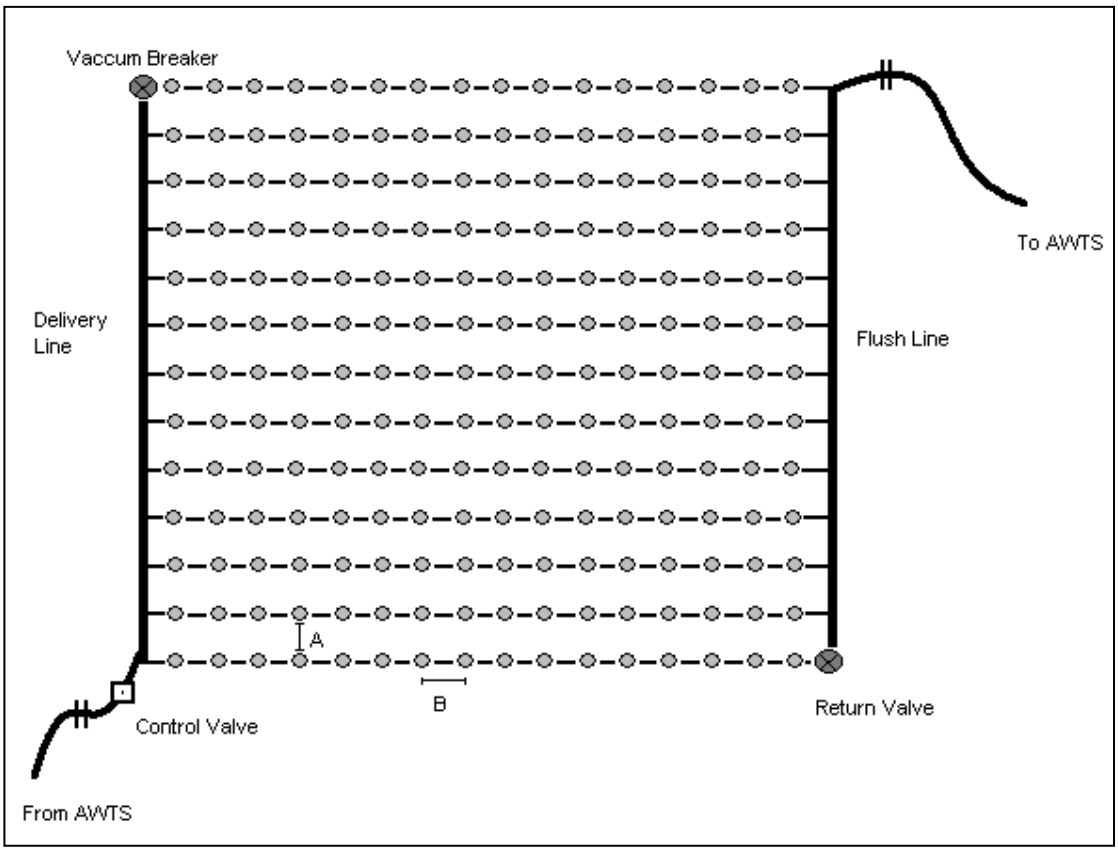


Figure 2 Irrigation Plan View

Site De-vegetation and Soil Renovation Processes (Only applicable for recently de-vegetated sites) (Pre irrigation installation)

1. The land application area is located in the area contained within the bushfire buffer zone and hence will have all vegetation removed. This will alleviate the effects of the forest canopy reducing evapotranspiration rates.
2. Soils will be disturbed by site de-vegetation and removal of large trees. After de-vegetation the following steps should be taken to renovate the soil profile before irrigation is installed:
    a. Harrow and level the residual soil surface. Ensure that the ground surface is levelled along natural slope contours and that all major rocks and large roots are removed.
    b. Gypsum should be incorporated at the rate of 1kg/5m^2
    c. Imported topsoil (not clay) should be applied as shown in Fig 1 above. Do not compact this layer, and avoid travelling over with large machinery.
    d. Irrigation should be laid as per the specifications below (point 3-4) and covered with further topsoil as per Fig 1 above.
    e. Selected vegetation should be planted at a density of approx. 1 plant per 4m^2.
    f. Mulch should be placed over the site as shown in Figure 1 above.

Land Application Area Design and Construction Notes

3. Delivery/flush line diameter = 25 -30 mm
4. Irrigation line diameter = 12-16mm
5. Irrigation line spacing (A) =300 mm for Sands, Sandy Loams and Loams to 600mm for Clay Loams, Light Clays and Heavy Clays (see the wastewater flow modelling section of this report for soil classification).
6. Dripper/Sprinkler spacing (B) as per manufacturers specifications.
7. A vacuum breaker should be installed at the highest point of the irrigation area (or in the case of multiple irrigation lots at each lot). This breaker should be protected and marked).
8. A flush line should be installed at the lowest point of the irrigation area incorporating a return valve for back flushing of the system back into the treatment chamber.
9. **All lateral lines MUST be installed parallel to the contours of the land. All minimum setbacks MUST be adhered to.**
10. An inline filter must be inserted into the delivery line.
11. The first 100mm of the natural soil below the ground surface should be mechanically tilled to aid line installation and soil permeability
12. Gypsum should be incorporated at the rate of 1kg/5m^2 in dispersive soils.
13. Imported topsoil (not clay) should be applied as shown above.
14. Selected vegetation should be planted at a density of approx. 1 plant per 4m^2. Recommendation regarding suitable species is made in this report.
15. Irrigation areas greater than 400 m^2 should be split into 100 m^2 cells with effluent flows switched between irrigation lots with an automatic valve system.
16. Where practical a 300% reserve area should be identified on the site to allow movement of the irrigation area if required.
17. In areas of moderate to steep slopes (>10%) then upslope cut off drainage should be installed to minimise shallow ground water recharge of the irrigation area from upslope.
18. All livestock and Vehicles MUST be excluded from irrigation area.

Indicative Plantings

PLANTS 1 – 6m

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

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

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

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

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

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

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

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

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

Melaleuca gibbosa
Fine leafed paperbark, Slender honey-myrtle
Evergreen small shrub with mauve/purple ball shaped flowers in late spring and summer. Suitable for most soils, tolerating lime and salt soil. Frost resistant.

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

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

Notelaea ligustrina
Native Olive, Mock olive, Privet mock olive
Tall shrub with smooth, dark green leaves. Small yellow flowers and purple fruit. Prefers a moist, semi-shaded position but grows well in a wide range of conditions.

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

SHRUBS TO 1m

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

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

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

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

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

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

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

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

Ficinea nodosa (syn isolepis nodosa)
Knobby club rush
Dense tufted native rush with stiff stems. Rounded brown flower knobs in summer. Suit damp or moist sandy soil. 60cm X 1m wide.

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

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

Isolepis inundata
Knobby club rush, Swamp club rush
Handy aquatic for waters edge or general planting (eg. shrub beds, dry creek beds).

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

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

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

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

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

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

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

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

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

TREES

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

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

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

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

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

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

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

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

Interceptor Spoon Drain Design and Construction Notes

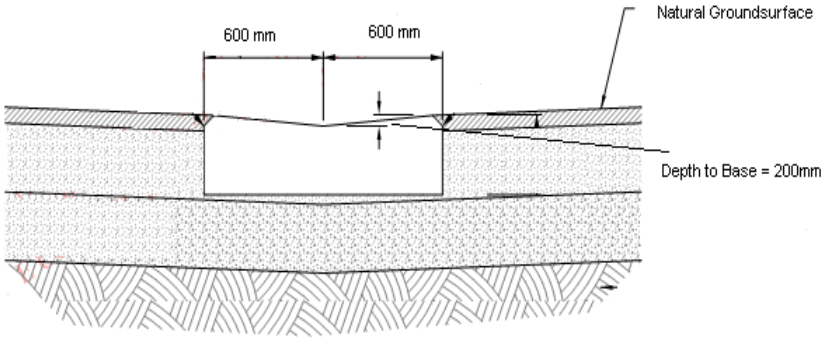
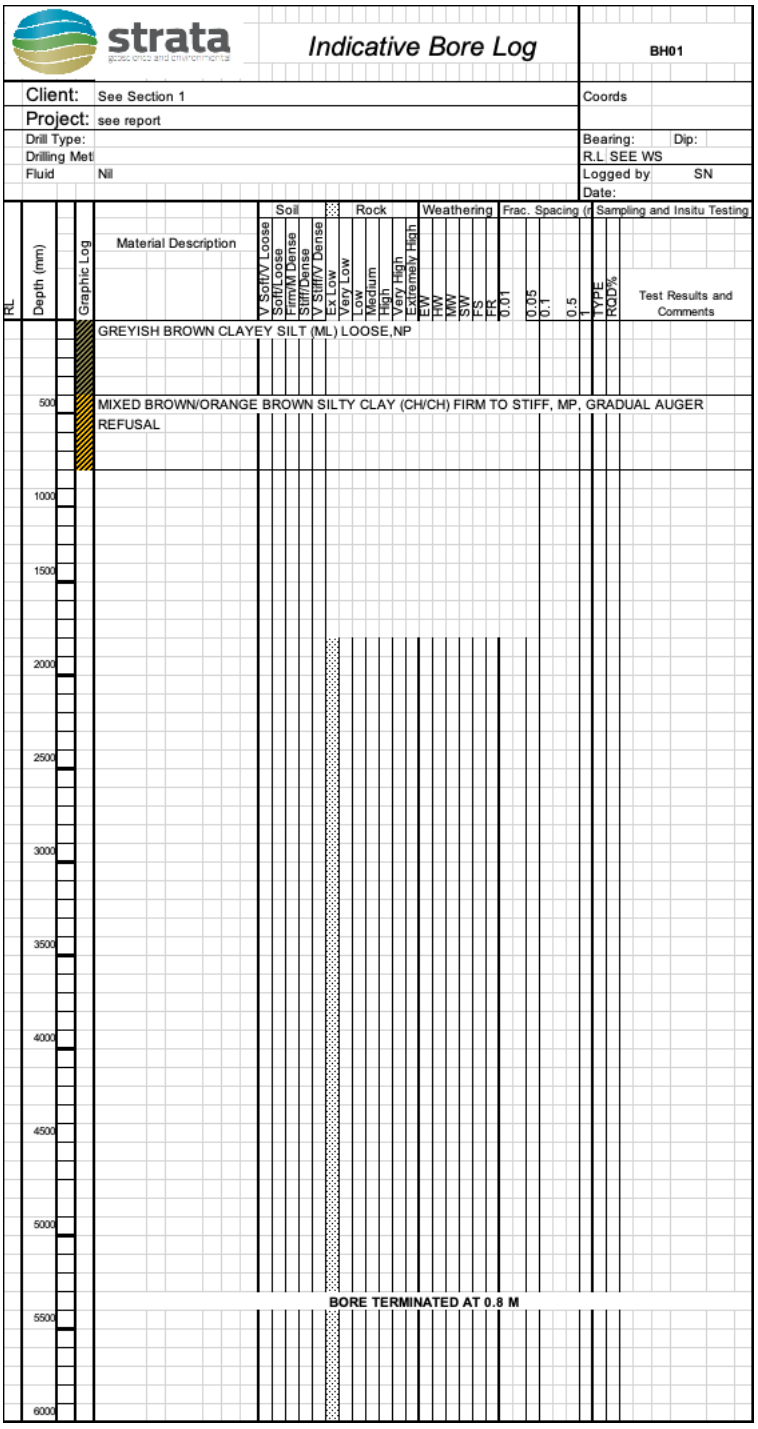


Figure 3 Spoon drain cross section showing key dimensions

1. Spoon drain should be located upslope of the proposed irrigation area/trenches/beds as shown in site plan.
2. Spoon Drains should be 1200mm wide and 200mm deep.
3. Spoon drains are best employed for areas where surface water run on from upslope areas is possible with little immediate subsurface recharge anticipated.
4. The drainage channel can be armoured with 50-100mm Dolerite aggregate if soils are anticipated to be dispersive or intensive peak flows are expected (ie if immediately down slope from hardstand surfaces).
5. Spoon drains should be constructed to ensure adequate fall to appropriate stormwater discharge points or other suitable areas provided that any water is not disposed of over site boundaries.

Appendix 3 Site Investigation Details/ Photos and Indicative Bore Logs

Site and Soil Evaluation with Reference to AS1547 Table D1 Appendix D1	
Site Factor	**Result**
Slope (over proposed system/LAA)	4 Degrees
Shape	Variable
Aspect	NW
Exposure	High exposure to both sun and wind
Erosion, mass movements landslip	No evidence of erosion, mass movement or landslip
Boulders/Rock Outcrops	Rocky outcrops
Vegetation	Grass, weeds
Watercourse	See site plans 100m from LAA.
Soil Water Regime	Shallow groundwater possible- bores within localised landscape- ensure 50m setback.
Fill	Minor disturbance
Run-on/Flooding	Not anticipated over the development area or LAA. Upslope interceptor to capture any surface, near surface flows.
Channeled Runoff	No concentrated runoff over proposed LAA. See storm water management plan (or similar) for details of onsite storm water management.
Soil Surface Condition	Moist
Salinity	No saline tolerant species, salt scald or bare earth observed.
Other Site and Soil Factors	See note regarding fall from ancillary in Section 5.5



strata geotechnics and environmental

Indicative Bore Log

BH02

Client:	See Section 1	Coords	
Project:	see report		
Drill Type:		Bearing:	Dip:
Drilling Met		R.L	SEE WS
Fluid	Nil	Logged by	SN
		Date:	

RL	Depth (mm)	Graphic Log	Material Description	Soil: V Soft/V Loose	Soft/Loose	Firm/M Dense	Stiff/Dense	V Stiff/V Dense	Rock: Ex Low	Very Low	Low	Medium	High	Very High	Extremely High	Weathering: EW	HW	MW	SW	FS	FR	Frac. Spacing (m): 0.01	0.05	0.1	0.5	1	Sampling and Insitu Testing: TYPE	RQD%	Test Results and Comments
			GREYISH BROWN CLAYEY SILT (ML) LOOSE,NP																										
			SUDDEN REFUSAL																										
	500																												
	1000																												
	1500																												
	2000																												
	2500																												
	3000																												
	3500																												
	4000																												
	4500																												
	5000																												
	5500		BORE TERMINATED AT 0.2 M																										
	6000																												

Appendix 4 Form 35 and Certificate of Accreditation

Section 94
Section 106
Section 129
Section 155

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Form 35

To: SYSTEMBUILT *Owner name*

Address

Suburb/postcode

Designer details:

Name: S NIELSEN

Category: HYDRAULIC SERVICES

Business name: STRATA GEOSCIENCE AND ENVIRONMNETAL P/L

Phone No: 0413545358

Business address: 72-74 LAMBECK DRIVE

TULLAMARINE 3043

Fax No:

Licence No: CC6113K Email address: sven@strataconsulting.com.au

Details of the proposed work:

Owner/Applicant SYSTEMBUILT

Designer's project reference No. SR06547

Address: 384 DORANS ROAD

Lot No:

SANDFORD

Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:

WASTEWATER SYSTEM IRRIGATION SPECIFICATION – ONLY WARRANTED TO A THE MAXIMUM MODELLED DAILY FLOW RATE AND WHEN INSTALLED AS PER THE DESIGN AND TERMS AND CONDITIONS OF THE REPORT.

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

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

Certificate Type:	Certificate	Responsible Practitioner
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☐ Civil design	Civil Engineer or Civil Designer
	☒ Hydraulic	Building Services Designer

	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	☐ Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

Deemed-to-Satisfy: ☐X	Performance Solution: ☐ (*X the appropriate box*)
Other details:	

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by: SN	Date:
Schedules:	Prepared by: SN	Date
Specifications:	Prepared by: SN	Date27/1/26
Computations	Prepared by: SN	Date27/1/26
Performance solution proposals:	Prepared by: SN	Date:
Test reports:	Prepared by: NA	Date

Standards, codes or guidelines relied on in design process:

AS1547-2012

/

Any other relevant documentation:

STRATA REPORT SR06547

Attribution as designer:

I SVEN NIESLEN..... am responsible for the design of that part of the work as described in this certificate;

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

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

Name: (print)SVEN NIELSEN *SN*

Designer:	SVEN NIELSEN	Sven Nielsen	27/1/26

Licence No: CC6113K

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- [X] The works will not increase the demand for water supplied by TasWater
- [X] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure

Type text here

- [X] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [X] The works will not damage or interfere with TasWater's works

X	The works will not adversely affect TasWater's operations
X	The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
X	I have checked the LISTMap to confirm the location of TasWater infrastructure
X	If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I .....SVEN NIELSEN..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 23008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

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

	Name: (print)	*Signed*	*Date*
Designer:	SVEN NIELSEN	Sven Nielsen	Date: 27/1/26

Appendix 5 Terms and Conditions

Scope of Work
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.

Third Parties
The Services are supplied to the Client for the sole benefit of the Client and must not be relied upon by any person or entity other than the Client. Strata is not responsible or liable to any third party. All parties other than the Client are advised to seek their own advice before proceeding with any course of action.

Provision of Information
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.

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 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 anthopogenic 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 land application area design life beyond 2 years from installation.

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.

If, during the course of providing the Services, Strata develops, discovers or first reduces to practice a concept, product or process which is capable of being patented then such concept, product or process is and remains the property of Strata and:

(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.

Digital Copies of Report
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.