

Council Reference: DA22/0343 LN85544 SS/SP/edm
Your Reference:



18 January 2023

Customer Service | 1300 292 872 | (02) 6670 2400

Elkn Pty Ltd
11/35 Currumbin Creek Road
CURRUMBIN WATERS QLD 4223

tsc@tweed.nsw.gov.au
www.tweed.nsw.gov.au



PO Box 816
Murwillumbah NSW 2484

Please address all communications
to the General Manager

ABN 90 178 732 496

Dear Sir/Madam

Development Application DA22/0343 - two storey dwelling and in-ground swimming pool at Lot 47 DP 1264557; No. 7 Habitat Drive CASUARINA

Reference is made to your Development Application regarding the above. Please find enclosed Development Consent No. DA22/0343.

You should note that before building construction works can commence you are required to obtain a Construction Certificate.

REASONS FOR THE DECISION

The development proposal/amendment has been considered in accordance with the relevant provisions of the NSW Environmental Planning and Assessment Act 1979 and on balance is suitable to be determined by way of approval.

Community views were considered as part of the assessment in accordance with Council's Development Control Plan and the NSW Environmental Planning and Assessment Act 1979 requirements for public notification.

For further information regarding this matter please contact Council's Building and Environmental Health Unit.

Yours faithfully

Seth Philbrook
Senior Town Planner

Enc

NOTICE OF DETERMINATION OF A DEVELOPMENT APPLICATION

To: Elkn Pty Ltd
11/35 Currumbin Creek Road
CURRUMBIN WATERS QLD 4223

Pursuant to Section 4.18(1)(a) of the Environmental Planning and Assessment Act 1979, notice is hereby given of the determination by the Tweed Shire Council of Development Application No. **DA22/0343** relating to land described as:

Lot 47 DP 1264557; No. 7 Habitat Drive CASUARINA

to be developed in accordance with plans and details submitted for the purpose of –

TWO STOREY DWELLING AND IN-GROUND SWIMMING POOL

The Development Application has been determined by the granting of consent subject to the conditions described below:

GENERAL

1. The development shall be completed in accordance with the plans approved by Council, except where varied by conditions of this consent.
[GEN0015]
2. The issue of this Development Consent does not certify compliance with the relevant provisions of the Building Code of Australia.
[GEN0115]
3. Approval is given subject to the location of, protection of, and/or any necessary approved modifications to any existing public utilities situated within or adjacent to the subject property. Any necessary adjustment or modification of existing services is to be undertaken in accordance with the requirements of the relevant authority, at the Developer's expense.
[GEN0135]
4. A Construction Certificate approval is to be obtained for all proposed pre-cast concrete panel fencing of any height and masonry fencing in excess of 1.2 metres in height, prior to any construction of the fence being commenced.
Site specific design details or approved generic details prepared by a practicing structural engineer are required to be submitted and approved as part of the Construction Certificate application.

Such structural engineers design details are to confirm that the fence proposal has been designed to take account of all site issues including the site's soil and load bearing characteristics, wind and other applied loadings, long term durability of all components particularly in relation to corrosion and compliance with Tweed Shire Council's "Council Utilities - Work in Proximity" policy and provision of appropriate pedestrian sight clearances to footpaths in accordance with Australian Standard AS2890 "Parking Facilities".

[GEN0145]

5. The owner is to ensure that the proposed building is constructed in the position and at the levels as nominated on the approved plans or as stipulated by a condition of this consent, noting that all boundary setback measurements are taken from the real property boundary and not from such things as road bitumen or fence lines.

[GEN0300]

6. All existing trees within the road reserve are to be retained and protected during construction. Where existing trees within the road reserve cannot be adequately retained and protected, approval from Council's General Manager or their delegate is required to remove street trees and they are to be replaced with a similar species in a 45L pot in accordance with Council's Development Design Specification D14.08.03C Tree Planting and Location (for distances away from infrastructure such as light poles and driveways) and Standard Drawing 'Tree and Shrub Planting Details' Dwg. No. SD701 (including the installation of root barrier) to the satisfaction of Council's General Manager or their delegate.

[GEN0355]

7. As per the terms of restriction numbered 12 on the plan DP1264557, the owner of the subject lot is advised that the lot is subject to a site classification that is poorer than 'M' under (Australian Standard) AS2870.

[GENNS01]

8. Where the front fence forms part of the pool safety barrier, it is not to exceed 1.8m in height above the natural ground level, measured to both the inside and outside.

[GENNS02]

PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

9. In accordance with Section 6.14 of the Environmental Planning and Assessment Act 1979 (as amended), a Construction Certificate for BUILDING WORKS OR Subdivision Works Certificate for SUBDIVISION WORKS shall NOT be issued until any Long Service Levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act, 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid (as applicable). Council is authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided.

[PCC0285]

10. Stormwater
 - (a) Details of the proposed roof water disposal, including surcharge overland flow paths are to be submitted to and approved by the Certifier (Council or a Registered Certifier) prior to the issue of a Construction Certificate. These details shall include likely landscaping within the overland flow paths.

- (b) Disposal of stormwater by means of infiltration devices must be carried out in accordance with Section D7.09 of Tweed Shire Council's Development Design and Construction Specification - Stormwater Quality.
- (c) All roof water shall be discharged to infiltration pits located wholly within the subject allotment.
- (d) The infiltration rate for sizing infiltration devices shall be 3m per day:
 - * As a minimum requirement, infiltration devices are to be sized to accommodate the ARI 3 month storm (deemed to be 40% of the ARI one year event) over a range of storm durations from 5 minutes to 24 hours and infiltrate this storm within a 24 hour period, before surcharging occurs.
- (e) Surcharge overflow from the infiltration area to the street gutter, inter-allotment or public drainage system must occur by **visible surface flow**, not piped.
- (f) Runoff other than roof water must be treated to remove contaminants prior to entry into the infiltration areas (to maximise life of infiltration areas between major cleaning/maintenance overhauls).
- (g) If the site is under strata or community title, the community title plan is to ensure that the infiltration areas are contained within common land that remain the responsibility of the body corporate (to ensure continued collective responsibility for site drainage).
- (h) All infiltration devices are to be designed to allow for cleaning and maintenance overhauls.
- (i) All infiltration devices are to be designed by a suitably qualified Engineer taking into account the proximity of the footings for the proposed/or existing structures on the subject property, and existing or likely structures on adjoining properties.
- (j) All infiltration devices are to be designed to withstand loading from vehicles during construction and operation of the development.
- (k) All infiltration devices are to be located clear of stormwater or sewer easements.

[PCC1135]

PRIOR TO COMMENCEMENT OF WORK

11. The proponent shall accurately locate and identify any existing sewer main, stormwater line or other underground infrastructure within or adjacent to the site and the Principal Certifier advised of its location and depth prior to commencing works and ensure there shall be no conflict between the proposed development and existing infrastructure prior to start of any works.

[PCW0005]

12. The erection of a building in accordance with a development consent must not be commenced until:
 - (a) a construction certificate for the building work has been issued by the consent authority, the council (if the council is not the consent authority) or a registered certifier, and
 - (b) the person having the benefit of the development consent has:
 - (i) appointed a principal certifier for the building work, and

- (ii) notified the principal certifier that the person will carry out the building work as an owner-builder, if that is the case, and
 - (c) the principal certifier has, no later than 2 days before the building work commences:
 - (i) notified the consent authority and the council (if the council is not the consent authority) of his or her appointment, and
 - (ii) notified the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work, and
 - (d) the person having the benefit of the development consent, if not carrying out the work as an owner-builder, has:
 - (i) appointed a principal contractor for the building work who must be the holder of a contractor licence if any residential work is involved, and
 - (ii) notified the principal certifier of any such appointment, and
 - (iii) unless that person is the principal contractor, notified the principal contractor of any critical stage inspection and other inspections that are to be carried out in respect of the building work.
- 13. Prior to work commencing, a "Notice of Commencement of Building or Subdivision Work and Appointment of Principal Certifier" shall be submitted to Council at least **2 days** prior to work commencing. [PCW0215]
- 14. Residential building work: [PCW0225]
 - (a) Residential building work within the meaning of the *Home Building Act 1989* must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the following information:
 - (i) in the case of work for which a principal contractor is required to be appointed:
 - * in the name and licence number of the principal contractor, and
 - * the name of the insurer by which the work is insured under Part 6 of that Act,
 - (ii) in the case of work to be done by an owner-builder:
 - * the name of the owner-builder, and
 - * if the owner-builder is required to hold an owner builder permit under that Act, the number of the owner-builder permit.
 - (b) If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under subclause (1) becomes out of date, further work must not be carried out unless the principal certifying authority for the development to which the work relates (not being the council) has given the council written notice of the updated information. [PCW0235]

15. A temporary builder's toilet is to be provided prior to commencement of work at the rate of one closet for every 15 persons or part of 15 persons employed at the site. Each toilet provided must be:
- (a) a standard flushing toilet connected to a public sewer, or
 - (b) if that is not practicable, an accredited sewage management facility approved by the council

[PCW0245]

16. **Where prescribed by the provisions of the Environmental Planning and Assessment Regulation 2021**, a sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
- (a) showing the name, address and telephone number of the principal certifier for the work, and
 - (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
 - (c) stating that unauthorised entry to the site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

[PCW0255]

17. It is a condition of this approval that, if an excavation extends below the level of the base of the footings of a building on an adjoining allotment of land or is likely to effect the integrity of the adjoining land, the person causing the excavation to be made must comply with the following:
- (a) The person must, at the person's own expense:
 - (i) preserve and protect the building / property from damage; and
 - (ii) if necessary, underpin and support the building in an approved manner.
 - (b) The person must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars to the owner of the proposed work.

[PCW0765]

18. Prior to commencement of work on the site all erosion and sedimentation control measures are to be installed and operational including the provision of a "shake down" area, where required. These measures are to be in accordance with the approved erosion and sedimentation control plan and adequately maintained throughout the duration of the development.

In addition to these measures the core flute sign provided with the stormwater approval under Section 68 of the Local Government Act is to be clearly displayed on the most prominent position of the sediment fence or erosion control device which promotes awareness of the importance of the erosion and sediment controls provided.

This sign is to remain in position for the duration of the project.

[PCW0985]

DURING CONSTRUCTION

19. Should any Aboriginal object or cultural heritage (including human remains) be discovered all site works must cease immediately and the Tweed Byron Local Aboriginal Land Council (TBLALC) Aboriginal Sites Officer (on 07 5536 1763) are to be notified. The find is to be reported to the Biodiversity and Conservation Division of the NSW Department of Planning, Industry and Environment. No works or development may be undertaken until the required investigations have been completed and any permits or approvals obtained, where required, in accordance with the National Parks and Wildlife Act, 1974.

[DUR0025]

20. Commencement of work, including the switching on and operation of plant, machinery and vehicles is limited to the following hours, unless otherwise permitted by Council:
Monday to Saturday from 7.00am to 6.00pm
No work to be carried out on Sundays or Public Holidays
The proponent is responsible to instruct and control subcontractors regarding hours of work.

[DUR0205]

21. The wall and roof cladding is to have low reflectivity where they would otherwise cause nuisance to the occupants of buildings with direct line of sight to the proposed building.

[DUR0245]

22. All building work (other than work relating to the erection of a temporary building) must be carried out in accordance with the requirements of the Building Code of Australia (as in force on the date the application for the relevant construction certificate was made).

[DUR0375]

23. Building materials used in the construction of the building are not to be deposited or stored on Council's footpath or road reserve, unless prior approval is obtained from Council.

[DUR0395]

24. The Principal Certifier is to be given a minimum of 48 hours notice prior to any critical stage inspection or any other inspection nominated by the Principal Certifier via the notice under Section 6.6 of the Environmental Planning and Assessment Act 1979.

[DUR0405]

25. It is the responsibility of the applicant to restrict public access to the construction works site, construction works or materials or equipment on the site when construction work is not in progress or the site is otherwise unoccupied in accordance with SafeWork NSW requirements and Work Health and Safety Regulation 2017.

[DUR0415]

26. Any cut or fill on the property is to be battered at a ratio not greater than 1:2 (v:h) within the property boundary, stabilised and provided with a dish drain or similar at the base in accordance with Tweed Shire Councils Design and Construction Specifications, Development Control Plan Part A1 to the satisfaction of the Principal Certifier.

Please note timber retaining walls are not permitted.

27. The development is to be carried out in accordance with the current BASIX certificate and schedule of commitments approved in relation to this development consent.

28. All work associated with this approval is to be carried out so as not to impact on the neighbourhood, adjacent premises or the environment. All necessary precautions, covering and protection shall be taken to minimise impact from:

- Noise, water or air pollution.
- Dust during filling operations and also from construction vehicles.
- Material removed from the site by wind.

29. Any damage caused to public infrastructure (roads, footpaths, water and sewer mains, power and telephone services etc) during construction of the development shall be repaired in accordance with Councils Development Design and Construction Specifications prior to the issue of a Subdivision Certificate and/or prior to any use or occupation of the buildings.

30. No portion of the structure may be erected over any existing sullage or stormwater disposal drains, easements, sewer mains, or proposed sewer mains.

31. Swimming Pools (Building)

- (a) The swimming pool is to be installed and access thereto restricted in accordance with Australian Standard AS 1926.1 - 2012 & AS 1926.3 -2010 & AS 1926.2-2007, the Swimming Pools Act 1992 and the Swimming Pools Regulation 2008.
- (b) Swimming pools shall have suitable means for the drainage and disposal of overflow water.
- (c) The pool pump and filter is to be enclosed and located in a position so as not to cause a noise nuisance to adjoining properties.
- (d) Warning notices are to be provided in accordance with Part 3 of the Swimming Pools Regulation 2008.
- (e) Once your pool or spa is complete please register it at www.swimmingpoolregister.nsw.gov.au.

32. Backwash from the swimming pool is to be connected to the sewer in accordance with Australian Standard AS 3500.2 Section 10.9.

33. The builder must provide an adequate trade waste service to ensure that all waste material is suitably contained and secured within an area on the site, and removed from the site at regular intervals for the period of construction/demolition to ensure no material is capable of being washed or blown from the site.

34. Council is to be given 24 hours notice for any of the following inspections prior to the next stage of construction:
- (a) internal drainage, prior to slab preparation;
 - (b) water plumbing rough in, and/or stackwork prior to the erection of brick work or any wall sheeting;
 - (c) external drainage prior to backfilling.
 - (d) completion of work and prior to occupation of the building.
- [DUR2485]
35. Plumbing
- (a) A plumbing permit is to be obtained from Council prior to commencement of any plumbing and drainage work.
 - (b) The whole of the plumbing and drainage work is to be completed in accordance with the requirements of the Plumbing Code of Australia and AS/NZS 3500.
- [DUR2495]
36. Overflow relief gully is to be located clear of the building and at a level not less than 150mm below the lowest fixture within the building and 75mm above finished ground level.
- [DUR2545]
37. All new hot water installations shall deliver hot water at the outlet of sanitary fixtures used primarily for personal hygiene purposes at a temperature not exceeding:-
- * 45°C for childhood centres, primary and secondary schools and nursing homes or similar facilities for aged, sick or disabled persons; and
 - * 50°C in all other classes of buildings.
- A certificate certifying compliance with the above is to be submitted by the licensed plumber on completion of works.
- [DUR2555]
38. No retaining walls or similar structures are to be constructed over or within the zone of influence of Council's sewer main.
- [DUR2705]
39. The Applicant shall submit the appropriate 'Application for Water Service Connection' form to Council's Water Unit to facilitate a property service water connection for existing Lot 47 DP 1264557, from the existing water main in Habitat Drive. The connection shall be undertaken by Tweed Shire Council, with all applicable costs and application fees paid by the Applicant.
- [DUR2800]
40. Swimming pool pumps, air conditioning units, heat pump water systems and the like shall be located, installed and operated so as not to be heard in a habitable room of a residence during restricted hours or where it would create offensive noise as defined within the **NSW Protection of the Environment Operations (Noise Control) Regulation 2017**.
- [DUR2835]

41. The occupier of any premises in or on which a swimming pool (not including a spa pool) is being constructed must ensure that a sign is erected and maintained that:
- (a) bears a notice containing the words “This swimming pool is not to be occupied or used”, and
 - (b) is located in a prominent position in the immediate vicinity of that swimming pool, and
 - (c) continues to be erected and maintained until a relevant occupation certificate or a certificate of compliance has been issued for that swimming pool.

Maximum penalty: 5 penalty units.

Note. The signage requirements in subclause (3) are in addition to any signage that may be required under the *Environmental Planning and Assessment Act 1979* or any other Act.

[DUR2845]

42. Works in the vicinity of public infrastructure must comply with the following requirements;
- a) No portion of any structure may be erected within any easement for public infrastructure over the subject site. All structures shall be designed and sited such that all structure loads will be transferred to the foundation material outside of the zone of influence of any public infrastructure.
 - b) Surface treatment over the sewer pipe shall be limited to soft landscaping, non-interlocking paving, concrete slab with construction joints along the alignment of the sewer easement (or one metre from the sewer if no easement exists) or similar treatments as specified by Council officers, to allow ready access to the pipe for excavation. Council will not be responsible for the reinstatement of plantings, unauthorised structures or decorative surfacing in the vicinity of the pipe in the event of pipe excavation or other maintenance works.
 - c) Any fencing erected across the sewer main shall be designed and constructed with removable panels and footings located at least 1.0 metres horizontally clear of sewer main.
 - d) Trees and other landscaping that will grow to over one metre in height at maturity are not permitted to be planted within the sewer easement to prevent the tree roots intruding into sewer mains and internal sewer pipes. Landscaping over the sewer shall be of a minor nature designed to ensure they do not damage or interfere with any part of the pipeline.
 - e) Deep soil planting zones are not permitted within the sewer easement to ensure adequate protection of council’s public sewer infrastructure.

[DURNS01]

PRIOR TO ISSUE OF OCCUPATION CERTIFICATE

43. A person must not commence occupation or use of the whole or any part of a new building or structure (within the meaning of Section 6.9 and 6.10 unless an occupation certificate has been issued in relation to the building or part (maximum 25 penalty units).

[POC0205]

44. Prior to occupation of the building the property street number is to be clearly identified on the site by way of painted numbering on the street gutter within 1 metre of the access point to the property.

The street number is to be on a white reflective background professionally painted in black numbers 75-100mm high.

On rural properties or where street guttering is not provided the street number is to be readily identifiable on or near the front entrance to the site.

For multiple allotments having single access points, or other difficult to identify properties, specific arrangements should first be made with Council and emergency services before street number identification is provided.

The above requirement is to assist in property identification by emergency services and the like. Any variations to the above are to be approved by Council prior to the carrying out of the work.

[POC0265]

45. A Partial or Whole Occupation Certificate is to be obtained prior to the Occupation or the commencement of the use of the building.

Within 5 years from the date of issue of any Partial Occupation Certificate for part of a building an Occupation Certificate for the "Whole Building" must be applied for and obtained from the nominated Principal Certifying Authority.

[POC0355]

46. Prior to the issue of an occupation certificate adequate proof and/or documentation is to be submitted to the Principal Certifier to identify that all commitment on the BASIX "Schedule of Commitments" have been complied with.

[POC0435]

47. Upon completion of the pool the builder is to submit to the Principal Certifier a certificate stating that the "Water Recirculation System" has been installed in accordance with AS 1926.3-2010.

[POC0905]

48. Prior to the occupation or use of any building and prior to the issue of any occupation certificate, a final inspection report is to be obtained from Council in relation to the plumbing and drainage works.

[POC1045]

49. The swimming pool or spa is required to be registered at www.swimmingpoolregister.nsw.gov.au prior to the issue of any occupation certificate for the swimming pool or spa.

[POC1100]

USE

50. All externally mounted air conditioning units and other mechanical plant or equipment are to be located so that any noise impact due to their operation which may be or is likely to be experienced by any neighbouring premises is minimised. Notwithstanding this requirement all air conditioning units and other mechanical plant and or equipment is to be acoustically treated or shielded where considered necessary to the satisfaction of the General Manager or his delegate such that the operation of any air conditioning unit, mechanical plant and or equipment does not result in the emission of offensive or intrusive noise.

[USE0175]

51. The ground floor area comprising bed 1 and a rumpus is not to be used or adapted for separate residential habitation or occupation.

[USE0465]

52. The building is to be used for single dwelling purposes only.

53. The keeping of dogs, cats or other animals on the property is to be in accordance with any relevant 88B Instrument requirements.

[USE1245]

54. Swimming Pools (Building)

- (a) It is the responsibility of the pool owner to ensure that the pool fencing continues to provide the level of protection required regardless of and in response to any activity or construction on the subject property or the adjoining premises. Due regard must be given to the affect that landscaping will have on the future effectiveness of the security fencing. (Section 7 Swimming Pools Act 1992).
- (b) The resuscitation poster must be permanently displayed in close proximity to the swimming pool. (Section 17 Swimming Pools Act 1992).
- (c) Warning notices required under Part 3 of the Swimming Pools Regulation 2008 shall be maintained at all times.

[USE1295]

55. The swimming pool is not to be used for commercial purposes without prior Development Consent.

[USE1305]

56. Swimming pool pumps, air conditioning units, heat pump water systems and the like shall not be operated if it can be heard in a habitable room of a residence during restricted hours or at other times should the noise from the article be deemed to be offensive as defined within the **NSW Protection of the Environment Operations (Noise Control) Regulation 2017**.

[USE1510]

The reasons for the imposition of conditions are to minimise any adverse impact the development may cause and to give effect to the objectives of the Environmental Planning and Assessment Act, 1979.

The application was determined on:

21 December 2022

The consent to operate from:

18 January 2023

The consent to lapse on 18 January 2028 unless commenced prior to that date.

REVIEW OF DETERMINATION

For a determination other than for designated development you are entitled to request reconsideration of this determination under Section 8.3 of the Environmental Planning and Assessment Act, 1979. The request for review of the determination must be submitted on the NSW Planning Portal. The fees payable are specified in Schedule 4 and determined in accordance with Part 13 of the Environmental Planning and Assessment Regulation 2021.

The request for a review may be made at any time:

- a) prior to the time limited for the making of an appeal under Section 8.7 expires, if no such appeal is made against the determination, or
- b) prior to an appeal under Section 8.7 against the determination is disposed of by the Court, if such an appeal is made against the determination.

RIGHT OF APPEAL

If you are dissatisfied with this decision, Sections 8.7 and 8.10 of the Environmental Planning and Assessment Act 1979 gives you the right to appeal to the NSW Land and Environment Court.

Signed on behalf of the Tweed Shire Council

Seth Philbrook, Senior Town Planner
18 January 2023

PROPERTY DESCRIPTION

LOT 47
SITE AREA
SHIRE

DP 1273771
401.8m² (APPROX)
TWEED
THIS IS THE PLAN REFERRED TO IN DEVELOPMENT CONSENT NO. DA22/0343



PROPOSED - AREA ANALYSIS (GFA)

GROUND FLOOR	
GROUND FLOOR INTERNAL FLOOR AREA (EXCLUDING GARAGE)	153.1 m ²
GARAGE AREA + STORAGE	52.6 m ²
LEVEL 1	
LEVEL 1 INTERNAL FLOOR AREA (EXCLUDING STAIR/VOID)	169.9m ²
STAIR + VOID	16.4 m ²
TOTAL INTERNAL GFA (INC VOID)	392.0m²
ENTRY DECK	4.6m ²
ALFRESCO (EXC. POOL SURROUND AND PATHWAYS)	17.2m ²
L1 DECK	29.6m ²
TOTAL PROPOSED AREA	443.4m²

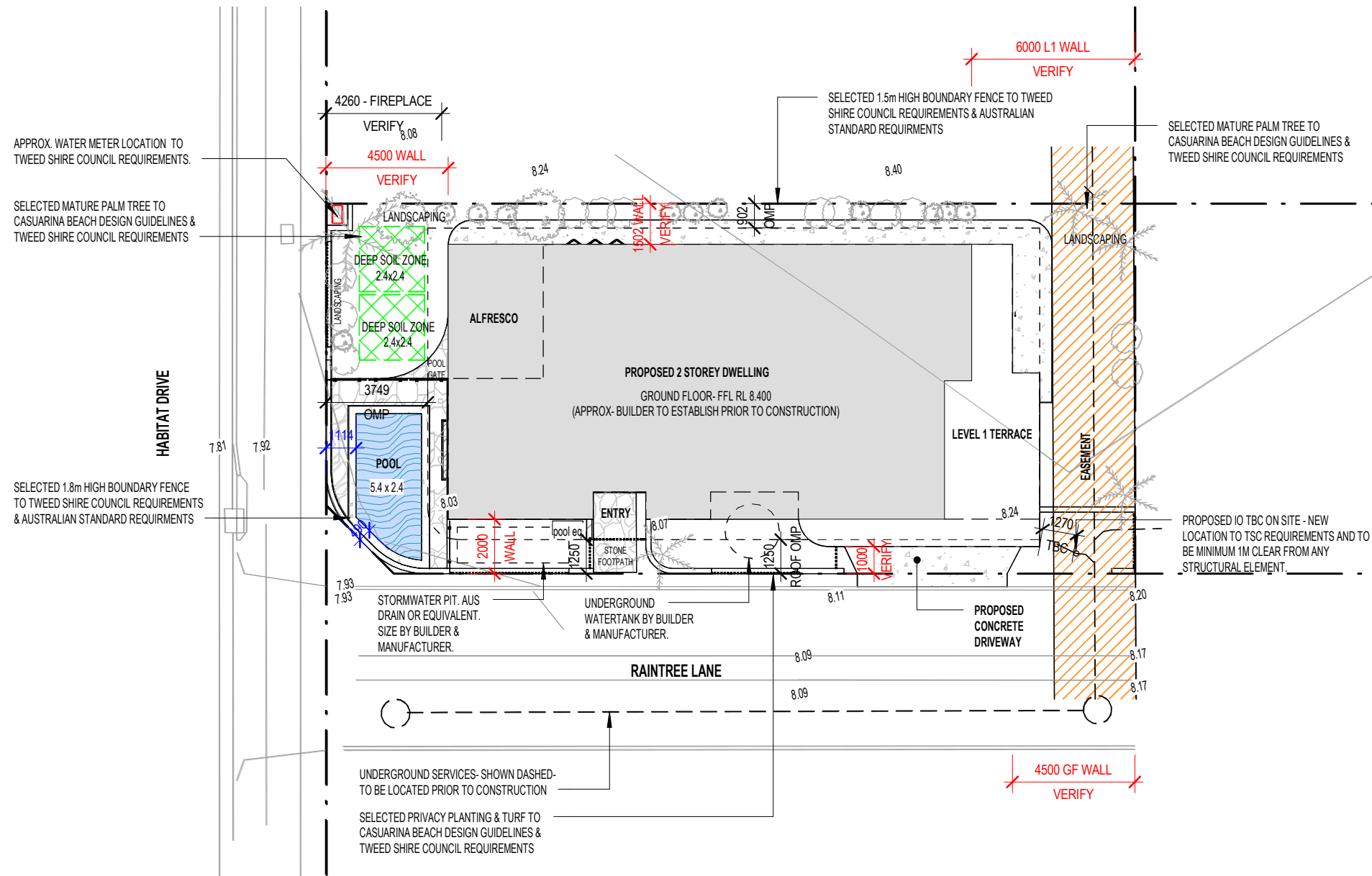
Note - Areas noted are approximate and for information only. Area are measured to external face of wall structure. The areas noted may vary from calculated areas for GFA based on council and other authority requirements.

DCP CONTROLS- TWEED SHIRE- DCP A1

DESIGN CRITERIA

REQUIRED	ACHIEVED
1) LANDSCAPING 20% (LOTS 300-450m ²) REQUIRED 20% OF 401m ² = 80.2m ² (APPROX)	ACHIEVED 97.6m ² OR 24.4%(APPROX, EXC POOL)
2) DEEP SOIL ZONES 2.4m x 2.4m (FRONT & REAR)	ACHIEVED
3) SETBACKS	
PRIMARY FRONT = 4.5m	ACHIEVED 4.5M
SECONDARY FRONT = 2m	2M
NORTH SIDE = 0.9m GROUND FLOOR	ACHIEVED 1.5M
NORTH SIDE = 1.5m LEVEL 1	ACHIEVED 1.5M
EAST REAR/SIDE = 4.5m (GROUND FLOOR)	ACHIEVED 3.5M
EAST REAR/SIDE = 6m (LEVEL 1)	ACHIEVED 6M
GARAGE - 5.5 m (FROM FRONT)	1M FROM LANEWAY
4) SITE COVERAGE LOTS 300 - 450m ² 55% = 220.5m ²	206.0m ² OR 51.3%
5) HEIGHT = 13.6m	ACHIEVED 6.55M(FROM NGL)

NOTE:
BUILDING FFL RL IS APPROXIMATE AND TO BE ESTABLISHED ON SITE WITH BUILDER PRIOR TO CONSTRUCTION. DRIVEWAY GRADES TO COMPLY WITH RELEVANT LOCAL AUTHORITY AND AUSTRALIAN STANDARD REQUIREMENTS



NOTE:
ALL FENCING TO POOL AREA TO COMPLY WITH NCC, AUSTRALIAN STANDARD AND LOCAL AUTHORITY REQUIREMENTS.

REV.	DESCRIPTION	DATE
A	DA REVIEW ISSUE	02.02.22
B	APPROVAL ISSUE	24.02.22
C	AMENDED CALCS	11.04.22
D	DA AMENDMENTS	30.09.22

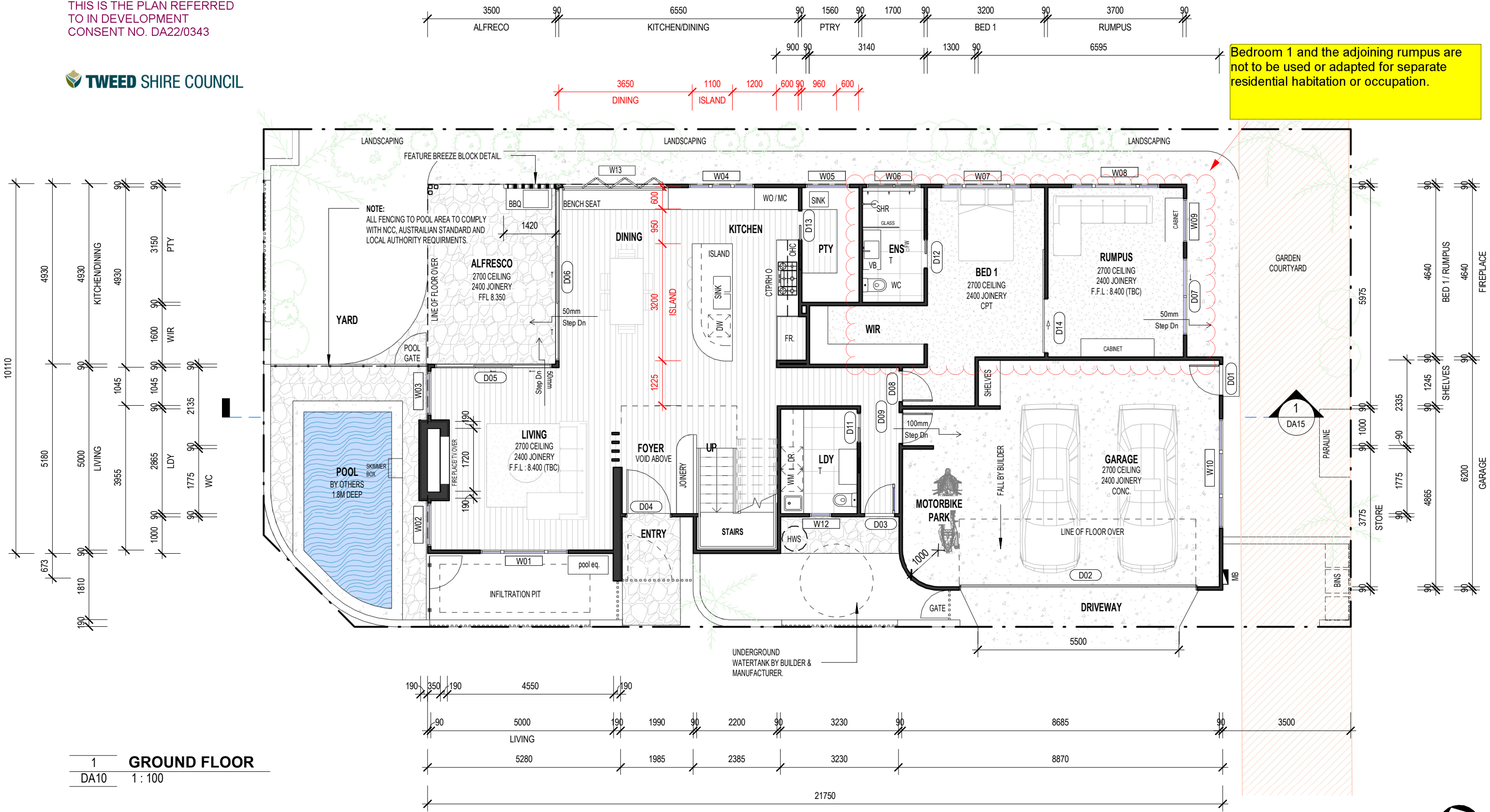
COPYRIGHT 2022 JARDINE DESIGN SPACE
DO NOT SCALE DRAWINGS. CONTRACTORS TO VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH JARDINE DESIGN SPACE GENERAL NOTES SHEET FORMING PART OF THIS DOCUMENTATION. ALL MATERIALS AND WORK ARE TO BE STRICTLY IN ACCORDANCE WITH NATIONAL CONSTRUCTION CODE, AUSTRALIAN STANDARDS AND LOCAL AUTHORITY REQUIREMENTS, CURRENT AT TIME OF CONSTRUCTION. THE PURPOSE OF THESE DOCUMENTS ARE TO COMMUNICATE DESIGN INTENT. IF DISCREPANCIES BETWEEN THESE DETAILS AND THE NATIONAL CONSTRUCTION CODE, AUSTRALIAN STANDARDS AND MANUFACTURERS ARE NOTED, CONTRACTOR IS TO CONFIRM PRIOR TO CONSTRUCTION. DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS ISSUED FOR CONSTRUCTION.



JARDINE DESIGN SPACE
BUILDING DESIGN
Ph: 0403 414 089
Em: admin@jardinedesignspace.com.au
QBCC Licence- 15141676

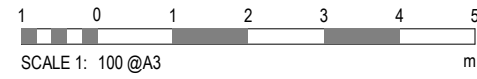
Project : PROPOSED RESIDENTIAL DWELLING	Location : 7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557	Drawing number : DA09	Project number : P21.25
Client : Matt & Nerida Rimmer	Drawing Title : SITE PLAN	Scale : @ A3	Issue : As indicated D

Bedroom 1 and the adjoining rumpus are not to be used or adapted for separate residential habitation or occupation.



1 **GROUND FLOOR**
 DA10 1 : 100

NOTE:
 BUILDING FFL RL IS APPROXIMATE AND TO BE ESTABLISHED ON SITE WITH BUILDER PRIOR TO CONSTRUCTION. DRIVEWAY GRADES TO COMPLY WITH RELEVANT LOCAL AUTHORITY AND AUSTRALIAN STANDARD REQUIREMENTS



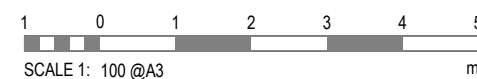
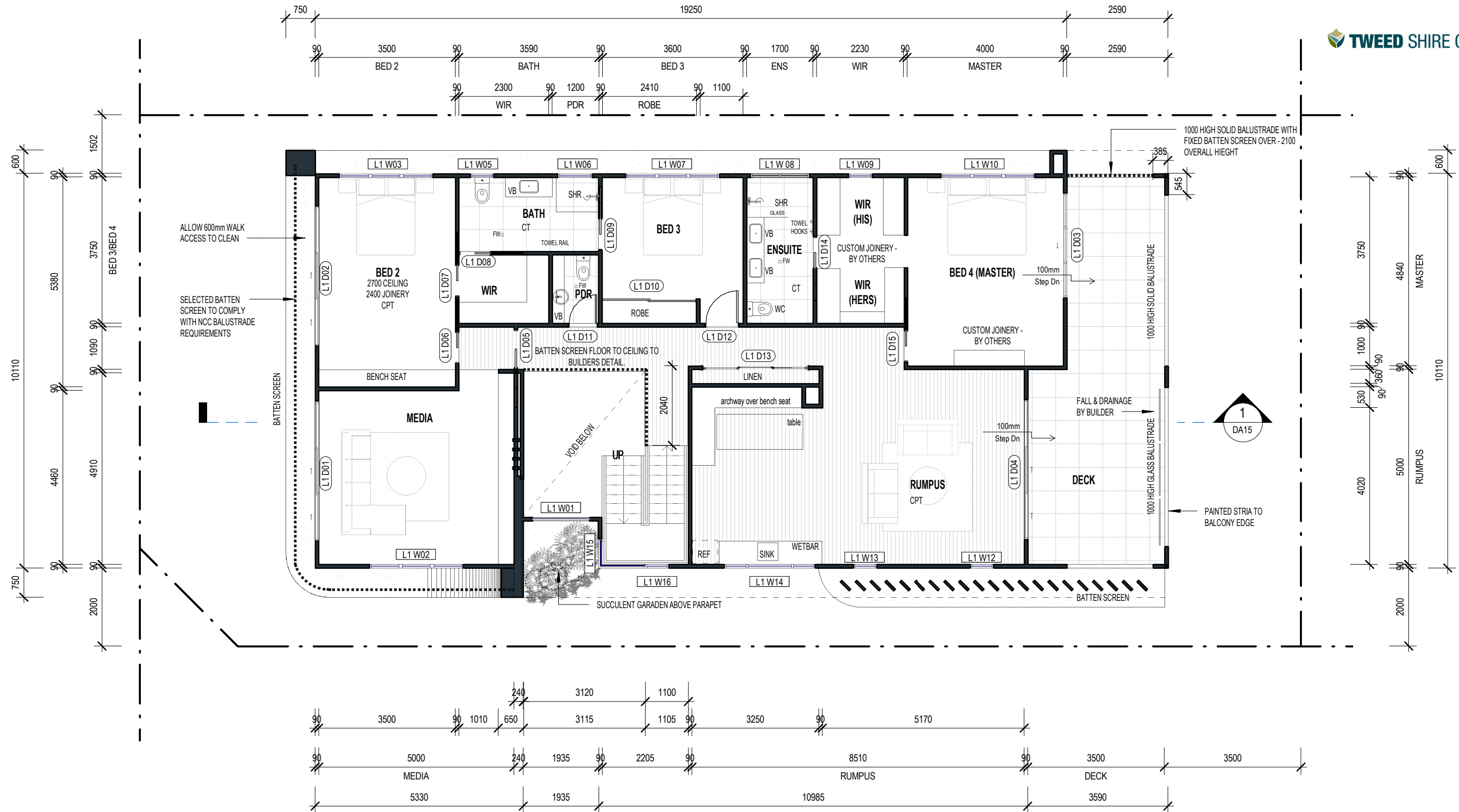
REV.	DESCRIPTION	DATE
G	DA REVIEW ISSUE	02.02.22
H	DA REVIEW ISSUE 2	17.02.22
I	DA REVIEW ISSUE 3	21.02.22
J	APPROVAL ISSUE	24.02.22
K	DA AMENDMENTS	30.09.22
L	DA AMENDMENTS 2	29.11.22

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 BUILDING DESIGN

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 Em: admin@jardinedesignspace.com.au
 QBCC Licence- 15141676

Project:	PROPOSED RESIDENTIAL DWELLING	Location:	7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557	Drawing number:	DA10	Project number:	P21.25
Client:	Matt & Nerida Rimmer	Drawing Title:	GROUND FLOOR PLAN	Scale:	@ A3	Issue:	L



REV.	DESCRIPTION	DATE
D	CLIENT REVIEW	02.12.21
E	CLIENT REVIEW	09.12.21
F	DA REVIEW ISSUE	02.02.22
G	DA REVIEW ISSUE 3	21.02.22
H	APPROVAL ISSUE	24.02.22
I	DA AMENDMENTS	30.09.22

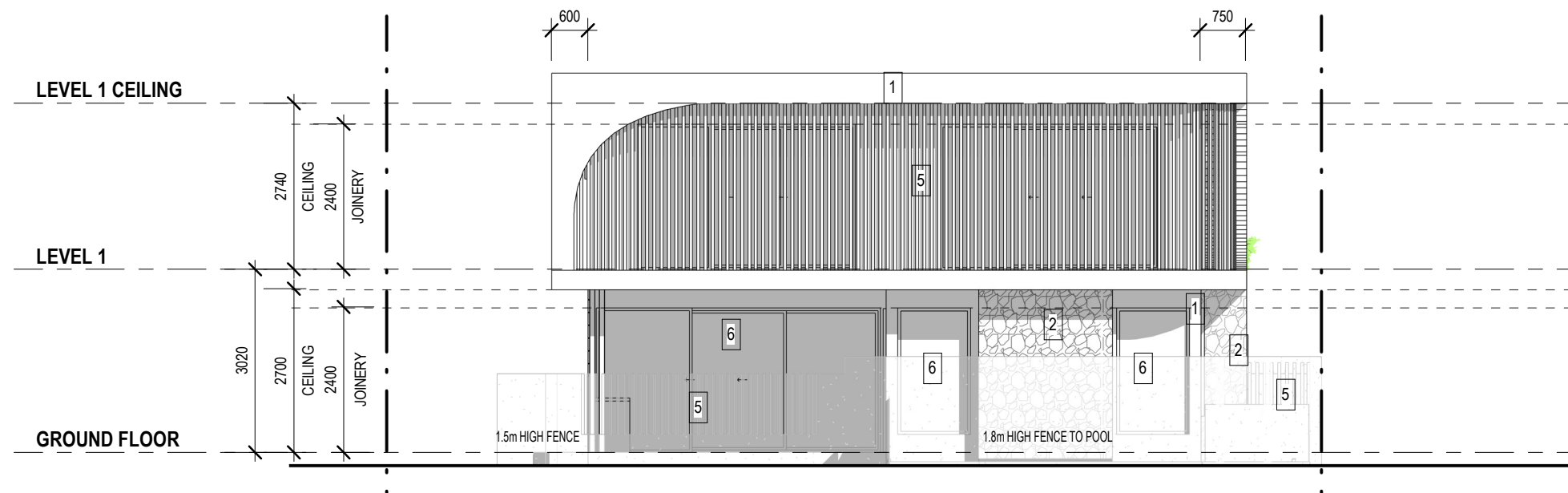
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Project:	PROPOSED RESIDENTIAL DWELLING	Location:	7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557
Client:	Matt & Nerida Rimmer	Drawing Title:	LEVEL 1 FLOOR PLAN

Drawing number:	DA11	Project number:	P21.25
Scale:	@ A3	Issue:	I

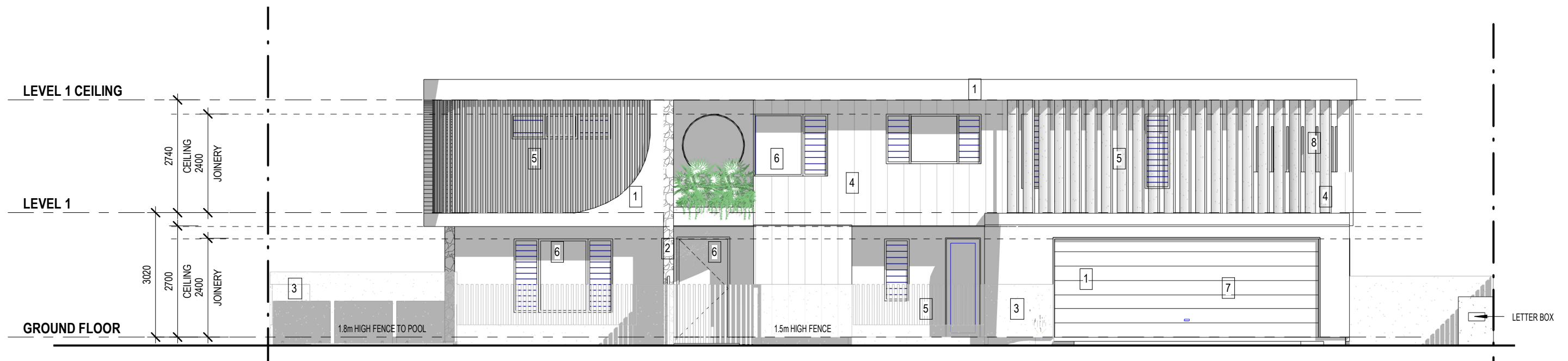


1 WEST ELEVATION
DA13 1:100

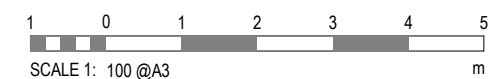
- 1 NRG GREENBOARD (OR EQUAL APPROVED) AND RENDER
- 2 SELECT STONE FINISH
- 3 190 CORE FILLED BLOCKWORK- PAINTED RENDER FINISH
- 4 JAMES HARDIE STRIA CLADDING COLOUR - TBC
- 5 SELECTED VERTICAL BATTEN 'KNOTWOOD' OR EQUAL
- 6 POWDERCOATED ALUMINIUM WINDOWS & SLIDING DOORS
- 7 COLORBOND PANEL LIFT DOOR COLOUR - TBC
- 8 89 SHS POSTS

Where the front fence forms part of the pool safety barrier, it is not to exceed 1.8m in height above the natural ground level, measured to both the inside and outside.

THIS IS THE PLAN REFERRED TO IN DEVELOPMENT CONSENT NO. DA22/0343

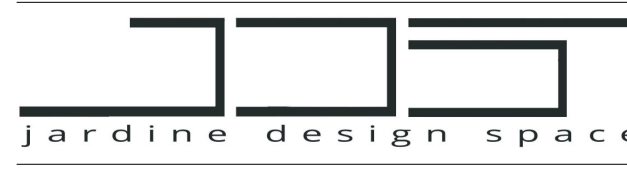


2 SOUTH ELEVATION
DA13 1:100



REV.	DESCRIPTION	DATE
D	CLIENT REVIEW	09.12.21
E	DA REVIEW ISSUE	02.02.22
F	DA REVIEW ISSUE 2	17.02.22
G	DA REVIEW ISSUE 3	21.02.22
H	APPROVAL ISSUE	24.02.22
I	DA AMENDMENTS 2	29.11.22

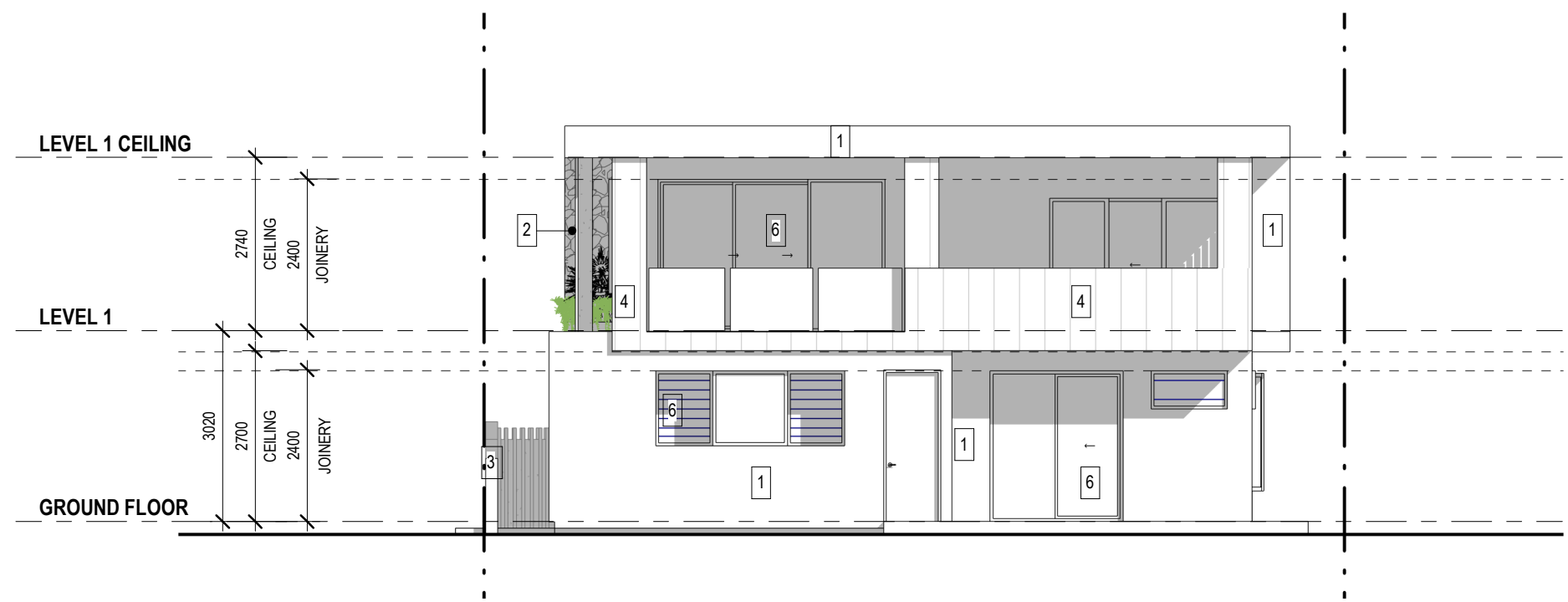
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Project: PROPOSED RESIDENTIAL DWELLING
Location: 7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557
Client: Matt & Nerida Rimmer
Drawing Title: WEST & SOUTH ELEVATIONS

Drawing number: DA13
Project number: P21.25
Scale: @ A3
Issue: 1

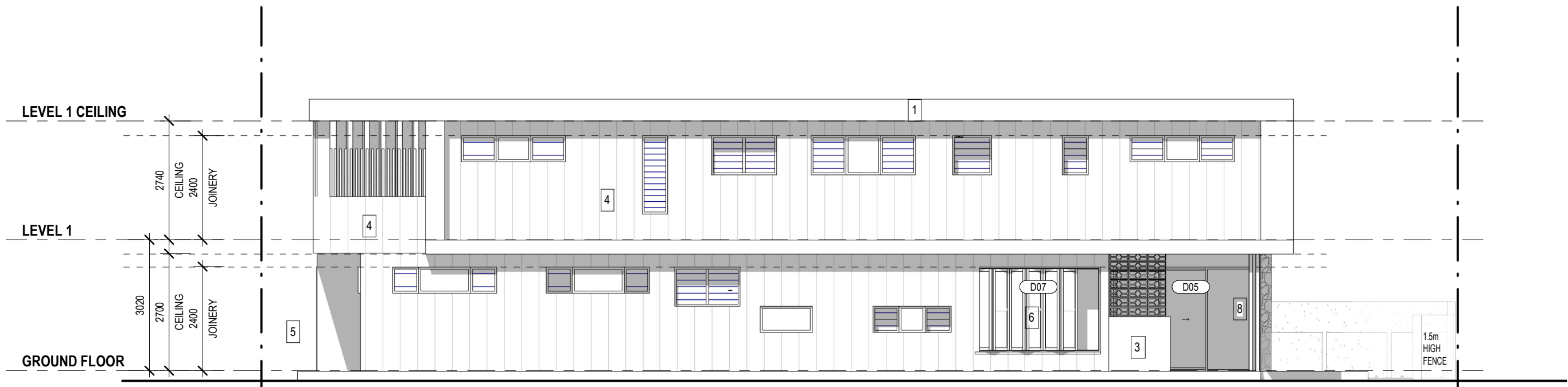


- 1 NRG GREENBOARD (OR EQUAL APPROVED) AND RENDER 
- 2 SELECT STONE FINISH 
- 3 190 CORE FILLED BLOCKWORK- PAINTED RENDER FINISH 
- 4 JAMES HARDIE STRIA CLADDING COLOUR - TBC 
- 5 SELECTED VERTICAL BATTEN 'KNOTWOOD' OR EQUAL 
- 6 POWDERCOATED ALUMINIUM WINDOWS & SLIDING DOORS 
- 7 COLORBOND PANEL LIFT DOOR COLOUR - TBC 
- 8 89 SHS POSTS 

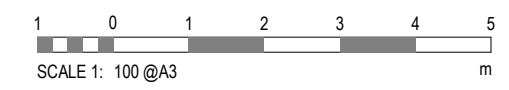
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 CONSENT NO. DA22/0343



1 EAST ELEVATION
 DA14 1:100



2 NORTH ELEVATION
 DA14 1:100



REV.	DESCRIPTION	DATE
D	DA REVIEW ISSUE	02.02.22
E	DA REVIEW ISSUE 2	17.02.22
F	DA REVIEW ISSUE 3	21.02.22
G	APPROVAL ISSUE	24.02.22
H	DA AMENDMENTS	30.09.22
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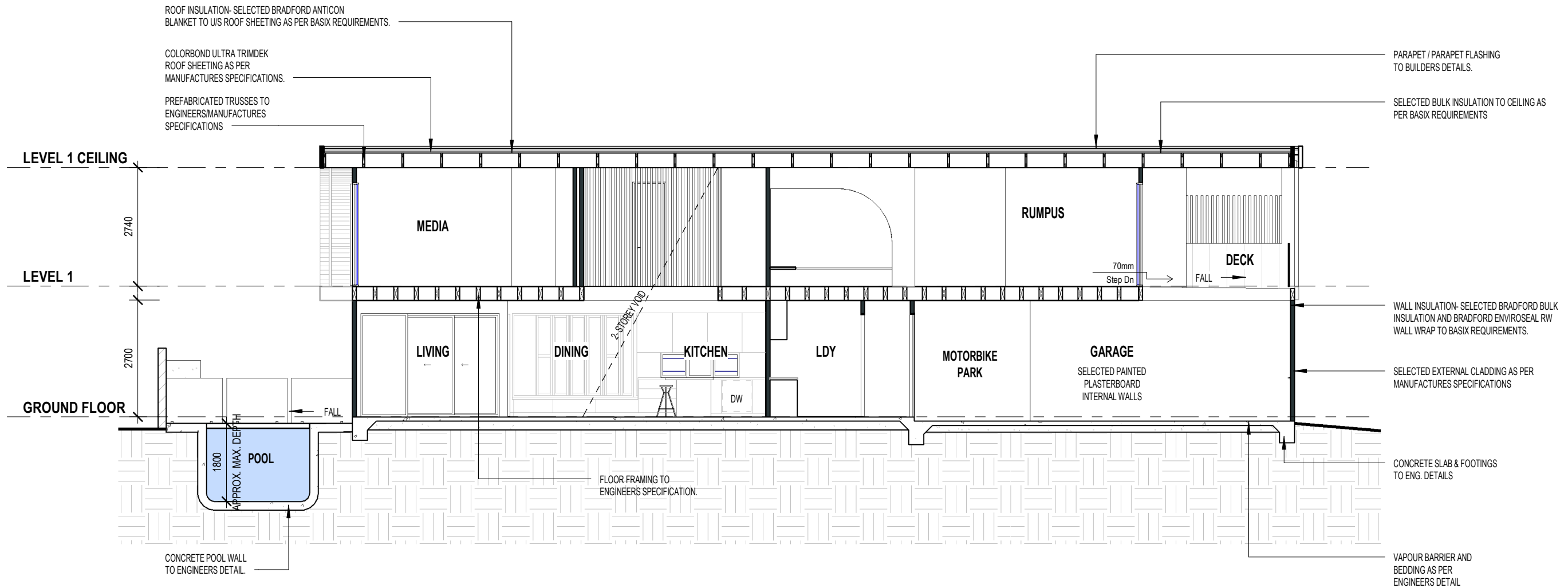
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Project :	PROPOSED RESIDENTIAL DWELLING	Location :	7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557
Client :	Matt & Nerida Rimmer	Drawing Title :	NORTH & EAST ELEVATIONS

Drawing number :	DA14	Project number :	P21.25
Scale :	@ A3	Issue :	1

APPROVAL



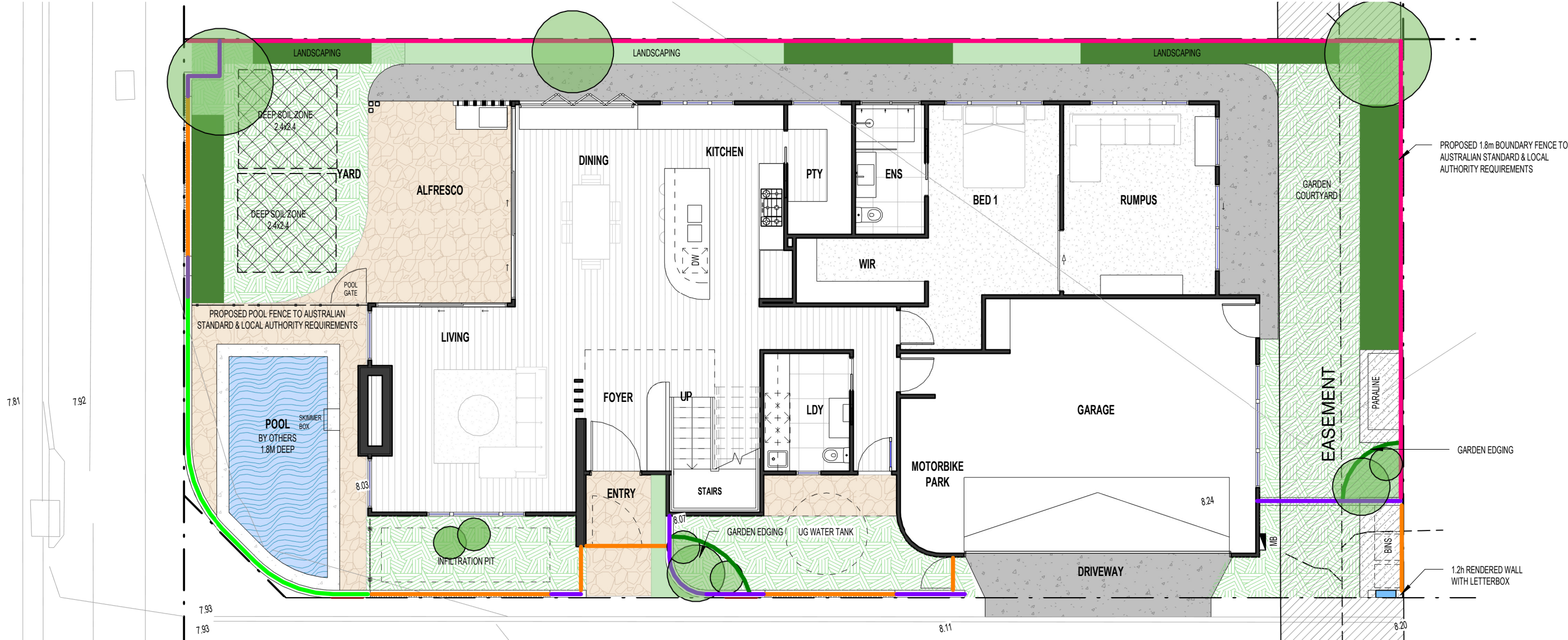
1 WEST/EAST- SECTION
DA15 1 : 100

REV.	DESCRIPTION	DATE
A	DA REVIEW ISSUE	02.02.22
B	DA REVIEW ISSUE 2	17.02.22
C	APPROVAL ISSUE	24.02.22
D	DA AMENDMENTS	30.09.22

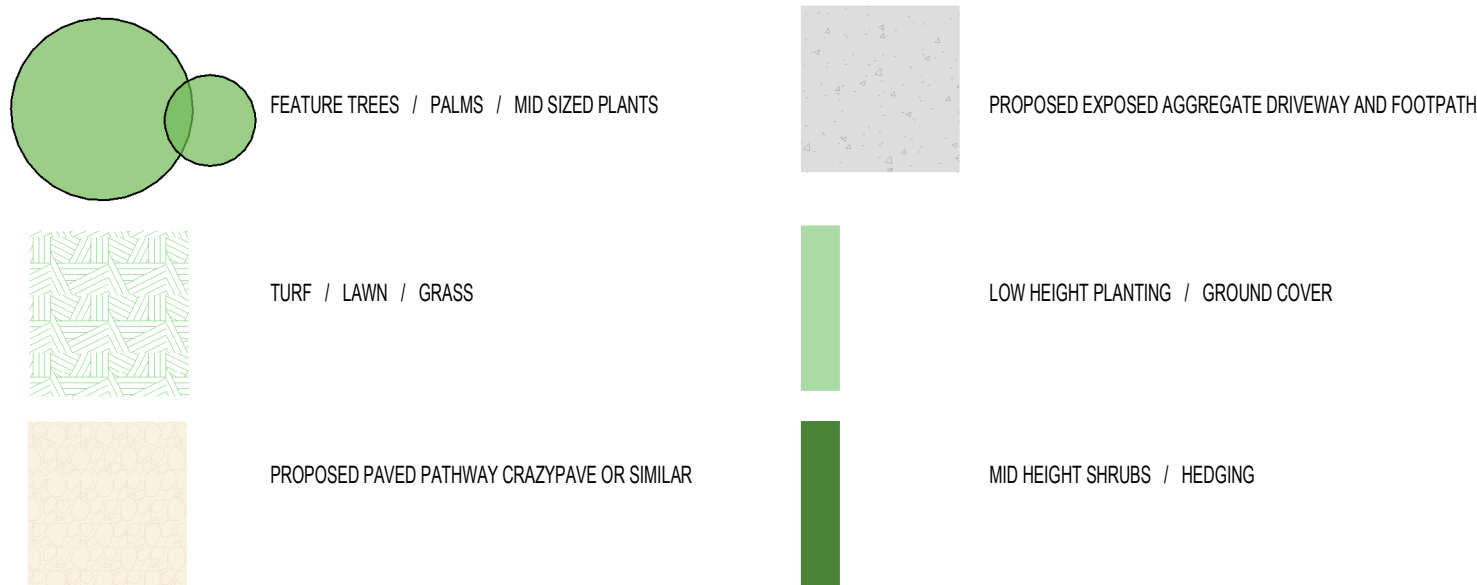
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Project :	Location :	Drawing number :	Project number :
PROPOSED RESIDENTIAL DWELLING	7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557	DA15	P21.25
Client :	Drawing Title :	Scale : @ A3	Issue :
Matt & Nerida Rimmer	SECTION	1 : 100	D

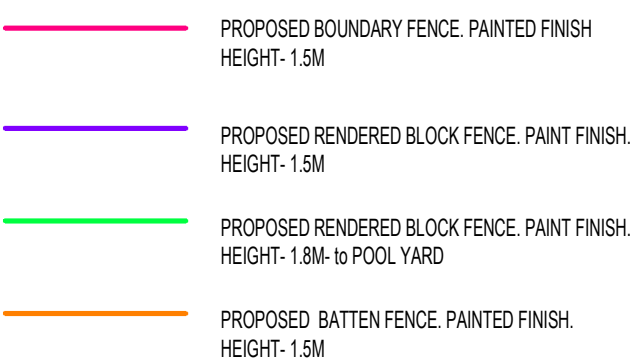


LANDSCAPING LEGEND



NOTE:
ALL PLANTING IN LANDSCAPE INTENT TO BE IN ACCORDANCE WITH TWEED SHIRE COUNCILS LANDSCAPING AND SPECIES REQUIREMENTS. PLANTING IS TO SATISFY 88b INSTRUMENT.

EXTERNAL FENCING LEGEND



Proposed Letterbox Location
INSTALLED IN ACCORDANCE WITH AUSTRALIAN POST REQUIREMENTS.
INTEGRATED INTO 1.2m HIGH FRONT FENCE

THIS IS THE PLAN REFERRED TO IN DEVELOPMENT CONSENT NO. DA22/0343



REV.	DESCRIPTION	DATE
A	DA REVIEW ISSUE	02.02.22
B	APPROVAL ISSUE	24.02.22
C	DA AMENDMENTS	30.09.22

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Project : PROPOSED RESIDENTIAL DWELLING
Client : Matt & Nerida Rimmer

Location : 7 Habitat Drive, Casuarina NSW Lot 47- DP 1264557
Drawing Title : LANDSCAPE INTENT

Drawing number :	Project number :
DA22	P21.25
Scale : @ A3	Issue :
1 : 100	C

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 1285841S

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, 14 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	Lot 47 Habitat Drive	
Street address	7 Habitat Drive Casuarina 2487	
Local Government Area	Tweed Shire Council	
Plan type and plan number	deposited 1264557	
Lot no.	47	
Section no.	n/a	
Project type	separate dwelling house	
No. of bedrooms	4	
Project score		
Water	✓ 42	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 100	Target 50

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343



Certificate Prepared by
Name / Company Name: SeedHaus
ABN (if applicable): 25890335667

Description of project

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343



Project address

Project name	Lot 47 Habitat Drive
Street address	7 Habitat Drive Casuarina 2487
Local Government Area	Tweed Shire Council
Plan type and plan number	Deposited Plan 1264557
Lot no.	47
Section no.	n/a

Project type

Project type	separate dwelling house
No. of bedrooms	4

Site details

Site area (m ²)	401
Roof area (m ²)	170
Conditioned floor area (m ²)	288.0
Unconditioned floor area (m ²)	32.0
Total area of garden and lawn (m ²)	97

Assessor details and thermal loads

Assessor number	15/1698
Certificate number	0007100316
Climate zone	10
Area adjusted cooling load (MJ/m ² .year)	25
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	✔ 42	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 100	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 5 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 5 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 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 122 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 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.) a tap that is located within 10 metres of the swimming pool in the development 		✓ ✓ ✓	✓ ✓ ✓
Swimming pool			
The swimming pool must not have a volume greater than 19 kilolitres.	✓	✓	
The swimming pool must be outdoors.	✓	✓	


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	All or part of floor area square metres

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343





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: electric heat pump with a performance of 36 to 40 STCs or better.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a		✓	✓
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>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</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 4 of the bedrooms / study; dedicated • at least 3 of the living / dining rooms; dedicated • the kitchen; dedicated 		<p>✓</p> <p>✓</p> <p>✓</p>	<p>✓</p> <p>✓</p> <p>✓</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 		<p style="text-align: center;">THIS IS THE PLAN REFERRED TO IN DEVELOPMENT CONSENT NO. DA22/0343</p> 	<p style="text-align: center;">✓ ✓ ✓</p>
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 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Swimming pool			
The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): electric heat pump		✓	
The applicant must install a timer for the swimming pool pump in the development.		✓	
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 8 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	✓	✓	✓
Other			
The applicant must install an induction 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.

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343



Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0007100316-02

Generated on 14 Mar 2022 using BERS Pro v4.4.1.5 (3.21)

Property

Address Habitat Drive , Casuarina , NSW , 2487
Lot/DP 47/1264557
NCC Class* 1A
Type New Dwelling

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343

Plans

Main Plan P21.25
Prepared by Jardine Design Space



6.1
The more stars
the more energy efficient

**NATIONWIDE
HOUSE**
ENERGY RATING SCHEME

42.1 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

Construction and environment

Assessed floor area (m ²)*	Exposure Type
Conditioned*	Open
Unconditioned*	NatHERS climate zone
Total	10
Garage	

Thermal performance

Heating	Cooling
15.9 MJ/m ²	26.2 MJ/m ²



Accredited assessor

Name Marcus Gazsik
Business name SeedHaus
Email hello@seedhaus.com.au
Phone 07 5522 9674
Accreditation No. DMN/15/1698
Assessor Accrediting Organisation Design Matters National
Declaration of interest Declaration completed: no conflicts

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=XwtKWtXBj. 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.

* Refer to glossary.

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

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-004-01 A	ALM-004-01 A Aluminium B DG Air Fill Clear-Clear	4.8	0.59	0.56	0.62

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-004-01 A	n/a	2400	820	n/a	90	S	No
Laundry	ALM-004-01 A	n/a	1500	600	n/a	90	S	No
Kitchen/Living	ALM-004-01 A	n/a	1800	2400	n/a	45	S	No



Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-01 A	n/a	2100	1200	n/a	00	W	No
Kitchen/Living	ALM-004-01 A	n/a	2100	1200	n/a	00	W	No
Kitchen/Living	ALM-004-01 A	n/a	2400	3200	n/a	65	N	No
Kitchen/Living	ALM-004-01 A	n/a	2400	4700	n/a	65	W	No
Kitchen/Living	ALM-004-01 A	n/a	1950	2800	n/a	90	N	No
Kitchen/Living	ALM-004-01 A	n/a	600	1800	n/a	67	N	No
Kitchen/Living	ALM-004-01 A	n/a	1200	1500	n/a	45	N	No
Kitchen/Living	ALM-004-01 A	n/a	1200	1500	n/a	45	N	No
Pantry	ALM-004-01 A	n/a	600	1200	n/a	00	N	No
Ensuite	ALM-004-01 A	n/a	900	1500	n/a	90	N	No
Bedroom 1	ALM-004-01 A	n/a	600	2400	n/a	45	N	No
Rumpus	ALM-004-01 A	n/a	600	2400	n/a	45	N	No
Rumpus	ALM-004-01 A	n/a	600	1200	n/a	90	E	No
Rumpus	ALM-004-01 A	n/a	2400	2100	n/a	45	E	No
Media	ALM-004-01 A	n/a	600	2400	n/a	67	S	Yes
Media	ALM-004-01 A	n/a	2400	3600	n/a	65	W	Yes
Void	ALM-004-01 A	n/a	1500	1800	n/a	20	S	No
Void	ALM-004-01 A	n/a	1500	750	n/a	00	W	Yes
Void	ALM-004-01 A	n/a	1500	1500	n/a	00	S	Yes
Rumpus	ALM-004-01 A	n/a	2400	3600	n/a	65	E	Yes
Rumpus	ALM-004-01 A	n/a	1800	600	n/a	90	S	Yes
Rumpus	ALM-004-01 A	n/a	1800	600	n/a	90	S	Yes
Rumpus	ALM-004-01 A	n/a	1200	2300	n/a	45	S	No
Bedroom 2	ALM-004-01 A	n/a	2400	3600	n/a	65	W	Yes
Bedroom 2	ALM-004-01 A	n/a	600	2400	n/a	67	N	No
Bath	ALM-004-01 A	n/a	900	600	n/a	90	N	No
Bath	ALM-004-01 A	n/a	900	900	n/a	90	N	No
Bedroom 3	ALM-004-01 A	n/a	900	2400	n/a	45	N	No
Ensuite	ALM-004-01 A	n/a	900	1500	n/a	90	N	No
WIR	ALM-004-01 A	n/a	1800	600	n/a	90	N	No
Bedroom 4	ALM-004-01 A	n/a	600	2400	n/a	67	N	No
Bedroom 4	ALM-004-01 A	n/a	2400	2700	n/a	65	E	Yes

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					

* Refer to glossary.

Custom* roof windows



TWEED SHIRE COUNCIL

Substitution tolerance ranges

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
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No Data Available

Skylight type and performance

Skylight ID	Skylight description
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No Data Available

Skylight schedule

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

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage 1	2400	820	90	E
Garage 1	2400	5200	90	S
Kitchen/Living	2400	1200	90	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel on Battens	0.50	Medium	Foil, Anti-glare one side + Bulk Insulation R2.5	No
EW-2	Fibro Cavity Panel on Battens	0.50	Medium	Foil, Anti-glare one side + Bulk Insulation R2	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage 1	EW-1	2700	6195	E	100	NO
Garage 1	EW-1	2700	8600	S	100	NO
Garage 1	EW-1	2700	2000	W	200	YES
Kitchen/Living	EW-1	2700	1190	S	1000	YES
Laundry	EW-1	2700	2090	S	1000	YES



Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	EW-1	2700	1000	E	12000	YES
Kitchen/Living	EW-1	2700	2300	S	0	NO
Kitchen/Living	EW-1	2700	1000	W	7300	YES
Kitchen/Living	EW-1	2700	2200	S	2000	YES
Kitchen/Living	EW-1	2700	1000	E	16500	YES
Kitchen/Living	EW-1	2700	5000	S	100	NO
Kitchen/Living	EW-1	2700	5000	W	100	NO
Kitchen/Living	EW-1	2700	3400	N	5000	YES
Kitchen/Living	EW-1	2700	4900	W	3500	YES
Kitchen/Living	EW-1	2700	6495	N	100	NO
Pantry	EW-1	2700	1690	N	100	NO
Ensuite	EW-1	2700	1890	N	100	NO
Bedroom 1	EW-1	2700	3390	N	100	NO
Rumpus	EW-1	2700	4495	N	100	NO
Rumpus	EW-1	2700	4695	E	100	NO
Media	EW-2	2700	1200	E	16600	YES
Media	EW-2	2700	5100	S	100	NO
Media	EW-2	2700	4395	W	700	NO
Void	EW-2	2700	2395	S	100	NO
Void	EW-2	2700	1200	W	7800	YES
Void	EW-2	2700	1995	S	1300	YES
Rumpus	EW-2	2700	4995	E	3700	YES
Rumpus	EW-2	2700	8495	S	100	NO
Bedroom 2	EW-2	2700	5495	W	700	NO
Bedroom 2	EW-2	2700	3595	N	200	NO
Bath	EW-2	2700	3590	N	200	NO
Bedroom 3	EW-2	2700	3690	N	200	NO
Ensuite	EW-2	2700	1790	N	200	NO
WIR	EW-2	2700	2290	N	200	NO
Bedroom 4	EW-2	2700	4095	N	200	NO
Bedroom 4	EW-2	2700	4900	E	2600	NO
Bedroom 4	EW-2	2700	1100	S	5100	YES

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1	Cavity wall, direct fix plasterboard, single gap	130.00	Bulk Insulation, No Air Gap R2
IW-2	Cavity wall, direct fix plasterboard, single gap	166.00	No insulation

* Refer to glossary.

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Garage 1	Waffle pod slab 300 mm 85mm	50.30	None	Waffle Pod 300mm	Bare
Kitchen/Living	Waffle pod slab 300 mm 85mm	6.50	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 85mm	5.70	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 85mm	77.20	None	Waffle Pod 300mm	Ceramic Tiles 8mm
WIR	Waffle pod slab 300 mm 85mm	5.50	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Pantry	Waffle pod slab 300 mm 85mm	4.90	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Ensuite	Waffle pod slab 300 mm 85mm	5.50	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1	Waffle pod slab 300 mm 85mm	17.50	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Rumpus	Waffle pod slab 300 mm 85mm	20.70	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Media/Kitchen/Living	Timber Above Plasterboard 19mm	21.90		No Insulation	Carpet+Rubber Underlay 18mm
Media	Suspended Timber Floor 19mm	0.90	Enclosed	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Void/Kitchen/Living	Timber Above Plasterboard 19mm	0.80		No Insulation	Carpet+Rubber Underlay 18mm
Void/Laundry	Timber Above Plasterboard 19mm	2.20		No Insulation	Carpet+Rubber Underlay 18mm
Void/Kitchen/Living	Timber Above Plasterboard 19mm	14.80		No Insulation	Carpet+Rubber Underlay 18mm
Void	Suspended Timber Floor 19mm	0.80	Enclosed	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Rumpus/Garage 1	Timber Above Plasterboard 19mm	27.70		No Insulation	Carpet+Rubber Underlay 18mm
Rumpus/Kitchen/Living	Timber Above Plasterboard 19mm	5.90		No Insulation	Carpet+Rubber Underlay 18mm
Rumpus/Laundry	Timber Above Plasterboard 19mm	3.70		No Insulation	Carpet+Rubber Underlay 18mm
Rumpus/Bedroom 1	Timber Above Plasterboard 19mm	4.20		No Insulation	Carpet+Rubber Underlay 18mm
Rumpus	Suspended Timber Floor 19mm	2.50	Enclosed	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	6.90		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 2	Suspended Timber Floor 19mm	12.50	Enclosed	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Hall/Kitchen/Living	Timber Above Plasterboard 19mm	6.30		No Insulation	Cork Tiles or Parquetry 8mm
Hall/WIR	Timber Above Plasterboard 19mm	3.30		No Insulation	Cork Tiles or Parquetry 8mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	6.90		No Insulation	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	3.90		No Insulation	Carpet+Rubber Underlay 18mm
Powder/Kitchen/Living	Timber Above Plasterboard 19mm	1.90		No Insulation	Ceramic Tiles 8mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	7.20		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 3/WIR	Timber Above Plasterboard 19mm	1.00		No Insulation	Carpet+Rubber Underlay 18mm



Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bedroom 3/Pantry	Timber Above Plasterboard 19mm	5.10		No Insulation	Carpet+Rubber Underlay 18mm
Ensuite/WIR	Timber Above Plasterboard 19mm	1.20		No Insulation	Ceramic Tiles 8mm
Ensuite/Ensuite	Timber Above Plasterboard 19mm	5.20		No Insulation	Ceramic Tiles 8mm
WIR/Bedroom 1	Timber Above Plasterboard 19mm	8.30		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4/Garage 1	Timber Above Plasterboard 19mm	0.80		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4/Bedroom 1	Timber Above Plasterboard 19mm	5.10		No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 4/Rumpus	Timber Above Plasterboard 19mm	13.80		No Insulation	Carpet+Rubber Underlay 18mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage 1	Plasterboard	Bulk Insulation R3	No
Garage 1	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
WIR	Timber Above Plasterboard	No Insulation	No
Pantry	Timber Above Plasterboard	No Insulation	No
Ensuite	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Timber Above Plasterboard	No Insulation	No
Rumpus	Plasterboard	Bulk Insulation R3	No
Rumpus	Timber Above Plasterboard	No Insulation	No
Media	Plasterboard	Bulk Insulation R3	No
Void	Plasterboard	Bulk Insulation R3	No
Rumpus	Plasterboard	Bulk Insulation R3	No
Bedroom 2	Plasterboard	Bulk Insulation R3	No
Hall	Plasterboard	Bulk Insulation R3	No
Bath	Plasterboard	Bulk Insulation R3	No
WIR	Plasterboard	Bulk Insulation R3	No
Powder	Plasterboard	Bulk Insulation R3	No
Bedroom 3	Plasterboard	Bulk Insulation R3	No
Ensuite	Plasterboard	Bulk Insulation R3	No
WIR	Plasterboard	Bulk Insulation R3	No
Bedroom 4	Plasterboard	Bulk Insulation R3	No

* Refer to glossary.

Ceiling penetrations*



Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
Kitchen/Living	1	Downlights - LED	150	Sealed
Laundry	1	Downlights - LED	150	Sealed
Kitchen/Living	12	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
WIR	2	Downlights - LED	150	Sealed
Pantry	1	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Bedroom 1	4	Downlights - LED	150	Sealed
Rumpus	4	Downlights - LED	150	Sealed
Media	4	Downlights - LED	150	Sealed
Rumpus	6	Downlights - LED	150	Sealed
Bedroom 2	2	Downlights - LED	150	Sealed
Hall	2	Downlights - LED	150	Sealed
Bath	2	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
WIR	1	Downlights - LED	150	Sealed
Powder	1	Downlights - LED	150	Sealed
Powder	1	Exhaust Fans	300	Sealed
Bedroom 3	2	Downlights - LED	150	Sealed
Ensuite	2	Downlights - LED	150	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
WIR	2	Downlights - LED	150	Sealed
Bedroom 4	4	Downlights - LED	150	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	2	1200
Bedroom 1	1	1200
Rumpus	1	1200
Media	1	1200
Rumpus	2	1200
Bedroom 2	1	1200
Bedroom 3	1	1200
Bedroom 4	1	1200

* Refer to glossary.



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

THIS IS THE PLAN REFERRED
TO IN DEVELOPMENT
CONSENT NO. DA22/0343



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).