

BASIX Assessment

Project Details	<p>Address: 1 Luan Court, Byron Bay, NSW, 2481</p> <p>Lot and Plan: 1, 2, CP SP57243, SP57243, SP57243</p> <p>Council: Byron Shire Council</p> <p>NCC Climate Zone: 2</p> <p>Project Description:</p> <p>Building Classification: 1a</p>																												
Result	<p>Complies with Building Sustainability Index subject to the minimum construction requirements below and the BASIX certificate attached:</p>																												
Construction Details and Minimum Requirements	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">External Walls:</td> <td>Reflective foil and R2.0 batts</td> </tr> <tr> <td>Insulation:</td> <td>R2.0 batts</td> </tr> <tr> <td>Internal Walls:</td> <td>Plasterboard</td> </tr> <tr> <td>Insulation:</td> <td>R2.0 batts to garage</td> </tr> <tr> <td>Floor:</td> <td>Waffle pod and suspended timber</td> </tr> <tr> <td>Insulation:</td> <td>R2.0 batts to open subfloor</td> </tr> <tr> <td>Ceiling:</td> <td>Plasterboard</td> </tr> <tr> <td>Insulation:</td> <td>R2.5 batts</td> </tr> <tr> <td>Roof:</td> <td>Colorbond (Medium colour)</td> </tr> <tr> <td>Insulation:</td> <td>R1.3 blanket</td> </tr> <tr> <td>Glazing:</td> <td>Single clear with aluminium frames</td> </tr> <tr> <td></td> <td><small>Note: NSW BASIX Thermal Comfort Protocol allows a +/- 10% tolerance of SHGC value which overrides the values shown on the NatHERS Certificate.</small></td> </tr> <tr> <td>Ceiling Penetrations:</td> <td>Sealed LED downlights and exhaust fans</td> </tr> <tr> <td>Other:</td> <td>Building must also comply with Parts 3.12.1, 3.12.3 and 3.12.5 of the NCC 2019</td> </tr> </table>	External Walls:	Reflective foil and R2.0 batts	Insulation:	R2.0 batts	Internal Walls:	Plasterboard	Insulation:	R2.0 batts to garage	Floor:	Waffle pod and suspended timber	Insulation:	R2.0 batts to open subfloor	Ceiling:	Plasterboard	Insulation:	R2.5 batts	Roof:	Colorbond (Medium colour)	Insulation:	R1.3 blanket	Glazing:	Single clear with aluminium frames		<small>Note: NSW BASIX Thermal Comfort Protocol allows a +/- 10% tolerance of SHGC value which overrides the values shown on the NatHERS Certificate.</small>	Ceiling Penetrations:	Sealed LED downlights and exhaust fans	Other:	Building must also comply with Parts 3.12.1, 3.12.3 and 3.12.5 of the NCC 2019
External Walls:	Reflective foil and R2.0 batts																												
Insulation:	R2.0 batts																												
Internal Walls:	Plasterboard																												
Insulation:	R2.0 batts to garage																												
Floor:	Waffle pod and suspended timber																												
Insulation:	R2.0 batts to open subfloor																												
Ceiling:	Plasterboard																												
Insulation:	R2.5 batts																												
Roof:	Colorbond (Medium colour)																												
Insulation:	R1.3 blanket																												
Glazing:	Single clear with aluminium frames																												
	<small>Note: NSW BASIX Thermal Comfort Protocol allows a +/- 10% tolerance of SHGC value which overrides the values shown on the NatHERS Certificate.</small>																												
Ceiling Penetrations:	Sealed LED downlights and exhaust fans																												
Other:	Building must also comply with Parts 3.12.1, 3.12.3 and 3.12.5 of the NCC 2019																												
Assessor Details	<p>Name: Conor Horwood</p> <p>Accreditation Number: DMN/16/1757</p> <p>Signature:</p> 																												

DISCLAIMER: The report and results above have been calculated using information made available to Enviuro as supplied on the referenced drawings. The report and subsequent results are specific to this data and shall become null and void if any variations are made. Unless information has been noted on the drawings, or advised in writing, the results and report reflect a worst case scenario whereby default values and assumptions have been applied.



Nationwide House Energy Rating Scheme NatHERS Certificate No. 0006354427-01

Generated on 28 Mar 2022 using BERS Pro v4.4.1.5 (3.21)

Property

Address 1 Luan Court , Byron Bay , NSW , 2481
Lot/DP 2/57243
NCC Class* 1A
Type New Dwelling

Plans

Main Plan 240835
Prepared by G.J. Gardner

Construction and environment

Assessed floor area (m ²)*	Exposure Type
Conditioned* 152.0	Suburban
Unconditioned* 31.0	NatHERS climate zone
Total 183.0	10
Garage 21.0	

5.2
The more stars
the more energy efficient

**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME

51.7 MJ/m²
Predicted annual energy load for
heating and cooling based on standard
occupancy assumptions.

For more information on
your dwelling's rating see:
www.nathers.gov.au

Accredited assessor

Name Conor Horwood
Business name Enviiro
Email conor.horwood@enviirro.com.au
Phone 1300100368
Accreditation No. DMN/16/1757
Assessor Accrediting Organisation Design Matters National
Declaration of interest Declaration completed: no conflicts

Thermal performance

Heating	Cooling
17.3 MJ/m ²	34.4 MJ/m ²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=chJLxwiyW. When using either link, ensure you are visiting hstar.com.au



National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

Medium roof colour as specified by client

Assessor Advice:

> R2.0 batts to internal garage walls

> R2.0 batts to open subfloor

I have modeled the shading in accordance with NatHERS principles

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70	0.66	0.73

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-002-01 A	n/a	1800	600	n/a	45	W	No
Kitchen/Living	ALM-002-01 A	n/a	1800	600	n/a	45	W	No
Kitchen/Living	ALM-002-01 A	n/a	2400	4800	n/a	45	S	No
Kitchen/Living	ALM-002-01 A	n/a	2400	1500	n/a	45	S	No
Foyer	ALM-002-01 A	n/a	2100	600	n/a	45	N	No
Office	ALM-002-01 A	n/a	600	1800	n/a	45	W	No
Office	ALM-002-01 A	n/a	1800	600	n/a	45	N	No
Office	ALM-002-01 A	n/a	1800	600	n/a	45	N	No
Ldry	ALM-002-01 A	n/a	2400	1500	n/a	45	W	No
Bath	ALM-002-01 A	n/a	600	1500	n/a	45	W	No
Bedroom 2	ALM-002-01 A	n/a	1200	1800	n/a	10	W	No
Bedroom 2	ALM-002-01 A	n/a	1200	1800	n/a	10	W	No
Bedroom 2	ALM-002-01 A	n/a	2100	2700	n/a	45	N	No
Activity	ALM-002-01 A	n/a	2100	2100	n/a	45	N	No
Activity	ALM-002-01 A	n/a	600	1500	n/a	00	E	No
Activity	ALM-002-01 A	n/a	600	1800	n/a	45	E	No
Bedroom 1	ALM-002-01 A	n/a	1200	2700	n/a	45	E	No
Bedroom 1	ALM-002-01 A	n/a	600	2100	n/a	10	S	No
W.I.R.	ALM-002-01 A	n/a	900	600	n/a	10	W	No
Ens.	ALM-002-01 A	n/a	900	600	n/a	10	W	No
Ens.	ALM-002-01 A	n/a	900	1500	n/a	45	S	No

Roof window *type and performance*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight type and performance

Skylight ID	Skylight description
No Data Available	

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Foyer	2100	920	90	N
Garage	2100	2400	90	N

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-2	Fibro Cavity Panel Direct Fix	0.50	Medium	Anti-glare foil with bulk no gap R2	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	EW-1	2740	5695	W	0	NO
Kitchen/Living	EW-1	2740	4095	E	450	NO
Kitchen/Living	EW-1	2740	8950	S	0	NO
Foyer	EW-1	2740	2240	N	1200	YES
Garage	EW-1	2740	3495	N	500	NO
Garage	EW-2	2740	6050	E	500	NO
Garage	EW-1	2740	850	S	6000	YES
Pantry	EW-1	2740	1340	E	450	YES
Office	EW-1	2740	3045	W	0	NO
Office	EW-1	2740	4050	N	0	NO
Office	EW-1	2740	1200	E	2250	YES
Ldry	EW-1	2740	1890	W	0	NO
Bath	EW-1	2740	2040	W	0	NO
Bedroom 2	EW-1	2440	7195	W	450	NO
Bedroom 2	EW-1	2440	4045	N	1650	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Activity	EW-1	2440	2245	N	1650	NO
Activity	EW-1	2440	7195	E	450	NO
Bedroom 1	EW-1	2440	5495	E	450	NO
Bedroom 1	EW-1	2440	4295	S	450	NO
W.I.R.	EW-1	2440	1640	W	450	NO
Ens.	EW-1	2440	3845	W	450	NO
Ens.	EW-1	2440	1995	S	450	NO

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
WV-1	Cavity wall, direct fix plasterboard, single gap	138.00	No insulation
WV-2	Cavity wall, direct fix plasterboard, single gap	23.00	Bulk Insulation, No Air Gap R2

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living	Waffle pod slab 300 mm 85mm	46.30	None	Waffle Pod 300mm	Vinyl 3mm
Foyer	Waffle pod slab 300 mm 85mm	14.70	None	Waffle Pod 300mm	Vinyl 3mm
Garage	Waffle pod slab 300 mm 85mm	20.80	None	Waffle Pod 300mm	Bare
Pantry	Waffle pod slab 300 mm 85mm	3.30	None	Waffle Pod 300mm	Vinyl 3mm
Office	Waffle pod slab 300 mm 85mm	12.10	None	Waffle Pod 300mm	Vinyl 3mm
Ldry	Waffle pod slab 300 mm 85mm	7.20	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bath	Waffle pod slab 300 mm 85mm	3.30	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Pdr	Waffle pod slab 300 mm 85mm	2.10	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 2/Foyer	Timber Above Plasterboard 19mm	2.30		No Insulation	Vinyl 3mm
Bedroom 2/Office	Timber Above Plasterboard 19mm	12.10		No Insulation	Vinyl 3mm
Bedroom 2/Ldry	Timber Above Plasterboard 19mm	5.40		No Insulation	Vinyl 3mm
Bedroom 2/Bath	Timber Above Plasterboard 19mm	3.50		No Insulation	Vinyl 3mm
Bedroom 2/Pdr	Timber Above Plasterboard 19mm	2.30		No Insulation	Vinyl 3mm
Activity/Foyer	Timber Above Plasterboard 19mm	12.70		No Insulation	Vinyl 3mm
Activity	Suspended Timber Floor 19mm	2.60	Totally Open	Bulk Insulation in Contact with Floor R2	Vinyl 3mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	19.80		No Insulation	Vinyl 3mm
W.I.R./Kitchen/Living	Timber Above Plasterboard 19mm	6.20		No Insulation	Vinyl 3mm
WC/Kitchen/Living	Timber Above Plasterboard 19mm	0.50		No Insulation	Ceramic Tiles 8mm

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
WC/Ldry	Timber Above Plasterboard 19mm	1.90		No Insulation	Ceramic Tiles 8mm
Ens./Kitchen/Living	Timber Above Plasterboard 19mm	7.40		No Insulation	Ceramic Tiles 8mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Kitchen/Living	Plasterboard	Bulk Insulation R2.5	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Foyer	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	Bulk Insulation R2.5	No
Pantry	Plasterboard	Bulk Insulation R2.5	No
Office	Timber Above Plasterboard	No Insulation	No
Ldry	Timber Above Plasterboard	No Insulation	No
Bath	Timber Above Plasterboard	No Insulation	No
Pdr	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Plasterboard	Bulk Insulation R2.5	No
Activity	Plasterboard	Bulk Insulation R2.5	No
Bedroom 1	Plasterboard	Bulk Insulation R2.5	No
W.I.R.	Plasterboard	Bulk Insulation R2.5	No
WC	Plasterboard	Bulk Insulation R2.5	No
Ens.	Plasterboard	Bulk Insulation R2.5	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
Kitchen/Living	6	Downlights - LED	150	Sealed
Foyer	2	Downlights - LED	150	Sealed
Garage	2	Downlights - LED	150	Sealed
Pantry	1	Downlights - LED	150	Sealed
Office	2	Downlights - LED	150	Sealed
Ldry	2	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Pdr	1	Downlights - LED	150	Sealed
Pdr	1	Exhaust Fans	300	Sealed
Bedroom 2	4	Downlights - LED	150	Sealed
Activity	4	Downlights - LED	150	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
W.I.R.	2	Downlights - LED	150	Sealed
WC	1	Downlights - LED	150	Sealed
WC	1	Exhaust Fans	300	Sealed
Ens.	3	Downlights - LED	150	Sealed
Ens.	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	2	1200
Office	1	1200
Bedroom 2	1	1200
Activity	1	1200
Bedroom 1	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.50	Medium
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.50	Medium

Explanatory notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au .
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 1229381S_03

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 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Monday, 28 March 2022

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



Planning,
Industry &
Environment

Project summary		
Project name	ENV210588_03	
Street address	1 Luan Court Byron Bay 2481	
Local Government Area	Byron Shire Council	
Plan type and plan number	strata 57243	
Lot no.	2	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	3	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 51	Target 50

Certificate Prepared by
Name / Company Name: Enviiro Pty Ltd
ABN (if applicable): 641734830

Description of project

Project address	
Project name	ENV210588_03
Street address	1 Luan Court Byron Bay 2481
Local Government Area	Byron Shire Council
Plan type and plan number	Strata Plan 57243
Lot no.	2
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	3
Site details	
Site area (m ²)	407
Roof area (m ²)	163
Conditioned floor area (m2)	156.5
Unconditioned floor area (m2)	11.32
Total area of garden and lawn (m2)	247

Assessor details and thermal loads		
Assessor number	DMN/16/1757	
Certificate number	0006354427-01	
Climate zone	10	
Area adjusted cooling load (MJ/m ² .year)	34	
Area adjusted heating load (MJ/m ² .year)	17	
Ceiling fan in at least one bedroom	Yes	
Ceiling fan in at least one living room or other conditioned area	Yes	
Project score		
Water	 40	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 51	Target 50

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 3000 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 100 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: <ul style="list-style-type: none"> 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.) 		✓ ✓ ✓	✓ ✓ ✓

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 show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.	✓	✓	✓
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 - concrete slab on ground	113.0 square metres
floor - suspended floor/open subfloor	3.0 square metres
floor - suspended floor above garage	All or part of floor area

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: gas instantaneous with a performance of 6 stars.	✓	✓	✓
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			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p> <p>Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off</p> <p>Laundry: natural ventilation only, or no laundry; Operation control: n/a</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>
Artificial lighting			
<p>The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:</p> <ul style="list-style-type: none"> • at least 3 of the bedrooms / study; dedicated • at least 3 of the living / dining rooms; dedicated • the kitchen; dedicated 		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> • all bathrooms/toilets; dedicated • the laundry; dedicated • all hallways; dedicated 		  	  
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 2 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.			
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.			
The applicant must install a fixed outdoor clothes drying line as part of the development.			

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.

Working Drawings

1	Cover Sheet	N/A
2	Site Plan	1:200 @ A3
3	Driveway Section	1:100 @ A3
4	Floor Plan - Lower	1:100 @ A3
5	Floor Plan - Upper	1:100 @ A3
6	Elevations 1 of 2	1:100 @ A3
7	Elevations 2 of 2	1:100 @ A3
8	Sections / Details 1 of 2	as per dwg.
9	Sections / Details 2 of 2	as per dwg.
10	Slab Layout	1:100 @ A3
11	Electrical Plan	1:100 @ A3
12	Bracing Plan	1:100 @ A3
13	Sun study June	1:200 @ A3
14	Sun Study December	1:200 @ A3
15	3D Perspectives	nts @ A3

G.J. Gardner. HOMES

Issue	Date	Description
WD-A	09/02/22	BA Issue
WD-B	22/03/22	Basix changes

Proposed New Building For:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court, Byron Bay



NOTES:
 Images Are Diagramatic Only
 Refer To Elevations For Details



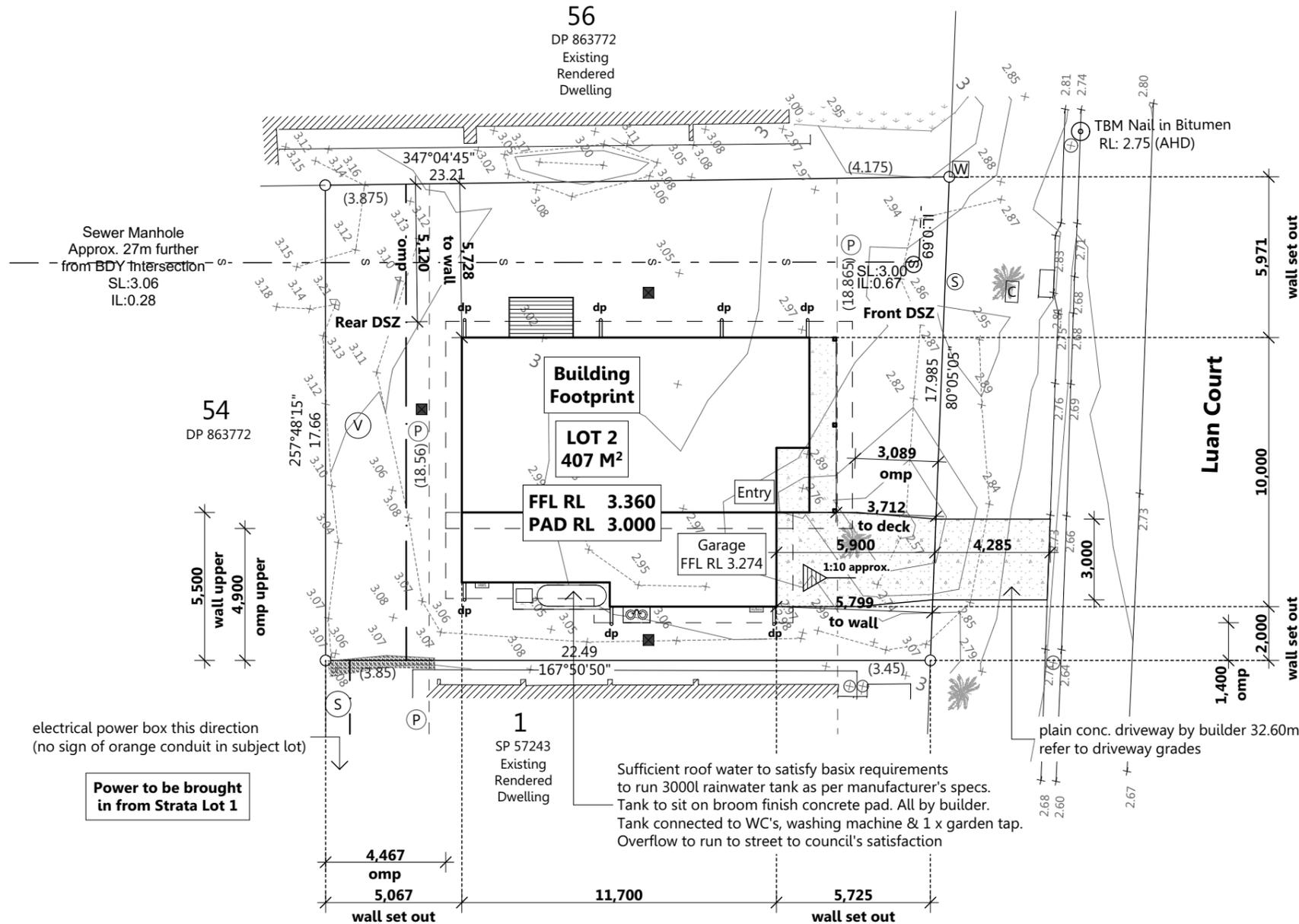
Note: Driveway shape & profile is indicative only and may be altered at builder's discretion

Note: All surface stormwater runoff to be directed to 3 x stormwater pits (SWP - position of pits to be determined on site by plumber) and then to street and to have no effect on neighbouring properties. All to council's satisfaction.

- (P) DENOTES PROLONGATION OF OUTER FACE OF RENDERED MASONRY BLOCK WALL
- (V) EASEMENT FOR DRAINAGE PF SEWAGE 3.0 WIDE
- (S) EASEMENT FOR SERVICES 0.9 WIDE

Standard Notes:

1. All written dimensions take precedence over scale.
2. All roof beams, lintels and brickwork angles to truss/wall frame manufacturer's specifications and engineer's verification.
3. WC doors to comply with BCA Vol. 2 pt 3.8.3.3.
4. All wet areas to be completed in accordance with BCA vol. 2 pt 3.8.1.
5. Engineer designed - prefabricated timber roof trusses as per manufacturer's specifications (600 cts unless noted otherwise).
6. 90mm prefabricated timber wall frames as per manufacturer's specifications.
7. Builder & trades are to confirm all measurements, details & specifications prior to set-out & ordering of materials.
8. Report any errors for clarification/correction as no responsibility will be taken after construction has commenced.
9. All electrical appliance & plumbing symbols are diagrammatic only. Refer to builder's specification for details of all fixtures.
10. Size and location of downpipes to be confirmed on site by builder.
11. All work to be constructed in accordance with the Building Code of Australia and relevant trade and technical manuals.



Real Property Description

Lot Number: 2
 Registered Plan Number: SP57243
 Parish:
 County:
 Local Authority: Byron Shire Council
 Site Area: 407M²
 Site Coverage: 31.09%

Driveway Gradient

Grade	1:10 approx.			
Transitional	Grade	1:8	1:4	1:8
	Distance	n/a	n/a	n/a
FFL	R.L 3.274			
NGL (boundary)	R.L 2.700			
Height Gain	0.574 m			
Distance	5.9 m			

Bushfire Protection Requirements

Building constructed to BAL 19 bushfire requirements to all sides of the building

Legend

- rock retaining wall
- timber retaining wall
- masonry block retaining wall
- conc. sleeper retaining wall
- direction of fall
- FGL 17.500 Proposed FGL RL
- 16.65 NGL RL
- dp Downpipe Location
- RW--- Roof Water Line
- - - SW - - - Stormwater Line
- - - S - - - Sewer Line
- 1800mm high butted timber fence
- 1800mm high secondary street fencing minimum 50% transparent
- Field gully pit
- G Single timber gate
- Letterbox
- Rubbish Bin Location
- Clothes line location

Area Calculations

Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



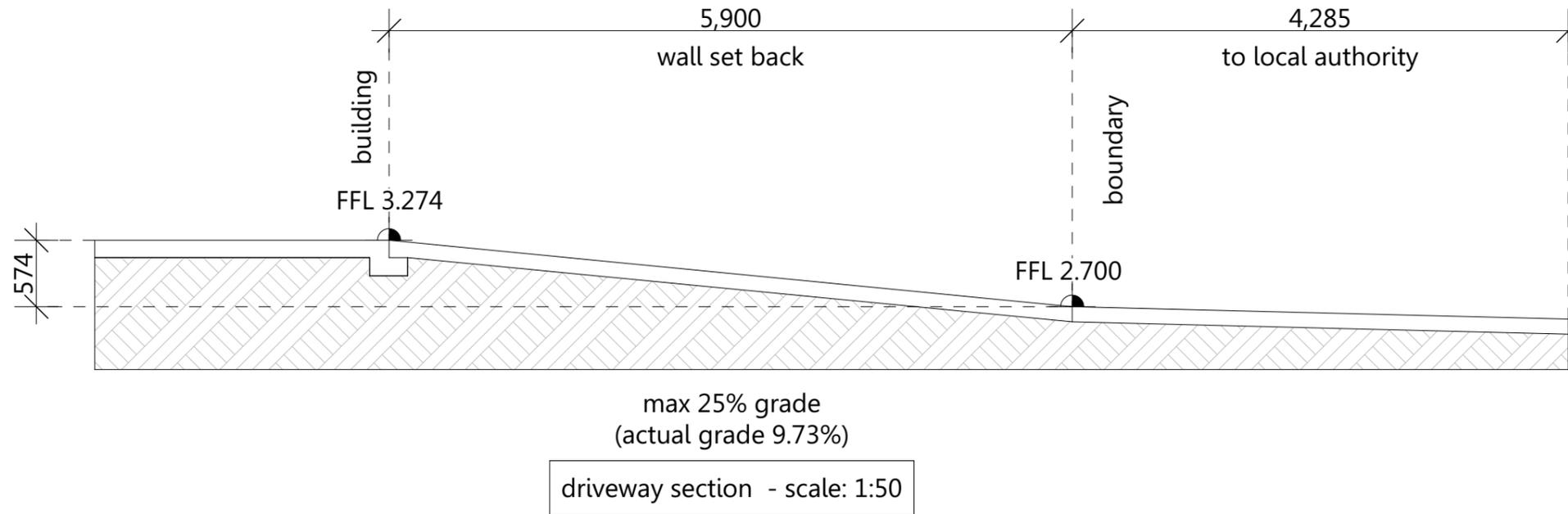
Please Read Carefully

This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court,
 Byron Bay

Title:
Site Plan
 Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 2 of 15	Issue: B	Scale: 1:200 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB



Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony

G.J. Gardner. HOMES

T: (07) 5523 0988
 W: www.gjgardner.com.au
 A: Shop 5 / 107 Minjungbal Drive
 Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be constructed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
 This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

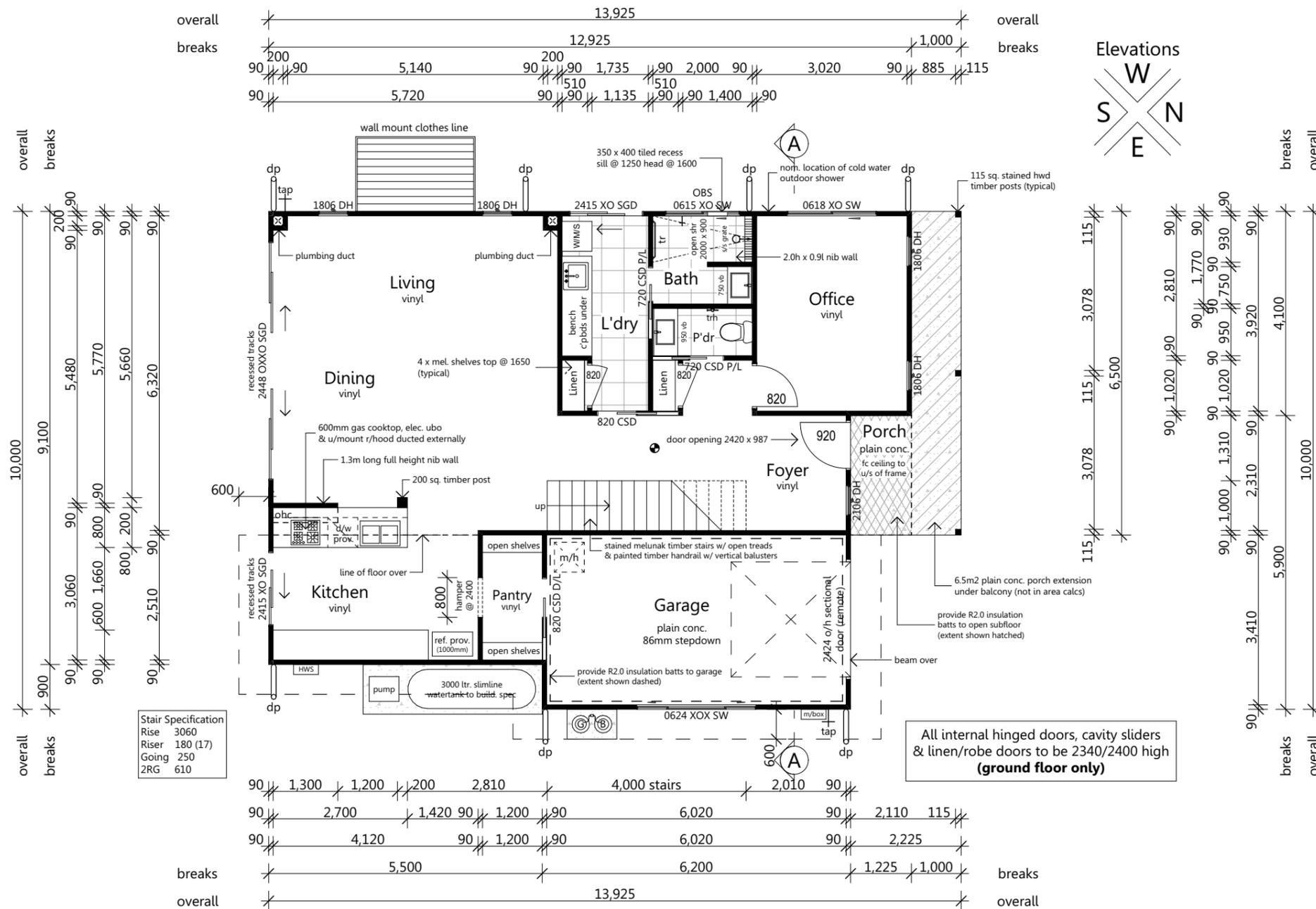
Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court,
 Byron Bay

Title:
Driveway Section
 Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 3 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

Notes:
 1. Refer sheet 1 for standard floorplan notes
 2. ● - Smoke detectors to be connected to mains power and having a standby power supply in accordance with AS3786-1993.
 3. Floor coverings - all as indicated on floor plan and all by builder.

0006354427-01 28 Mar 2022
 Assessor: Conor Horwood
 Accreditation No. DMN16/1757
 Address: 1 Luan Court, Byron Bay, NSW, 2481
 hstar.com.au



Bushfire Protection Requirements
 Building constructed to BAL 19 bushfire requirements to all sides of the building

Bearers & joists
 • As specified by engineer designed & fixed in accordance with manufacturer's specifications & tie down details
 • Layout as per frame & truss manufacturer's or engineers design



T: (07) 5523 0988
 W: www.gjgardner.com.au
 A: Shop 5 / 107 Minjungbal Drive Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, its servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
 This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court, Byron Bay

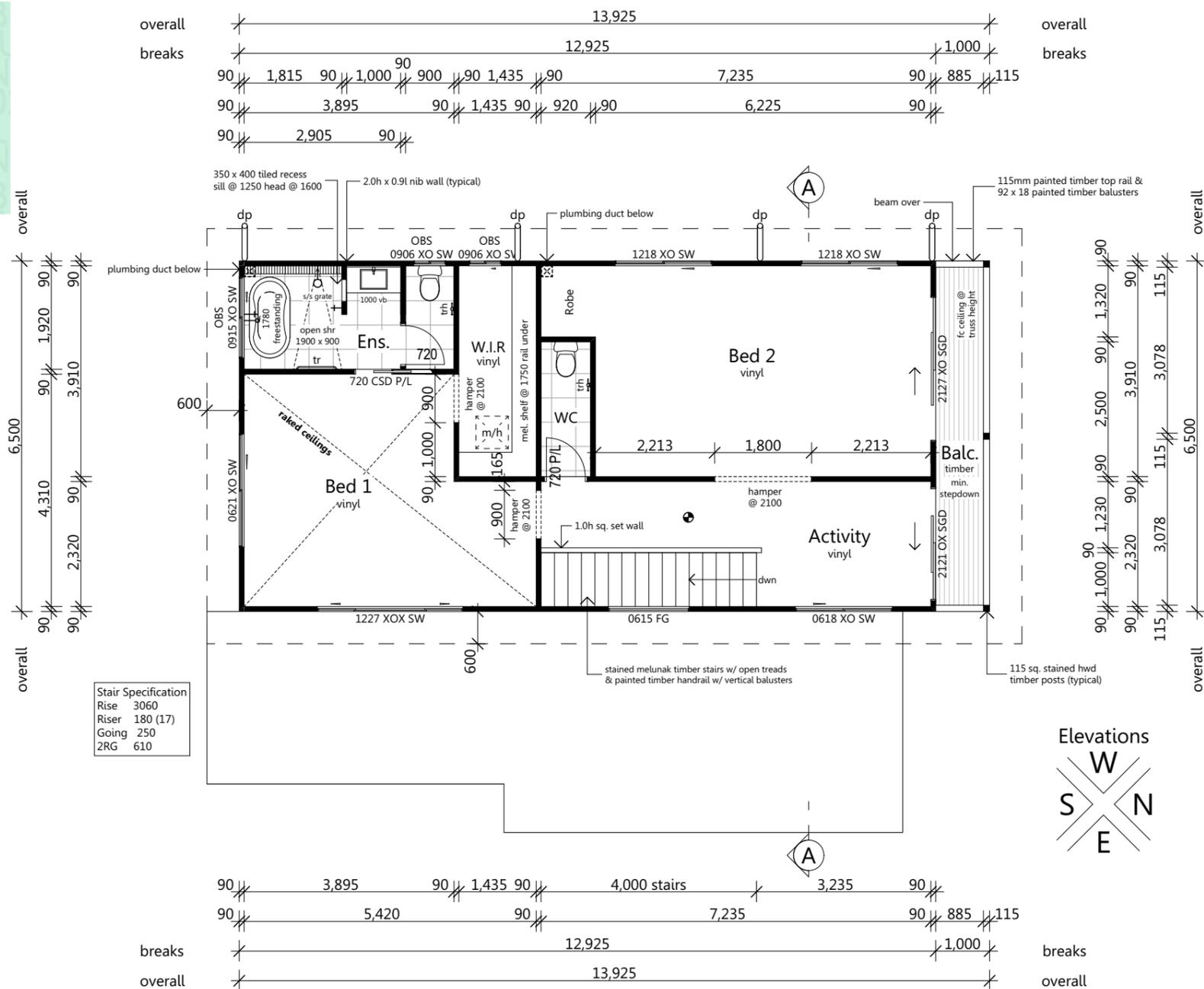
Title:
Floor Plan - Lower
 Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 4 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

Notes:
 1. Refer sheet 1 for standard floorplan notes
 2. ● - Smoke detectors to be connected to mains power and having a standby power supply in accordance with AS3786-1993.
 3. Floor coverings - all as indicated on floor plan and all by builder.



0006354427-01 28 Mar 2022
 Assessor: Conor Horwood
 Accreditation No. DMN/16/1757
 Address: 1 Luan Court, Byron Bay, NSW, 2481
 5.2 Nationwide House Energy Rating Scheme
 51.7 MJ/m²
 www.nathers.gov.au
 hstar.com.au



Bushfire Protection Requirements
 Building constructed to BAL 19 bushfire requirements to all sides of the building

Bearers & joists
 • As specified by engineer designed & fixed in accordance with manufacturer's specifications & tie down details
 • Layout as per frame & truss manufacturer's or engineers design

Area Calculations

Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



T: (07) 5523 0988
 W: www.gjgardner.com.au
 A: Shop 5 / 107 Minjungbal Drive
 Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

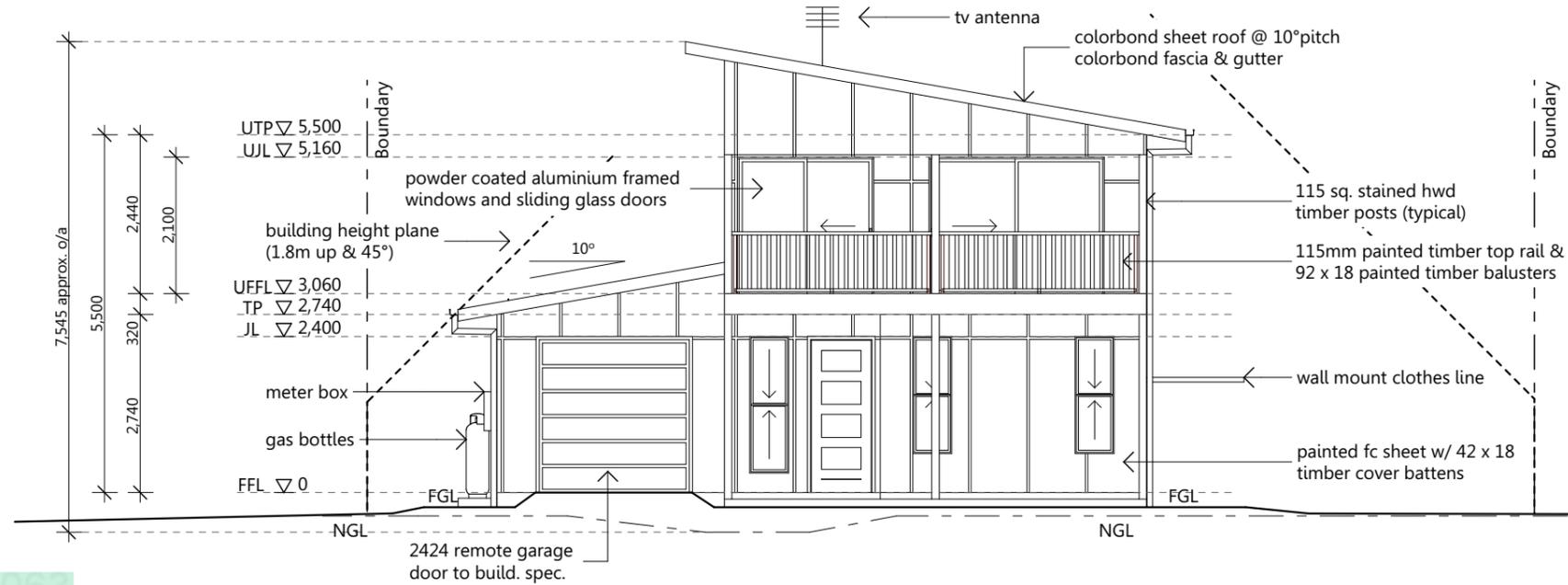
Please Read Carefully
 This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court,
 Byron Bay

Title:
Floor Plan - Upper
 Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 5 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

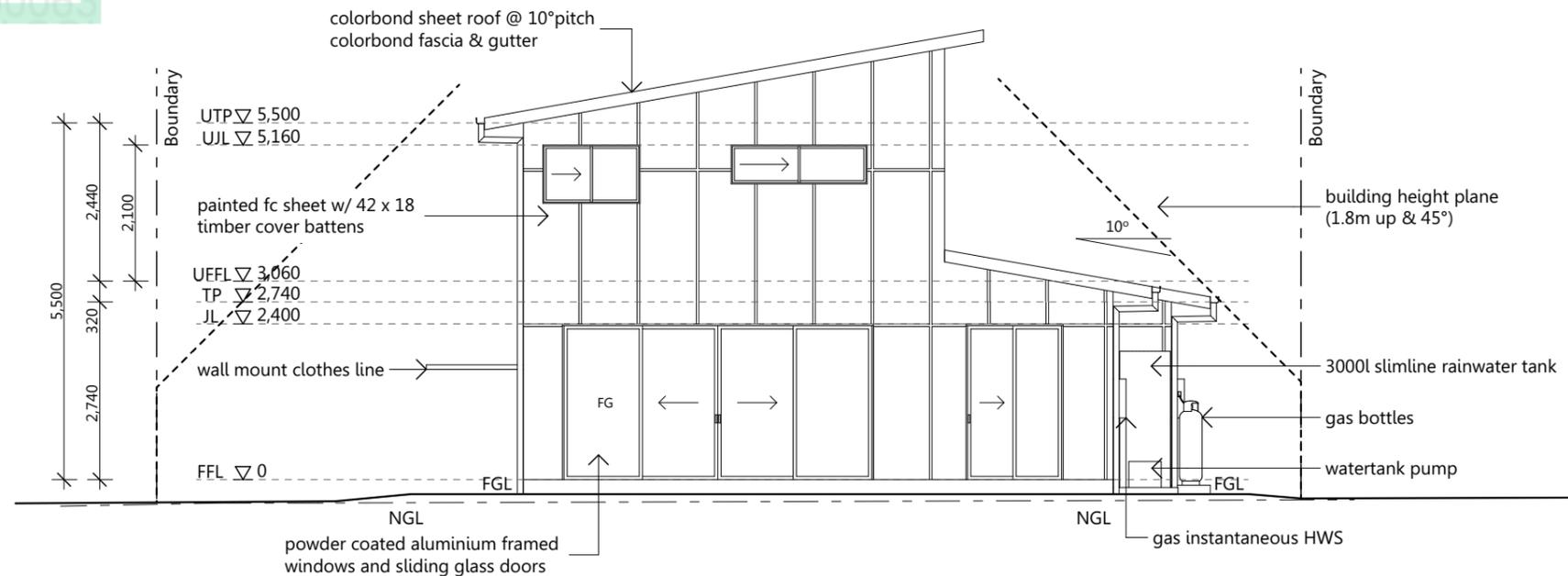
Note: 42 x 42 architraves to external windows



North Elevation

5.2
NATIONWIDE HOUSE ENERGY RATING SCHEME
51.7 MJ/m²
www.nathers.gov.au

0006354427-01 28 Mar 2022
Assessor: Conor Horwood
Accreditation No. DMN/16/1757
Address: 1 Luan Court, Byron Bay, NSW, 2481
hstar.com.au



South Elevation

Bushfire Protection Requirements
Building constructed to BAL 19 bushfire requirements to all sides of the building

Note:

- These plans are to be read in conjunction with builders detailed specifications & all engineering documentation.
- Articulation joints as per engineering details
- All opening windows with fall height of 2m or greater to be restricted to max. 125mm opening

Area Calculations

Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony

G.J. Gardner. HOMES

T: (07) 5523 0988
W: www.gjgardner.com.au
A: Shop 5 / 107 Minjungbal Drive
Tweed Heads South NSW 2486

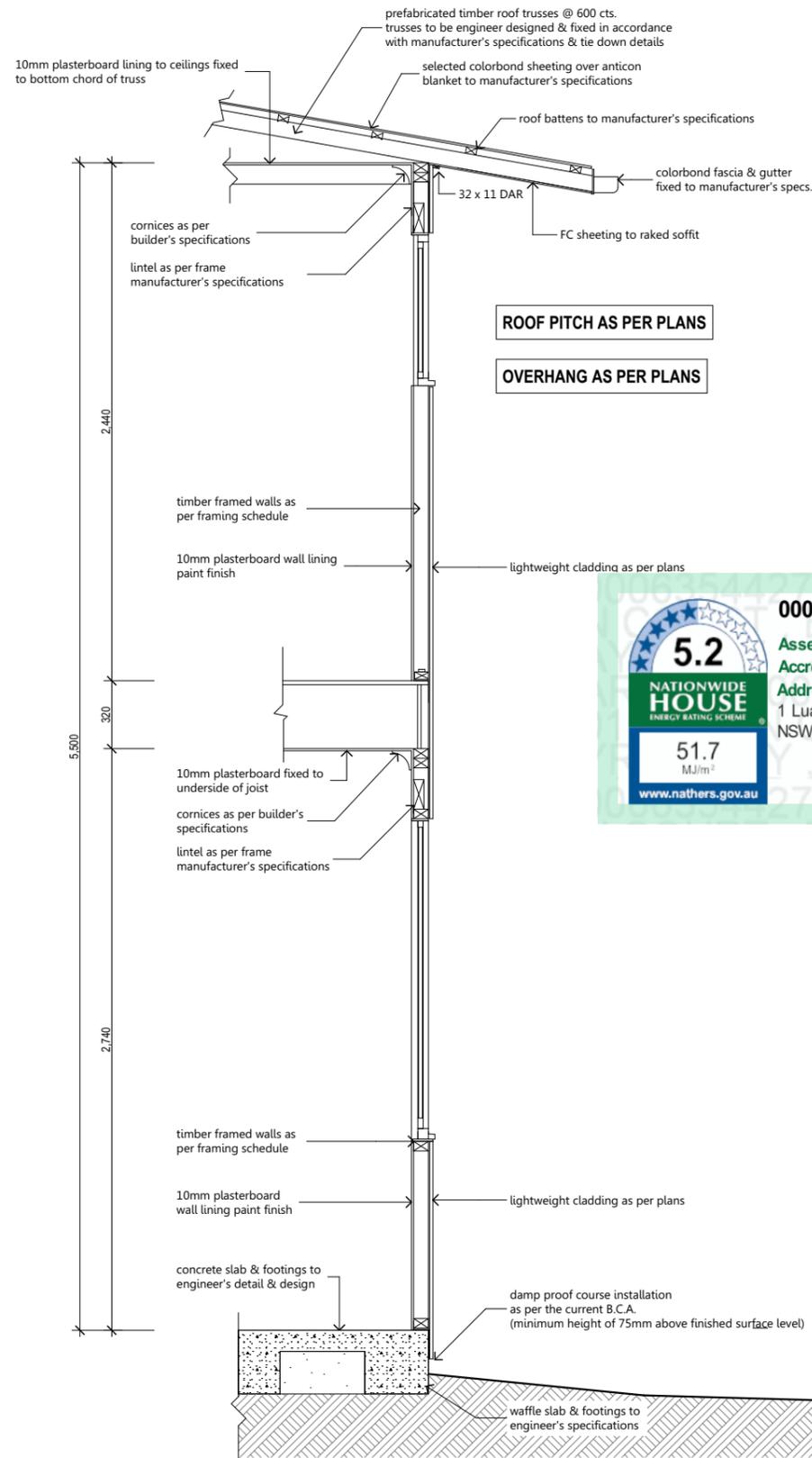
We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, its servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
Owner / sDate.....
Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
Lot 2, 1 Luan Court,
Byron Bay

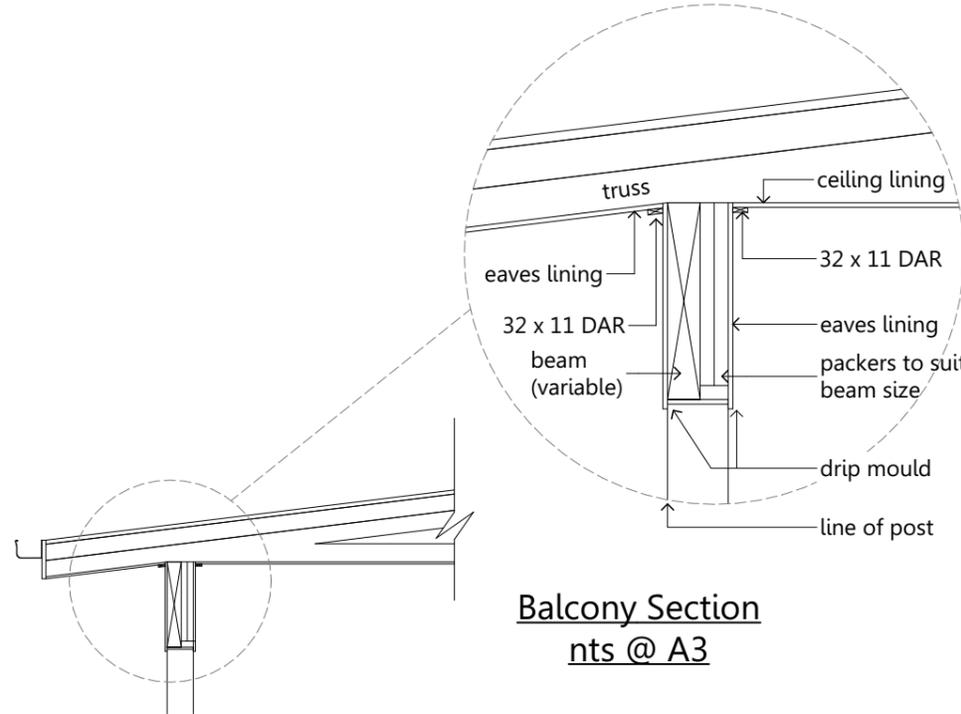
Title:
Elevations 1 of 2
Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 6 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

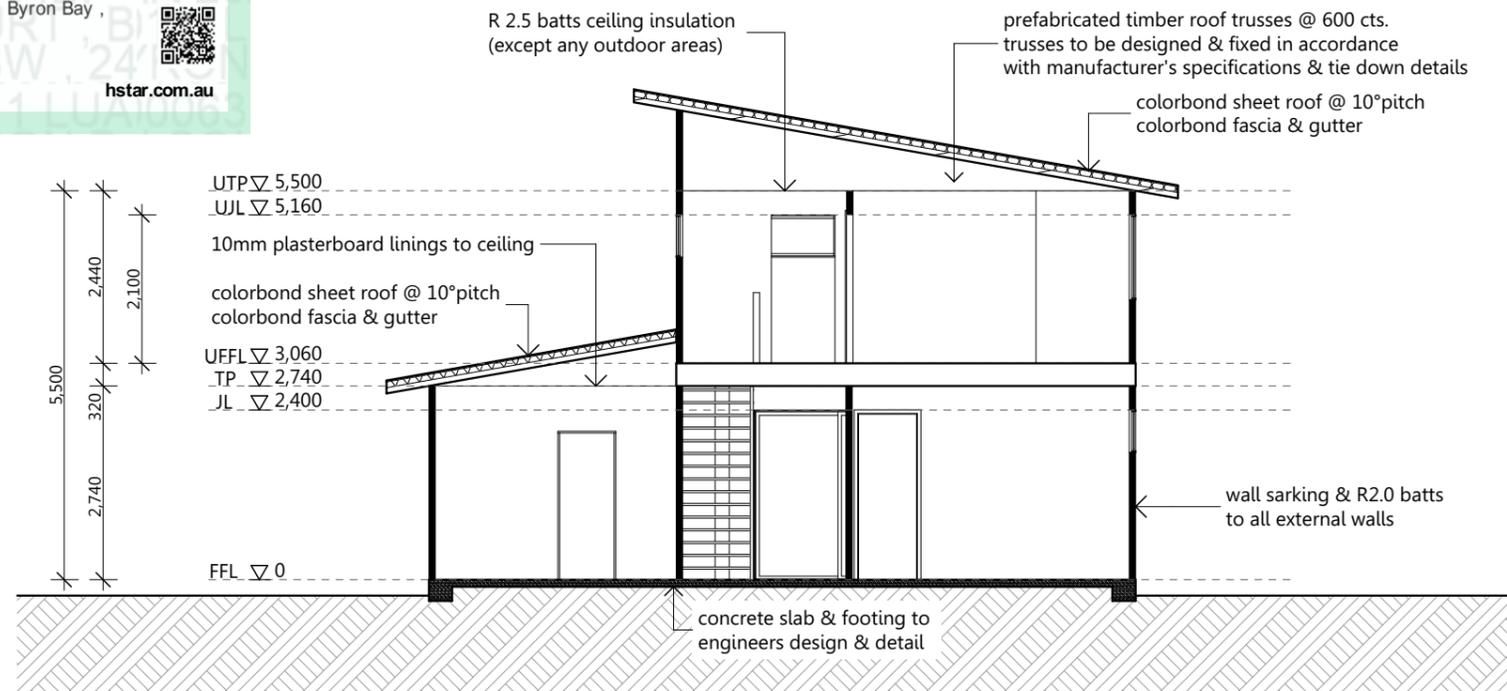


ROOF PITCH AS PER PLANS

OVERHANG AS PER PLANS



Balcony Section
nts @ A3



Section A 1:100 @A3

DETAIL 1 1:30

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony

G.J. Gardner. HOMES

T: (07) 5523 0988
W: www.gjgardner.com.au
A: Shop 5 / 107 Minjungbal Drive
Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully

This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
Owner / sDate.....
Owner / sDate.....

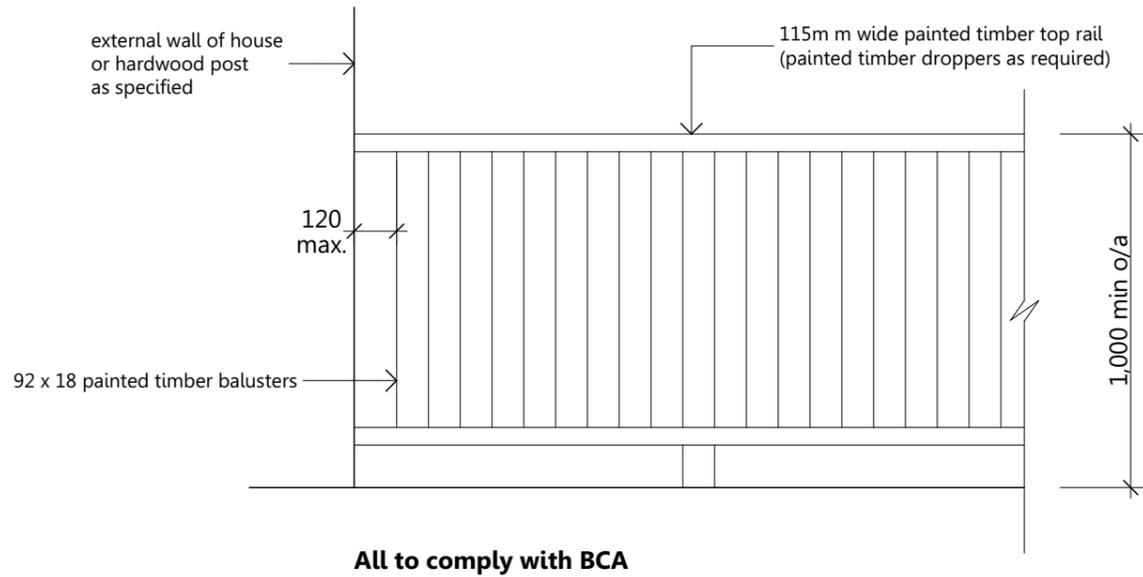
Client:
Yuki Koresawa & Takayo Otsu
Lot 2, 1 Luan Court,
Byron Bay

Title:
Sections / Details 1 of 2
Design Name:
Modified Balwyn

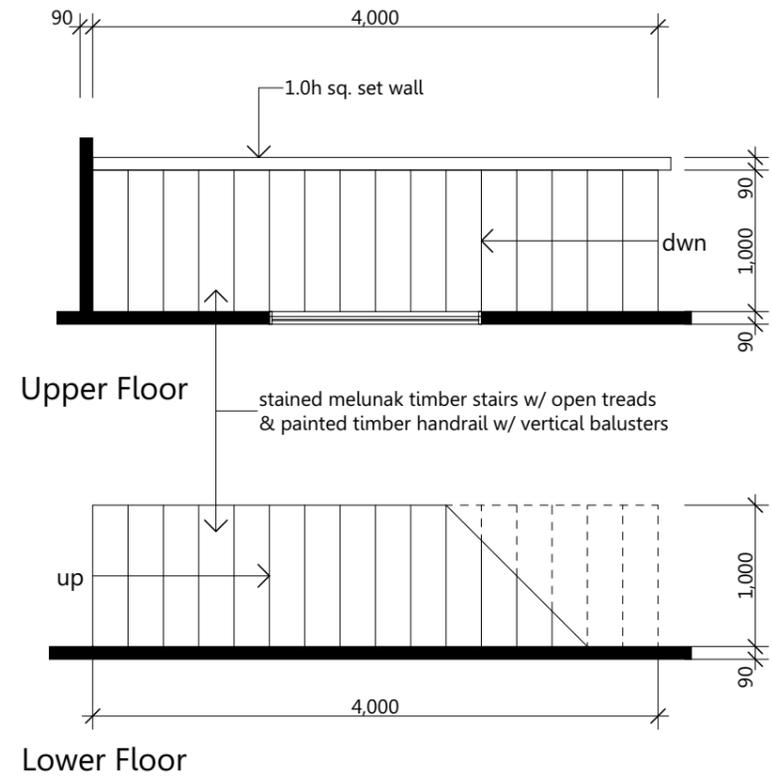
Plot Date: 22/03/22	Drawing No: 8 of 15	Issue: B	Scale: as per dwg.
Job N°: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB



Note: 1000mm wide (between frames) stained melunak timber stairs. Open treads. 250 goings typical. All to stair manufacturer's specs and T.B.C. on site. Painted timber handrail & vertical balustrade to one side.



External Balustrading Detail
1:20 @ A3



Stair Specification
Rise 3060
Riser 180 (17)
Going 250
2RG 610

Stair Detail
1:50 @ A3

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



T: (07) 5523 0988
W: www.gjgardner.com.au
A: Shop 5 / 107 Minjungbal Drive
Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
Owner / sDate.....
Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
Lot 2, 1 Luan Court,
Byron Bay

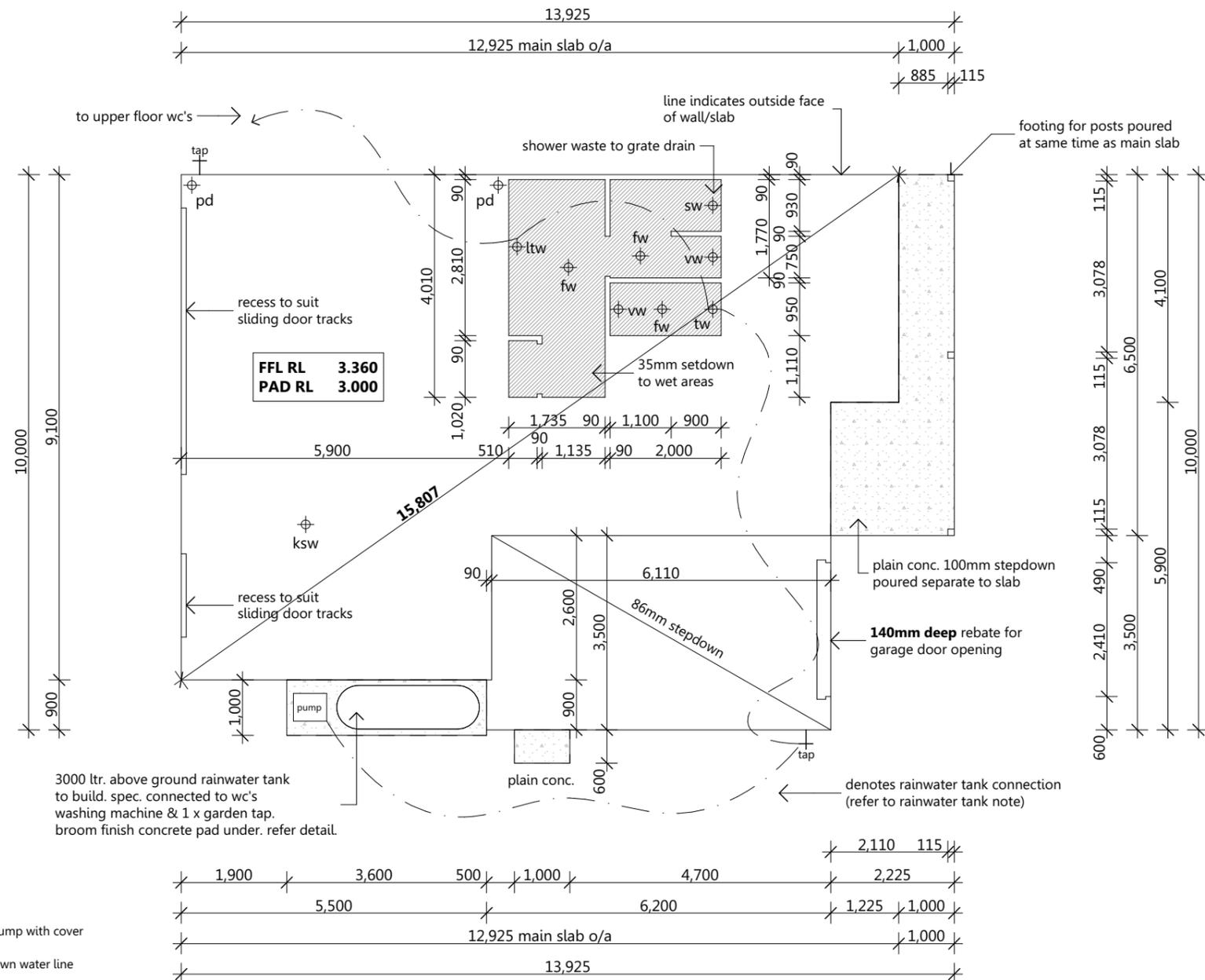
Title:
Sections / Details 2 of 2
Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 9 of 15	Issue: B	Scale: as per dwg.
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

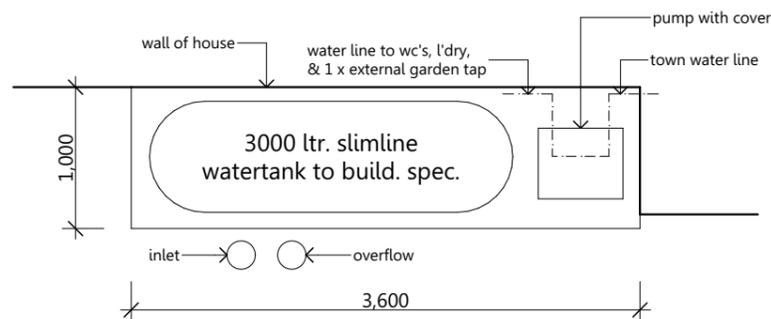


Legend

- ⊕ Under Slab Points
- fw Floor Waste
- tw Toilet Waste
- vw Vanity Waste
- sw Shower Waste
- bw Bath Waste
- ksw Kitchen Sink Waste
- ltw L'dry Tub Waste
- pd Plumbing Duct Waste
- lbw Load Bearing Wall



3000 ltr. above ground rainwater tank to build. spec. connected to wc's washing machine & 1 x garden tap. broom finish concrete pad under. refer detail.



Typical Rainwater Tank Detail
1:50 @ A3

Notes

- Verify all dimensions prior to commencement.
- All plan dimensions are to outside of brickwork unless noted otherwise
- Footings and slab construction to be in accordance with any geotechnical report & engineer's detail for this allotment.
- Termite protection to be in accordance with AS 3660.1 - 1995 and B.C.A 3.1.3.

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



T: (07) 5523 0988
W: www.gjgardner.com.au
A: Shop 5 / 107 Minjungbal Drive
Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
Owner / sDate.....
Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
Lot 2, 1 Luan Court,
Byron Bay

Title:
Slab Layout
Design Name:
Modified Balwyn

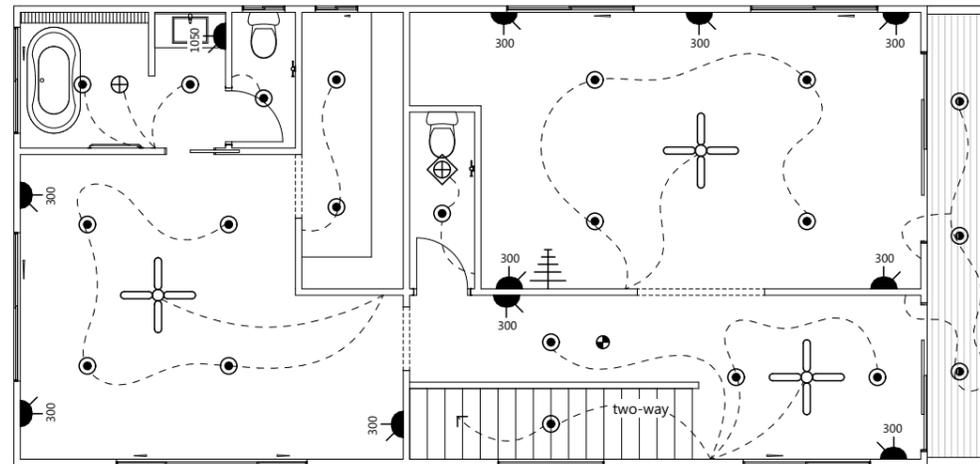
Plot Date: 22/03/22	Drawing No: 10 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB



Electrical Legend

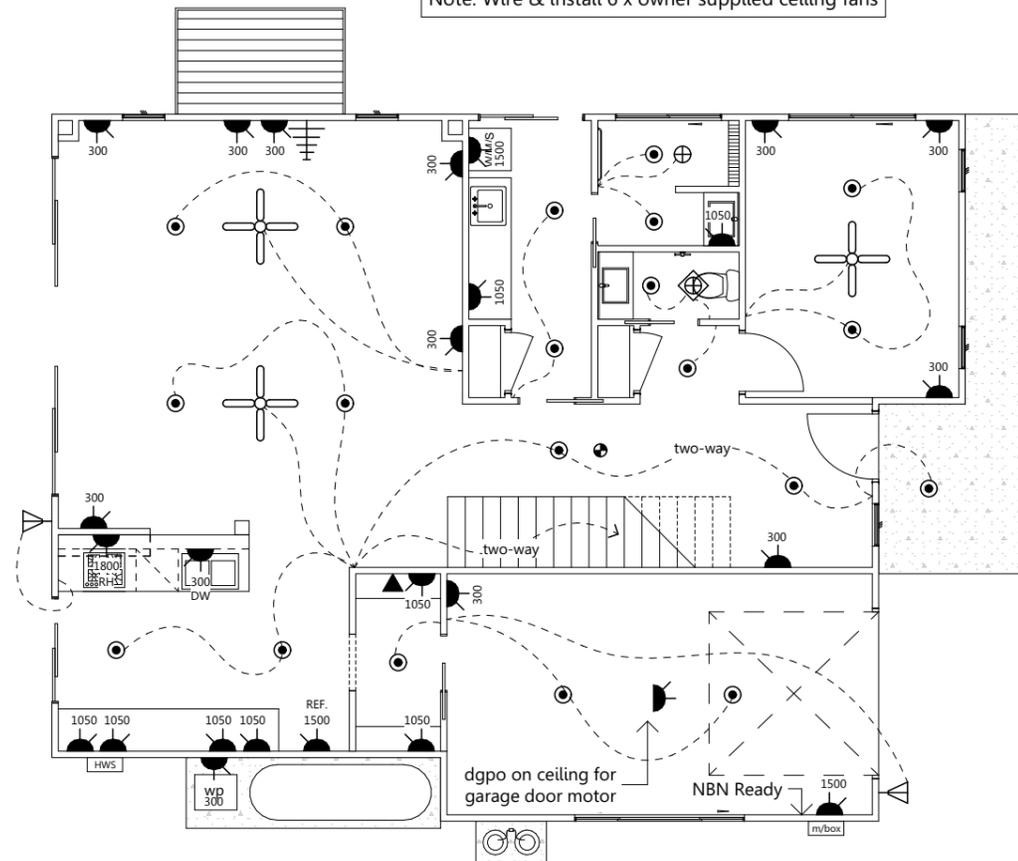
Symbol	Description	Qty
	Double power outlet (water proof)	1
	Single power outlet (water proof)	
	Single power outlet	
	Double power outlet	36
	Down light point - (CFL)	
	Down light point - (LED)	41
	Feature downlight point - (Halogen or LED)	
	Round Oyster Fluro Light Point	
	Feature Pendant light point	
	Exterior twin spot sensor light point	2
	Feature exterior up & down light point	
	Single fluorescent light point	
	Double fluorescent light point	
	Stairwell 1/2 oyster wall light point	
	Exhaust Fan on separate switch control vented externally as per BCA requirements	2
	Exhaust Fan on light switch control vented externally as per BCA requirements	2
	Fan / Light / Heater (4 Globe)	
	Fan / Light / Heater (2 Globe)	
	Smoke detector - to be interconnected & h/wired	2
	Phone point	1
	T.V Point	2
	Ceiling fan (owner supplied)	6
	Ceiling fan / light	
	Air Conditioner - Internal Unit	
	Air Conditioner - External Unit	
	Zoned Ducted Vent - Air Conditioner	

Heights			
Light Switches	@ 1150 AFL	Refrigerator	@ 1500 AFL
Wall Mounted Lights	@ 2000 AFL	Rangehood	@ 1800 AFL
Power Outlets (Standard)	@ 300 AFL	Dishwasher	@ 300 AFL
Microwave Oven (Oven Tower)	@ 1800 AFL	Vanity Basins	@ 1050 AFL
Microwave Oven (Under Bench)	@ 700 AFL	Laundry Bench	@ 1050 AFL
Kitchen Bench	@ 1050 AFL	Washing Machine	@ 1500 AFL



Upper Level

Note: Wire & install 6 x owner supplied ceiling fans



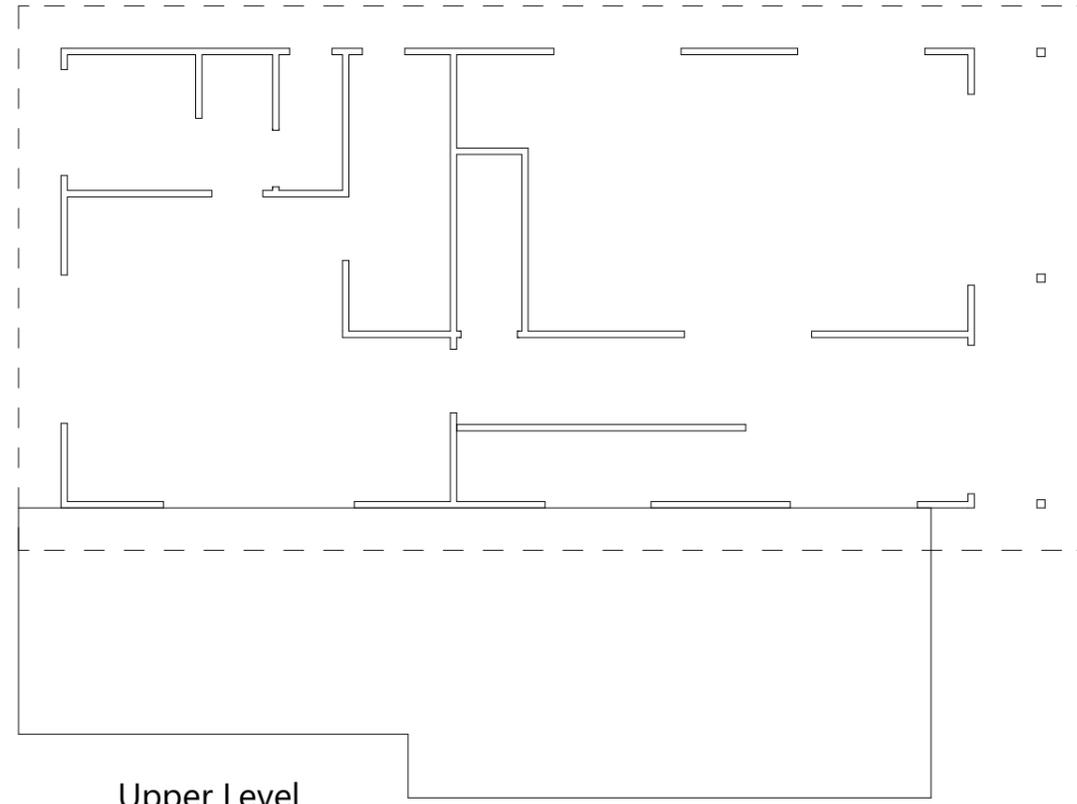
Lower Level

5.2 Assessor **Conor Horwood**
 Accreditation No. **DMV16/1757**
 Address **1 Luan Court, Byron Bay, NSW, 2481**

51.7 MJ/m²
 www.nathers.gov.au **hstar.com.au**

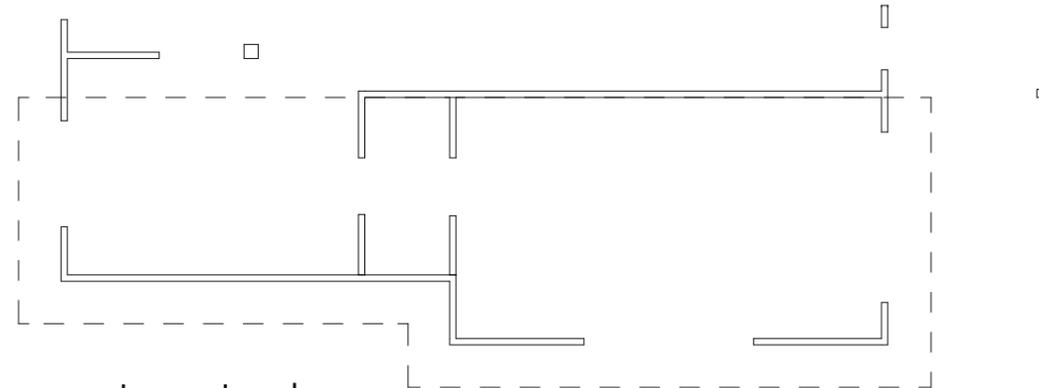
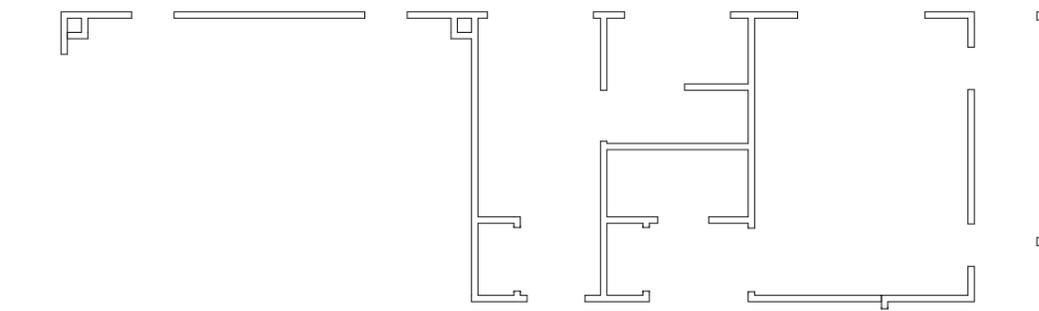
Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



Upper Level

refer to engineer's documentation for bracing design



Lower Level

0006354427-01 28 Mar 2022

Assessor: Conor Horwood
 Accreditation No. DMN/16/1757

Address
 1 Luan Court, Byron Bay, NSW, 2481

5.2
 NATIONWIDE HOUSE ENERGY RATING SCHEME

51.7 MJ/m²

www.nathers.gov.au

hstar.com.au

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



T: (07) 5523 0988
 W: www.gjgardner.com.au
 A: Shop 5 / 107 Minjungbal Drive
 Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
 This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

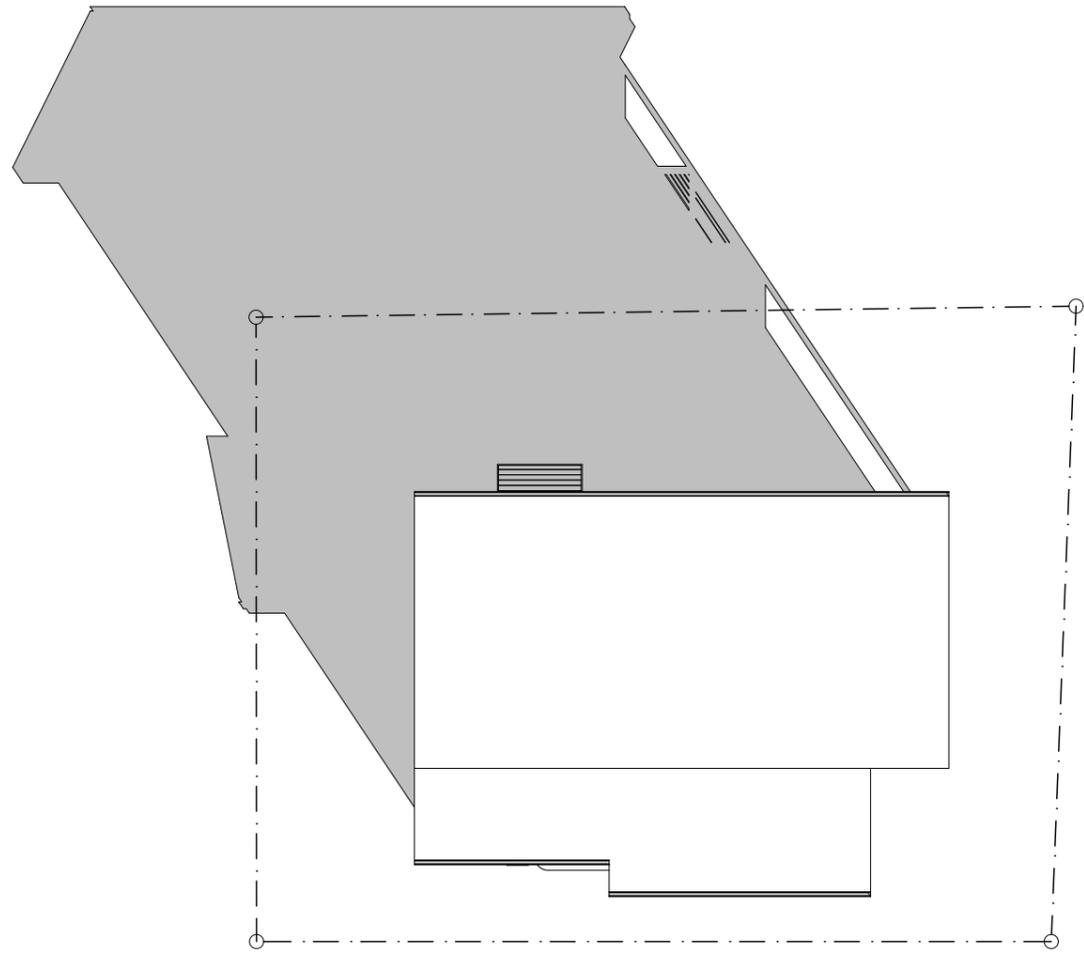
Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court,
 Byron Bay

Title:
Bracing Plan
 Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 12 of 15	Issue: B	Scale: 1:100 @ A3
Job No: 240835	Working Drawings		Designed By: GJ
			Drawn By: JD
			Checked By: MB

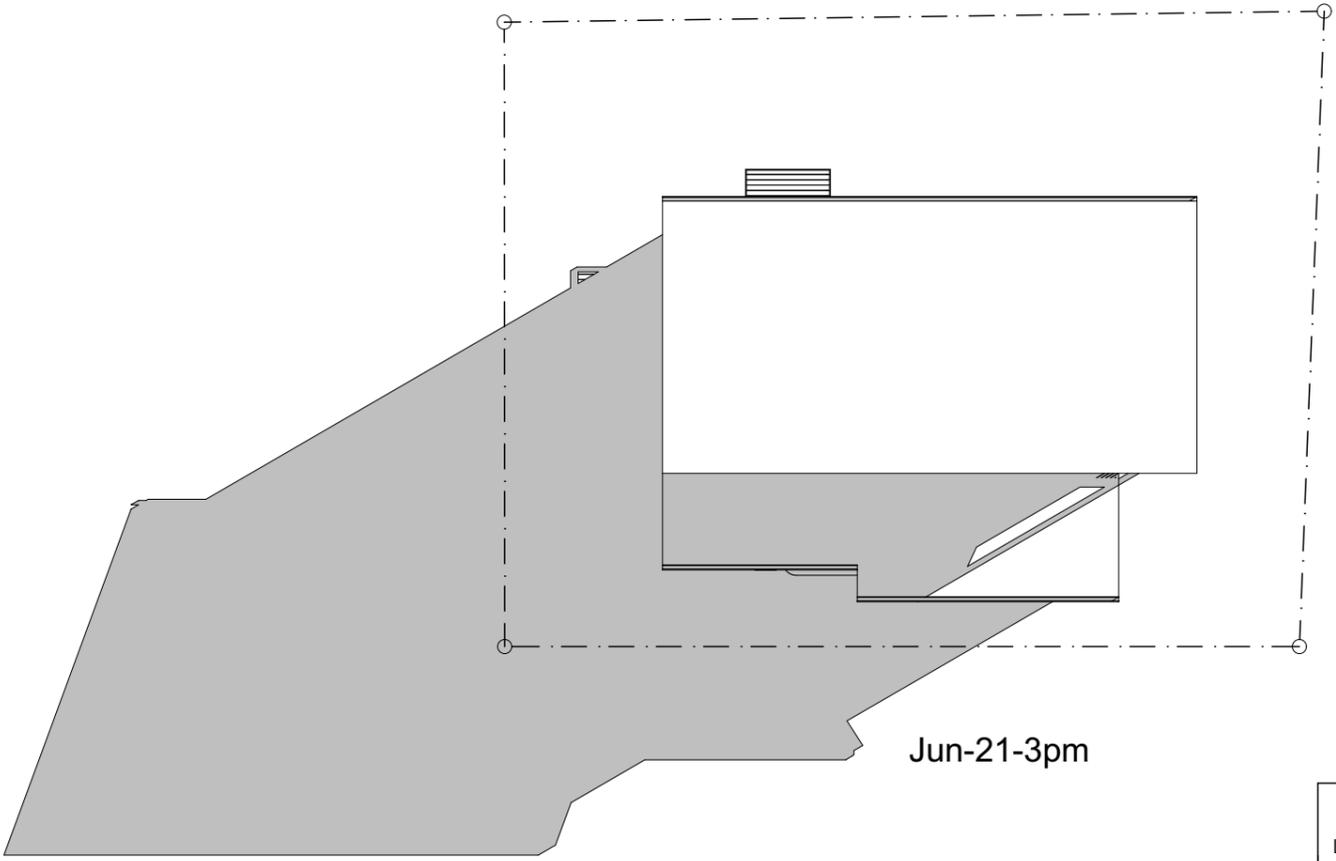


Sun Study
 Location Byron Bay, NSW
 Latitude: 28° 38' 30.84"
 Longitude: 153° 36' 37.80"



Jun-21-9am

Luan Court



Jun-21-3pm

Luan Court

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony



T: (07) 5523 0988
 W: www.gjgardner.com.au
 A: Shop 5 / 107 Minjungbal Drive
 Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
 This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
 Lot 2, 1 Luan Court,
 Byron Bay

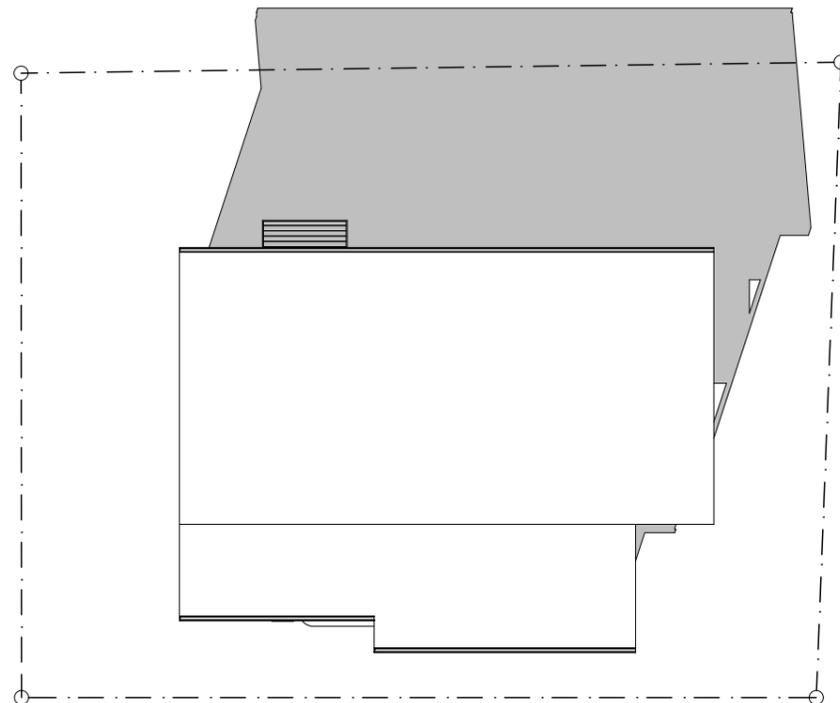
Title:
 Sun study June
 Design Name:
 Modified Balwyn

Plot Date: 22/03/22	Drawing No: 13 of 15	Issue: B	Scale: 1:200 @ A3
Job N°: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB

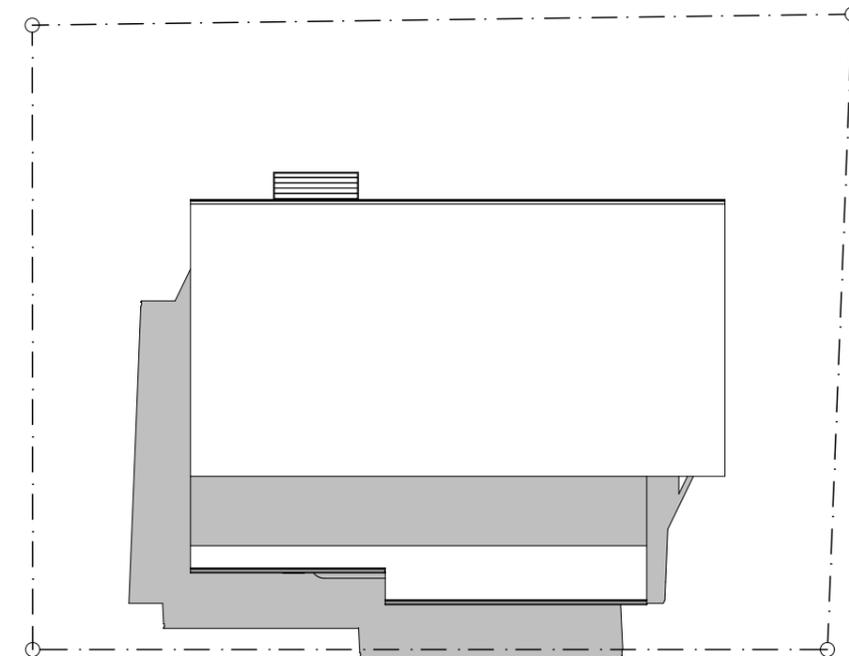


Sun Study

Location Byron Bay, NSW
 Latitude: 28° 38' 30.84"
 Longitude: 153° 36' 37.80"



Dec-21-9am



Dec-21-3pm

Area Calculations

Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony

Please Read Carefully

This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
 Owner / sDate.....
 Owner / sDate.....



North-East Perspective



South-East Perspective

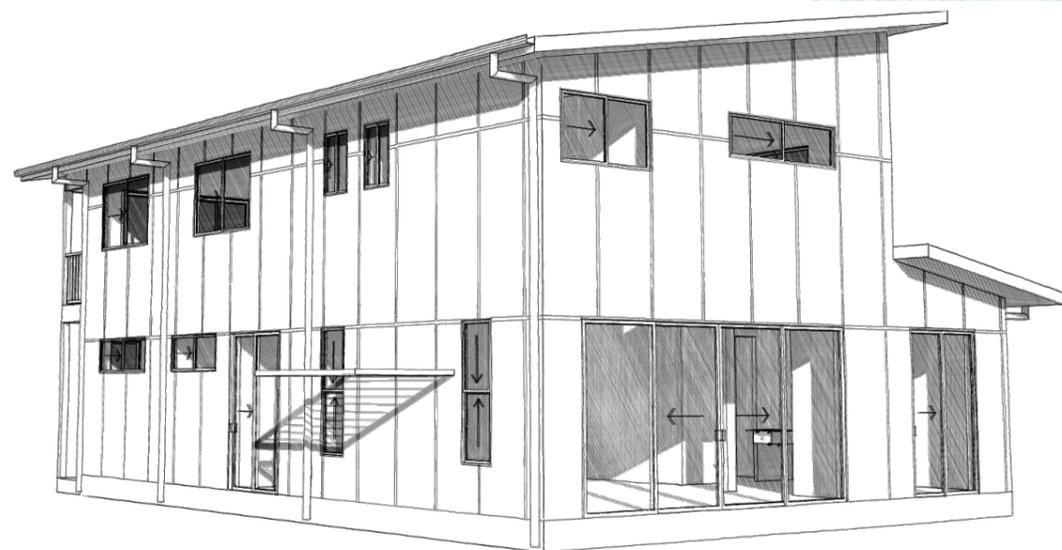
0006354427-01 28 Mar 2022

5.2
NATIONWIDE HOUSE ENERGY RATING SCHEME

Assessor: Conor Horwood
Accreditation No. DMN/16/1757
Address: 1 Luan Court, Byron Bay, NSW, 2481

51.7 MJ/m²
www.nathers.gov.au

hstar.com.au



South-West Perspective



North-West Perspective

Area Calculations	
Living Lower:	95.61 sqm
Living Upper:	84.01 sqm
Garage:	21.47 sqm
Porch:	2.94 sqm
Balcony:	6.50 sqm
Total:	210.53 sqm

+6.50 sqm plain conc. only under balcony

NOTES:
Images Are Diagrammatic Only
Refer To Elevations For Details

G.J. Gardner. HOMES

T: (07) 5523 0988
W: www.gjgardner.com.au
A: Shop 5 / 107 Minjungbal Drive
Tweed Heads South NSW 2486

We reserve the right to alter designs, colours and specifications without notice. Whilst every care has been taken in the preparation of this document, the particulars contained herein are not to be construed as any representation of fact. All information provided to us is from reputable sources and no responsibility is accepted by the vendor, it's servants or agents for any errors or omissions. All interested parties should make their own enquiries to satisfy themselves in relation to all matters.

Please Read Carefully
This plan certified correct is the one referred to in the contract & specifications and I understand change hereafter may not be possible. These plans supercede all other previous plans or sketches.
Owner / sDate.....
Owner / sDate.....

Client:
Yuki Koresawa & Takayo Otsu
Lot 2, 1 Luan Court,
Byron Bay

Title:
3D Perspectives
Design Name:
Modified Balwyn

Plot Date: 22/03/22	Drawing No: 15 of 15	Issue: B	Scale: nts @ A3
Job N°: 240835	Designed By: GJ		Drawn By: JD
Working Drawings			Checked By: MB