



DEVELOPMENT APPLICATION

PDPLANPMTD-2025/056112

PROPOSAL: Additions & Alterations (Single Dwelling)

LOCATION: 40 Thompson Way, Clifton Beach

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 16/04/2026

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 16/04/2026. 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 16/04/2026.

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.

Application for Development / Use or Subdivision

Use this form to obtain planning approval for developing or using land, including subdividing it into smaller lots or lot consolidation.

Proposal: Extension of Lounge, Utilities and Garage

Location: 40 Thompson Way, Clifton Beach

Personal Information Removed



Is the property on the Tasmanian Heritage Register? Yes No

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 City of Clarence, please provide planner's name:

Current use of site: **Existing dwelling**

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

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.
- 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.

Please refer to the development/use and subdivision checklist on the following pages to determine what documentation must be submitted with your application.



Development/use or subdivision checklist

Mandatory Documents

This information is required for the application to be valid. We are unable to proceed with an application without these documents.

- 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 City of Clarence.

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

Additional Documents

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 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 plans 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 City of Clarence Planning team on (03) 6217 9550.



SEARCH OF TORRENS TITLE

VOLUME 110464	FOLIO 40
EDITION 4	DATE OF ISSUE 07-Dec-2018

SEARCH DATE : 18-Aug-2025

SEARCH TIME : 12.54 PM

DESCRIPTION OF LAND

City of CLARENCE
 Lot 40 on Plan [110464](#)
 Being the land described in Conveyance No. 68/8485
 Derivation : Part of 1 000-0-0 Granted to E. P. Butler and W.
 Woolley
 Derived from Y16708

SCHEDULE 1

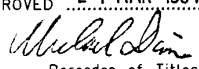
[D88622](#) TRANSFER to MICHAEL SCOTT JENNINGS Registered
 21-May-2013 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
[21/5864](#) CONVEYANCE: Benefiting Easement: Right to pass and
 repass over the Right of Way shown on Plan No. [110464](#)
[E158966](#) MORTGAGE to Australia and New Zealand Banking Group
 Limited Registered 07-Dec-2018 at 12.01 PM

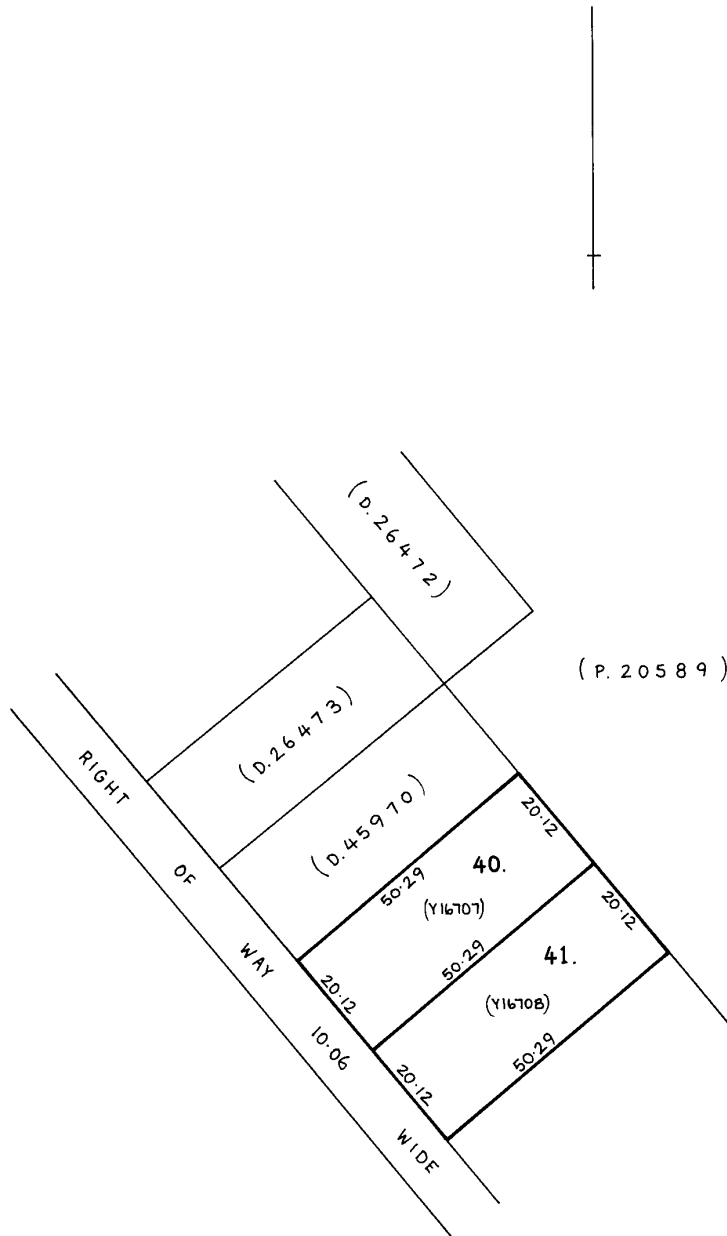
UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

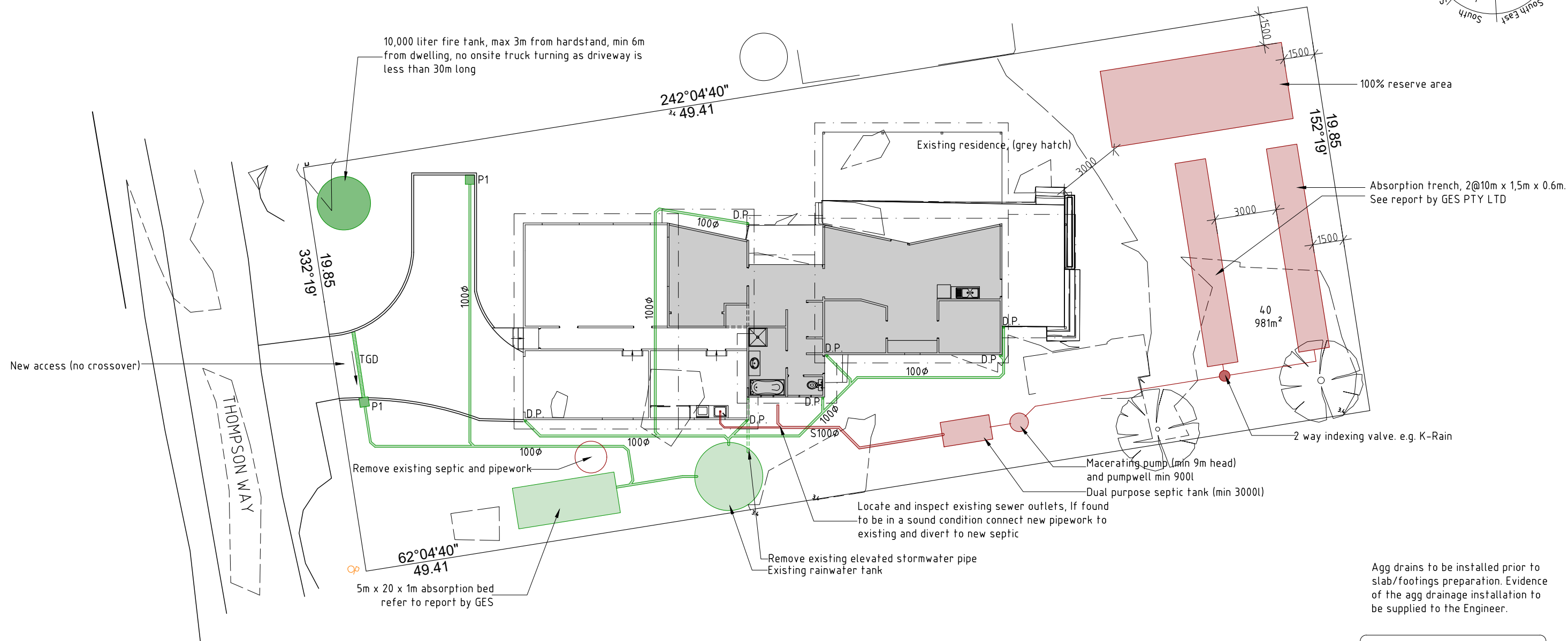
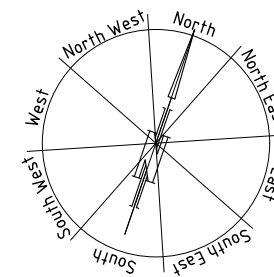
FILE NUMBER Y.16707 & Y.16708 GRANTEE PART OF 1000A OR OP. QTD. TO EDWARD PAINE BUTLER & WILLIAM WOOLLEY		<p style="text-align: center;">CONVERSION PLAN</p> LOCATION <p style="text-align: center;">CITY OF CLARENCE</p> CONVERTED FROM 68/8486 & 68/8485 NOT TO SCALE LENGTHS IN METRES		REGISTERED NUMBER <p style="font-size: 2em; text-align: center;">P 110464</p>
MAPSHEET MUNICIPAL CODE No. 14		LAST UPI No. 15633 15634	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	APPROVED <u>24 MAR 1994</u>  Recorder of Titles
DRAWN MC				

SKETCH BY WAY OF ILLUSTRATION ONLY

"EXCEPTED LANDS"



A-183



Agg drains to be installed prior to slab/footings preparation. Evidence of the agg drainage installation to be supplied to the Engineer.

Plumber to confirm the location of existing on-site services prior to commencement of any excavations

- S100φ 100uPVC sewerage
1.67% min. fall
- 100φ 100uPVC stormwater
1:100 min. fall
- 100x100 cast in kerb to downslope of driveway perimeter
I.O. at each intersection & bend

TGD Trafficable grate drain
P1 450x450 Trafficable pit.
Each grate pit to be fitted with SPEL Environmental Stormsack water quality improvement device. Designed & installed in accordance with manufacturers instructions

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR
TAYLOR AND BEESON BUILDING PTY LTD AT
40 THOMPSON WAY CLIFTON BEACH

PLUMBING PLAN

DATE
18/03/2026

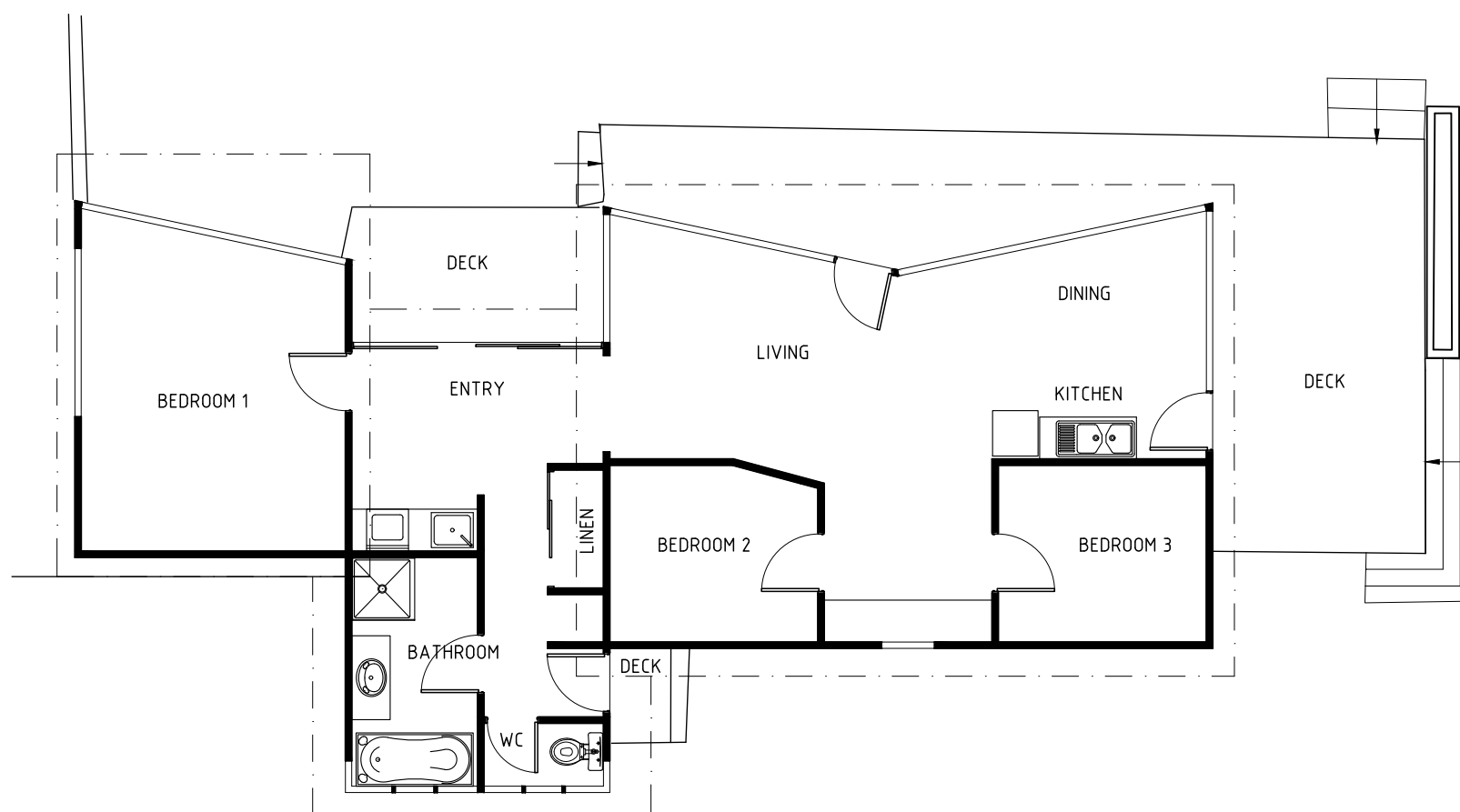
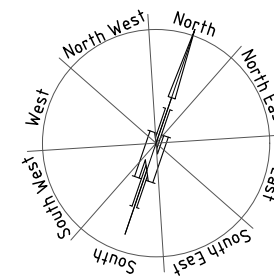
DRAWN BY G. Tilley
email: gtilley7@biopond.com
phone ph 0400 671 582

SCALE 1:200
0 2000 4000

AMENDED
18/03/2026

DRAWING NO.
17 OF 22

Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0825



**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR
TAYLOR AND BEESON BUILDING PTY LTD AT
40 THOMPSON WAY CLIFTON BEACH

EXISTING PLAN

SCALE 1:100
0 1000 2000

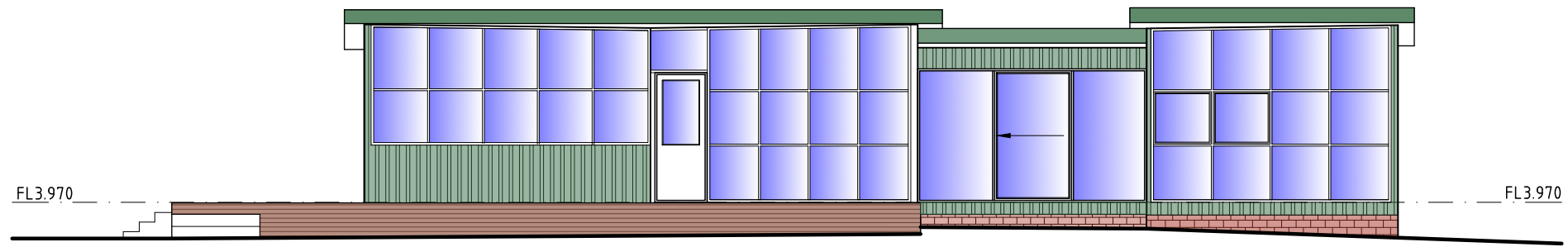
AMENDED

DATE
22/ 01/ 2026

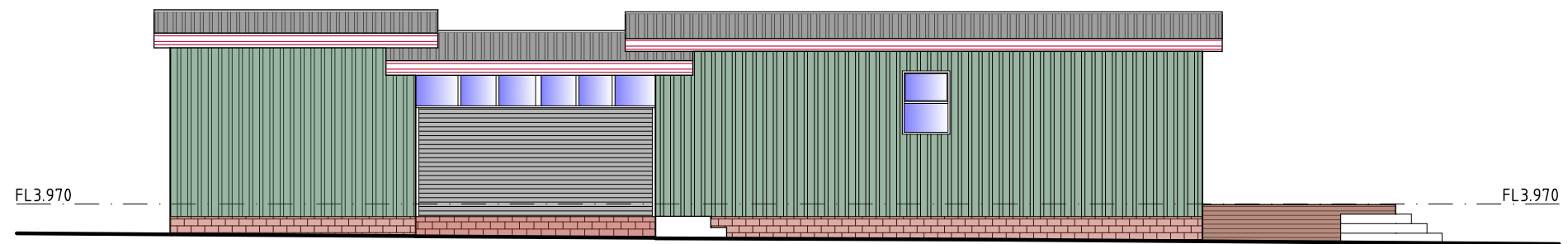
DRAWING NO.
02 OF 08

DRAWN BY G. Tilley
email: gtilley7@biapond.com
phone ph 0400 671 582

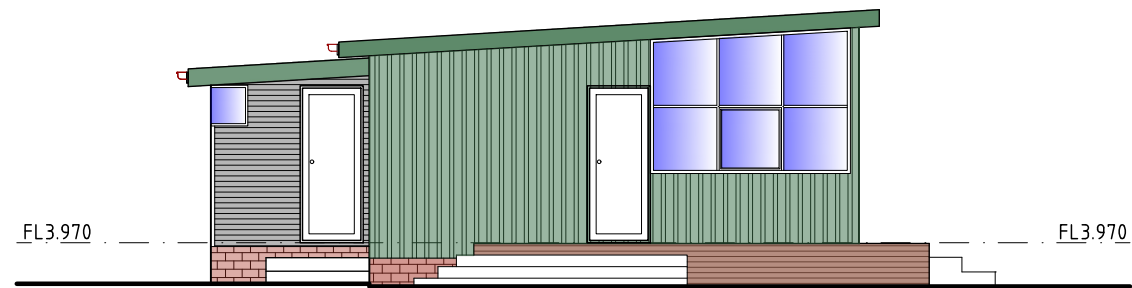
Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0825



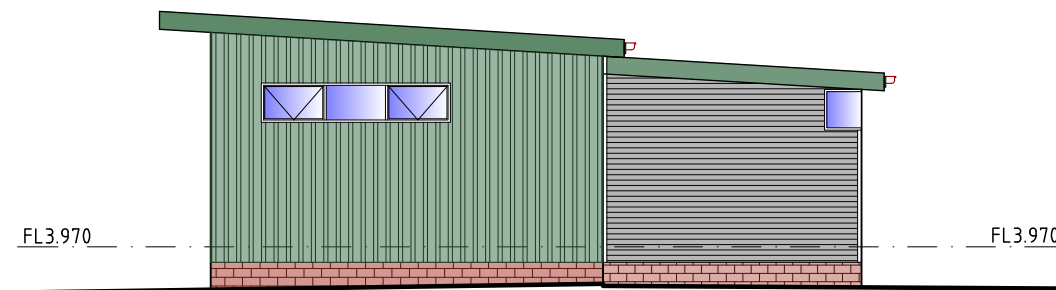
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR
TAYLOR AND BEESON BUILDING PTY LTD AT
40 THOMPSON WAY CLIFTON BEACH

EXISTING ELEVATIONS

SCALE: 1:100
0 1000 2000

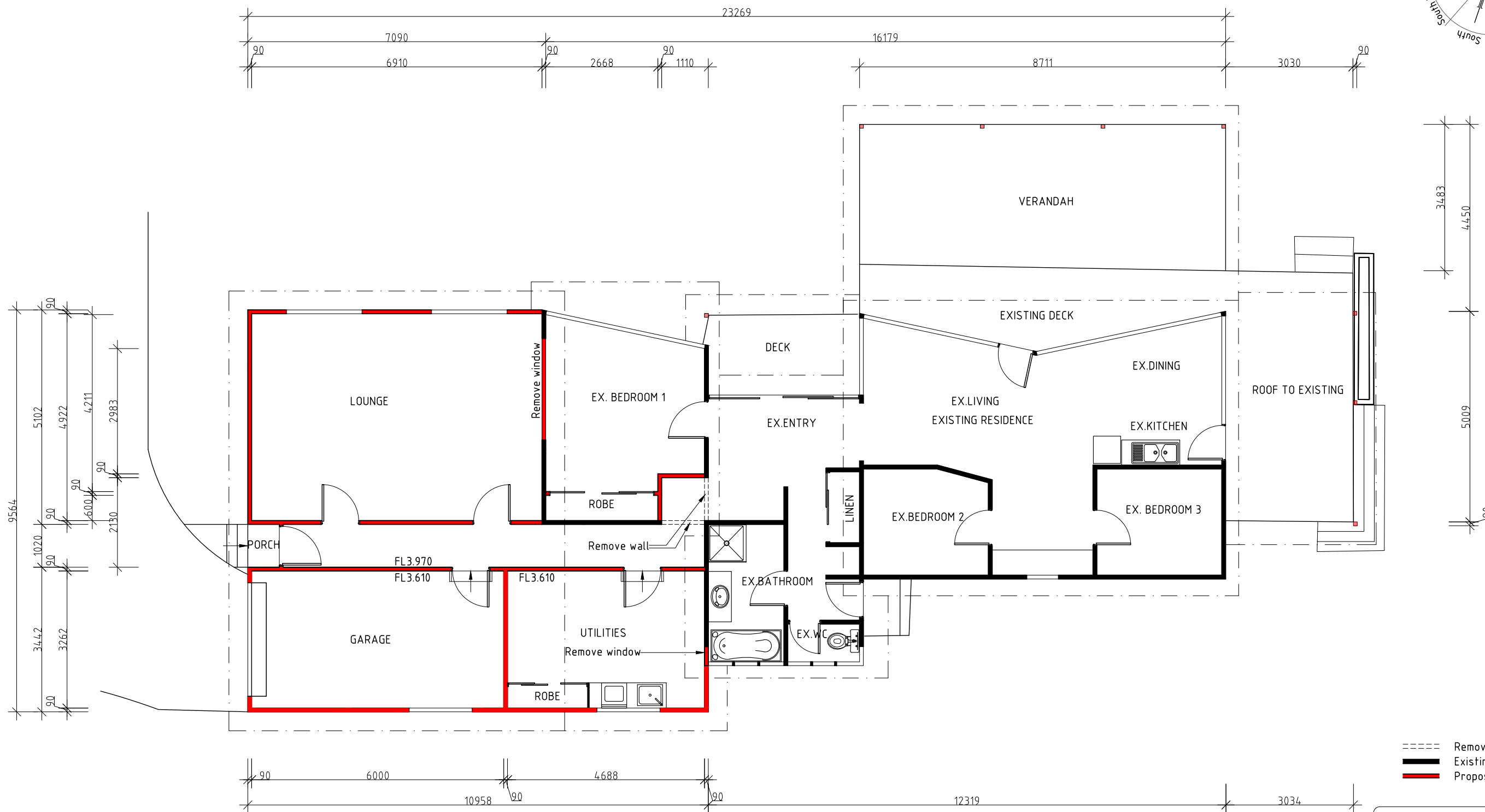
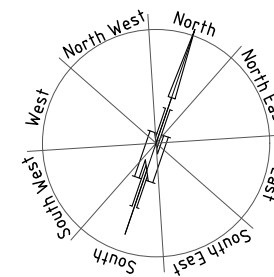
AMENDED

DATE
22/ 01/ 2026

DRAWING NO.
03 OF 08

DRAWN BY G. Tilley
email: gtilley7@biopond.com
phone ph 0400 671 582

Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0825



- Removed
- Existing
- Proposed

AREAS	
Existing residence	93.39m ²
Addition	83.53m ²
Proposed Residence	176.92m ²
Existing Deck	31.34m ²
Verandah addition	29.66m ²
Proposed Verandah	61.00m ²

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR
TAYLOR AND BEESON BUILDING PTY LTD AT
40 THOMPSON WAY CLIFTON BEACH

PROPOSED PLAN

DATE
22/ 01/ 2026

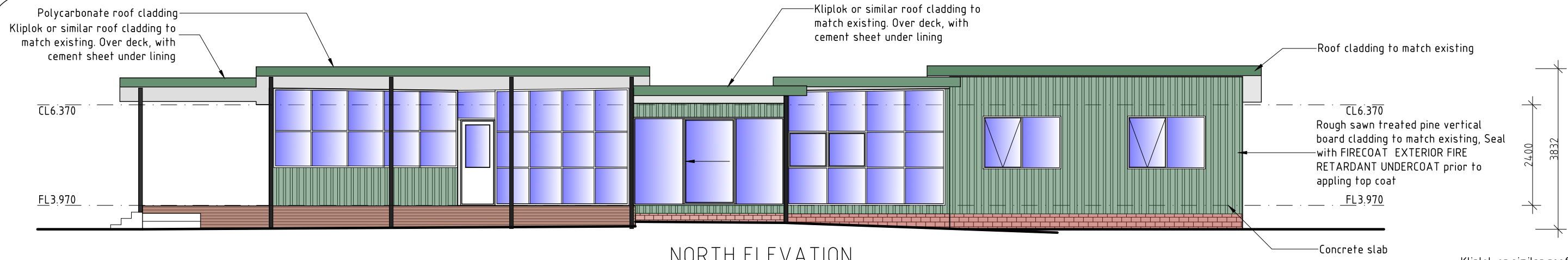
DRAWN BY G. Tilley
email: gtilley7@biopond.com
phone ph 0400 671 582

SCALE 1:100
0 1000 2000

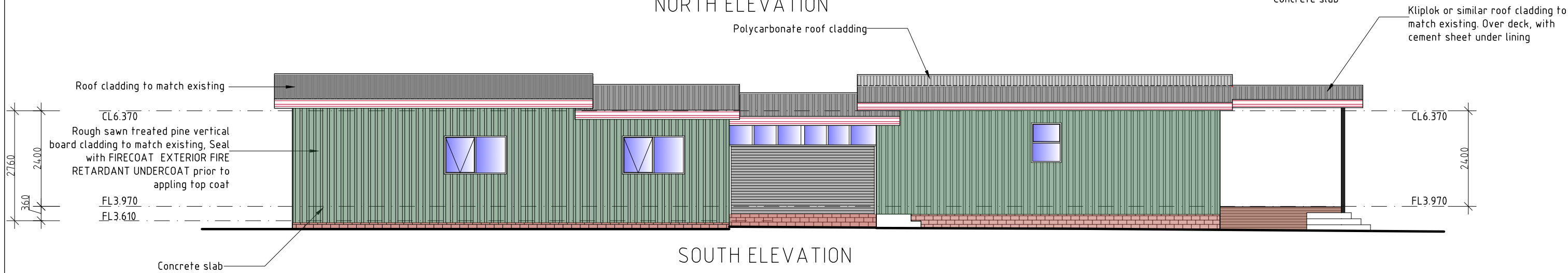
AMENDED

DRAWING NO.
04 OF 08

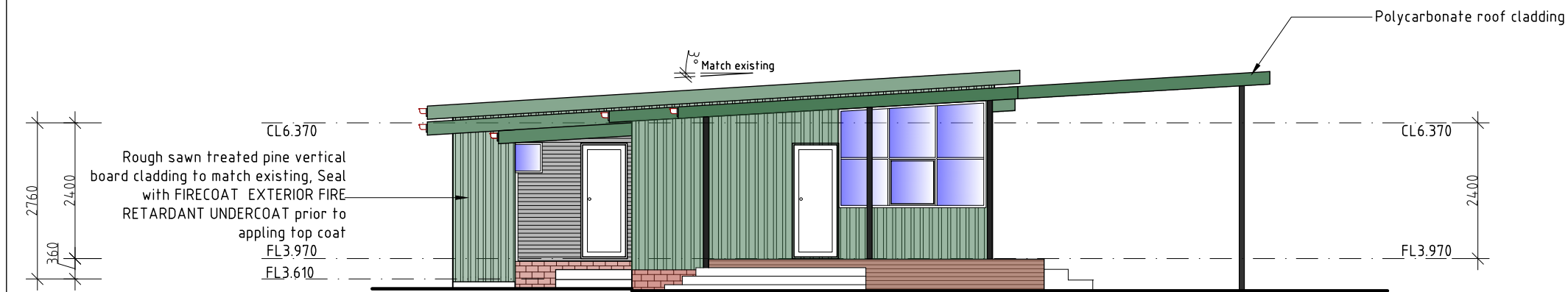
Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0825



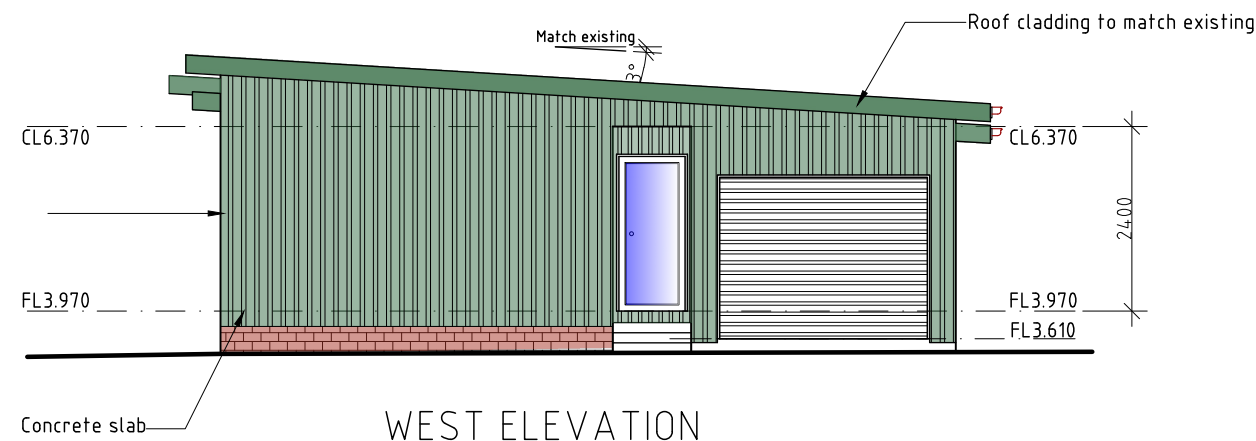
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR
TAYLOR AND BEESON BUILDING PTY LTD AT
40 THOMPSON WAY CLIFTON BEACH

PROPOSED ELEVATIONS

SCALE 1:100
0 1000 2000

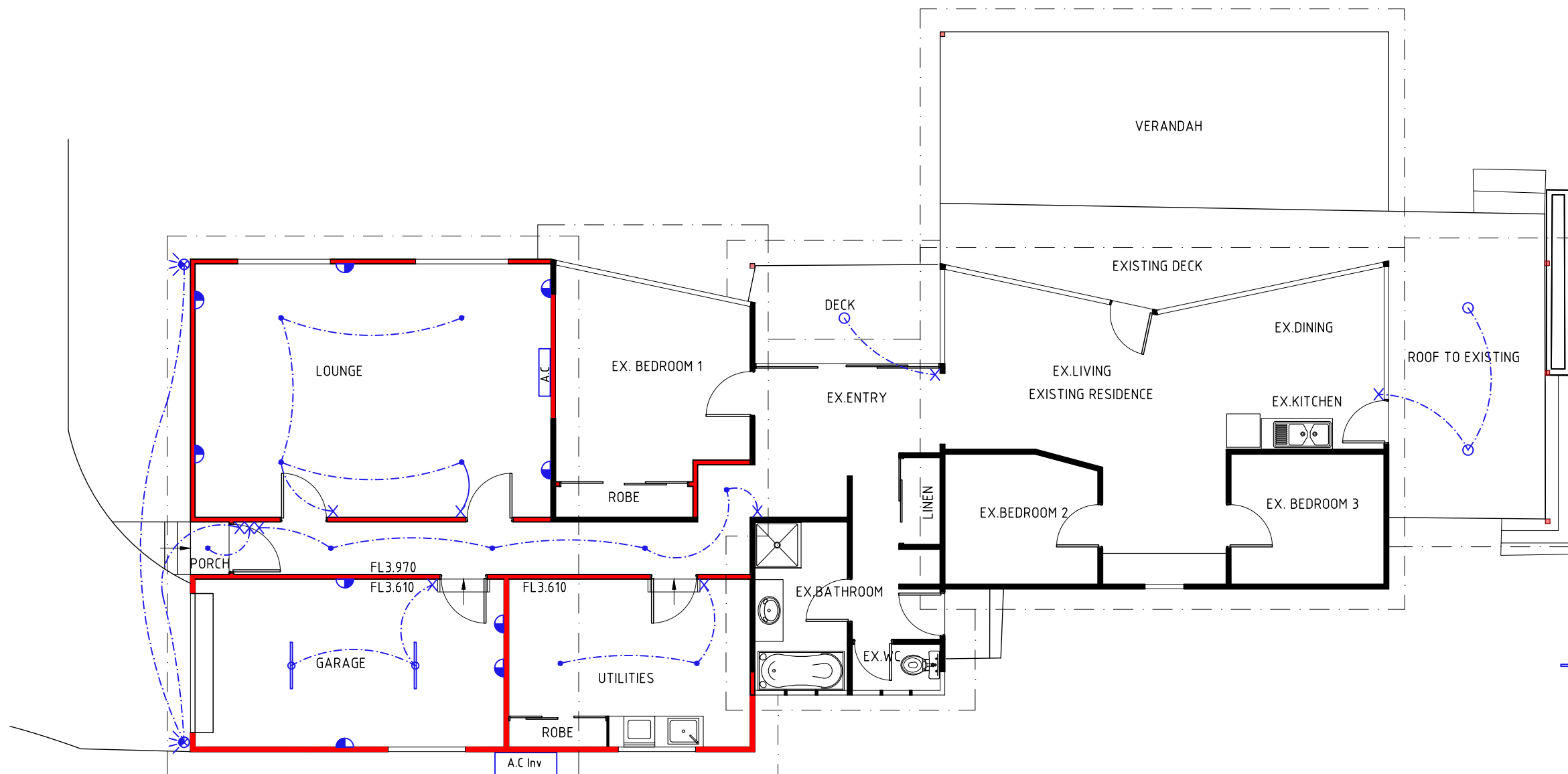
AMENDED

DATE
22/ 01/ 2026

DRAWING NO.
05 OF 08

DRAWN BY G. Tilley
email: gtilley7@biopond.com
phone ph 0400 671 582

Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0825



- Downtight point
Recessed downlights to be MARTEC, GENESIS
Fully sealed recessed downlight 100° beam or similar
- Surface mounted 28 watt fluorescent light fitting
- ⊗ Surface or wall mounted external security sensor
light with 20 watt LED globes
- ⊕ Up/down exterior wall light 12 watt LED,
1800mm above FL.

For dimmer switch location, refer to lighting calculations.
External lights to be controlled by daylight sensor, or have an average light source efficacy of not less than 40 Lumens/watt.
All Bathroom fans to be fitted with backdraught dampers/shutters, and to be ducted directly to outdoor air.
See attached Lighting calculation.

- ⊕ Interconnected photoelectric smoke alarms.
- × Light switch
- ⊕ Waterproof power point
- Single power point
- Double power point
- ⊕ TV connection point
- ⊕ Telephone/internet connection point
- ⊕ Wall mounted reverse cycle heat pump, indoor unit. Size based off 6kW system
- ⊕ Ground based reverse cycle heat pump outdoor unit. Size based off 6kW system.

ROOF VENTILATION

SUPPLY
Continuous gap at eaves is:
25mm for <16° pitch
10mm for >16° pitch

EXHAUST
Continuous gap at ridge is min.
5mm for all roof pitches.

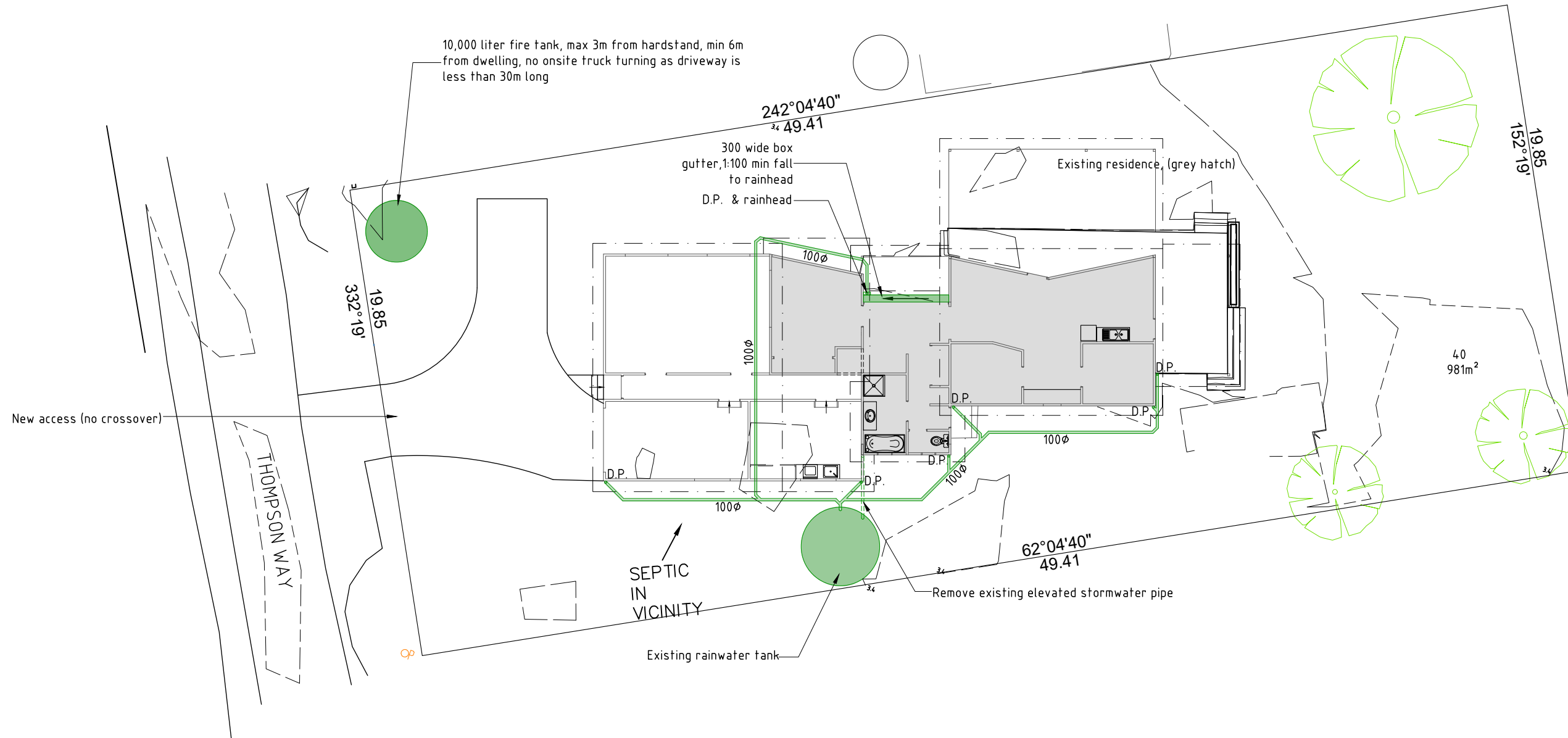
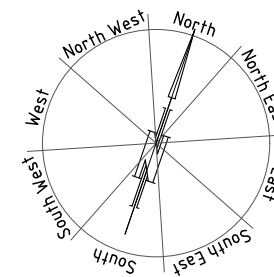
Refer to ABCB Housing Provisions Table 10.8.3 for alternative.

NOTE: Glazier to verify all glass prior to manufacture of glazing Units

Glazing compliance certificate to be provided by glass supplier

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR TAYLOR AND BEESON BUILDING PTY LTD AT 40 THOMPSON WAY CLIFTON BEACH	REFLECTED CEILING & ELECTRICAL PLAN		DATE 22/ 01/ 2026	DRAWN BY G. Tilley email: gtilley7@biopond.com phone ph 0400 671 582
	SCALE 1:100 0 1000 2000	AMENDED	DRAWING NO. 06 OF 08	Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0825



Agg drains to be installed prior to slab/footings preparation. Evidence of the agg drainage installation to be supplied to the Engineer.

Plumber to confirm the location of existing on-site services prior to commencement of any excavations

- S100φ 100uPVC sewerage
1.67% min. fall
- 100φ 100uPVC stormwater
1:100 min. fall
- 100x100 cast in kerb to downslope of driveway perimeter
I.O. at each intersection & bend

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR TAYLOR AND BEESON BUILDING PTY LTD AT 40 THOMPSON WAY CLIFTON BEACH	STORMWATER CONCEPT PLAN		DATE 22/ 01/ 2026	DRAWN BY G. Tilley email: gtilley7@biopond.com phone ph 0400 671 582
	SCALE 1:200 0 2000 4000	AMENDED	DRAWING NO. 07 OF 08	Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0825

WET AREAS TO COMPLY WITH NCC VOL. 2 PART H4D2, ABCB HOUSING PROVISIONS PART 10.2 AND AS 3740

WATERPROOFING OF ENCLOSED & UNENCLOSED SHOWERS:

FLOOR: Waterproof entire floor if no preformed shower base provided
WALLS: Waterproof to not less than 1800mm above the floor substrate
WALL JUNCTIONS AND JOINTS: Waterproof internal and external corners and horizontal joints within a height of 1800mm above the floor level with not less than 40mm width either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof internal and external corners and joints
PENETRATIONS: Waterproof all penetrations

AREAS OUTSIDE THE SHOWER ON CONCRETE SLAB OR FC FLOORING:

FLOORS: Entire floor to be water resistant
WALLS/FLOOR JUNCTIONS: Waterproof all wall/floor junctions and where a flashing is used, the horizontal leg must be not less than 40mm

AREAS OUTSIDE THE SHOWER ON TIMBER FLOOR:

FLOORS: Waterproof entire floor
WALL/FLOOR JUNCTIONS: Waterproof all wall/floor junctions and where a flashing is used, the horizontal leg must be not less than 40mm.

AREAS ADJACENT TO NON-FREESTANDING BATHS AND SPAS (without showers):

FLOOR: Water resistant to entire floor on concrete or FC flooring; or Waterproof to entire floor on timber floor.
WALLS: Water resistant walls to a height of not less than 150mm above the vessels, for the full extent, where the vessel is within 75mm of a wall.
WALL JUNCTIONS AND JOINTS: Water resistant within 150mm above the vessel for the extent of the vessel to a width of 40mm either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof for the extent of the vessel

AREAS ADJACENT TO INSERTED BATHS AND SPAS (without showers):

FLOOR: Water resistant to entire floor on concrete or FC flooring; or Waterproof to entire floor on timber floor.
HORIZONTAL SURFACES: Waterproof shelf adjoining bath or spa and include a waterstop under the vessel lip
WALLS: Waterproof walls to not less than 150mm above the lip of the vessel
WALL JUNCTIONS AND JOINTS: Waterproof junctions within 150mm of vessel to a width of 40mm either side of the junction
WALL/FLOOR JUNCTIONS: Waterproof wall/floor junctions 25mm above finished floor level
PENETRATIONS: Waterproof penetrations where they occur in horizontal surfaces, seal penetrations where they occur in vertical surfaces

OTHER AREAS (LAUNDRIES AND WCs):
FLOOR: Water resistant floor to entire room
WALLS: Water resistant wall to a height of not less than 150mm above the vessel for the extent of the vessel, where the vessel is within 75mm of wall
WALL JUNCTIONS AND JOINTS: Waterproof junctions where a vessel is fixed to a wall
WALL/FLOOR JUNCTIONS: Water resistant wall/floor junctions with horizontal leg not less than 40mm where flashing used
PENETRATIONS: Waterproof penetrations where they occur in surfaces required to be waterproof or water resistant.

WATERPROOFING SYSTEMS:
 Waterproofing systems to be in accordance with ABCB Housing Provisions Part 10.2.6.
FALLS TO WET AREA FLOORS:
 Where a floor waste is installed the continuous fall of a floor plane to the waste must be no less than 1:80 and no more than 1:50.
STEPDOWN SHOWERS:
 Where stepdown showers are used, the shower area must be stepped down a minimum of 25mm below the finished floor level outside the shower. Refer to ABCB Housing Provisions Part 10.2.15 & relevant figures for details.
HOB CONSTRUCTION:
 Shower hobs are to be constructed in accordance with ABCB Housing Provisions Part 10.2.16.
ENCLOSED SHOWERS WITH LEVEL THRESHOLD:
 Enclosed showers with a level threshold must be provided with a waterstop in accordance with ABCB Housing Provisions Part 10.2.17 & relevant figures.

UNENCLOSED SHOWERS:
 Unenclosed showers are to have a waterstop min. 1500mm from the shower rose with the vertical leg finishing flush with the top surface of the floor. Waterproof all all joints and junctions. Waterproof entire bathroom floor where unenclosed showers are installed. Refer to ABCB Housing Provisions Part 10.2.18 & relevant figures for details.

PENETRATIONS:
 All penetrations in showers and wet areas must be waterproofed in accordance with ABCB Housing Provisions part 10.2.23.

FLASHINGS/JUNCTIONS:
 All flashings and junctions in wet areas to be installed in accordance with ABCB Housing Provisions Part 10.2.24 & relevant figures.

SHOWER SCREENS:
 1900H Semi-frameless shower screens to comply with ABCB Housing Provisions Table 8.4.6 & AS 1288:2021. Minimum 6mm toughened safety organic coated glass, labelled to comply with industry standards. Install shower screens in accordance with ABCB Housing Provisions Part 10.2.32.

- HYDRAULIC NOTES:**
- All plumbing shall be in accordance with the Tasmanian Plumbing Regulations, AS 3500 and to the local authority approval.
 - The location of the existing services where shown are approximate only and shall be confirmed on site where possible. Determine location of existing power, Telstra, water and drainage services prior to commencing new work.
 - Conceal all pipework in ceiling space, ducts, cavities, wall chases, cupboards etc. unless otherwise approved.
 - Refer to designers drawings and fixture and equipment technical specifications for pipework connections.
 - Make good all disturbed surfaces to match existing.
 - Remove all excess soil and surplus materials from site.
 - All plumbing to be installed by a licensed plumber.

Install inspection openings at major bends for stormwater and all low points of downpipes.
 All plumbing & drainage to be in accordance with local Council requirements. Provide surface drain to back of bulk excavation to drain leveled pad prior to commencing footing excavation.
 Stormwater line (100mm uPVC)
 Sewer line (100mm uPVC)

SERVICES
 The heated water system must be designed & installed with Part B2 of NCC Vol. 3 - Plumbing Code of Australia
 Thermal insulation for heated water piping must:
 a) be protected against the effects of weather and sunlight; and
 b) be able to withstand the temperatures within the piping; and
 c) use thermal insulation in accordance with AS/NZS 4859.1

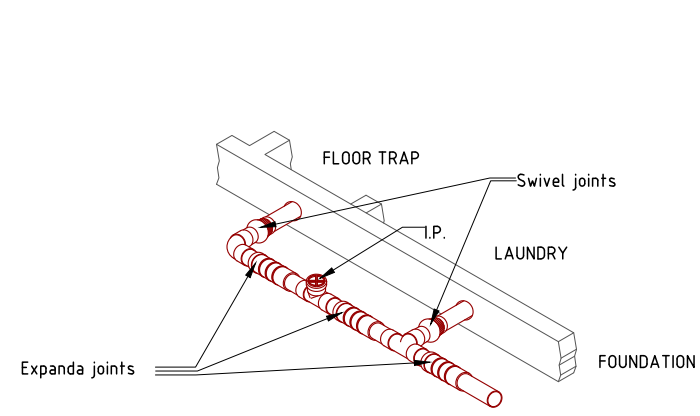
Heated water piping that is not within a conditioned space must be thermally insulated as follows:

- Internal piping:
 - All flow and return internal piping that is -
 - within an unventilated wall spaces
 - within an internal floor between storeys; or
 - between ceiling and insulation and a ceiling
 Must have a minimum R-value of 0.2 (ie. 9mm of closed cell polymer insulation)
- Piping located within a ventilated wall space, an enclosed building subfloor or a roof space:
 - All flow and return piping
 - Cold water supply piping and Relief valve piping within 500mm of the connection to central water heating system
 Must have a minimum R-value of 0.45 (ie. 19mm of closed cell polymer insulation)
- Piping located outside the building or in an unenclosed building sub-floor or roof space:
 - All flow and return piping.
 - Cold water supply piping and Relief valve piping within 500mm of the connection to central water heating system
 Must have a minimum R-value of 0.6 (ie. 25mm of closed cell polymer insulation)
 Piping within an insulated timber framed wall, such as that passing through a wall stud, is considered to comply with the above insulation requirements.

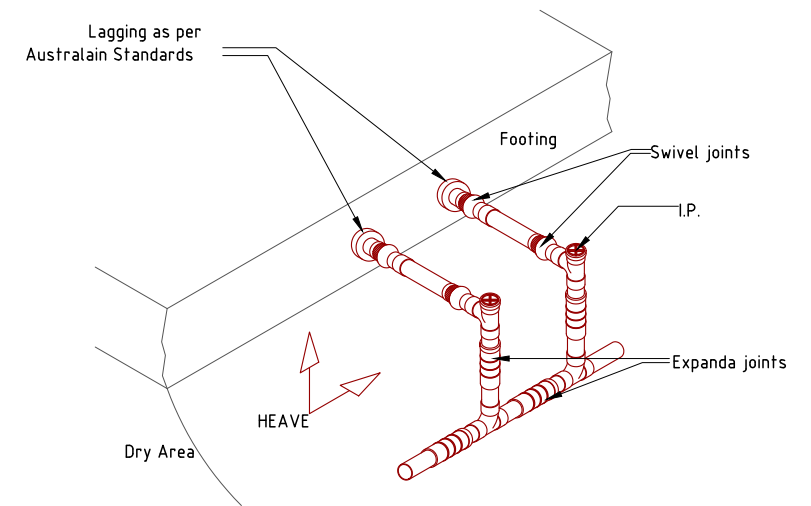
Hot & Cold Water Nominal Diameters	
Branch off takes	Min. DN20
Max. off take length 6m	DN18
Max. off take length 3m	DN15
Max. off take length 1m	DN10

Insulation Schedule		
Heated water pipes Type	Size Range	Insulation
Circulating Line	32-40	25mm Rockwool with foil wrap
Branch Line Offtake	20-25 18	19mm Bradflex 13mm Bradflex
Cold water pipes exposed		
Type	Size Range	Insulation
All	>20	13mm Bradflex
Other cold water pipes		
Type	Size Range	Insulation
All	All	Not required

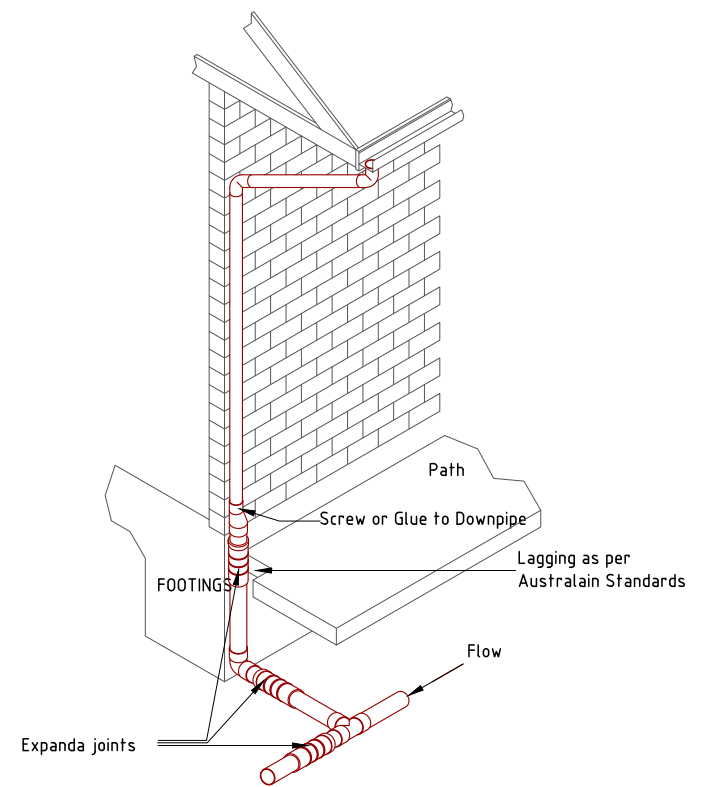
NOTE: Water pipes associated directly with plan equipment shall be insulated in accordance with the manufacturers instructions for a typical installation



GUIDELINES FOR PVC-U DRAINAGE SYSTEM WITH EXPANSION AND SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS



GUIDELINES FOR PVC-U DRAINAGE SYSTEM WITH EXPANSION AND SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS



GUIDELINES FOR PVC-U DRAINAGE SYSTEM WITH EXPANSION AND SWIVEL JOINT LOCATIONS FOR REACTIVE SOILS

Surface drainage to conform with NCC Vol. 2 Part H2D2. NOTE: 50mm fall required over first 1m from building.

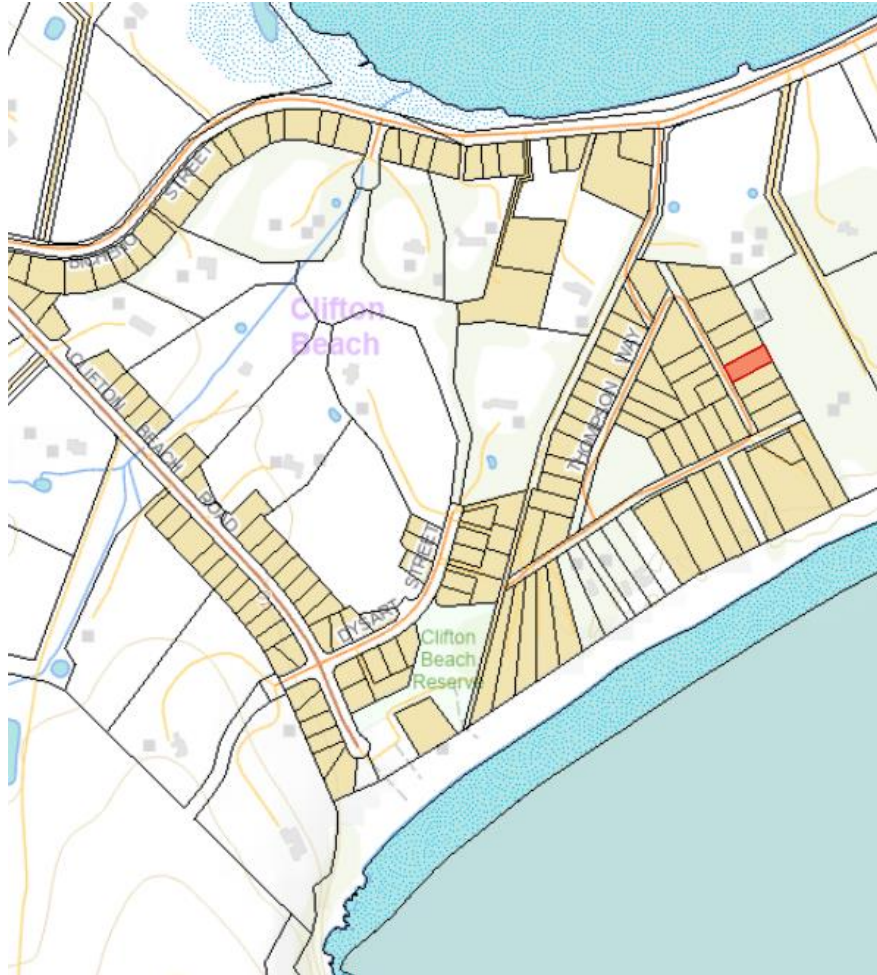
IMPORTANT NOTICE FOR ATTENTION OF OWNER:
 The owners attention is drawn to the fact that foundations and associated drainage in all sites requires continuing maintenance to assist footing performance. Advice for foundation maintenance is contained in the CSIRO Building Technology File 18 and it is the owners responsibility to maintain the site in accordance with that document.

**DEVELOPMENT DRAWINGS ONLY
 NOT FOR CONSTRUCTION**

PROPOSED ADDITION AND GARAGE FOR TAYLOR AND BEESON BUILDING PTY LTD AT 40 THOMPSON WAY CLIFTON BEACH	PLUMBING NOTES		DATE 22/01/2026	DRAWN BY G. Tilley email: gtilley7@biopond.com phone ph 0400 671 582
	SCALE N/A	AMENDED	DRAWING NO. 08 OF 08	Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0825

BUSHFIRE ASSESSMENT REPORT

For M.S. Jennings
Proposed Dwelling Addition & Garage
40 Thompson Way
Clifton Beach, 7020



Prepared by Gary Williams
Accreditation No BFP-109 (Category 2)
Scope of Work 1, 2 & 3A
2nd September 2025 Our Ref: 781T&B

G J WILLIAMS DRAFTING SERVICE

ABN 87 756 789 831

ARCHITECTURAL - HOME DESIGN. PLANS. APPROVALS.

SURVEY & GENERAL DRAFTING,

BUSHFIRE RISK ASSESSMENTS

Homes, Units, Extensions
Sale Plans
Development Applications
Council Approvals
Title Searches

995 Pelverata Rd
Pelverata Tas 7150

Mobile: 0428 396 159

Email: gjwdrafting@outlook.com.au

Table of Content

- 1. Executive Summary
- 2. Introduction
- 3. Proposal
- 4. Site Description
- 5. Bushfire Attack Level Assessment
- 6. Required Bushfire Protection Measures
 - 6.1 Construction Requirements
 - 6.2 Property Access
 - 6.3 Firefighting Water Supply
 - 6.4 Hazard Management Area
- 7. Additional recommendations
- 8. Disclaimer

- Appendix A. Building Drawings
- Appendix B. Aerial Photograph
- Appendix C. Bushfire Hazard Management Plan
- Appendix D. Certificate of Title
- Appendix E. Photos

VERSION CONTROL			
VERSION	DATE	AUTHOR	DESCRIPTION
1.0	2/09/25	GJW	For issue

1.Executive Summary

This report has been prepared to assess any Bushfire risks associated with proposed dwelling additions & garage at 40 Thompson Way, Clifton Beach and to provide measures to achieve an acceptable residual risk for the building. (Refer Appendix A)

The development is on a residential block of about 1,000m² in area. (Refer Appendix B & D)

The Lot is shown as being within a Bushfire-prone Area on the Clarence Local Provisions Schedule overlay & hence by definition is within a Bushfire-prone Area.

The assessment is:

BAL-19 for all elevations.

This assessment is based on creating & maintaining a Hazard Management Area over the entire Lot 40 as shown on the Bushfire Hazard Management Plan (BHMP). (Refer Appendix C)

The building works are to be compliant with the construction requirements for BAL-19, or higher, and as per the Director's Determination-Bushfire Hazard Areas v1.2 (Director's Determination).

A water supply for firefighting purposes is to be provided to comply with the Director's Determination. (Refer Appendix C).

Vehicular Access to a water supply for firefighting is to be compliant with the Director's Determination including a compliant hardstand & vehicle turning where applicable. (Refer Appendix C)

2.Introduction

Owners: M.S. Jennings. (as per Certificate of Title)

This report has been prepared to provide an assessment of any bushfire risk issues associated with a proposed dwelling addition and garage at 40 Thompson Way, Clifton Beach.

Review of LIST shows the proposal as being within a Bushfire-prone Area on the Clarence Local Provisions Schedule overlay. Therefore, as defined by Code C13.0 of the Tasmanian Planning Scheme, the Building Regulations, and the Director's Determination, the proposed building works are within a Bushfire-prone Area.

A site inspection was conducted on the 21st of August 2025.

3. Proposal

The proposal is for the addition of Longe room, utilities room and a Garage on the southwestern side of an existing single storey, 3 bedroom dwelling. (Refer Appendix C)

4. Site Description

The property is the land contained within **Certificates of Title Volume 110464 Folio 40 (PID-5200642)** which describes the land as being **Lot 40 on Plan 110464** in the

City of Clarence and is zoned **Low Density Residential** under the **Clarence Local Provisions Schedule**. (Refer to Appendix D)

The Lot is in an area of residential allotments averaging around 1,000m² in size with predominantly maintained gardens. Many of these blocks have retained areas of remnant native vegetation. Adjoining the northeast is a large allotment consisting predominantly of native vegetation. (Refer Appendix B)

The surrounding land is level with the subject title sitting about 300m south of Pipe Clay Lagoon and 190m north of Clifton Beach.

The lot fronts onto the eastern side of Thompson Way being a gravel loop road with a 10km/hr. speed limit. This road services over 50 properties. Land Information System Tasmania (LIST) cadastral information states this as Road (Type unknown) whereas LIST Road Centrelines layer states the Authority as Private with the traffic direction shown as Alternating. The road is narrow in places and has passing areas. Compliance with the Director's Determination has not been determined.

There is no reticulated TasWater water supply to the land.

5. Bushfire Attack Level Assessment. (Refer to Appendix B & Appendix E for Photographs)

The BAL has been determined by using the simplified procedure described in Clause 2.2 (Method 1) of AS 3959:2018.

As per Table 2.1 AS 3959:2018 the relevant Fire Danger Index (FDI) for Tasmania is noted as 50 & thus Table 2.6 AS 3959:2018 applies for determining the Bushfire Attack Levels (BALs).

The vegetation, where possible, has been classified as per AS 3959:2018 Table 2.3 and Figures 2.4 (A)-(H) The assessed vegetation is that out to the 100m offset.

The ground runs level in all directions. It is noted that LIST does not show any fire history for this area.

Adjoining to the Northeast is a large track of land consisting of Forest vegetation. TASVEG 4.0 describes this vegetation as Dry eucalyptus forest and woodland (Eucalyptus amygdalina coastal forest and woodland) with a Forest structure. There is a large tennis court near the boundary of the subject title that would provide some reduction in the intensity of a fire front from this direction. (Refer Appendix B)

To the Southeast is the non-vegetated area of the Thompson Way road formation and then urban development, generally consisting of maintained gardens, to out past the 100m offset.

To the Northwest and Southeast there is also urban development with maintained gardens.

Many of these urban allotments have retained tracts of the native vegetation and hence cannot be regarded as low threat vegetation. This vegetation does not correlate well with the descriptions of the vegetation classifications listed in AS 3959.

TABLE OF ASSESSMENT PER TABLE 2.6 AS 3959:2018					
		NORTHEAST	SOUTHWEST	SOUTHEAST	NORTHWEST
SLOPE		LEVEL	LEVEL	LEVEL	LEVEL
VEGETATION CLASSIFICATION		FOREST/ SCRUB	URBAN DEVELOPMENT	URBAN DEVELOPMENT*	URBAN DEVELOPMENT*
DEFENDABLE SPACE REQUIRED (m)	BAL 29	16-<23	N/A	N/A	N/A
	BAL 19	23-<32	N/A	N/A	N/A
DEFENDABLE SPACE ACHIEVED (m) #		29	N/A	N/A	N/A

* ALTHOUGH URBAN DEVELOPMENT, AND GENERALLY WITH MAINTAINED GARDENS, THIS IS NOT ASSESSED AS LOW THREAT VEGETATION DUE TO SECTIONS OF RETAINED NATIVE VEGETATION.

MEASURED FROM THE PROPOSED NEW BUILDING WORK.

The assessed BAL for the building works is:

BAL-19 for all Elevations

This assessment is based on creating & maintaining a Hazard Management Area over the entire Lot 40 as shown on the Bushfire Hazard Management Plan (BHMP). (Refer Appendix C)

6. Required Bushfire Protection Measures.

All works are to comply with the Director's Determination available at www.cbos.tas.gov.au (Resources and tools>Building and trades forms, publications and reports>Building in Hazardous Areas Determinations)

6.1 Construction Requirements

(Director's Determination- cl.4.1 (NCC Vol 2, Part H7))

AS 3959:2018 Construction of buildings in bushfire-prone areas provides for construction requirements for buildings.

Sections 3 and 6 provide for BAL-19

The new building works are to be compliant with the construction requirements of AS 3959:2018 for BAL-19 and the Director's Determination.

The draft building plans show the cladding of the new structures to be rough sawn treated pine vertical boards (match existing). Attention is drawn to cl.6.4.1 AS 3959:2018 with reference to the components less than 400mm from the ground etc.

The construction requirements only apply to the new building works, although upgrade of the existing structures is encouraged. Higher levels of construction are also encouraged.

The design plans must be verified as compliant by the Building Surveyor prior to the issue of the Certificate of Likely Compliance.

6.2 Property Access.

(Director's Determination- cl.4.2 & Table 4.2)

Vehicular Access to a water supply for firefighting is to be compliant with the Director's Determination including a compliant vehicle hardstand and vehicle turning where applicable. (Refer Appendix C - BHMP)

6.3 Firefighting Water Supply

(Director's Determination- cl. 4.3 & Table 4.3B)

A water supply for firefighting purposes is to be provided to comply with the Director's Determination. (Refer BHMP Appendix C).

A clear pathway for a hose lay from the water access point to all parts of the building to be protected should be maintained at all times.

6.4 Hazard Management Area

(Director's Determination- cl.4.4 & Table 4.4)

A Hazard Management Area (HMA) is to be created & maintained all year round, for the life of the building to at least the dimensions shown on the Bushfire Hazard Management Plan. (Appendix C)

Also refer to the Guide to Hazard Management Area attached. (Refer Appendix C)

Some common maintenance includes:

- remove selected small trees to create clumps separated by open areas, rather than continuous strips of vegetation,
- prune shrubs & lower branches of trees to a height of at least 2m to separate the ground from any tree canopy
- minimize fine fuels at ground level (mow, slash & rake) Lawns should be maintained to a height of less than 100mm.
- remove any trees/branches likely to fall or drop debris on the building (NB permits may be required)
- regular cleaning of roof gutters.

The creation of the HMA and maintenance is the responsibility of the developer and the owner at the time.

All works (construction requirements, property access, firefighting water supply and the hazard management area) must be verified as compliant by the Building Surveyor prior to occupancy.

7. Additional recommendations. (non-mandatory)

It is highly recommended that consideration is given to preparing a "My Bushfire Plan" in accordance with Tasmania Fire Service guidelines available at www.fire.tas.gov.au (Publications>Bushfire safety>TFS Bushfire Safety Guide) or ph 1800 000 699.

As many assessments are somewhat reliant on the adjoining properties being maintained in a minimal fuel condition, it is the owner's responsibility to liaise with the neighbours or notify Council should this maintenance not occur and result in a fire hazard.

8.Disclaimer

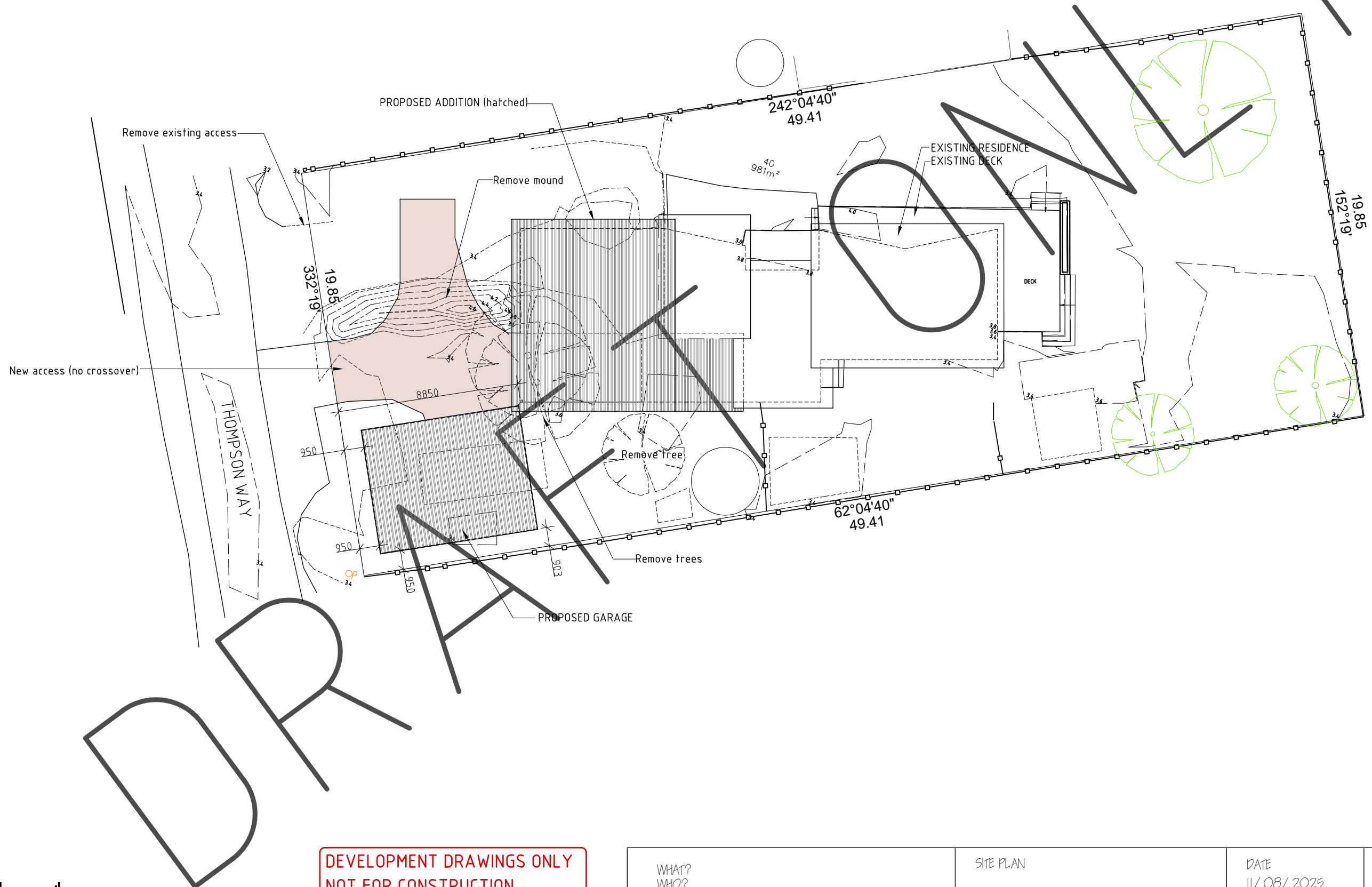
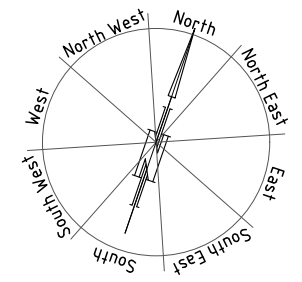
This report deals solely with the potential bushfire risk. All other assessments, statutory or otherwise, are outside the scope of this report. All commentary within this report is to be interpreted in relation to the bushfire risk/mitigation only.

This report is based on the status of the vegetation and other criteria at the time the site inspection was undertaken and cannot be relied upon for any future or altered development. The impact of future development and vegetation growth has not been considered.

This report and recommendations are an attempt to reduce the potential damage or loss caused by a bushfire as per legislation and regulations current at this time. No responsibility can be accepted for any such damage or loss.

As per AS 3959, it should be noted that the acceptable standards against which this has been assessed cannot guarantee to prevent damage or loss from a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature & behavior of fire & extreme weather conditions.

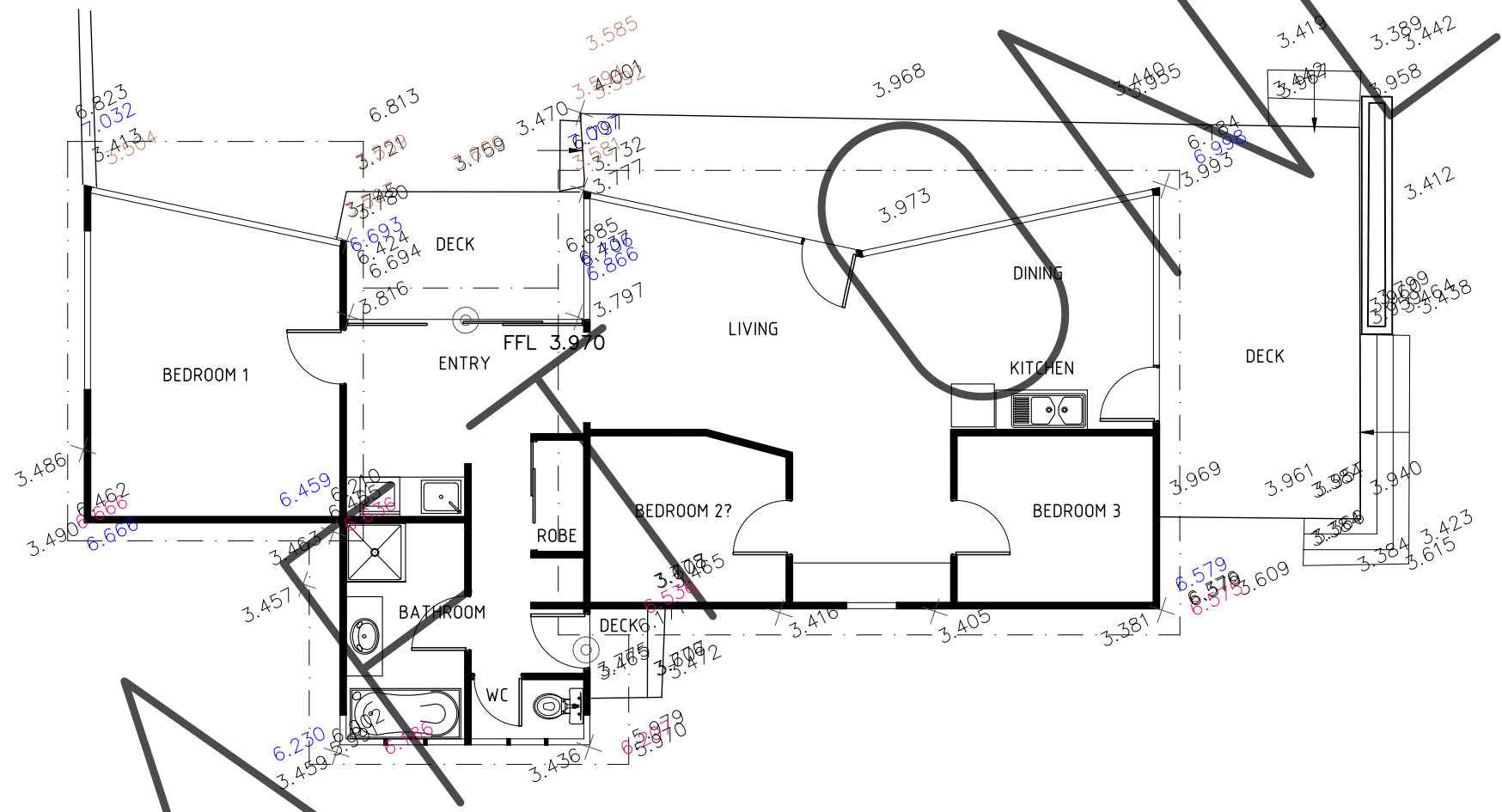
Appendix A (1 of 6)



**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

WHAT? WHO? WHERE?	SITE PLAN	DATE 11/08/2025	DRAWN BY ---- email: qtilley7@biapond.com phone ph 0400 671 582
	SCALE 1:200 0 2000 4000	AMENDED	DRAWING NO. 00 OF 00
			Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0025

Appendix A (2 of 6)



ALL TIMBER MEMBER SIZING SHALL BE IN ACCORDANCE WITH AS 1684.2:2021 (TIMBER FRAMING MANUAL)
 ALL BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH AS 1684.2:2021
 NOTE - ALL TIMBER MEMBERS SPECIFIED ARE NOMINAL SIZES. REFER TO AS 1684.2:2021 SPAN TABLES

WHAT?
 WHO?
 WHERE?

EXISTING PLAN

DATE
 11/ 08/ 2025

DRAWN BY ----
 email: qtilley7@biapond.com
 phone ph 0400 671 582

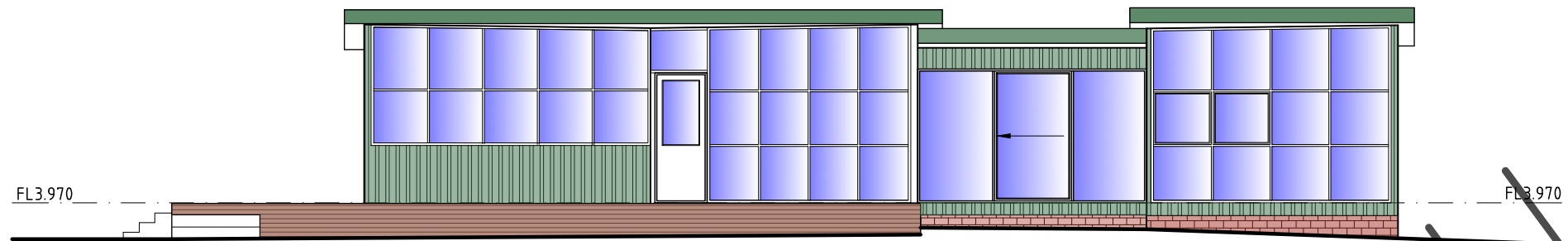
SCALE 1:100
 0 1000 2000

AMENDED

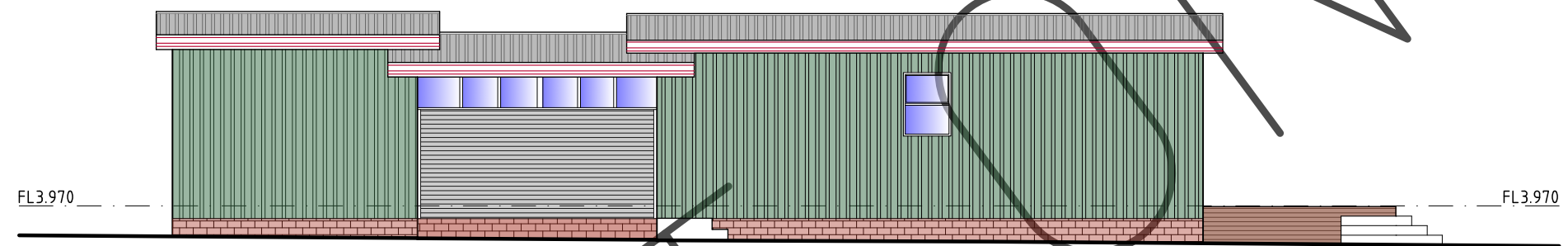
DRAWING NO.
 00 OF 00

Certified: G. Tilley Accreditation No. CC620H
 © copyright 2025 0025

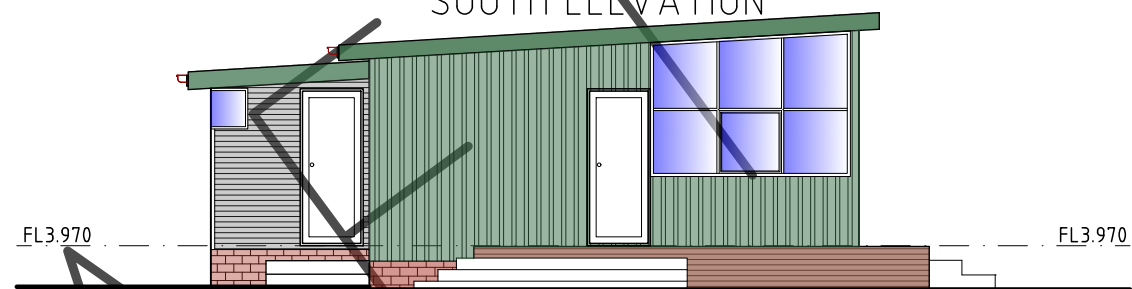




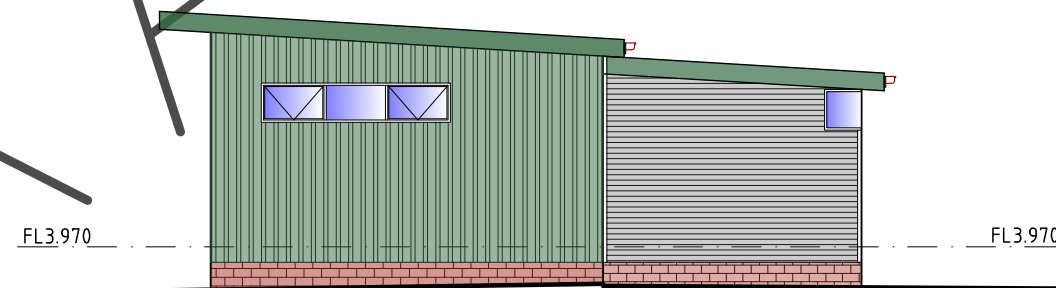
NORTH ELEVATION



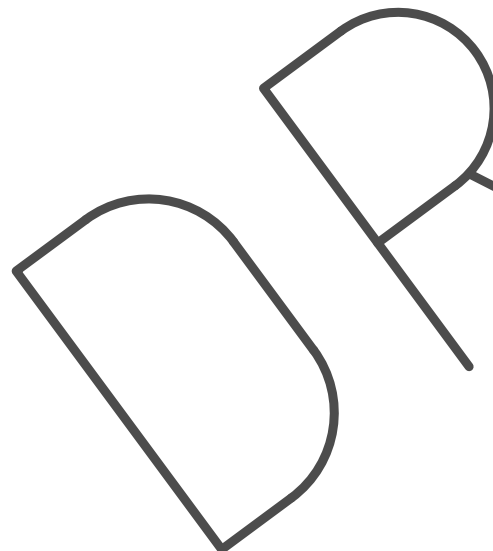
SOUTH ELEVATION



EAST ELEVATION



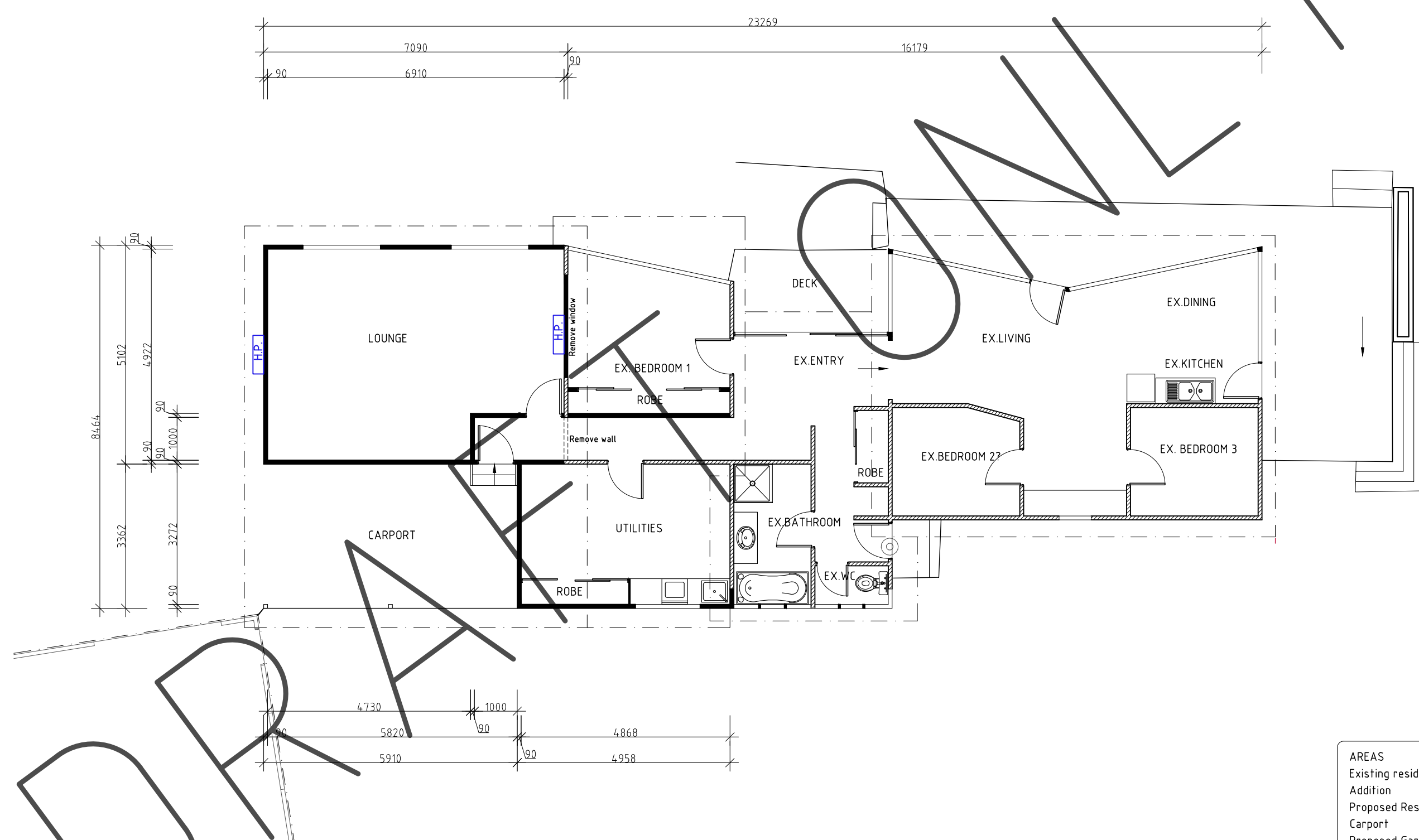
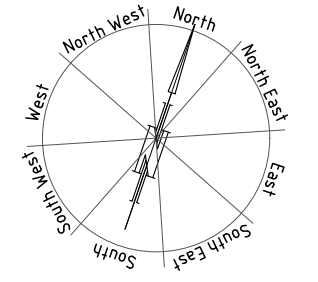
WEST ELEVATION



WHAT? WHO? WHERE?	EXISTING ELEVATIONS		DATE 11/08/2025	DRAWN BY ---- email: qtilley7@biapond.com phone ph 0400 671 582
	SCALE: 1:100 0 1000 2000	AMENDED	DRAWING NO. 00 OF 00	Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0025



Appendix A (4 of 6)

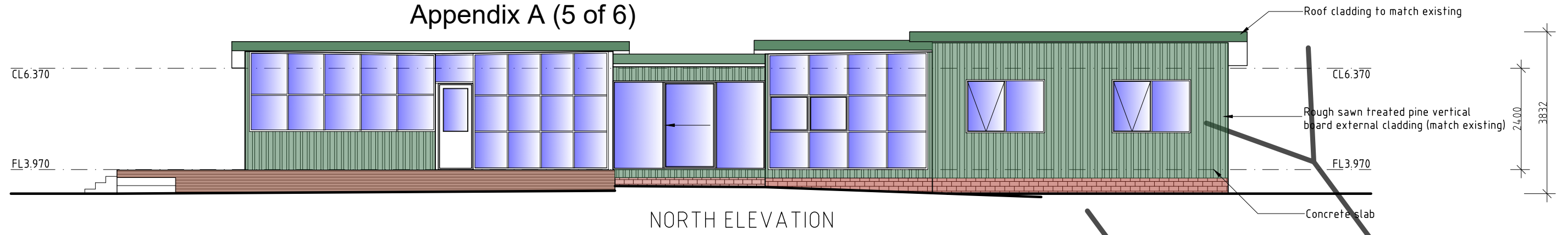


AREAS	
Existing residence	93.39m ²
Addition	52.38m ²
Proposed Residence	145.77m ²
Carport	19.86m ²
Proposed Garage	46.71m ²

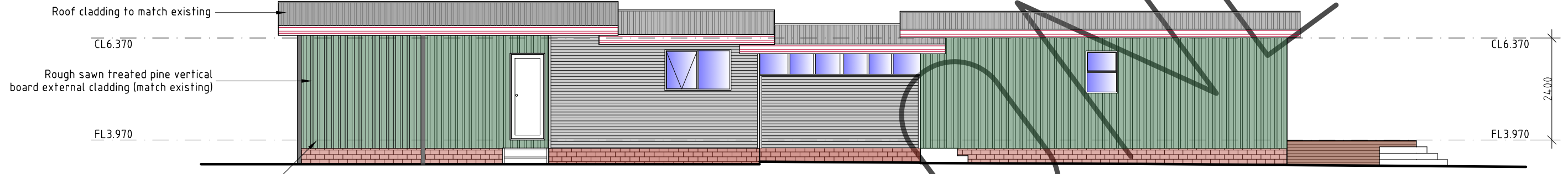
DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

WHAT? WHO? WHERE?	PLAN	DATE 11/ 08/ 2025	DRAWN BY ---- email: qtiley7@biapond.com phone ph 0400 671 582
	SCALE 1:100 0 1000 2000	AMENDED	DRAWING NO. 00 OF 00

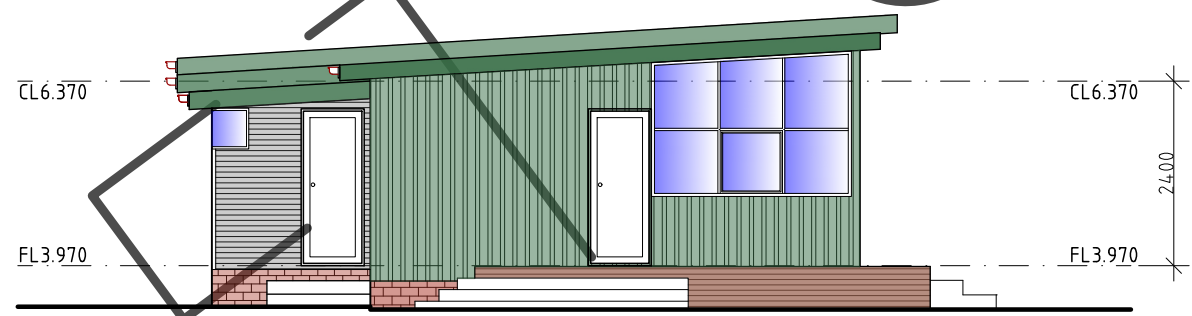
Appendix A (5 of 6)



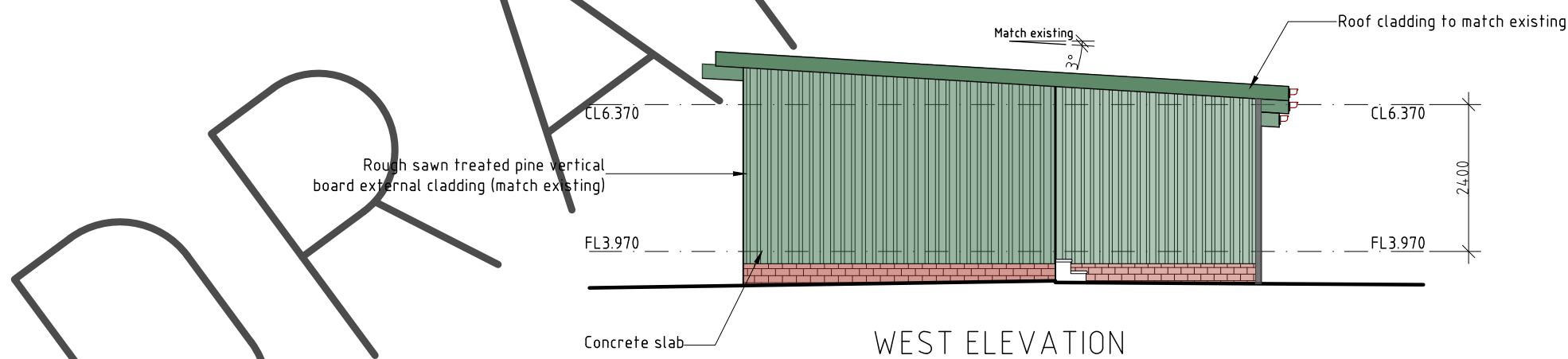
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

WHAT?
WHO?
WHERE?

ELEVATIONS

SCALE 1:100
0 1000 2000

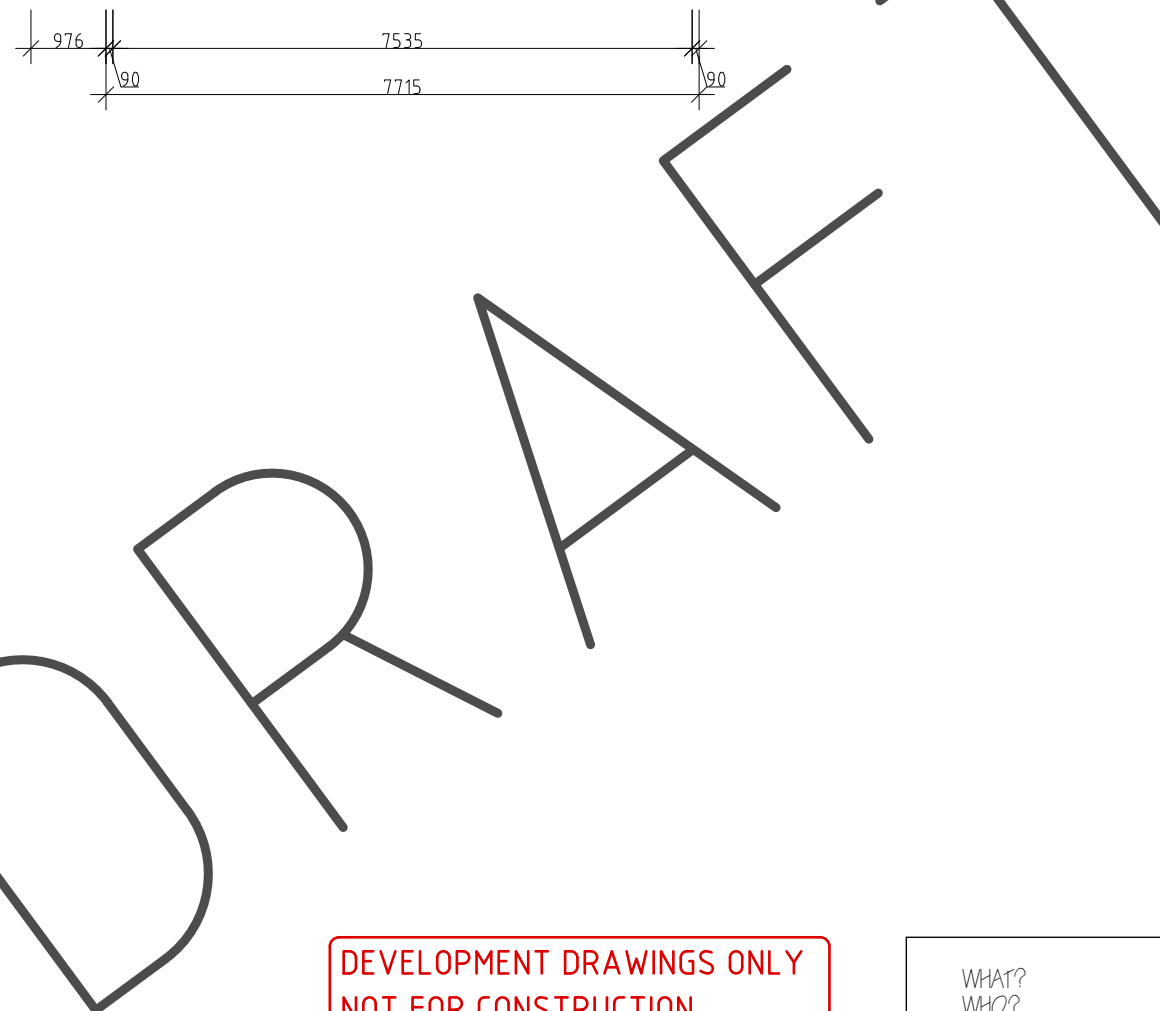
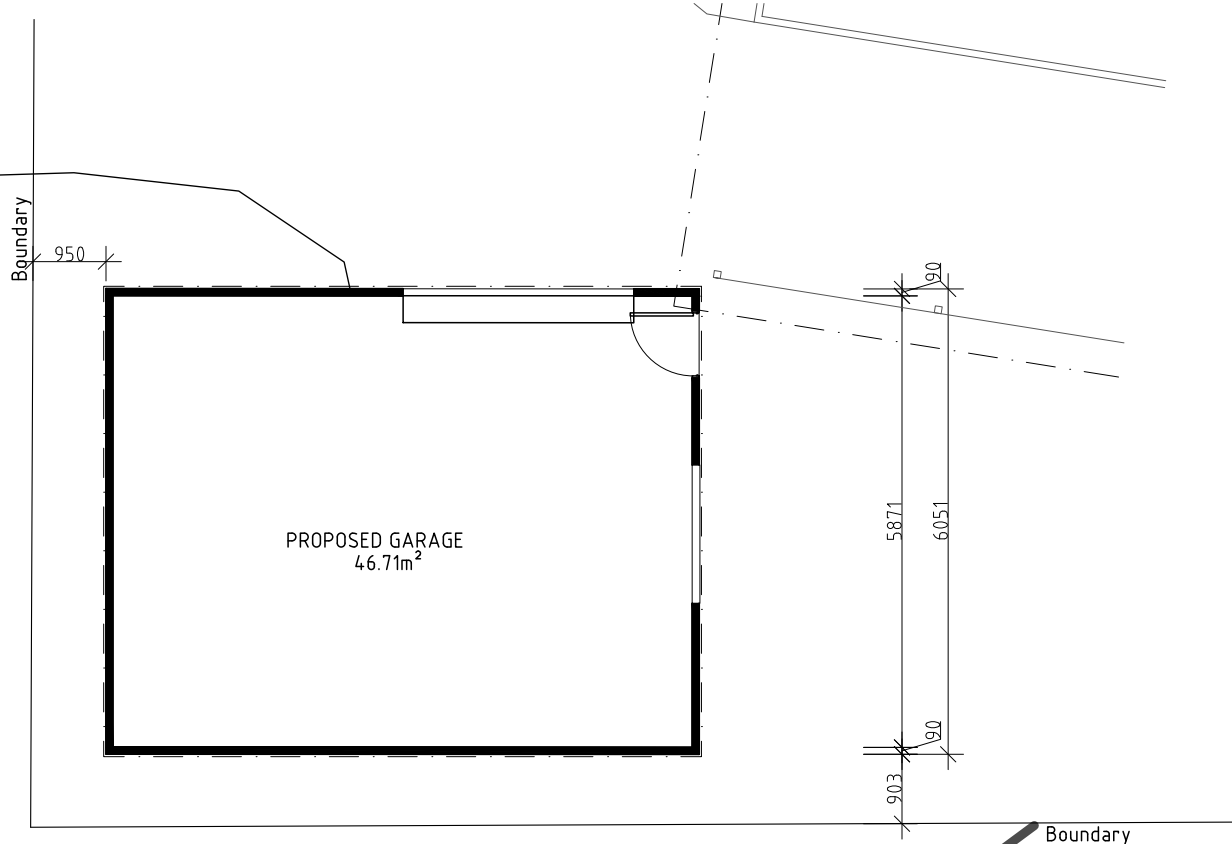
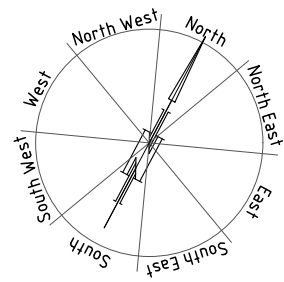
DATE
11/08/2025

DRAWING NO.
00 OF 00

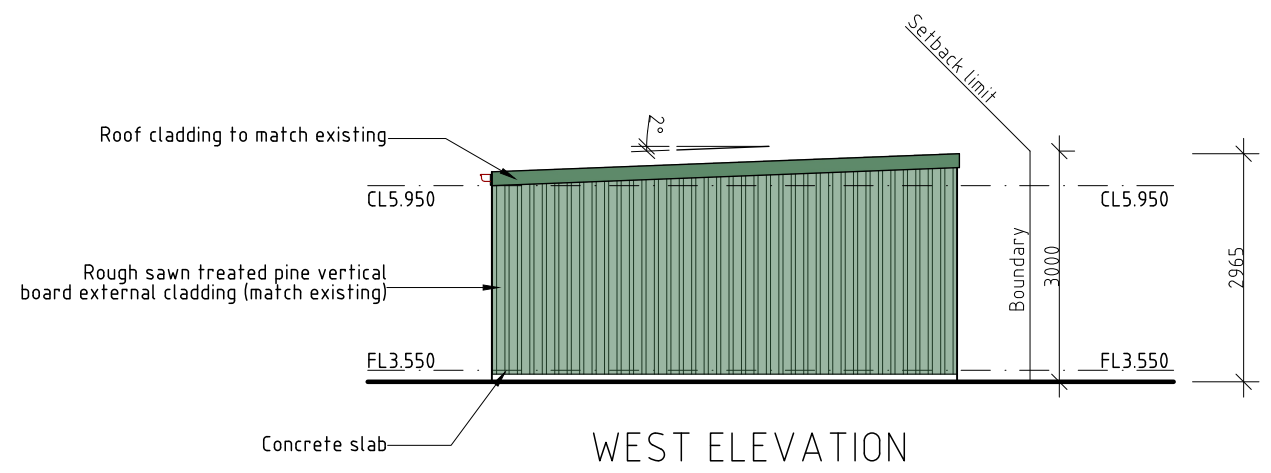
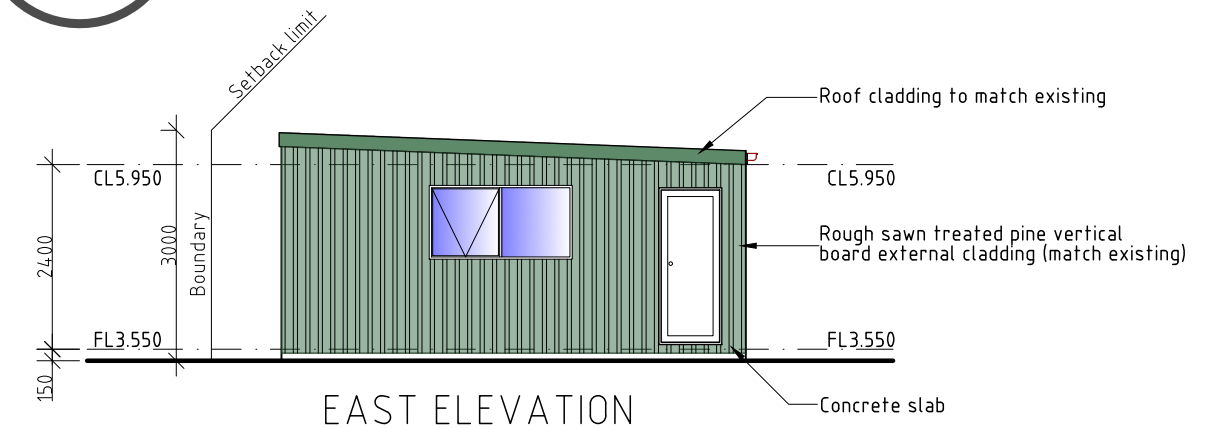
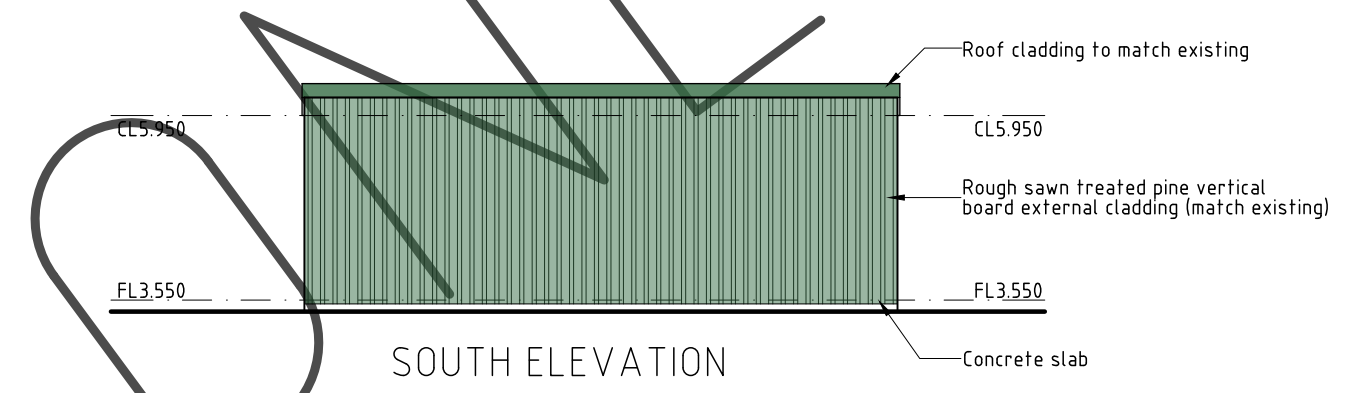
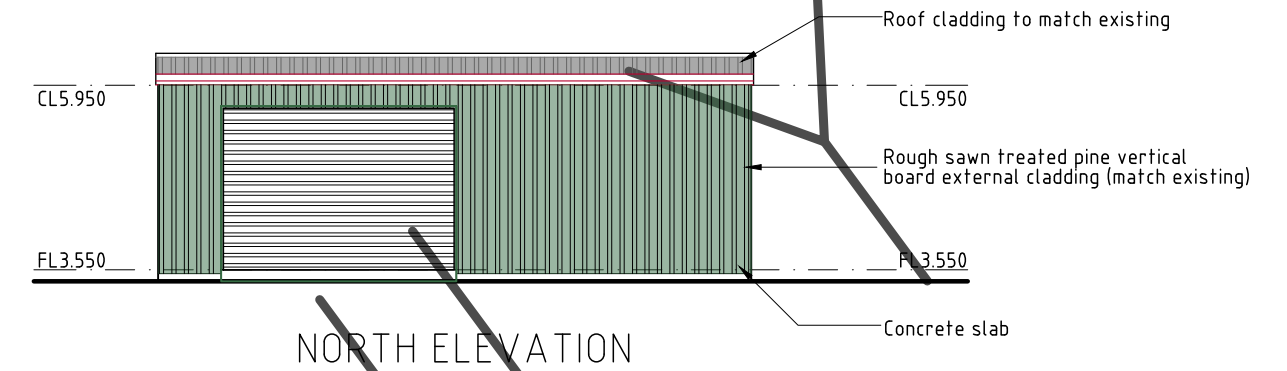
DRAWN BY ----
email: qtilley7@biapond.com
phone ph 0400 671 582

Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0025

Appendix A (6 of 6)



**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**



WHAT?
WHO?
WHERE?

PLAN

DATE

DRAWN BY J.Tilley
email: jttilley7@biopond.com
phone ph 0400 671 582

SCALE 1:100
0 1000 2000

AMENDED

DRAWING NO.
00 OF 00

Certified: G. Tilley Accreditation No. CC620H
© copyright 2025 0025



100m Offset Assess'd Area

www.thelist.tas.gov.au

© COPYRIGHT AND DISCLAIMER. Map data is compiled from a variety of sources and hence its accuracy is variable. If you wish to make decisions based on this data you should consult with the relevant authorities. Apart from any use permitted under the Copyright Act 1968, no part of the report may be copied without the permission of the General Manager, Land Tasmania, Department of Primary Industries, Parks, Water and Environment, GPO Box 44 Hobart 7001.

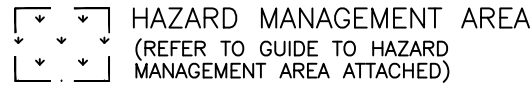
Document Set ID: 5712879

Version: 1, Version Date: 08/10/2025



SCHEDULE OF REQUIREMENTS FOR BAL-19

ALL WORKS ARE TO COMPLY WITH THE DIRECTOR'S DETERMINATION - "BUSHFIRE HAZARD AREAS"-2024 v1.2. (DIRECTOR'S DETERMINATION AVAILABLE AT www.cbos.tas.gov.au (Resources and tools>Building and trade forms, publications and reports>Building in Hazardous Areas Determinations))



THIS AREA TO BE CREATED & MAINTAINED TO, AT LEAST, THE DIMENSIONS SHOWN SO THAT IT IS KEPT IN A MINIMAL FUEL CONDITION.

CONSTRUCTION (APPLIES TO NEW WORK ONLY ALTHOUGH UPGRADE OF THE EXISTING STRUCTURES IS ENCOURAGED) TO COMPLY WITH THE PROVISIONS OF THE DIRECTOR'S DETERMINATION. HABITABLE BUILDINGS AND ASSOCIATED OUTBUILDINGS MUST BE DESIGNED & CONSTRUCTED TO COMPLY WITH AS 3959:2018 SECn 3 & SECn 6 FOR BAL-19 REQUIREMENTS. HOWEVER, NO SPECIFIC CONSTRUCTION REQUIREMENTS FOR OUTBUILDINGS MORE THAN 6m FROM THE HABITABLE BUILDING OR FIRE SEPARATED PER AS 3959 cl. 3.2. HIGHER LEVELS OF CONSTRUCTION ARE ENCOURAGED.

VEHICULAR ACCESS

DIRECTOR'S DETERMINATION (cl.2.3.2 & TABLE 2) TO BE TO WITHIN 90m FROM THE FURTHEST PART OF THE BUILDING AS A HOSE LAY. THERE ARE NO SPECIFIC ACCESS REQUIREMENTS WHERE ACCESS LENGTH IS <30m or ACCESS IS NOT REQUIRED FOR A FIRE APPLIANCE TO ACCESS A FIREFIGHTING WATER POINT. WHERE >30m, IN LENGTH or ACCESS IS FOR A FIRE APPLIANCE TO A FIREFIGHTING WATER POINT, ACCESS TO BE:

- ALL WEATHER CONSTRUCTION
- LOAD CAPACITY OF MIN. 20 TONNES, INCL BRIDGES & CULVERTS
- MIN. CARRIAGEWAY WIDTH OF 4m (TRAFFIC LANE WIDTH OF 3m + SHOULDER WIDTH OF 0.5m EA. SIDE)
- MIN. VERTICAL CLEARANCE OF 4m.
- MIN. HORIZONTAL CLEARANCE OF 0.5m FROM THE EDGE OF CARRIAGEWAY.
- MAX. CROSSFALL OF 5%
- DIPS MAX. OF 12.5% ENTRY & EXIT ANGLES.
- MIN. CURVE INNER RADIUS OF 10m.
- MAX. GRADIENT OF 15%/28% FOR SEALED & 10%/18% FOR UNSEALED & END WITH A TURNING AREA FOR FIRE APPLIANCES OF A MIN. 10m OUTER RADIUS TURNING CIRCLE, ACCESS ENCIRCLING THE BUILDING OR A "T" or "Y" TURNING HEAD 4m WIDE & 8m LONG.

FOR ACCESS LENGTHS >200m, PASSING BAYS OF ADDITIONAL 2m WIDE & 20m LONG ARE TO BE PROVIDED NO MORE THAN 200m APART AND FOR THAT PART OF THE ACCESS SERVING 3 OR MORE PROPERTIES, PASSING BAYS ARE TO BE PROVIDED NO MORE THAN 100m APART.

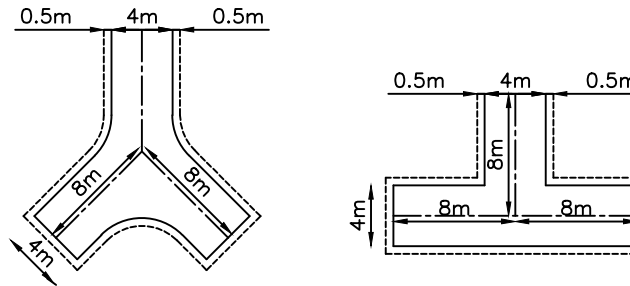
WATER SUPPLY (for FIREFIGHTING)

DIRECTOR'S DETERMINATION. (cl. 2.3.3 & TABLE 3B) THE FURTHEST PART OF THE BUILDING AREA TO BE PROTECTED MUST BE WITHIN 90m (HOSE LAY) OF A CONNECTION TO A STORED WATER SUPPLY IN A TANK, SWIMMING POOL, DAM OR LAKE AVAILABLE FOR FIREFIGHTING PURPOSES AT ALL TIMES WHICH HAS A CAPACITY OF AT LEAST 10,000L FOR EACH HABITABLE BUILDING. THIS 10,000L IS NOT TO BE USED FOR FIREFIGHTING SPRINKLER SYSTEMS. TANKS ARE TO BE METAL, CONCRETE OR LAGGED BY NON-COMBUSTIBLE MATERIAL IF ABOVE GROUND UNLESS SHIELDED IN ALL DIRECTIONS PER SECn.3.5 AS 3959 WITH THE LOWEST 400mm EXTERIOR OF THE TANK PROTECTED BY METAL, NON-COMBUSTIBLE MATERIAL OR MIN. 6mm FIBRE-CEMENT. FITTINGS, PIPEWORK & ACCESSORIES, INC. STAND & SUPPORTS:

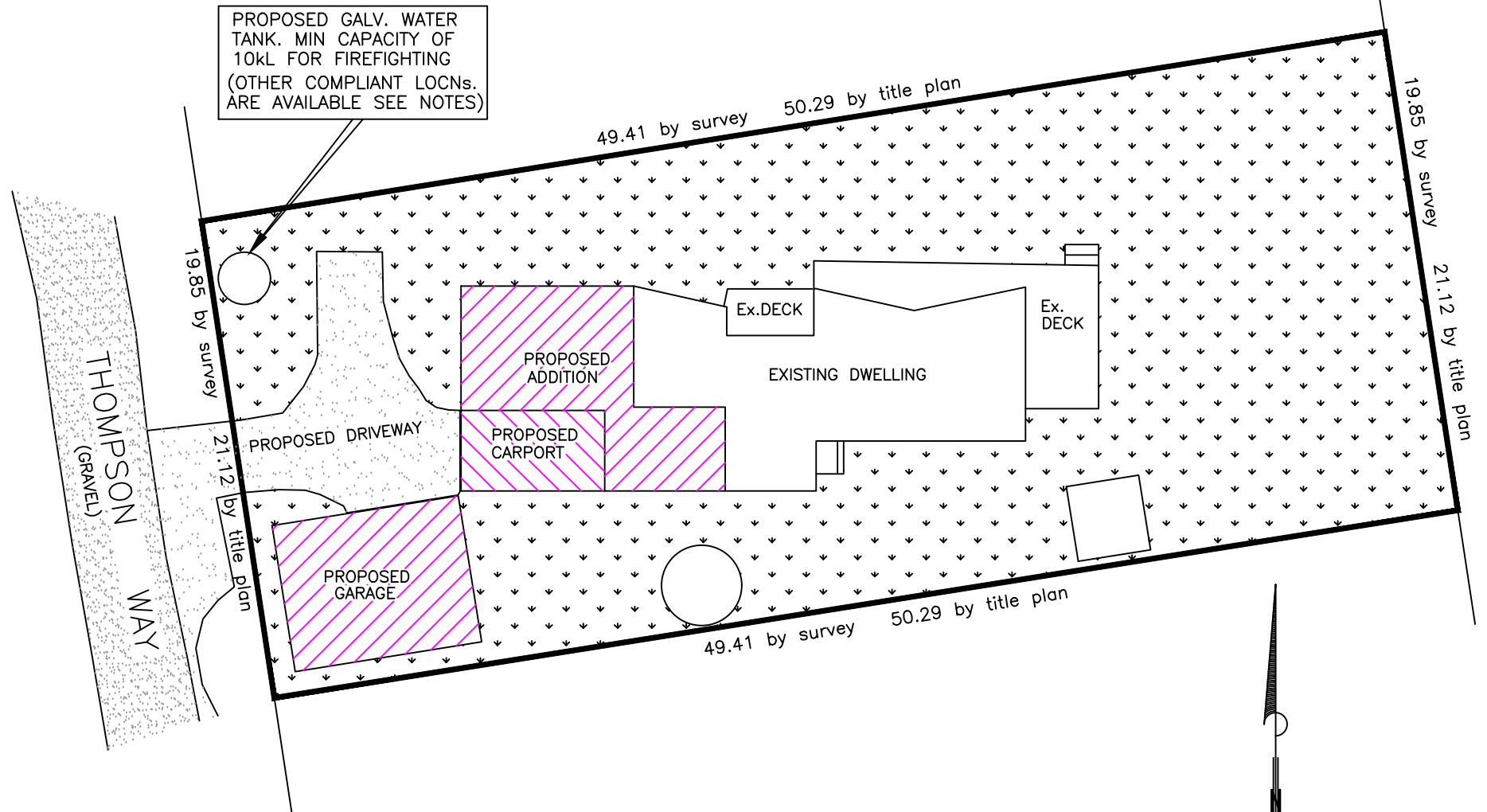
FITTINGS & PIPEWORK MUST BE BURIED TO A MIN. DEPTH OF 300mm PER 5.23 AS/NZS 3500.1 2003 OR BE METAL OR LAGGED WITH A NON-COMBUSTIBLE MATERIAL IF ABOVE GROUND, HAVE A MIN NOMINAL INTERNAL DIA. OF 50mm, BE FITTED WITH A VALVE OF MIN. INTERNAL DIA. OF 50mm & BE PROVIDED WITH A DIN or STANDARD FORGED STORZ 65 COUPLING WITH A SUCTION WASHER. THE COUPLING MUST BE ACCESSIBLE AT ALL TIMES & BE FITTED WITH A BLANK CAP & SECURING CHAIN OF MIN. 220mm LONG. ALTERNATIVELY, UNDERGROUND TANKS MAY HAVE AN OPENING IN THE TOP OF MIN 250mm DIA. REMOTE OFFTAKES ARE TO BE VISIBLE, ACCESSIBLE, AT A HEIGHT OF 450-600mm ABOVE GROUND & BE PROTECTED FROM POSSIBLE DAMAGE. SIGNAGE FOR STATIC WATER CONNECTIONS ARE TO BE PERMANENTLY FIXED IN A VISIBLE LOCATION & COMPLIANT WITH: AS 2304-2011 Water storage tanks for fire protection systems; OR BE MARKED WITH THE LETTER "W", MIN 100mm HIGH IN UPPER CASE WITHIN A CIRCLE, BE OF FADE RESISTANT MATERIAL WITH WHITE REFLECTIVE "W" & CIRCLE ON A RED BACKGROUND. THE SIGN IS TO BE MIN. 400mm HIGH, WITHIN 1m OF THE CONNECTION & NOT IMPEDE ACCESS OR OPERATION. IT IS PREFERABLE THAT REMOTE OFFTAKES BE FROM A CHARGED LINE.

A CLEAR PATHWAY FOR THE HOSE LAY FROM THE WATER CONNECTION POINT TO ALL PARTS OF THE BUILDING TO BE PROTECTED IS TO BE MAINTAINED AT ALL TIMES. A HARDSTAND AREA FOR FIRE APPLIANCES OF MIN 3m WIDE, 6m LONG OF THE STANDARD OF, & CONNECTED TO THE ACCESS CARRIAGEWAY IS TO BE PROVIDED. IT IS TO BE MAX. 3m HOSE LAY FROM THE WATER CONNECTION, INCLUDING THE MINIMUM LEVEL OF DAMS, SWIMMING POOLS ETC. & MIN. 6m FROM THE BUILDING AREA TO BE PROTECTED.

VEHICLE TURNING DIMENSIONS (ALSO REFER TO NOTES)



Appendix C (1 of 4)



PROPOSED GALV. WATER TANK. MIN CAPACITY OF 10KL FOR FIREFIGHTING (OTHER COMPLIANT LOCNS. ARE AVAILABLE SEE NOTES)

LOT 40
P110464

CT 110464-40
PID 5200642

BAL-19

BUSHFIRE HAZARD MANAGEMENT PLAN

TO BE READ IN CONJUNCTION WITH BUSHFIRE ASSESSMENT REPORT BY G J WILLIAMS DRAFTING SERVICE DATED 2nd SEPTEMBER 2025 REF. No 781T&B

THIS FORMS AN INTEGRAL PART OF THE BUILDING APPROVAL DOCUMENTATION. ENSURE ALL RELEVANT CONSULTANTS & CONTRACTORS ARE PROVIDED WITH A COPY OF THIS PLAN & SUPPORTING REPORT.

ALTHOUGH A COMPLIANT FIREFIGHTING WATER SUPPLY HAS BEEN SHOWN, OTHER LOCATIONS & CONFIGURATIONS MAY BE AVAILABLE FOR COMPLIANCE. (REFER TO SCHEDULE OF REQUIREMENTS) ANY ALTERNATIVE ARRANGEMENT MUST BE CHECKED WITH THE BUILDING SURVEYOR BEFORE PROCEEDING.

G. J. WILLIAMS DRAFTING SERVICE	
ARCHITECTURAL, SURVEY & GENERAL DRAFTING BUILDING DESIGNER & BUSHFIRE HAZARD PRACTITIONER Gary Williams - Accreditation No.1110E & BFP-109 CATEGORY 2/SCOPE OF WORK: 1, 2 & 3A	
995 PELVERATA RD. PELVERATA. 7150 MOBILE 0428 396 159	gjwdrafting@outlook.com.au ABN: 87 756 789 831
PROPOSED DWELLING ADDITION & GARAGE FOR M.S. JENNINGS 40 THOMPSON WAY CLIFTON BEACH	
DRAWING No: 781T&B-BHMP1	DATE: 2 SEPTEMBER 2021
SCALE: @A3 1:250	

GUIDE TO HAZARD MANAGEMENT AREA (HMA)

(THIS IS AN INTEGRAL PART OF THE BUILDING APPROVAL DOCUMENTATION)

As per the Directors Determination – “Bushfire Hazard Areas”, the HMA *“means the area, between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for firefighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.”*

It is to provide a defensible space for the building from bushfires.

The potential outcome is to reduce the amount of sparks and embers reaching the building, reduce radiant heat and protect from direct flame attack.

The creation and maintenance of a HMA does not necessarily require the total removal of or lack of vegetation.

The HMA may be considered as two zones, being a Building Protection Zone (BPZ) and a Fuel Modified Buffer Zone (FMBZ).

The BPZ is that adjacent to the building that has little or no material available to burn. This can be achieved by non-flammable areas such as paths, driveways and low cropped lawns. It may include dams, vegetable gardens, wastewater treatment system (eg septic tank) effluent disposal areas plus radiant heat shields, ember traps and windbreaks such as masonry/stone walls or non-combustible fences.

Fire hazards such as wood/rubbish heaps and stored fuel should be removed from this area. Regular cleaning of roof gutters is required (installation of no-combustible leaf gutter guards should be considered).

A non-combustible perimeter path around the building should be considered. Avoid planting shrubs against the building walls and decks or near windows and glass doors. Do not use pine bark or other flammable mulches. Avoid high flammability plants and consider low-flammability plants (refer Tasmania Fire Service www.fire.tas.gov.au or phone 1800 000 699).

The FMBZ, still being part of the HMA, is an area further out from the building than the BPZ and is such that fine fuels are removed and larger fuels are strategically modified to reduce the intensity of an approaching bushfire. The use of flammable garden mulches should be avoided.

This can potentially be achieved by separation of vegetation, both vertically and horizontally. Clumps of vegetation should be separated by open areas with minimal ground litter and fine fuels, rather than a continuous wall.

Appendix 'C' (3 of 4)

Trees should be such that there are areas of separation between the crowns. Retaining established trees can trap embers and reduce wind speed. Also create vertical separation by removing fine fuels between the ground and the tree canopy to at least 2 metres by pruning lower branches and shrubs and minimise ground litter.

Trees with smooth bark are less likely to catch fire and allow the fire to travel up the trunk to the canopy.

Consideration should be given to the removal of trees that are likely to fall or drop debris on the building. (Permits may be required. Check with the local authority before proceeding). The FMBZ can include low cropped grass and cultivated areas such as orchard, vineyards etc. Lawns should be maintained to a height less than 100mm.

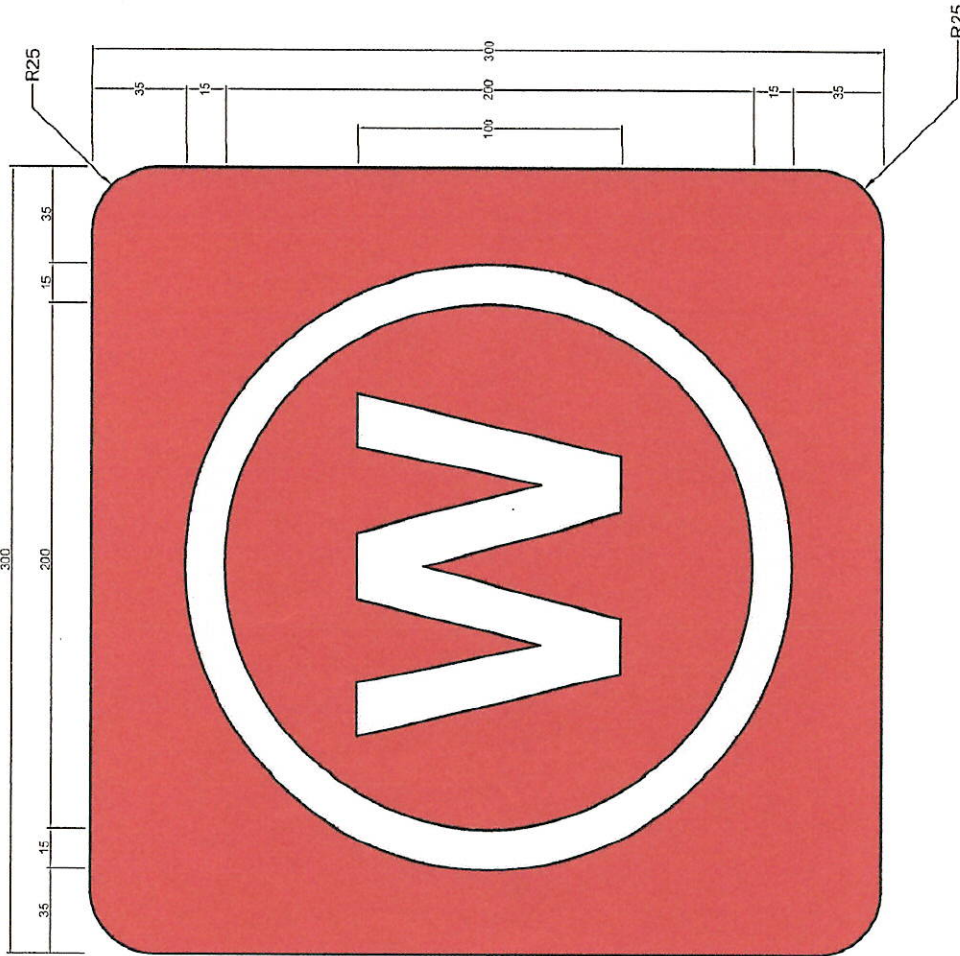
The slope of the land of the HMA (being the BPZ and FMBZ) has a bearing on its design and layout as fire tends to travel faster up slopes.

Consideration should also be given to the location of Class 10 buildings (non-habitable buildings such as sheds, detached garages and carports etc). These need to be positioned at an absolute minimum of 6 m from the habitable building unless built to the same assessed Bushfire Attack Level (BAL) construction requirements as that of the habitable building as prescribed in AS 3959. The HMA/BPZ may need to be extended accordingly.

The HMA should be created and maintained all year round for the life of the development. This is the responsibility of the developer/owner at the time.

Further information may be obtained from Tasmania Fire Service (TFS) at www.fire.tas.gov.au or ph 1800 000 699.

Appendix C'
(4 of 4)

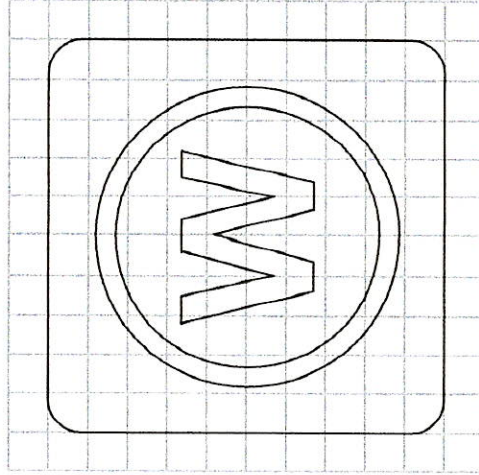


OVERALL SIGN DIMENSIONS (mm): 300 x 300, +/- 5
SURFACE AREA OF SIGN (sq.m) : 0.0895

LEGEND COLOUR: WHITE (N14) IN ACCORDANCE WITH AS2700,
WITH A RETROREFLECTIVE SURFACE FINISH
BACKGROUND COLOUR: SIGNAL RED (R13) IN ACCORDANCE WITH AS2700

FOR SIGN FIXING AND LOCATION REQUIREMENTS, REFER TO
TASMANIA FIRE SERVICE WATER SUPPLY SIGNAGE GUIDELINES

FOR LEGEND SPECIFICATIONS AND MANUFACTURING DETAIL
REFER TO TASMANIA FIRE SERVICE WATER SUPPLY SIGNAGE GUIDELINES



GRID MODULE X = 30mm Y = 30mm

ISSUE	AMENDMENT	DATE	APPRD	DRVN	WH	APPRD	CC	DATE	FILE	BPP	DWG NO.	TFS-WS01	SCALE
A								2/2/2017					1:2
B													
C													
D													



Tasmania Fire Service

NOTES
- all dimensions are in mm
- written dimensions take precedence over scaled measurements

TITLE
TASMANIA FIRE SERVICE
WATER SUPPLY SIGN

SEARCH OF TORRENS TITLE

VOLUME 110464	FOLIO 40
EDITION 4	DATE OF ISSUE 07-Dec-2018

SEARCH DATE : 18-Aug-2025

SEARCH TIME : 12.54 PM

DESCRIPTION OF LAND

City of CLARENCE
 Lot 40 on Plan [110464](#)
 Being the land described in Conveyance No. 68/8485
 Derivation : Part of 1 000-0-0 Granted to E. P. Butler and W. Woolley
 Derived from Y16708

SCHEDULE 1

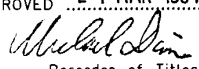
[D88622](#) TRANSFER to MICHAEL SCOTT JENNINGS Registered
 21-May-2013 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
[21/5864](#) CONVEYANCE: Benefiting Easement: Right to pass and
 repass over the Right of Way shown on Plan No. [110464](#)
[E158966](#) MORTGAGE to Australia and New Zealand Banking Group
 Limited Registered 07-Dec-2018 at 12.01 PM

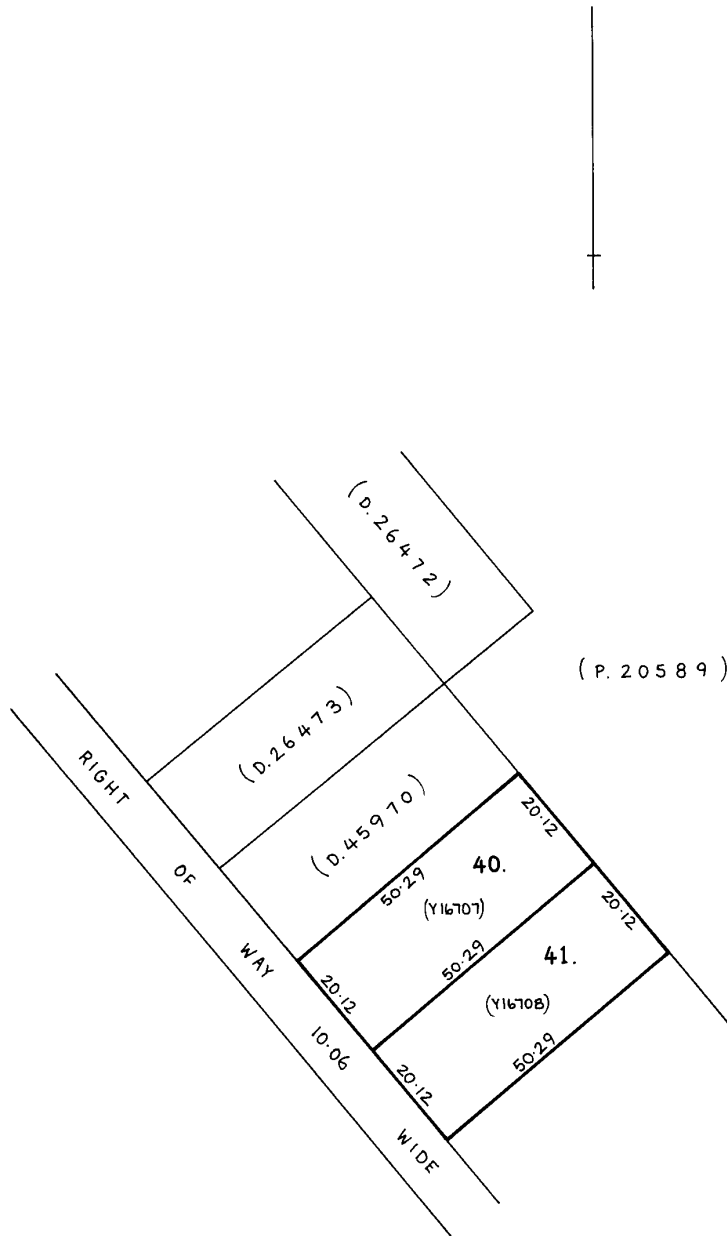
UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

FILE NUMBER Y.16707 & Y.16708 GRANTEE PART OF 1000A OR OP. QTD. TO EDWARD PAINE BUTLER & WILLIAM WOOLLEY		<p style="text-align: center;">CONVERSION PLAN</p> LOCATION <p style="text-align: center;">CITY OF CLARENCE</p> CONVERTED FROM 68/8486 & 68/8485 NOT TO SCALE LENGTHS IN METRES		REGISTERED NUMBER <p style="font-size: 2em; text-align: center;">P 110464</p>
MAPSHEET MUNICIPAL CODE No. 14		LAST UPI No. 15633 15634	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	APPROVED <u>24 MAR 1994</u>  Recorder of Titles
DRAWN MC				

SKETCH BY WAY OF ILLUSTRATION ONLY

"EXCEPTED LANDS"



A-183

Appendix E (1 of 4)

Vegetation to the Northeast





Looking Southwest



Adjoining property to the southeast



Adjoining property to the Northwest



Looking Southeast along Thompson Way



CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Owner /Agent
 Address
 Suburb/postcode

Form **55**

Qualified person details:

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

Qualifications and Insurance details: (description from Column 3 of the Director of Building Control's Determination)

Speciality area of expertise: (description from Column 4 of the Director of Building Control's Determination)

Details of work:

Address: Lot No:
 Certificate of title No:
The assessable item related to this certificate: (description of the assessable item being certified)
Assessable item includes –
- a material;
- a design
- a form of construction
- a document
- testing of a component, building system or plumbing system
- an inspection, or assessment, performed

Certificate details:

Certificate type: (description from Column 1 of Schedule 1 of the Director of Building Control's Determination)

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

building work, plumbing work or plumbing installation or demolition work:

or

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:

Bushfire Assessment Report by Gary Williams dated 2nd September 2025
Bushfire Hazard Management Plan by G.J. Williams Drafting Service dated 2nd September 2025

Relevant calculations:

AS 3959:2018 – Method 1 BAL Assessment

References:

Building Regulations 2016,
AS 3959:2018 Construction of Buildings in Bushfire-prone Areas,
Director's Determination – Bushfire Hazard Areas & National Construction Code H7D4.

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

The proposed building work – if designed & constructed in accordance with the Bushfire Hazard Management Plan referred to in this certificate, will comply with the acceptable Deemed-to-Satisfy requirements of the Director's Determination – Bushfire Hazard Areas v1.2

The applicable Bushfire Attack Level (BAL) determined using AS 3959:2018 for design & construction is – BAL-19

Scope and/or Limitations

1. The scope of this certification is limited to compliance with the requirements of the Director's Determination-Bushfire Hazard Areas v1.2.
2. The effectiveness of the measures prescribed in the bushfire hazard management plan and supporting report are dependant of their correct implementation and maintenance for the life of the development.
3. No guarantee can be provided that the building work will survive every bushfire event.
The assessment only deals with the potential bushfire risk. All other assessments, statutory or otherwise are outside the scope of this evaluation.

The assessment is relevant at the time it was undertaken and cannot be relied upon for future development.

Impacts of land rezoning, future development & vegetation growth have not been considered.

I certify the matters described in this certificate.

Qualified person:

Signed:



A rectangular box containing a handwritten signature in black ink.

Certificate No:

781T&B

Date:

2/9/2025

GEO-ENVIRONMENTAL ASSESSMENT

40 Thompson Way

Clifton Beach

September 2025



GEO-ENVIRONMENTAL

S O L U T I O N S

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

Investigation Details

Client:	Taylor and Beeson Building
Site Address:	40 Thompson Way, Clifton Beach
Date of Inspection:	25/08/2025
Proposed Works:	Alterations/Additions
Investigation Method:	Hand Auger
Inspected by:	C. Cooper

Site Details

Certificate of Title (CT):	110464/40
Title Area:	Approx. 978.1 m ²
Applicable Planning Overlays:	Bushfire-prone areas
Slope & Aspect:	Flat with no dominant aspect facing slope
Vegetation:	Gardens
Ground Surface:	Disturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Quaternary Sediments
Climate:	Annual rainfall 550mm
Water Connection:	Tank
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	AS2870:2011, AS1726:2017 & AS1547:2012

Investigation

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

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	BH 3 Depth (m)	USCS	Description
0.00-1.30	0.00-0.10	0.00-1.00	SP	Silty SAND: Medium grain, pale brown-grey, slightly moist, loose.
1.30-1.40	0.10-1.10	1.00-1.20	SP	Silty SAND: Medium grain, brown, slightly moist, very dense, hand auger refusal on hard pan.

Site Notes

Soils on site are developing from Quaternary Sediments. The soils consist of windblown sands over clay subsoils overlying rock.

Site Classification

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

The site has been classified as:

Class P

Y^s range: **0mm**

Notes: The site has been classified as Class P, due to trees on the site which are to be removed prior to construction. The removal of these trees will disturb the ground conditions and may cause differential movement and settlement across the building area. It is anticipated that the site will undergo significant differential settlement if the loose surface sand is not either sufficiently compacted or removed. It is strongly recommended the foundations be placed on the underlying natural sand material with bearing capacities >100kPa. In addition, adequate drainage must be installed surrounding the proposed foundation area to improve soil strength.

Wind Loading Classification

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

Wind Classification:	N2
Region:	A
Terrain Category:	1.0
Shielding Classification:	PS
Topographic Classification:	T0
Wind Classification:	N2
Design Wind Gust Speed – m/s ($V_{h,u}$):	40

Wastewater Classification & Recommendations

According to AS1547-2012 (on-site waste-water management) the natural soil is classified as **Sand (category 1)**. It is proposed to install a dual-purpose septic tank with on-site absorption. A Design Loading Rate (DLR) of 20L/m²/day has been assigned for primary treated effluent.

The proposed three-bedroom dwelling has a calculated maximum wastewater output of 600L/day. This is based on a tank water supply and a maximum occupancy of 5 people (120L/day/person).

Using the DLR of 20L/m²/day, an absorption area of at least 30m² will be required to accommodate the expected flows. This can be accommodated by two 10m x 1.5m x 0.6m absorption trenches connected to a dual-purpose septic tank (min 3000L) via a two way indexing valve e.g. k-rain. A pump (min 9m head) and pumpwell (min 900L) will be required to pump the effluent up to the absorption area. For all calculations please refer to the Trench summary reports. A cut-off drain will be required upslope of the absorption area and the area excluded from traffic or any future building works. A 100% reserve area should be set aside for future wastewater requirements.

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

Upslope or level buildings:	3m
Downslope buildings:	5m
Upslope or level boundaries:	1.5m
Downslope boundaries:	2m
Downslope surface water:	100m

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

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

Construction Notes & Recommendations

The site has been classified as **Class P** due to the need to remove trees and poor bearing capacities in the upper soil profile.

It is recommended that all footings be founded in the natural material with bearing capacities >100kPa.

All earthworks on site must comply with AS3798:2007, and I further recommend that consideration be given to drainage and sediment control on site during and after construction. Care should also be taken to ensure there is adequate drainage in the construction area to avoid the potential for weak bearing and foundation settlement associated with excessive soil moisture.

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

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

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

Director

GES

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

Assessment Report

Site assessment for on-site waste water disposal

Assessment for Taylor and Beeson Building	Assess. Date	16-Sep-25
	Ref. No.	
Assessed site(s) 40 Thompson Way Clifton Beach	Site(s) inspected	25-Aug-25
Local authority Clarence	Assessed by	John Paul Cumming

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

Wastewater Characteristics

Wastewater volume (L/day) used for this assessment = 600 (using the 'No. of bedrooms in a dwelling' method)
 Septic tank wastewater volume (L/day) = 200
 Sullage volume (L/day) = 400
 Total nitrogen (kg/year) generated by wastewater = 1.8
 Total phosphorus (kg/year) generated by wastewater = 1.5

Climatic assumptions for site

(Evapotranspiration calculated using the crop factor method)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean rainfall (mm)	41	36	36	45	36	29	46	47	40	48	44	56
Adopted rainfall (R, mm)	41	36	36	45	36	29	46	47	40	48	44	56
Retained rain (Rr, mm)	37	32	32	41	32	26	41	42	36	43	40	50
Max. daily temp. (deg. C)												
Evapotrans (ET, mm)	130	110	91	63	42	29	32	42	63	84	105	126
Evapotr. less rain (mm)	93	78	59	23	10	3	-10	0	27	41	65	76
Annual evapotranspiration less retained rain (mm) =											463	

Soil characteristics

Texture = Sand Category = 1 Thick. (m) = 1.2
 Adopted permeability (m/day) = 3 Adopted LTAR (L/sq m/day) = 20 Min depth (m) to water = 3

Proposed disposal and treatment methods

Proportion of wastewater to be retained on site: All wastewater will be disposed of on the site
 The preferred method of on-site primary treatment: In dual purpose septic tank(s)
 The preferred method of on-site secondary treatment: In-ground
 The preferred type of in-ground secondary treatment: Trench(es)
 The preferred type of above-ground secondary treatment: None
 Site modifications or specific designs: Not needed

Suggested dimensions for on-site secondary treatment system

Total length (m) = 20
 Width (m) = 1.5
 Depth (m) = 0.6
 Total disposal area (sq m) required = 30
 comprising a Primary Area (sq m) of: 30
 and a Secondary (backup) Area (sq m) of:

Sufficient area is available on site

Comments

Using the DLR of 20L/m²/day, an absorption area of 30m² is required to accommodate the expected wastewater flows from the proposed dwelling.

GES

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

Site Capability Report
Site assessment for on-site waste water disposal

Assessment for Taylor and Beeson Building	Assess. Date	16-Sep-25
	Ref. No.	
Assessed site(s) 40 Thompson Way Clifton Beach	Site(s) inspected	25-Aug-25
Local authority Clarence	Assessed by	John Paul Cumming

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

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
	Expected design area	sq m	200	V. high	Very high	Moderate	Other factors lessen impact
	Density of disposal systems	/sq km	20	Mod.	Moderate		
	Slope angle	degrees	1	High	Very low		
	Slope form	Straight simple		High	Low		
	Surface drainage	Good		High	Very low		
	Flood potential	Site floods <1:100 yrs		High	Very low		
	Heavy rain events	Infrequent		High	Moderate		
	Aspect (Southern hemi.)	Faces N		V. high	Very low		
	Frequency of strong winds	Common		High	Low		
	Wastewater volume	L/day	600	High	Moderate	No change	
	SAR of septic tank effluent		1.7	High	Low		
	SAR of sullage		2.6	High	Moderate		
	Soil thickness	m	1.2	V. high	Very low		
	Depth to bedrock	m	1.2	V. high	Moderate		
	Surface rock outcrop	%	0	V. high	Very low		
	Cobbles in soil	%	0	V. high	Very low		
	Soil pH		5.5	High	Low		
	Soil bulk density	gm/cub. cm	1.4	High	Very low		
	Soil dispersion	Emerson No.	8	V. high	Very low		
	Adopted permeability	m/day	3	Mod.	Very high	Moderate	
	Long Term Accept. Rate	L/day/sq m	20	High	Low		

Comments: There is low risk of environmental harm associated with on-site wastewater disposal at this site.

GES

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

Environmental Sensitivity Report
Site assessment for on-site waste water disposal

Assessment for Taylor and Beeson Building	Assess. Date	16-Sep-25
	Ref. No.	
Assessed site(s) 40 Thompson Way Clifton Beach	Site(s) inspected	25-Aug-25
Local authority Clarence	Assessed by	John Paul Cumming

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

Alert	Factor	Units	Value	Confid level	Limitation		Remarks
					Trench	Amended	
AA	Cation exchange capacity	mmol/100g	15	High	Very high		
A	Phos. adsorp. capacity	kg/cub m	0.3	High	High		
	Annual rainfall excess	mm	-463	High	Very low		
	Min. depth to water table	m	3	High	Very low		
	Annual nutrient load	kg	3.3	High	Very low		
	G'water environ. value	Agric non-sensit		V. high	Low		
	Min. separation dist. required	m	3	High	Very low		
	Risk to adjacent bores	Very low		V. high	Very low		
	Surf. water env. value	Agric non-sensit		V. high	Low		
	Dist. to nearest surface water	m	240	V. high	Moderate		
	Dist. to nearest other feature	m	1.5	V. high	Very high	Moderate	Other factors lessen impact
	Risk of slope instability	Very low		V. high	Very low		
	Distance to landslip	m	580	V. high	Very low		

Comments

Wastewater disposal on site is limited by the low CEC and nutrient absorption capacity of the soil. The planting of deep rooted grasses is recommended to encourage nutrient uptake.

APPENDIX 1 - PSP Results Table

Perth Sand Penetrometer (PSP) Conversion to Californian Bearing Ratio
(ref: Australian Standard AS 1289.6.3.3 - 1997)

PSP Location BH1

Depth (mm)	PSP	PSP	PSP Resistance	Allowable Bearing Capacity	CBR (Rounded Up)
	(Blows/100mm)	(mm/Blow)	(mPa)	(kPa)	
0-100	1	100.0	0.3	37	2
100-200	1	100.0	0.3	37	2
200-300	1	100.0	0.3	37	2
300-400	1	100.0	0.3	37	2
400-500	1	100.0	0.3	37	2
500-600	1	100.0	0.3	37	2
600-700	1	100.0	0.3	37	2
700-800	1	100.0	0.3	37	2
800-900	2	50.0	0.6	74	4
900-1000	2	50.0	0.6	74	4
1000-1100	2	50.0	0.6	74	4
1100-1200	3	33.3	0.9	110	6
1200-1300	6	16.7	1.9	221	13
1300-1400	11	9.1	3.4	404	25
1400-1500	15	6.7	4.7	551	35

PSP Location BH2

Depth (mm)	PSP	PSP	PSP Resistance	Allowable Bearing Capacity	CBR (Rounded Up)
	(Blows/100mm)	(mm/Blow)	(mPa)	(kPa)	
0-100	1	100.0	0.3	37	2
100-200	2	50.0	0.6	74	4
200-300	2	50.0	0.6	74	4
300-400	1	100.0	0.3	37	2
400-500	2	50.0	0.6	74	4
500-600	2	50.0	0.6	74	4
600-700	3	33.3	0.9	110	6
700-800	3	33.3	0.9	110	6
800-900	4	25.0	1.3	147	8
900-1000	10	10.0	3.1	368	22
1000-1100	16	6.3	5.0	588	37

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

Acceptable Solutions	Performance Criteria	Compliance
<p>A1</p> <p>Horizontal separation distance from a building to a land application area must comply with one of the following:</p> <ul style="list-style-type: none"> a) be no less than 6m; or b) be no less than: <ul style="list-style-type: none"> (i) 3m from an upslope building or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building. 	<p>P1</p> <ul style="list-style-type: none"> a) The land application area is located so that <ul style="list-style-type: none"> (i) the risk of wastewater reducing the bearing capacity of a building’s foundations is acceptably low.; and (ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation 	<p>Consistent with A1 (b) (i) Land application area will be located with a minimum separation distance of 3m from an upslope or level building.</p> <p>Consistent with A1 (b) (ii) Land application area will be located with a minimum separation distance of 5m from a downslope building.</p>
<p>A2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b)</p> <ul style="list-style-type: none"> (a) be no less than 100m; or (b) be no less than the following: <ul style="list-style-type: none"> (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water. 	<p>P2</p> <p>Horizontal separation distance from downslope surface water to a land application area must comply with all of the following:</p> <ul style="list-style-type: none"> 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. 	<p>Consistent with A2 (a) Land application area located > 100m from downslope surface water</p>

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

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

AS1547:2012 – Loading Certificate – Septic System Design

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

Site Address: 40 Thompson Way Clifton Beach

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

Summary of Design Criteria

DLR: 20L/m²/day.

Absorption area: 30m²

Reserve area location /use: Assigned

Water saving features fitted: Standard fixtures

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

Typical loading change consequences: Expected to be minimal due to capacity of system and site area (provided loading changes within 25% of design)

Overloading consequences: Continued overloading may cause hydraulic failure of the absorption area and require upgrading/extension of the area. Risk considered acceptable due to visible signs of overloading and owner monitoring.

Underloading consequences: Lower than expected flows will have minimal consequences on system operation unless the house has long periods of non occupation. Under such circumstances additional maintenance of the system may be required. Risk considered acceptable.

Lack of maintenance / monitoring consequences: Issues of underloading/overloading and condition of the absorption area require monitoring and maintenance, if not completed system failure may result in unacceptable health and environmental risks. Septic tank de-sludging must also be monitored to prevent excessive sludge and scum accumulation. Monitoring and regulation by the property owner required to ensure compliance.

Other operational considerations: Owners/occupiers must be aware of the operational requirements and limitations of the system, including the following; the absorption area must not be subject to traffic by vehicles or heavy stock and should be fenced if required. The absorption area must be kept with adequate grass cover to assist in evapotranspiration of treated effluent in the absorption trenches. The septic tank must be desludged at least every 3 years, and any other infrastructure such as septic tank outlet filters must also be cleaned regularly (approx. every 6 months depending upon usage). Foreign materials such as rubbish and solid waste must be kept out of the system.

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Owner name
 Address
 Suburb/postcode

Designer details:	
Name:	<input type="text" value="John-Paul Cumming"/> <small>Category:</small> <input type="text" value="Bld. Svcs. Dsgnr. - Hydraulic"/>
Business name:	<input type="text" value="Geo-Environmental Solutions"/> <small>Phone No:</small> <input type="text" value="03 6223 1839"/>
Business address:	<input type="text" value="29 Kirksway Place"/> <small>Fax No:</small> <input type="text" value="N/A"/>
	<input type="text" value="Battery Point"/> <input type="text" value="7004"/>
Licence No:	<input type="text" value="CC774A"/> <small>Email address:</small> <input type="text" value="office@geosolutions.net.au"/>

Details of the proposed work:	
Owner/Applicant	<input type="text" value="Taylor and Beeson Building"/> <small>Designer's project reference No.</small> <input type="text" value="J12085"/>
Address:	<input type="text" value="40 Thompson Way"/> <small>Lot No:</small> <input type="text" value="110464/40"/>
	<input type="text" value="Clifton Beach"/> <input type="text" value="7020"/>
Type of work:	Building work <input type="checkbox"/> Plumbing work <input checked="" type="checkbox"/> <small>(X all applicable)</small>

Description of work:
 (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
	<input type="checkbox"/> Building design	Architect or Building Designer
	<input type="checkbox"/> Structural design	Engineer or Civil Designer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer or Civil Designer
	<input checked="" type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Service Designer
	<input type="checkbox"/> Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	<input type="checkbox"/> Other (specify)	

Deemed-to-Satisfy: 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: Geo-Environmental Solutions	Date: Sep-25
Schedules:	Prepared by:	Date:
Specifications:	Prepared by: Geo-Environmental Solutions	Date: Sep-25
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by: Geo-Environmental Solutions	Date: Sep-25

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


Any other relevant documentation:	
Onsite Wastewater Assessment - 40 Thompson Way Clifton Beach - Sep-25	
Onsite Wastewater Assessment - 40 Thompson Way Clifton Beach - Sep-25	

Attribution as designer:	
---------------------------------	--

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

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

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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	John-Paul Cumming		17/09/2025
Licence No:	CC774A		

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.
If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.
TasWater must then be contacted to determine if the proposed works are Certifiable Works.

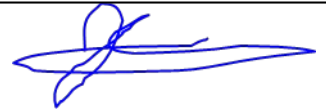
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- The works will not damage or interfere with TasWater's works
- The works will not adversely affect TasWater's operations
- The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

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

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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	John-Paul Cumming		17/09/2025



CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Owner /Agent
 Address
 Suburb/postcode

Qualified person details:

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

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

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

Details of work:

Address: Lot No:
 Certificate of title No:

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

Certificate details:

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

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

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

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

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

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

Site Classification consistent with AS2870-2011.

Scope and/or Limitations

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

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

Qualified person:

Signed:

Certificate No:

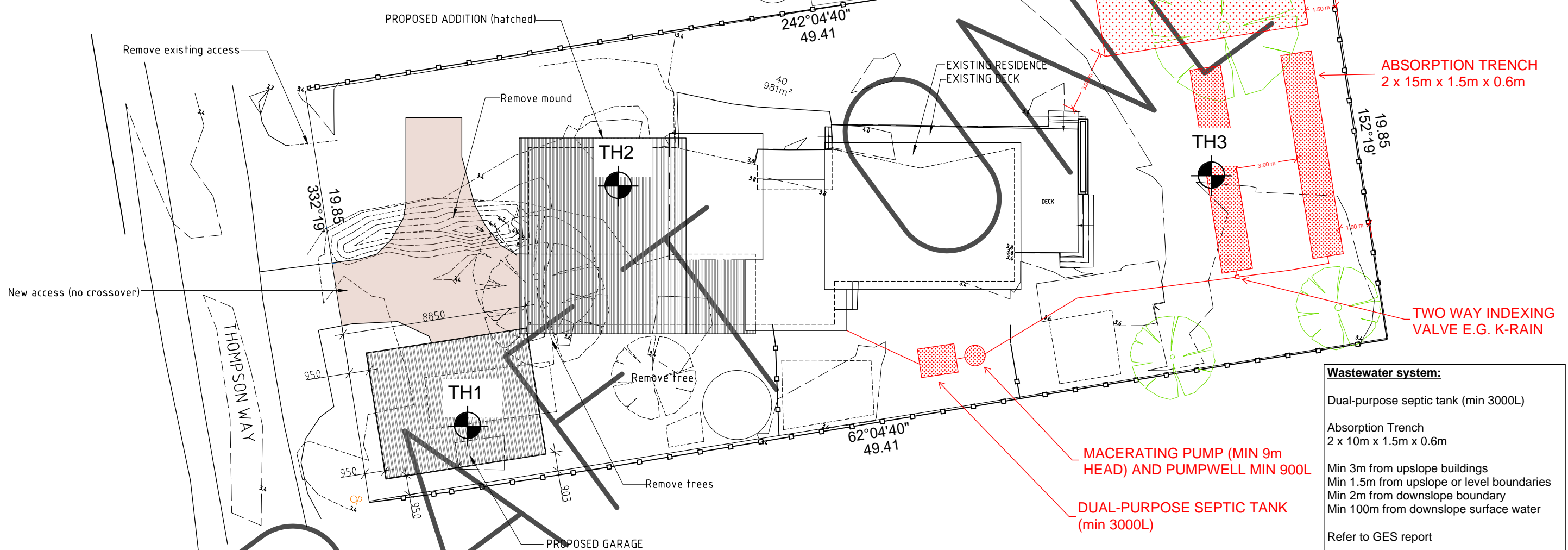
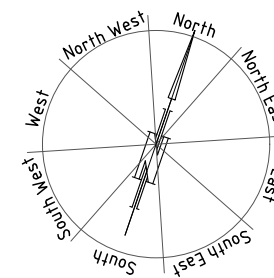
Date:

J12085

17/09/2025



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



100% RESERVE AREA

ABSORPTION TRENCH
2 x 15m x 1.5m x 0.6m

TWO WAY INDEXING
VALVE E.G. K-RAIN

MACERATING PUMP (MIN 9m
HEAD) AND PUMPWELL MIN 900L
DUAL-PURPOSE SEPTIC TANK
(min 3000L)

Wastewater system:

- Dual-purpose septic tank (min 3000L)
- Absorption Trench
2 x 10m x 1.5m x 0.6m
- Min 3m from upslope buildings
- Min 1.5m from upslope or level boundaries
- Min 2m from downslope boundary
- Min 100m from downslope surface water

Refer to GES report

GES
GEO-ENVIRONMENTAL
SOLUTIONS
29 Kirkway Place Battery Point
Tj 62231839 E| office@gesolutions.net.au

Dr. John Paul Cumming
Building Services Designer-
Hydraulic
CCC774A

17/09/2025

**DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION**

WHAT? WHO? WHERE?	SITE PLAN	DATE 11/ 08/ 2025	DRAWN BY ---- email: qtilley7@biapond.com phone ph 0400 671 582
	SCALE 1:200 0 2000 4000	AMENDED	DRAWING NO. 00 OF 00
			Certified: G. Tilley Accreditation No. CC620H © copyright 2025 0025

Design notes:

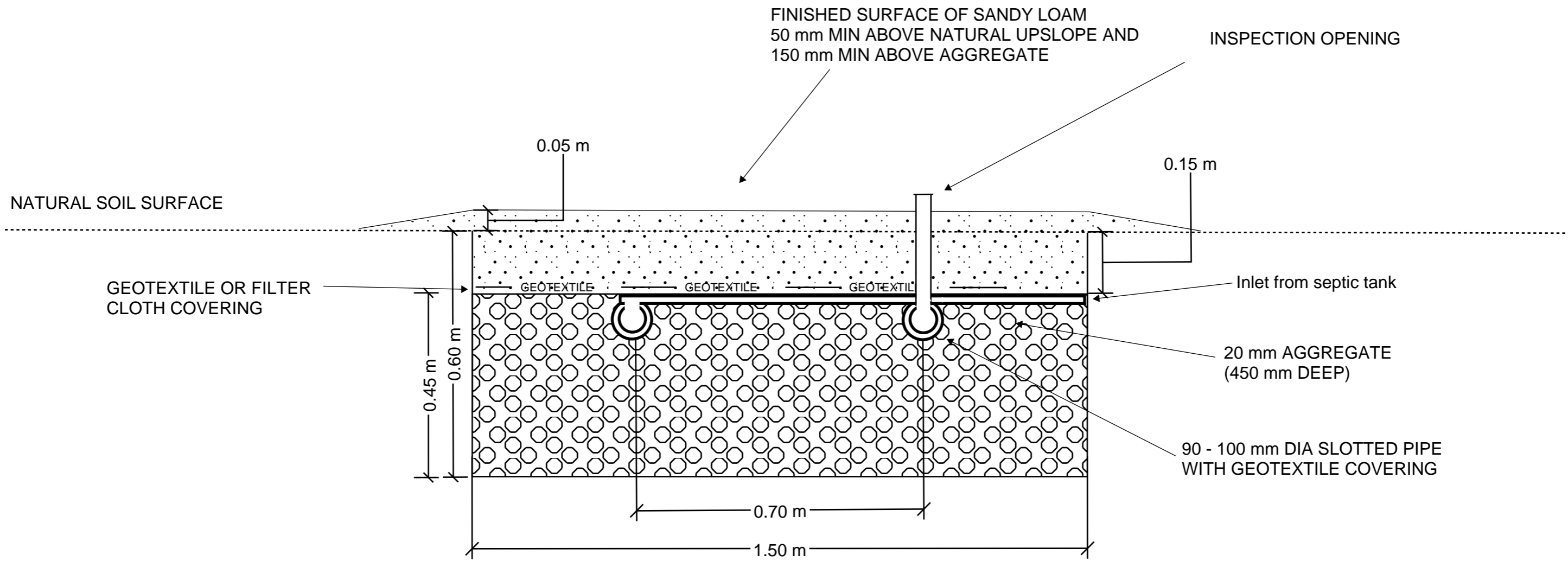
1. Absorption trench dimensions of up to 20m long by 0.60m deep by 1.5m wide.
2. Base of trenches to be excavated level and smearing and compaction avoided.
3. Lower 450mm of bed to be filled with 20mm drainage aggregate and slotted 100mm distribution pipes packed into upper 100mm of aggregate
4. Final finished surface with sandy loam from on site to be 100 mm above natural surface to allow for settlement.
5. Construction on slopes up to 20% to allow trench depth range 650mm upslope edge to 450mm on down slope edge.
6. On slopes over 5% the sandy loam cover should be 75-100mm above natural with a toes no less than 500mm in length to avoid surface water accumulation (up slope ag drain also recommended to divert surface water flows).
7. The distribution pipe grid must be absolutely level to allow even distribution of effluent around the absorption area – it is recommended that the level be verified by running water into the system before backfilling and commissioning the trench
8. The slotted 90-100mm PVC distribution pipes must be slotted at “8 and 4 o’clock” when looking at the pipe section end-on, with the slots running level along the horizontal length of the pipe – please see figure 2 – or commercially available pre-slotted PVC pipe utilised
9. All works on site to comply with AS3500 and Tasmanian Plumbing code.



GEO-ENVIRONMENTAL

SOLUTIONS

29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au

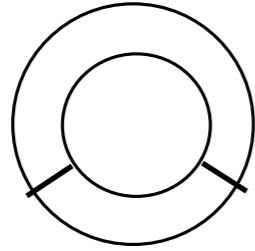


Do not scale from these drawings.
Dimensions to take precedence
over scale.

Absorption Trench Design- Slotted Pipe

Figure 2 - Distribution Pipe Detail

Cross Section



Slotted 100mm distribution pipe
- slots at "8 and 4 o'clock"

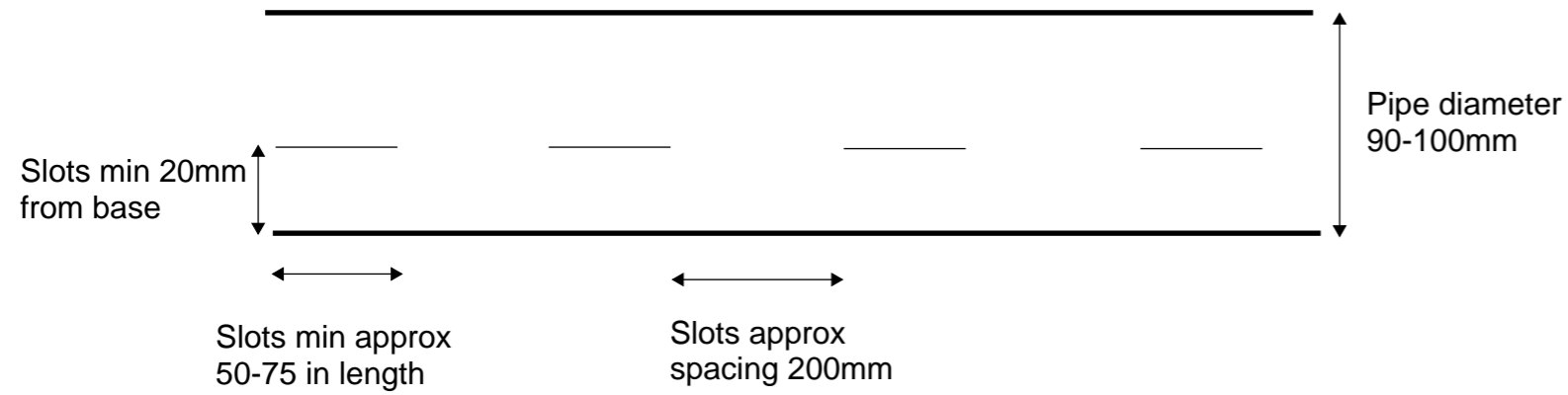


GEO-ENVIRONMENTAL

S O L U T I O N S

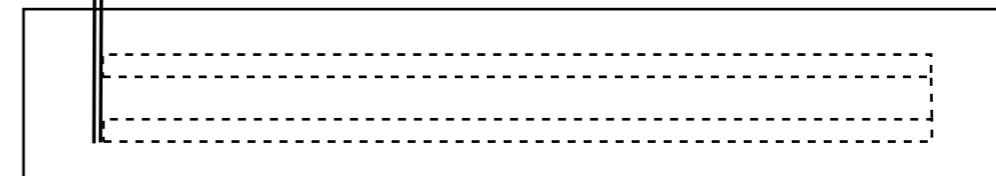
29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au

Side View



Inlet from septic tank

Top view of Trench:



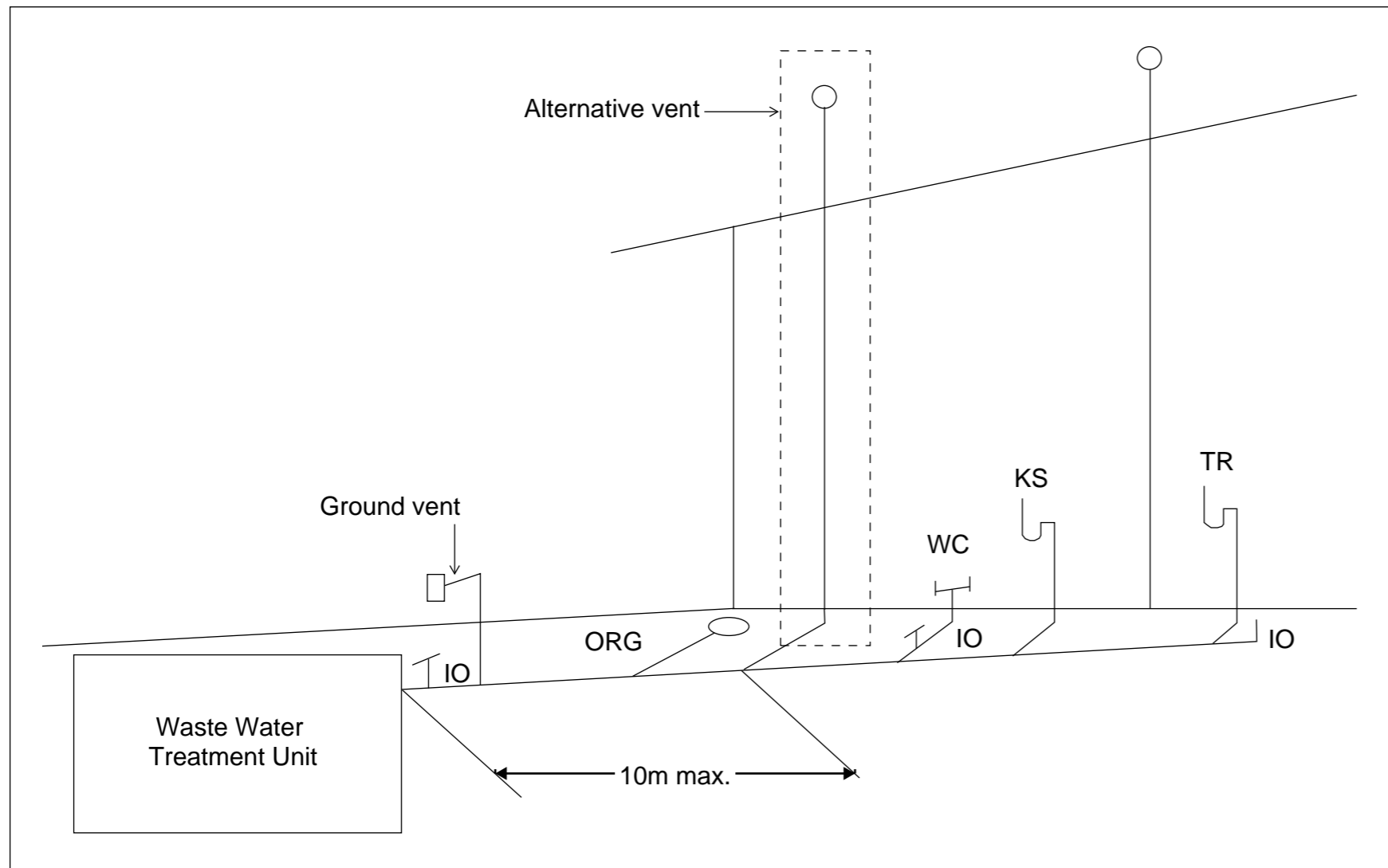
Slotted 90-100mm pvc pipe @ 500mm spacing- connected with 90 degree corner joins- 500mm spacing from ends of trench

Do not scale from these drawings.
Dimensions to take precedence over scale.

Geo-Environmental Solutions

Absorption Trench Detail

Sheet 2 of 2



Tas Figure C2D6 Alternative Venting Arrangements

Vents must terminate in accordance with AS/NZS 3500.2

Alternative venting to be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last sanitary fixture or sanitary appliance and the on-site wastewater management system. Use of a ground vent is not recommended

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

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

STORMWATER ASSESSMENT

40 Thompson Way

Clifton Beach

September 2025



GEO-ENVIRONMENTAL

S O L U T I O N S

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

Investigation Details

Client:	Taylor and Beeson Building
Site Address:	40 Thompson Way, Clifton Beach
Date of Inspection:	25/08/2025
Proposed Works:	Alterations/Additions
Investigation Method:	Hand Auger
Inspected by:	C. Cooper

Site Details

Certificate of Title (CT):	110464/40
Title Area:	Approx. 978.1 m ²
Applicable Planning Overlays:	Bushfire-prone areas
Slope & Aspect:	Flat with no dominant aspect
Vegetation:	Gardens
Ground Surface:	Disturbed

Background Information

Geology Map:	MRT 1:250000
Geological Unit:	Quaternary Sediments
Climate:	Annual rainfall 550mm
Water Connection:	Tank
Sewer Connection:	Unserviced-On-site required
Testing and Classification:	AS2870:2011 & AS1726:2017

Investigation

A number of bore holes were completed to identify the distribution and variation of the soil materials at the site, bore hole locations are indicated on the site plan. See soil profile conditions presented below.

Soil Profile Summary

BH 1 Depth (m)	BH 2 Depth (m)	BH 3 Depth (m)	USCS	Description
0.00-1.30	0.00-0.10	0.00-1.00	SP	Silty SAND: Medium grain, pale brown-grey, slightly moist, loose.
1.30-1.40	0.10-1.10	1.00-1.20	SP	Silty SAND: Medium grain, brown, slightly moist, very dense, hand auger refusal on hard pan.

Soil Conditions

Soils on site are developing from Quaternary Sediments. The soils consist of deep windblown sand deposits. A high permeability of >3m/day is expected.

GES have identified the following at the site:

- The site has a flat grade and presents a little to no risk to slope stability and landslip
- There are no proposals for cuts or change of grade which will impact on any proposed onsite stormwater absorption,
- The site soils have been identified as comprising of deep sands.
- A water table was not identified during the investigation.
- There is a low risk of the natural soils being impacted by contamination;
- There is no evidence to suggest saline water intrusion at the site
- A hard pan was encountered at 1.1-1.4 meters

Soil Dispersion

The site soils have been identified as non-dispersive (Emerson class 8).

Existing Conditions and Assumptions

The site covers an area of approximately 978.1m² with a proposed roof area of approx. 260m².

There is no public stormwater system that the property can connect to, and it is therefore it is proposed that

stormwater from the site would be routed through the proposed drainage system comprising of Grated Sumps and PVC Pipes discharged to a subsurface absorption trench.

The stormwater management report is prepared in accordance with the design criteria listed below:

- The stormwater drainage system is designed using Bureau of Meteorology (BOM) published rainfall Intensity Frequency Duration (IFD) data as a minor / major system to accommodate the 5% AEP / 20 min storm events.
- The flow rate of stormwater leaving the site shall be designed so that it does not exceed the pre- developed flow rate for both the minor and major rain events.
- The total site discharges are modelled as described in *Storm Drainage Design in Small Urban Catchments*, a handbook for Australian practice by *Australian Rainfall and Runoff (ARR2019)*, Book 9 – Runoff in Urban Areas.

Detention Calculations

Detention calculations area provided in Appendix A

Summary and Conclusions

- Detention design to be adopted as per design and documentation.
- The designed solution complies with the performance solution design check carried out.
- The 5m trench is designed over a 20-minute storm duration for proposed development.

It is also recommended that regular inspection and maintenance is conducted to ensure the stormwater system is operating without obstruction. A schematic of recommended checks is attached.

GES Stormwater Maintenance Plan Checklist

Indicative frequency	Inspection and criteria	Maintenance activities (where required)
Annual	Check whether any tree branches overhang the roof or are likely to grow to overhang the roof	If safe and where permitted, consider pruning back any overhanging branches
	Check that access covers to storage tanks are closed	Secure any open access covers to prevent risk of entry
	Check that screens on inlets, overflows and other openings do not have holes and are securely fastened	Repair any defective screens to keep out mosquitoes
	Inspect tank water for presence of rats, birds, frogs, lizards or other vermin or insects	Remove any infestations, identify point of entry and close vermin and insect-proof mesh
	Inspect tank water for presence of mosquito larvae (inspect more frequently in sub-tropical and tropical northern Australia, based on local requirements)	Identify point of entry and close with insect-proof mesh with holes no greater than 1.6 mm in diameter
	Inspect gutters for leaf accumulation and ponding	Clean leaves from gutters-remove more regularly if required. If water is ponding, repair gutter to ensure water flows to downpipe
	Check signage at external roof water taps and that any removable handle taps are being properly used	Replace or repair the missing or damaged signage and fittings
	Check plumbing and pump connections are watertight/without leakage	Repair any leaks as necessary
	Check suction strainers, in-line strainers and pump location for debris	Clean suction strainers, in-line strainers or debris from pump location
	Check pump installation is adequate for reliable ongoing operation	Modify and repair as required
	Check first flush diverter, if present	Clean first flush diverter, repair and replace if necessary
	Check health of absorption trench area and surrounding grass or plants	Investigate any adverse impacts observed that might be due to irrigation
	Check condition of roof and coatings	Investigate and resolve any apparent changes to roof condition, such as loss of material coatings

Triennial	Drain, clean out and check the condition of the tank walls and roof to ensure no holes have arisen due to tank deterioration	Repair any tank defects
	Check sediment levels in the tank	Organise a suitable contractor to remove accumulated sediment if levels are approaching those that may block tank outlets
	Undertake a systematic review of operational control of risks to the system	Identify the reason for any problems during inspections and take actions to prevent failures occurring in future
After 20 years and then every 5 years	Monitor the effectiveness of the stormwater absorption area to assess for any clogging due to algal growth, or blocking due to tree roots/grass growth/trench failure.	Clean or replace clogged equipment
Ongoing	Inspect and follow up on any complaints or concerns raised that could indicate problems with the system	Repair or replace any problems that are notified

STORAGE TRENCH							
Hydrology							
Total Catchment Area		260	m ²				
Runoff Coefficient		1					
Annual Recurrence Interval (ARI)		20	yr				
Ground Conditions							
Hydraulic conductivity (K)		5.000	m/day				
		3.470	mm/min				
Adjusted Rate (15% clogging factor)		2.950	mm/min				
Trench Design							
Length		5	m				
Width		2	m				
Depth		1	m				
Infiltration Area		10	m ²				
Porosity		0.35	%				
Trench Storage		3.5	m ³				
		3500	L				
Detention tank data				Final Check			
Tank Storage		3.5	m ³	Criteria	Requirement	Design	Check
Tank Underflow		1.929	L/s	Total Detention needed	2510	7000	OK
Tank Underflow		115.74	L/min	Trench Capacity underflow for 5% AEP 20-minute storm	3171	3500	OK
Total Available storage		7.0	m ³				
		7000	L				

STORM CHECK						
Storm Duration	Intensity	Inflow Volume	Outflow Volume	Required Storage	Emptying time	% Storage Provided
	(mm/hr)	(m ³)	(L)	(L)	(hr)	
1 min	135	585	29	556	0.31	630
2 min	105	910	59	851	0.48	411
3 min	95.3	1239	88	1150	0.65	304
4 min	88.3	1531	118	1413	0.80	248
5 min	82.6	1790	147	1642	0.93	213
10 min	62.8	2721	295	2426	1.37	144
15 min	51.1	3322	442	2879	1.63	122
20 min	43.4	3761	590	3171	1.79	110
25 min	38	4117	737	3379	1.91	104
30 min	34	4420	885	3535	2.00	99
45 min	26.3	5129	1327	3801	2.15	92
1 hour	22	5720	1770	3950	2.23	89
1.5 hour	17.2	6708	2655	4053	2.29	86
2 hour	14.5	7540	3539	4001	2.26	87
3 hour	11.6	9048	5309	3739	2.11	94
4.5 hour	9.38	10975	7964	3011	1.70	116
6 hour	8.13	12683	10618	2065	1.17	170
9 hour	6.67	15608	15927	-	-	-
12 hour	5.79	18065	21236	-	-	-
18 hour	4.69	21949	31855	-	-	-
24 hour	3.99	24898	42473	-	-	-
30 hour	3.48	27144	53091	-	-	-
36 hour	3.08	28829	63709	-	-	-
48 hour	2.51	31325	84946	-	-	-
72 hour	1.81	33883	127418	-	-	-
			Full volume	3500	2.29	
Notes:						
Inflow volume calculated using Equation 10.1 (WSUD Guidelines: Chapter 10)						
Outflow volume calculated using Equation 10.2 (WSUD Guidelines: Chapter 10)						
Required storage and emptying time is left blank when outflow volume exceeds inflow volume						

Location

Label: Clifton Beach
Easting: 543099
Northing: 5240376
Zone: 55
Latitude: Nearest grid cell: 42.9875 (S)
Longitude: Nearest grid cell: 147.5375 (E)



IFD Design Rainfall Intensity (mm/h)

Issued: 17 September 2025

Rainfall intensity for Durations, Exceedance per Year (EY), and Annual Exceedance Probabilities (AEP).
[FAQ for New ARR probability terminology.](#)

Unit:

Duration	Annual Exceedance Probability (AEP)						
	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	61.9	69.6	95.8	115	135	165	189
2 min	52.2	58.3	77.9	91.7	105	122	135
3 min	46.4	51.9	69.8	82.5	95.3	111	124
4 min	42.0	47.1	63.9	76.0	88.3	105	118
5 min	38.6	43.3	59.1	70.7	82.6	98.9	112
10 min	28.2	31.8	44.0	53.1	62.8	77.0	88.9
15 min	22.9	25.8	35.7	43.2	51.1	62.8	72.7
20 min	19.5	22.0	30.4	36.7	43.4	53.2	61.4
25 min	17.3	19.4	26.8	32.2	38.0	46.4	53.3
30 min	15.6	17.5	24.0	28.9	34.0	41.3	47.3
45 min	12.4	13.9	18.9	22.6	26.3	31.6	35.8
1 hour	10.5	11.8	16.0	19.0	22.0	26.1	29.4
1.5 hour	8.40	9.41	12.7	14.9	17.2	20.1	22.4
2 hour	7.18	8.05	10.8	12.7	14.5	16.9	18.7
3 hour	5.78	6.49	8.70	10.2	11.6	13.4	14.7
4.5 hour	4.66	5.26	7.07	8.25	9.38	10.8	11.9
6 hour	4.00	4.53	6.12	7.15	8.13	9.42	10.4
9 hour	3.21	3.65	4.99	5.85	6.67	7.80	8.64
12 hour	2.73	3.11	4.29	5.06	5.79	6.82	7.59
18 hour	2.14	2.45	3.43	4.07	4.69	5.58	6.27
24 hour	1.77	2.04	2.88	3.44	3.99	4.78	5.39
30 hour	1.52	1.76	2.49	2.99	3.48	4.18	4.73
36 hour	1.34	1.54	2.20	2.64	3.08	3.72	4.22
48 hour	1.08	1.24	1.77	2.14	2.51	3.03	3.45
72 hour	0.777	0.895	1.28	1.54	1.81	2.18	2.49
96 hour	0.609	0.700	0.991	1.19	1.40	1.68	1.92
120 hour	0.503	0.576	0.809	0.968	1.13	1.36	1.55
144 hour	0.430	0.491	0.683	0.812	0.945	1.14	1.29
168 hour	0.377	0.430	0.593	0.699	0.810	0.975	1.11

Note:
 # The 50% AEP IFD **does not** correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.
 * The 20% AEP IFD **does not** correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 4.48 ARI.

STORMWATER DETENTION V5.05

Geo-Environmental Solutions

Location: Clifton Beach
Site: 260m² with tc = 20 and tcs = 15 mins.
PSD: AEP of 5%, Underground rectangular tank PSD = 1.93L/s
Storage: AEP of 5%, Underground rectangular tank volume = 2.51m³

Design Criteria (Custom AEP IFD data used)

Location = Clifton Beach
Method = E (A)RI 2001,A(E)P 2019

PSD annual exceedance probability (APE) = 5 %
Storage annual exceedance probability (APE) = 5 %

Storage method = U (A)bove,(P)ipe,(U)nderground,(C)ustom

Site Geometry

Site area (As) = 260 m² = 0.026 Ha
Pre-development coefficient (Cp) = 0.63
Post development coefficient (Cw) = 1.00

Total catchment (tc) = 20 minutes
Upstream catchment to site (tcs) = 15 minutes

Coefficient Calculations

Pre-development				Post development			
Zone	Area (m ²)	C	Area * C	Zone	Area (m ²)	C	Area * C
Concrete	0	0.90	0	Concrete	0	0.90	0
Roof	123	1.00	123	Roof	260	1.00	260
Gravel	0	0.50	0	Gravel	0	0.50	0
Garden	137	0.30	41	Garden	0	0.30	0
Total	260	m²	164	Total	260	m²	260
Cp = ΣArea*C/Total =			0.631	Cw = ΣArea*C/Total =			1.000

Permissible Site Discharge (PSD) (AEP of 5%)

PSD Intensity (I) = 43.4 mm/hr For catchment tc = 20 mins.
Pre-development (Qp = Cp*I*As/0.36) = 1.98 L/s
Peak post development (Qa = 2*Cw*I*As/0.36) = 6.27 L/s = (0.144 x I) Eq. 2.24

Storage method = U (A)bove,(P)ipe,(U)nderground,(C)ustom
Permissible site discharge (Qu = PSD) = 1.929 L/s

Above ground - Eq 3.8

$$0 = PSD^2 - 2*Qa/tc*(0.667*tc*Qp/Qa + 0.75*tc+0.25*tcs)*PSD + 2*Qa*Qp$$

Taking x as = PSD and solving

$$a = 1.0 \quad b = -14.4 \quad c = 24.8$$

$$PSD = -b \pm \sqrt{b^2 - 4ac} / (2a)$$

$$PSD = 2.002 \text{ L/s}$$

Below ground pipe - Eq 3.3

$$Qp = PSD * [1.6 * tcs / (tc * (1 - 2 * PSD / (3 * Qa))) - 0.6 * tcs^2 / (tc * (1 - 2 * PSD / (3 * Qa)))^2 - 0.67]$$

$$= 1.98$$

$$PSD = 1.985 \text{ L/s}$$

Below ground rectangular tank - Eq 3.4

$$t = tcs / (tc * (1 - 2 * PSD / (3 * Qa))) = 0.943$$

$$Qp = PSD * [0.005 - 0.455 * t + 5.228 * t^2 - 1.045 * t^3 - 7.199 * t^4 + 4.519 * t^5]$$

$$= 1.98$$

$$PSD = 1.929 \text{ L/s}$$

Design Storage Capacity (AEP of 5%)

Above ground (Vs) = $[0.5*Qa*td - [(0.875*PSD*td)(1 - 0.917*PSD/Qa) + (0.427*td*PSD^2/Qa)]] * 60/10^3 \text{ m}^3$ Eq 4.23

Below ground pipe (Vs) = $[(0.5*Qa - 0.637*PSD + 0.089*PSD^2/Qa)*td] * 60/10^3 \text{ m}^3$ Eq 4.8

Below ground rect. tank (Vs) = $[(0.5*Qa - 0.572*PSD + 0.048*PSD^2/Qa)*td] * 60/10^3 \text{ m}^3$ Eq 4.13

td (mins)	I (mm/hr)	Qa (L/s)	Above Vs (m ³)	Pipe Vs (m ³)	B/G Vs (m ³)
5	82.6	11.9			1.46
10	62.8	9.1			2.07
13	55.1	8.0			2.26
16	49.3	7.1			2.38
19	44.7	6.5			2.46
21	42.2	6.1			2.49
24	39.0	5.6			2.51
27	36.3	5.2			2.51
29	34.7	5.0			2.50
32	32.6	4.7			2.48

Table 1 - Storage as function of time for AEP of 5%

Type	td (mins)	I (mm/hr)	Qa (L/s)	Vs (m ³)
Above Pipe				
B/ground	25.8	37.3	5.4	2.51

Table 2 - Storage requirements for AEP of 5%

Frequency of operation of Above Ground storage

Qop2 = 0.75 Cl 2.4.5.1
 Qp2 = Qop2 * Qp1 (where Qp1 = PSD) = 1.50 L/s at which time above ground storage occurs
 I = $360 * Qp2 / (2 * Cw * As * 10^3)$ = 10.4 mm/h Eq 4.24

Period of Storage

Time to Fill:

Above ground (tf) = $td * (1 - 0.92 * PSD / Qa)$ Eq 4.27

Below ground pipe (tf) = $td * (1 - 2 * PSD / (3 * Qa))$ Eq 3.2

Below ground rect. tank (tf) = $td * (1 - 2 * PSD / (3 * Qa))$ Eq 3.2

Time to empty:

Above ground (te) = $(Vs + 0.33 * PSD^2 * td / Qa * 60 / 10^3) * (1.14 / PSD) * (10^3 / 60)$ Eq 4.28

Below ground pipe (te) = $1.464 / PSD * (Vs + 0.333 * PSD^2 * td / Qa * 60 / 10^3) * (10^3 / 60)$ Eq 4.32

Below ground rect. tank (te) = $2.653 / PSD * (Vs + 0.333 * PSD^2 * td / Qa * 60 / 10^3) * (10^3 / 60)$ Eq 4.36

Storage period (Ps = tf + te) Eq 4.26

Type	td (mins)	Qa (L/s)	Vs (L/s)	tf (mins)	te (mins)	Ps (mins)
Above Pipe						
B/ground	25.8	5.4	2.5	19.6	65.7	85.4

Table 3 - Period of Storage requirements for AEP of 5%

Orifice

Permissible site discharge (Qu=PSD) = 1.93 L/s (Underground storage)

Orifice coefficient (CD) = 0.61 For sharp circular orifice

Gravitational acceration (g) = 9.81 m/s²

Maximum storage depth above orifice (H) = 600 mm

Orifice flow (Q) = $CD * Ao * \sqrt{2 * g * H}$

Therefore:

Orifice area (Ao) = 922 mm²

Orifice diameter (D = $\sqrt{4 * Ao / \pi}$) = 34.3 mm

New Services

- STORMWATER PIPE WITH FLOW DIRECTION
- GRATED STORMWATER PIT 450x450 CLASS A ACO GALVANISED HEELGUARD OR SIMILAR ENGINEER APPROVED

Performance Solution Compliance Notes:

AS 3500.3 - CL 7.10
 • 7.10.1 - OVERFLOW IS SAFE AND DOES NOT COMPROMISE FREEBOARD TO HABITABLE SPACES.

GENERAL

- AS/NZS 3500.3: PART 3 STORMWATER DRAINAGE AUSTRALIAN RAINFALL AND RUN-OFF VOLUME 8: URBAN STORMWATER MANAGEMENT
- AUSTRALIAN RUNOFF QUALITY - A GUIDE TO WATER SENSITIVE URBAN DESIGN
- STORM DRAINAGE DESIGN IN SMALL URBAN CATCHMENTS: A HANDBOOK FOR AUSTRALIAN PRACTICE
- WATER SENSITIVE URBAN DESIGN (WSUD) ENGINEERING PROCEDURE: STORMWATER
- WATER SERVICES ASSOCIATION OF AUSTRALIA CODE (WSAA)

Stormwater Services Notes:

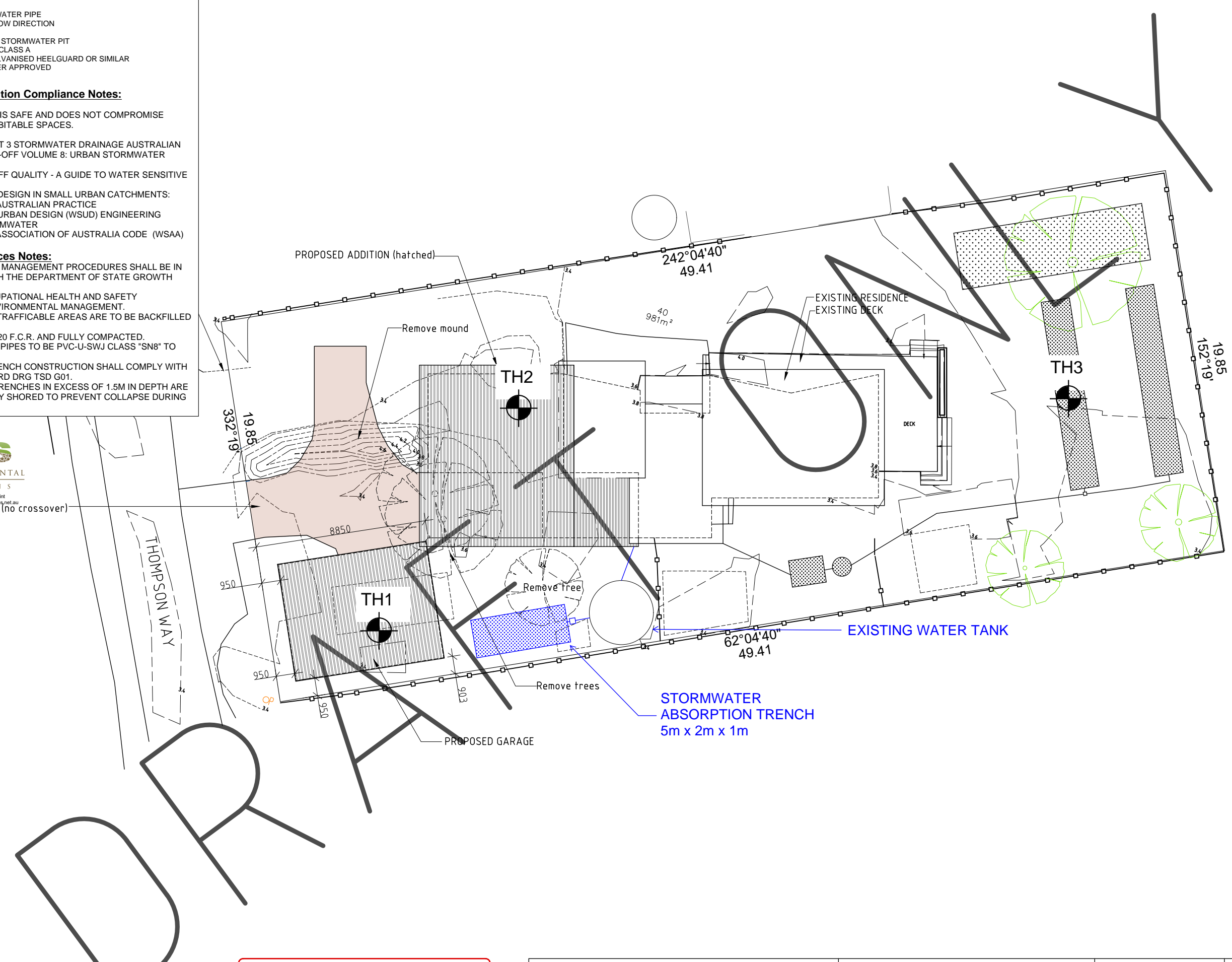
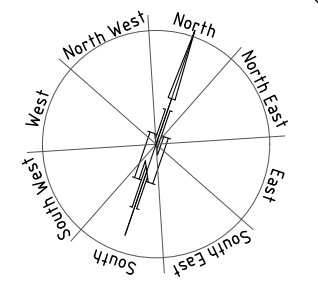
1. ALL SITE SAFETY & MANAGEMENT PROCEDURES SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF STATE GROWTH SPECIFICATIONS: SECTION 168 OCCUPATIONAL HEALTH AND SAFETY & SECTION 176 ENVIRONMENTAL MANAGEMENT.
2. ALL PIPES UNDER TRAFFICABLE AREAS ARE TO BE BACKFILLED

FULL DEPTH WITH 20 F.C.R. AND FULLY COMPACTED.

3. ALL STORMWATER PIPES TO BE PVC-U-SWJ CLASS "SN8" TO AS1254 UNO.
4. ALL DRAIN AND TRENCH CONSTRUCTION SHALL COMPLY WITH THE LGAT STANDARD DRG TSD G01.
5. ANY EXCAVATED TRENCHES IN EXCESS OF 1.5M IN DEPTH ARE TO BE ADEQUATELY SHORED TO PREVENT COLLAPSE DURING WORKS.



29 Kirkway Place Battery Point
 Tj 62231839 Ej office@gesolutions.net.au
 New access (no crossover)



DEVELOPMENT DRAWINGS ONLY
NOT FOR CONSTRUCTION

WHAT?
WHO?
WHERE?

SITE PLAN

DATE
11/08/2025

DRAWN BY ----
 email: qtilley7@biapond.com
 phone ph 0400 671 582

SCALE 1:200
 0 2000 4000

AMENDED

DRAWING NO.
00 OF 00

Certified: G. Tilley Accreditation No. CC620H
 © copyright 2025 0025

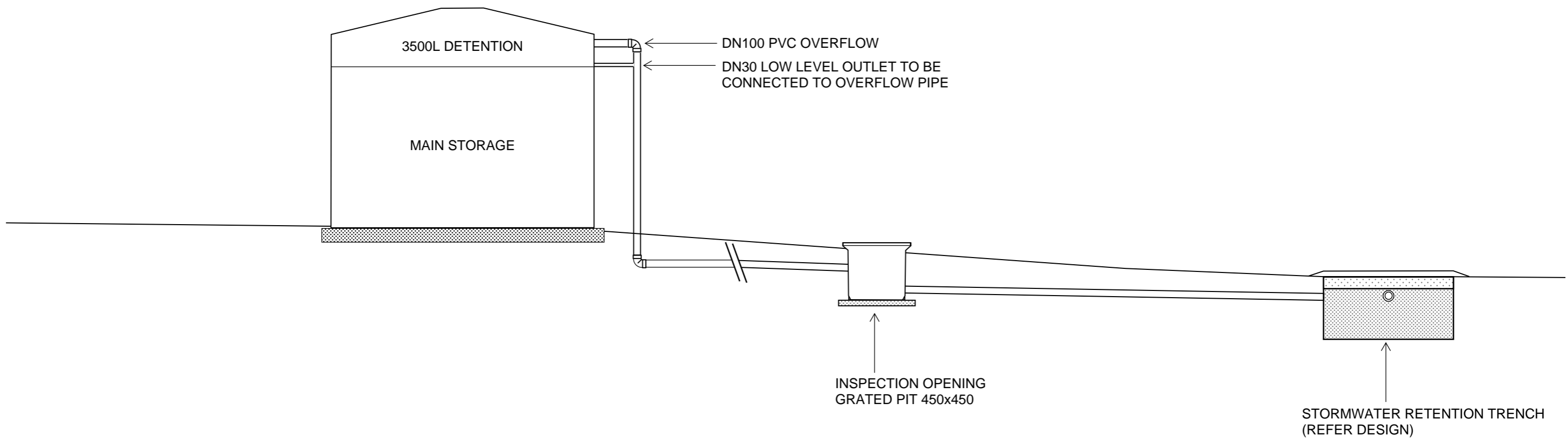




GEO-ENVIRONMENTAL

SOLUTIONS

29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au



Do not scale from these drawings.
Dimensions to take precedence
over scale.

STORMWATER DETENTION
SCHEMATIC CROSS-SECTION

RAINWATER TANK
WITH 3500L DETENTION

Sheet 1 of 1

Design notes:

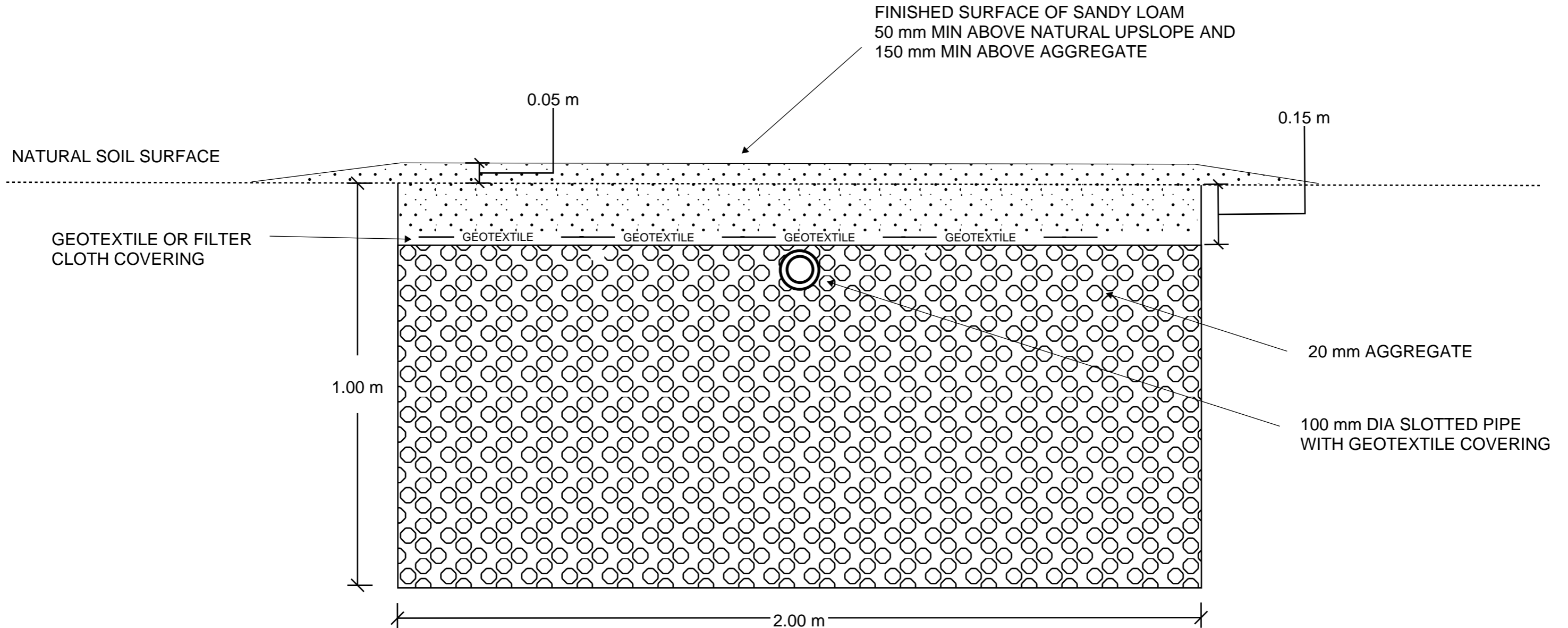
1. Absorption bed dimensions of up to 21m long by 1m deep by 2m wide
– total storage volume calculated at average 35% porosity.
2. Base of bed to be excavated level and smearing and compaction avoided.
3. 90-100mm slotted pipe should be placed in the top 100mm of the 20mm aggregate
4. Geotextile or filter cloth to be placed over the pipe to prevent clogging of the pipes and aggregate
5. All works on site to comply with AS3500 and Tasmanian Plumbing code.



GEO-ENVIRONMENTAL

SOLUTIONS

29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au



Do not scale from these drawings.
Dimensions to take precedence
over scale.

Geo-Environmental Solutions
Stormwater trench

Stormwater Absorption Detail

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Owner name
 Address
 Suburb/postcode

Designer details:

Name: Category:
 Business name: Phone No:
 Business address:
 Fax No:
 Licence No: Email address:

Details of the proposed work:

Owner/Applicant Designer's project reference No.
Address: Lot No:

Type of work: Building work Plumbing work (X all applicable)

Description of work:

(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
<input type="checkbox"/>	Building design	Architect or Building Designer
<input type="checkbox"/>	Structural design	Engineer or Civil Designer
<input type="checkbox"/>	Fire Safety design	Fire Engineer
<input checked="" type="checkbox"/>	Civil design	Civil Engineer or Civil Designer
<input type="checkbox"/>	Hydraulic design	Building Services Designer
<input type="checkbox"/>	Fire service design	Building Services Designer
<input type="checkbox"/>	Electrical design	Building Services Designer
<input type="checkbox"/>	Mechanical design	Building Service Designer
<input type="checkbox"/>	Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
<input type="checkbox"/>	Other (specify)	

Deemed-to-Satisfy: Performance Solution: (X the appropriate box)

Other details:

Stormwater absorption trench

Design documents provided:

The following documents are provided with this Certificate –

Document description:

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

Standards, codes or guidelines relied on in design process:

AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

Any other relevant documentation:

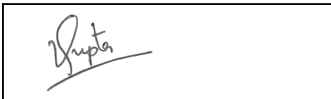
Stormwater Assessment - 40 Thompson Way Clifton Beach - Sep-25

Attribution as designer:

I Vinamra Gupta, am responsible for the design of that part of the work as described in this certificate;

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

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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Vinamra Gupta		17/09/2025
Licence No:	685982720		

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:

- The works will not increase the demand for water supplied by TasWater
- The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater’s sewerage infrastructure
- The works will not require a new connection, or a modification to an existing connection, to be made to TasWater’s infrastructure
- The works will not damage or interfere with TasWater’s works
- The works will not adversely affect TasWater’s operations
- The work are not within 2m of TasWater’s infrastructure and are outside any TasWater easement
- I have checked the LISTMap to confirm the location of TasWater infrastructure
- If the property is connected to TasWater’s water system, a water meter is in place, or has been applied for to TasWater.

Certification:

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

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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	Vinamra Gupta		17/09/2025