

Boyce Bell Pty Ltd ABN 35 154 852 936 Trading as Boyce Built Environment Consulting



National Construction Code Compliance Report Eco-tourist Facility (Proposed caretakers dwelling)



851 Wang Wauk Road Wang Wauk June 2024

Jim Boyce 0418 699 971
MRICS, MAIBS
For Boyce Bell Pty Ltd ABN 35 154 852 936 Trading as Boyce Built Environment Consulting





Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of publication, BBEC, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance upon the whole or any part of this document.

© Copyright 2024

This document and any attachments referenced herein remain the property of BBEC. Copying, editing, reproducing, disseminating or redistributing this document is not permitted without the prior consent of BBEC.

Commercial in Confidence

This document contains confidential material that is intended solely for the client commissioning BBEC to prepare this report. The client, project team and all regulatory authorities shall exercise precautionary measures to ensure that the information contained herein is not to be accessed by any third party. BBEC will take no responsibility for the use of any information contained within this report by any third party, unless BBEC's permission is requested and provided in writing.



Contents

Part	Title	Page
1	Introduction	4
2	Basis of Report	4
3	NCC 2022 – Housing Provisions	5
a	Part 2 Structure	5
b	Part 3.1 Site Preparation	6
c	Part 3.2 Footings and slabs	6
d	Part 6 Framing	7
e	Part 7 Roof and Wall Cladding	7
f	Part 8 Glazing	8
g	Part 9 Fire Safety	8
h	Part 10 Health and Amenity	8
i	Part 11 Safe Movement and access	9
4	Conclusion	10



1. Introduction

Boyce Built Environment Consulting (BBEC) has received instructions from Mr Adam Eckersley, one of the owners of a property legally described as Lot 43 DP 263785 851 Wang Wauk Road Wang Wauk NSW 2423 to prepare a National Construction Code 2022 compliance report which will assist the consent authority, MidCoast Council (MCC) in its assessment of a development application which will seek consent for an eco-tourist facility, which includes a caretakers dwelling. This report will consider the conversion works which have already been undertaken and involve the initial alterations to an existing machinery shed which have resulted in the use of this structure as a caretakers dwelling.

2. Basis of Report

This report is based on the site inspection carried out on 30 April 2024 and a desktop assessment using the following documents:

- ♦ Neil Ryan design plans, 2023-023, Sheets 1 to 7 dated April 2024
- ♦ National Construction Code/Building Code of Australia 2022 (NCC2022) Volume 2, prepared by the Australian Building Codes Board
- ♦ The Guide to the BCA Volume 1 prepared by Australian Building Codes Board

The report will contain an assessment of the subject building and compare it with the relevant acceptable construction provisions of the NCC2022 and recommendations on any work to ensure the building satisfies these requirements.

The relevant provisions of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 (the Regulation) associated with the proposed change of use to a dwelling house are as follows:

'BASIX development' is defined in the dictionary of the Regulation and includes 'a development that involves a change of use by which a building becomes a BASIX building'.

A BASIX building is further defined to include a building that contains at least one dwelling, on the basis of the above information a BASIX certificate is required for the proposed development.

As discussed, the proposed development seeks consent for the change of use of the existing building to a dwelling house as defined in Greater Taree Local Environmental Plan 2010 (LEP2010). At the time of inspection it was noted that the building alterations and conversion works have already been undertaken as can



be seen from the photographs below, this review therefore will consider matters that were visible at the time of the inspection.





The proposed classification under Clause A6G2 of NCC2022 is 1a - detached house.

3. NCC 2022 - Housing Provisions

a. Part 2 – Structure

As the development involved a change of building classification from Class 10a to Class 1a, then a full structural engineering report will be required to demonstrate compliance with this part of NCC2022. In particular a re-examination of the building is required as a result of the original structural engineers design specifically references the proposed non-habitable use of the building. The proposal as a caretaker's residence will have to ensure the safety of all occupants of the building.



b. Part 3.1 – Site Preparation

A number of factors are considered under this part of NCC2022 and in particular, Parts 3.3 and 3.4 are relevant to the subject building.

Clause 3.3.3 requires that surface water must be diverted away from Class 1 buildings. In particular, Clause 3.3.3(a) is relevant to the subject building and requires the finished ground level adjacent to a building to be drained to give a slope of not less than 25mm over the first 1m from the building.

In addition, Clause 3.3.3(b) sets finished slab heights of not less than 100mm in low rainfall intensity areas, the existing slab appears to comply with the numerical standards in this Clause.

Clause 3.4.1 of NCC2022 considers termite risk and requires that a 'primary building element' is to be protected where it is considered susceptible to termite attack. Primary building elements are members in a building specifically designed to take part of the building loads. The provisions of Clause 3.4.1 do not apply when the building has all its primary building elements constructed from certain materials which includes either steel, aluminum or other metals. This exemption therefore applies to the subject building which is constructed primarily from steel and aluminum.

c. Part 4 – Footings and Slab

The subject building is erected in the form of slab on ground construction and shows no visible signs of movement and no major cracking is evident in either the slab itself or the tiled floor areas within the building. A vapour barrier complying with clause 4.2.8 of NCC2022 is visible around the perimeter of the subject building which is evidenced in the photographic record provided by the owners below:





d. Part 6 - Framing

The major load bearing components is the original steel frame of the machinery shed. There is no evidence of deflection or movement in the steel framing due wind loading, these observations are to be verified by the structural engineer's report.

A mezzanine has being constructed at first floor level and whilst there is no evidence of deflection in the floor the structural adequacy of this component is to be included in the structural engineers report.





e. Part 7 – Roof and Wall Cladding

The roof and walls of the subject building have been finished using a pre-coloured corrugated profile metal cladding material (colourbond) which is considered an acceptable sheet roofing and wall cladding material under Parts 7.2 and Clause H1D7(5) of NCC2022 subject to compliance with AS1562.1.

The site inspection revealed no evidence of failure in either the roof or wall cladding and it appears to afford acceptable weather protection.

Gutters and down pipes are connected to rain water tanks and generally comply with numerical requirements of Clause 7.4.5 of NCC2022.



f. Part 8 - Glazing

We are advised that the external windows and doors were installed by the original machinery shed company (Ranbuild) and a compliance certificate is required from the supplier confirming compliance with AS2047 and AS1288. Compliance with AS1288 also applies to the shower screens.

g. Part 9 – Fire Safety

A smoke alarm system complying with AS3786-2014 along with Clauses 9.5.2 and 9.5.4 of NCC2022 has been installed in the subject building. In addition, an installation compliance certificate from an appropriately qualified and experienced electrician confirming the installation complies with the requisite standards is attached to this report.

h. Part 10 - Health and Amenity

Whilst there is general compliance with this part of NCC2022, there are three Clauses in this part that require further discussion in the subject building.

Clause 10.2.1 which deals with the waterproofing of wet areas and whilst the waterproofing system used in the wet areas of the subject building was not visible at the time of the inspection, the compliance certificate for this component has been provided and is attached to this report.

Clause 10.3.1 provides the numerical standards for the height of rooms and other spaces. Predominantly the room heights in the subject building comply with requirements of Clauses 10.3.1 (1)(a) and (b). The exception is the mezzanine area at first floor level which fails to comply with Clauses 10.3.1(1)(e)(i) in that it does not have a height of not less than 2.2m for at least two-thirds of the floor area of the room.

There appears to be two options available:

- 1. Restrict the use of the first floor to storage/non-habitable purposes
- 2. Consider the development of a performance solution to demonstrate compliance with performance requirement H4P2 of NCC2022.

Clause 10.4.1 which sets out the requirements for adequate cooking, washing, bathroom, sanitary and laundry facilities. Our inspection confirmed that the subject building generally complies with these requirements.



i. Part 11 - Safe Movement and access

The stairway geometry generally complies with the numerical requirements of Clause 11.2.2 of NCC2022 with the exception of Clause 11.2.2(d) in that the existing rises have openings that would allow a 125mm sphere to pass through between the treads.



Clause 11.2.4 sets out the requirements for slip resistance to stair treads, ramps and landings, compliance can be achieved by achieving a tread surface slip resistance classification of P3 or R10, or a nosing strip to each tread with a slip resistance classification of P3.

The barrier to the mezzanine area fails to comply with Clause 11.3.3(b) of NCC2022 in that the height of the barrier is 950mm and does not achieve the numerical standard 1000mm set out in Clause 11.3.4(b)(i) of NCC2022. In addition, there are a number of openings in the barrier to the stairway that fail to comply with Clause 11.3.4(4) of NCC2022 in that a125mm sphere is able to pass through it.





4. Conclusion

We are satisfied that the subject building can be effectively used as a dwelling subject to the following matters being resolved:

- 1. A structural engineers report is provided confirming that the existing building is structurally adequate to function as a dwelling.
- 2. Provide a compliance certificate from an appropriately qualified and experienced window/glazing manufacturer that the windows and glazing comply with AS2047 and AS1288 respectively.
- 3. The use of the first floor is to be restricted to storage purposes only or a performance solution to be developed to demonstrate compliance with performance requirement H4P2 of NCC2022.
- 4. The openings of the existing risers to the stairway is to be restricted in accordance with Clause 11.2.2(d) of NCC2022.
- 5. The provision of adequate slip resistance to stairway treads in accordance with Clause 11.2.4 of NCC2022.
- 6. The height of the barrier to the first floor is to be increased to comply with Clause 11.3.3(b) of NCC2022
- 7. The openings in the barrier to the stairway is to be restricted in accordance with Clause 11.3.4(4) of NCC2022.

Once the above remedial works have been completed, a Final Occupation Certificate is to be issued prior to the lawful use of the subject building as a dwelling.

Jim Boyce 12 June 2024
BDC2032, MRICS, MAIBS
For Boyce Bell Pty Ltd ABN 35 154 852 936 Trading as Boyce Built Environment Consulting