

Development Applications

Notice is hereby given under Section 57(3) of the *Land Use Planning & Approvals Act 1993* that an application has been made to the Break O' Day Council for a permit for the use or development of land as follows:

DA Number	DA 2024 / 00125
Applicant	Onshore Designs – M Eastwood
Proposal	Residential – Dwelling and Outbuilding
Location	7 Karaka Close, Stieglitz

Plans and documents can be inspected at the Council Office by appointment, 32 – 34 Georges Bay Esplanade, St Helens during normal office hours or online at www.bodc.tas.gov.au.

Representations must be submitted in writing to the General Manager, Break O'Day Council, 32 -34 Georges Bay Esplanade, St Helens 7216 or emailed to admin@bodc.tas.gov.au, and referenced with the Application Number in accordance with section 57(5) of the abovementioned Act during the fourteen (14) day advertised period commencing on Saturday 5th July, 2025 **until 5pm Friday 18th July, 2025.**

John Brown
GENERAL MANAGER

PROJECT INFORMATION

BUILDING DESIGNER:	MICHAEL EASTWOOD
ACCREDITATION No:	CC 1066 S
LAND TITLE REFERENCE NUMBER:	151896/3
FLOOR AREA	138 m ²
DECK FLOOR AREA	90 m ² SHED 54m ²
DESIGN WIND SPEED:	N2
SOIL CLASSIFICATION:	M
CLIMATE ZONE:	7
BUSHFIRE-PRONE BAL RATING:	BAL 19
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:	RL6400
FINISHED FLOOR LEVEL:	RL7200
OVERFLOW RELIEF GULLY LEVEL:	RL

Proposed Dwelling For
George and Nicole Beis

7 Karaka Street
Akaroa
St helens TAS
7215
PLANNING APPLICATION

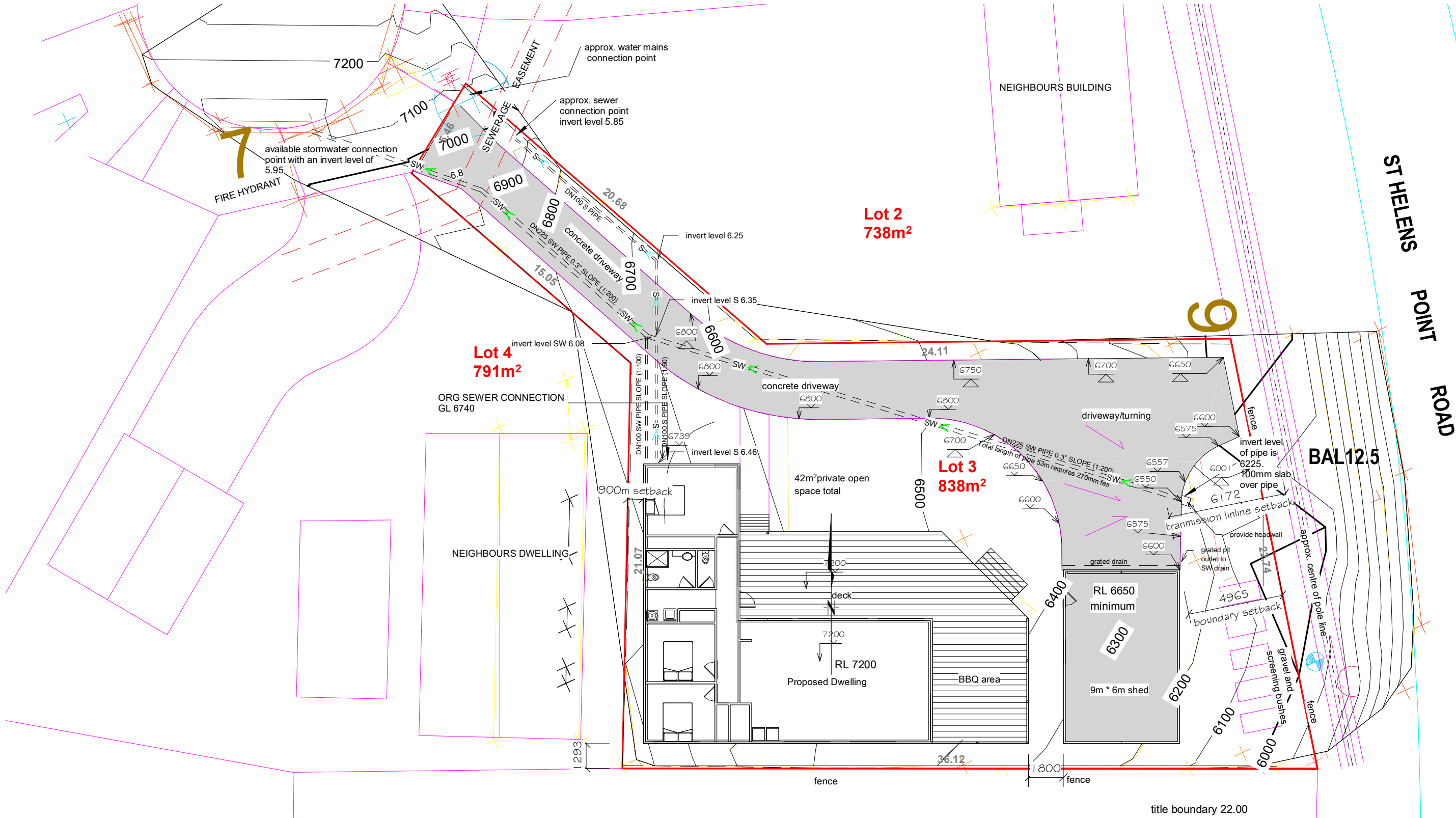
Michael Eastwood
Onshore Design
building designSTUDIO
www.buildingdesignstudio.com.au

mail/ 10 Restdown Drive, Otago, 7017
0429901003
onshoredesigns@bigpond.com

Amended 15/03/2025

'Drawings and Specifications as instruments of service are and shall remain the property of the Building Designer. They are not to be used on extensions of the project, or other projects, except by agreement in writing and appropriate compensation to the Building Designer. The General Contractor is responsible for confirming and correlating dimensions at the job site. The Building Designer will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the project.'

Drawing List	
Sheet Number	Sheet Name
A1	Site Plan
A2	Floor Plan
A3	Elevations
A4	Elevations
A5	3D Visuals
A6	3D Visuals



1 SITE PLAN
1 : 200



MICHAEL EASTWOOD
BUILDING · ENERGY REPORTS · BUSHFIRE REPORTS
Accredited Building Practitioners
Design + Documentation
Interior Design / Planning / Energy Assessments
Bushfire Assessments / Healthy House

10 Restdown Drive, Otago Bay, 7017

0429 901 003

NEIGHBOURS DWELLING

Job Title
Proposed Development
at
7 Karaka Close
Stieglitz 7216

for George and Nicole Beis

Drawing Title
Site Plan

Date:
15/03/25

Drawn By:
Michael Eastwood

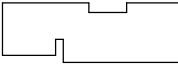
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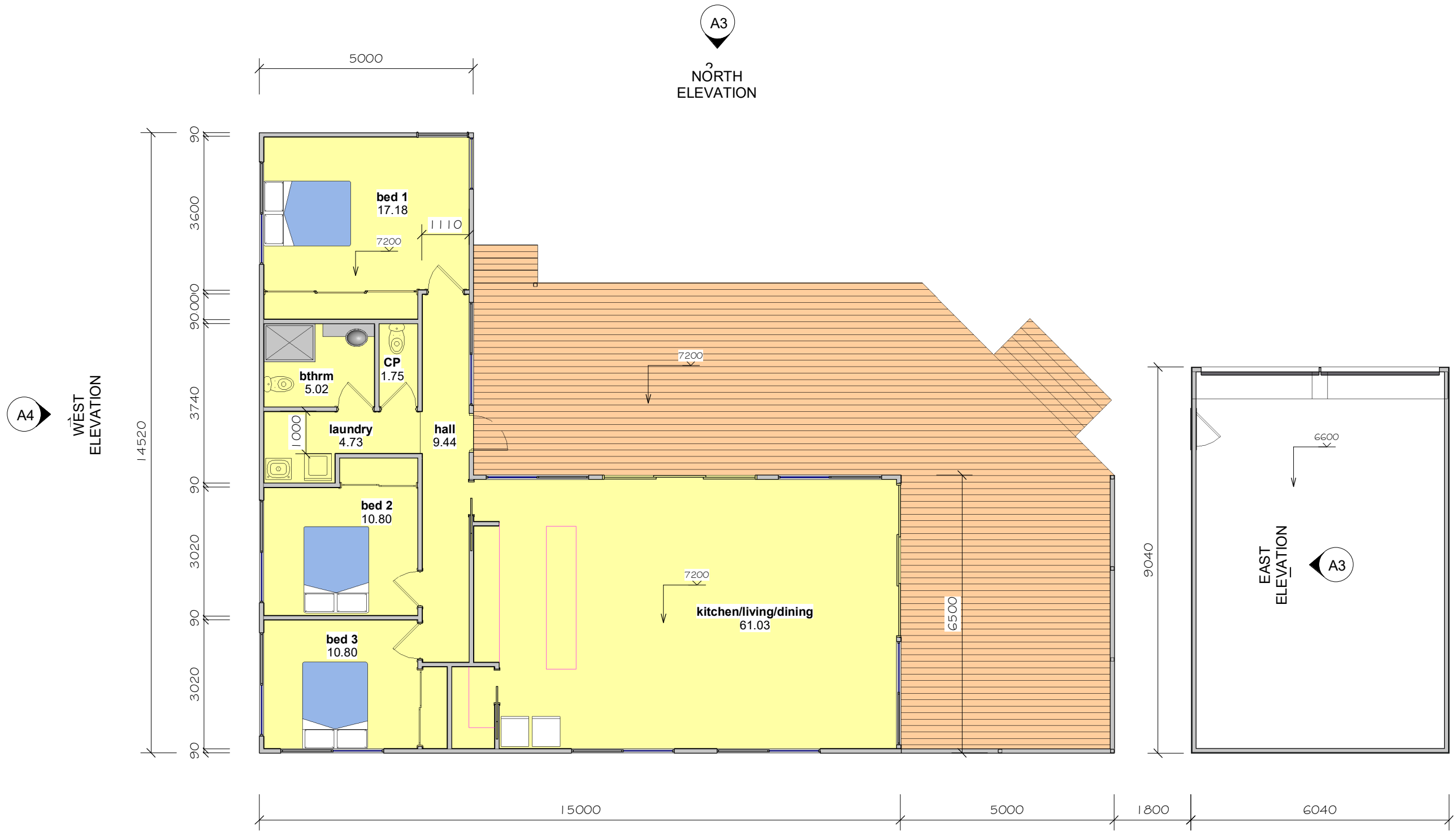
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Sheet No:
A1

Rev.	Date	Description

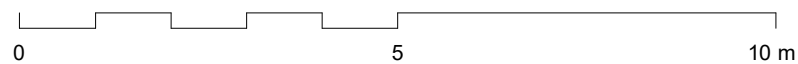


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FLOOR PLAN
1 : 100

SOUTH ELEVATION



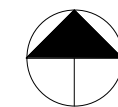
ONSHORE DESIGNS
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Job Title
Proposed Development
at 7 Karaka Close
Stieglitz 7216
for George and Nicole Beis

Drawing Title
Floor Plan



W50N3

Date:
15/03/25

Drawn By:
Michael Eastwood

Accreditation No.
CC 1066 S

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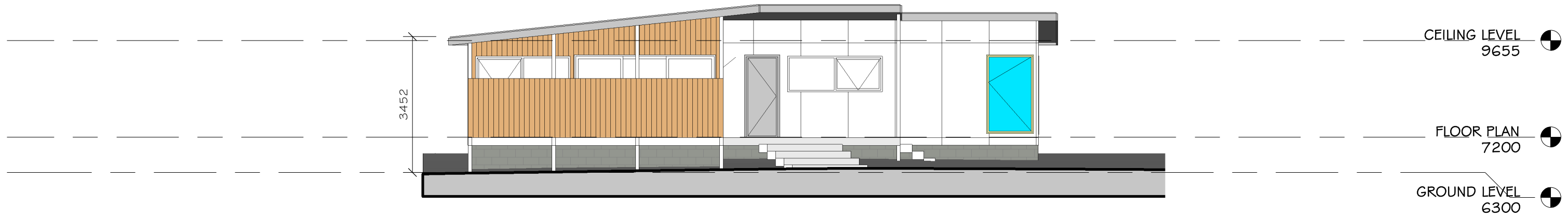
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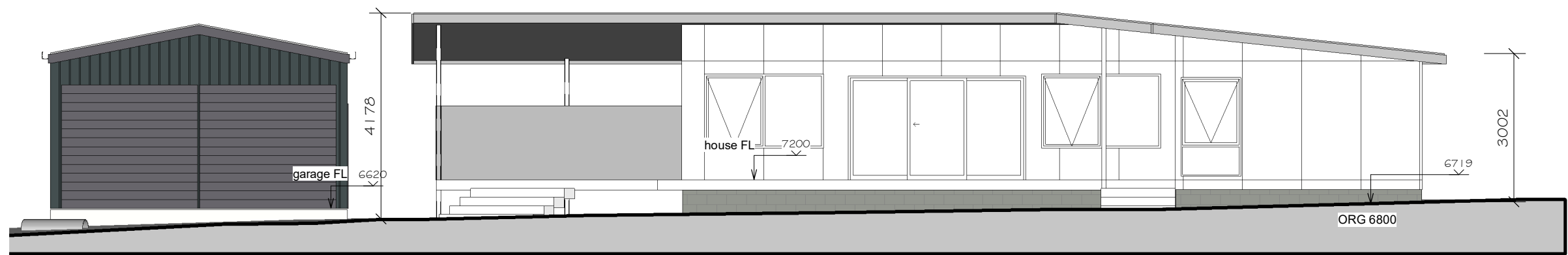
A2



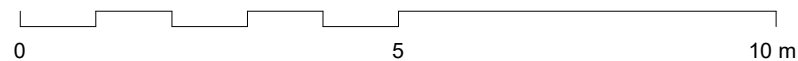
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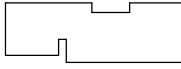


1 EAST ELEVATION
1 : 100



2 NORTH ELEVATION
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Rev.	Date	Description	 Printed Date 29/05/2025 8:22:00 AM



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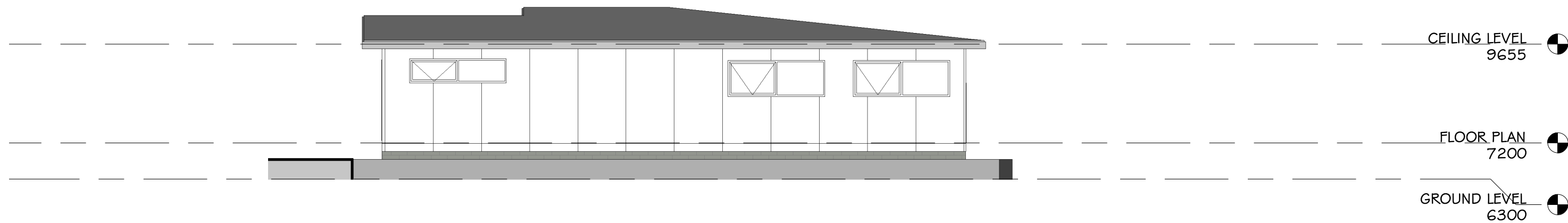
Job Title
Proposed Development
at **7 Karaka Close**
Stieglitz 7216
for **George and Nicole Beis**

Drawing Title
Elevations

Date:
15/03/25
Drawn By:
Michael Eastwood
Accreditation No.
CC 1066 S
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1 : 100

Project No:

Sheet No:
A3



1 WEST ELEVATION
1 : 100



2 SOUTH ELEVATION
1 : 100



ONSHORE DESIGNS

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Job Title

Proposed Development
at 7 Karaka Close
Stieglitz 7216

for George and Nicole Beis

Drawing Title

Elevations

Date:

15/03/25

Drawn By:

Michael Eastwood

Accreditation No.
CC 1066 S

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Project No:

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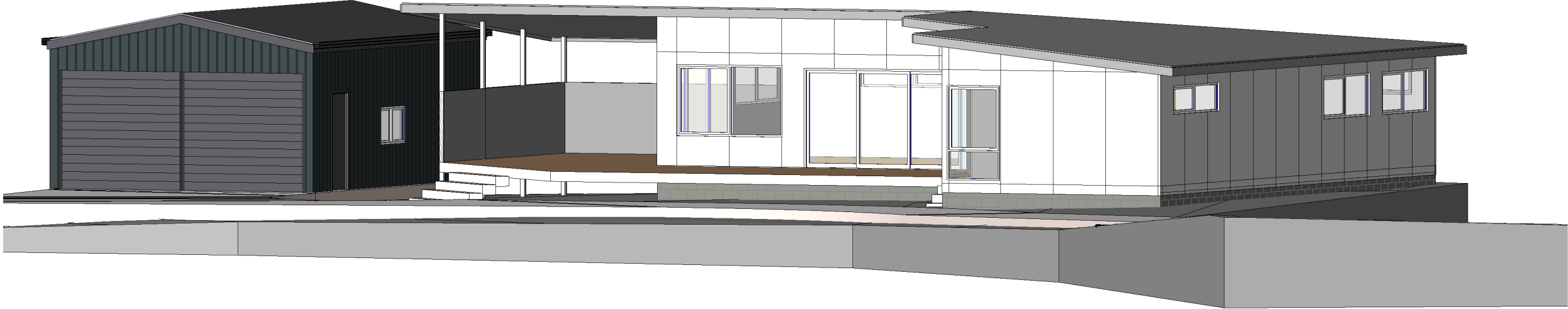
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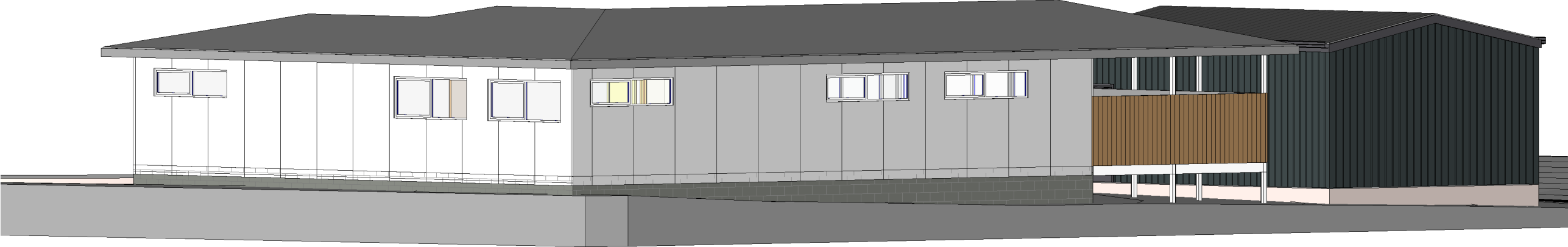


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1 NORTH VISUAL

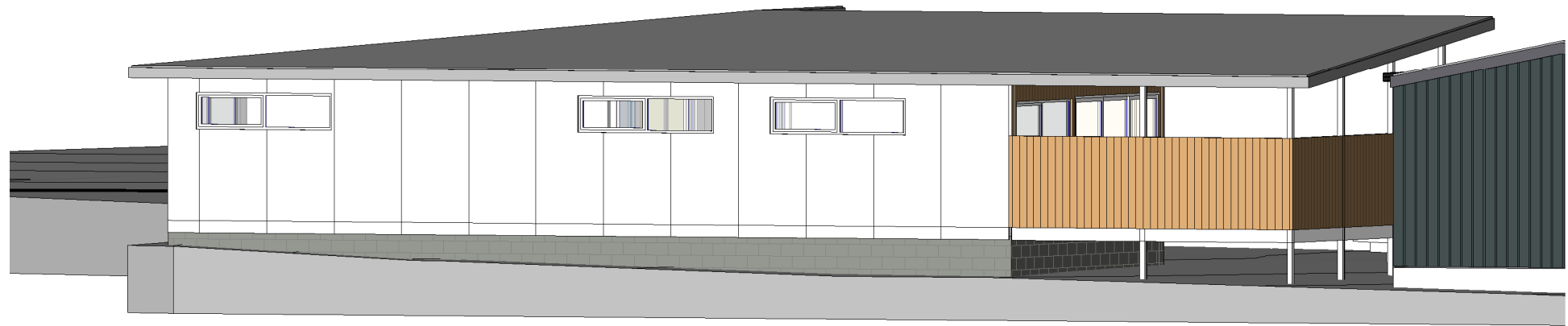


2 WEST VISUAL

Rev.	Date	Description	 Printed Date 29/05/2025 8:22:01 AM	<div> ONSHORE DESIGNS ===== MICHAEL EASTWOOD ===== BUILDING · ENERGY REPORTS · BUSHFIRE REPORTS Accredited Building Practitioners Design + Documentation Interior Design / Planning / Energy Assessments Bushfire Assessments / Healthy House 10 Restdown Drive, Otago Bay, 7017 ===== 0429 901 003 =====</div>	Job Title Proposed Development at 7 Karaka Close Stieglitz 7216 for George and Nicole Beis	Drawing Title 3D Visuals	Date: 15/03/25	Project No:
							Drawn By: Michael Eastwood	Sheet No:
							Accreditation No. CC 1066 S	A5
							Scale:	



1 EAST VISUAL



2 SOUTH VISUAL



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10 Restdown Drive, Otago Bay, 7017


0429 901 003

Job Title
Proposed Development
 at 7 Karaka Close
 Stieglitz 7216
 for George and Nicole Beis

Drawing Title
3D Visuals

Date:
15/03/25
 Drawn By:
 Michael Eastwood
 Accreditation No.
 CC 1066 S
 Scale:

Project No:
 Sheet No:
A6

Rev.	Date	Description	 Printed Date 29/05/2025 8:22:02 AM						

June 2024

Development Application Compliance report

Prepared for

Break'o'Day Council

obo

George and Nicole Beis
67 Weston Hill Road
Sorell TAS 7172

Prepared by

Michael Eastwood

Onshore Designs
onshoredesigns@bigpond.com
mobile 0429901003

Introduction

This report forms part of a Development Application for **Residential Use** in the **General Residential Zone** and relies on the **Acceptable Solutions** and part there-of the **Performance Criteria** 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.

It is the intent of this report to demonstrate compliance with all relevant scheme standards that form part of the Tasmanian Planning Scheme that are applicable to this application.

Appendices:

Documents

1. Break'o'day Council Application Form
2. Titles and folio plans

Drawings

3. Site Plan
 4. Floor plans and elevations
-

Date	July 2024
Applicant Details	Michael Eastwood Onshore Designs 10 Restdown Drive Otago Bay, 7017 onshoredesigns@bigpond.com mobile 0429901003
Owner Details	George and Nicole Beis 67 Weston Hill Road Sorell TAS 7172
Property Details	Cert Title no 151896/3 Size: 838m²
Development Address	7 Karaka Close Stieglitz TAS 7216
<hr/>	
Development Type	Proposal for new dwelling, garage and BBQ hut
	Proposed Floor Plan 172m ² , Proposed Garage 54m ² , Proposed amenities 4m ² , Proposed BBQ hut 36m ² , Total Proposed 266m²
Zone	General Residential
Use	Residential
Application	Permitted Use

Description of Development Proposal

Proposed single level three bedroom open plan dwelling with BBQ area
Proposed colourbond steel 9*6 garage with attached bathroom

Applicable Planning Scheme Standards and Codes

ZONE	12-General Residential
-------------	-------------------------------

CODES	C2.0 Parking and Sustainable Transport Code Meets all acceptable solutions.
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Overlays

Tasmanian Planning General Overlays

Overlay Name- Stormwater Management Specific Area Plan
LPS Reference Number BRE-S2.0

Bushfire Prone Area

Overlay Name- Bushfire-prone areas
Bushfire Assessment provided through building application.

Priority Vegetation Area

Overlay Name- Priority vegetation area
NA. General Residential Zone

Airport obstacle limitation area

Overlay Name- Airport obstacle limitation area
C16.0 Safeguarding of Airports Code

COMPLIANCE WITH PLANNING SCHEME

The proposed additions are in the **General Residential Zone**. Each scheme standard will be addressed in relation to the proposal.

8.0 General Residential Zone

8.2 Use Table

No Permit Required Qualification: Only if Single Dwelling

8.4 Development Standards for Dwellings

8.4.1 Residential density for multiple dwellings

NA

8.4.2 Setbacks and building envelope for all dwellings

P1 Setback to direct dwelling 29m from primary frontage to Karaka Close. I conclude St Helens Point Road as a secondary frontage. Setback to this secondary frontage to the BBQ hut is 1300mm at the closest point. Height of the carport style structure is approx. 2.6m at this point. Numbers 3 and 5 Karaka Close have a very similar setback to their buildings. See site plan

A2 Setback from frontage to proposed garage is 24m.

P3

- (a) The proposed will not cause an unreasonable loss of amenity to adjoining properties, having regard to:
 - (i) With the position and setback to neighbouring dwellings there will be no reduction in sunlight to a habitable room of a dwelling on an adjoining property. See site plan.
 - (ii) With the position and setback to neighbouring dwellings there will be no overshadowing the private open space of a dwelling on an adjoining property; See site plan
 - (iii) NA. No adjoining vacant property; or
 - (iv) With the proposed kept to a low as possible height visual impacts caused by the apparent scale, bulk or proportions of the dwelling when viewed from an adjoining property would not be an issue.

- (b) The separation between dwellings on adjoining properties is consistent with that existing on established properties in the area; See site plan
- (c) There are no direct solar installations on the neighbouring properties except the existing building to the north of the proposed. There will be no shadowing to the northern allotment. See site plan for orientation.

8.4.3 Site coverage and private open space for all dwellings

A1 See site plan to size of building (Lot 838m² , proposed including dwelling, BBQ hut and garage.266m²) . Percentage developed 31.5%

A2 (a) In one location and approx. 42m²

- (b) (i) The lawn area has a minimal horizontal dimension of > 4m.
- (c) Mainly located between the dwelling and the frontage (North orientation)
- (d) Reasonably level lawn area.

8.4.4 Sunlight to private open space of multiple dwellings

NA

8.4.5 Width of openings for garages and carports for all dwellings

A1 NA. See position of proposed garage on internal allotment

8.4.6 Privacy for all dwellings

A1 No finished surface of floor >1000mm above existing floor level

A2 No finished surface of floor >1000mm above existing floor level

A3 NA

8.4.7 Frontage fences for all dwellings

A1 NA No application for a front fence. Internal allotment

8.4.8 Waste storage for multiple dwellings

NA

Applicable Code

C2.0 Car Parking and Sustainable Transport Code

C2.5 Use Standards

C2.5.1 Car Parking Numbers

- A1** Residential Use
2 Parking spaces in proposed garage

See site plan

C2.5.2 Bicycle parking Numbers

- NA** No requirement in this Use to provide bicycle parking

C2.5.3 Number of Motorcycle Parking Spaces

- NA** No requirement in this Use to provide bicycle parking

C2.5.4 Loading Bays

- NA** No requirement in this Use to provide bicycle parking

C2.6 Development Standards for Buildings and Works

C2.6.1 Construction of parking areas.

All parking on concrete in the proposed garage and driveway

A1

- a)** All parking areas are on concrete
- b)** All parking areas will be drained to the stormwater grated pits and drain.
- c)** NA

C2.6.2 Design and layout of parking areas

Parking spaces meet Aus Standards.

A1.1

(b)

The layout of car parking spaces, access aisles and circulation roadways are designed and constructed to comply with *Australian Standard AS 2890- Parking facilities, Parts 1-6. See site plan showing entry and exit points. Access widths. Car parking dimensions etc*

A1.2

.NA no requirement

C2.6.3 Number of accesses for vehicles

As Existing. No change

A2 NA

C2.6.4 Lighting of Parking Areas within the General Business Zone and Central Business Zone

NA

C2.6.5 Pedestrian access

NA

C2.6.6 Loading bays

NA

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

NA

C2.6.8 Siting of parking and turning areas

A1 NA

A2 NA

Applicable Code

BRE-S2.0 Stormwater Management Specific Area Plan

BRE-S2.7 Development Standards for Buildings and Works

A1

Development must be:

(a) capable of connecting to the public stormwater system.

Stormwater connected to council street stormwater system

Applicable Code

C16.0 Safeguarding of Airports Code

C16.4 Use or Development Exempt from this Code

C16.4.1 The following use or development is exempt from this code:

(a) development that is not more than the AHD height specified for the site of the development in the relevant airport obstacle limitation area.

The proposed development has an AHD of approximately 15.000

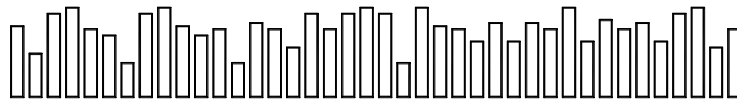
Signed:



Michael Eastwood
BDSbuildingdesignstudio

CSE TASMANIA PTY LTD

civil and structural engineering



May 23rd , 2025

Deb Szekely
Senior Town Planner
Break O'Day Council
Georges Bay Esplanade
St Helens 7216

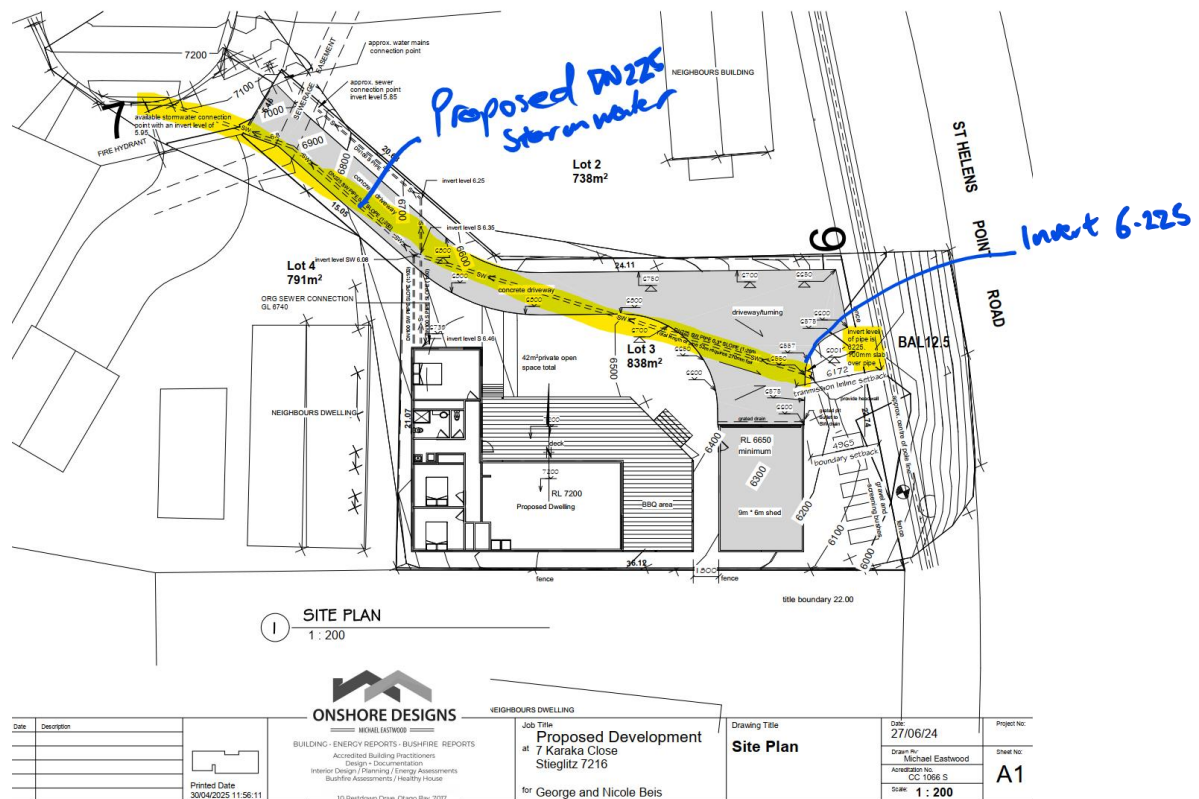
Forwarded by email admin@bodc.tas.gov.au

**RE: DA 2024/00125 - Land Use Planning and Approvals Act 1993 – Section 54
- Additional information required Residential - Construction of Dwelling, Shed
with Amenities & Carport/BBQ Hut, 7 Karaka Close, Stieglitz**

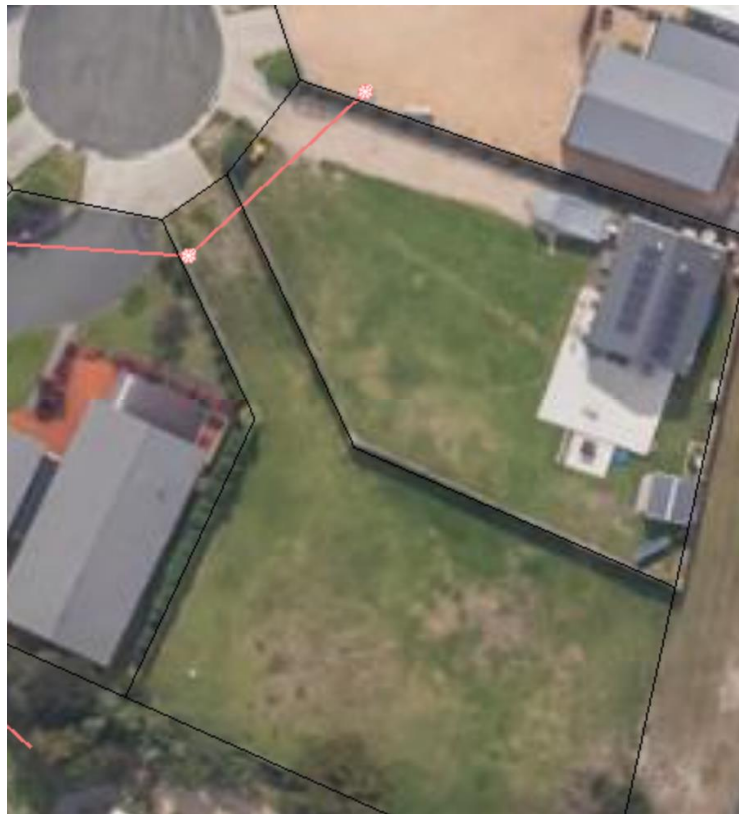
Dear Deb,

George Beis has asked that respond to your information request for the above property dated 15/7/24. My response to each of the points raised follows:-

1a) Amended site plan with required details are attached. This shows current FSL contours.



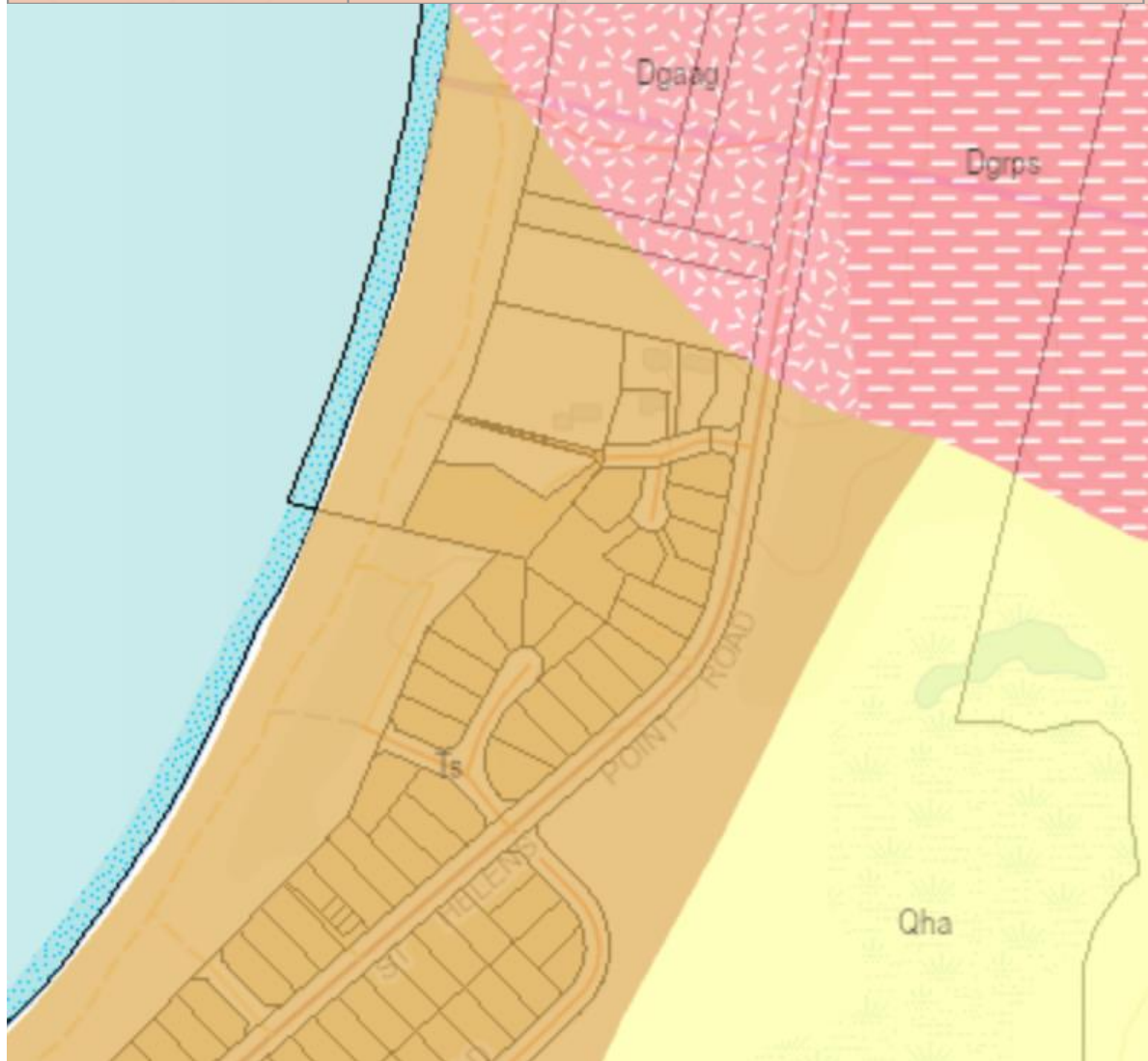
stormwater pit has outgoing line at 5.95 so connection there can be made at RL 6. The finish invert at 6.225 can be achieved with driveway concrete covering the proposed 225 dia pipe.



1b) Concrete driveway and car manoeuvring area now shown on the plans – the driveway drains to the internal pipeline which provides an overflow drain from the low area east of the driveway and garage. Note geology for this area is very permeable sands. This is consistent with the sands shown adjacent to the St Helens Point road in the low areas to the east. The provision of the internal pipe will offset the additional water generated by the development decreasing permeability.

The geological record for the site is shown below.

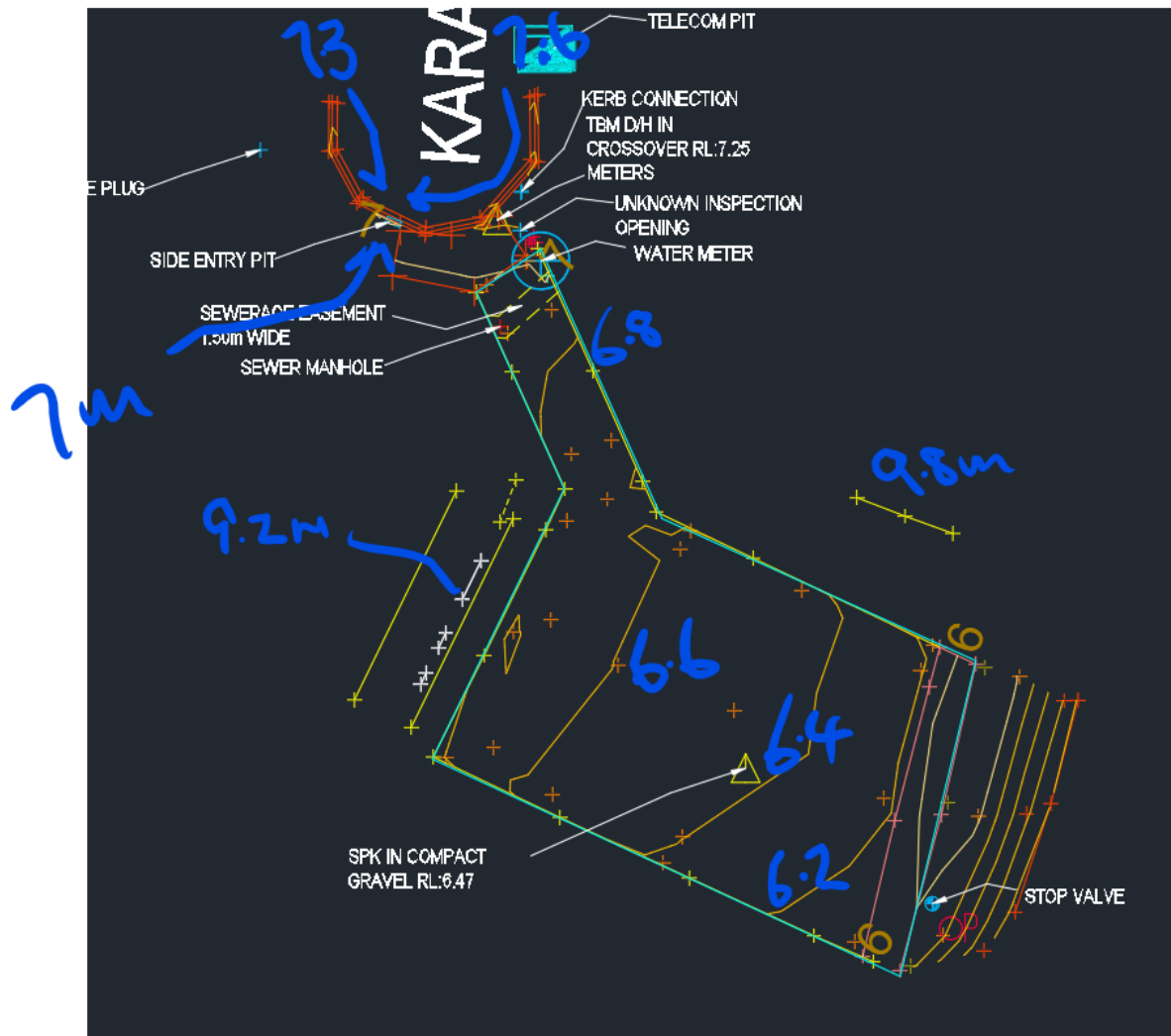
Map Symbol	Ts	Filter or Search Layer
Description	Dominantly non-marine sequences of gravel, sand, silt, clay and regolith.	Legend filtering not available on this layer
Stratigraphic Unit	Undifferentiated Cenozoic sequences>Undifferentiated Paleogene - Neogene sequences>Paleogene - Neogene non-marine sequences of gravel, sand, silt, clay and regolith	
Supergroup	Undifferentiated Paleogene - Neogene sequences	
Group	Paleogene - Neogene non-marine sequences of gravel, sand, silt, clay and regolith	



1c) Floor levels for the proposed structures are at

- garage 6.65m and
- house 7.2m

while natural ground below each is 6.3m and 6.5/6.6m respectively. The 25/11/24 survey file provides details of current contours following gravelling of the site.



1d) Flood Hazard Report in response to C12 Flood Prone Areas Hazard Code. This section further elaborates on the Pitt and Sherry report dated 30th of November 2021 for a previous owner of this lot. In drawing conclusions about the flood risks I have remodelled the catchment and demonstrate that the selected floor levels are safe from the 1% AEP flood event with Climate Change based on SSP 2 – 4.5 which is the accepted model in stormwater management.

The Flood Hazard report is attached as **Appendix 1**

We trust this meets your requirements and should further clarification be required regarding the above please do not hesitate to contact the undersigned.

Yours sincerely,

Chris Martin BE(Hons), MBA (Tech Mgt), FIEAust, CPEng
Senior Civil/Structural Engineer
Director – CSE Tasmania Pty Ltd

Appendix 1

Flood Hazard Report 7 Karaka Close, Stieglitz

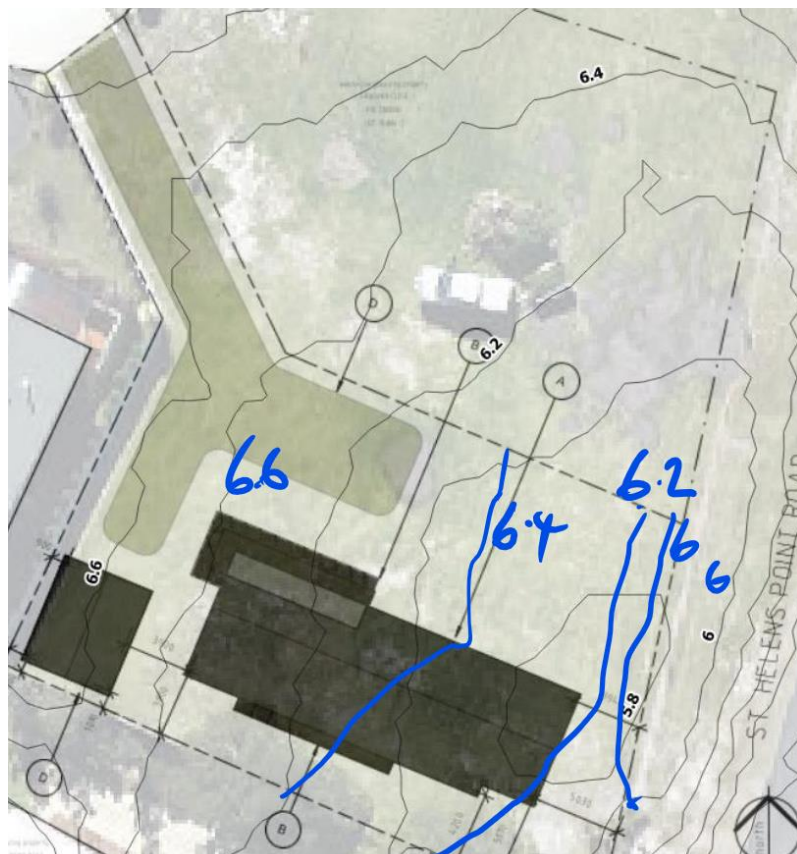
Prepared by Chris Martin, CSE Tasmania BE(Hons), MBA (Tech Mgt), FIEAust, CPEng

Background

Council flood mapping has identified the potential for flooding up to RL 7 extending throughout lots in the Karaka Culdesac. In reality the lidar image and survey supports overflow from the area:-

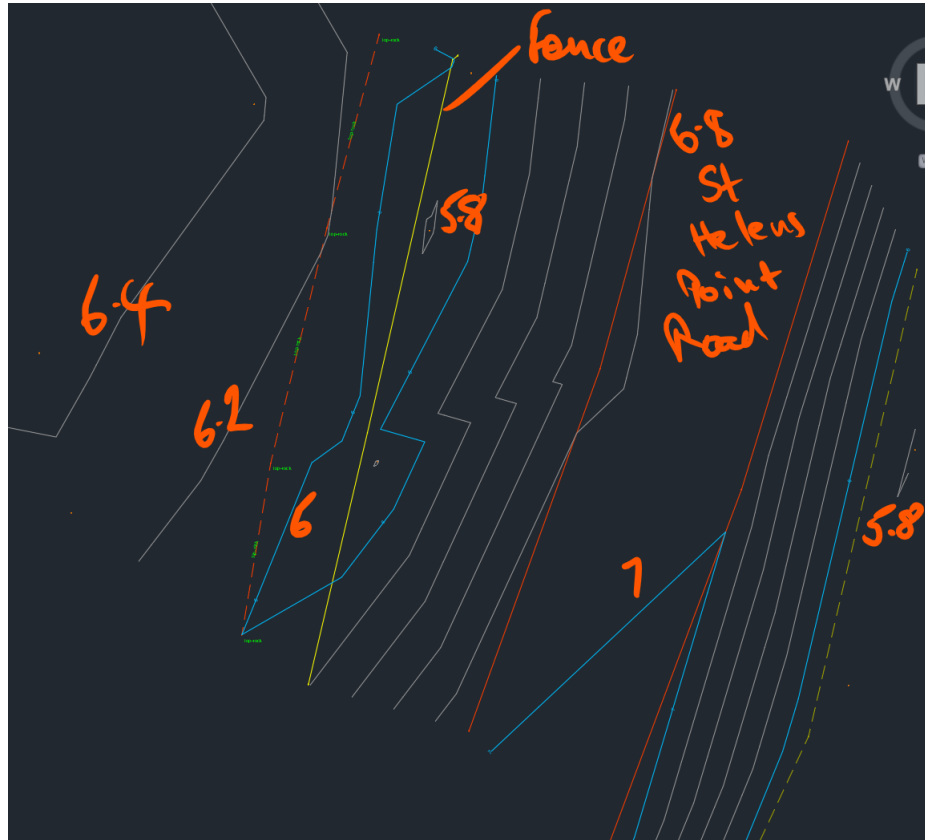
- At RL approx. 7.2 to 7.3 overland through neighbouring properties to the west or
- At RL 7.6 through the Culdesac.
- At RL 6.8 to 6.9 water will flood over St Helens Point Road to the depression area. No lower overflow exists to the east.

Since the Pitt and Sherry report was prepared additional fill has been placed in 7 Karaka Close lifting ground by a maximum of 400mm. The following image shows the lidar contours at the time of the Pitt and Sherry Report with approximate new finished surface level from the 25/11/24 Survey.



Further survey of the low area adjacent to the subject lot and St Helens Point Road is shown below. Note the owner has provided a gravel soakage drain along the east side of the lot. The image below shows that the soakage drain has approx the same invert as the east side of the road which is also in a low area. No drainage

pipes or channels have been provided connecting this low area under St Helens Point Road which creates a wier at RL 6.8 to 6.9.



The actual survey levels show that the lidar pickup for this area is very close to actual. Following is a composite of survey and lidar showing detention areas and overflows. The lowest overflow path runs through existing properties to the west at RL7.2 to 7.3. This is not in public land and can't be relied upon. Overflow at RL 7.6 can be obtained along and west of Karaka Close. St Helens Point Road will be submerged at RL 6.9 (there is no culvert to drain this area).

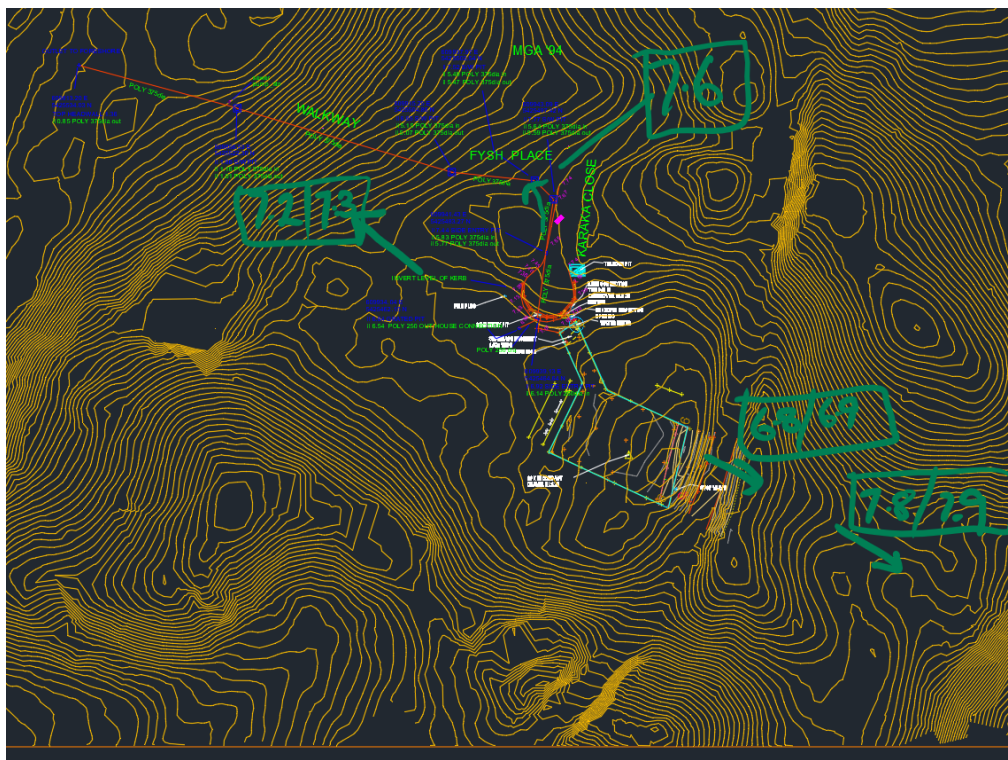




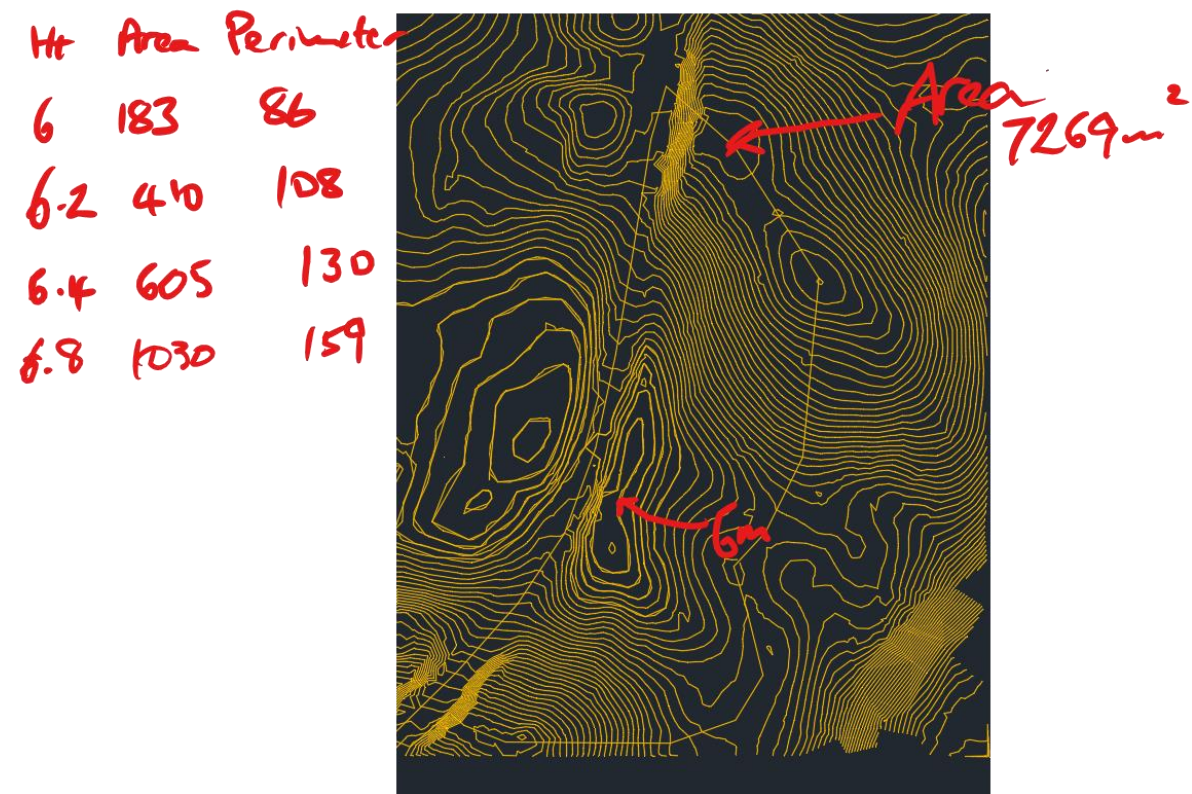
Image shows low area west of St Helens Point Road is in sand.



Black fence is the subject property

Catchment east of the St Helens Point Road should be treated as a separate basin with area 0.727 Ha.

Area west of road reduces to 1.373Ha.

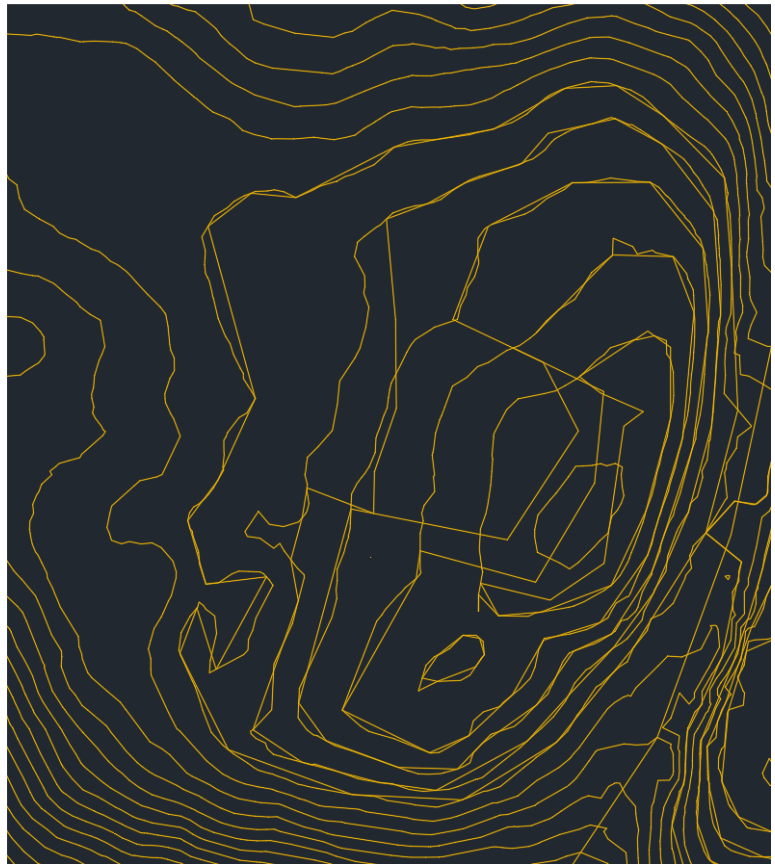


Referring to the photo below the residential catchment west of St Helens Point Road will have approx 35% impervious, 35% residual impervious and 30% permeable when fully developed.

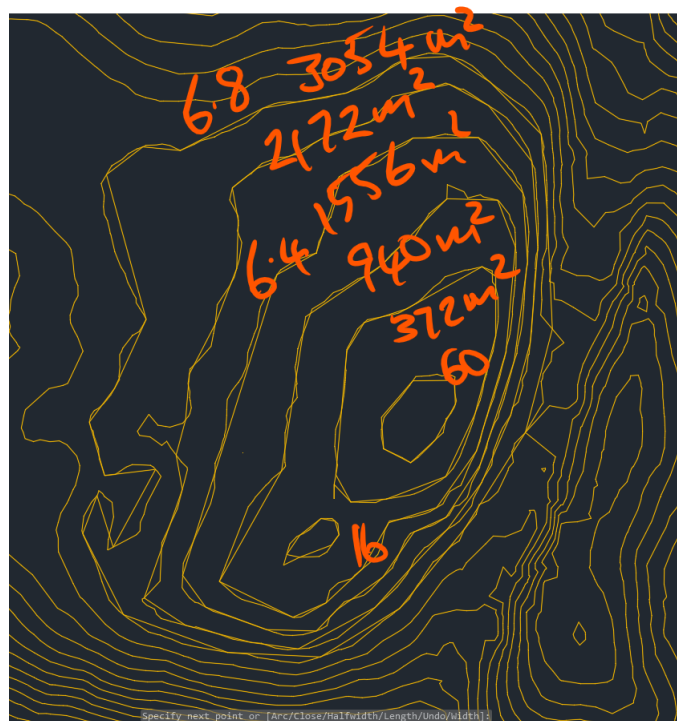


The storage below the proposed garage slab height of 6.65 is given in the contour areas shown below. Note contours are modified to current gravel height.

Ht	Area	Perim
5.8	4	4
6	126	90
6.2	631	150
6.4	1224	184
6.6	2041	192
6.8	3054	236



Areas before filling are shown below by way of comparison



Modelling Rainfall and Runoff Data

The following data specific to St Helens has been incorporated into the Drain model

Median Preburst Depths and Ratios

Values are of the format depth (ratio) with depth in mm

min (h)\AEP(%)	50	20	10	5	2	1
60 (1.0)	11.7 (0.607)	7.2 (0.274)	5.1 (0.162)	3.0 (0.083)	2.0 (0.046)	1.3 (0.027)
90 (1.5)	12.6 (0.545)	7.9 (0.253)	4.9 (0.131)	1.9 (0.045)	3.5 (0.069)	4.6 (0.082)
120 (2.0)	9.2 (0.348)	6.9 (0.193)	5.4 (0.128)	3.9 (0.081)	7.5 (0.133)	10.2 (0.162)
180 (3.0)	5.1 (0.160)	7.4 (0.169)	8.9 (0.173)	10.3 (0.176)	8.8 (0.130)	7.7 (0.103)
360 (6.0)	9.4 (0.208)	13.1 (0.211)	15.6 (0.213)	17.9 (0.214)	17.0 (0.174)	16.3 (0.150)
720 (12.0)	9.4 (0.152)	13.3 (0.153)	15.8 (0.153)	18.3 (0.152)	19.4 (0.136)	20.2 (0.126)
1080 (18.0)	6.2 (0.085)	10.4 (0.101)	13.1 (0.106)	15.8 (0.109)	12.9 (0.074)	10.7 (0.054)
1440 (24.0)	5.4 (0.068)	7.0 (0.061)	8.0 (0.058)	9.1 (0.056)	6.8 (0.034)	5.1 (0.023)
2160 (36.0)	0.7 (0.009)	1.5 (0.012)	2.0 (0.013)	2.5 (0.013)	3.1 (0.014)	3.6 (0.014)
2880 (48.0)	2.2 (0.024)	1.2 (0.009)	0.6 (0.004)	0.0 (0.000)	0.3 (0.001)	0.6 (0.002)
4320 (72.0)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)	0.0 (0.000)

Climate Change Factors

SSP2-4.5

Year	<1 hour	1.5 Hours	2 Hours	3 Hours	4.5 Hours	6 Hours	9 Hours	12 Hours	18 Hours	>24 Hours
2030	1.18	1.17	1.16	1.14	1.13	1.12	1.12	1.11	1.1	1.1
2040	1.22	1.2	1.19	1.17	1.16	1.15	1.14	1.13	1.12	1.12
2050	1.27	1.24	1.23	1.21	1.19	1.18	1.17	1.16	1.15	1.14
2060	1.3	1.27	1.25	1.23	1.21	1.2	1.19	1.18	1.16	1.16
2070	1.33	1.3	1.28	1.26	1.24	1.22	1.21	1.19	1.18	1.17
2080	1.37	1.33	1.31	1.28	1.26	1.24	1.22	1.21	1.2	1.19
2090	1.4	1.36	1.34	1.31	1.28	1.26	1.24	1.23	1.21	1.2
2100	1.41	1.37	1.35	1.32	1.29	1.27	1.25	1.24	1.22	1.21

Rainfall multiplier of 1.4 has been used in the Drains project options sheet.

Loss Factors

Initial Loss (Adjustment Factors)

	Losses SSP1-2.6	Losses SSP2-4.5	Losses SSP3-7.0	Losses SSP5-8.5
2030	1.05	1.05	1.05	1.05
2040	1.05	1.06	1.06	1.07
2050	1.06	1.07	1.07	1.08
2060	1.06	1.07	1.09	1.1
2070	1.06	1.08	1.1	1.12
2080	1.06	1.09	1.12	1.14
2090	1.06	1.09	1.13	1.17
2100	1.06	1.1	1.15	1.19

Continuing Loss (Adjustment Factors)

	Losses SSP1-2.6	Losses SSP2-4.5	Losses SSP3-7.0	Losses SSP5-8.5
2030	1.1	1.1	1.1	1.11
2040	1.12	1.12	1.13	1.14
2050	1.12	1.15	1.16	1.18
2060	1.13	1.17	1.19	1.23
2070	1.13	1.18	1.23	1.28
2080	1.13	1.2	1.27	1.33
2090	1.13	1.21	1.31	1.39
2100	1.12	1.22	1.34	1.44

Data

Storm Losses

Note: Burst Loss = Storm Loss - Preburst

Note: These losses are only for rural use and are **NOT FOR DIRECT USE** in urban areas

ID	18123.0
Storm Initial Losses (mm)	43.0
Storm Continuing Losses (mm/h)	1.1

Factored losses for 2100 use SSP 2-4.5

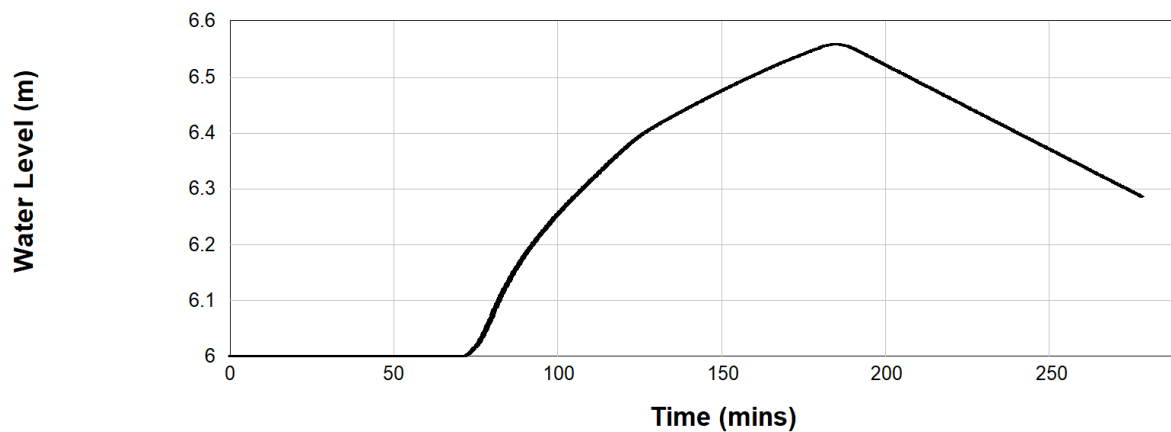
Initial loss then $1.09 \times 43 = 46.87$

Continuing loss is $1.1 \times 1.21 = 1.33$

Drains Modelling Results

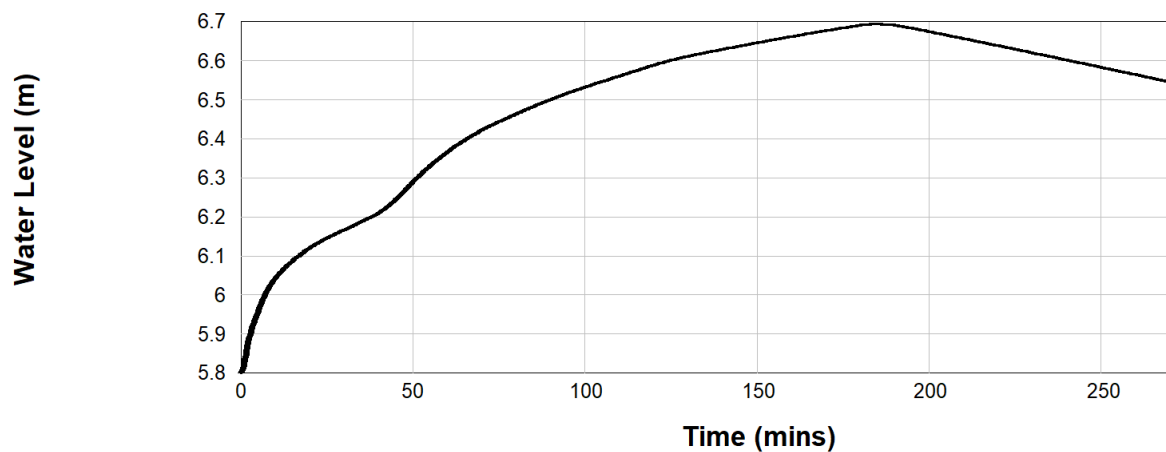
East rural basin does not overflow and so can be left separate – it is unlikely to be developed. If it were an alternate stormwater outflow would be established.

Basin12410 Water Level - 1% AEP, 3 hour burst, Storm 8
File Edit Properties



Basin in subject property does not reaches the shed slab level at RL6.65 for the 100 year climate change model. The house at RL 7.2 has 500 free board.

Basin12405 Water Level - 1% AEP, 3 hour burst, Storm 8
File Edit Properties



This is modelled assuming the basin permeability is 20% of the sand permeability.

Detention Basin

Data | Initial Water Level | Infiltration Data

Floor is:

☐ Impermeable

☒ Permeable

Effective Ratio

20 %

Walls are:

☐ Impermeable

☒ Permeable

Effective Ratio

20 %

Hydraulic Conductivity (m/sec)

5e-05

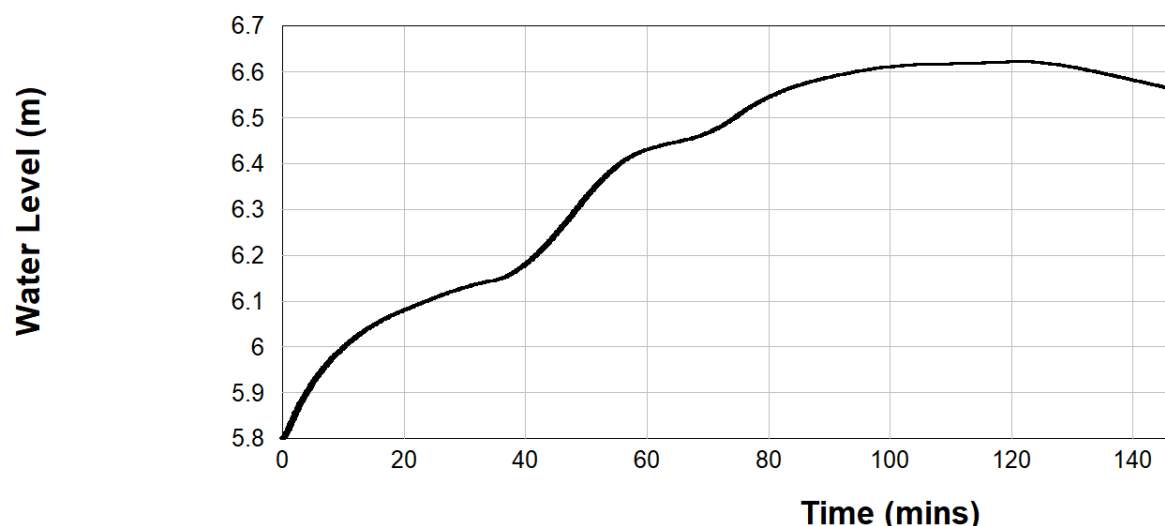
Note:
The Effective Ratio multiplies the Floor Area and Wall Perimeter by the specified percentage to represent the Effective Permeable Areas of Infiltration.

	Elev. (m)	Perimeter (m)
1	5.8	8
2	6	90
3	6.2	150
4	6.4	184
5	6.6	192
6	6.8	236
7		
8		
9		

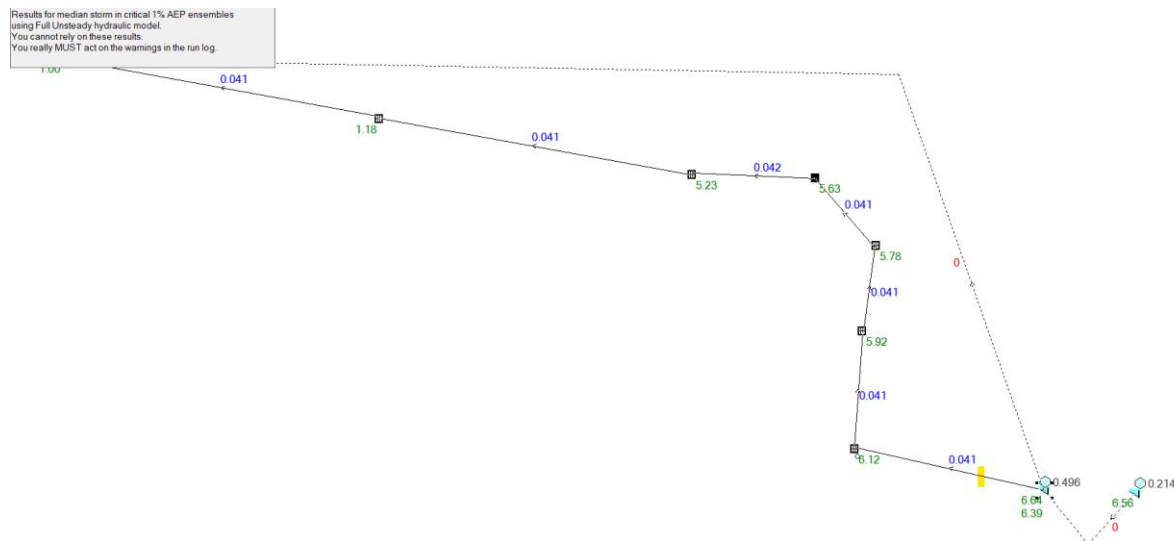
Lifting efficiency of the basin permeability to 50% the model shows no inundation of the garage. With the variables at play and the scope to undertake measures by 2100 to improve the basin permeability or provide a further drainage outlet this modelling shows a low risk of there being flood issues.

Basin12405 Water Level - 1% AEP, 2 hour burst, Storm 8

File Edit Properties



Modelling is conservative as it assumes all water enters the pipe network via the 225 dia new pipe in the subject block – in reality much of the water will enter the pipe network at the culdesac.



Performance Criteria of the C12 Flood-Prone Areas Hazard Code are required to be met. Relevant sections of the code are reproduced below.

C12.5.1 is not relevant as it relates to non habitable buildings and existing buildings.

C12.5.2 is not relevant as it relates to critical, hazardous or vulnerable uses.

C12.6 Development Standards for Buildings and Works

C12.6.1 Buildings and works within a flood-prone hazard area

Objective:	That: (a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.
Acceptable Solutions	Performance Criteria
A1 No Acceptable Solution.	P1.1 Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to: (a) the type, form, scale and intended duration of the development; (b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures; (c) any advice from a State authority, regulated entity or a council; and (d) the advice contained in a flood hazard report, and P1.2 A flood hazard report also demonstrates that the building and works: (a) do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and (b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.

C12.7 relates to subdivision and is not relevant as the lot already exists.

With regard to the C12.6 the proposed dwelling and the garage are above the expected Q100 flood levels expected with climate change in 100 years time. There is therefore no risk of harm provided the design follows the site layout plan incorporating a 225 dia connection to the low part of the subject lot.

With the addition of the 225 dia stormwater relief pipe the development of the site will not cause additional flooding on the surrounding land. Presently there is no relief. Should natural infiltration not occur the 6.6m contour is highlighted below. It is assumed that the neighbouring houses have built above the RL 7 level.

