

Date: 15 September 2019

Our Ref: P19175

Mr Mark Griffiths C/- Ray White Seaforth 48a Ethel ST Seaforth NSW 2092

Dear Mark,

RE: 13 Vista Ave, Balgowlah Heights BCA COMPLIANCE ASSESSMENT

Please find enclosed our BCA Compliance Report prepared in respect of the unauthorized structure situated at the above listed property.

In reviewing the content of this Report, particular attention is drawn to the content of Part 3 as Part 3 summarizes the compliance status of the proposed design in terms of each prescriptive provision of the BCA.

The inclusion of this summary enables an immediate understanding of the compliance status of the proposed design to be obtained.

Should you require any further information, please do not hesitate to contact me on the number provided.

Yours faithfully

Kieran Tobin Director

BCA COMPLIANCE ASSESSMENT

PREPARED FOR

Mr Mark Griffiths

REGARDING

13 Vista Ave, Balgowlah Heights Prepared By



REPORT REGISTER

The following report register documents the development and issue of this report and project as undertaken by this office, in accordance with the *Quality Assurance* policy of BCA Vision Pty Ltd.

Our Reference	Issue No.	Remarks	Issue Date
P19175	1	BCA Compliance Assessment	15 September 2019

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1.0 Introduction

1.1 GENERAL

This "BCA Compliance Assessment" report has been prepared at the request of Mr Mark Griffiths and relates to 13 Vista Ave, Balgowlah Heights.

Council have identified the following unauthorised structures within the subject property:-

• Construction of an enclosed storage space within an existing car port.

This report is required to measure the structure against the existing BCA and make suitable compliance comments or recommendations

This report is based upon, and limited to, the information depicted in the documentation provided for assessment, and does not make assumptions regarding "design intention" or the like.

1.2 REPORT BASIS

The content of this report reflects –

- (a) The principles and provisions of BCA 2019 Volume 2;
- (b) A site inspection of the existing building on Friday the 13th of September 2019;
- (c) Architectural plans prepared by Action Plans and dated 05/09/19.
- (d) Certificate of Structural Design & Existing Structure Adequacy prepared by GZ Consulting Engineers and dated 13/09/19.

1.3 EXCLUSIONS

It is conveyed that this report should not construed to infer that an assessment for compliance with the following has been undertaken –

- (a) Structural and services design documentation;
- (b) General building services (i.e. passenger lifts);
- (c) The individual requirements of service providers (i.e. Telstra, Water Supply, Energy Australia);
- (d) The individual requirements of the Workcover Authority;
- (e) Disability Discrimination Act (DDA).
- (f) Only a visual inspection of the structure has been undertaken. Inspection post construction of any structure will not allow identification of all compliance issues.

This inspections is limited to what is readily visible and does not include the removal of building fabric.

1.4 REPORT PURPOSE

The purpose of this report is to identify the extent to which the architectural design documentation complies with the relevant prescriptive provisions of the BCA 2019. The status of the design is summarised within Part 3 of this report.

2.0 BUILDING DESCRIPTION

2.1 GENERAL

In the context of the Building Code of Australia (BCA), the subject development is described within items 2.2 - 2.6 below.

2.2 RISE IN STOREYS (CLAUSE C1.2)

The subject storage area has a rise in storeys of one (1); the existing dwelling has a rise in storeys of two (2).

2.3 BUILDING CLASSIFICATION (CLAUSE A3.2)

The buildings incorporate the following classifications: -

Class 1A	Residential Dwelling/s
Class 10	Storage area within car port

2.4 ENERGY EFFICIENCY IN BUILDINGS (PART 3.12)

A BASIX certificate is not required for this class 10 structure.

2.5 BUSHFIRE PRONE LAND

A search of the RFS website has indicated that the site is not considered to be bushfire prone land.

3.0 BCA ASSESSMENT – SUMMARY

FDR = FURTHER DISCUSSION REQUIRED

3.1 Part 3.1.1 – Earthworks

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.1.1.1	Earthworks				✓
3.1.1.2	Un-retained bulk earthworks — site cut				✓
3.1.1.3	Un-retained bulk earthworks — site fill				✓
3.1.1.4	Fill				✓

3.2 PART 3.1.3 – DRAINAGE

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.1.3.2	Drainage requirements	✓			
3.1.3.3	Surface water drainage	✓			
3.1.3.4	Subsoil drainage				✓
3.1.4.5	Stormwater drainage	✓			

3.3 PART 3.1.4 – TERMITE RISK MANAGEMENT

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.1.4.2	Requirements for termite management systems	✓			
3.1.4.3	Termite management systems	✓			
3.1.4.4	Durable notice	✓			

3.4 PART 3.2 – FOOTINGS AND SLABS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.2.1	Application	✓ *			
✓ *=	refer to Engineers Certificate				

3.5 PART 3.2.2 – PREPARATION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.2.2.1	Excavation for footings	✓ *			
3.2.2.2	Filling under concrete slabs	✓ *			
3.2.2.3	Foundations for footings and	✓ *			
3.2.2.4	Slab edge support on sloping sites				✓
3.2.2.5	Stepped footings				✓
3.2.2.6	Vapour barriers				✓
3.2.2.7	Edge rebates				✓

3.6 PART 3.2.3 – CONCRETE REINFORCING

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.2.3.1	Concrete	✓ *			
3.2.3.2	Steel reinforcement	✓ *			
✓ *= F	Refer to Engineers Certificate				

3.7 PART 3.2.4 – SITE CLASSIFICATION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.2.4.1	3.2.4.1 Site classification				√

3.8 PART 3.2.5 – FOOTING & SLAB CONSTRUCTION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.2.5.1	Footing and slab construction				✓
3.2.5.2	Footings and slabs to extensions to existing buildings				√
3.2.5.3	Shrinkage control				✓
3.2.5.4	Minimum edge beam dimensions				✓
3.2.5.5	Footings for fireplaces on Class A and S sites				✓
3.2.5.6	Stump footing details				✓

3.9 PART 3.3.1 – UNREINFORCED MASONRY

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.3.1.1	Application				✓
3.3.1.2	External walls				✓
3.3.1.3	Internal walls				✓
3.3.1.4	Isolated piers				✓
3.3.1.5	Masonry units				✓
3.3.1.6	Mortar mixes				✓
3.3.1.7	Mortar joints				✓
3.3.1.8	Vertical articulation joints				✓
3.3.1.9	Sub-floor ventilation				✓
3.3.1.10	Shrinkage allowance for timber framing				✓

3.10 PART 3.3.2 – REINFORCED MASONRY

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.3.2.1	Application				✓
3.3.2.2	External wall construction				✓

3.11 PART 3.3.3 – MASONRY ACCESSORIES

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.3.3.1	Application				✓
3.3.3.2	Wall ties				✓
3.3.3.3	Fixing straps and tie-down systems				✓
3.3.3.4	Lintels				✓
3.3.3.5	Corrosion protection				✓

3.12 PART 3.3.4 – WEATHERPROOFING OF MASONRY

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.3.4.1	Application				✓
3.3.4.2	Width of cavity				✓
3.3.4.3	Cavity ventilation and drainage				✓
3.3.4.4	Damp-proof courses — materials				✓
3.3.4.5	Damp-proof courses—installation				✓
3.3.4.6	Flashings				✓
3.3.4.7	Location of flashings				✓
3.3.4.8	Flashings at the base of cavity walls				✓
3.3.4.9	Sill and head flashing				✓
3.3.4.10	Flashings at a roof abutting a wall				✓
3.3.4.11	Chimney flashings				✓
3.3.4.12	Weatherproofing for single skin masonry walls				✓

3.13 PART 3.4.1–SUB-FLOOR VENTILATION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.4.1.1	Application				✓
3.4.1.2	Sub-floor ventilation				✓

3.14 PART 3.4.2 – STEEL FRAMING

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.4.2.1	Application				✓
3.4.2.2	General				✓
3.4.2.3	Steel floor framing				✓
3.4.2.6	Installation of services				✓

3.15 PART 3.4.3 – TIMBER FRAMING

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.4.3.0	Residential timber-framed construction	✓			

3.16 PART 3.4.4 – STRUCTURAL STEEL MEMBERS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.4.4.1	Application				✓
3.4.4.2	Structural steel members				✓
3.4.4.3	Columns				✓
3.4.4.4	Corrosion protection				✓

3.17 PART 3.5.1 – CLADDING

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.5.1.1	Application				✓
3.5.1.2	Roof tiling	✓			
3.5.1.3	Metal sheet roofing				✓

3.18 PART 3.5.2 – GUTTERS & DOWNPIPES

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.5.2.1	Application	✓			
3.5.2.2	Materials	✓			
3.5.2.3	Selection of guttering	✓			
3.5.2.4	Installation of gutters	✓			
3.5.2.5	Downpipes — size and installation	✓			

3.19 PART 3.6–GLAZING

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.6.1	Application				√
3.6.2	Glazing sizes and installation				√
3.6.3	Fully framed glazing installed in perimeter of buildings				√
3.6.4	Human impact safety requirements				✓
3.6.4.1	Doors				√
3.6.4.2	Door side panels				√
3.6.4.3	Full height framed glazed panels				✓
3.6.4.4	Glazed panels, other than doors or side panels, on the perimeter of rooms				√
3.6.4.5	Bathroom, ensuite and spa room glazing				✓
3.6.4.6	Visibility of glazing				✓

3.20 PART 3.7.2–FIRE SEPARATION OF EXTERNAL WALLS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.7.2.1	Application				✓
3.7.2.2	External walls of Class 1 buildings				✓
3.7.2.3	Measurement of distances			✓	
3.7.2.4	Construction of external walls			✓	
3.7.2.5	Class 10a buildings		✓		
3.7.2.6	Open Car ports				
3.7.2.7	Allowable encroachments	✓			
3.7.2.8	Roof Lights				✓

3.21 PART 3.7.3 – Fire protection of separating walls and floors

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.7.3.1	Application				✓
3.7.3.2	Separating walls				✓
3.7.3.3	Services in separating walls				✓
3.7.3.4	Roof lights				✓
3.7.3.5	Horizontal projections				✓

3.22 PART 3.7.4 – Fire separation of garage top dwellings

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.7.4.1	Application				✓
3.7.4.2	Walls requiring protection				✓
3.7.4.3	Separating floors				✓

3.23 PART 3.7.5 – SMOKE ALARMS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.7.5.1	Application				✓
3.7.5.2	Requirements for smoke alarms				✓
3.7.5.3	Location — Class 1a buildings				✓
3.7.5.4	Location — Class 1b buildings				✓
3.7.5.5	Lighting to assist evacuation — Class 1b buildings				✓

3.24 PART 3.8.1 – WET AREAS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.1.1	Application				✓
3.8.1.2	Wet Areas				✓

3.25 PART 3.8.2 – ROOM HEIGHTS

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.2.1	Application				✓
3.8.2.2	Ceiling heights				✓

3.26 PART 3.8.3 – FACILITIES

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.3.1	Application				✓
3.8.3.2	Required facilities				✓
3.8.3.3	Construction of sanitary compartments				✓

3.27 PART 3.8.4 – LIGHT

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.4.1	Application				✓
3.8.4.2	Natural lighting				✓
3.8.4.3	Artificial lighting				✓

3.28 PART 3.8.5 – VENTILATION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.5.1	Application				✓
3.8.5.2	Ventilation requirements				✓
3.8.5.3	Location of sanitary compartments				✓

3.29 PART 3.8.6 – SOUND INSULATION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.8.6.1	Application				✓
3.8.6.2	Sound insulation requirements				✓
3.8.6.3	General installation requirements for walls				✓
3.8.6.4	Services				✓

3.30 PART 3.9.1 – STAIR CONSTRUCTION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.9.1.1	Application.				✓
3.9.1.2	General requirements				✓
3.9.1.3	Stair construction				✓
3.9.1.4	Slip-resistance				✓
3.9.1.5	Thresholds				✓

3.31 PART 3.9.2 – BALUSTRADES

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.9.2.1	Application				✓
3.9.2.2	When balustrades or other barriers are required				✓
3.9.2.3	Balustrades or other barrier construction				✓
3.9.2.5	Protection of Openable Windows				✓

3.32 PART 3.10.5 – BUSHFIRE CONSTRUCTION

Clause	Requirement	Complies	Does Not Comply	FDR	Not Applicable
3.10.5.0	Application				✓

4.0 BCA ASSESSMENT – SUMMARY

4.1 SUMMARY

We have reviewed the referenced plans and in our opinion the proposal can comply with the Building Code of Australia 2019 subject to the following recommendations: -

3.1 PART 3.7.2– FIRE SEPARATION

3.7.2.3	Measurement of distances (a) The distance from any point on an external wall of a building to an allotment boundary or another building is the distance to that point measured along a line at right angles from the allotment boundary or external wall of the other building which intersects that point without being obstructed by a wall complying with 3.7.2.4. (b) Where a wall within a specified distance is required to comply with 3.7.2.4, only that part of the wall (including any openings) within the specified distance need be constructed in that manner. ((c) Where the distance measured is between attached or detached buildings of different heights, the distance must be taken from the external wall with the highest elevation measured at right angles to a point that intersects the nearest part of a vertical projection above the adjacent building, excluding any eave overhang	For Reference
3.7.2.4	Construction of external walls (a) External walls (including gables) required to be fire- resisting (referred to in 3.7.2.2 or 3.7.2.5) must— (i) commence at the footings or ground slab, except where the	For Reference – see recommendation below

external wall commences above a separating wall complying with 3.7.3.2 (see Figure 3.7.2.2b); and Explanatory information: A Performance Solution must be used where an external wall required to be fire-resisting does not commence in accordance with 3.7.2.4(a)(i).

- (ii) extend to—
- (A) the underside of a non-combustible roof covering, except that a wall may terminate not more than 200 mm from the underside of a non-combustible roof covering, where the area between the external wall and underside of the roof covering is sealed with a non-combustible fascia, gutter or flashing; or (B) the underside of a non-combustible eaves lining (See Figure 3.7.2.3); and
- (iii) be constructed in accordance with (b). (b) A wall required by (a) must—
- (i) have an FRL of not less than 60/60/60 when tested from the outside; or
- (ii) be of masonry-veneer construction in which the external masonry veneer is not less than 90 mm thick; or
- (iii) be of masonry construction not less than 90 mm thick. Explanatory information: The intent of the typical construction details shown in Figure 3.7.2.3 is to ensure that combustible materials (external or internal) are not directly exposed to fire at the junction of the wall and non-combustible roof, eaves lining, guttering and the like. Other forms of construction may also be acceptable provided that they achieve this intent. See Figure 3.7.2.1 and 3.8.6.4 for internal separating wall construction under one common roof.
- (c) Openings in external walls required to be fire-resisting (referred to in 3.7.2.2 or 3.7.2.5) must be protected by—
- (i) non-openable fire windows or other construction with an FRL of not less than -/60/-; or
- (ii) self-closing solid core doors not less than 35 mm thick.
- (d) The requirements (c) do not apply to a window in a non-

habitable room that is located adjacent to and not less than 600 mm from the boundary of an adjoining allotment or 1200 mm2from another building on the same allotment provided that—

- (i) in a bathroom, laundry or toilet, the opening has an area of not more than 1.2 m2; or
- (ii) in
- a room other than one referred to in (i), the opening has an area of not more than 0.54 m2 and—
- (A) the window is steel-framed, there are no opening sashes and it is glazed in wired glass; or
- (B) the opening is enclosed with translucent hollow glass blocks.
- (e) Subfloor vents, roof vents, weepholes, control joints, construction joints and penetrations for pipes, conduits and the like need not comply with (c).

3.7.2.5 Class 10a buildings

- (a) Where a Class 10a building is located between a Class 1 building and the allotment boundary, other than the boundary adjoining a road alignment or other public space, the Class 1 building must be protected by one of the following methods shown in Figure 3.7.1.4.
- (b) Where a Class 10a building is located between a Class 1 building to which it is appurtenant and another building on the same allotment, the Class 1 building must be protected by one of the methods shown in Figure 3.7.1.5.
- (c) Where two or more Class 10a buildings on the same allotment are appurtenant to different Class 1 buildings, the Class 10a buildings must be separated in accordance with one of the methods shown in Figure 3.7.1.6
- (d) A carport is exempt from (a), (b) and (c) if—
 - (i) it has two or more sides open and not less than one third of its perimeter open and, for the purposes of this clause,

The external wall of the storage area is approximately 52mm from the southern property boundary

The external wall must be provided with a lightweight fire rated plasterboard to achieve the required Fire Resistance Level of 60/60/60

The system used must be an AS 1530 tested and certified system applied in exact accordance with the product specification.

- a side is considered to be open if the roof covering adjacent to that side is not less than 500 mm from another building or allotment boundary; and
- (ii) it has a polycarbonate or *non-combustible* roof covering and any ceiling lining and wall cladding, including gables, is also *non-combustible* (see Figure 3.7.1.7); and
- (iii) it does not provide direct vertical support to any part of the Class 1 building; and
- (iv) in the case where it has a common roof structure with the Class 1 building and the carport does not have a ceiling (see Figure 3.7.1.8), the opening between the top of the wall of the Class 1 building and the underside of the roof covering is infilled with—
 - (A) a non-combustible material; or
 - (B) construction clad with *non-combustible* material on the carport side.
- (e) Class 10a buildings must not significantly increase the risk of spread of fire between Class 2 to 9 buildings.

Author

KIERAN TOBIN

ACCREDITED CERTIFIER BPB NO 040915 September 2019