

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Single Dwelling

Certificate number: 674242S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 18/09/2014 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Friday, 26 February 2016

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary

Project name	5792
Street address	34 Coasters Retreat Pittwater 2108
Local Government Area	Pittwater Council
Plan type and plan number	deposited 25653
Lot no.	12
Section no.	-
Project type	separate dwelling house
No. of bedrooms	3

Project score

Water	✓ 43	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 47	Target 40

Certificate Prepared by

Name / Company Name: Partners Energy Management

ABN (if applicable): 15 418 789 019

Description of project

Project address

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Street address	34 Coasters Retreat Pittwater 2108
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Lot no.	12
Section no.	-

Project type

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Site details

Site area (m ²)	1125
Roof area (m ²)	260
Conditioned floor area (m2)	105.4
Unconditioned floor area (m2)	14.8
Total area of garden and lawn (m2)	100

Assessor details and thermal loads

Assessor number	20039
Certificate number	1008448274
Climate zone	56
Area adjusted cooling load (MJ/m ² .year)	36
Area adjusted heating load (MJ/m ² .year)	62

Other

none	n/a
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Project score

Water	 43	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 47	Target 40

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 2000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 80 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: - all toilets in the development - the cold water tap that supplies each clothes washer in the development - at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) - all hot water systems in the development - all indoor cold water taps (not including taps that supply clothes washers) in the development		✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - suspended floor/open subfloor	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: solar (electric boosted) with a performance of 31 to 35 RECs or better.	✓	✓	✓
Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✓	✓
Heating system			
The living areas must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✓	✓
Ventilation			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: no mechanical ventilation (ie. natural); Operation control: n/a		✓	✓
Kitchen: individual fan, not ducted; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	

Energy Commitments

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check

The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.



Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a  in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a  in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

BUILDING ENERGY EFFICIENCY CERTIFICATE

D Epstein

ISSUED TO

34 Coasters Retreat

ADDRESS

Site Lot 12

Pittwater

NSW

2108

1008448274

CERTIFICATION NUMBER

21/10/2015

DATE

56

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

62.0 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

36.0 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

98.0 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

105.0 m²

FLOOR AREA - CONDITIONED

15.0 m²

FLOOR AREA - UNCONDITIONED

120.0 m²

FLOOR AREA - TOTAL

David Howard

ASSESSOR NAME

20039

ASSESSOR NUMBER

Partners Energy Management

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR
accredited by the Association of Building Sustainability Assessors to
provide NatHERS house energy ratings.

THERMAL PERFORMANCE SPECIFICATIONS:

The following specifications take precedence over other plan notations for the construction of this building.

NOTE: In addition to BASIX commitments; building compliance is required to comply with the 'New South Wales Additions' in the NCC 2015 – Volume 2.

This includes New South Wales Parts 2.6 and 3.12.

Specific mention is made of the following provisions:

- Building Fabric Thermal Insulation

(NOTE: If steel framing is used a thermal break may be required)

- Building Sealing
- Building Services

WINDOWS

U-value 3.95 (or less than) & SHGC 0.65 (+/-10%)(generally)

U-value 4.12 (or less than) & SHGC 0.66 (+/-10%)(Louvres)

U-value 2.50 (or less than) & SHGC 0.62 (+/-10%)

(Sliding doors in Living/Kitchen module)

EXTERNAL WALL (Dark colour)

Cavity Panel – R2.7 bulk insulation

INTERNAL WALL

Cavity Panel – No Insulation (generally)

Cavity Panel – R2.7 bulk insulation (between bath and Bed 3)

EXTERNAL FLOOR

Suspended Timber – R2.7 bulk insulation

EXTERNAL CEILING

Plasterboard – R4.0 bulk insulation

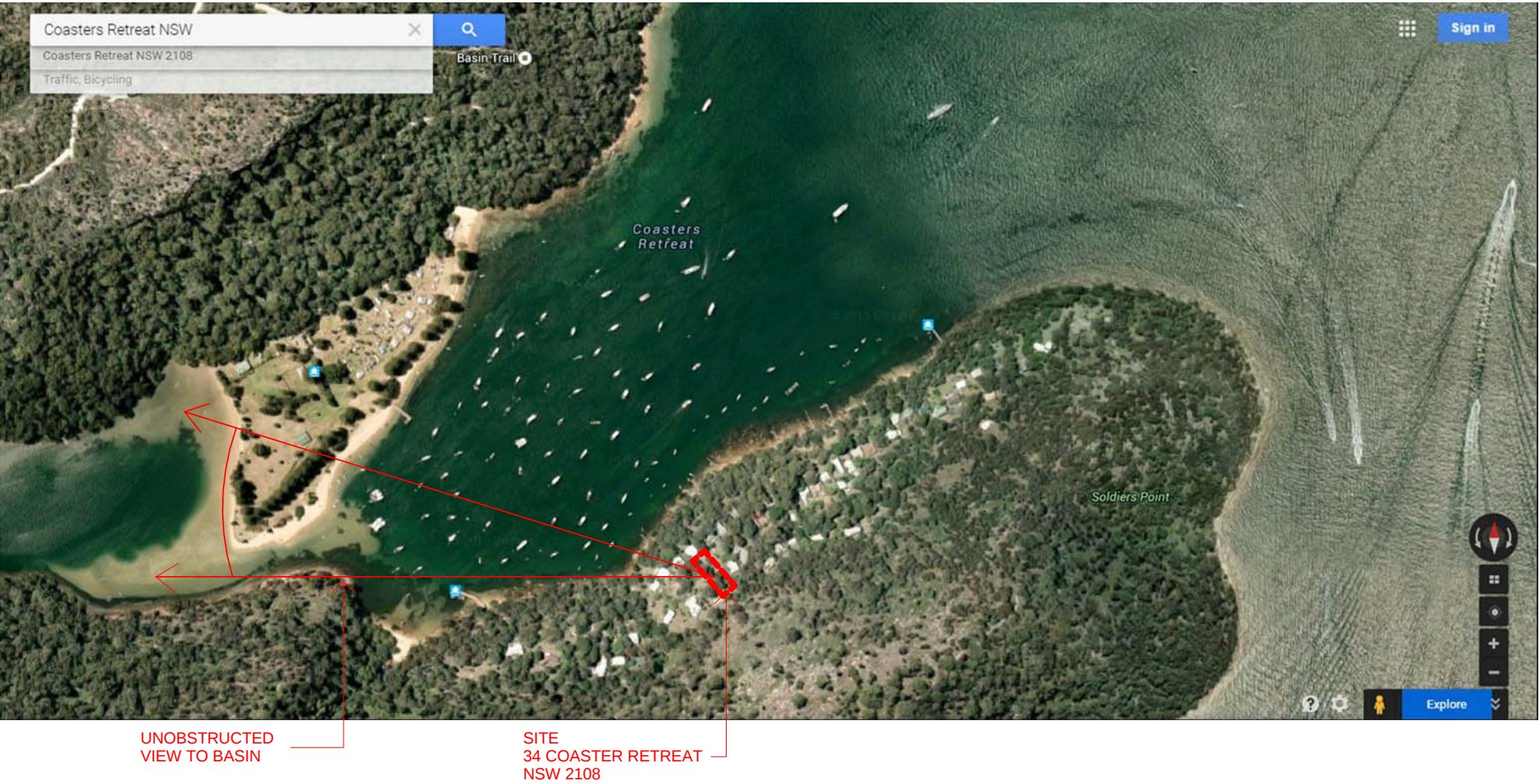
ROOF (Dark colour) (Non-ventilated)

Sheet Metal Roofing – Reflective Foil insulation

RATED either with NO DOWNLIGHTS or with LED downlights which do not penetrate ceiling insulation

DRAWING SCHEDULE

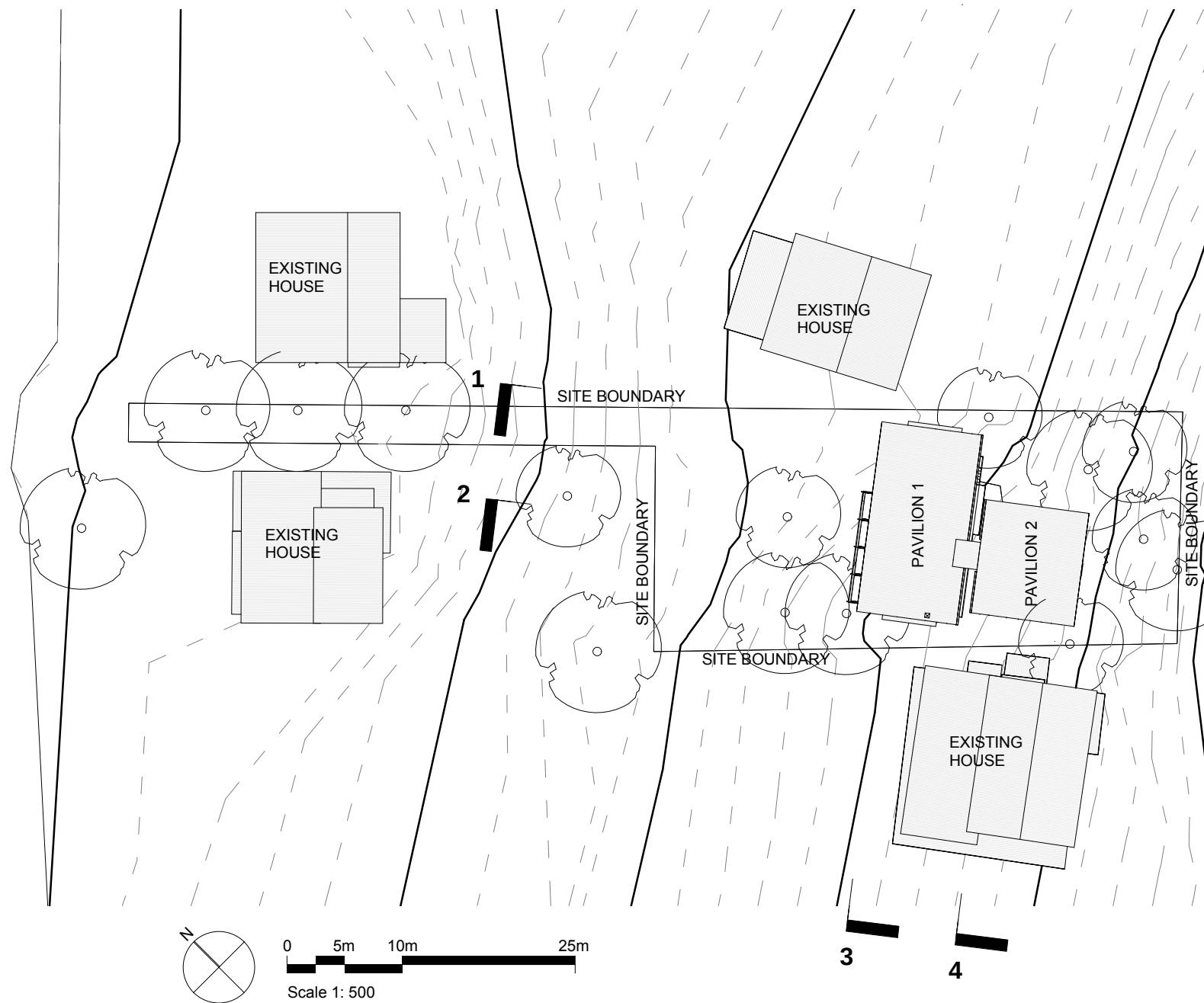
00	TITLE SHEET	
01	SITE LOCATION PLAN	24.02.16
02	SITE PLAN	24.02.16
03	SITE SECTION 1	24.02.16
04	SITE SECTION 2	24.02.16
05	SITE SECTION 3	24.02.16
06	FLOOR PLAN - LEVEL	24.02.16
07	FLOOR PLAN - LEVEL 2	24.02.16
08	ROOF PLAN	24.02.16
09	ELEVATIONS N/S	24.02.16
10	ELEVATIONS E/W	24.02.16
11	SECTIONS 1,2	24.02.16
12	SECTION 3	24.02.16
13	SECTION 4	24.02.16
14	SUN STUDY 01	24.02.16
15	SUN STUDY 02	24.02.16
16	AREA PLANS	24.02.16
17	MATERIAL BOARD	24.02.16



HOUSE SIZE

- 70m2 Open plan living area with kitchen + dining +living, laundry
- 74m2 All decks
- 12m2 Bathrooms
- 28m2 Bedrooms





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- Building Services

WINDOWS

U-value 3.95 (or less than) & SHGC 0.65 (+/-10%)(generally)

U-value 4.12 (or less than) & SHGC 0.66 (+/-10%)(Louvers)

U-value 2.50 (or less than) & SHGC 0.62 (+/-10%)

(Sliding doors in Living/Kitchen module)

EXTERNAL WALL (Dark colour)

Cavity Panel – R2.7 bulk insulation

INTERNAL WALL

Cavity Panel – No Insulation (generally)

Cavity Panel – R2.7 bulk insulation (between bath and Bed 3)

EXTERNAL FLOOR

Suspended Timber – R2.7 bulk insulation

EXTERNAL CEILING

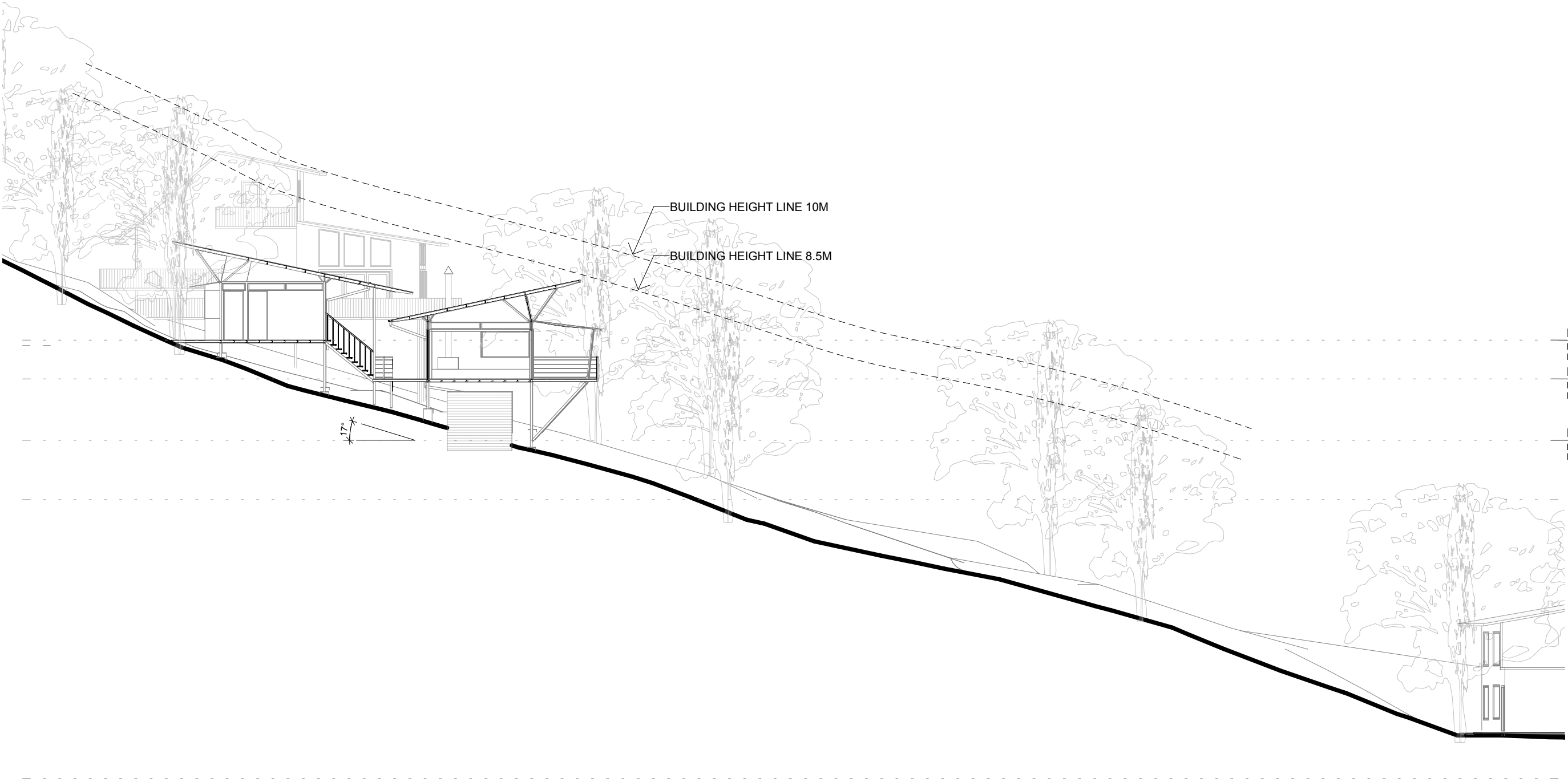
Plasterboard – R4.0 bulk insulation

ROOF (Dark colour) (Non-ventilated)

Sheet Metal Roofing – Reflective Foil insulation

RATED either with **NO DOWNLIGHTS** or with **LED downlights** which do not penetrate ceiling insulation

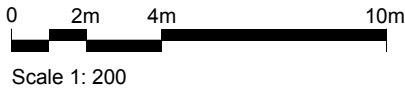




RL 29.33
PAVILION 2 -
FFL 0

RL 27.53
PAVILION 1 -
FFL 0

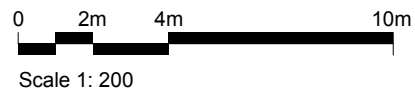
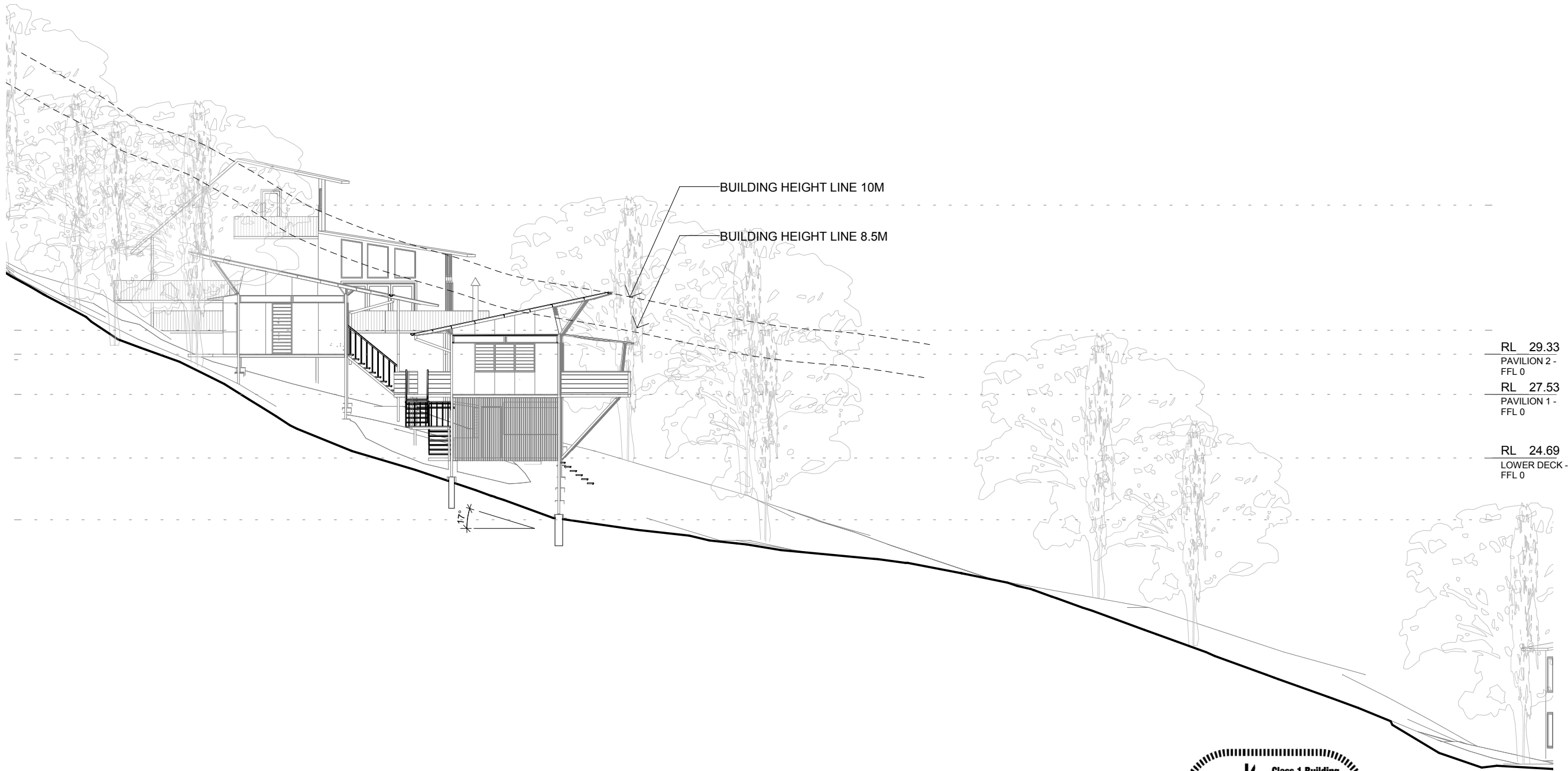
RL 24.69
LOWER DECK -
FFL 0



Section 1

1 : 200

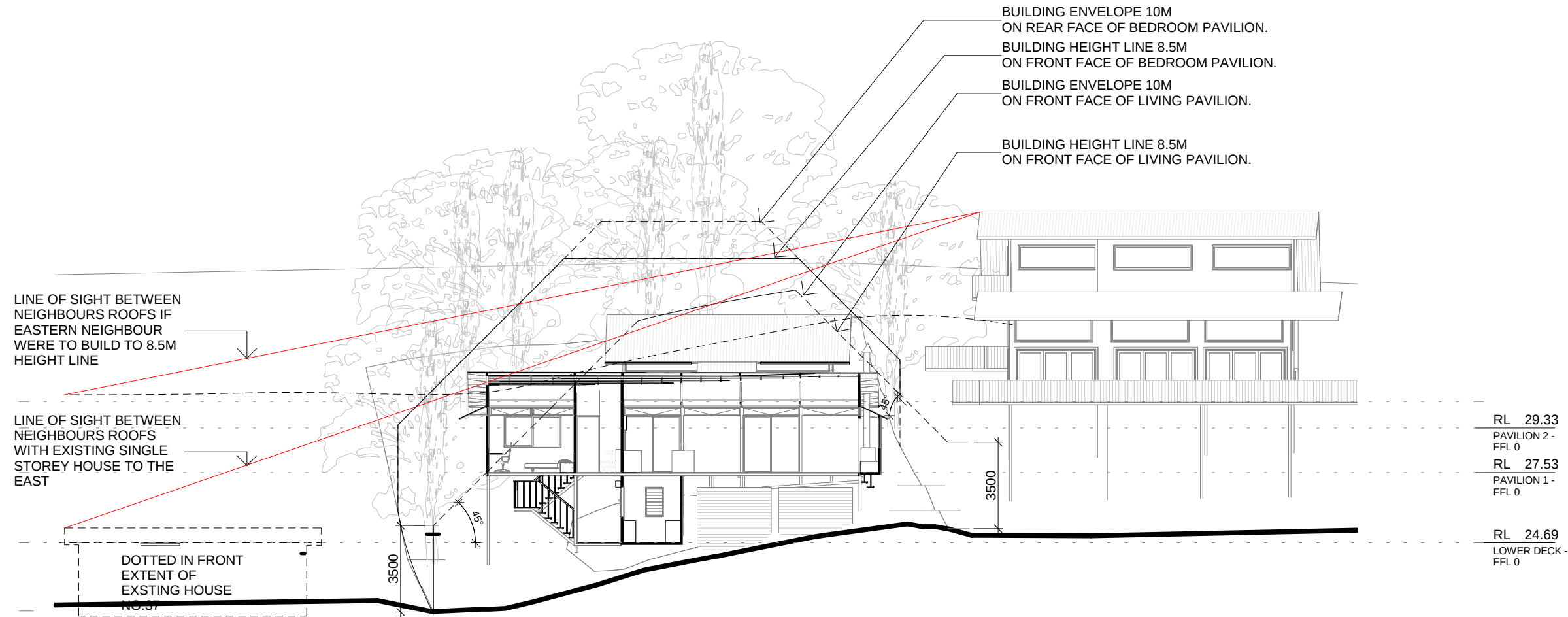




COASTERS RETREAT

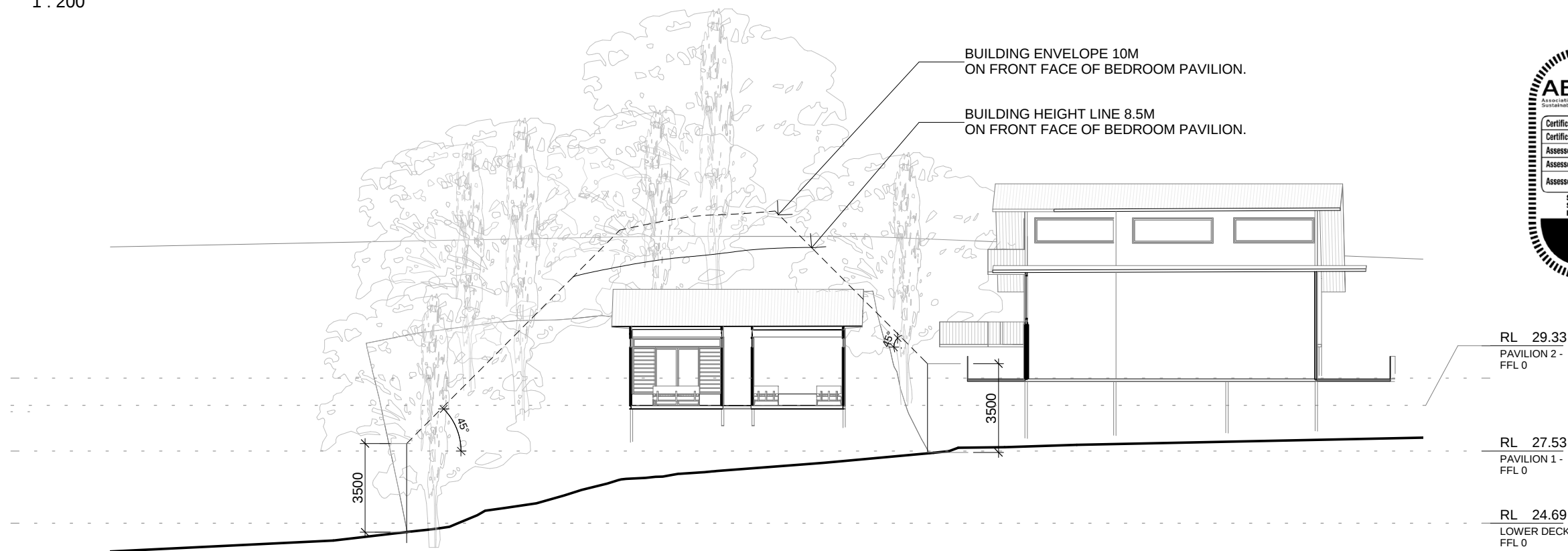
SECTION 2





Section 3

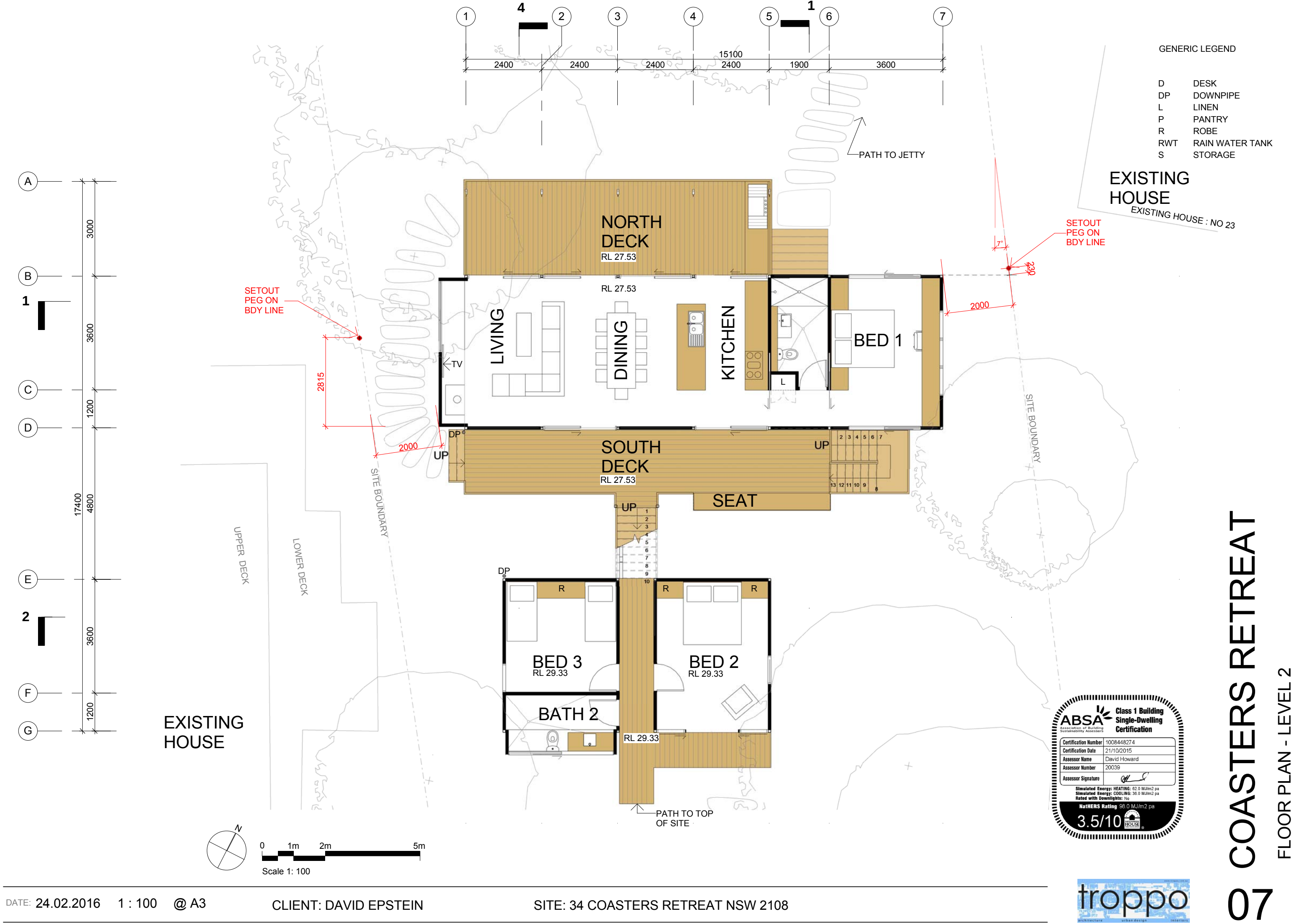
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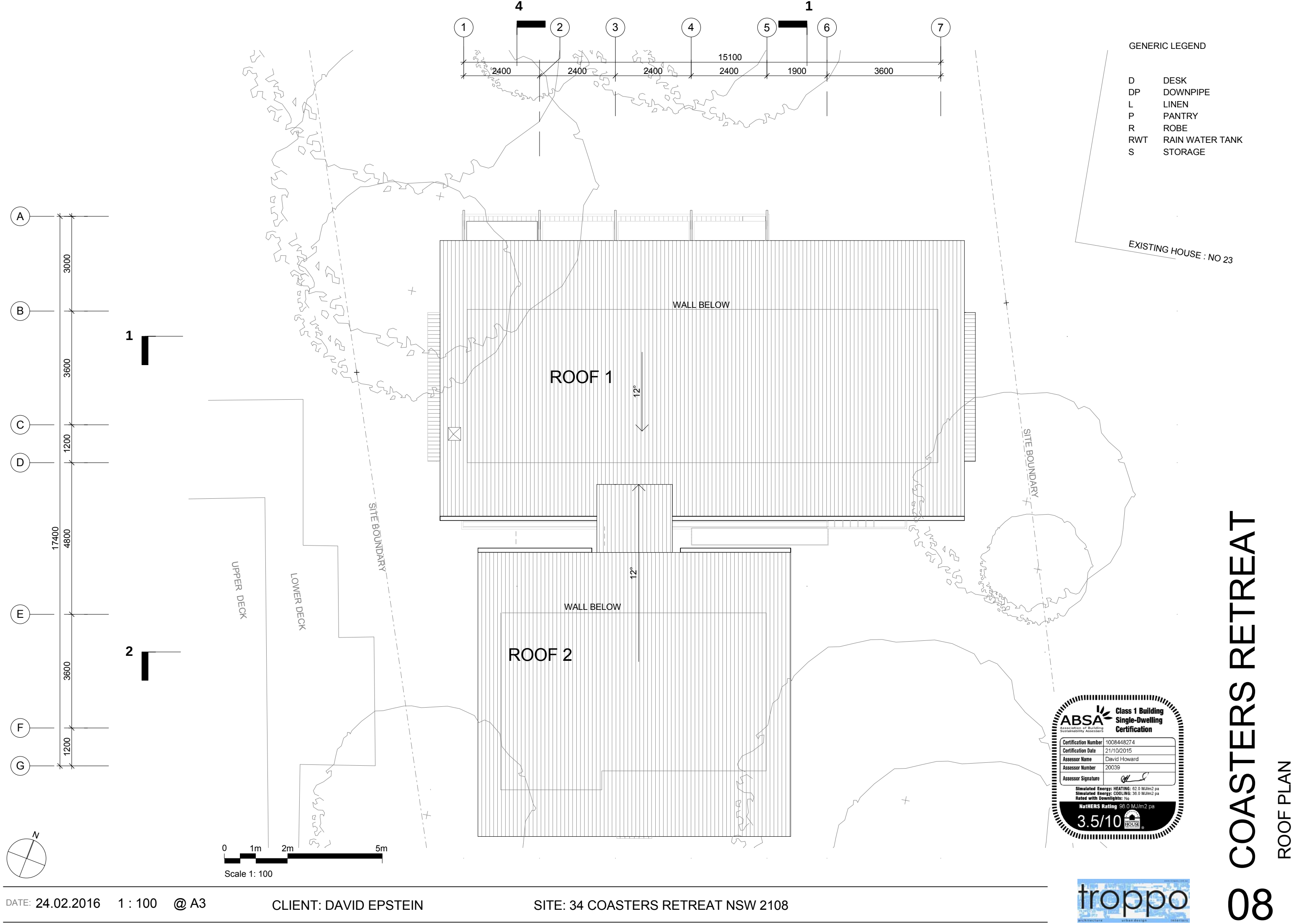


Section 4

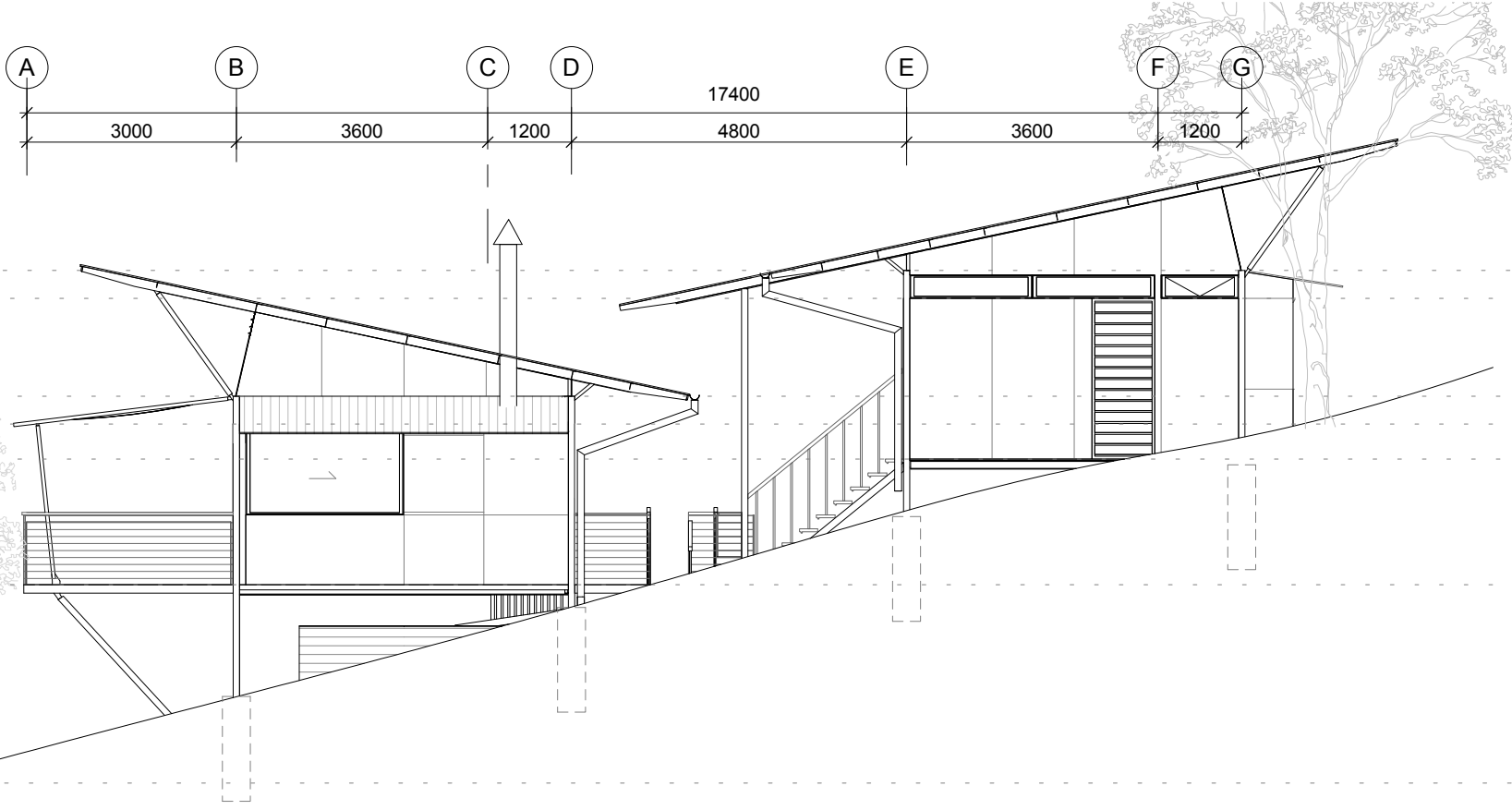
1 : 200











30.23 RL
P1 FL 2700

29.83 RL
L2 FL 2300

29.33 RL
PAVILION 2 -
FFL 0

27.53 RL
PAVILION 1 -
FFL 0

RL 32.03
P2 FL 2700

RL 31.63
P2 FL 2300

RL 29.33
PAVILION 2 -
FFL 0

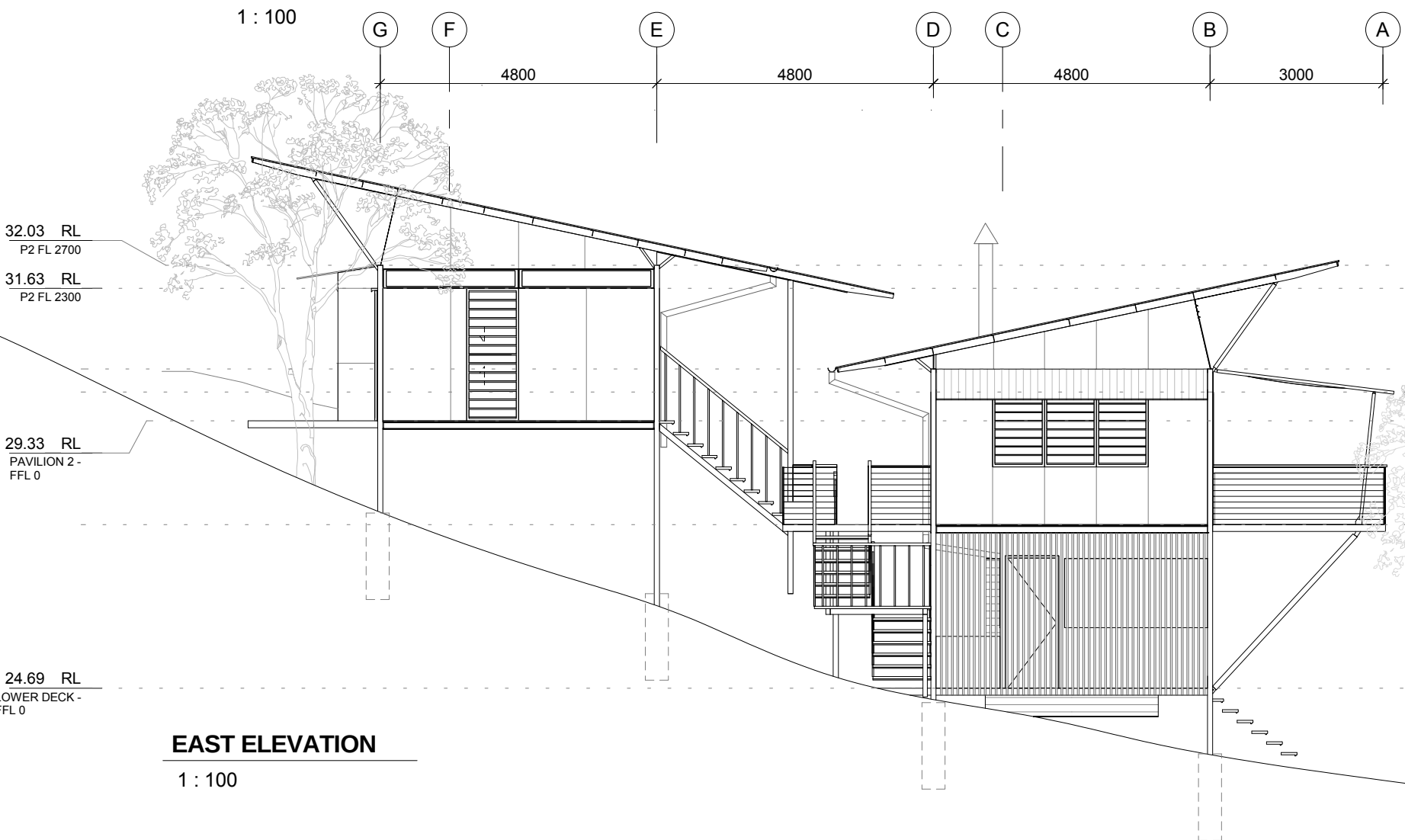
RL 27.53
PAVILION 1 -
FFL 0

24.69 RL
LOWER DECK -
FFL 0

RL 24.69
LOWER DECK -
FFL 0

WEST ELEVATION

1 : 100



32.03 RL
P2 FL 2700

31.63 RL
P2 FL 2300

29.33 RL
PAVILION 2 -
FFL 0

24.69 RL
LOWER DECK -
FFL 0

GENERIC LEGEND

- D DESK
- DP DOWNPIPE
- L LINEN
- P PANTRY
- R ROBE
- RWT RAIN WATER TANK
- S STORAGE

RL 30.23
P1 FL 2700

RL 29.83
L2 FL 2300

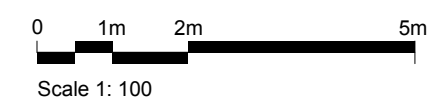
RL 29.33
PAVILION 2 -
FFL 0

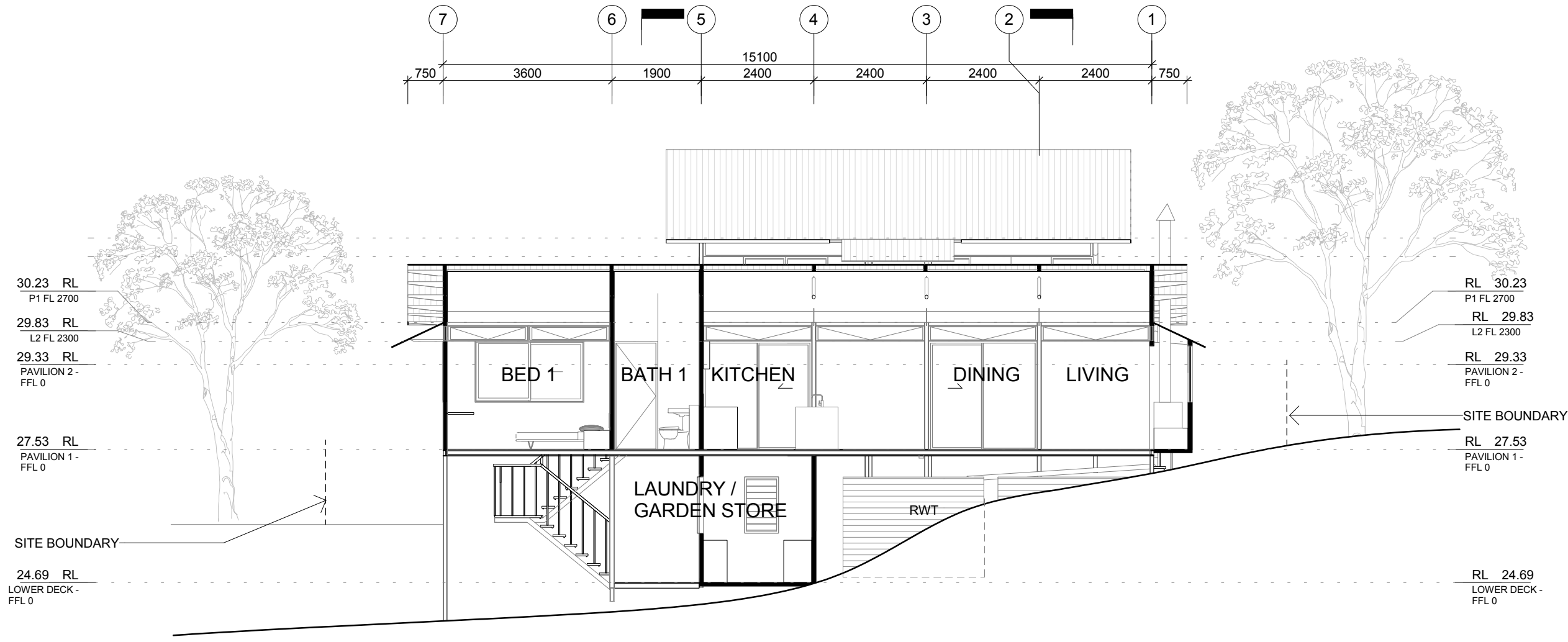
RL 27.53
PAVILION 1 -
FFL 0

RL 24.69
LOWER DECK -
FFL 0

EAST ELEVATION

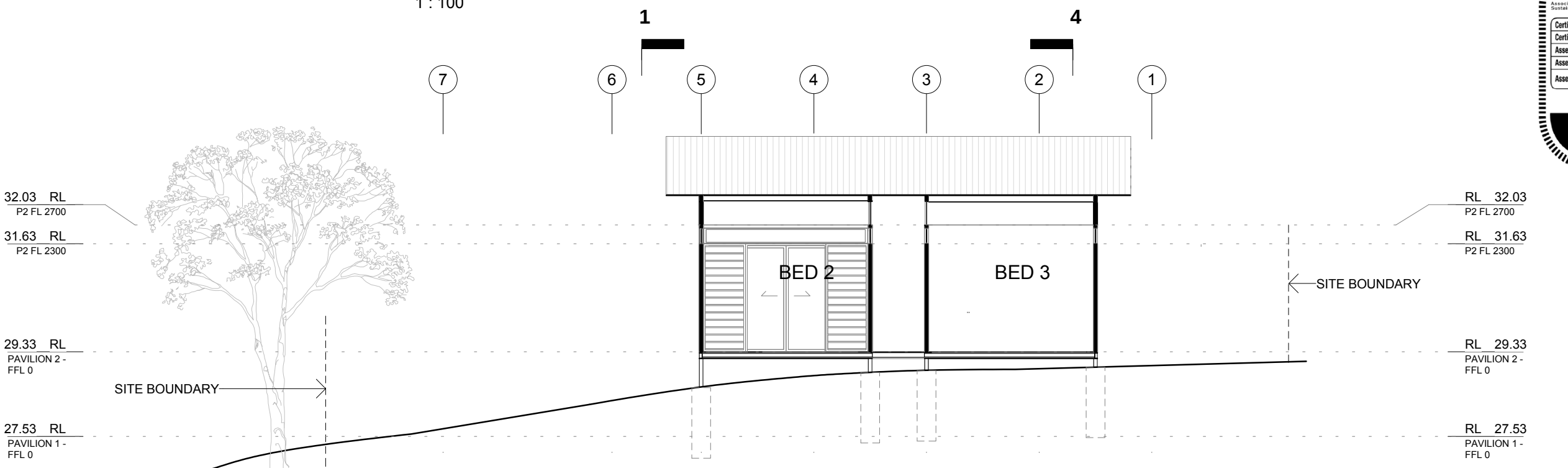
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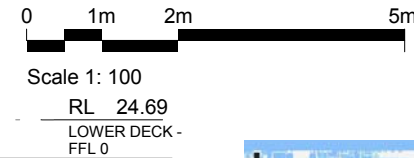


- GENERIC LEGEND
- D DESK
 - DP DOWNPIPE
 - L LINEN
 - P PANTRY
 - R ROBE
 - RWT RAIN WATER TANK
 - S STORAGE

Section 1
1 : 100

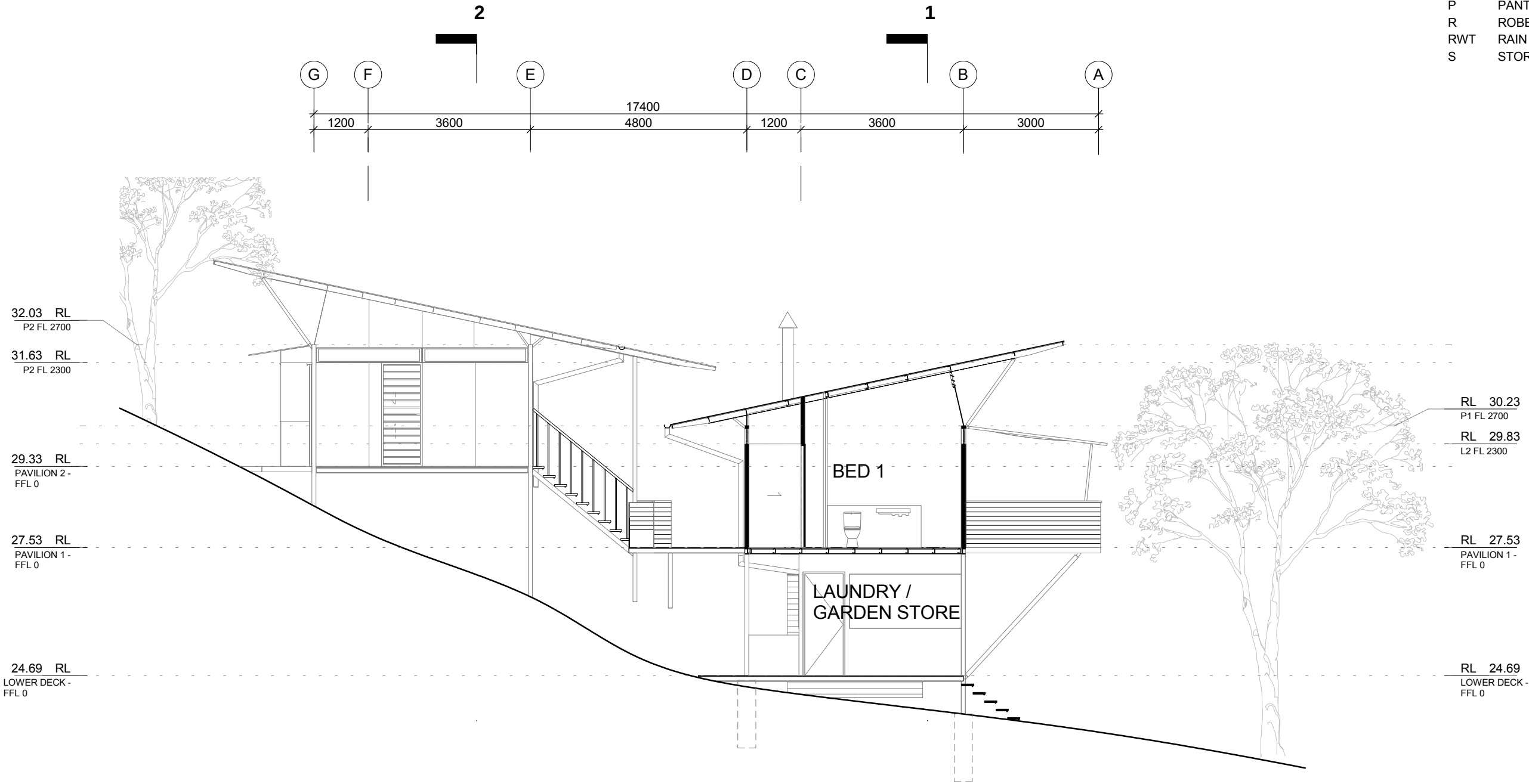


Section 2
1 : 100



GENERIC LEGEND

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- DP DOWNPIPE
- L LINEN
- P PANTRY
- R ROBE
- RWT RAIN WATER TANK
- S STORAGE

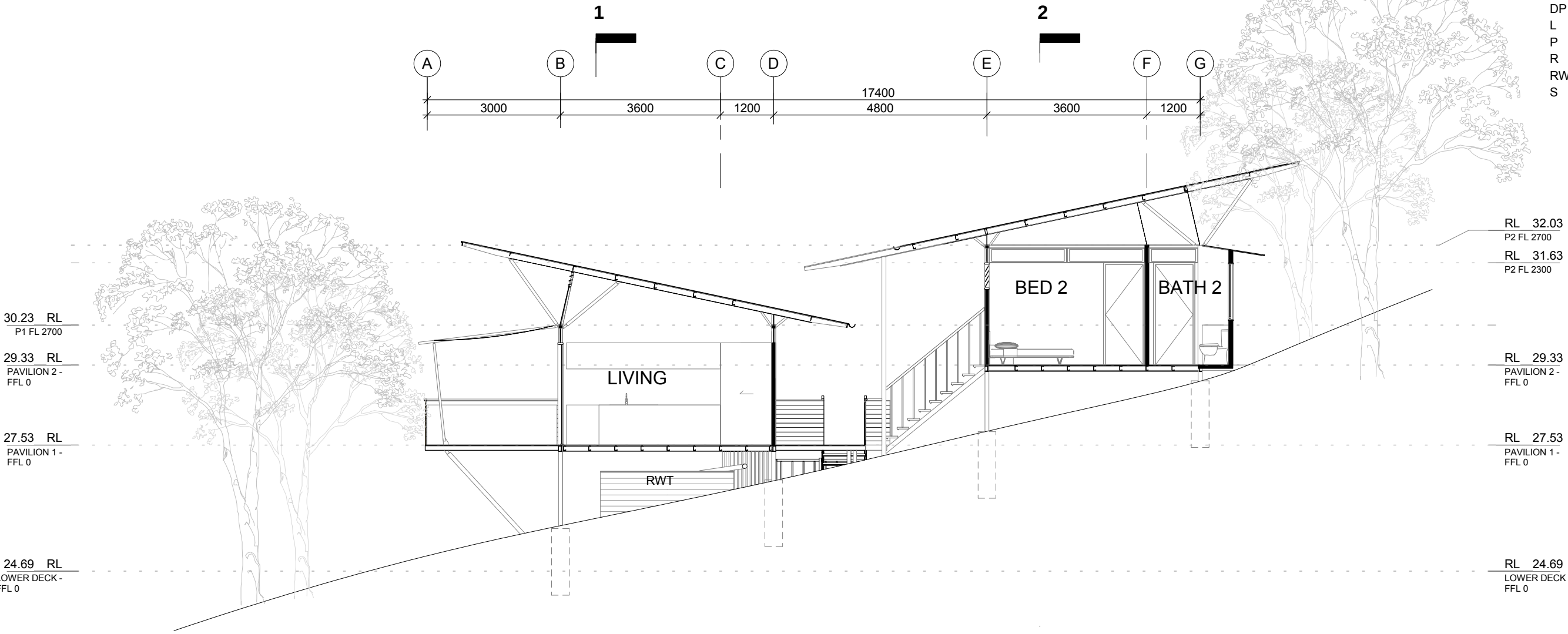


Section 3
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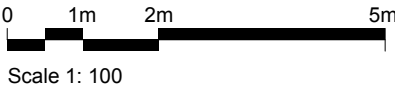


GENERIC LEGEND

- D DESK
- DP DOWNPIPE
- L LINEN
- P PANTRY
- R ROBE
- RWT RAIN WATER TANK
- S STORAGE



Section 4
1 : 100





SUN STUDY WINTER 9AM VIEW1



SUN STUDY SUMMER 9AM VIEW1



SUN STUDY WINTER 12PM VIEW1



SUN STUDY SUMMER 12PM VIEW1

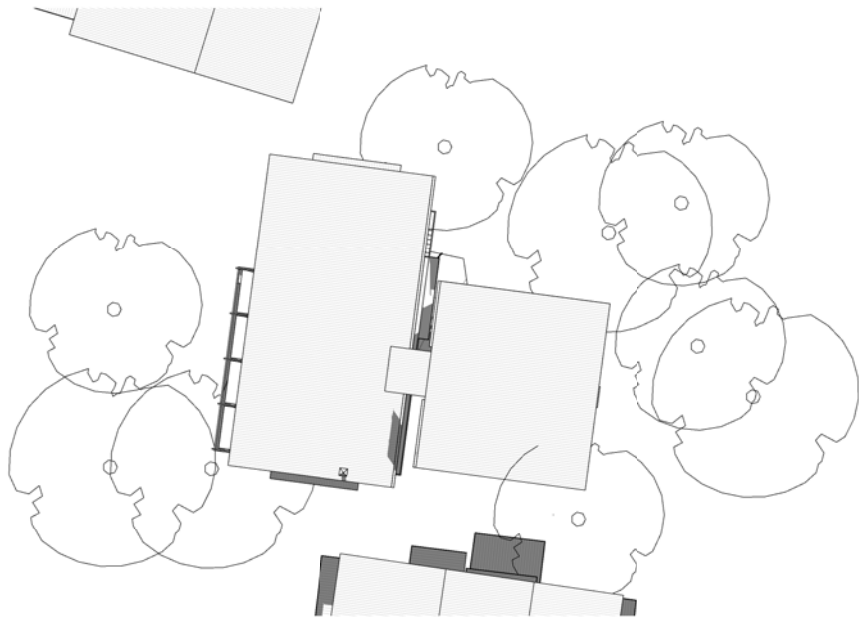


SUN STUDY WINTER 3PM VIEW1



SUN STUDY SUMMER 3PM VIEW1





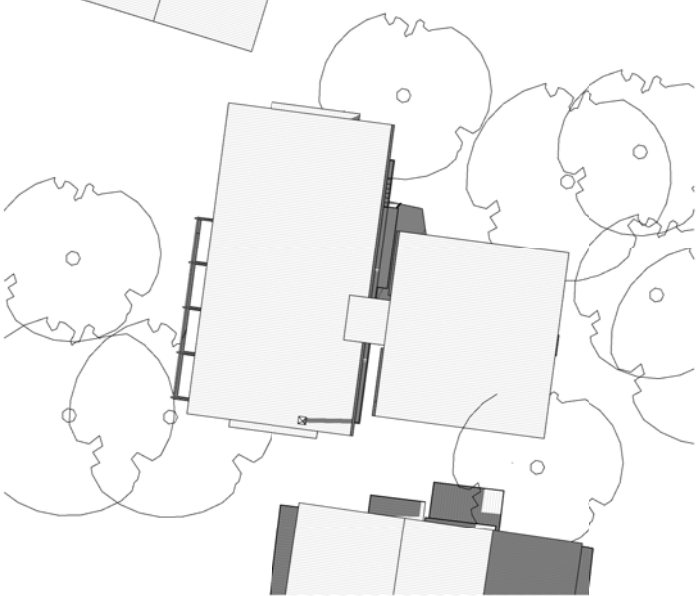
WINTER 9AM SUN STUDY

1 : 400



WINTER 12PM SUN STUDY

1 : 400



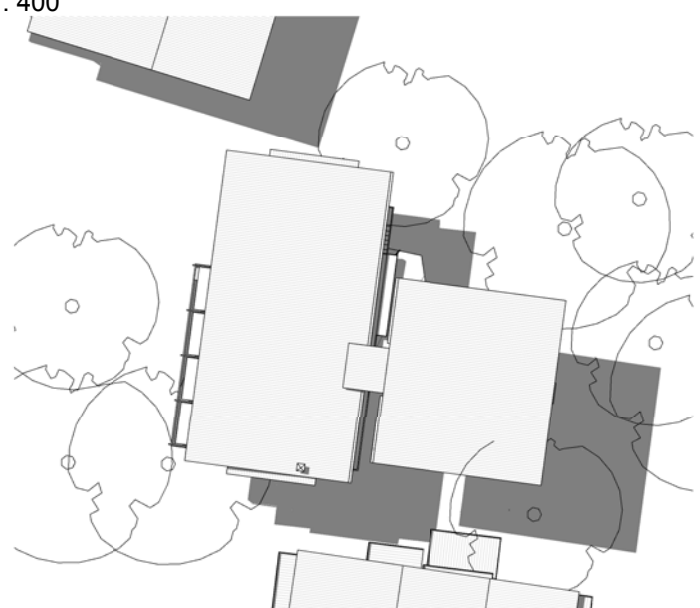
WINTER 3PM SUN STUDY

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SUMMER 9AM SUN STUDY

1 : 400



SUMMER 12PM SUN STUDY

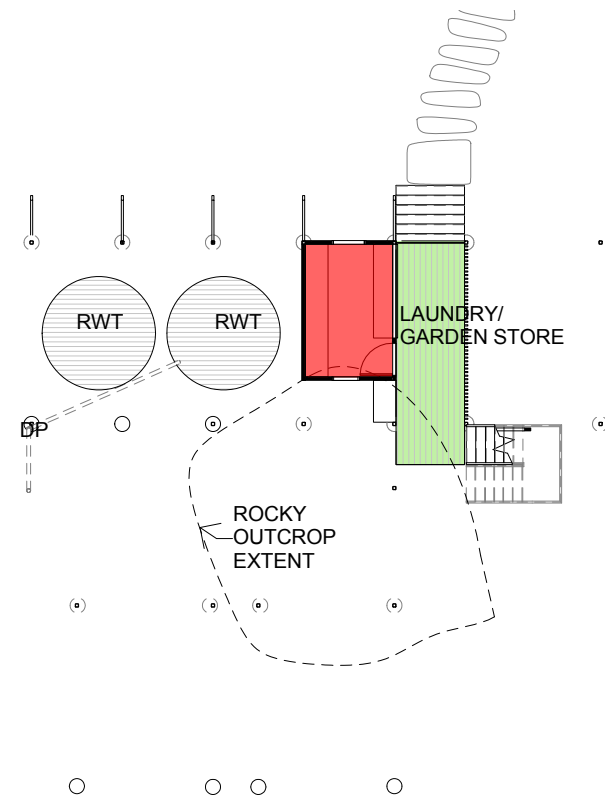
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SUMMER 3PM SUN STUDY

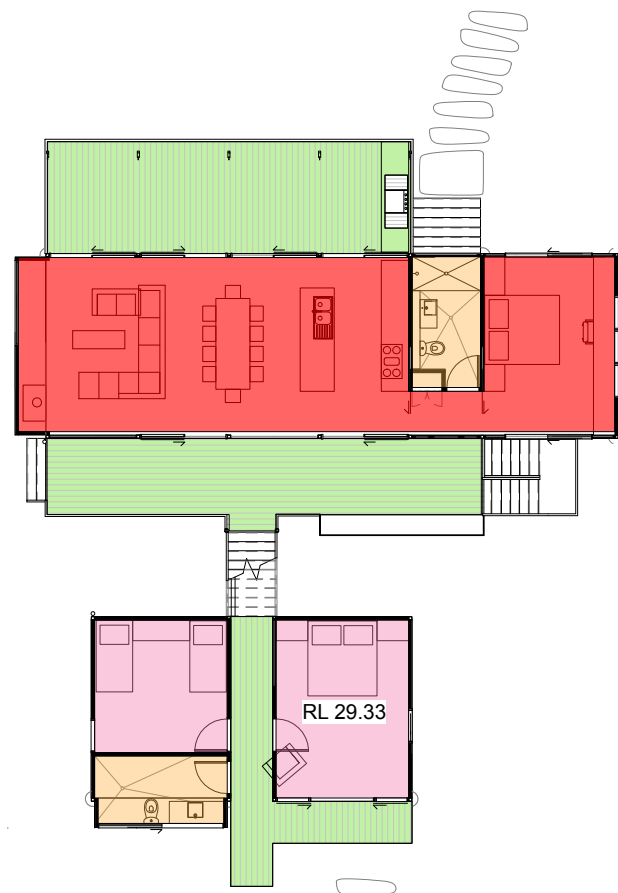
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AREA PLAN - LEVEL 1

1 : 200



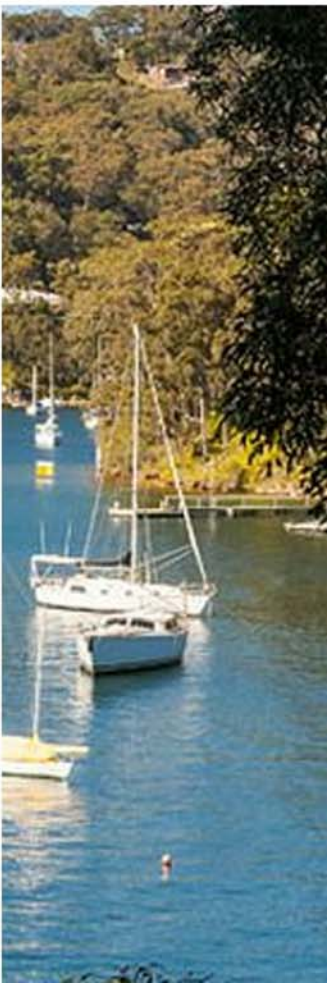
AREA PLAN - LEVEL 2

1 : 200

HOUSE SIZE

- 70m² Open plan living area with kitchen + dining +living, laundry
- 74m² All decks
- 12m² Bathrooms
- 28m² Bedrooms





MATERIAL SCHEDULE

- STRUCTURE - GALVANISED STEEL
- EXTERNAL WALL LININGS - FIBRE CEMENT SHEETING, CLEAR FINISH
- ROOF - COLORBOND CUSTOM ORB - WINDSPRAY
- DECKING - HARDWOOD, CLEAR FINISH
- DOORS AND WINDOWS - ALUMINIUM
- INTERNAL WALL LININGS - PLY

