NOTICE OF PROPOSED DEVELOPMENT

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

SITE:
11 ROTULI STREET, DODGES FERRY

PROPOSED DEVELOPMENT:
ADDITIONS AND ALTERATIONS

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website at www.sorell.tas.gov.au until **Monday 18th August 2025.**

Any person may make representation in relation to the proposal by letter or electronic mail (sorell.council@sorell.tas.gov.au) addressed to the General Manager. Representations must be received no later than **Monday 18th August 2025.**

APPLICATION NO: **5.2025-124.1**
DATE: **01 AUGUST 2025**

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

Full description of Proposal:	*Use:* Residential *Development:* Addition to existing dwelling. Proposed additional bedroom, e *Large or complex proposals should be described in a letter or planning report.*
Design and construction cost of proposal:	$ 200,000

Is all, or some the work already constructed:	No: ☑ Yes: ☐

Location of proposed works:	Street address: 11 Rotuli Street Suburb: Dodges Ferry Postcode: 7173 Certificate of Title(s) Volume: 227971 Folio: 1

Current Use of Site	Residential

Current Owner/s:	Name(s) Samuel Lennox and Grace Jones

Is the Property on the Tasmanian Heritage Register?	No: ☑ Yes: ☐	*If yes, please provide written advice from Heritage Tasmania*
Is the proposal to be carried out in more than one stage?	No: ☑ Yes: ☐	*If yes, please clearly describe in plans*
Have any potentially contaminating uses been undertaken on the site?	No: ☑ Yes: ☐	*If yes, please complete the Additional Information for Non-Residential Use*
Is any vegetation proposed to be removed?	No: ☑ Yes: ☐	*If yes, please ensure plans clearly show area to be impacted*
Does the proposal involve land administered or owned by either the Crown or Council?	No: ☑ Yes: ☐	*If yes, please complete the Council or Crown land section on page 3*

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

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

Declarations and acknowledgements
• I/we confirm that the application does not contradict any easement, covenant or restriction specified in the Certificate of Title, Schedule of Easements or Part 5 Agreement for the land. • I/we consent to Council employees or consultants entering the site and have arranged permission and/or access for Council's representatives to enter the land at any time during normal business hours. • I/we authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation and have permission of the copyright owner for such copies. • I/we declare that, in accordance with s52(1) of the *Land Use Planning and Approvals Act 1993*, that I have notified the owner(s) of the intention to make this application. • I/we declare that the information in this application is true and correct. *Details of how the Council manages personal information and how you can request access or corrections to it is outlined in Council's Privacy Policy available on the Council website.*
• I/we acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process, for display purposes during public exhibition, and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.
• Where the General Manager's consent is also required under s.14 of the *Urban Drainage Act 2013*, by making this application I/we also apply for that consent.

Applicant Signature:	Signature: ..... Date: 13/05/2025

Crown or General Manager Land Owner Consent
If the land that is the subject of this application is owned or administered by either the Crown or Sorell Council, the consent of the relevant Minister or the Council General Manager whichever is applicable, must be included here. This consent should be completed and signed by either the General Manager, the Minister, or a delegate (as specified in s52 (1D-1G) of the *Land Use Planning and Approvals Act 1993*). Please note: • If General Manager consent if required, please first complete the General Manager consent application form available on our website www.sorell.tas.gov.au • If the application involves Crown land you will also need a letter of consent. • Any consent is for the purposes of making this application only and is not consent to undertaken work or take any other action with respect to the proposed use or development.
I _____ being responsible for the administration of land at _____ declare that I have given permission for the making of this application for _____

Sorell Council
Development Application: 5.2025.124.1 - Development Application - 11 Rotuli Street, Dodges Ferry - P1.pdf
Plans Reference:P1
Date Received:13/05/2025

Signature of General Manager, Minister or Delegate:	Signature: ..... Date: .....

BDStudio
BUILDING DESIGN STUDIO
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Accredited Practitioners: Design +
Structural Documentation +Interior Design +
Planning Applications +
Energy Assessments + Bushfire Reports
BDS buildingdesignstudio
10 Restdown Drive, Otago
Phone 0429901003
onshoredesigns@bigpond.com

May 2025

Development Application Compliance report

Prepared for

Sorell Council

obo
Grace Jones
Sam Lennox
11 Rotuli Street
Dodges Ferry TAS 7173

Prepared by

Michael Eastwood
BDSbuildingdesignstudio
onshoredesigns@bigpond.com
mobile 0429901003

Introduction

This report forms part of a Development Application for **Residential Use** in the **Low Density Residential Zone** and relies on the **Acceptable Solutions to** satisfy part of the relevant planning standards. The report is to be read in conjunction with the design drawings prepared by **Michael Eastwood** that form part of this application.

Appendices:

Documents

1. Sorell Council Application Form
2. Titles and folio plans

Drawings

3. Set A3 plans showing proposed addition

BDStudio
BUILDINGDESIGNSTUDIO
DESIGN DOCUMENTATION PLANNING

Date	May 2025
Applicant Details	**Michael Eastwood** **BDSbuildingdesignstudio** 10 Restdown Drive, Otago Bay, 7017 onshoredesigns@bigpond.com mobile 0429901003
Owner Details	Grace Jones Sam Lennox 11 Rotuli Street Dodges Ferry TAS 7173
Property Details	Cert Title no 227971/1 **Size: 1286m^2**
Development Address	11 Rotuli Street Dodges Ferry TAS 7173

Development Type	**Proposed additions to existing dwelling**
Development Area	**Proposed addition area 89m^2** **Proposed deck area 24m^2** **Total 113m^2**
Zone	**Low Density Residential**
Use	**Residential**
Qualification	Only if a single dwelling or home-based business.
Application	**No Permit Required**

Description of Development Proposal

Planning Application for proposed addition to existing dwelling. New main bedroom with ensuite, new bathroom, new kitchen/dining/living and new deck

Applicable Planning Scheme Standards and Codes

ZONE 10- Low Density Residential

CODES

COMPLIANCE WITH PLANNING SCHEME

The proposed change of use and containers are within a defined **10.0 Low Density Residential Zone**. Each scheme standard will be addressed in relation to the proposal.

10.0 Low Density Residential Zone

10.2 Use Table

Residential Single Dwelling

No Permit Required

10.3 Use Standards

10.3.1 Discretionary Uses

NA

10.3.2 Visitor Accommodation

NA

10.4 Development Standards for Dwelling

10.4.1Residential density for Multiple dwellings.

NA Not multiple dwellings

10.4.2 Building Height

Objective

That the height of dwellings is compatible with the streetscape and do not cause an unreasonable loss of amenity for adjoining properties.

A1 Max. height of proposed addition is 4.5m. See Elevations

10.4.3 Setbacks

Objective

That the siting of dwellings is compatible with the streetscape and does not cause an unreasonable loss of amenity for adjoining properties.

A1

Setback existing to front boundary to the existing house. Addition to the rear of the existing. See site plan

P2

Setback to side eastern boundary is 4m to proposed addition and 1.6m to the proposed deck.

I believe the siting of the proposed addition will not cause unreasonable loss of amenity to the adjoining properties as

a) The topography of the site is sloping east to west and the existing dwelling and proposed are set down below the neighbours dwelling to the east and with the neighbouring dwelling (to the east) elevated there will be no loss of amenity to such.
b) The lot is a reasonable size and quite longitudinal with the existing small dwelling to the northern boundary. The options were o go double storey or extend back into the allotment. By doing this, and the topography of the site, the neighbours existing dwellings are not compromised.
c) The setbacks of the neighbouring buildings are similar.
d) The proposed height is not much greater than the existing dwelling.
e) The proposed is positioned in the existing private open space however, with the proposed, the private open space will be moved more to the south as there is sufficient cleared area remaining.
f) Does not effect due to orientation and setbacks
g) Similar size and shape of dwellings within this area.

10.4.4 Site Coverage

Objective

That site coverage:
(a) is consistent with the character of existing development in the area;
(b) provides sufficient area for private open space and landscaping; and
(c) assists with the management of stormwater runoff.

A1 The Site coverage will not exceed 30% of the site.
Site coverage of the proposed and existing development is 340m^2. This is inclusive of Building, garage, decks and tanks etc. Site area 1286m^2. This equals 26.4%

10.4.5 Frontage fences for all dwellings

NA

Kind Regards Michael

Signed:

Michael Eastwood
BDSbuildingdesignstudio

8/07/2025

To Whom It May Concern:

RE: Suitability of Existing Onsite Wastewater System – 11 Rotuli Street Dodgers Ferry

Dear Sir/Madam,

I have been asked to review suitability of the existing wastewater system for an existing dwelling at the above address. The owners propose an extension to the residence **without adding further habital space**. The system installed is a 3250L Dual Purpose Septic Tank gravity dosing a 12m x 1.2m subsurface trench. Photos of the system condition and as installed plan are shown in Appendix 1.

With respect to peak flow rate modelling of effluent with reference to AS1547-2012 the following applies:

Wastewater System Modelling	
Number of Proposed Bedrooms	3
Number of Equivalent Persons	5
Water Source (Tank/Mains)	Tank
Daily Loading (L/per person/D)	120
Total Daily Loading (L/D)	600
Adopted Soil Category (AS1547-2012)	1
Indicative Permeability (m/d)	2
Adopted DLR/DIR (mm/d OR L/m^2/d)	40
Required LAA (m^2)	15

Given that the land application area is installed and functioning well (see photographic evidence in Appendix 1), the following recommendations are made:

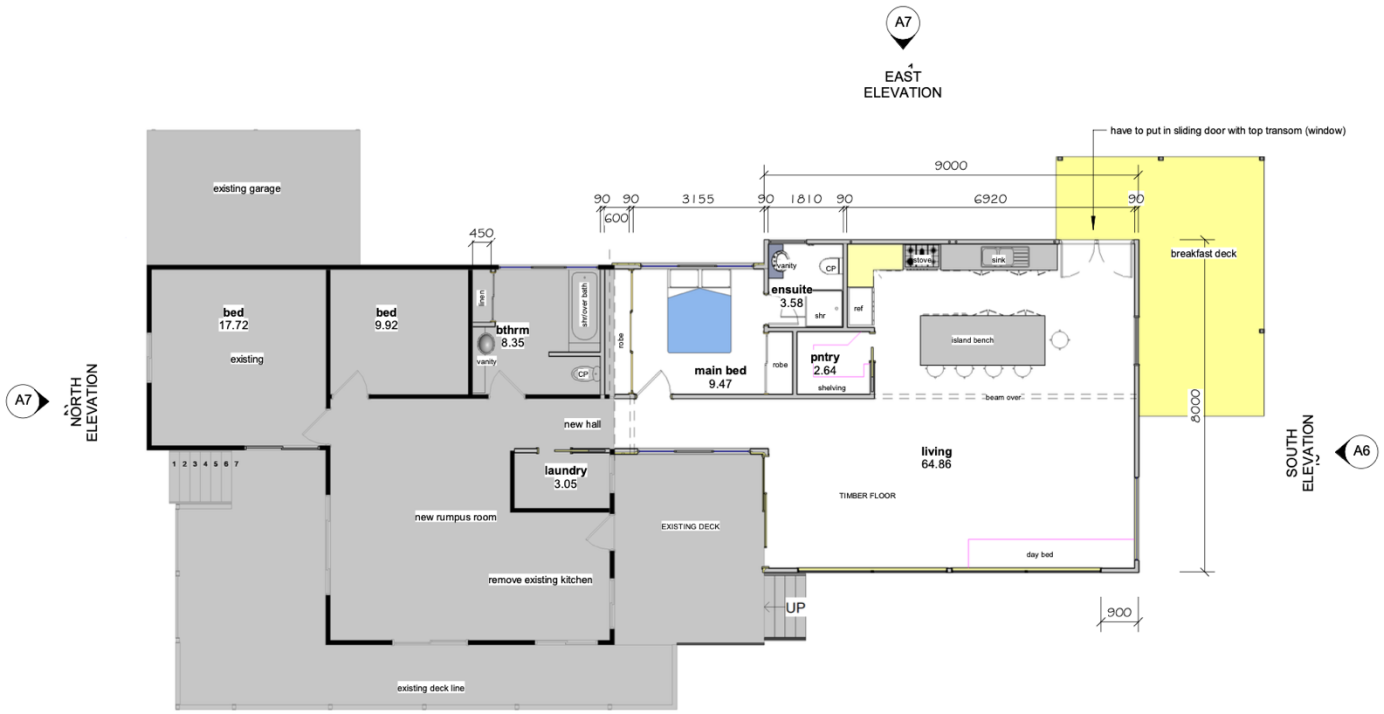
1. Recommend de-sludging the existing septic tank now and at three yearly intervals moving forward and fitting an bristle outlet filter.
2. Monitor the trench for signs of pooling or excessive vegetation growth on an annual basis.
3. If future signs of failure are evident then install further trenches in consultation with a qualified designer.

Please do not hesitate to contact me directly if you have any further questions regarding the above or require further information.

Regards,

Sven Nielsen MEngSc,CPSS
Director
E: sven@strataconsulting.com.au
P: 0413545358
W: www.strataconsulting.com.au

Appendix 1 Contemporary Site Photos (24/6/25) Proposed Floor Plan and As Installed Plans



1 FLOOR PLAN
1 : 100

WEST ELEVATION
A6

0 5 10 m

W40N2

Rev.	Date	Description

Printed Date
16/05/2025 11:17:50 AM

Onshore Designs
Building Designers
building design STUDIO
mail: 10 Restdown Drive, Otago, 7017
phone: mob 0429901003
web: www.buildingdesignstudio.com.au
email: onshoredesigns@bigpond.com

Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173
for Grace Jones and Sam Lennox

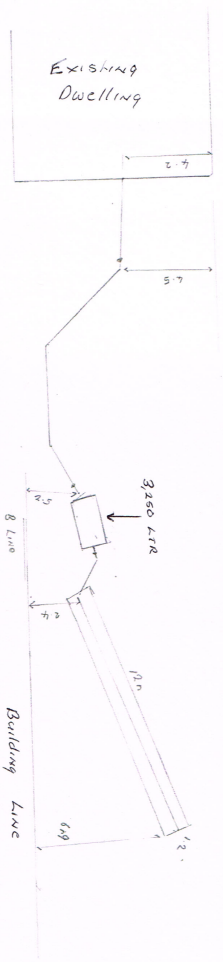
Drawing Title
Floor Plan

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: 1 : 100

Project No:
Sheet No: A5

17.8.2021

11 Rotuli St



Appendix 2 Wastewater Loading Certificate

Wastewater Loading Certificate	
System Capacity	5EP at 120L/person/day = 600 L/D
Design Summary	
• Effluent Quality	Primary
• Adopted Soil category	1
• Amended Adopted Soil Category	Not amended
• Adopted DLR/DIR (mm/d OR $L/m^2/d$)	40
• LAA Design	Trench
• Primary LAA Requirement	$15m^2$
• Reserve Area	Min 100% reserve LAA must be maintained in an undeveloped state near the primary LAA as identified on the site plan
Fixtures	Assumes std water saving fixtures inc 6/3L dual flush toilets, aerator forcets, Washing/dishwashing machines with min WELSS rating 4.5 star
Consequences of Variation in Effluent Flows	
• High Flows	The system should be capable of buffering against flows of up to 10 % in a 24 hr period or 5% over a 7 day period. System not rated for spa installation.
• Low Flows	Should not affect system performance
Consequences of Variation in Effluent Quality	Residence to avoid the installation of sink disposal systems (eg “sinkerators”), or the addition of large amounts of household cleaning products or other solvents. These can overload system BOD or affect effluent treatment by system biota.
Consequences of Lack of Maintenance and Monitoring Attention	Owners should maintain the system in compliance with systems Home Owners Manual and council permit. All livestock, vehicles and persons to be excluded from the LAA. Failure to ensure the above may lead to infection of waterways, bores or the spread of disease, as well as production of foul odours, attraction of pests and excessive weed growth.

Appendix 3 Form 35

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

To: ONSHORE DESIGNS *Owner name*

Address

Suburb/postcode

Form **35**

Designer details:

Name: S NIELSEN

Category: HYDRAULIC SERVICES

Business name: STRATA GEOSCIENCE AND ENVIRONMNETAL P/L

Phone No: 0413545358

Business address: 72-74 LAMBECK DRIVE

TULLAMARINE 3043

Fax No:

Licence No: CC6113K

Email address: sven@strataconsulting.com.au

Details of the proposed work:

Owner/Applicant AS ABOVE

Designer's project reference No.

Address: 11 ROTULI STREET

Lot No:

DODGERS FERRY

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

Description of work:

WASTEWATER OVERFLOW SYSTEM REVIEW

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

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

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

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

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

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
Schedules:	Prepared by:	Date
Specifications:	Prepared by: SN	Date 8/7/25
Computations	Prepared by: SN	Date 8/7/25
Performance solution proposals:	Prepared by:	Date
Test reports:	Prepared by:	Date

Standards, codes or guidelines relied on in design process:

AS1547-2012

Any other relevant documentation:	
SEE TERMS AND CONDITIONS IN REPORT	

Attribution as designer:

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

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

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

Name: (print)SVEN NIELSEN *SN*

Designer:	SVEN NIELSEN		8/7/25
Licence No:	CC6113K		

Assessment of Certifiable Works: (TasWater)

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

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

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

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

- [X] The works will not increase the demand for water supplied by TasWater
- [X] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- [X] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [X] The works will not damage or interfere with TasWater's works
- [X] The works will not adversely affect TasWater's operations
- [X] The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- [X] I have checked the LISTMap to confirm the location of TasWater infrastructur5

X	If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

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

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

	Name: (print)	*Signed*	*Date*
Designer:	SVEN NIELSEN		Date: 8/7/25

Appendix 4 Terms and Conditions

Scope of Work

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

Third Parties

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

Provision of Information

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

Integrity

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

Project Specific Criteria

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

Classification to AS2170-2011

It must be emphasised that the site classification to AS2170-2011 and recommendations referred to in this report are based solely on the observed soil profile at the time of the investigation for this report and account has been taken of Clause 2.1.1 of AS2170 - 2011. Other abnormal moisture conditions as defined in AS2170 – 2011 Clause 1.3.3 (a) (b) (c) and (d) may need to be considered in the design of the structure. Without designing for the possibility of all abnormal moisture conditions as defined in Clause 1.3.3, distresses will occur and may result in non "acceptable probabilities of serviceability and safety of the building during its design life", as defined in AS2170 - 2011, Clause 1.3.1. Furthermore the classification is preliminary in nature and needs verification at the founding surface inspection phase . The classification may be changed at this time based upon the nature of the founding surface over the entire footprint of the project area. Any costs associated with a change in the site classification are to be incurred by the client. Furthermore any costs associated with delayed works associated with a founding surface inspection or a change in classification are to be borne by the client. Where founding surface inspections are not commissioned the classifications contained within this report are void.

Subsurface Variations with Time

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

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

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

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

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

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

Furthermore Strata does not guarantee land application design life beyond 2 years from installation.

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

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

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

(i) the Client must not use, infringe or otherwise appropriate the same other than for the purpose of the project without first obtaining the written consent of Strata; and

(ii) the Client is entitled to a royalty free licence to use the same during the life of the works comprising the project.

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

Site Classification to AS2870-2011 - Residential Slabs and Footings

1. Introduction

Strata Geoscience and Environmental Pty Ltd was commissioned to provide a Site Classification to AS2870-2011 for:

Site Details and Key Investigation Outcomes	
Site Address	11 Rotuli Street Dodgers Ferry
Property Owner/Client	Onshore Designs
Development	Extensions
Date of Investigation	24/6/25
Key Geotechnical Limitations to Site Development	Low strength upper soil profiles, uncontrolled fill, vegetation potentially within zone of influence of future foundations, variable soil profiles.
Key Recommendations	**Deepened foundation recommended**
Site Classification to AS2870-2011	**Class P- Alert to uncontrolled fill>0.8m**
Subsidiary Site Classification to AS2870-2011 **(TO BE USED FOR PLUMBING DESIGN SEE APPENDIX 3)**	**Class S**
Site Classification to AS4055- 2021	**N3**

2. Scope

It is the scope of this investigation to consider geotechnical factors affecting the current development plan (if available). Namely;

- Geotechnical Drilling of minimum 2 Bore (s) to 1.8 m or refusal (whichever first) with logging, sampling and in-situ testing as required
- Site Classification to AS2870-2011 Residential Slabs and Footings.

The above scope has been determined in consultation with the Client and is subject to time and budgetary considerations. Geotechnical investigations are informative processes and further works may be required depending upon the findings of the results of this investigation.

The report does not include:

1. Soil contamination assessment including (salinity and acid sulphate)
2. Agricultural testing (nutrients of the soil)
3. A history study of the site showing past land uses and topography e.g. wells, trees, gullies.
4. Abnormal moisture conditions where there is no indication of differences across the site physically (existing structures, trees, dams, springs, creeks) or visual, tactile assessment.

3. Site Investigation

Please refer to Appendices for the results of field/laboratory investigation (where relevant) including site photographs, bore logs, bearing capacity and other relevant data

4. Interpretation

Geotechnical Parameter	Results
General Comments	**Sloping site with proximal tree potentially within zone of influence to future foundations. Soft low strength upper soil profiles. Uncontrolled fill up to approximately 2.5m on downslope end of development footprint.**
Site Geology (MRT Tas 1:250000)	- see Appendix 1
Geotechnical Risks:	
Slope Instability	Not mapped in a Hazard Band (DPAC 2025) accessed via LISTMAP.
Soft/Collapsing Soil	**Recommend a maximum 100kpa working bearing locally targeting a minimum 3000mm or refusal**
Ground surface Movement	Slight (site variability anticipated due to soil stratigraphy and variable geology)
Erosion Potential	Soils may be sensitive to wind and water erosion. Risks to be controlled by a soil and water management plan.
Surface Water	None observed
Shallow Groundwater/Perched Water	**Shallow groundwater likely throughout wet periods- site drainage required.**
Uncontrolled Fill/Disturbed Soils	**Deep uncontrolled fill/disturbed soil found onsite- fill MUST NOT be used as a founding substrate. Future soil disturbance will occur through site establishment.**
Impacting Vegetation (Onsite or on adjacent sites)	Vegetation potentially proximal to future foundations requiring design consideration
Proposed or recent removal of building/structures	Unknown
Proposed or recent removal of trees	Unknown
Excavation Difficulties	Not likely
Bulk Earthworks (Completed/partially completed/not proposed)	Large cut and fill within development area- localised piers required

It must be emphasised that in classifying the site, Strata Geoscience and Environmental P/L did not place sole reliance on the soil bore logs as a means of being an absolute representation of all subsurface features and conditions over the site. Any persons relying upon this document must not assume that subsurface conditions across the entire site will be identical to that represented in the bore logs.

Relevant information and guidance used in classifying the site includes several or all of the following:

1. Publications from Standards Australia, CSIRO, Foundation and Footings Society, Australian Geomechanics Society.
2. Well established and relevant knowledge of the behaviour of local soils and processes affecting soil behaviour (eg ephemeral springs, perched water tables, unstable slopes, collapsing soils, vegetation, etc).
3. The broad experience of the site classifier.
4. Specific investigations from nearby areas.
5. Past Performance of existing structures and foundations (where relevant and known)
6. Engineering Assessment of likely characteristic ground surface movement (ys) based upon estimated Ipt values and/or laboratory derived Iss values where relevant.

5. Construction Recommendations

5.1 Pre Construction

- **Results of this investigation MUST be confirmed when specific development plans are finalised. Failure to ensure this will void the classifications and recommendations contained within this report.**
- **Design depth to refusal for bored pier/driven pile designs may show variability over the site and may need to be considered in any contractor quotation. Construction machinery will show different depths to refusal that what is indicated in this investigation.**
- **Test pitting/piling with construction machinery is recommended before construction commences to determine excavatability of refusing substrate (if found).**
- **Screw piles should be driven to a minimum depth as nominated by the foundation designer to ensure lateral stability of each pile. Test piling at all corners of each building must occur to ensure this.**
- **This investigation did not determine rock strength parameters of the refusing substrate (if found) and therefore no comment is made about the excavatability of rock at depth. Hard rock may be encountered which may be difficult to excavate and would therefore increase the costs associated with bulk earthworks.**
- **Rocks may be liberated from bulk earthworks or vertical boring. Where large rocks are liberated this may impact upon the ability to cost effectively build on the site and further advice should be sort from Strata. Such profiles may also significantly increase earthworks costs and or materials cost in foundations.**
- **Where rock is encountered the in relation to the Foundation Recommendations the following terms should be noted as per AS2870-2011 Residential Slabs and Footings**
    - **Rock Outcrops** - Where a footing or edge beam encounters a single local rock outcrop over a length less than 1 m, the depth of the footing or edge beam may be reduced by up to one-third, provided the amount of top and bottom reinforcement is doubled and extended 500 mm past the section with reduced depth. Alternatively, the footing may be stepped or raised, provided the structural stiffness is preserved as per AS2870-2011 Clause 3.1.6.
    - **Partial Rock Outcrops** - Where part of the footing is on rock and part is on soil, provision for movement at the change between the two types of foundation shall be made by articulation of the superstructure or strengthening of the footing system. On Reactive Sites (M, H1 and H2) where part of the footing is on rock and part is on soil, the design shall be in accordance with engineering principles as per AS2870-2011 Clause 3.1.7.
    - **Design for complete rock foundation** - Where the edge beam or footing is to be founded entirely on rock, the footing or beam may be replaced by a levelling pad of concrete or mortar as per AS2870-2011 Clause 3.1.8.

- **Abnormal moisture conditions as defined in AS2870-2011 Clause 1.3.3 (a-d) MUST be considered in the design of competent footings. Without such consideration distresses of foundations may occur and result in non acceptable performance as defined in AS2870-2011 Clause 1.3.1.**
- **Uncontrolled Fill** - Any FILLING that does not meet the requirements of AS2870- 2011 Clause 2.5.3(b). This clause allows up to 0.8m of uncontrolled SAND FILL and up to 0.4m of uncontrolled CLAY FILL without impacting on the above site classification following that all foundations are founded on the natural soils through the filling.
- **Rolled Fill** - Consists of material compacted in layers by repeated rolling with an excavator or similar equipment. The depth of rolled fill shall not exceed 0.6m compacted in layers of not more than 0.3m thick for sand material or 0.3m compacted in layers of not more than 0.15m thick for other materials as per AS2870-2011 Clause 6.4.2(b).
- **Controlled Fill** – Fill that will be required to support structures or associated pavements, or for which engineering properties are to be controlled – Refer to AS2870-2011 Clauses 2.5.3, 2.5.3(a), and 6.4.2(a) – i.e. where a specification has been provided on the type, quality, and compaction requirements for filling at a site and the earthworks have been deemed compliant or have complied with the requirements of the specification.
- The recommendations of CSIRO Building Technology File 18 be adopted.
- An apron of paving around the building perimeter sloping away from foundations with a minimum fall of 1:60 be considered for Class M, H-1, H-2, E and P sites.

5.2 During Construction

Throughout construction it is highly recommended that:

- Inspection of the natural soil surface after footings excavation but prior to construction is required by Strata Geoscience and Environmental in accordance with Appendix D of AS 2870-2011. Failure to comply with this recommendation will void all classifications and recommendations contained in this report. The site classification may be changed at this time depending upon the nature of the founding surface which is dependant in part on foundation design.
- **Site cutting should be avoided if possible and if it occurs below 500mmbgs occurs then reclassification MUST be commissioned.**
- **Fill MUST NOT be used as a founding substrate.**
- All earthworks onsite must follow the recommendations of AS 3798-2007.
- Consideration should be given to drainage and sediment control on site during and after construction. Specifically upslope interceptor drainage must be placed around footings areas and downpipes must be directed away from discharging into founding areas.
- All colluvial rocks and boulders in founding zones should be removed
- All large trees near the building envelope must be removed. If construction takes place in summer or autumn then moisture conditions should be stabilised by soaking of dry areas around the former tree.
- Shrinkage cracking is almost inevitable in concrete slabs and is associated with the drying process. Therefore care must be taken where brittle or sensitive floor coverings are proposed, or where a polished slab is planned. The risk of damage can be reduced by not installing floor coverings until after shrinkage has occurred, which can take in excess of 3 months, or by using flexible mortars and appropriate sheeting material.
- Vertical barriers to prevent root incursions around founding zones should be considered in areas where gardens are to be established near foundations.

5.3 Post Construction

After construction, there are certain practices that the owner/occupier should be aware of to prevent excessive foundation movements. The owner will be responsible for any damage or loss associated with disregard for the recommendations contained in CSIRO Building Technology Files 18 “Foundation Maintenance and Footings Performances: A Homeowners Guide” available through CSIRO.

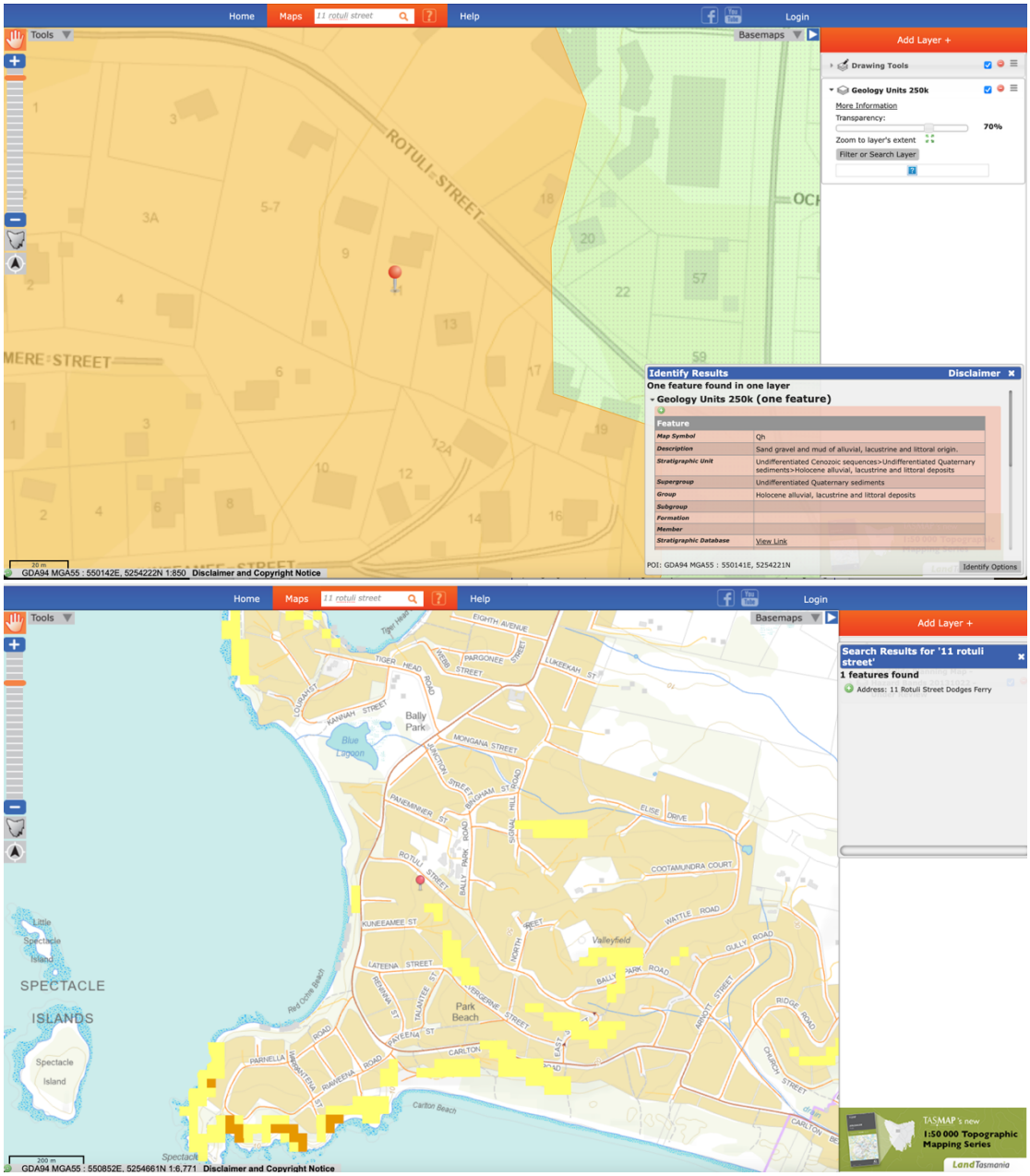
It is furthermore recommended that:

- Gardens or large shrubs or trees must not be established immediately adjacent to foundations
- Garden beds or lawn near foundations must not be excessively watered.
- Leaking underground services and downpipes or gutters must be fixed immediately.

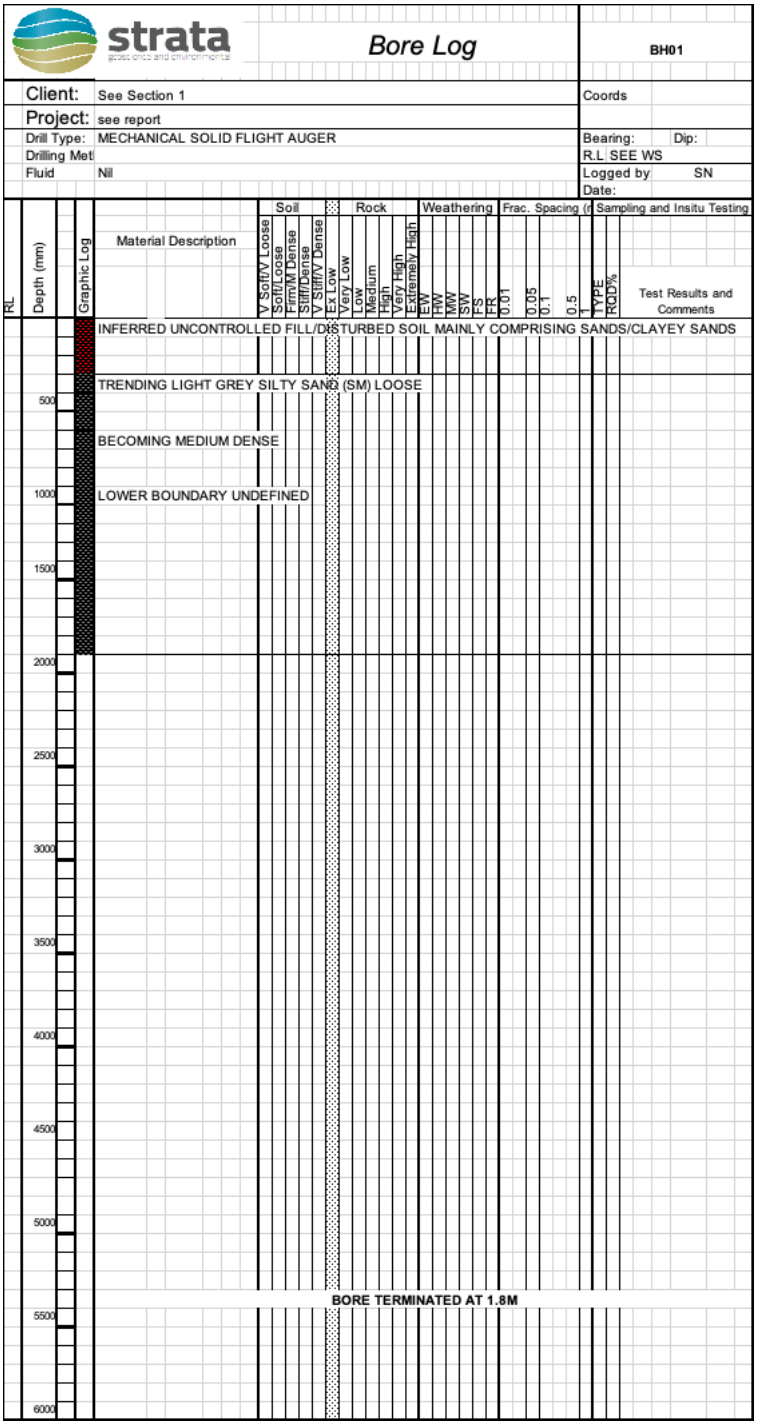
S Nielsen MEngSc CPSS
Director
Strata Geoscience and Environmental Pty Ltd
E:sven@strataconsulting.com.au

Appendix 1 Contemporary Site Photos and Geological Mapping


PREFS
042°51'47.22"S / 147°36'49.84"E ↑21m
MAIL
MAP
24/06/25
N
15:13:52
LOG
+10.2°
-08.2°
SHOW EXTRAS...
322° N38W 5724mils TRUE
ZERO
A-B
CAL
300
330
COLOR
0.5 X
PREFS
042°51'47.15"S / 147°36'49.74"E ↑27m
MAIL
MAP
24/06/25
N
15:13:59
LOG
+10.5°
-11.8°
SHOW EXTRAS...
317° N43W 5636mils TRUE
ZERO
A-B
CAL
300
330
COLOR
0.5 X
PREFS
042°51'46.77"S / 147°36'49.52"E ↑25m
MAIL
MAP
24/06/25
N
15:14:15
LOG
-08.0°
-15.1°
SHOW EXTRAS...
193° S13W 3431mils TRUE
ZERO
A-B
CAL
S
210
COLOR
0.5 X


Home
Maps
11 rotuli street
Help
Login
Tools
Basemaps
Add Layer +
Drawing Tools
Geology Units 250k
More Information
Transparency:
70%
Zoom to layer's extent
Filter or Search Layer
ROTULI STREET
MERE STREET
Identify Results
Disclaimer
One feature found in one layer
Geology Units 250k (one feature)
Feature
Map Symbol
Qh
Description
Sand gravel and mud of alluvial, lacustrine and littoral origin.
Stratigraphic Unit
Undifferentiated Cenozoic sequences>Undifferentiated Quaternary sediments>Holocene alluvial, lacustrine and littoral deposits
Supergroup
Undifferentiated Quaternary sediments
Group
Holocene alluvial, lacustrine and littoral deposits
Subgroup
Formation
Member
Stratigraphic Database
View Link
POI: GDA94 MGA55 : 550141E, 5254221N
Identify Options
GDA94 MGA55 : 550142E, 5254222N 1:850
Disclaimer and Copyright Notice
Search Results for '11 rotuli street'
1 features found
Address: 11 Rotuli Street Dodges Ferry
Bally Park
Blue Lagoon
Park Beach
Valleyfield
SPECTACLE ISLANDS
Spectacle Island
Little Spectacle Island
Red Ochre Beach
Carlton Beach
TASMAP's new
1:50 000 Topographic Mapping Series
LandTasmania
GDA94 MGA55 : 550852E, 5254661N 1:6,771
Disclaimer and Copyright Notice

Appendix 2 Bore Logs

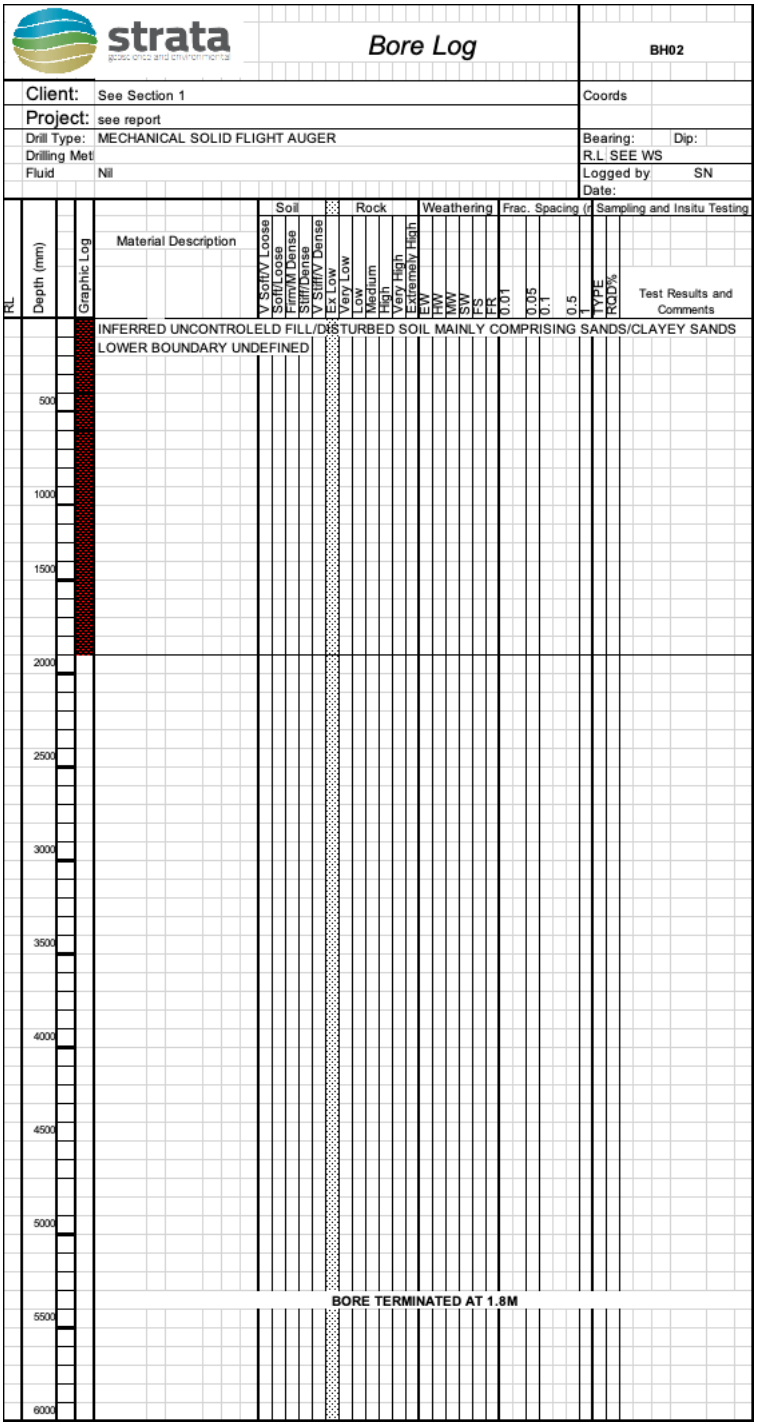


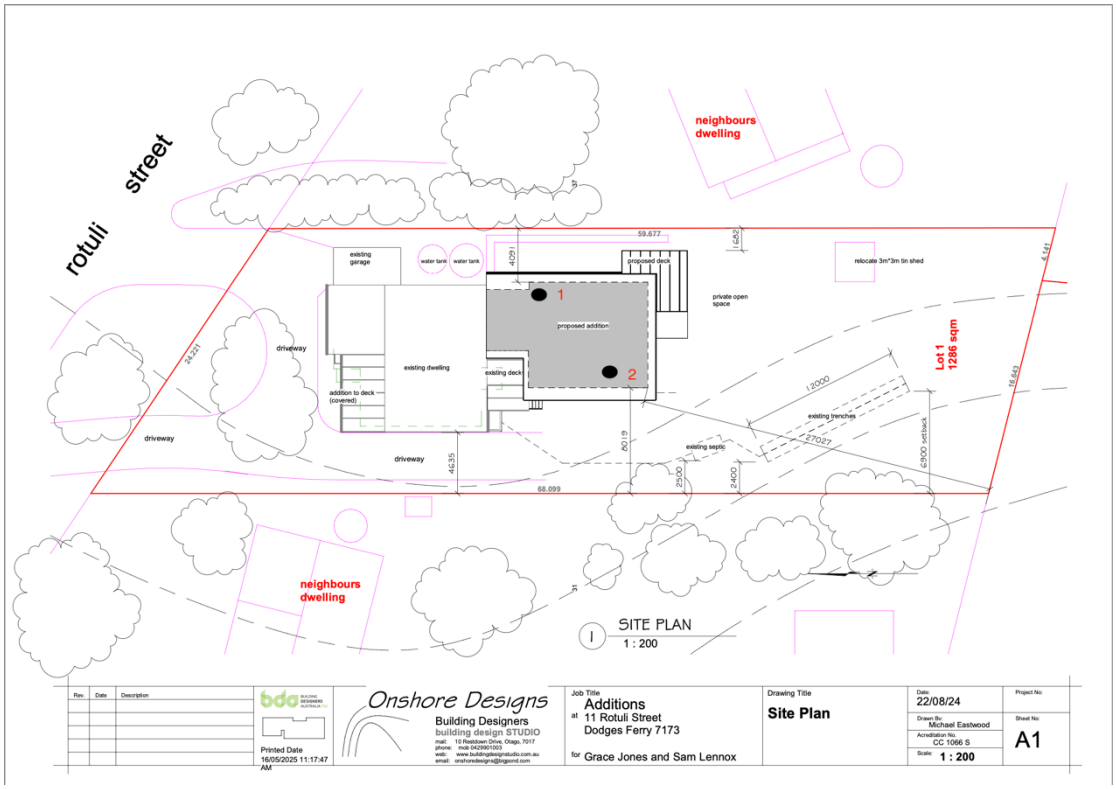
strata
geoscience and environmental

Bore Log — BH01

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

RL	Depth (mm)	Graphic Log	Material Description	Soil: V Soft/V Loose; Soft/Loose; Firm/M Dense; Stiff/Dense; V Stiff/V Dense	Rock: Ex Low; Very Low; Low; Medium; High; Very High; Extremely High	Weathering: EW; HW; MW; SW; FS; FR	Frac. Spacing (m): 0.01; 0.05; 0.1; 0.5; 1	Sampling and Insitu Testing: TYPE; RQD%	Test Results and Comments
			INFERRED UNCONTROLLED FILL/DISTURBED SOIL MAINLY COMPRISING SANDS/CLAYEY SANDS						
	500		TRENDING LIGHT GREY SILTY SAND (SM) LOOSE						
			BECOMING MEDIUM DENSE						
	1000		LOWER BOUNDARY UNDEFINED						
	1500								
	2000								
	2500								
	3000								
	3500								
	4000								
	4500								
	5000								
	5500		BORE TERMINATED AT 1.8M						
	6000								


strata
geoscience and environmental
Bore Log
BH02
Client: See Section 1
Coords
Project: see report
Drill Type: MECHANICAL SOLID FLIGHT AUGER
Bearing: Dip:
Drilling Meth
R.L SEE WS
Fluid Nil
Logged by SN
Date:
Soil
Rock
Weathering
Frac. Spacing (m
Sampling and Insitu Testing
RL
Depth (mm)
Graphic Log
Material Description
V Soft/V Loose
Soft/Loose
Firm/M Dense
Stiff/Dense
V Stiff/V Dense
Ex Low
Very Low
Low
Medium
High
Very High
Extremely High
EW
HWV
MWV
SWV
FS
FR
0.01
0.05
0.1
0.5
1
TYPE
RQD%
Test Results and Comments
INFERRED UNCONTROLELD FILL/DISTURBED SOIL MAINLY COMPRISING SANDS/CLAYEY SANDS
LOWER BOUNDARY UNDEFINED
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
BORE TERMINATED AT 1.8M


rotuli street
neighbours dwelling
existing garage
water tank
water tank
4091
59.677
1652
proposed deck
relocate 3m*3m tin shed
5.441
private open space
1
proposed addition
2
Lot 1
1286 sqm
driveway
24.231
existing dwelling
existing deck
addition to deck (covered)
12000
existing trenches
27027
6900 setback
55.493
driveway
driveway
4635
2019
existing septic
2500
2400
68.099
neighbours dwelling
SITE PLAN
1 : 200
Rev.
Date
Description
Printed Date
16/05/2025 11:17:47 AM
Onshore Designs
Building Designers
building design STUDIO
mail: 10 Restdown Drive, Otago, 7017
phone: mob 0429901003
web: www.buildingdesignstudio.com.au
email: onshoredesigns@bigpond.com
Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173
for Grace Jones and Sam Lennox
Drawing Title
Site Plan
Date:
22/08/24
Drawn By:
Michael Eastwood
Accreditation No.
CC 1066 S
Scale:
1 : 200
Project No:
Sheet No:
A1

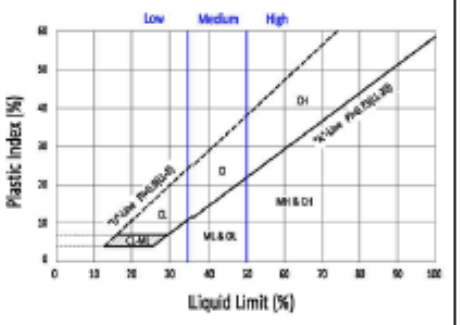
The following information is intended to assist in the interpretation of terms and symbols used in geotechnical borehole logs, test pit logs and reports issued by or for the Queensland Department of Transport and Main Roads (TMR). More detailed information relating to specific test methods is available in the TMR Materials Testing Manual (MTM) and the relevant Australian Standards.

Soil Descriptions

Description and Classification of Soils for Geotechnical Purposes: Refer to AS1726-1993 (Appendix A).

The following chart (adapted from AS1726-1993, Appendix A, Table A1) is based on the Unified Soil Classification System (USCS).

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



Soil Colour: Is described in the moist condition using black, white, grey, red, brown, orange, yellow, green or blue. Borderline cases can be described as a combination of two colours, with the weaker followed by the stronger. Modifiers such as pale, dark or mottled, can be used as necessary. Where colour consists of a primary colour with secondary mottling, it should be described as follows:

(Primary) mottled (Secondary). Refer to AS 1726-1993, A2.4 and A3.3.

Soil Moisture Condition: Is based on the appearance and feel of soil. Refer to AS 1726-1993, A2.5.

Term	Description
Dry	Cohesive soils; hard and friable or powdery, well dry of plastic limit. Granular soils; cohesionless and free-running.
Moist	Soil feels cool, darkened in colour. Cohesive soils can be moulded. Granular soils tend to cohere.
Wet	Soil feels cool, darkened in colour. Cohesive soils usually weakened and free water forms on hands when handling. Granular soils tend to cohere and free water forms on hands when handling.

Consistency of Cohesive Soils: May be estimated using simple field tests, or described in terms of a strength scale. In the field, the undrained shear strength (s_u) can be assessed using a simple field tool appropriate for cohesive soils, in conjunction with the relevant calibration. Refer to AS 1726-1993, Table A4.

Consistency - Essentially Cohesive Soils					
Term	Field Guide	Symbol	SPT "N" Value	Undrained Shear Strength s_u (kPa)	Unconfined Compressive Strength q_u (kPa)
Very soft	Oozes between fingers when squeezed in hand.	VS	0-2	<12	<25
Soft	Easily moulded with fingers.	S	2-4	12-25	25-50
Firm	Can be moulded by strong pressure of fingers.	F	4-8	25-50	50-100
Stiff	Not possible to mould with fingers.	St	8-15	50-100	100-200
Very stiff		VSt	15-30	100-200	200-400
Hard	Can be indented with difficulty by thumb nail.	H	>30	>200	>400

Note: SPT - N to q_u correlation from Terzaghi and Peck, 1967. (General guide only).

Soil Particle Sizes	
Term	Size Range
BOULDERS	>200 mm
COBBLES	63-200 mm
Coarse GRAVEL	20-63 mm
Medium GRAVEL	6-20 mm
Fine GRAVEL	2.36-6 mm
Coarse SAND	0.6-2.36 mm
Medium SAND	0.2-0.6 mm
Fine SAND	0.075-0.2 mm
SILT	0.002-0.075 mm
CLAY	<0.002 mm

Consistency of Non-Cohesive Soils: Is described in terms of the density index, as defined in AS 1289.0-2000. This can be assessed using a field tool appropriate for non-cohesive soils, in conjunction with the relevant calibration. Refer to AS 1726-1993, Table A5; BS5930-1999, p117.

Consistency - Essentially Non-Cohesive Soils				
Term	Symbol	SPT N Value	Field Guide	Density Index (%)
Very loose	VL	0-4	Foot imprints readily	0-15
Loose	L	4-10	Shovels Easily	15-35
Medium dense	MD	10-30	Shovelling difficult	35-65
Dense	D	30-50	Pick required	65-85
Very dense	VD	>50	Picking difficult	85-100

Standard Penetration Test (SPT): Refer to. AS 1289.6.3.1-2004. Example report formats for SPT results are shown below:

Test Report	Penetration Resistance (N)	Explanation / Comment
4, 7, 11	N=18	Full penetration; N is reported on engineering borehole log
18, 27, 32	N=59	Full penetration; N is reported on engineering borehole log
4, 18, 30/15 mm	N is not reported	30 blows causes less than 100 mm penetration (3rd interval) – test discontinued
30/80 mm	N is not reported	30 blows causes less than 100 mm penetration (1st interval) – test discontinued
rw	N<1	Rod weight only causes full penetration
hw	N<1	Hammer and rod weight only causes full penetration
hb	N is not reported	Hammer bouncing for 5 consecutive blows with no measurable penetration – test discontinued

Rock Descriptions

Refer to AS 1726-1993 (Appendix A3.3) for the description and classification of rock material composition, including:

(a) Rock type (Table A6, (a) and (b))
(b) Grain size
(c) Texture and fabric
(d) Colour (describe as per soil).

The condition of a rock material refers to its weathering characteristics, strength characteristics and rock mass properties. Refer to AS 1726-1993 (Appendix A3 Tables A8, A9 and A10).

Weathering Condition (Degree of Weathering):

The degree of weathering is a continuum from fresh rock to soil. Boundaries between weathering grades may be abrupt or gradational.

Rock Material Weathering Classification		
Weathering Grade	**Symbol**	**Definition**
Residual Soil	RS	Soil-like material developed on extremely weathered rock; the mass structure and substance fabric are no longer evident; there is a large change in volume but the material has not been significantly transported.
Extremely Weathered Rock	XW	Rock is weathered to such an extent that it has 'soil' properties, i.e. it either disintegrates or can be remoulded in water, but substance fabric and rock structure still recognisable.
Highly Weathered Rock	HW	Strong discolouration is evident throughout the rock mass, often with significant change in the constituent minerals. The intact rock strength is generally much weaker than that of the fresh rock.
Moderately Weathered Rock	MW	Modest discolouration is evident throughout the rock fabric, often with some change in the constituent minerals. The intact rock strength is usually noticeably weaker than that of the fresh rock.
Slightly Weathered Rock	SW	Rock is slightly discoloured but shows little or no change of strength from fresh rock.
Fresh Rock	FR	Rock shows no sign of decomposition or staining.

Notes:
1. Minor variations within broader weathering grade zones will be noted on the engineering borehole logs.
2. Extremely weathered rock is described in terms of soil engineering properties.
3. Weathering may be pervasive throughout the rock mass, or may penetrate inwards from discontinuities to some extent.
4. The 'Distinctly Weathered (DW)' class as defined in AS 1726-1993 is divided to incorporate HW and MW in the above table. The symbol DW should not be used.

Strength Condition (Intact Rock Strength):

Strength of Rock Material (Based on Point Load Strength Index, corrected to 50 mm diameter – $I_{s(50)}$. Field guide used if no tests available. Refer to AS 4133.4.1-2007.				
Term	**Symbol**	**Point Load Index (MPa)** $I_{s(50)}$		**Field Guide to Strength**
Extremely Low	EL	≤0.03		Easily remoulded by hand to a material with soil properties.
Very Low	VL	>0.03	≤0.1	Material crumbles under firm blows with sharp end of pick; can be peeled with knife; too hard to cut a triaxial sample by hand. Pieces up to 3 cm thick can be broken by finger pressure.
Low	L	>0.1	≤0.3	Easily scored with a knife; indentations 1 mm to 3 mm show in the specimen with firm blows of the pick point; has dull sound under hammer. A piece of core 150 mm long by 50 mm diameter may be broken by hand. Sharp edges of core may be friable and break during handling.
Medium	M	>0.3	≤1.0	Readily scored with a knife; a piece of core 150 mm long by 50 mm diameter can be broken by hand with difficulty.
High	H	>1	≤3	A piece of core 150 mm long by 50 mm diameter cannot be broken by hand but can be broken by a pick with a single firm blow; rock rings under hammer.
Very High	VH	>3	≤10	Hand specimen breaks with pick after more than one blow; rock rings under hammer.
Extremely High	EH	>10		Specimen requires many blows with geological pick to break through intact material; rock rings under hammer.

Notes:
1. These terms refer to the strength of the rock material and not to the strength of the rock mass which may be considerably weaker due to the effect of rock defects.
2. Anisotropy of rock material samples may affect the field assessment of strength.

Discontinuity Description: Refer to AS 1726-1993, Table A10.

Anisotropic Fabric	
BED	Bedding
FOL	Foliation
LIN	Mineral lineation
Defect Type	
LP	Lamination Parting
BP	Bedding Parting
FP	Cleavage / Foliation Parting
J, Js	Joint, Joints
SZ	Sheared Zone
CZ	Crushed Zone
BZ	Broken Zone
HFZ	Highly Fractured Zone
AZ	Alteration Zone
VN	Vein

Roughness (e.g. Planar, Smooth is abbreviated Pl / Sm)		Class
Stepped (Stp)	Rough or Irregular (Ro)	I
	Smooth (Sm)	II
	Slickensided (Sl)	III
Undulating (Un)	Rough (Ro)	IV
	Smooth (Sm)	V
	Slickensided (Sl)	VI
Planar (Pl)	Rough (Ro)	VII
	Smooth (Sm)	VIII
	Slickensided (Sl)	IX

Aperture		Infilling		
Closed	CD	No visible coating or infill	Clean	Cn
Open	OP	Surfaces discoloured by mineral/s	Stain	St
Filled	FL	Visible mineral or soil infill <1mm	Veneer	Vr
Tight	TI	Visible mineral or soil infill >1mm	Coating	Ct

Other	
Cly	Clay
Fe	Iron
Co	Coal
Carb	Carbonaceous
Sinf	Soil Infill Zone
Qz	Quartz
CA	Calcite
Chl	Chlorite
Py	Pyrite
Int	Intersecting
Inc	Incipient
DI	Drilling Induced
H	Horizontal
V	Vertical

Note: Describe 'Zones' and 'Coatings' in terms of composition and thickness (mm).

Discontinuity Spacing: On the geotechnical borehole log, a graphical representation of defect spacing vs depth is shown. This representation takes into account all the natural rock defects occurring within a given depth interval, excluding breaks induced by the drilling / handling of core. Refer to AS 1726-1993, BS5930-1999.

Defect Spacing			Bedding Thickness (Sedimentary Rock Stratification)	
Spacing/Width (mm)	Descriptor	Symbol	Descriptor	Spacing/Width (mm)
			Thinly Laminated	< 6
<20	Extremely Close	EC	Thickly Laminated	6 – 20
20 – 60	Very Close	VC	Very Thinly Bedded	20 – 60
60 – 200	Close	C	Thinly Bedded	60 – 200
200 – 600	Medium	M	Medium Bedded	200 – 600
600 – 2000	Wide	W	Thickly Bedded	600 – 2000
2000 – 6000	Very Wide	VW	Very Thickly Bedded	> 2000
>6000	Extremely Wide	EW		

Defect Spacing in 3D	
Term	Description
Blocky	Equidimensional
Tabular	Thickness much less than length or width
Columnar	Height much greater than cross section

Defect Persistence (areal extent)
Trace length of defect given in metres

Symbols

The list below provides an explanation of terms and symbols used on the geotechnical borehole, test pit and penetrometer logs.

Test Results			
PI	Plasticity Index	c'	Effective Cohesion
LL	Liquid Limit	c_u	Undrained Cohesion
LI	Liquidity Index	c'_R	Residual Cohesion
DD	Dry Density	ϕ'	Effective Angle of Internal Friction
WD	Wet Density	ϕ_u	Undrained Angle of Internal Friction
LS	Linear Shrinkage	ϕ'_R	Residual Angle of Internal Friction
MC	Moisture Content	c_v	Coefficient of Consolidation
OC	Organic Content	m_v	Coefficient of Volume Compressibility
WPI	Weighted Plasticity Index	$c_{\alpha\varepsilon}$	Coefficient of Secondary Compression

Test Symbols	
DCP	Dynamic Cone Penetrometer
SPT	Standard Penetration Test
CPTu	Cone Penetrometer (Piezocone) Test
PANDA	Variable Energy DCP
PP	Pocket Penetrometer Test
U50	Undisturbed Sample 50 mm (nominal diameter)
U100	Undisturbed Sample 100mm (nominal diameter)
UCS	Uniaxial Compressive Strength
Pm	Pressuremeter

Geotechnical Terms and Symbols

Test Results			
WLS	Weighted Linear Shrinkage	e	Voids Ratio
DoS	Degree of Saturation	ϕ'_{cv}	Constant Volume Friction Angle
APD	Apparent Particle Density	q_t / q_c	Piezocone Tip Resistance (corrected / uncorrected)
s_u	Undrained Shear Strength	q_d	PANDA Cone Resistance
q_u	Unconfined Compressive Strength	$I_{s(50)}$	Point Load Strength Index
R	Total Core Recovery	*RQD*	Rock Quality Designation

Test Symbols	
FSV	Field Shear Vane
DST	Direct Shear Test
PR	Penetration Rate
A	Point Load Test (axial)
D	Point Load Test (diametral)
L	Point Load Test (irregular lump)

28/11/13 Groundwater level on the date shown	Water Inflow	Water Outflow

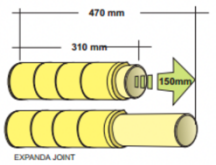
Appendix 3 Site Classification and Plumbing Specifications

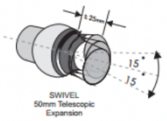
Table SP 01 - SOIL CLASSIFICATION, DIFFERENTIAL MOVEMENT, GRADE, ANGLE, JOINTS LOCATION & DRAWING No'S. CHART.

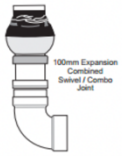
AS2870-2011 SOIL CLASSIFICATION	ON SITE SOIL CONDITIONS	DIFFERENTIAL MOVEMENT	SEWER & Stormwater GRADE	SWIVEL * (50mm Expansion)	SWIVEL/COMBO * (100mm Expansion)	EXPANDA JOINTS *	CREEP SLOPE SITES	DRAWING NUMBER
A	Most Sand & Rock sites	0 - 10mm	1:60 Minimum	Not necessary	Not necessary	Not necessary	These are termed P sites and are referred to in Drawing SP 105	N/a
S	Slightly reactive Soils	10 - 20mm						N/a
M	Moderatively reactive soils	20 - 40mm						SP 100 & SP 101
H1	Highly reactive soils	40 - 60mm	1:40 Minimum	As per AS3500.5 using 2 units outside and an Expansion Joint at every riser Not applicable to suspended sub-floors	As necessary using either or both Bend or Straight units ....unless suspended from slab	At Junctions within 1 mtr of internal building footprint and every 6 mtrs. As per Differential Movement See AS2032-2006 Clause 6.4.2.2-4 for suspension requirements		SP 102
H2	Very highly reactive soils	60 - 75mm						SP 102A
E	Extremely reactive soils	75 + mm						SP 102A
P	Soils affected by Abnormal moisture and conditions	From.. 20 + mm	As per Differential Movement					SP 105A

NOTE: Engineer or local Authority details take precedence over this chart

To be read in conjunction with Storm Plastics drawings shown.







GRADE RATIO	FALL IN 10 mtrs	ANGLE	GRADE %
1:100	100 mm	.57	1.0
1:80	125 mm	.71	1.25
1:60	167 mm	.95	1.65
1:50	200 mm	1.14	2.0
1:40	250 mm	1.43	2.5

* Unless specified otherwise, these joints are to be set at 50% of total telescopic movement.

Jan. 2015, WPT.

Appendix 4 Form 55

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: ONSHORE DESIGNS *Owner /Agent*

Address

Suburb/postcode

Form **55**

Qualified person details:

Qualified person: SVEN NIELSEN

Address: 17 LITTLE ARTHUR STREET

NORTH HOBART

Phone No: 0413545358

Fax No:

Licence No: AO1443 – CPSS

Email address: SVEN@STRATACONSULTING.COM.AU

Qualifications and Insurance details: MEngSc CPSS
PI INSURANCE
PUBLIC LIABILITY CONTACT FOR DETAILS

(description from Column 3 of the Director of Building Control's Determination)

Speciality area of expertise: INDICATIVE Site Classification to AS2870-2011/AS4055-2021

(description from Column 4 of the Director of Building Control's Determination)

Details of work:

Address: 11 ROTULI STREET

DODGERS FERRY

Lot No:

Certificate of title No:

The assessable item related to this certificate: INDICATIVE Site Classification to AS2870-2011/AS4055-2021

(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: FOUNDATION CLASSIFICATION

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

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

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

a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:	SR06269
Relevant calculations:	SEE REPORT WHERE RELEVANT
References:	

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

AS2870-2011 ASSESSMENT

Scope and/or Limitations

SEE RECOMMENDATIONS AND WELL AS TERMS AND CONDITIONS CONTAINED WITHIN THE RELEVANT REPORT, ESPECIALLY NOTING:

1. ENGINEERING AND ARCHITECTUAL PLANS TO BE SUBMITTED TO STRATA FOR RATIFICATION AGAINST REPORT RECOMMEDATIONS PRIOR TO CONSTRUCTION. FAILURE TO ENSURE THIS WILL VOID ALL CLASSIFICATIONS AND RECOMMENDATIONS CONTAINED IN THE REPORT
2. FOUNDING SURFACE INSPECTION OF ALL EXCAVATIONS PRIOR TO FOUNDATION CONSTRUCTION BY STRATA IS MANDATORY AND FAILING TO COMMISSION THIS WILL VOID ALL CLASSIFICATIONS AND RECOMMENDATIONS CONTAINED IN THE REPORT. THIS IS TO ENSURE THAT ALL FOUNDATIONS ARE TAKEN TO RECOMMENDED FOUNDING SUBSTRATE AND NOT SOFT TOPSOILS OR UNCONTROLLED FILL (WHERE PRESENT)
3. IF SITE CUTTING BEYOND 500MM OCCURS THEN THE SITE MUST BE RECLASSIFIED IN CONSULTATION WITH STRATA.

FORM VALID FOR 2 YEARS FROM THE DATE BELOW

I certify the matters described in this certificate.

	Signed:	*Certificate No:*	*Date:*
Qualified person:	S NIELSEN	SR06259	8/7/25

Appendix 5 Terms and Conditions

Scope of Work

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

Third Parties

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

Provision of Information

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

Integrity

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

Project Specific Criteria

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

Classification to AS2870-2011

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

Slope Instability Risks

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

Subsurface Variations with Time

Any report provided by Strata is based upon subsurface conditions encountered at the time of the investigation. Conditions can and do change significantly and unexpectedly over a short period of time. For example groundwater levels may fluctuate over time, affecting latent soil bearing capacity and ex-situ/insitu fill sediments may be placed/removed from the site. Changes to the subsurface conditions that were encountered at the time of the investigation void all recommendations made by Strata in any report. Strata is not liable, and

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

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

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

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

Geo-environmental Considerations

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

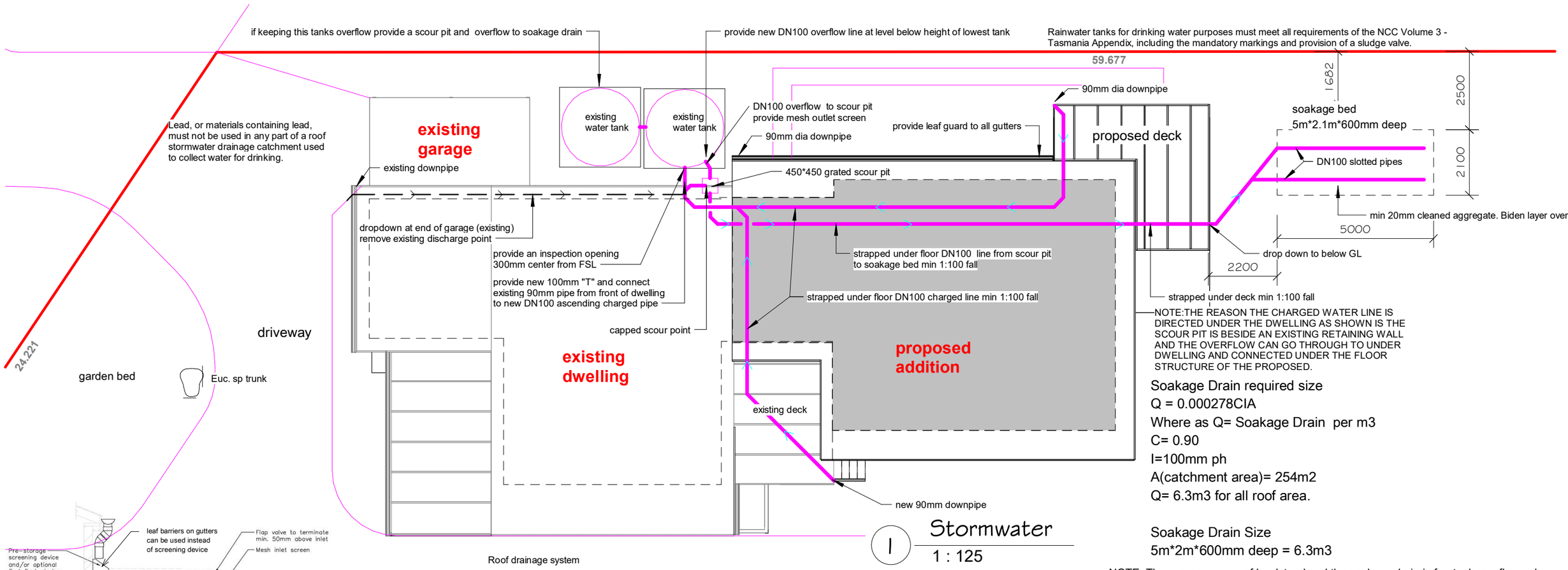
Copyright and Use of Documents
Copyright in all drawings, reports, specifications, calculations and other documents provided by Strata or its employees in connection with the Services remain vested in Strata. The Client has a licence to use the documents for the purpose of completing the project. However,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

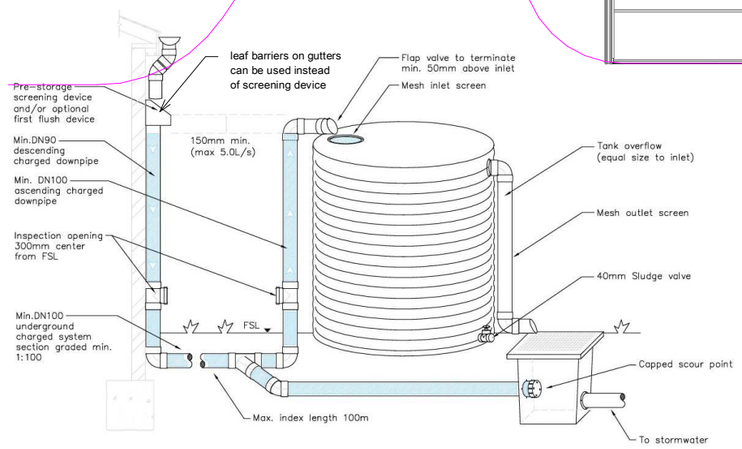
If, during the course of providing the Services, Strata develops, discovers or first reduces to practice a concept, product or process which is capable of being patented then such concept, product or process is and remains the property of Strata and:

(i) the Client must not use, infringe or otherwise appropriate the same other than for the purpose of the project without first obtaining the written consent of Strata; and

(ii) the Client is entitled to a royalty free licence to use the same during the life of the works comprising the project.

Digital Copies of Report
If any report is provided to the Client in an electronic copy except directly from Strata, the Client should verify the report contents with Strata to ensure they have not been altered in any way from the original provide by Strata.





TYPICAL INSTALLATION LAYOUT

All pipe and associated materials must be in accordance with AS/NZS 3500.3 and when in contact with drinking water must be compliant to the requirements of:
a. AS/NZS 4020, or
b. Through 'Evidence of Suitability' from an accredited testing laboratory as per the PCA. Certificates of conformity must be sought from respective manufacturers for stormwater products (AS/NZS 1254) and PVC-U products (AS/NZS 1260).

Solvent cement and priming fluid – where used for the jointing of PVC-U pipes and fittings must conform to AS/NZS 3879 and AS/NZS 4020.

Type P solvent cement (green) and priming fluid must be used for all charged downpipe joints.
Sealants used in any part of the roof stormwater drainage system must be neutral cure.

Roof drainage system

Roof gutters draining to a rainwater tank that is used for drinking water purposes shall:
4.3 For new construction, have a minimum fall of at least 1:500 for eaves gutters and 1:200 for box gutters. Increased fall should be applied wherever possible to minimise ponding, silt and debris build-up that may promote the growth of pathogens.

4.4 Where the presence of directly overhanging vegetation occurs, be fitted with a leaf-guard system that prevents the accumulation of leaf matter and other debris within the gutter system. Such a system must in no way impede the free flow of water within the gutter or create the potential for blockage. In bushfire prone areas, the screen must be noncombustible, in accordance with AS 3959.

Note 1: A leaf-guard system should also be considered where wind may cause debris from nearby vegetation to accumulate in gutters.

4.5 Not drain any section of roof where the flue from a slow combustion heater forms part of that catchment, nor collect any water from condensate drains or heated water discharge drains.

Descending (above ground) charged downpipe:

4.6 Rainwater draining from the gutter into each charged downpipe must pass through a deflecting leaf diverter. The device must feature a primary coarse screen to prevent entry of animals and debris, plus a secondary fine screen to prevent entry of mosquitoes and other insects etc. Leaf diverters may be omitted, where fine-mesh gutter screens are installed to the full gutter system.

4.7 A watertight inspection opening must be installed on the descending pipework to the tank and be located a minimum 300mm to centre above FSL.

Note 2: A first-flush device may be fitted in a location subject to the manufacturer's recommendations. It is recommended that such a device feature automatic drainage of the diverted water volume rather than reliance upon manual activation of a device valve. Drainage from such a device must not have the potential to cause damage or further water pooling.

Note 3: Sunlight has been shown to penetrate light-coloured plastic downpipes promoting the growth of algae in the warmed water. Light-coloured above-ground charged downpipes should be coated in a dark paint before applying a topcoat for cosmetic purposes.

Soakage Drain required size
Q = 0.000278CIA
Where as Q= Soakage Drain per m3
C= 0.90
I=100mm ph
A(catchment area)= 254m2
Q= 6.3m3 for all roof area.

Soakage Drain Size
5m*2m*600mm deep = 6.3m3

NOTE: There are no areas of hardstand and the soakage drain is for tank overflow only
The dwelling is reliant on the water tanks as a potable supply. The tanks will form part of a retention system. Mannings formulae is not required in this application and the design of the soakage drain is through a simplified formulae used in this situation
Soil is predominantly sand with exceptional draining capacity.

Underground charged section of pipework

4.8 Underground pipework must not be within 15 metres downslope, or within 4 metres in any direction from the nearest edge of an on-site wastewater management system land application area.

4.9 The underground section of pipework must be minimum DN100 and have a minimum cover and bedding in accordance with AS/NZS 3500.3.

4.10 The lowest point of the charged system must have a junction installed with a branch line graded towards a watertight cap within a scour-point pit, or draining to a point that does not create a nuisance and meets local authority requirements.

4.11 The scour pit must be sized in accordance with AS/NZS 3500.3 and be fitted with a grate, appropriate to its location.

4.12 The minimum fall across the pit must be in accordance with AS/NZS 3500.3
Ascending (above ground) charged pipe to tank

4.13 A watertight inspection opening must be installed on the ascending pipework to the tank and located a minimum 300mm to centre above FSL.

4.14 The ascending pipework must terminate via a flap valve, above a screened inlet located in the top of the tank. The invert of this outflow pipe must be a minimum 150mm below the surcharge point of the gutter system or leaf-guard diverter for flow rates not exceeding 5.0 L/s. For flow rates exceeding 5.0 L/s, calculations are required to determine minimum head and must be provided on request.

Tank overflow

4.15 The tank overflow must be fitted with a fine screen to prevent the entry of mosquitoes and vermin to the tank. Such a screen may be at the tank outlet itself, or integral to the overflow pipe and must be accessible for cleaning.

4.16 The tank overflow pipework must not be directly connected to the surface stormwater system. The overflow must terminate over a grated stormwater pit or directly over the scour-point pit.

Sorell Council
Development Application: 5.2025.124.1 - Response to Request For Information - 11 Rotuli Street, Dodges Ferry - P2.pdf
Plans Reference: P2
Date received: 25/07/2025

Rev.	Date	Description

BUILDING DESIGNERS AUSTRALIA TAS

Printed Date
24/07/2025 5:03:54 PM

Onshore Designs
Building Designers
building design STUDIO
mail: 10 Restdown Drive, Otago, 7017
phone: mob 0429901003
web: www.buildingdesignstudio.com.au
email: onshoredesigns@bigpond.com

Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173

for Grace Jones and Sam Lennox

Drawing Title
Stormwater

Date: 22/07/25
Project No:
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 125**
Sheet No: **A15**

PROJECT INFORMATION

BUILDING DESIGNER:	MICHAEL EASTWOOD
ACCREDITATION No:	CC 1066 S
LAND TITLE REFERENCE NUMBER:	227971/1
FLOOR AREA	88.35m^2
ADDITIONAL DECK FLOOR AREA	23.11 m^2
DESIGN WIND SPEED:	N2
SOIL CLASSIFICATION:	M
CLIMATE ZONE:	7
BUSHFIRE-PRONE BAL RATING:	NA
ALPINE AREA:	NOT APPLICABLE
CORROSION ENVIRONMENT:	MEDIUM
FLOODING:	NO
LANDSLIP:	NO
DISPERSIVE SOILS:	UNKNOWN
SALINE SOILS:	UNKNOWN
SAND DUNES:	UNKNOWN
MINE SUBSIDENCE:	NO
LANDFILL:	UNKNOWN
DATUM LEVEL AT KERB:	UNKNOWN
GROUND LEVEL:	Existing
FINISHED FLOOR LEVEL:	Existing
OVERFLOW RELIEF GULLY LEVEL:	Existing

AREA SCHEDULE (Gross Building)

Name	Area	Perimeter
Proposed Addition	88.35	41356
Existing	81.22	40700
Proposed Deck	23.11	22490
Existing/remaining deck	51.47	50103

Proposed Additions For
Grace Jones and Samuel Lennox

11 Rotuli Street
Dodges Ferry

BUILDING APPLICATION

Michael Eastwood
Onshore Design
buiding designSTUDIO
www.buildingdesignstudio.com.au

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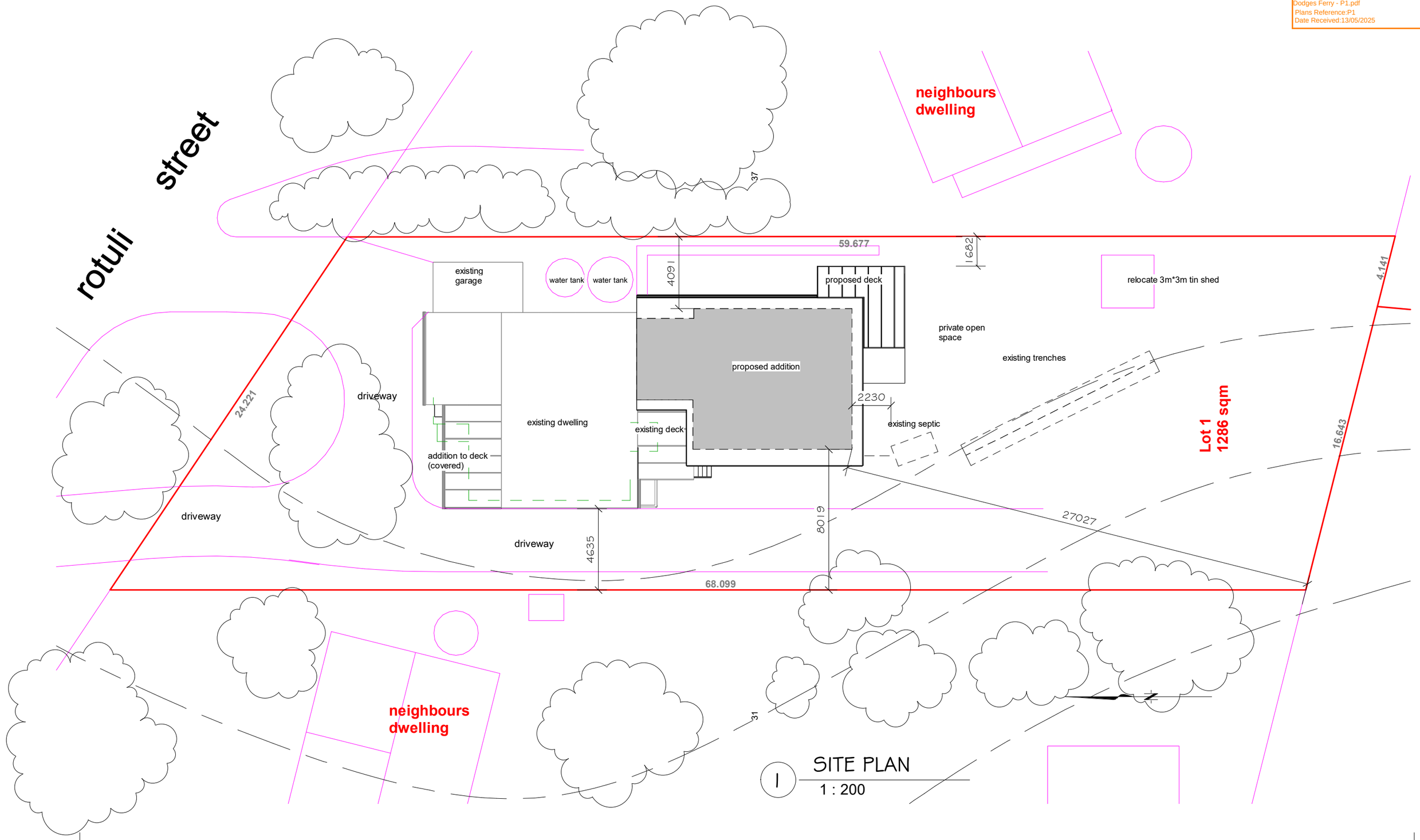
0429901003
onshoredesigns@bigpond.com

Drawing List

Sheet Number	Sheet Name
A0	Title Sheet
A1	Site Plan
A2	Existing Plan
A3	Existing Elevations
A4	Demolition Plan
A5	Floor Plan
A6	Elevations
A7	Elevations
A8	3D Visuals
A9	3D Visuals



1 SITE PLAN
1 : 200

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Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173

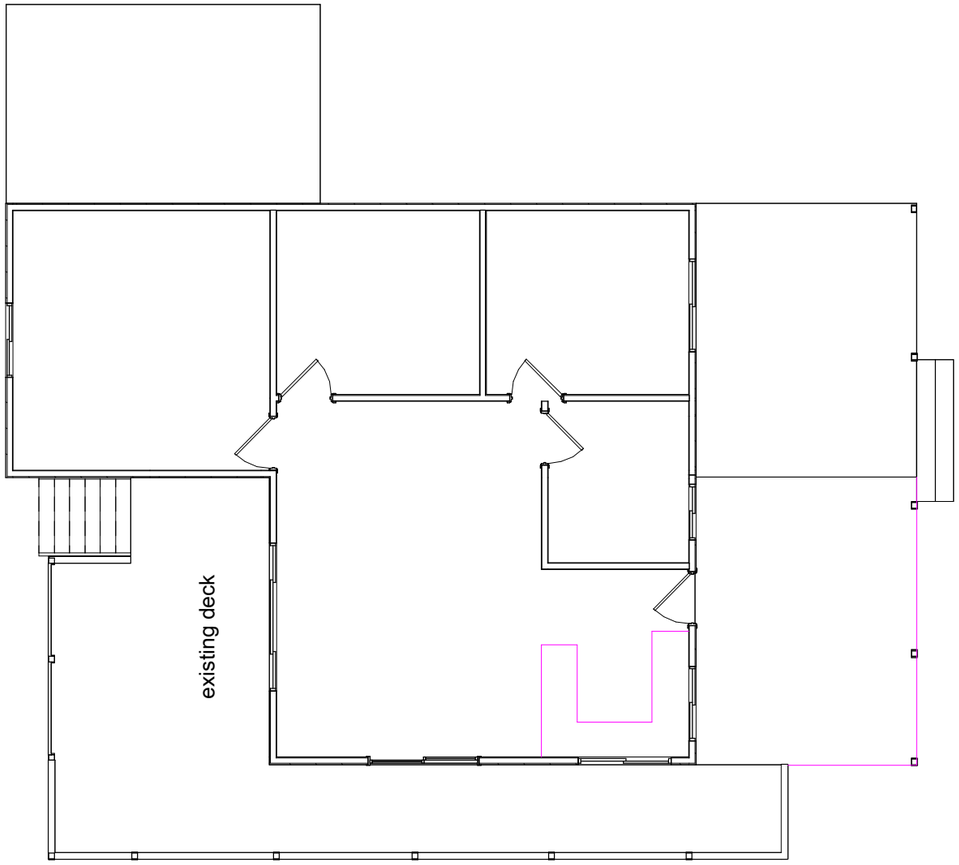
for Grace Jones and Sam Lennox

Drawing Title
Site Plan

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 200**
Project No:
Sheet No: A1

A3
EXISTING
EAST
ELEVATION

A3
EXISTING
NORTH
ELEVATION



EXISTING
SOUTH
ELEVATION
A3

Flooring Note

Strip timber flooring throughout
unless otherwise noted

Existing Drawings

These plans are based on a measure by Sam Lennox
Builder to cross check existing items prior to proceeding with new

1 EXISTING PLAN
1 : 100

EXISTING
WEST
ELEVATION
A3

0 5 10 m

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Job Title
Additions
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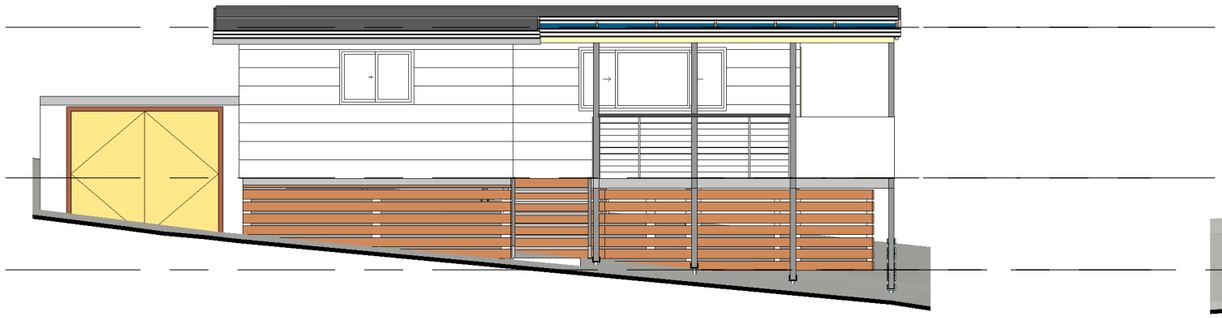
for Grace Jones and Sam Lennox

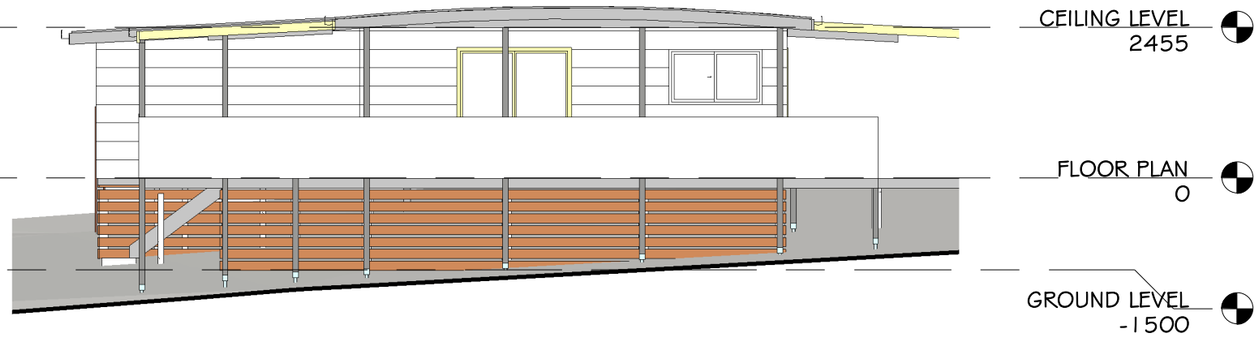
Drawing Title
Existing Plan

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**

Project No:
Sheet No: A2



1 EXISTING NORTH ELEVATION
1 : 100



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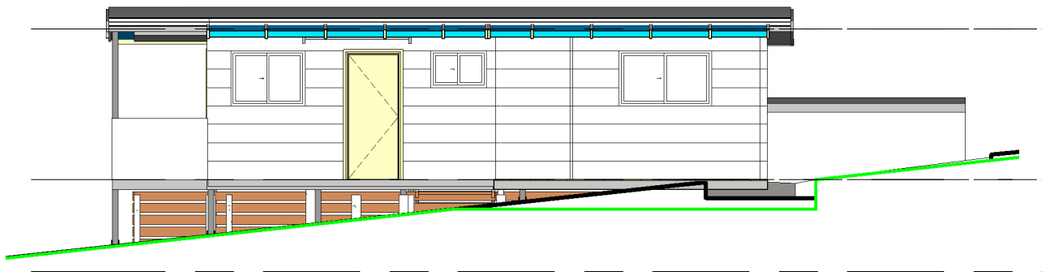
1 : 100



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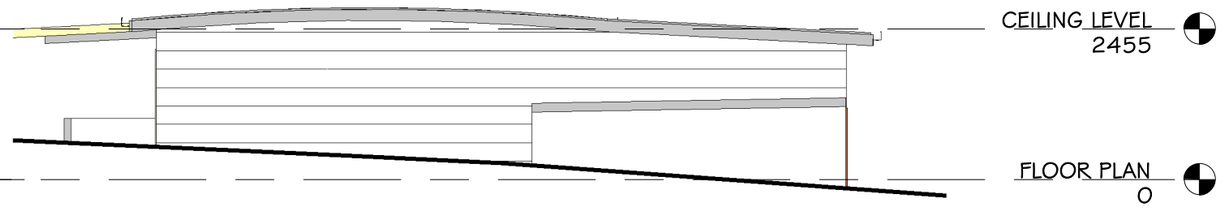
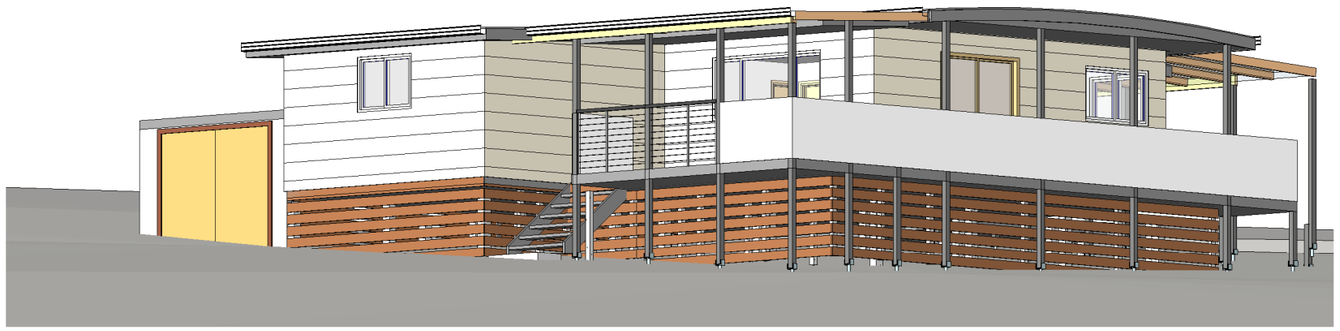
1 : 100



4 EXISTING EAST ELEVATION
1 : 100



5 EXISTING VISUAL

0 5 10 m

Sorell Council
Development Application: 5.2025.124.1 - Development Application - 11 Rotuli Street, Dodges Ferry - P1.pdf
Plans Reference:P1
Date Received:13/05/2025

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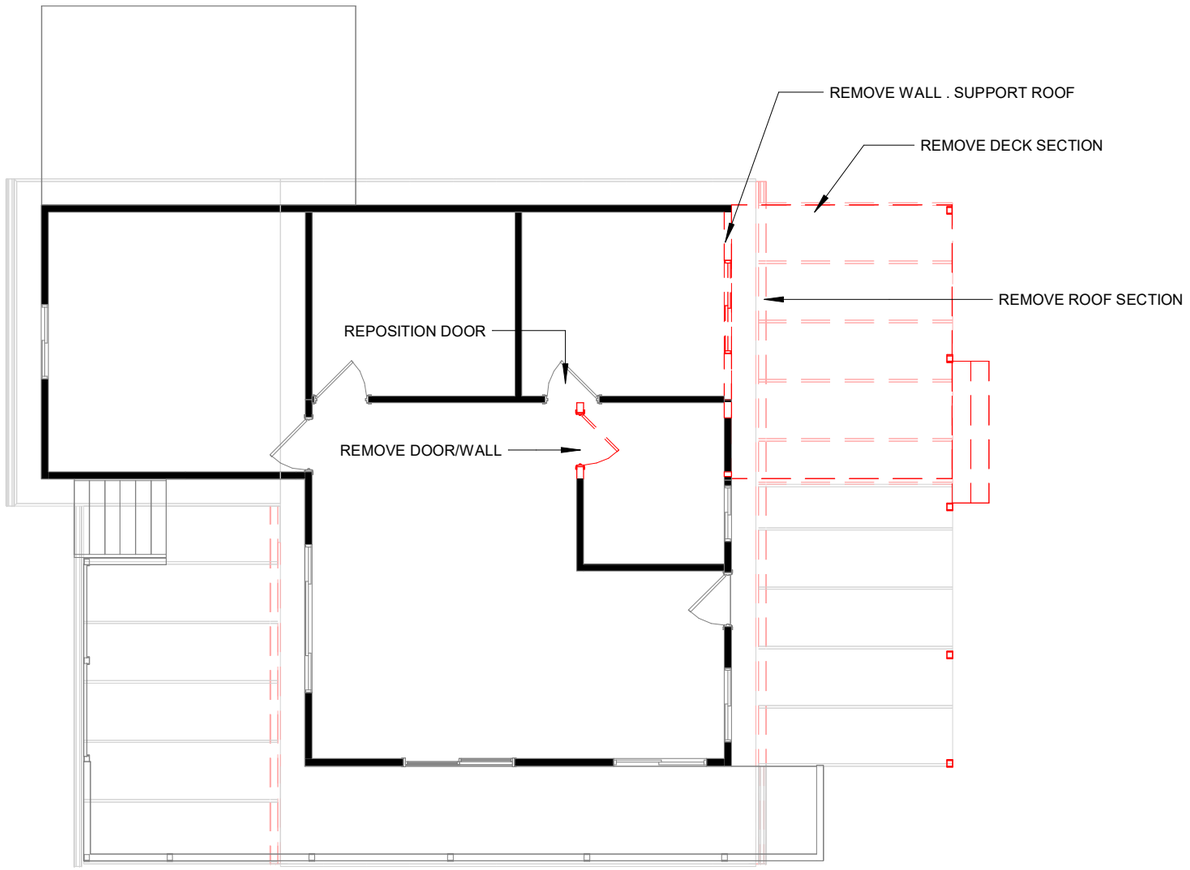
Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173

for Grace Jones and Sam Lennox

Drawing Title
Existing Elevations

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**
Project No:
Sheet No: A3



1 DEMOLITION PLAN
1 : 100

Demolition Notes

0 5 10 m

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Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173

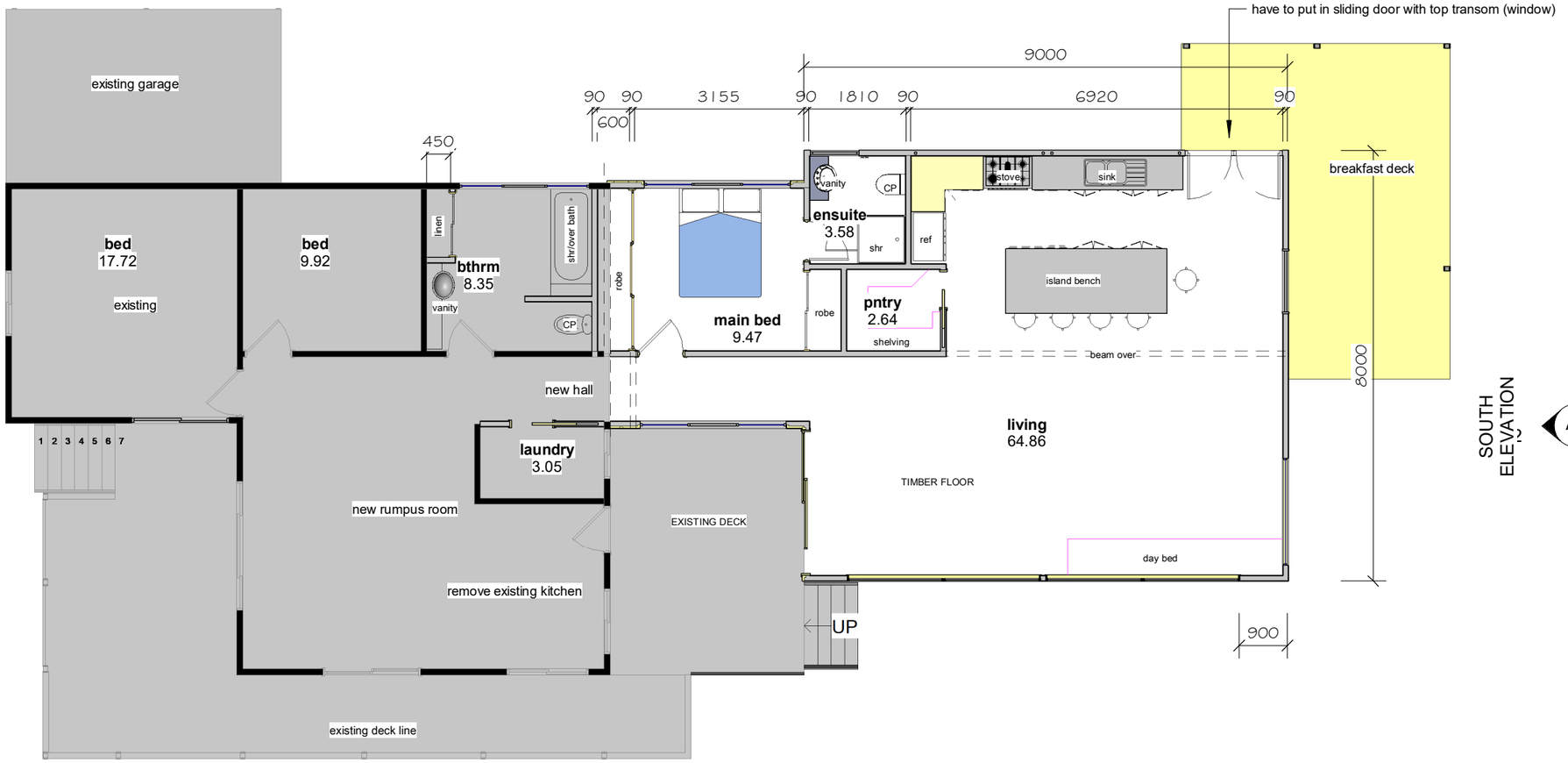
for Grace Jones and Sam Lennox

Drawing Title
Demolition Plan

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**
Project No:
Sheet No: A4

A7

EAST ELEVATION



A7

NORTH ELEVATION

SOUTH ELEVATION

A6

1 FLOOR PLAN
1 : 100

WEST ELEVATION

A6

0 5 10 m

W40N2

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Job Title
Additions
at 11 Rotuli Street
Dodges Ferry 7173

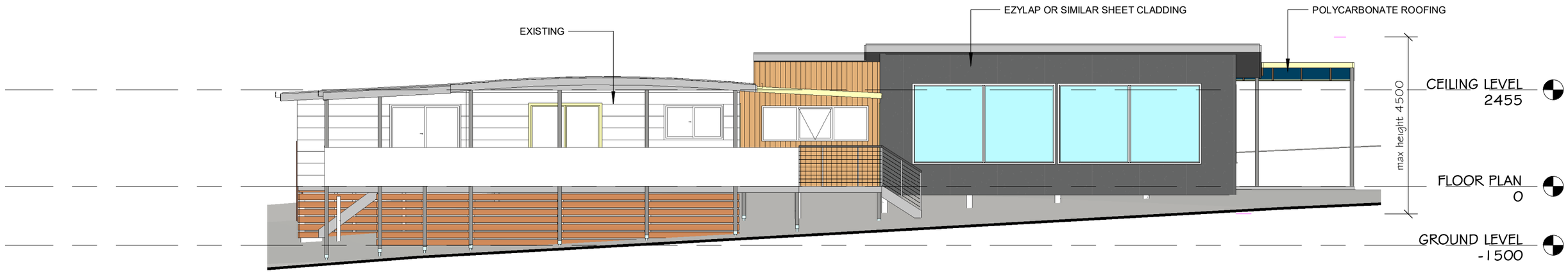
for Grace Jones and Sam Lennox

Drawing Title
Floor Plan

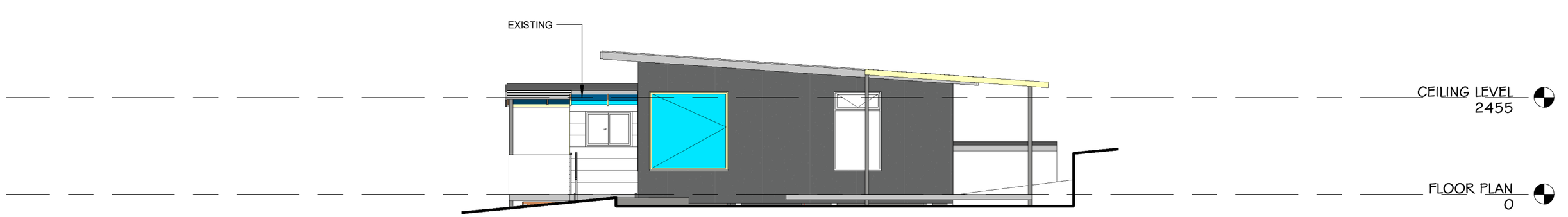
Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**

Project No:

Sheet No: A5



1 WEST ELEVATION
1 : 100



2 SOUTH ELEVATION
1 : 100

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Development Application: 5.2025.124.1 - Development Application - 11 Rotuli Street, Dodges Ferry - P1.pdf
Plans Reference:P1
Date Received:13/05/2025

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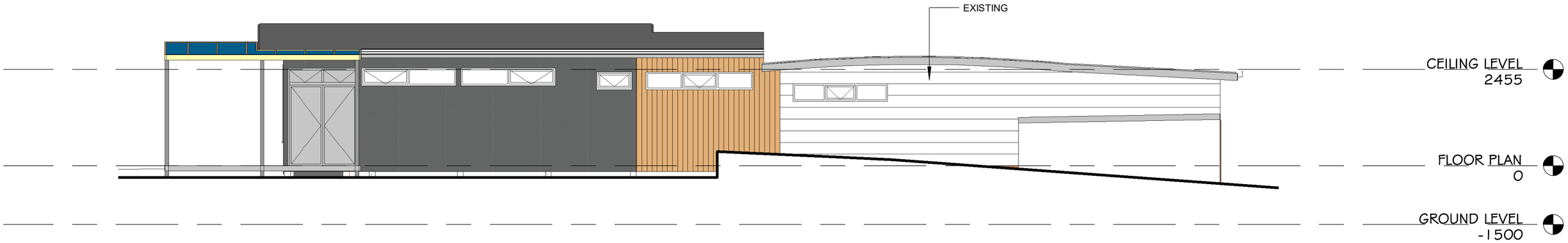
Drawing Title
Elevations

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**
Project No:
Sheet No: A6



1 EAST ELEVATION
1 : 100

2 NORTH ELEVATION
1 : 100

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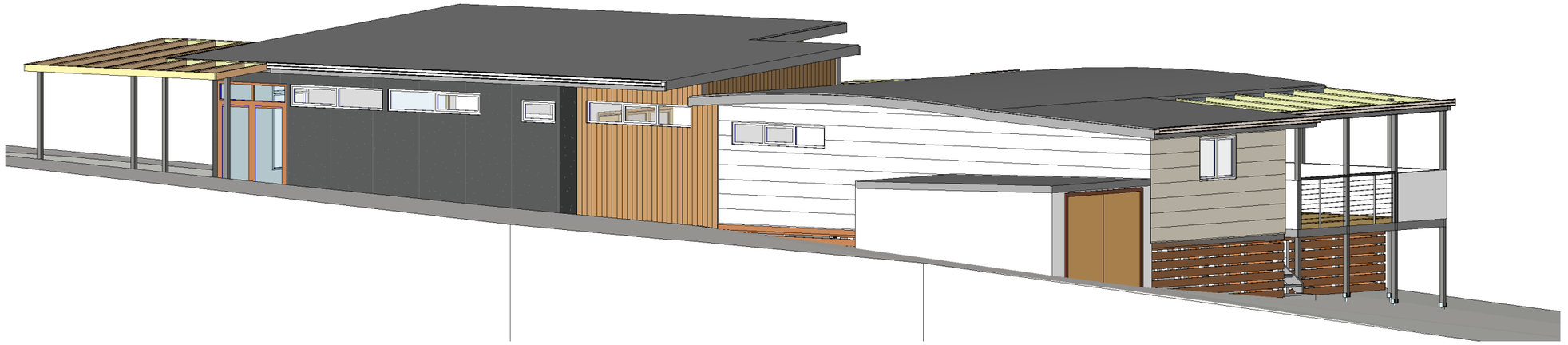
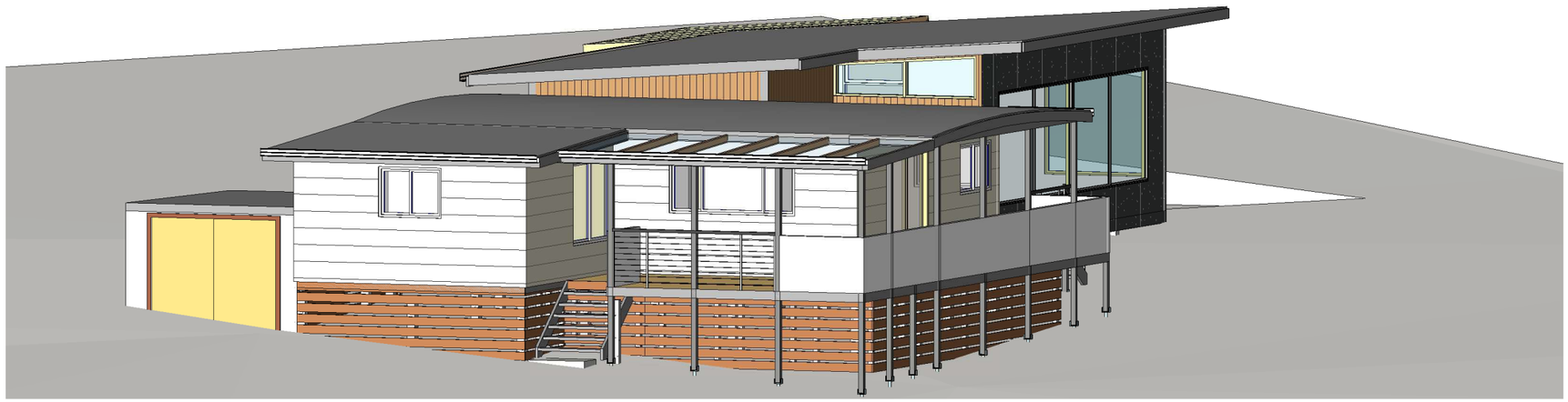
Drawing Title
Elevations

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale: **1 : 100**
Project No:
Sheet No: A7



1 EAST VISUAL



2 NORTH VISUAL

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Job Title
Additions
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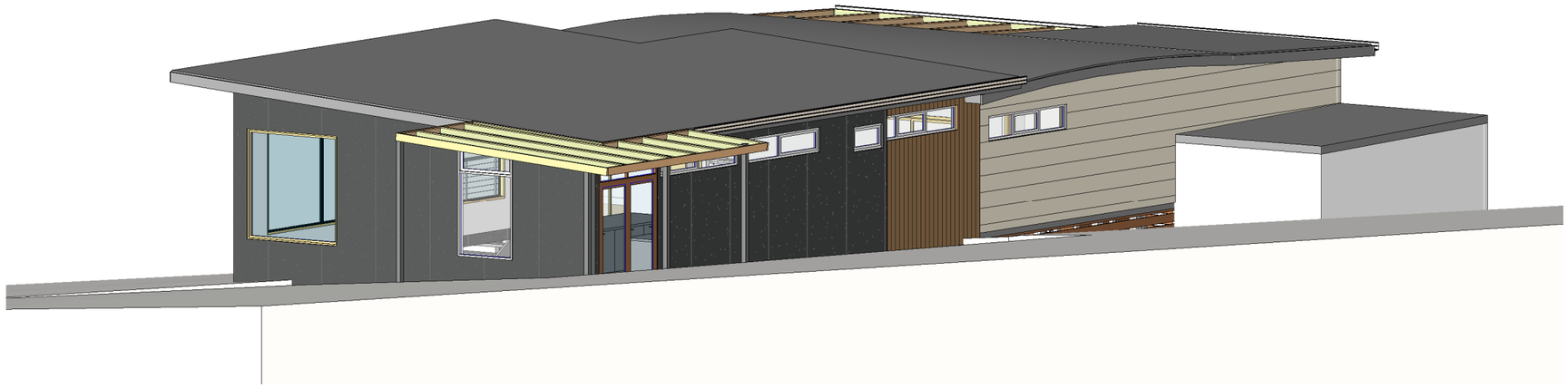
for Grace Jones and Sam Lennox

Drawing Title
3D Visuals

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale:

Project No:
Sheet No: A8



1 SOUTH VISUAL

2 WEST VISUAL

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Drawing Title
3D Visuals

Date: 22/08/24
Drawn By: Michael Eastwood
Acreditation No. CC 1066 S
Scale:

Project No:
Sheet No: A9