



Public Notice Details

Planning Application Details

Application No	DA2500133
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Property Details

Property Location	172 Main Street Kempton
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Application Information

Application Type	Discretionary Development Application
Development Category	Dwelling and Outbuilding
Advertising Commencement Date	8/10/25
Advertising Closing Period	22/10/25
<small>If the Council Offices are closed during normal office hours within the above period, the period for making representations is extended.</small>	

Enquiries regarding this Application can be made via to Southern Midlands Council on (03) 6254 5050 or by emailing planningenquires@southernmidlands.tas.gov.au. Please quote the development application number when making your enquiry.

Representations on this application may be made to the General Manager in writing either by

Post: PO Box 21, Oatlands Tas 7120
Email: mail@southernmidlands.tas.gov.au
Fax: 03 6254 5014

All representations must include the authors full name, contact number and postal address and be received by the advertising closing date.

**APPLICATION FOR PLANNING PERMIT****DEVELOPMENT / USE**

Use this form to apply for a permit in accordance with section 57 and 58 of the *Land Use Planning and Approvals Act 1993*

Proposed use/development:
(Provide details of proposed works and use).

Construction of a single dwelling and outbuilding.

Location of Development:
(If the development includes more than one site, or is over another property include address of both Properties).

172 Main Street Kempton

Certificate of Title/s Volume Number/Lot Number:

183233/24

Land Owners Name:

Shaun Hilder

Full Name/s or Full Business/Company Name

Applicant's Name:

Construct Creative Pty Ltd

Full Name/s or Full Business/ Company Name (ABN if registered business or company name)

Contact details:

Postal address for correspondence: PO Box 88 Glenorchy 7010

Telephone or Mobile: 6272 3000

Email address: Rachael@creativehomeshobart.com.au

(Please note it is your responsibility to provide your correct email address and to check your email for communications from the Council.)

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

Construct Creative Pty Ltd

Full Name/s or Full Business or Company Name and ABN if registered business or company name

Print email address

Rachael@creativehomeshobart.com.au

ABN

72 618 149 170

What is the estimated value of all the new work proposed

\$ 342,000 -



For Commercial Planning Permit Applications Only

Signage:

Is any signage proposed?

Yes

☐

No

☒

If yes, attach details: size, location and art work

Business Details:

Existing hours of operation

N/A

Hours	am	to	pm
Weekdays			
Sat			
Sun			

Proposed hours of new operation

Hours	am	to	pm
Weekdays	8		5
Sat	—		—
Sun	—	—	—

Number of existing employees:

0

Number of proposed new employees:

5

Traffic Movements:

Number of commercial vehicles serving the site at present

0

Approximate number of commercial vehicles servicing the site in the future

2 per day

Number of Car Parking Spaces:

How many car spaces are currently provided

0

How many new car spaces are proposed

2

Is the development to be staged:

Please tick ✓ answer

Yes

☐

No

☒

Please attach any additional information that may be required by Part 6.1 *Application Requirements* of the Tasmanian Planning Scheme – Southern Midlands.

Signed Declaration

I/we as owner of the land or person with consent of the owner hereby declare that:

- I/we have read the Certificate of Title and Schedule of Easements for the land and I/we are satisfied that this application is not prevented by any restrictions, easements or covenants.
- I/we provide permission by or on behalf of the applicant for Council officers to enter the site to assess the application.
- The information given in this application is true and accurate. I/we understand that the information and materials provided with this application may be made available to the public. I/we understand that the Council may make such copies of the information and materials as, in its opinion, are necessary to facilitate a thorough consideration of the application.
- I/we have secured the necessary permission from the copyright owner to communicate and reproduce the plans submitted with the application for assessment. I/we indemnify the Southern Midlands Council for any claim or action taken against it regarding a breach of copyright in respect of any of the information or material provided.
- I/we declare that, in accordance with Section 52(1) 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 consent is attached and the application form signed by the Minister of the Crown responsible and/or the General Manager of the Council.

Applicant Signature
(If not the Title Owner)

Applicant Name (please print)

Rachael Cunningham

Date

23/9/25

Land Owner(s) Signature

Land Owners Name (please print)

Date



Land Owner(s) Signature

Land Owners Name (please print)

Date

PRIVACY STATEMENT

The Southern Midlands Council abides by the Personal Information Protection Act 2004 and views the protection of your privacy as an integral part of its commitment towards complete accountability and integrity in all its activities and programs.

Collection of Personal Information: The personal information being collected from you for the purposes of the Personal Information Protection Act, 2004 and will be used solely by Council in accordance with its Privacy Policy. Council is collecting this information from you in order to process your application.

Disclosure of Personal Information: Council will take all necessary measures to prevent unauthorised access to or disclosure of your personal information. External organisations to whom this personal information will be disclosed as required under the Building Act 2000. This information will not be disclosed to any other external agencies unless required or authorised by law.

Correction of Personal Information: If you wish to alter any personal information you have supplied to Council please telephone the Southern Midlands Council on (03) 62545050. Please contact the Council's Privacy Officer on (03) 6254 5000 if you have any other enquires concerning Council's privacy procedures.



Information & Checklist Sheet

DEVELOPMENT / USE

Use this check list for submitting your application for a planning permit –Please do not attach the check list with your application

Submitting your application ✓

1. All plans and information required per Part 6.1 Application Requirements of the Tasmanian Planning Scheme i.e.: site plan showing all existing buildings, proposed buildings, elevation plans etc. ☒
2. Copy of the current Certificate of Title, Schedule of Easements and Title Plan (Available from Service Tasmania Offices) ☒
3. Any reports, certificates or written statements to accompany the Application (if applicable) required by the relevant zone or code. ☐
4. Prescribed fees payable to Council ☐

Information

If you provide an email address in this form then the Southern Midlands Council ("the Council") will treat the provision of the email address as consent to the Council, pursuant to Section 6 of the Electronic Transactions Act 2000, to using that email address for the purposes of assessing the Application under the Land Use Planning and Approvals Act 1993 ("the Act").

If you provide an email address, the Council will not provide hard copy documentation unless specifically requested.

It is your responsibility to provide the Council with the correct email address and to check your email for communications from the Council.

If you do not wish for the Council to use your email address as the method of contact and for the giving of information, please tick ✓ the box ☐

Heritage Tasmania

If the Property is listed on the Tasmanian Heritage Register then the Application will be referred to Heritage Tasmania unless an Exemption Certificate has been provided with this Application. (Phone 1300 850 332 (local call cost) or email enquires@heritage.tas.gov.au)

TasWater

Depending on the works proposed Council may be required to refer the Application to TasWater for assessment (Phone 136992)

IMPORTANT: There is no connection between Planning approval and Building & Plumbing approvals.

Owners are to ensure that the work is either **Low-Risk Building Work, Notifiable Building Work or Permit work in accordance with the Directors Determination – Categories of Building & Demolition Work v 1.4 dated 12 March 2021** prior to any building works being carried out on the land.

https://www.cbos.tas.gov.au/data/assets/pdf_file/0014/405014/Directors-determination-categories-of-building-and-demolition-work-2021.pdf

PROJECT ADDRESS: LOT 24 KEMPTON ESTATE, KEMPTON

CLIENTS: SHAUN HILDER

DRAWINGS:

- 01 COVER PAGE
- 02 PROPOSED SITE PLAN
- 03 PROPOSED FLOOR PLAN
- 04 PROPOSED ROOF PLAN
- 05 PROPOSED ELEVATIONS
- 06 PROPOSED ELEVATIONS
- 07 SECTION A-A
- 08 TYPICAL SECTION DETAILS
- 09 WINDOW SCHEDULE

FLOOR AREAS:	FLOOR AREA:	102.0 m ²
	SHED:	54.0 m ²
	TOTAL AREA:	156.0 m ²
	DECK:	12.9 m ²

SOIL CLASSIFICATION: --

WIND CLASSIFICATION: --

CLIMATE ZONE: 7

BUSHFIRE ATTACK LEVEL: N/A - NOT WITHIN OVERLAY

ALPINE AREA: N/A

CORROSION ENVIRONMENT: N/A

DOCUMENTATION INDEX

The documentation listed below should be read in conjunction with these drawings and form the basis of construction documentation for the project

[illegible]

M.C. KEMPTON

GENERAL NOTES:

RECEIVED

1. THIS PLAN HAS BEEN PREPARED BY SURVEY PLUS FROM A COMBINATION OF EXISTING RECORDS AND FIELD SURVEY FOR THE PURPOSES OF SHOWING THE PHYSICAL FEATURES OF THE LAND AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE.

2. TITLE BOUNDARIES SHOWN WERE NOT VERIFIED OR MARKED AT THE TIME OF THIS SURVEY.

3. SERVICES SHOWN ON THIS PLAN WERE LOCATED WHERE POSSIBLE BY FIELD SURVEY. THEY ARE NOT A COMPLETE PICTURE OF SERVICES ON SITE. ALL SERVICE LOCATIONS ARE TO BE VERIFIED BEFORE COMMENCEMENT OF ANY WORK ON SITE. IN PARTICULAR THOSE SERVICES NOT PREVIOUSLY LOCATED THROUGH FIELD SURVEY.

4. SURVEY PLUS CAN NOT ACCEPT LIABILITY WHATSOEVER FOR LOSS OR DAMAGE CAUSED TO ANY UNDERGROUND SERVICE WHETHER SHOWN BY OUR SURVEY OR NOT.

5. THIS NOTE IS AN INTEGRAL PART OF THIS PLAN/DATA. REPRODUCTION OF THIS PLAN OR ANY PART OF IT WITHOUT THIS NOTE BEING INCLUDED IN FULL WILL RENDER THE INFORMATION SHOWN ON SUCH A REPRODUCTION INVALID AND NOT SUITABLE FOR USE WITHOUT PRIOR AUTHORITY OF SURVEY PLUS.

6. HORIZONTAL DATUM IS MGA (GDA94).

7. VERTICAL DATUM IS AHD.

8. CONTOUR INTERVAL IS 0.1 METRES, INDEX IS 0.2 METRES.

9. SURVEY BY ROBOTIC TOTAL STATION AND GPS.

10. APPROXIMATE BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN DERIVED FROM BOUNDARY STAKES AND/OR PEGS PLACED ON SITE BY PDA SURVEYORS AND ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY.

11. 3D DATA TURNED OFF IN LAYER CONTROL.

- 3D TIN
- MAJOR CONTOUR 3D
- MINOR CONTOUR 3D

•DP 90mm DOWNPIPE

NOTE: ALL PROPOSED STORMWATER TO BE DISCHARGED TO EXISTING INFRASTRUCTURE

EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED ON THE SITE IN ACCORDANCE WITH COUNCIL REQUIREMENTS

PROPOSED SITE PLAN

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02



CONTRACTOR MUST VERIFY ALL DIMENSIONS AND LEVELS AT THE JOB PRIOR TO COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS.

DO NOT SCALE DRAWINGS. ALWAYS USE WRITTEN DIMENSIONS.

REV:

DESCRIPTION:

BY:

DATE:

CONCEPT PLANS

RK

24/11/21

A MODIFIED AS CLIENT FEEDBACK

RK

08/2/22

B WORKING DRAWINGS

RK

11/2/22

C REDRAW & ADD THE SHED

NN

26/8/25

PRELIMINARY



CREATIVE HOMES
HOBART

CREATIVE HOMES HOBART, CNR OF ELWICK ROAD & BROOKER HIGHWAY, GLENORCHY 7010 PH: 03 6272 3000

JOB ADDRESS:

Lot 24, Kempton Estate
Kempton

DESIGNER: I. Brown

ACCRED. NO.: CC6652

DRAWN: N. Nguyen

DATE: August 2025

CHECKED:

DATE:

SCALE: 1:200

REV: C

CLIENT:

Shaun Hilder

SHEET:

2 of 9

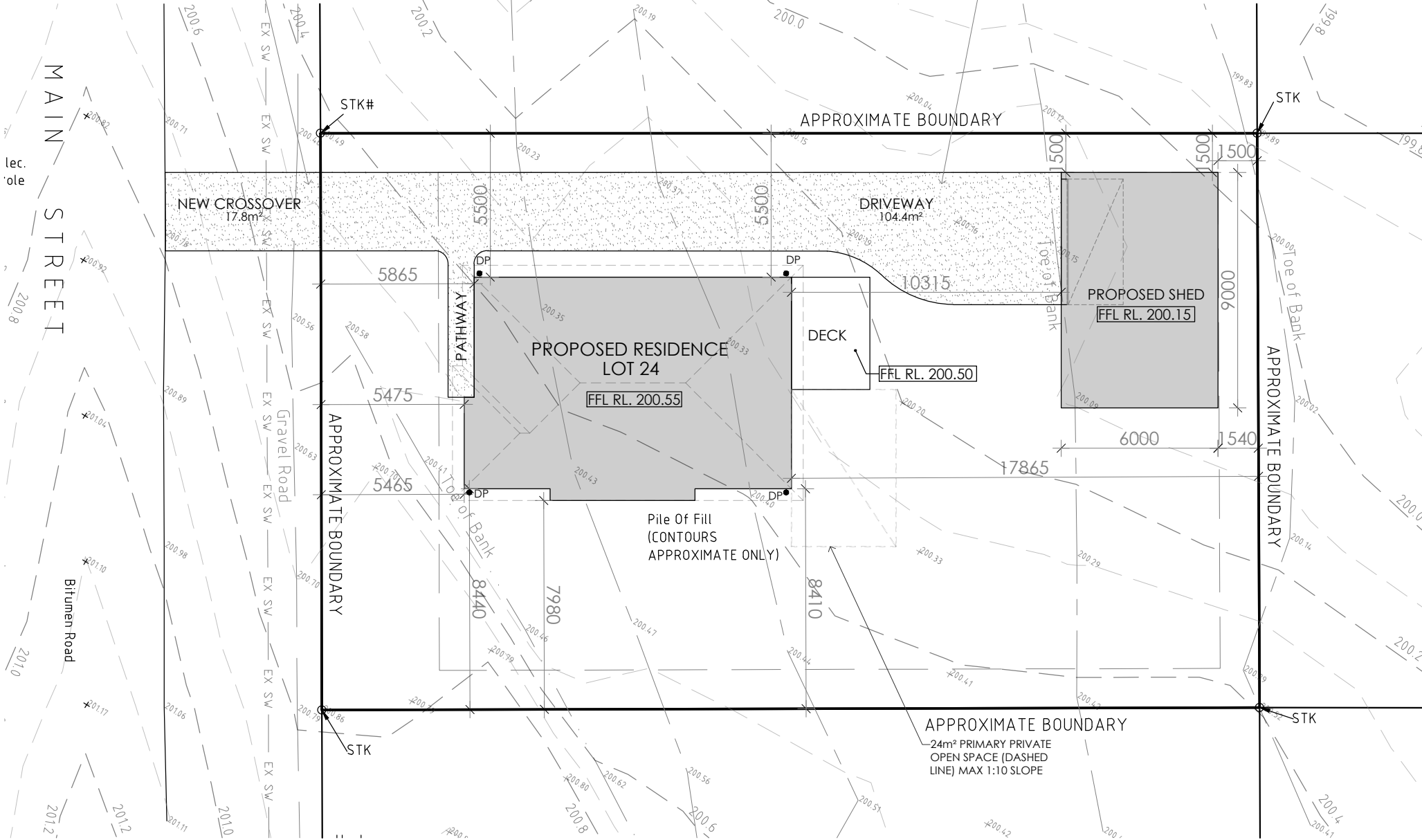
DESIGN TYPE:

Custom

DRAWING NO:

APPROXIMATE BOUNDARIES SHOWN
ARE APPROXIMATE ONLY PER
BOUNDARY PEGS AND BOUNDARY
STAKES

THE NEW CROSSOVER IS TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH (IPWEA) LGAT- STANDARD DRAWINGS TSD R09-V1 URBAN ROADS & DRIVEWAYS & TSD R14-V1 TYPE KC VEHICULAR CROSSING AT DEVELOPER'S COST



LEGEND

STK = Stake By Registered Surveyors Undertaking Subdivision Works

LOT SERVICES UNABLE TO BE LOCATED:

- NO STORMWATER LOT CONNECTION
- NO SEWER LOT CONNECTION
- NO ELECTRICITY LOT CONNECTION
- NO COMMUNICATIONS LOT CONNECTION
- NO WATER METER BOX

GPS DATA SCALE LOCATION

JOB CONTROL POINT

POINT NO: 117

DESCRIPTION: STAKE#

GPS SCALE FACTOR = 1.000428453

E: 516167.220

N: 5291805.742

RL: 200.49

EPU = 0.04±

NOTES

SITE PREPARATION

THE SITE IS TO BE DISTURBED AS MINIMALLY AS POSSIBLE TO THE EXTENT REQUIRED TO CARRY OUT THE BUILDING WORKS. EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH NCC PART 3.2. UN-RETAINED EMBANKMENT GRADIENTS SHALL BE IN ACCORDANCE WITH NCC TABLE 3.2.1. DRAINAGE SHALL BE IN ACCORDANCE WITH NCC PART 3.3.2. THE BUILDER AND SUBCONTRACTOR SHALL ENSURE THAT ALL STORMWATER DRAINS, SEWER PIPES AND THE LIKE ARE LOCATED AT A SUFFICIENT DISTANCE FROM ANY BUILDINGS FOOTING AND/OR SLAB EDGE BEAMS SO AS TO PREVENT GENERAL MOISTURE PENETRATION, DAMPNES, WEAKENING & UNDERMINING OF ANY BUILDING AND ITS FOOTING SYSTEM.

LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION.

ATTENTION OF OWNER

THE OWNERS ATTENTION IS DRAWN TO THE FACT THAT FOUNDATIONS AND ASSOCIATED DRAINAGE FOR 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 THIS DOCUMENT.

SOIL AND WATER MANAGEMENT NOTES:

DRAINAGE LINES ARE TO BE INSTALLED PRIOR TO THE PLACEMENT OF ROOF AND GUTTERING. ONCE DWELLING IS ROOFED, CONNECT IMMEDIATELY. APPLY TEMPORARY COVERING TO DISTURBED AREAS THAT WILL REMAIN EXPOSED FOR 14 DAYS OR MORE DURING CONSTRUCTION (EG. WATERPROOF BLANKET, VEGETATION OR MULCH)

PROTECT ANY NEARBY OR ON-SITE DRAINAGE PITS FROM SEDIMENT BY INSTALLING SEDIMENT TRAPS AROUND THEM.

LIMIT ENTRY/EXIT TO ONE POINT AND STABILISE. INSTALL FACILITIES TO REMOVE DIRT/ MUD FROM VEHICLE WHEELS BEFORE THEY LEAVE THE SITE.

SITE TO BE VEGETATED AND PLANTED ACCORDING TO THE HOBART REGIONAL SOIL AND WATER MANAGEMENT CODE OF PRACTICE.

BUILDER AND SUBCONTRACTORS TO VERIFY ALL

DIMENSIONS AND LEVELS PRIOR TO THE COMMENCEMENT OF ANY WORK. GIVE 24 HOURS MINIMUM NOTICE WHERE AMENDMENTS ARE REQUIRED TO DRAWINGS. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH DOCUMENTATION LISTED ON THE COVER PAGE. DO NOT SCALE DRAWINGS. DIMENSIONS ARE TO TAKE PREFERENCE OVER SCALE. BUILDING SPECIFICATION AND ENGINEERS DRAWINGS SHALL OVERRIDE ARCHITECTURAL DRAWINGS.

-THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWING SHEETS, CONSULTANTS DRAWINGS, DOCUMENTS, SCHEDULES AND SPECIFICATIONS (AS APPLICABLE).

-THE BUILDER AND SUBCONTRACTOR SHALL ENSURE THAT ALL STORMWATER DRAINS, SEWER PIPES AND THE LIKE ARE LOCATED AT A SUFFICIENT DISTANCE FROM ANY BUILDINGS FOOTING AND/OR SLAB EDGE BEAMS SO AS TO PREVENT GENERAL MOISTURE PENETRATION, DAMPNES, WEAKENING & UNDERMINING OF ANY BUILDING AND ITS FOOTING SYSTEM.

- LOCATION OF ALL EXISTING ONSITE SERVICES TO BE CONFIRMED ONSITE PRIOR TO CONSTRUCTION

IMPORTANT!

SITE INFORMATION AS DRAWN IS APPROXIMATE ONLY. FINAL SITE INFORMATION IS SUBJECT TO A DETAILED CONTOUR SURVEY BY LICENSED SURVEYOR.

SOIL CLASSIFICATION:

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WIND CLASSIFICATION:

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SITE COVERAGE

SITE AREA	793	m²
PROPOSED BUILDING FOOTPRINT	156.0	m²
PROPOSED SITE COVERAGE	19.67	%

RECEIVED AREAS: 23/09/2025	
FLOOR AREA:	102.0 m ²
SHED:	54.0 m ²
TOTAL AREA:	156.0 m ²
DECK:	12.9 m ²

LEGEND:	
DP	DOWNPIPE LOCATION
SHR	SHOWER
BTH	BATH
VB	VANITY BASIN
WC	TOILET
OHC	OVERHEAD CUPBOARDS
REF	REFRIGERATOR
P	PANTRY
RH	RANGE HOOD
UBO	UNDER BENCH OVEN
CT	COOK TOP
S	SINK
DW	DISH WASHER
T	TROUGH
WM	WASHING MACHINE
MH	MANHOLE
CSD	CAVITY SLIDING DOOR
AAW	ALUM. AWNING WINDOW
AFW	ALUM. FIXED WINDOW
ASD	ALUM. SLIDING DOOR
B/O	BEAM OVER
BAL	BALUSTRADE

BAL SELECTED BALUSTRADE TO
BUILDER'S STANDARD DETAIL
INSTALLED IN ACCORDANCE
WITH NCC

MASONRY ARTICULATION
JOINT - LOCATION TO
ENGINEER'S DETAILS

CEILING MOUNTED
INTERCONNECTED SMOKE
DETECTORS, MAINS WIRED WITH
BATTERY BACKUP, ALL IN
ACCORDANCE WITH AS 3786.

DP 90mm DOWNPIPE

NOTE: LIFT OFF HINGES TO WC
TO BE INSTALLED AS REQUIRED
IN ACCORDANCE WITH NCC.

PROPOSED FLOOR PLAN

FLOOR AREA: 156.0m²

PRELIMINARY

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CONTRACTOR MUST VERIFY ALL DIMENSIONS
AND LEVELS AT THE JOB PRIOR TO COMMENCING
ANY WORK OR MAKING ANY SHOP DRAWINGS.

DO NOT SCALE DRAWINGS.
ALWAYS USE WRITTEN DIMENSIONS.

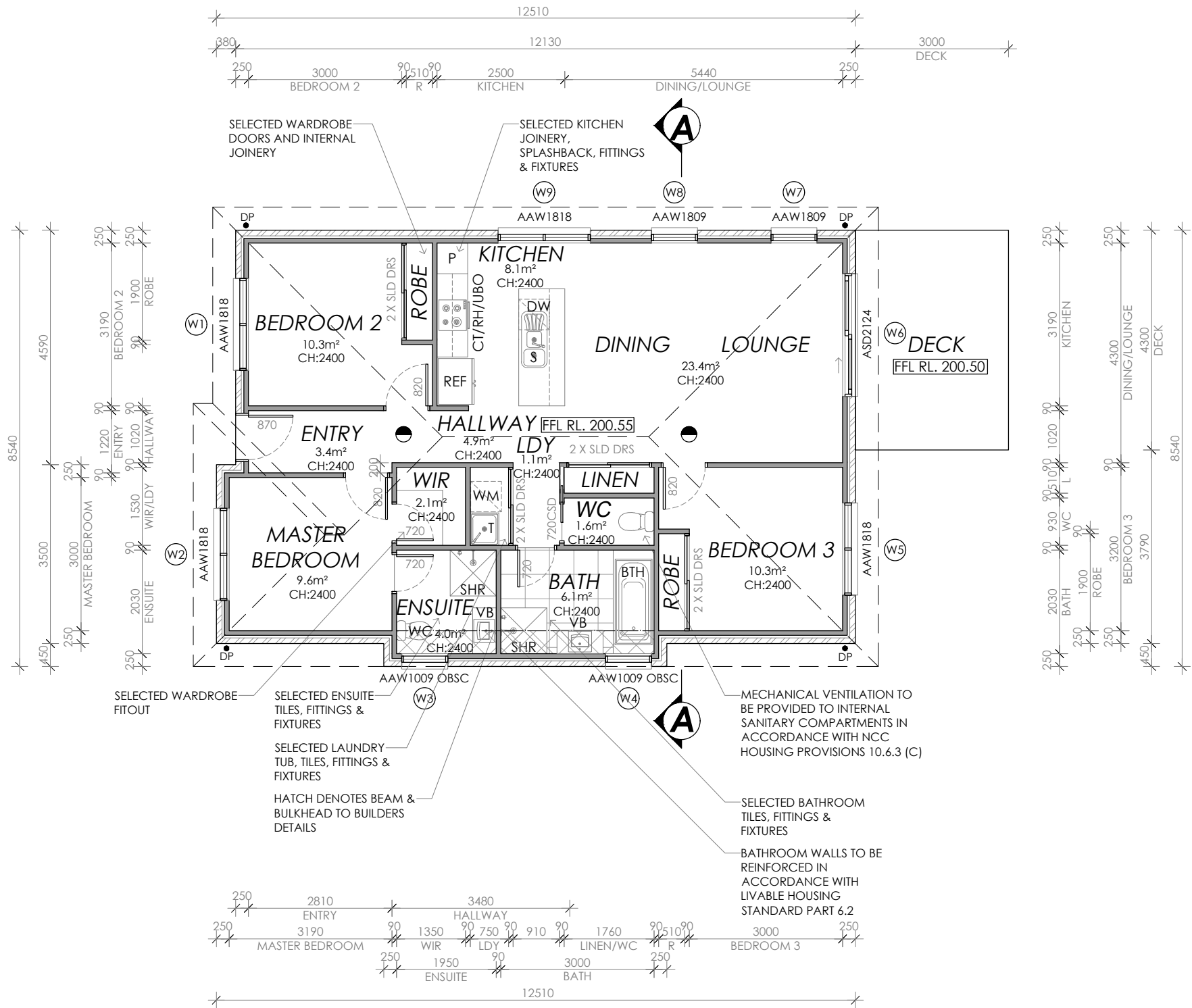
REV:	DESCRIPTION:	BY:	DATE:
	CONCEPT PLANS	RK	24/11/21
A	MODIFIED AS CLIENT FEEDBACK	RK	08/2/22
B	WORKING DRAWINGS	RK	11/2/22
C	REDRAW & ADD THE SHED	NN	26/8/25



CREATIVE HOMES
HOBART

CREATIVE HOMES HOBART, CNR OF ELWICK ROAD & BROOKER HIGHWAY, GLENORCHY 7010 PH: 03 6272 3000

JOB ADDRESS: Lot 24, Kempton Estate Kempton		CLIENT: Shaun Hilder	
DESIGNER: I. Brown	ACCRED. NO.: CC6652	SHEET:	3 of 9
DRAWN: N. Nguyen	DATE: August 2025	DESIGN TYPE:	Custom
CHECKED:	DATE:	DRAWING NO:	---
SCALE: 1:100	REV: C		



Framing NCC H1D6
All timber framing, fixing and bracing shall comply with AS 1684 and the requirements of NCC H1D6. Manufactured sizes must not be undersized to those specified, for all timber sizes, stress grades, spacing and wall bracing refer to Engineer's details. Tie-down details shall be in accordance with Engineer's details and comply with NCC H1D6 (4). Structural steel members shall comply with the requirements of clauses in NCC H1D6 (3). Refer to Engineer's details where provided.

Glazing NCC H1D8
All windows to be aluminium awning style, double glazed (obscured safety glass to bathrooms as shown on drawings) All glazing shall comply with the requirements of AS 2047 & AS 1288 and NCC H1D8.

Human impact safety requirements shall comply with NCC H1D8 (3) and Part 8.4 of the ABCB Housing provisions.

Note:
Builder and subcontractors to verify all dimension and levels prior to the commencement of any work. Give 24hrs minimum notice where amendments are required to design of working drawings. These drawings are to be read in conjunction with Engineer's and Surveyor's drawings and notes. Do not scale drawings. Dimensions are to take preference over scale. Building specification and Engineer's drawings shall override architectural drawings. All construction work shall be carried out in accordance with the state building regulations, local council by-laws and relevant NCC and AS codes.

Important notice for attention of Owners: 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 this document.

Energy efficiency:
Insulation must comply with AS/NZS4859.1 and be installed in accordance with ABCB housing provisions Part 13.2.2 and comply with minimum R values for climate zone 7.
Bulk insulation between external studs to be insulated with min R2.0. (Ensure batts fit within cavity without compression making sure that there is at least 25mm gap from the reflective surface). External walls are to be clad with vapour permeable reflective foil over the outside of the timber frame. Ceiling to be insulated with R4.0 and vapour permeable sarking. Floor to be insulated with Min R1.7 batts where applicable. Seal exhaust fans to Ensuite, Bathroom, Laundry and Kitchen. All downlights to be IC rated. Construction of the external walls, floor and roof for compliance with building sealing requirements shall comply with BCA 2019 Part 3.12


General:
All flashings, weep holes and damp proof coursing to be in accordance with NCC Housing provisions Part 5.7. Fibre cement sheet in accordance with NCC Housing provisions Part 7.5. Block construction in accordance NCC Housing provisions Part 5. Plasterboard linings to internal walls and ceilings with selected cornice. (see below for wet areas)

Wet areas: All wet areas shall comply with the requirements of ABCB Housing provisions Part 10.2. Provide waterproof plasterboard sheeting to all walls and ceilings. Provide ceramic tiles or other approved water resistant lining in accordance with Part 10.2.9 to a minimum height of 1800mm to shower walls and to a height of min 150mm behind baths, basins, sinks, troughs, washing machines and wall fixtures.

For construction of floor wastes refer to NCC ABCB Housing provisions part 10.2.12. For typical installation requirements for substrate preparation, penetrations, flashings/junctions, membranes, screeds, hobs, baths, showers, door jambs and screens refer to ABCB Housing provisions part 10.2.14-32.

PROPOSED ROOF PLAN

PRELIMINARY

© COPYRIGHT IN WHOLE OR IN PART											
04		CONTRACTOR MUST VERIFY ALL DIMENSIONS AND LEVELS AT THE JOB PRIOR TO COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS. DO NOT SCALE DRAWINGS. ALWAYS USE WRITTEN DIMENSIONS.	REV:	DESCRIPTION:	BY:	DATE:	 <div>CREATIVE HOMES HOBART, CNR OF ELWICK ROAD & BROOKER HIGHWAY, GLENORCHY 7010 PH: 03 6272 3000</div>			JOB ADDRESS: Lot 24, Kempton Estate Kempton	CLIENT: Shaun Hilder
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			C	REDRAW & ADD THE SHED	NN	26/8/25	SCALE: 1:100	REV: C			

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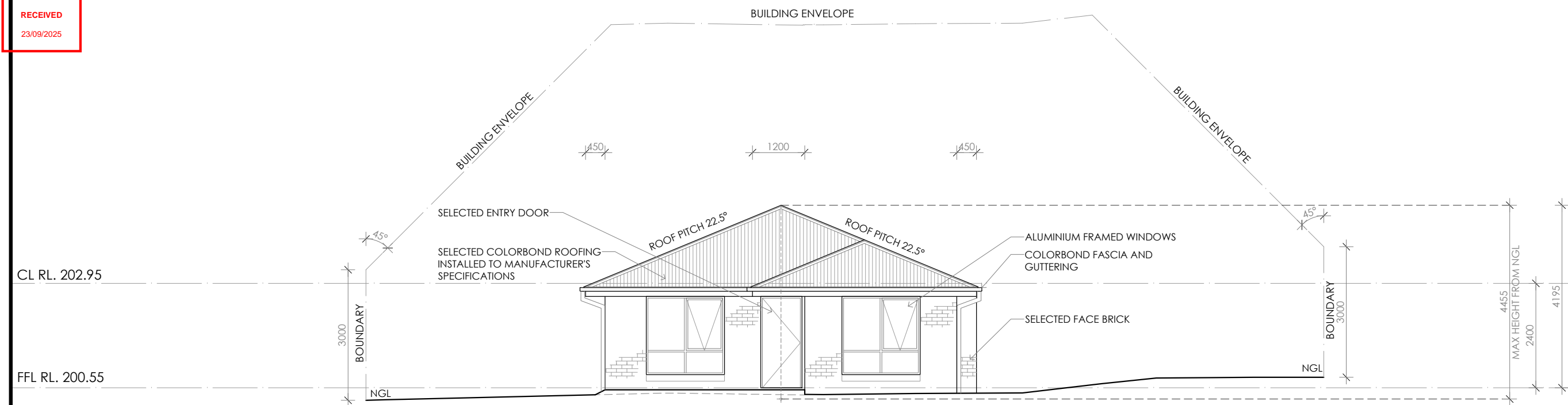
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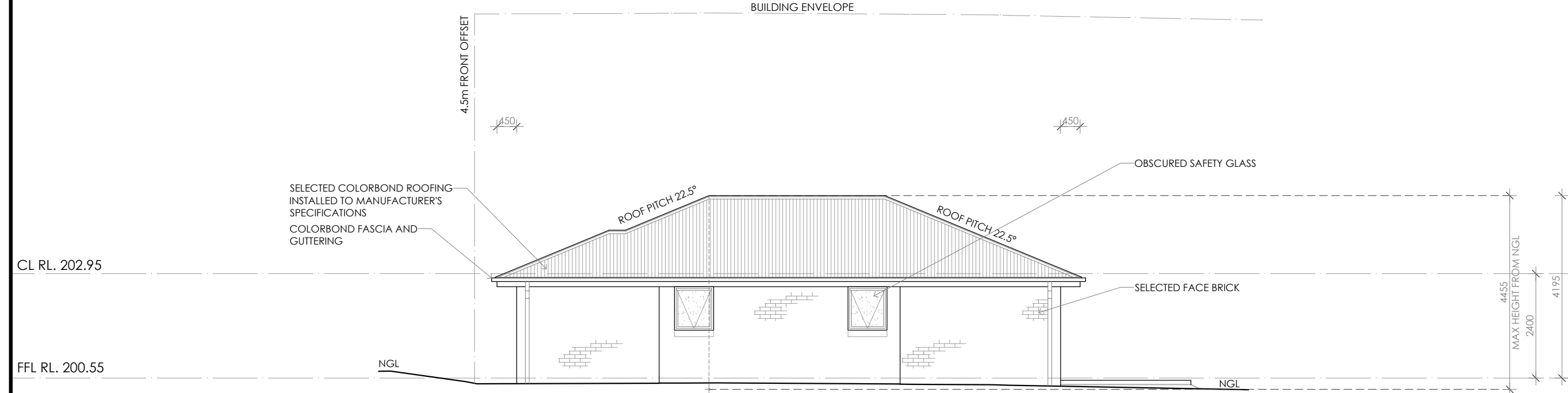
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● DP 90mm DOWNPIPE



WESTERN ELEVATION



SOUTHERN ELEVATION

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Human impact safety requirements shall comply with NCC H1D8 (3) and Part 8.4 of the ABCB Housing provisions.

Note:
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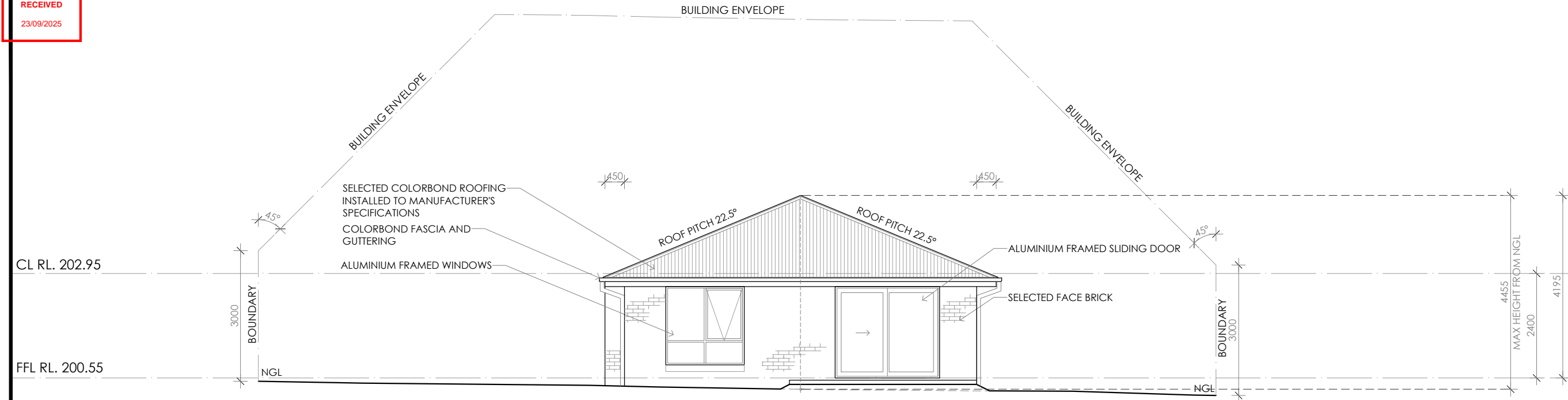
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Energy efficiency:
Insulation must comply with AS/NZS4859.1 and be installed in accordance with ABCB housing provisions Part 13.2.2 and comply with minimum R values for climate zone 7.
Bulk insulation between external studs to be insulated with min R2.0. (Ensure batts fit within cavity without compression, making sure that there is at least 25mm gap from the reflective surface). External walls are to be clad with vapour permeable reflective foil over the outside of the timber frame. Ceiling to be insulated with R4.0 and vapour permeable sarking. Floor to be insulated with Min R1.7 batts where applicable. Seal exhaust fans to Ensuite, Bathroom, Laundry and Kitchen. All downlights to be IC rated. Construction of the external walls, floor and roof for compliance with building sealing requirements shall comply with BCA 2019 Part 3.12

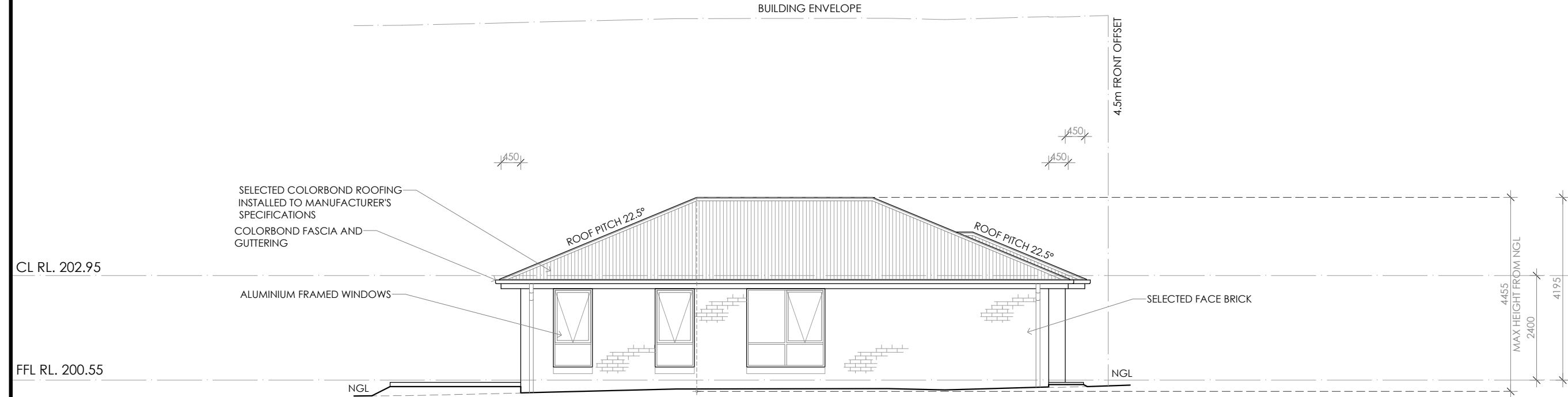
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Wet areas: All wet areas shall comply with the requirements of ABCB Housing provisions Part 10.2. Provide waterproof plasterboard sheeting to all walls and ceilings. Provide ceramic tiles or other approved water resistant lining in accordance with Part 10.2.9 to a minimum height of 1800mm to shower walls and to a height of min 150mm behind baths, basins, sinks, troughs, washing machines and wall fixtures.

For construction of floor wastes refer to NCC ABCB Housing provisions part 10.2.12. For typical installation requirements for substrate preparation, penetrations, flashings/ junctions, membranes, screeds, hobs, baths, showers, door jambs and screens refer to ABCB Housing provisions part 10.2.14-32.



EASTERN ELEVATION



NORTHERN ELEVATION

Framing NCC H1D6
All timber framing, fixing and bracing shall comply with AS 1684 and the requirements of NCC H1D6. Manufactured sizes must not be undersized to those specified, for all timber sizes, stress grades, spacing and wall bracing refer to Engineer's details. Tie-down details shall be in accordance with Engineer's details and comply with NCC H1D6 (4). Structural steel members shall comply with the requirements of clauses in NCC H1D6 (3). Refer to Engineer's details where provided.

Glazing NCC H1D8
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MMC - KEMPTON
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REQUIRES: Timber framing, fixing and bracing shall comply with AS 1684 and the requirements of NCC H1D6. Manufactured sizes must not be undersized to those specified, for all timber sizes, stress grades, spacing and wall bracing refer to Engineer's details. Tie-down details shall be in accordance with Engineer's details and comply with NCC H1D6 (4). Structural steel members shall comply with the requirements of clauses in NCC H1D6 (3). Refer to Engineer's details where provided.

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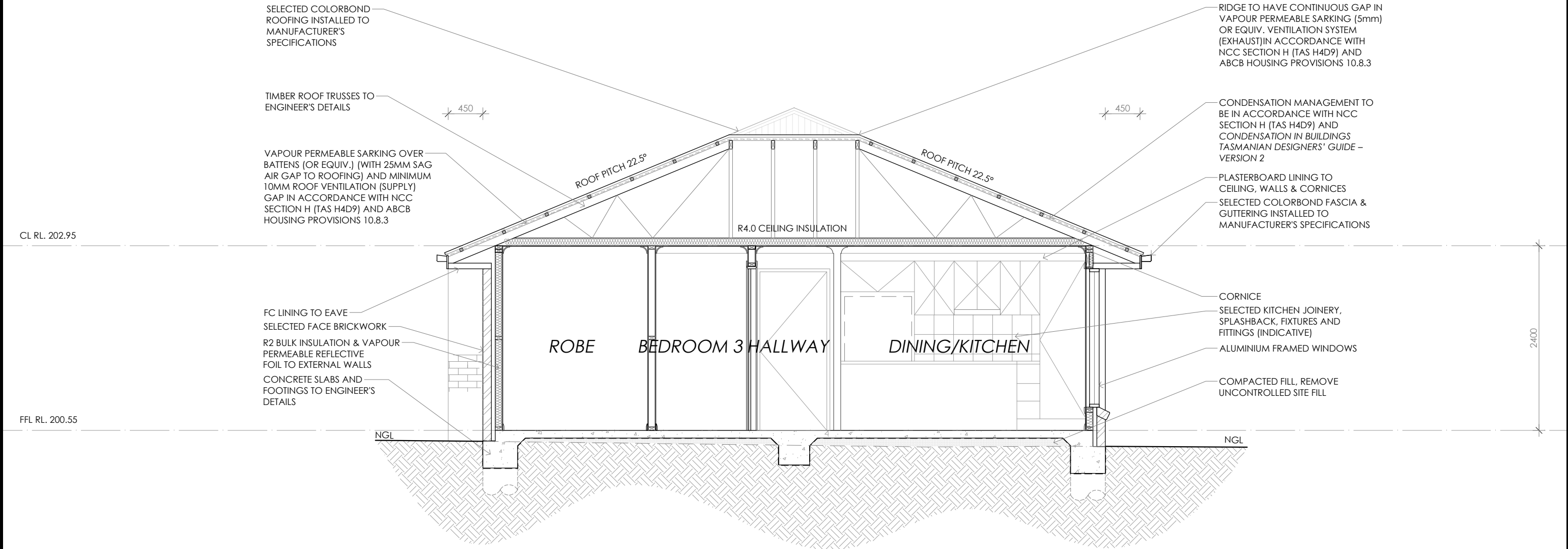
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SECTION A-A

TRUSS MANUFACTURER TO NOTE:
ALL TRUSSES TO BE DESIGNED TO BE SUPPORTED BY ALL EXTERNAL WALLS FOR BOTH DEAD AND WIND LOADS.

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07


PROJECT NORTH

CONTRACTOR MUST VERIFY ALL DIMENSIONS AND LEVELS AT THE JOB PRIOR TO COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS.

DO NOT SCALE DRAWINGS. ALWAYS USE WRITTEN DIMENSIONS.

PRELIMINARY

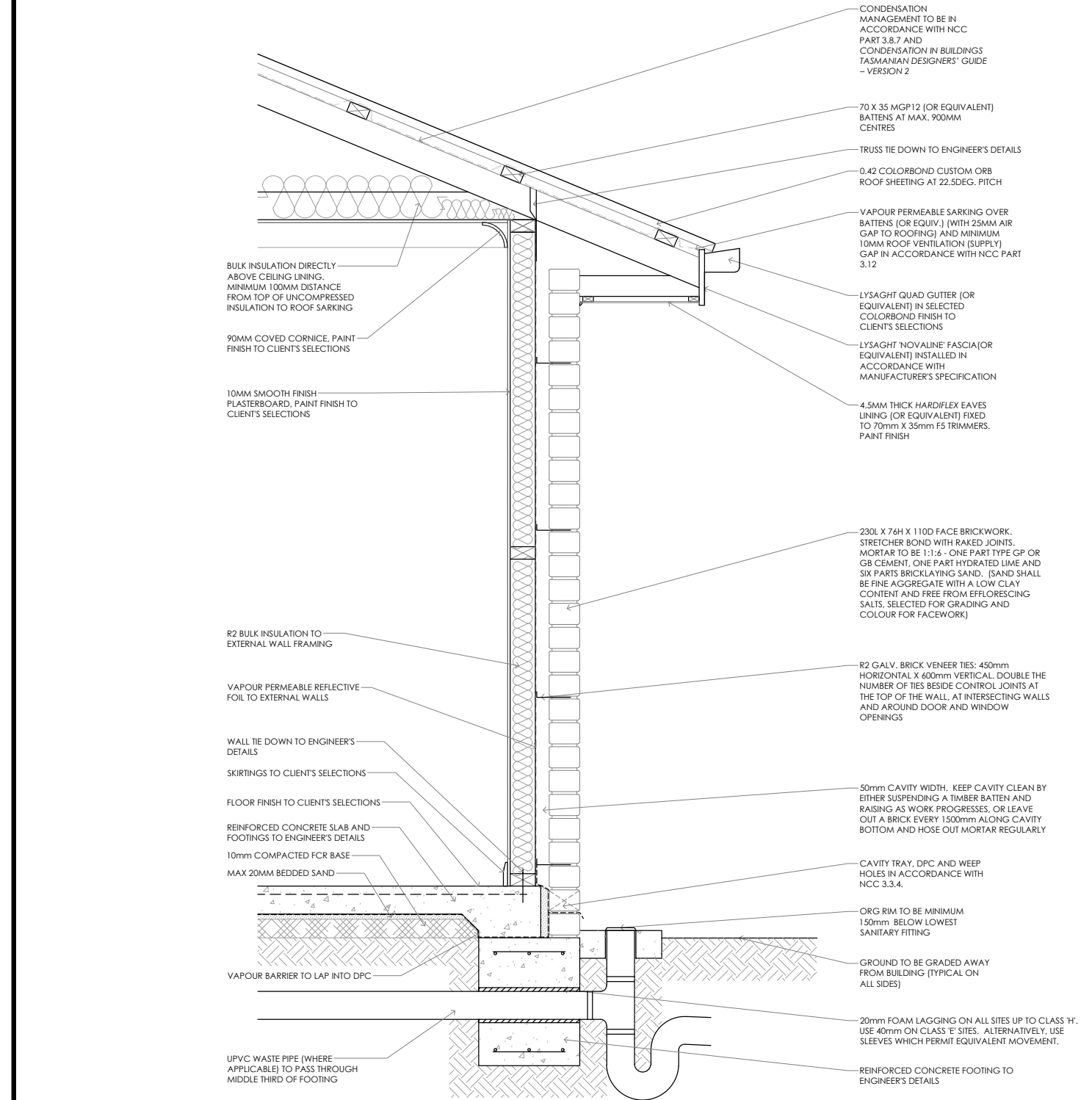
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	CONCEPT PLANS	RK	24/11/21
A	MODIFIED AS CLIENT FEEDBACK	RK	08/2/22
B	WORKING DRAWINGS	RK	11/2/22
C	REDRAW & ADD THE SHED	NN	26/8/25



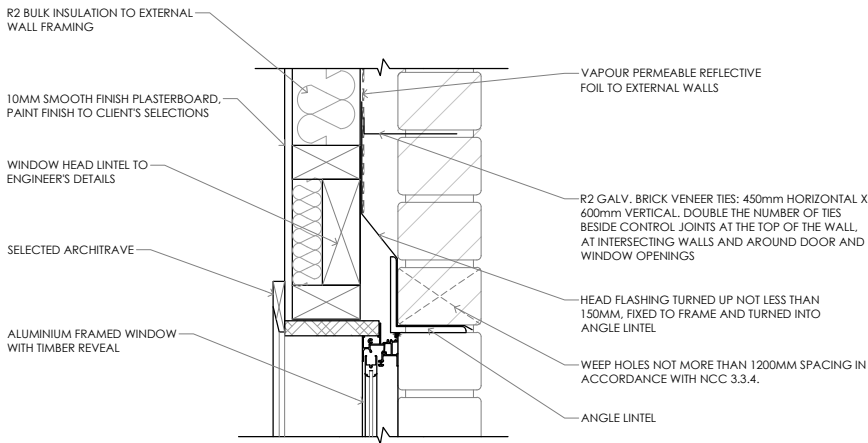
CREATIVE HOMES
HOBART

CREATIVE HOMES HOBART, CNR OF ELWICK ROAD & BROOKER HIGHWAY, GLENORCHY 7010 PH: 03 6272 3000

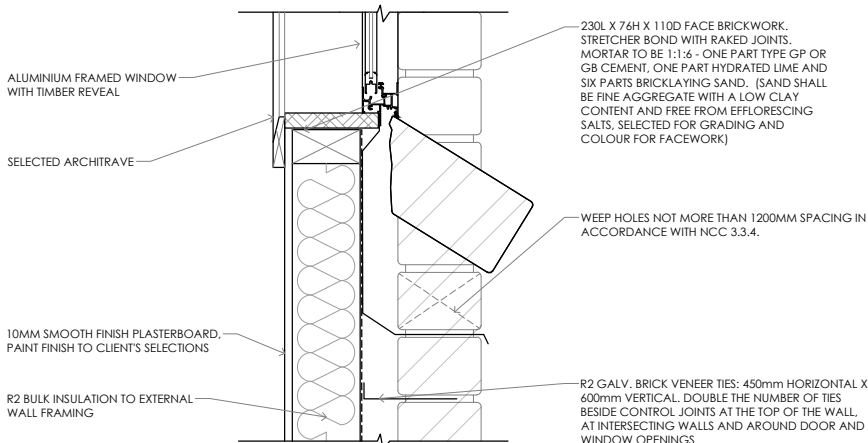
JOB ADDRESS: Lot 24, Kempton Estate Kempton		CLIENT: Shaun Hilder
DESIGNER: I. Brown	ACCRED. NO.: CC6652	SHEET: 7 of 9
DRAWN: N. Nguyen	DATE: August 2025	DESIGN TYPE: Custom
CHECKED:	DATE:	DRAWING NO: ---
SCALE: 1:50	REV: C	



FLOOR, WALL & ROOF DETAIL SCALE 1:20



WINDOW HEAD DETAIL SCALE 1:10



WINDOW SILL DETAIL SCALE 1:10

TYPICAL SECTION DETAILS

PRELIMINARY

© COPYRIGHT IN WHOLE OR IN PART

08		CONTRACTOR MUST VERIFY ALL DIMENSIONS AND LEVELS AT THE JOB PRIOR TO COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS. DO NOT SCALE DRAWINGS. ALWAYS USE WRITTEN DIMENSIONS.	REV:	DESCRIPTION:	BY:	DATE:
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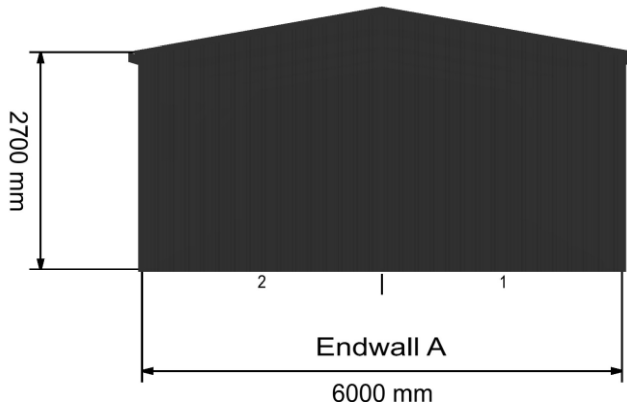
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WINDOW SCHEDULE

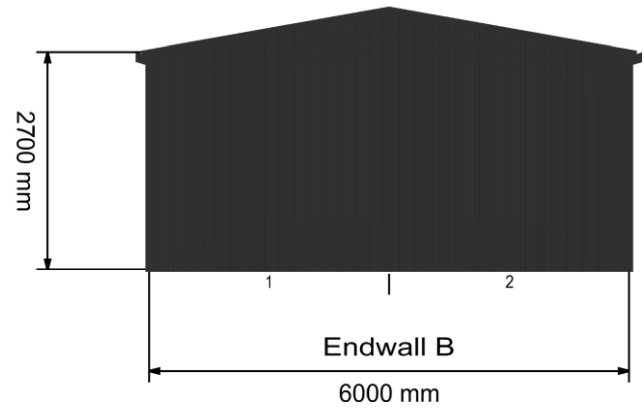
fg FIXED GLAZING

Building Specification – Drawings

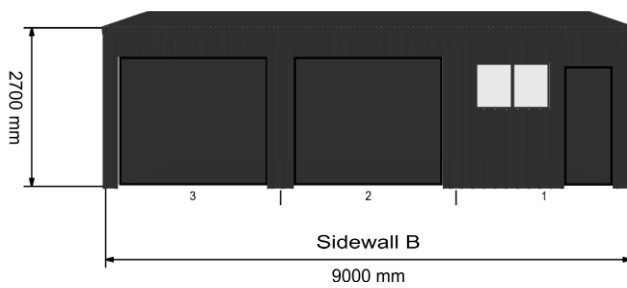
Front



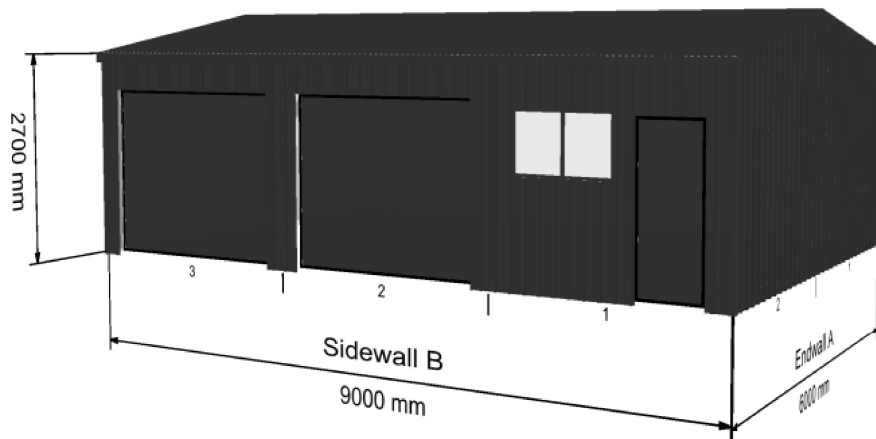
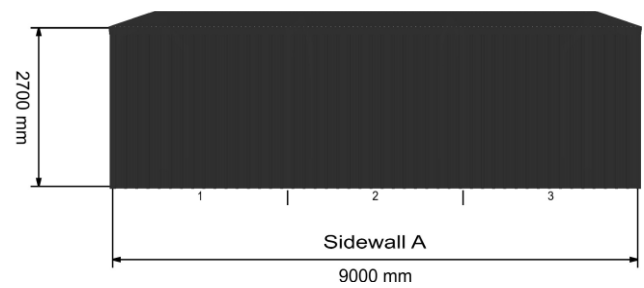
Rear



Left Side



Right Side



DOYLE **SOIL** **CONSULTING**



SITE AND SOIL EVALUATION REPORT **FOUNDATION AND WINDLOADING ASSESSMENT**

Lot 24 Grange Estate

Kempton

January 2022

SITE INFORMATION

Client: Creative Homes Hobart

Address: Lot 24 Grange Estate, Kempton (Part of CT 123249/1)

Site Area: Approximately 793 m²

Date of inspection: 11/01/2022

Building type: New house

Services: Mains water and sewer

Planning Overlays: None

Mapped Geology - MRT 1:50 000 Brighton sheet: **Rlm** = Triassic Sandstone, dominantly quartz sandstone. BUT actual geology is fan alluvium from hill to east (dolerite and sandstone) transported via Little Quion Creek.

Soil Depth: Refusal at 0.5 to 1.35m

Subsoil Drainage: Imperfect

Drainage lines / water courses: Little Quion Creek to the North – East, Green Ponds Rivulet to the West, including several waterbodies

Vegetation: Disturbed

Rainfall in previous 7 days: Approximately 20 mm

Site Assessment and Sample Testing

Site investigation and soil classification in accordance with AS2870-2011 *Residential slabs and footings*.

AS 4055-2012 *Wind load for Housing*

Two drill cores with refusal @ 0.5 m at TH1, and refusal @ 1.35 m at TH2

Dynamic Cone Penetrometer (DCP) test near TH2 with refusal @ 0.8 m

Emerson Dispersion test on subsoils and linear shrinkage tests on all likely founding layers

Test holes were dug using a Christie Post Driver Soil Sampling Kit, comprising CHPD78 Christie Post Driver with Soil Sampling Tube (50 mm OD x 1600 mm)

SOIL PROFILES – Test Hole 1



Depth (m)	Horizon	Description and field texture grade	Soil Classifn.
0.0 – 0.1	FILL	Imported topsoil fill, brown 7.5YR 4/2, Sandy Loam , strong fine angular blocky structure and single grain, slightly moist loose consistency, slightly dilatant	SC
0.1 – 0.4	FILL	Green Sandy Light Clay , massive, moist soft consistency, common fine gravels	CH
0.4 – 0.5	FILL	Compacted and controlled clay/gravel fill, strong brown 7.5YR 4/6, Clayey Gravel , single grain, slightly moist very hard consistency, refusal on dolerite gravelly fill which is very compact	GC
0.5 +	FILL over natural soil	Fill is too compact to penetrate and below it will be the natural soil as shown in TH2	Prob CH?

SOIL PROFILES – Test Hole 2



Depth (m)	Horizon	Description and field texture grade	Soil Classifn.
0.0 – 0.4	A1	Brown 7.5YR 5/2, Sandy Clay Loam , strong medium platy structure breaking to strong fine angular blocky structure, slightly moist firm consistency, common roots	SC/ML
0.4 – 0.8	B2 ₁	Mixed grey 7.5YR 5/1 and yellowish brown 10YR 5/6, Medium Clay , massive breaking to coarse columnar structure, slightly moist very stiff consistency, abundant fine roots, few rocks	CH
0.8 – 1.35	B2 ₂	light olive grey 5Y 6/2 and olive yellow 2.5Y 6/6, Gritty Light Clay , abundant fine grained dolerite gravels and rocks, carbonate present, refusal on gravels	CH

SITE AND SOIL COMMENTS

The natural soil profiles are formed from clayey and gravelly fan alluvium derived from dolerite/sandstone hills to the east via Little Quoin Creek (appendix 3). The site has substantial controlled fill across the rear half (see attached engineers report). The profiles are moderately shallow where the controlled fill is present as it is too compact to penetrate, and the natural soil is moderately deep with refusal occurring at approximately 0.8 to 1.35 m (note this will underlie the fill). The field textures of the natural soil profile are dominated by clay, which is highly reactive, weakly to strongly structured with low bearing capacity to at least 1.0 m. We recommend founding on the underlying competent gravel layers or the controlled fill.

LINEAR SHRINKAGE AND SOIL REACTIVITY

Samples of the clayey subsoils were tested for reactivity using the linear shrinkage test. Linear shrinkage provides an approximate guide to aid soil classification of reactivity of clays for foundations. The tests suggest the clays are moderately to highly reactive.

Sample	Depth (m)	Length of mould (L)	Longitudinal Shrinkage (LS) in mm	LS (%)	Soil Class
TH 2	0.4 – 0.8	125	20.0	16.0	H – 1
TH 2	0.8 – 1.3	125	18.0	14.4	H – 1

DCP TESTS AND ESTIMATED BEARING CAPACITY

Dynamic Cone Penetrometer (DCP) testing is a method of estimating likely soil bearing capacity. However, surface layers (~ upper 0.7 m) are subject to significant soil moisture variations with season which affect DCP values, especially in clays, e.g. in summer or drought then dry clays may be very stiff – hard but in winter only soft – firm. Thus, DCP values below ~ 0.7 m are likely to be more typical of year – to – year soil bearing conditions in clayey and silty soils. We provide estimated soil bearing strengths along with a variance range (+/-) based on a review of published literature relating field DCP readings to triaxial soil strength tests.

Doyle Soil Consulting: Site and Soil Assessment – Lot 24 Grange Estate, Kempton

A minimum bearing capacity of 100 kPa is required for strip and pad footings and under the edge footings and associated slab foundations. The Dynamic Cone Penetrometer (DCP) test was carried out near TH2. The subsoils were slightly moist to moist when tested and so the field DCP values are likely to be higher than in very moist to saturated soil conditions (winter/spring).

The field DCP data indicates that the bearing capacity of the soil is only at a suitable strength below approx. 0.6 m. However, the competent gravel layers at below approx. 0.8 m would be the recommended foundation material.

The clay horizons are moderately to highly reactive/plastic and thus require foundation design suitable for moderate to high shrinking and swelling induced movement (refer to tables below and AS2870-2011 clause 2.4.5).

Depth (mm)	DCP n-number	DCP Penetration Index	Estimated bearing capacity (kPa)	Likely Variance
DCP 1	(Blows/100 mm)	(mm/Blow)	(kPa = n x 30)	+/-
0 - 100	3	33.3	90	30
100 - 200	4	25.0	120	40
200 - 300	1	100.0	30	10
300 - 400	1	100.0	30	10
400 - 500	2	50.0	60	20
500 - 600	4	25.0	120	40
600 - 700	10	10.0	300	100
700 - 800	30	3.3	900	300

EMERSON AGGREGATE DISPERSION TEST

Soils with an excess of exchangeable sodium ions on the cation exchange complex (clays), can cause clay dispersion. Under some circumstances the presence of dispersive soils can also lead to significant erosion, and in particular tunnels leading to eventual gully erosion. Based upon field survey of the property and the surrounding area, no erosion was identified at the site.

The subsoil was tested for dispersion using the Emerson Aggregate Test (EAT). Photos are available on request. The class 2(1) indicates a slight dispersive characteristic and class 8 is no dispersion. The subsoils are therefore non/slightly/mildly spontaneously dispersive and so exposure to rainfall may lead to minor clay dispersion and potentially rill and tunnel erosion, although this is more common in sandy lighter clays, sandy clay loams and silt loams. Dispersive clay subsoil materials can also cause sealing of the soil surface – if left out in wet weather, they then dry and set very hard in dry weather. To minimise this, we recommend coverage of exposed subsoil with topsoil or regular treatment with gypsum at 0.5 Kg/m² along with minimising subsoil disturbance whenever possible. Photo available on request.

Sample	Depth (m)	Visual sign	Class
TH 2	0.4 – 0.8	Some dispersion (Slight milkiness immediately adjacent to aggregate)	2(1)
TH 2	0.8 – 1.3	No slaking and no dispersion	8

WIND CLASSIFICATION

The AS 4055-2021 *Wind load for Housing* classification of the site is:

Region:	A
Terrain category:	TC3
Shielding Classification:	NS
Topographic Classification:	T2
Wind Classification:	N2
Design Wind Gust Speed ($V_{h,u}$)	40 m/sec

SITE CLASSIFICATION AND RECOMMENDATIONS

According to AS2870-2011 (construction) the site is classified as **Class P** due to the presence of controlled fill to approx. 0.3 – 1.2 m depth as indicated by the subdivision geotechnical engineering reports. In the Handbook of Geotechnical Investigation and Design Tables (2007), Look (2007) indicates no more than of 0.5% settlement per unit depth of fill in gravelly controlled fills (with minor fines matrix) meaning approximately 7 mm of surface settlement would be the maximum expected for this material.

In addition to the **Class P**, the subsoil clay rich layers (under the fill) also meet the **Class M** class and this means they are moderately reactive with 20 – 40 mm the dominant reactivity of expected surface movement under normal soil moisture ranges for the location. All foundations require adequate drainage systems to maintain constant moisture conditions, please refer to CSIRO foundation management BTF 18 sheet attached

General Notes – Important points pertinent to maintenance of foundation soil conditions

This report relates to the soil and site conditions on the property at the time of the site assessment. The satisfactory long-term performance of footings is dependent upon the on-going site maintenance by the owner.

Examples of abnormal moisture conditions developing after construction include the following:

- A) The effect of trees too close to the footings
- B) Excessive or irregular watering of gardens adjacent to the footings
- C) Failure to maintain site drainage affecting footings
- D) Failure to repair plumbing leaks affecting footings
- E) Loss of vegetation from near the building.

All earthworks on site must comply with AS3798-2007 Guidelines on Earthworks for commercial and residential developments.

REPORT LIMITATIONS

Whilst every attempt is made to describe sub-surface conditions, natural variation will occur that cannot be determined by limited investigative soil testing. Therefore, discrepancies are possible between test results and observations during construction. It is our intention to accurately indicate the most probable soil type(s) and conditions for the area assessed. However due to the nature of sampling an area, variations in soil type, soil depth and site conditions may occur.

We accept no responsibility for any differences between what we have reported and actual site and soil conditions for the particular regions we could not directly assess at the time of inspection.

It is recommended that during construction, Doyle Soil Consulting and/or the design engineer be notified of any major variation to the foundation conditions as predicted in this report. Any changes to the site through excavations may alter the site classification.

In these cases, it is expected the owner consult the author for a reclassification. This report requires certification via a form 55 certificate from Doyle Soil Consulting to validate its contents.

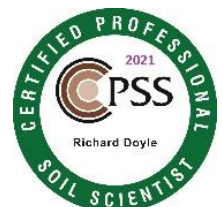
Because site discrepancies may occur between this report and actual site conditions, it is a condition of certification of this report that the builder be provided with a copy of this report.



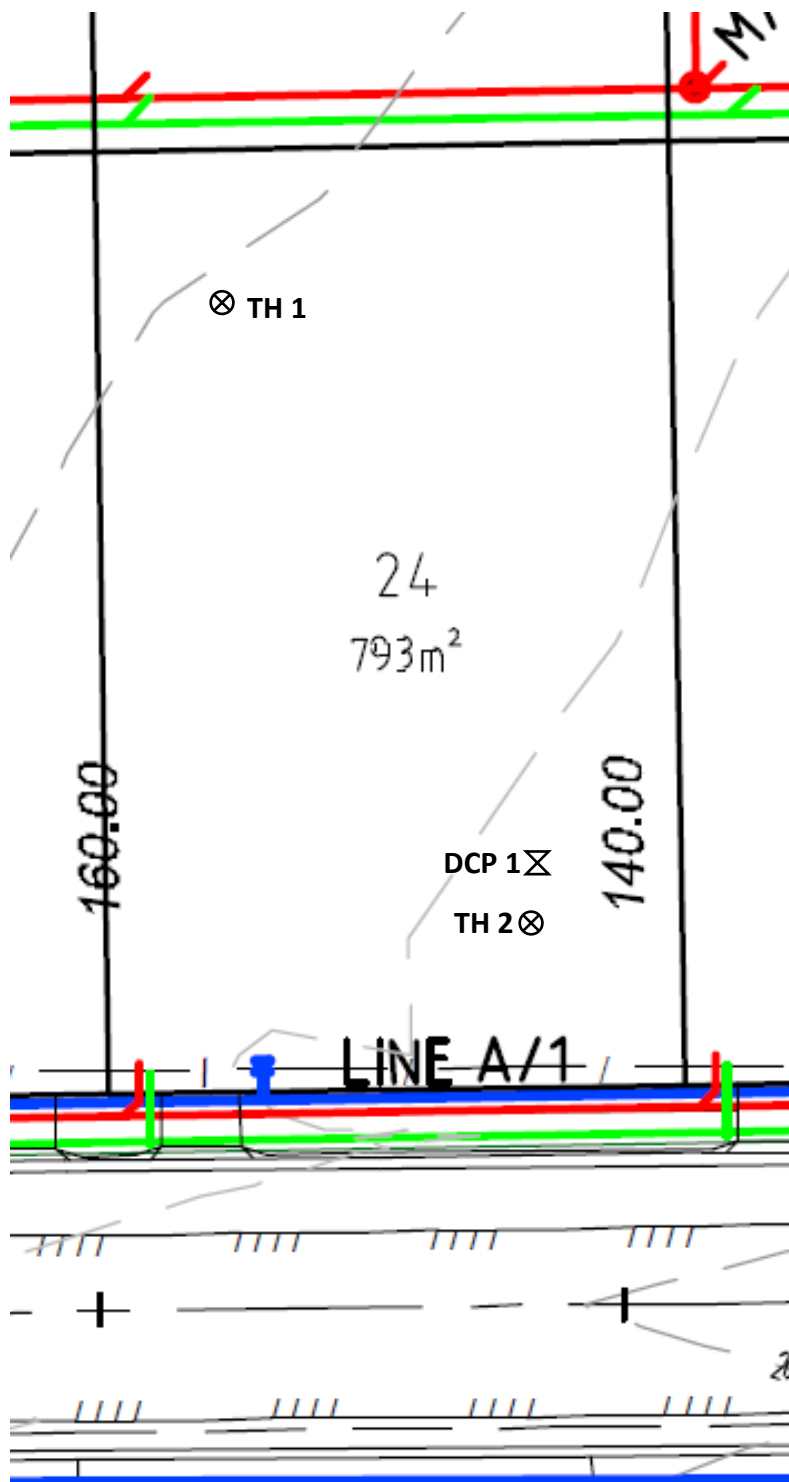
Evan Langridge
B.Agr.Sc.(Hons).
Soil Scientist



Dr Richard Doyle
B.Sc.(Hons), M.Sc.(Geol),
Ph.D. (Soil Sci.), CPSS (Certified Prof
Soil Scientist)
Geologist and Soil Scientist



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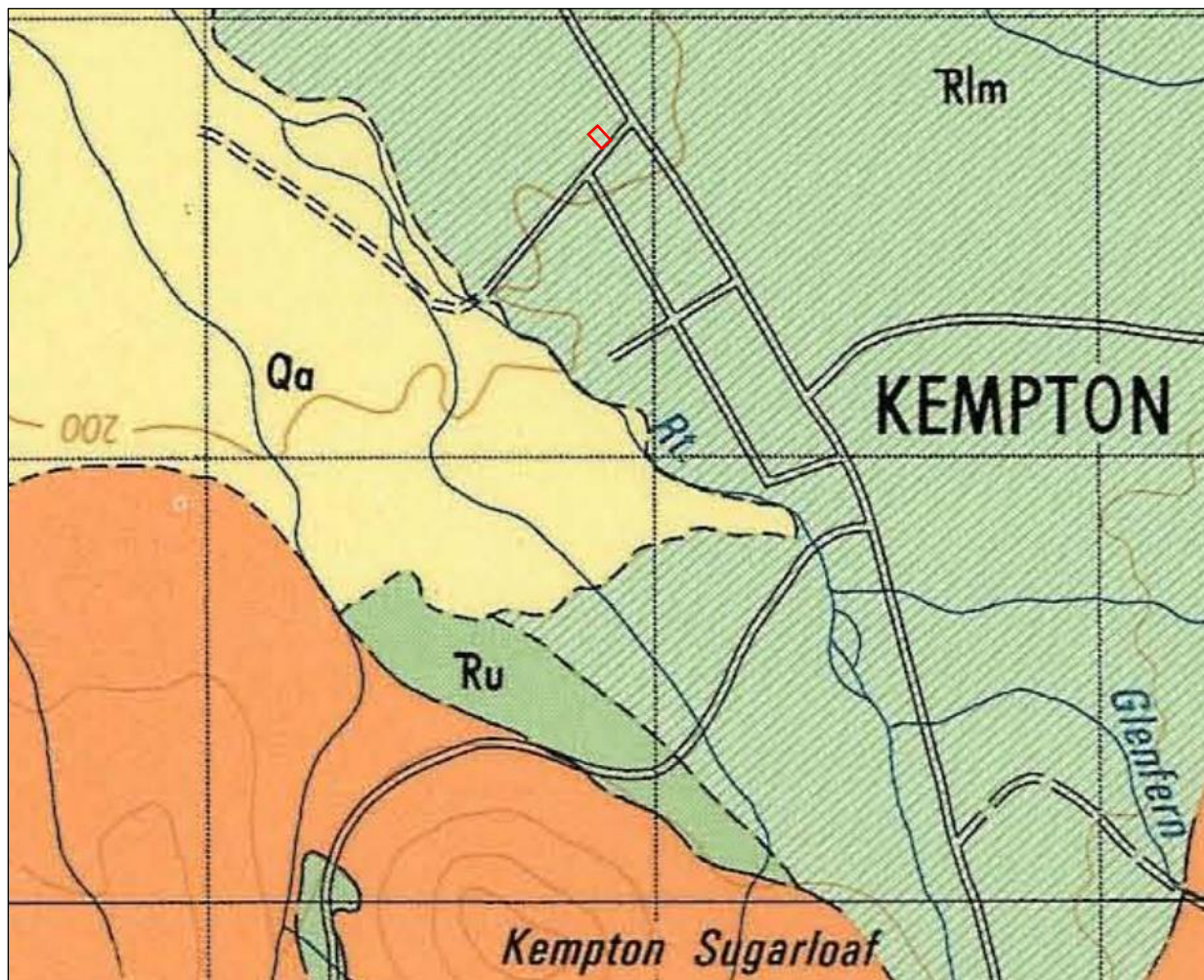


APPENDIX 2 – Definitions of Soil Horizons

Horizon name	Meaning
A1	Dark topsoils, zone of maximum organic activity
A2 or E	Leached, light/pale washed-out sandy layer
A3 or AB	Transition from A to B, more like A
B1 or BA	Transition from A to B, more like B
B2	Main subsoils layer with brown colouration, accumulations of clay, humus, iron oxide, etc
B3	Transitional from B2 to C
C	Weakly weathered soil parent materials

Subscript	Meaning
r	Reducing conditions (anaerobic)
t	Enriched in translocated clay
s	Iron/aluminium oxide accumulations
g	Mottled, suggesting periodic/seasonal wetness
m	Cemented layer (oxides, carbonates, humus, silica etc)
k	Calcium carbonate (lime) accumulation
h	Humus accumulation a subsoil

APPENDIX 3 – MRT 1:50 000 Geology Map



**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'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 Geotechnical Assessment Report for the address detailed above in, 'Details of Work'.
Relevant calculations:	Refer to above report.
References:	AS2870-2011 Residential slabs and footings AS1726-2017 Geotechnical site investigations CSIRO Building Technology File -18

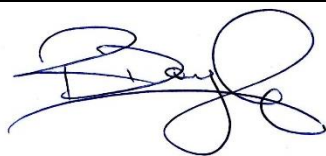
Substance of Certificate: (what it is that is being certified)

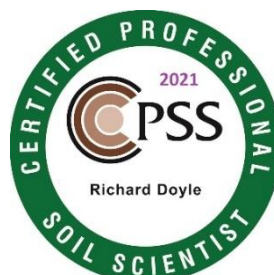
Site classification consistent with AS2870-2011.

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 earthworks, drainage condition changes or variations in site maintenance.

I certify the matters described in this certificate.

Qualified person:	<i>Signed:</i> 	<i>Certificate No:</i> 899	<i>Date:</i> 19/01/2022
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EARTHWORKS COMPLIANCE REPORT

To	AWC Pty Ltd		
Report No.:	7553B	Date:	30/11/2021
Project:	Stage - 1 Main Street, Kempton	Job No.	7553
Attention:	Brendan Moore	Subject:	Earthworks Compliance
Prepared By:	SJ	Checked By:	MBS

1 INTRODUCTION

Scherzic Ground Investigations have undertaken inspections and testing of earthworks for a new residential subdivision for Stage 1 of Main Road, Kempton as requested by Brendan Moore from AWC Pty Ltd. This advice follows on from test pits (6No) and laboratory testing undertaken for pavement design for the Greenfields site prior to any works, given in our Report 7553A, dated 23 September 2021. This report presents the results of site compliance inspections undertaken for placement of filling detailed in drawing No "Jones-09-01, Rev 2, 20/10/2020, By Ross Cummings Engineering (Note Stage 1 works are shaded & to front of site). Also note this drawing does not provide a detail on the filling to the low lying areas nor any specification in the filling of the low lying areas. The results presented does not address any works associated with pavement construction.

2 INSPECTIONS & TESTING

2.1 STRIPPING

Scherzic staff inspected stripping of the subgrade on two occasions: 8th October and 20th October 2021. On 8 October Scherzic advised for further organics to be removed by soft spots to be filled with imported material. The stripping approved is shown in the figures below:

Scherzic

Ground Investigations



Figure 1 - Stripping of subgrade organics



Figure 2 - Subgrade stripping with 'soft spots'

2.2 PLACEMENT OF FILLING

Imported filling used to level the low points in stage 1 has been tested by Scherzic. The compacted layers of Gravel/Rock filling were tested using a Dynatest 3032 LWD (Light Weight Deflectometer). Multiple locations were tested at the pad levels and sample at these sites were retrieved for laboratory testing (PSD confirm the grading of this material as Gravel Rock(Dolerite) with Clay & Sand, which would comply with the superseded DIER Subgrade 1 specification. Laboratory results are attached in Appendix A.

The LWD testing was undertaken using both 150mm and 300mm diameter plates with 3 impacts per each plate size. The detailed test results are provided in Appendix B. An analysis of the LWD test results has been undertaken to determine the top layer modulus(E1) underlying foundation modulus (Em) and variation with depth of the material (n – nonlinearity). A summary of the LWD analysis is given in the table below:

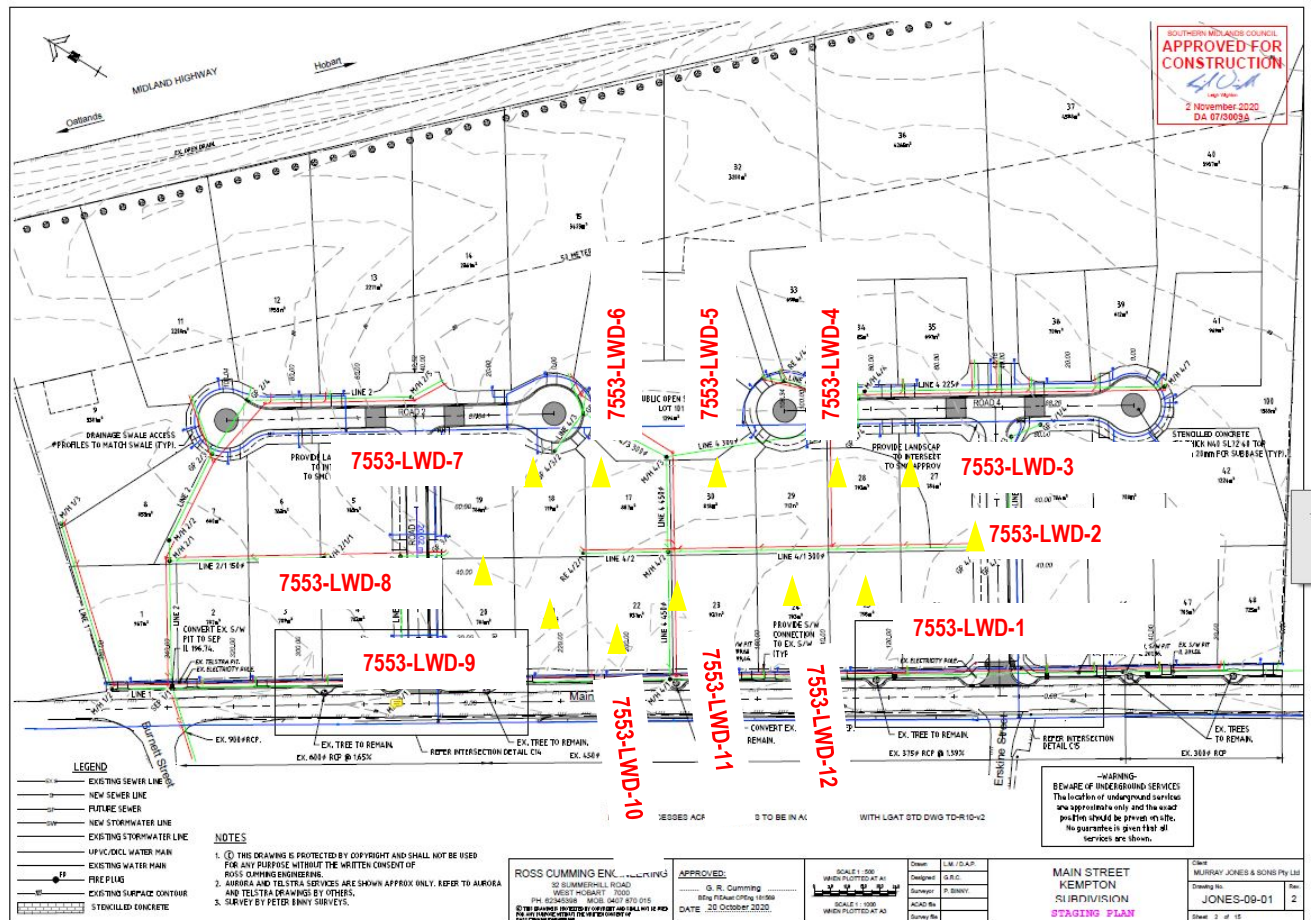
Table 1 - Summary of LWD analysis on 28 October 2021

Location	Material Description	Top Layer Depth – H1 (mm)	Total Fill Depth (mm)	E1 (Upper Layer Modulus) MPa	n (non-linearity)	Em (Profile Modulus) MPa	Eo MPa	Reduced Level
7553-LWD 01	<75mm Rock (Dolerite) with clay	300	300	31	0	16	24	RL 200.65
7553-LWD 02	<75mm Rock (Dolerite) with clay	300	300	43	-0.05	73	49	RL 200.55
7553-LWD 03	<75mm Rock (Dolerite) with clay	300	300	41	-3.1	46	62	RL 200.45
7553-LWD 04	<75mm Rock (Dolerite) with clay	300	300	61	0	41	52	RL 200.45
7553-LWD 05	<75mm Rock (Dolerite) with clay	300	300	50	0	98	58	RL 200.45
7553-LWD 06	<75mm Rock (Dolerite) with clay	300	300	43	-0.12	13	30	RL 200.45
7553-LWD 07	<75mm Rock (Dolerite) with clay	300	300	109	0	52	82	RL 200.45
7553-LWD 08	<75mm Rock (Dolerite) with clay	300	300	72	-0.03	23	47	RL 200.30
7553-LWD 09	<75mm Rock (Dolerite) with clay	300	600	247	-0.02	15	69	RL 199.90
7553-LWD 10	<75mm Rock (Dolerite) with clay	300	900	101	-0.02	27	61	RL 200.00
7553-LWD 11	<75mm Rock (Dolerite) with clay	300	1200	98	-0.74	65	117	RL 200.00
7553-LWD 12	<75mm Rock (Dolerite) with clay	300	600	117	0	30	68	RL 200.25

Em – General soil profile modulus to >600mm

Eo – Surface Modulus

Figure 3- LWD Test Locations on 28 October 2021



3 SUMMARY

The assessment by Scherzic indicates well graded gravel (rock) filling has been placed over the natural soils which were stripped of all organics and deleterious materials before placing the imported filling.

The testing indicates the grave/rock filling has been suitably compacted within a range of 31 to 247MPa. The underlying natural softer fine sands and silts show a much lower modulus and this should be assessed for any future construction over stage 1 works.

Please note the above advice is based on the assessment outlined and should further information or differing conditions be encountered, then this advice should be reviewed. For further advice or clarification, contact the undersigned.

Martin B Schult, BEng., MEngSc., DipGeoSc., MIE(Aust.), CPEng., NER

Principal Geotechnical Engineer

Appendix A

Laboratory Test Reports

PARTICLE SIZE DISTRIBUTION REPORT

Report No: L7553-05
JOB NUMBER: 7553
CLIENT: AWC
PROJECT: Main St. Kempton
DATE: 5/11/2021
AUSTRALIAN STANDARD: AS1289.3.6.1

SAMPLE No: 2219
SAMPLE LOCATION: Stockpile
SAMPLE DEPTH: Stockpile
SAMPLE DESCRIPTION: Basalt
TECHNICIAN: SJ
CHECKED BY: mbs

Particle Size Distribution

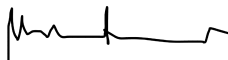
Tin weight	122.9	Total Sample Weight (g)	2111.5
Mass of wet sample + tin (gm)	549.4	Sample weight for 13.2mm below sieving	1293.9
Mass of dry sample + tin (gm)	520.3	Calculated Total Dry Mass	2023.22
Moisture content:	7.32%		

Sieve no.	Diameter (mm)	Mass retained (g)	% retained	% passing
	100	0.0	0.00%	100.00%
13	75	0.0	6.42%	93.58%
14	53	122.7	6.06%	87.52%
15A	37.5	136.9	6.77%	80.76%
16	26.5	302.4	14.95%	65.81%
15	19	125.8	6.22%	59.59%
	13.2	86.4	4.27%	55.32%
17	9.5	107.7	5.32%	50.00%
	6.7	150.3	7.43%	42.57%
	4.75	144.2	7.13%	35.44%
21	2.36	182.8	9.04%	26.41%
22	1.18	115.4	5.70%	20.70%
23	0.6	81.0	4.00%	16.70%
24	0.425	39.0	1.93%	14.77%
25	0.3	30.6	1.51%	13.26%
26	0.15	51.8	2.56%	10.70%
27	0.075	29.6	1.46%	9.24%
58	Pan	1.5	0.12%	

Gravel %	73.6	Gravel Type*:	Basalt
Sand %	17.2	Sand Type*:	Basalt
Clay/Silt %	9.2	Clay/Silt type*:	N/A

*Visual Assessment only

Approved


 Martin Schult, CPEng., NER

PARTICLE SIZE DISTRIBUTION REPORT

Report No: L7553-06
JOB NUMBER: 7553
CLIENT: AWC
PROJECT: Main St. Kempton
DATE: 5/11/2021
AUSTRALIAN STANDARD: AS1289.3.6.1

SAMPLE No: 2220
SAMPLE LOCATION: Stockpile
SAMPLE DEPTH: Stockpile
SAMPLE DESCRIPTION: Basalt
TECHNICIAN: SJ
CHECKED BY: mbs

Particle Size Distribution

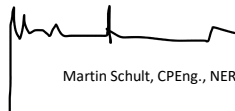
Tin weight	123.1	Total Sample Weight (g)	2609.6
Mass of wet sample + tin (gm)	983.3	Sample weight for 13.2mm below sieving	1609.4
Mass of dry sample + tin (gm)	923.4	Calculated Total Dry Mass	2497.53
Moisture content:	7.48%		

Sieve no.	Diameter (mm)	Mass retained (g)	% retained	% passing
	100	0.0	0.00%	100.00%
13	75	0.0	9.09%	90.91%
14	53	34.4	1.38%	89.53%
15A	37.5	480.1	19.22%	70.31%
16	26.5	145.9	5.84%	64.46%
15	19	112.7	4.51%	59.95%
	13.2	163.7	6.55%	53.40%
17	9.5	121.6	4.87%	48.53%
	6.7	135.7	5.43%	43.10%
	4.75	114.0	4.56%	38.53%
21	2.36	158.4	6.34%	32.19%
22	1.18	84.4	3.38%	28.81%
23	0.6	61.8	2.47%	26.33%
24	0.425	30.0	1.20%	25.13%
25	0.3	24.7	0.99%	24.14%
26	0.15	41.6	1.67%	22.48%
27	0.075	24.5	0.98%	21.50%
58	Pan	1.8	0.11%	

Gravel %	67.8	Gravel Type*:	Basalt
Sand %	10.7	Sand Type*:	Basalt
Clay/Silt %	21.5	Clay/Silt type*:	N/A

*Visual Assessment only

Approved



Martin Schult, CPEng., NER

Scherzic

Ground Investigations

Appendix B

Deflectometer Test Results

File: 28 10 2021 Fill LWD 1 to 12

Date: 28. October 2021

Point No.	Location	Drop	Radius mm	Load kN	Stress kPa	Def. 1 Micron	Eo MPa	GPS Latitude
1	7471_02 LWD - 5	1	75	7	394	1212	44	-42.5256854
		2	75	7.2	410	1052	53	
		3	75	7	395	1010	53	
		4	75	7.4	417	972	59	
		5	150	7.1	101	290	95	
		6	150	7.2	101	502	55	
		7	150	7.2	102	466	60	
		8	150	7.2	102	484	58	
		9	150	7.3	103	464	60	
		10	150	7.2	102	511	55	
2	7553 - LWD - 1	1	75	6.4	363	26159	2	-42.52581348
		2	75	6.9	393	2078	26	
		3	75	7	393	1900	28	
		4	150	6.8	96	1174	22	
		5	150	7.1	100	1119	24	
		6	150	7.1	101	1105	25	
		7	150	7.2	101	1138	24	
3	7553 - LWD - 10	1	75	7.1	403	1520	36	-42.52564433
		2	75	7.3	411	771	73	
		3	75	7.3	411	732	77	
		4	75	7.2	409	732	76	
		5	150	7.2	102	453	62	
		6	150	7.4	104	464	61	
		7	150	7.4	105	471	61	
		8	150	7.4	105	474	60	
		9	150	7.4	105	468	61	
4	7553 - LWD - 11	1	75	7.1	399	1576	35	-42.52576214
		2	75	7	399	615	89	
		3	75	7.3	412	560	100	
		4	75	7.3	412	516	109	
		5	150	7.2	102	108	257	
		6	150	7.4	104	227	126	
		7	150	7.4	105	249	115	
		8	150	7.4	105	256	112	
		9	150	7.5	106	259	111	
5	7553 - LWD - 12	1	75	6.9	389	1454	36	-42.52587286
		2	75	7.1	402	673	81	
		3	75	7.3	412	642	88	
		4	75	6.9	391	602	89	
		5	150	6.9	97	427	62	
		6	150	7.1	100	391	70	
		7	150	7.2	101	404	68	
		8	150	7.2	101	408	68	

6 7553 - LWD - 2	1	75	6.5	370	18800	3	-42.52604763
	2	75	7.1	400	1295	42	
	3	75	7.1	401	1160	47	
	4	75	7	394	1123	48	
	5	150	7.1	100	555	49	
	6	150	7.2	102	565	49	
	7	150	7.2	102	576	48	
	8	150	7.3	103	559	50	
7 7553 - LWD - 3	1	75	6.9	390	1327	40	-42.52597131
	2	75	7.1	400	1250	44	
	3	75	7.4	419	1140	50	
	4	150	7.1	100	423	65	
	5	150	7.2	102	439	64	
	6	150	4.6	65	347	51	
	7	150	7.2	102	442	63	
	8	150	7.1	101	469	59	
8 7553 - LWD - 4	1	75	6.8	384	1164	45	-42.52579663
	2	75	6.9	391	990	54	
	3	75	7	397	943	57	
	4	150	7	99	515	53	
	5	150	7.1	100	532	51	
	6	150	7	99	707	38	
	7	150	7	99	782	35	
	8	150	7.1	100	991	28	
9 7553 - LWD - 6	1	75	6.6	372	2704	19	-42.52550343
	2	75	7	398	1629	33	
	3	75	7.1	400	1557	35	
	4	75	7	399	1455	37	
	5	150	6.9	98	833	32	
	6	150	7.2	102	933	30	
	7	150	7.3	103	964	29	
	8	150	7.3	103	927	30	
10 7553 - LWD - 7	1	75	7.2	406	1020	54	-42.52534644
	2	75	7.3	416	616	92	
	3	75	7.4	419	599	95	
	4	75	4.8	273	411	91	
	5	150	7	99	347	78	
	6	150	7.3	103	342	82	
	7	150	7.3	103	340	83	
	8	150	7.4	104	348	81	
11 7553 - LWD - 8	1	75	6.8	388	2037	26	-42.52538659
	2	75	7.1	403	1026	54	
	3	75	7.2	410	987	57	
	4	75	7.3	410	931	60	
	5	150	7.1	101	546	50	
	6	150	7.4	104	610	47	
	7	150	7.5	106	626	46	

12 7553 - LWD - 9

8	150	7.3	104	600	47	
9	150	7.4	105	621	46	
1	75	7.1	400	1105	49	-42.52550691
2	75	7	396	535	101	
3	75	7	394	476	113	
4	75	7.1	401	499	110	
5	150	7.2	101	409	68	
6	150	7.1	100	392	70	
7	150	7.1	100	378	72	
8	150	7	99	398	68	

SMC - KEMPTON

RECEIVED

23/09/2025

GPS Longitude	GPS Height
147.197444	0

147.1970366	0
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147.196666	0
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147.196858	0
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147.197061	0
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Foundation Maintenance and Footing Performance: A Homeowner's Guide



PUBLISHING

BTF 18-2011
replaces
Information
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870-2011, the Residential Slab and Footing Code.

Causes of Movement

Settlement due to construction

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

Erosion

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

Saturation

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume, particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

Seasonal swelling and shrinkage of soil

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

Shear failure

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.

In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

GENERAL DEFINITIONS OF SITE CLASSES

Class	Foundation
A	Most sand and rock sites with little or no ground movement from moisture changes
S	Slightly reactive clay sites, which may experience only slight ground movement from moisture changes
M	Moderately reactive clay or silt sites, which may experience moderate ground movement from moisture changes
H1	Highly reactive clay sites, which may experience high ground movement from moisture changes
H2	Highly reactive clay sites, which may experience very high ground movement from moisture changes
E	Extremely reactive sites, which may experience extreme ground movement from moisture changes

Notes

1. Where controlled fill has been used, the site may be classified A to E according to the type of fill used.
2. Filled sites. Class P is used for sites which include soft fills, such as clay or silt or loose sands; landslide; mine subsidence; collapsing soils; soil subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise.
3. Where deep-seated moisture changes exist on sites at depths of 3 m or greater, further classification is needed for Classes M to E (M-D, H1-D, H2-D and E-D).

23/09/2015

Tree root growth

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

Unevenness of Movement

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

Effects of Uneven Soil Movement on Structures**Erosion and saturation**

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpend).

Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

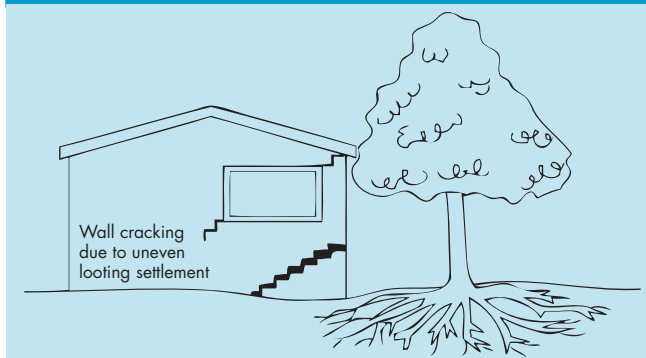
Seasonal swelling/shrinkage in clay

Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.

As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the

Trees can cause shrinkage and damage

external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

Movement caused by tree roots

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

Complications caused by the structure itself

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

Effects on full masonry structures

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.

The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

Effects on framed structures

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation causes a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

Effects on brick veneer structures

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

Water Service and Drainage

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem. Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.

- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

Seriousness of Cracking

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870-2011.

AS 2870-2011 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

Prevention/Cure

Plumbing

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

Ground drainage

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

Protection of the building perimeter

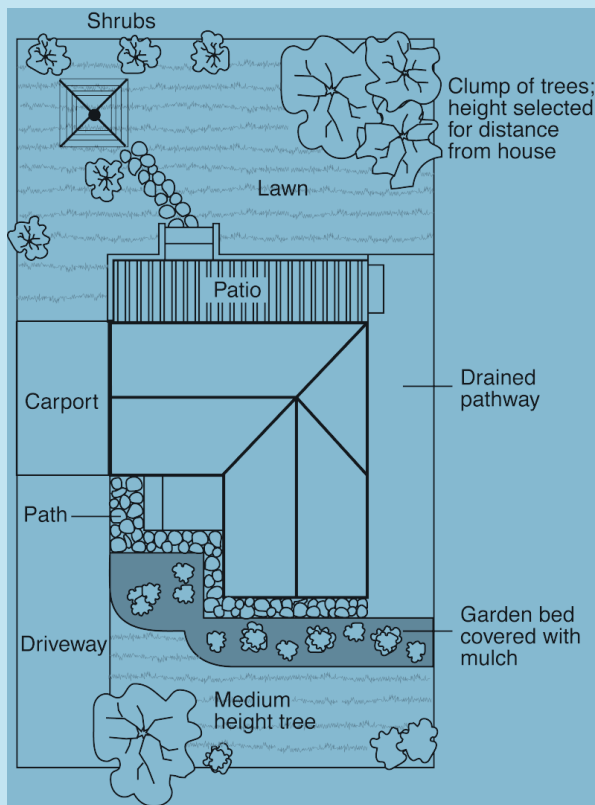
It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving should

CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

Description of typical damage and required repair	Approximate crack width limit (see Note 3)	Damage category
Hairline cracks	<0.1 mm	0
Fine cracks which do not need repair	<1 mm	1
Cracks noticeable but easily filled. Doors and windows stick slightly.	<5 mm	2
Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired.	5–15 mm (or a number of cracks 3 mm or more in one group)	3
Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted.	15–25 mm but also depends on number of cracks	4

Gardens for a reactive site



extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

Condensation

In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

Warning: Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

The garden

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

Existing trees

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

Information on trees, plants and shrubs

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

Excavation

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.

The information in this and other issues in the series was derived from various sources and was believed to be correct when published.

The information is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject.

Further professional advice needs to be obtained before taking any action based on the information provided.

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SEARCH OF TORRENS TITLE

VOLUME 183233	FOLIO 24
EDITION 2	DATE OF ISSUE 18-Nov-2022

SEARCH DATE : 23-Sep-2025

SEARCH TIME : 03.21 PM

DESCRIPTION OF LAND

Town of KEMPTON

Lot 24 on Sealed Plan [183233](#)

Derivation : Part of 700 Acres Loc. to Whickam Whitchurch

Prior CT [123249/1](#)

SCHEDULE 1

[M993362](#) TRANSFER to SHAUN MICHAEL HILDER Registered
18-Nov-2022 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP[183233](#) COVENANTS in Schedule of Easements

SP[183233](#) FENCING PROVISION in Schedule of Easements

24/68 CONVEYANCE Made Subject to Conditions

[B915185](#) & [B915186](#) PROCLAMATION under Section 9A and 52A of
the Roads and Jetties Act 1935 Registered
13-Mar-1996 at 12.05 PM

[E320491](#) MORTGAGE to Westpac Banking Corporation Registered
18-Nov-2022 at 12.01 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

<p>OWNER: MURRAY JONES & SONS PTY LTD</p> <p>FOLIO REFERENCE: C.T. 123249/1</p> <p>GRANTEE: PART OF 700-0-0 LOC TO WHICKAM WHITCHURCH.</p>	<h3>PLAN OF SURVEY</h3> <p>BY SURVEYOR: TONY WOOLFORD 72 GRAHAMS RD, MT RUMNEY PH. 0418 248 569 e: tnwoolford@tassie.net.au</p> <p>LOCATION: TOWN OF KEMPTON</p> <p>SCALE 1: 1250 LENGTHS IN METRES</p>	<p>REGISTERED NUMBER SP183233</p> <p>APPROVED EFFECTIVE FROM 5 SEP 2022</p> <p>Recorder of Titles</p>
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PRIORITY FINAL PLAN

ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN

PIPELINE AND SERVICES EASEMENT 4.00 WIDE

PIPELINE AND SERVICES EASEMENT 3.00 WIDE

LOT 101 ROAD 554m²

ID	Bearing	Distance
a	132°13'	3.11
b	102°13'	3.11
c	72°13'	3.11
d	222°13'	3.11
e	192°13'	3.11
f	162°13'	3.11

DRAINAGE EASEMENT 3.00 WIDE

PIPELINE AND SERVICES EASEMENT 3.00 WIDE

LOT 102 ROAD 557m²

ID	Bearing	Distance
g	132°13'	3.11
h	102°13'	3.11
i	72°13'	3.11
j	222°13'	3.11
k	192°13'	3.11
l	162°13'	3.11

Registered Land Surveyor: *M Woolford* Date: 6-4-22

REF: D1076

Council Delegate: *[Signature]* Date: 4/8/22

SCHEDULE OF EASEMENTS

ASSISTANT RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

<p align="center">SCHEDULE OF EASEMENTS</p> <p>NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.</p>	<p align="center">Registered Number</p> <p align="center">SP 183233</p>
--	--

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

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

Each lot on the plan is subject to:-

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

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

Lot 1 is:

(as defined herein)

SUBJECT TO a PIPELINE AND SERVICES EASEMENT in gross in favour of TasWater over the land marked PIPELINE AND SERVICES EASEMENT 4.00 WIDE shown on the Plan.


(as defined herein)

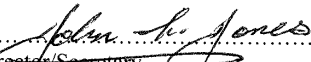
SUBJECT TO a PIPELINE AND SERVICES EASEMENT in gross in favour of TasWater over the land marked PIPELINE AND SERVICES EASEMENT 3.00 WIDE shown on the Plan.

SUBJECT TO a Right of Drainage in favour of Southern Midlands Council over the land marked PIPELINE AND SERVICES EASEMENT 3.00 WIDE shown on the Plan.


SUBJECT TO a Right of Drainage in favour of Southern Midlands Council over the land marked PIPELINE AND SERVICES EASEMENT 4.00 WIDE shown on the Plan.

SIGNED by MURRAY JONES & SONS PTY LTD
ACN 009 481 476 as registered proprietor of the land
comprised in Certificate of Title Volume 123249
Folio 1 in accordance with Section 127 of the
Corporations Act in the presence of:


 Director
 Full Name **DONALD M JONES**


 Director/Secretary
 Full Name **JOHN L JONES**

(USE ANNEXURE PAGES FOR CONTINUATION)

<p>SUBDIVIDER: Murray Jones & Sons Pty Ltd</p> <p>FOLIO REF: 123249/1</p> <p>SOLICITOR & REFERENCE: Damian Egan (DFE 2100593)</p>	<p>PLAN SEALED BY: Southern Midlands Council</p> <p>DATE: 27/2/2022</p> <p>2007/3009</p> <p>REF NO. _____</p> <p align="right">  Council Delegate </p>
<p>NOTE: The Council Delegate must sign the Certificate for the purposes of identification.</p>	

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 8 PAGES	Registered Number SP183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

Lot 22 is:

SUBJECT TO a Right of Drainage in favour of Southern Midlands Council over the land marked DRAINAGE EASEMENT 3.00 WIDE shown on the Plan

Lot 23 is:

(as defined herein)

SUBJECT TO a PIPELINE AND SERVICES EASEMENT in gross in favour of TasWater over the land marked PIPELINE AND SERVICES EASEMENT 3.00 WIDE shown on the Plan.

EASEMENTS – INTERPRETATION

“**Easement Land**” means land subject to a Pipeline and Services Easement.

“**TasWater**” means Tasmanian Water and Sewerage Corporation Pty Ltd (ACN 162 220 653), its successors and assigns.

“**Pipeline and Services Easement**” means:

THE FULL RIGHT AND LIBERTY for TasWater at all times to:

- (1) enter and remain upon the Easement Land with or without machinery, vehicles, plant and equipment;
- (2) investigate, take soil, rock and other samples, survey, open and break up and excavate the Easement land for any purpose or activity that TasWater is authorised to do or undertake;
- (3) install, retain, operate, modify, relocate, maintain, inspect, cleanse, repair, remove and replace the Infrastructure;

SIGNED by MURRAY JONES & SONS PTY LTD
 ACN 009 481 476 as registered proprietor of the land
 comprised in Certificate of Title Volume 123249
 Folio 1 in accordance with Section 127 of the
 Corporations Act in the presence of:

Donald M Jones
 Director
DONALD M JONES
 Full Name

John L Jones
 Director/Secretary
JOHN L JONES
 Full Name

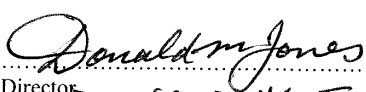
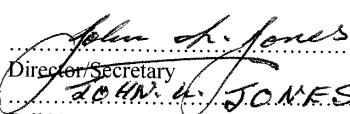
NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 3 OF 8 PAGES	Registered Number SP 183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

- (4) run and pass sewerage, water and electricity through and along the Infrastructure;
- (5) do all works reasonably required in connection with such activities or as may be authorised or required by any law:
 - (a) without doing unnecessary damage to the Easement Land; and
 - (b) leaving the Easement Land in clean and tidy condition;
- (6) if the Easement Land is not directly accessible from a highway, then for the purpose of undertaking any of the preceding activities TasWater may with or without employees, contractors, agents and any other persons authorised by it, and with or without machinery, vehicles, plant and equipment enter the Lot from the highway at any vehicle entry and cross the Lot to the Easement Land; and
- (7) use the Easement Land as a right of carriageway for the purpose of undertaking any of the preceding purposes on the land, TasWater reinstating any damage that it causes in doing so to any boundary fence of the Lot.

PROVIDED ALWAYS THAT:

- (1) The registered proprietors of the Lot in the folio of the Register ("the Owner") must not without the written consent of TasWater first had and obtained and only in compliance with any conditions which form the consent:
 - (a) alter, excavate, plough, drill or otherwise penetrate the ground level of the Easement Land;

SIGNED by MURRAY JONES & SONS PTY LTD ACN 009 481 476 as registered proprietor of the land comprised in Certificate of Title Volume 123249 Folio 1 in accordance with Section 127 of the Corporations Act in the presence of:	
 Director DONALD M JONES Full Name	 Director/Secretary JOHN H JONES Full Name
NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.	

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 4 OF 8 PAGES	Registered Number SP 183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

- (b) install, erect or plant any building, structure, fence, pit, well, footing, pipeline, paving, tree, shrub or other object on or in the Easement Land;
 - (c) remove any thing that supports, protects or covers any Infrastructure on or in the Easement Land;
 - (d) do any thing which will or might damage or contribute to damage to any of the Infrastructure on or in the Easement Land;
 - (e) in any way prevent or interfere with the proper exercise and benefit of the Easement Land by TasWater or its employees, contractors, agents and all other persons duly authorised by it; or
 - (f) permit or allow any action which the Owner must not do or acquiesce in that action.
- (2) TasWater is not required to fence any part of the Easement Land.
- (1) The Owner may erect a fence across the Easement Land at the boundaries of the Lot.
- (2) The Owner may erect a gate across any part of the Easement Land subject to these conditions:
- (a) the Owner must provide TasWater with a key to any lock which would prevent the opening of the gate; and
 - (b) if the Owner does not provide TasWater with that key or the key provided does not fit the lock, TasWater may cut the lock from the gate.
- (5) If the Owner causes damage to any of the Infrastructure, the Owner is liable for the actual cost to TasWater of the repair of the Infrastructure damaged.

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 Full Name

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ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 5 OF 8 PAGES	Registered Number SP183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

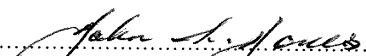
- (6) If the Owner fails to comply with any of the preceding conditions, without forfeiting any right of action, damages or otherwise against the Owner, TasWater may:
- (a) reinstate the ground level of the Easement Land; or
 - (b) remove from the Easement Land any building, structure, pit, well, footing, pipeline, paving, tree, shrub or other object; or
 - (c) replace any thing that supported, protected or covered the Infrastructure.

“Infrastructure” means infrastructure owned or for which TasWater is responsible and includes but is not limited to:

- (i) sewer pipes and water pipes and associated valves;
- (ii) telemetry and monitoring devices;
- (iii) inspection and access pits;
- (iv) electricity assets and other conducting media (excluding telemetry and monitoring devices);
- (v) markers or signs indicating the location of the Easement Land or any other Infrastructure or any warnings or restrictions with respect to the Easement Land or the Infrastructure;
- (vi) anything reasonably required to support, protect or cover any of the Infrastructure;
- (vii) any other infrastructure whether of a similar nature or not to the preceding which is reasonably required for the piping of sewage or water, or the running of electricity, through the Easement Land or monitoring or managing that activity; and
- (viii) where the context permits, any part of the Infrastructure.

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 Corporations Act in the presence of :


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DONALD M JONES
 Full Name


 Director/Secretary
JOHN D JONES
 Full Name

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ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 6 OF 8 PAGES	Registered Number SP183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

COVENANTS

The owners of lots 2, 3, 21, 23, 24, 46 and 47 on the Plan covenant with the Vendor (Murray Jones & Sons Pty Ltd) and the owner for the time being of every other lot shown on the Plan to the intent that the burden of this covenant may run with and bind the covenantor's lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every other lot shown on the Plan to observe the following stipulations:


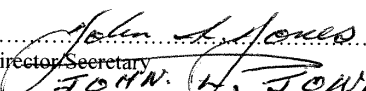
- (a) Not to build or erect or cause to be built or erected on each such lot any building and/or structure within 4.5m from the front boundary of each such lot with Main Street, Kempton as shown on the Plan.

The owners of lots 1, 4, 20, 22, 25, 26, 45 and 48 covenant with the Vendor (Murray Jones & Sons Pty Ltd) and the owner for the time being of every other lot shown on the Plan to the intent that the burden of this covenant may run with and bind the covenantor's lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every other lot shown on the Plan to observe the following stipulations:

- (a) Not to build or erect or cause to be built or erected on each such lot any building and/or structure within 7.5m from the front boundary of each such lot with Main Street, Kempton as shown on the Plan.

The owners of each lot on the Plan (other than Lots 101 and 102) covenant with the Vendor (Murray Jones & Sons Pty Ltd) and the owner for the time being of every other lot shown on the Plan to the extent that the burden of these covenants may run with and bind the covenantor's lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every part of every other lot (other than Lots 101 and 102) shown on the Plan to observe the following stipulations:

- (a) Not to erect or permit to be erected or placed on the lot:

SIGNED by MURRAY JONES & SONS PTY LTD ACN 009 481 476 as registered proprietor of the land comprised in Certificate of Title Volume 123249 Folio 1 in accordance with Section 127 of the Corporations Act in the presence of:	
 Director DONALD M JONES Full Name	 Director/Secretary JOHN H. JONES Full Name
NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.	

SCHEDULE OF EASEMENTS

ASSISTANT RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 7 OF 8 PAGES	Registered Number SP183233
SUBDIVIDER: Murray Jones & Sons Pty Ltd FOLIO REFERENCE: 123249/1	

- (i) any dwelling house or unit other than a new dwelling house or unit;
- (ii) any log cabin;
- (iii) any transportable home; or
- (iv) any caravan, hut or shed for any kind of permanent or temporary residential use on the lot PROVIDED THAT this sub-clause does not affect the right of the owner of the lot to have and keep a caravan thereon;
- (b) Not to use or permit or suffer to be used in any building on the lot second-hand materials for outer wall facings (including gables) and rooves for any building on the lot.
- (c) Not to use or cause to be used for any roofs any material except Colorbond roofs (or any similar quality colour coated or coloured corrugated iron roof) or any low grade roofing material more commonly used in any industrial or commercial buildings or properties.
- (d) Not to erect or permit to be erected any free-standing carports or garages on the lot unless the same are in conformity with the design for and colours and materials of the dwelling house or unit constructed thereon.
- (e) Not to erect or permit to be erected or placed on the lot any dwelling houses and/or buildings not approved by the local municipal council as complying with the design, guidelines and provisions of the Planning Scheme Heritage Special Precinct Area. The guidelines and provisions:
 - (i) provide that the design and external appearance of all new buildings or additions/adaptations to buildings respect and maintain the historic character and heritage values;
 - (ii) ensure that new buildings do not visually dominate 19th Century buildings;

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 ACN 009 481 476 as registered proprietor of the land
 comprised in Certificate of Title Volume 123249
 Folio 1 in accordance with Section 127 of the
 Corporations Act in the presence of:

Donald M Jones
 Director
DONALD M JONES
 Full Name

John H Jones
 Director/Secretary
JOHN H JONES
 Full Name

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ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 8 OF 8 PAGES	Registered Number SP 183233
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- (iii) maintain the visual amenity of the historic buildings when viewed from the Midland Highway or from streets within the settlements; and
- (iv) require fences along boundary streets to be:
 - (A) between 900mm and 1000mm with a maximum of 1200mm for posts;
 - (B) vertically articulated and not horizontally articulated; and
 - (C) transparent or open in appearance with a distance between dowels or pickets such that the fence does not appear solid.


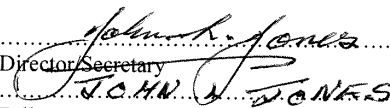
The Vendor reserves the right for themselves and/or their assigns to sell or otherwise deal with any lot on the Plan either subject to the above conditions and/or restrictive covenants or any one of them and/or subject to such modifications thereof as the Vendor shall in the Vendor's absolute discretion deem fit. Exercise of the said right in relation to any lot shall not give the owners of any other lot any right of action against the Vendors or another person.

The Owners of Lots 1 – 4, 20, 21, 24, 26 and 45 – 48 on the Plan covenant with the Vendor (Murray Jones & Sons Pty Ltd) and the owner for the time being of every other lot shown on the Plan to the intent that the burden of this covenant may run with and bind the covenantor's lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every other lot shown on the Plan to observe the following stipulation:

- (a) not to erect more than one (1) dwelling house on the lot (other than the usual appurtenances thereto).

FENCING PROVISION

In respect of each lot shown on the Plan (other than Lots 101 and 102) the Vendor, Murray Jones & Sons Pty Ltd, shall not be required to fence.

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