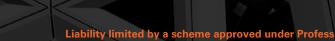


Tenambit Community Centre Tyrell Street, Tenambit NSW 2323

bmc

Prepared for: Maitland City Council

Revision 3 30 April 2024 Reference: N230044



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BCA Capability Statement

+ To	Maitland City Council
+ Attention	Allison Cronin
+ Email	Allison.Cronin@maitland.nsw.gov.au
+ From	Jake Hofner + Beth Simmons
+ Subject	BCA Capability Statement – Tenambit Community Centre
+ Project No.	N230044
+ Date	30 April 2024

This statement has been prepared to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation that will accompany the Development Application (DA) to Maitland City Council for the proposed construction of a new residential apartment building against the Building Code of Australia 2022 (BCA).



1.0 Proposed Development

1.1 Project Description

The proposed development comprises the construction of a new Tenambit community centre. We note that the Tenambit community centre has been deemed two separate buildings.



Figure 1: Perspective of Proposed Development

1.2 Capability Statement Objectives

The objectives of this statement are to:

- + confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- + confirm that the proposed new building works can readily achieve compliance with the BCA pursuant to section 19 of the *Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021.*
- + accompany the Development Application submission to enable the Consent Authority to be satisfied that subsequent compliance with the fire & life safety and health & amenity requirements of the BCA, will not necessarily give rise to design changes to the building which may necessitate the submission of an application under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

It should be noted that it is not the intent of this statement to identify all BCA provisions that apply to the subject development. The development will be subject further assessment following receipt of more detailed documentation at Construction Certificate stage.

This Statement is prepared in accordance with the Conflicts of Interest provisions of Part 4 of the Building and Development Certifiers Regulation 2020.



1.3 Relevant Version of the BCA

Pursuant to Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the day on which the application for the Construction Certificate is made. The current version of the BCA is BCA 2022, with the next revision of the BCA coming into effect in May 2025. As the Construction Certificate application will likely be lodged prior to May 2025, this report assesses the design against compliance with the requirements of BCA 2022.

1.4 Referenced Documentation

+ Drawing No.	+ Drawing Title	+ Revision	+ Date
TE_DA0001	Cover Sheet	4	23.04.2024
TE_DA1001	Proposed Site Plan	4	23.04.2024
TE_DA1002	Site Analysis/Demolition Plan	4	23.04.2024
TE_DA1003	Proposed Streetscape Elevations	4	23.04.2024
TE_DA1101	Cut and Fill Diagram	4	23.04.2024
TE_DA2101	Proposed Ground Floor Plan	4	23.04.2024
TE_DA2102	Proposed Roof Plan	4	23.04.2024
TE_DA3101	Elevations – East Pavilion	4	23.04.2024
TE_DA3102	Elevations – West Pavilion	4	23.04.2024
TE_DA3201	Sections	4	23.04.2024
TE_DA3901	Perspectives	3	23.04.2024

This report has been prepared based on a review of the preliminary DA architectural plans prepared by AJC Architects:

1.5 Building Classification

The new building works have been classified as follows:

+ BCA Classification	Class 7b (Storage) Class 9b (Community Centre),
+ Rise in Storeys	One (1)
Storeys Contained	One (1)
+ Type of Construction	Type C Construction
Importance Level (Structural)	IL2 – IL3 where more than 300persons are accommodated
Sprinkler Protected Throughout	No
+ Effective Height	<12m
+ Floor Area	<3,000m ²
Max. Fire Compartment Size	<1,000m ²



Zone 5

Note: (1) The building is a single building for the purpose of this report on the based on the common roof structure.

(2) The final use of the proposed tenancy space is to be confirmed and will be subject to a separate assessment in the future.

1.6 Fire Compartment Floor Area Limitations

Maximum size of fire compartment/atria is:

+ Classification		+ Type A	+ Type B	+ Type C
6, 7, 8 or 9a	Max. floor area	5,000m²	3,500m²	2,000m ²
	Max. volume	30,000m ³	21,000m ³	12,000m ³
5, 9b or 9c	Max. floor area	8,000m²	5,500m²	3,000m²
	Max. volume	48,000m ³	33,000m ³	18,000m ³

1.7 Distance to Fire Source Features

Based upon a review of the plans, it is noted that each elevation of the building is located within the following distances from fire source features on the site.

+ Elevation	+ Fire Source Feature	+ Distance
North	Far side of a road	>3m
East	Far side of a road	>3m
West	Far side of a road	>3m
South	Side or rear boundary	>3m

Note: Fire Source Feature (FSF) – The far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.



Figure 2: Proposed site plan



2.0 BCA Assessment – Key Issues

We note the following BCA compliance matters with relation to proposed building works are capable of complying with the BCA. Please note that this is not a full list of BCA clauses, they are the key requirements that relate to the proposed work and the below should be read in conjunction with the BCA.

2.1 Section B – Structure

- + New building works are to comply with the structural provisions of the BCA 2022 and referenced standards including AS 1170.
- + The loadbearing capacity of balustrades should be reviewed, particularly with respect to loadings under AS 1170.
- + The Importance Level provisions of BCA (Section B) are to be acknowledged by the Structural Engineer and addressed to the degree necessary.
- New building works to the existing building must be compliant with earthquake provisions of AS1170.4 – Earthquake Actions in Australia.

Comment: Compliance readily achieved design drawings and certification to be provided along with the application for Construction Certificate

2.2 Section C – Fire Resistance

C2D2 /
Spec 5Type of Construction Required: The building is required to comply with the requirements of
Type C Construction as stated within Specification 5. The table below provides an overview of the
requirements of each. Refer Appendix 1 for the FRL requirements of Type C Construction.

Type C Construction:

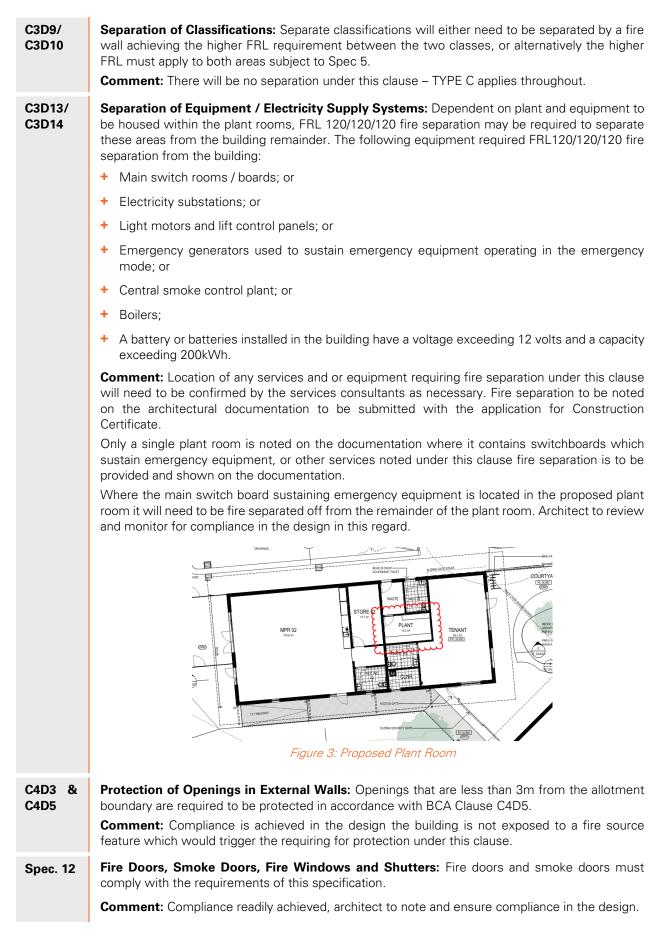
- External walls (and columns incorporated within) need not achieve an FRL if >3m from a boundary or separate building. Where required, external walls of Type C Construction only require an FRL from the outside and not in both directions.
- + Floors need not achieve an FRL, subject to S5C3.
- + Roofs need not achieve an FRL.
- + Internal columns need not achieve an FRL.

Comment: Compliance readily achieved, based on the information available the building is not located in proximity of a fire source feature which would drive the need for fire rating to external walls and the like design certification to be provided along with the application for Construction Certificate.



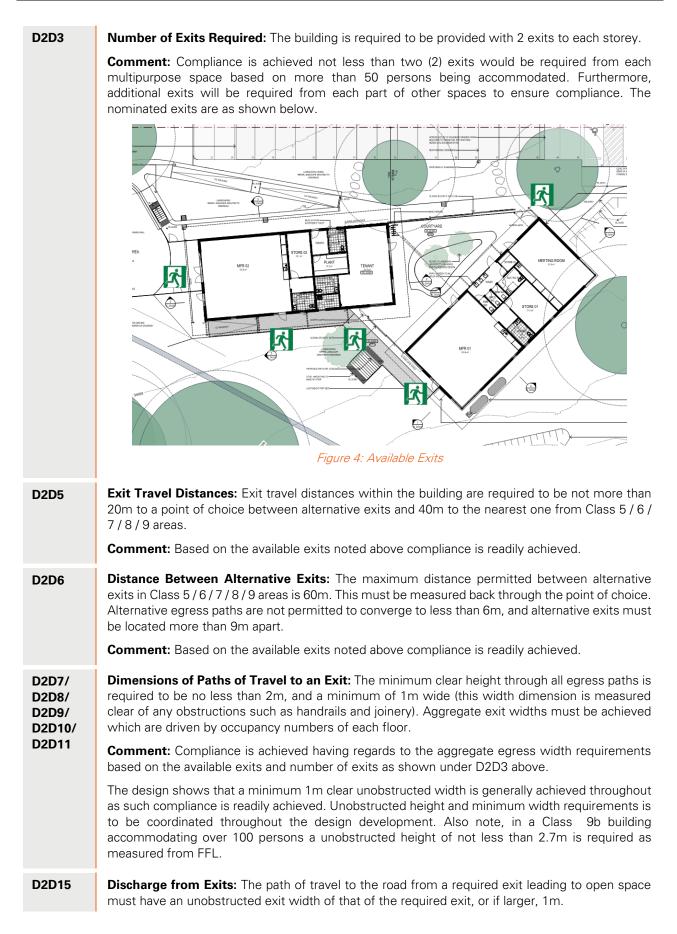
C2D10 / C2D14	Non-Combustible Building Elements: All materials and or components incorporated in an external wall or fire-rated wall must be non-combustible. This includes but not limited to:
	+ Any external wall claddings.
	+ Any framing or integral formwork systems. I.e. timber framing, sacrificial formwork, etc.
	+ Any external linings or trims. I.e. external UPVC window linings, timber window blades, etc.
	+ Any sarking or insulation contained within the wall assembly.
	This is not an exhaustive list, and any element incorporated within any external wall assembly must be identified and approved prior to the issue of a Construction Certificate.
	Refer to Table 1 in Appendix 1 for the elements required to be non-combustible.
	Ancillary Elements: An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible, unless it is in accordance with this clause.
	Comment: The building is of TYPE C construction as such the requirements of this clause do not apply.
C2D11 & Spec. 7	Fire Hazard Properties: A schedule of all wall, floor, and ceiling linings along with associated test reports are to be provided for review to ensure compliance with the fire hazard property requirements of the BCA. Noting:
	+ Minimum Group Numbers apply to wall and ceiling linings. AS 5637.1 test reports must be provided to determine compliance.
	+ Minimum Critical Radiant Flux values apply to floor linings. AS ISO 9239.1 test reports must be provided to determine compliance
	Refer to Table 2 and 3 in Appendix 1 below for the required fire hazard properties.
	Comment : Compliance readily achieved, details demonstrating compliance to be provided along with the application for Occupation Certificate.
C3D3	General Floor Area and Volume Limitations: The building is to achieve fire compartment sizes not in excess of the DtS requirements of this clause.
	Comment: The following maximum fire compartment sizes apply to the building:
	+ 2,000m ² and 12,000m ³
	Based on a review of the documentation to date we note that the building will not exceed the limitations under this clause as such compliance is achieved.
C3D8	Separation by Fire Walls:
	<u>Separation of buildings</u> . A part of a building may be considered separate from the remainder of the building if separated by a fire wall in accordance with the following:
	+ The fire wall extends through all storeys and is carried through to the underside of the roof covering.
	- Where roofs of separate buildings are at different heights, the fire wall must extend to the underside of:
	- The higher roof, or >6m above the lower roof.
	- The lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3m to any wall above the lower roof.
	 The lower roof if its covering is non-combustible and the lower part is sprinkler protected.
	<u>Separation of fire compartments-</u> A part of a building, separated from the remainder by a fire wall, may be treated as a separate fire compartment if the fire wall extends to the underside of:
	+ A floor having an FRL required for a fire wall; or
	+ The roof covering.
	Comment: There will be no fire separation proposed under the works.







2.3 Parts D – Provision for Escape and Construction of Exits





Comment: Details to be provided in the design. The required exits from the building are to be connected to the adjoining road by a compliant path albeit a BCA compliant ramp and or stairway the documentation demonstrates compliance in this regard.

Stairways, Balustrades, and Handrails:

D3D15/ D3D16/ D3D20/ D3D22

D3D14/

- <u>Stairways:</u>
- + A stairway must have no more than 18, nor less than 2, risers in each flight.
- + Landings must be not less than 750mm in length.
- + In a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°.

Balustrades:

- + All balustrades must achieve a minimum height of 1m above finished floor level.
- Balustrades (except for fire-isolated stairs) must not permit a 125mm sphere to pass through any opening.
- Balustrades in fire-isolated exits must comprise no gap larger than 150mm between nosing line (or landing) and bottom rail. Other openings in the balustrade must not exceed 460mm. If the fire-isolated exit also functions as a circulation stair, the 125mm gap requirement applies in lieu of these reduced provisions.
- A barrier required by D3D17, located on a floor more than 1m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150mm and 760mm above the floor.

This does not apply to fire isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, <u>other than</u> –

- external stairways; and
- external ramps; and

Handrails:

 Handrails must be located on both sides of all stairways and ramps except for fire-isolated stairs. Handrails must comply with AS 1428.1 as relevant.

Comment: Compliance readily achieved; the documentation is to show the location of handrails which will need to be provided along with the Construction Certificate Documentation.



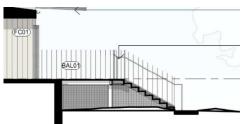
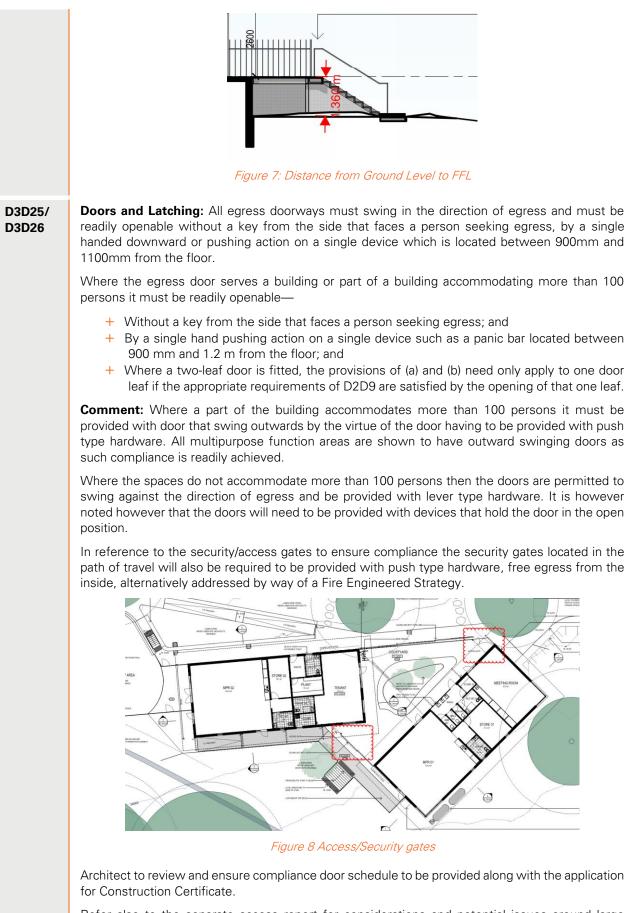


Figure 5: Stair Eastern Elevation

Figure 6: Stair North-West Elevation

Balustrades have been detailed. Further details to be provided along with the application for Construction Certificate showing balustrades wherever the distance to the surface below is more than 1m. A typical area of concern is as shown in the figure below. Compliance readily achieved details to be provided along with the application for Construction Certificate.





Refer also to the separate access report for considerations and potential issues around large sliding type doors which needs to be coordinated with the projects Access Consultant.



Part D4Access for People with a Disability: The extent of access required depends on the classification
of the building. Buildings and parts of buildings must be accessible as set out in Table D3.1 unless
exempted by Clause D4D5 the building is required to comply with AS1428.1-2009.

Comment: We understand an independent access consultant has been engaged to provide advice in this regard. A copy of the access report is to be provided along with the application for Construction Certificate.

2.4 Section E – Services and Equipment

E1D2	Fire Hydrants: Fire hydrant coverage is required to be provided to the building in accordance with AS2419.1 – 2021.
	Comment: Compliance readily achieved, details demonstrating compliance including design drawings and certification to be provided along with the application for Construction Certificate.
	Where proposed to rely on street hydrant coverage the Hydraulic consultant will need to review and confirm compliant coverage can be achieved and also the existing infrastructure provides the necessary performance to comply with AS 2419.1-2021. Where coverage cannot be achieved a new onsite system will be required.
	The location of any proposed outlets will need to be shown on the architectural documentation and submitted with the application for Construction Certificate.
E1D3	Fire Hose Reels: Fire hose reels are required to be provided to areas other than school classrooms and associated corridors in a Class 9b school building, and any Class 5 buildings / parts. Where required to be provided, fire hose reels are to comply with AS 2441 – 2005.
	Comment: Compliance readily achieved, Fire Hose Reel coverage will be required throughout the building details demonstrating compliance including design drawings and certification to be provided along with the application for Construction Certificate.
	The location of any proposed outlets will need to be shown on the architectural documentation and submitted with the application for Construction Certificate.
E1D14	Fire Extinguishers: To be provided and designed in accordance with AS 2444-2001.
	Comment: Compliance readily achieved, installation certification to be provided along with application for Occupation Certificate.
E2D4/ E2D9/	Smoke Hazard Management: The following smoke hazard management systems are to be installed to the building and will be required throughout:
E2D11/ E2D12/ E2D13	 Automatic shut-down of mechanical air handling systems upon fire trip in accordance with Section 5 and 6 of AS 1668.1.
	Comment: Where the building is provided with a ducted air handling system then it is required to be provided with shutdown of the air handling system. Mechanical consultant to review and ensure compliance where a ducted system is proposed then design certification is to be provided along with the application for Construction Certificate.
	We understand that the community center is not proposed to be used for any other purpose such as a discotheque or the like which would require additional measures to be provided.
E4D2 - E4D8	Emergency Lighting and Exits Signs: Emergency lighting and exit signage to be provided in accordance with E4D2 - E4D5 complying with AS 2293.1 – 2018.
	Comment: Compliance readily achieved details demonstrating compliance to be provided along with the application for Construction Certificate including design documentation and certification. Compliance is required where the building has a floor area of more than 300m ² .



E4D9 Emergency Warning & Intercom Systems (EWIS): An Emergency Warning and Intercom System is required to be provided in accordance with AS 1670.4 – 2018.

Comment: An EWIS system is not required in the building on the basis that the building has a floor are of less than 1,000m2

2.5 Section F – Health and Amenity

Part F1	Damp and Weatherproofing: Damp and weatherproofing to comply with the prescriptive requirements of this Part.
	Comment: Compliance readily achievable, architect to review and ensure compliance in the design certification to be provided along with the application for Construction Certificate. Particular attention needs to be paid to the treatment of the subfloor space.
Part F2	Wet Areas and Overflow Protection: Where urinals are installed, an impervious wall lining must be provided up to the top of the urinal.
	Where any floor waste is installed (including floor wastes not required by the BCA), they must be provided with falls in accordance with F2D3.
	In a class 9b building elements in a bathroom must be protected in accordance with the requirements of F2D2 of the BCA
	Comment: Compliance readily achieved, architect to review and ensure compliance in the design details with accompanying design certification to be provided along with the application for Construction Certificate
Part F3	Roof and Wall Cladding: This section contains DtS provisions for the weatherproofing of certain external wall and roof designs.
	 Roof coverings must comply with F3D2.
	+ Sarking must comply with F3D3.
	 Glazed assemblies must comply with F3D4.
	 Wall cladding must comply with F3D5. Where the proposed wall cladding is not one that is specified under this clause as a DTS compliant material then a Performance Solution will be required.
	Comment: Compliance readily achievable, architect to note and ensure compliance in the design with respect of the weatherproofing requirements.
	For the purpose of this report, it has been assumed that it will not comprise of any material which is DTS compliant for the purpose of F3D5 of the BCA and as such will need to be addressed by way of a Performance Solution. In this regard, a Performance Solution is required to be obtained in relation to the departures from F3D5 with respect to wall cladding systems. A Façade Engineer is required to prepare the Performance Based Design Brief (PBDB) and Performance Solution Report. This will need to be submitted along with the application for Construction Certificate.
Part F4	Sanitary Facilities: Sanitary facilities must be provided to comply with the requirements of this part.
	If not more than 10 people are employed a single unisex accessible sanitary compartment may be provided in lieu of separate facilities for each.
	Employees and the public may share the same facilities if the facilities are not less than both those required by the public and staff.



At each bank of toilets where there is one or more toilet in addition to an accessible sanitary compartment not less than one sanitary compartment suitable for use by a person with an ambulant disability must be provided for both female and male use.

Comment: Based on the nominated population numbers provided by the project team (5 staff – 261 patrons) the following number of facilities will be required.

	Class 9b (5 staff/261 patrons) public hall or similar							
	Closet Pans Urinals Washbasins Compl				Complies			
		Required	Proposed	Required	Proposed	Required	Proposed	Yes/No
	Male	3	3	3	3	3	3	Yes
	Female	5	5	-	-	3	4	Yes
	For the purpose of achieving compliance with the above, one of the accessible sanitary compartments has been counted as a Male Urinal and in addition an additional WC has been counted as a urinal in accordance with F4D9 of the BCA.The final use of the proposed tenancy is to be confirmed, however, based on a single accessible sanitary facility can accommodate up to 10 staff. This will be subject to separate approval/assessment.Either a separate ambulant sanitary compartment is to be provided for Male and Female use							
	Solution I	, .	ects Access		y is to be a and submit		,	
Part F5	Ceiling H	eights: The t	loor to ceilin	g heights mu	ust be as follo	ows:		
	The minin	num ceiling h	neights in a C	Class 9b build	ling are as fo	llows:		
		chool classroom, or other assembly building or part accommodating not more than 100 ersons - 2.4m.						
		Theatre, public hall, or other assembly building or part accommodating more than 100 persons - 2.7m.						
	In any bui	lding:						
	+ Bathro – 2.1m		y compartm	ents, tea pre	parations roc	oms, pantries	s, storerooms	s or the like
	+ A com	mercial kitch	en – 2.4m,					
	+ Above	a stairway, r	amp, landing	g or the like –	- 2m.			
	Comment: Compliance generally achieved throughout the building all new areas are to be designed as having an unobstructed height greater than 2.7m where the room accommodates or is a corridor associated with a part accommodating more than 100persons.							
		er rooms or ight of 2.4m.		note more t	than 100 per	sons are acc	commodated	can have a
Part F6	AS 1680.		cal or air-con	ditioning inst	ns are requir tallations mu			
		t: Compliand			ign certificat	ion to be p	rovided alon	g with the



2.6 Section G – Ancillary Provisions

Part G5	Construction in Bushfire Prone Areas: In a designated bushfire prone area the following must comply with Specification 43:
	+ A Class 9a health-care building.
	+ A Class 9b—
	 early childhood centre; or
	 primary or secondary school.
	+ A Class 9c residential care building.
	Comment: Project team has confirmed that the proposed development is not located within a bushfire prone area.
Part G6	Occupiable Outdoor Areas: Occupiable Outdoor Areas (such as the communal rooftop space) are required to comply with the fire hazard property, provision for escape, construction of exits, firefighting equipment, lift installations, visibility in an emergency, exit signs and warning systems, and light and ventilation provisions of the BCA (as specifically prescribed under this part) as if it were an internal building part.
	Comment: We note that the building does not include any outdoor occupiable area in the current design. In this regard, compliance is achieved.

2.7 Section NSW Part I4 – Entertainment Venues

Part I4
 Entertainment Venues: The building is classified as an Entertainment Venue as defined under the Environmental Planning and Assessment Regulations 2021, and as such is required to comply with the requirements under this part. Compliance is readily achievable, noting a detailed review is to be carried out prior to the Construction Certificate stage.
 Comment: We note that the building will not be an Entertainment Venue for the purpose of this clause as directed by the client.

2.8 Section J – Energy Efficiency

Part J Energy Efficiency: The new building works subject to compliance with the Energy Efficiency Provisions of BCA 2022 Section J relating to:

- + J1: Energy Efficiency Performance Requirements
- + J2: Energy Efficiency
- + J3: Elemental Provisions for a Class 2 Building and a Class 4 Part
- + J4: Building Fabric
- + J5: Building Sealing
- + J6: Air-Conditioning and Ventilation
- + J7: Artificial Lighting and Power
- + J8: Heated Water Supply and Swimming Pool and Spa Pool Plant
- + J9: Energy Monitoring and On-Site Distributed Energy Resources



The Construction Certificate documentation from the architect, mechanical, electrical, and hydraulic engineers are to incorporate details demonstrating compliance with the above provisions (as applicable to their respective disciplines).

Comment: Compliance readily achieved the requirements of this part will apply to all new building works. A copy of the Section J/JV3 report will need to be provided along with the application for Construction Certificate.



3.0 Preliminary Fire Safety Schedule

The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final compliance review.

+ Statutory Fire Safety Measure	+ Design/Installatin Standard	+ Existing	+ Proposed
Automatic Fail Safe Devices	BCA 2022 Clause D3D26		✓
Automatic Fire Detection & Alarm System	BCA 2022 Spec. 20C6 AS 1670.1 – 2018		~
Emergency Lighting	BCA 2022 Clause E4D2 & E4D4 AS 2293.1 – 2018		~
Emergency Evacuation Plan	AS 3745 - 2010		✓
Exit Signs	BCA 2022 Clauses E4D5, NSW E4D6 & E4D8 AS 2293.1 – 2018		~
Fire Blankets	AS 3504 – 1995 & AS2444 – 2001		✓
Fire Doors	BCA 2022 Clause C3D13, C3D14, AS 1905.1 – 2015 and Manufacturer's Specification		~
Fire Hose Reels	BCA 2022 Clause E1D3 AS 2441 – 2005		~
Fire Hydrant Systems (Street Hydrants)	BCA 2022 Clause E1D2 AS 2419.1 – 2021		~
Fire Seals	BCA 2022 Clause C4D15, AS 1530.4 – 2014 & AS 4072.1 – 2014 and Manufacturer's Specification		~
Lightweight Construction	BCA 2022 Clause C2D9 AS 1530.4 – 2014 and Manufacturer's Specification		~
Mechanical Air Handling Systems (Automatic Shutdown)	BCA 2022 Clause E2D3 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012		~
Portable Fire Extinguishers	BCA 2022 Clause E1D14 AS 2444 – 2001		~
Warning & Operational Signs	BCA 2022 Clause, D4D7. AS 1905.1 – 2015 & Section 108 of the EP&A (DCFS) Regulation 2021		~
Fire Engineered Performance Solutions relating to: TBC	ТВС		TBC

Please note that the above schedule will need to be revised prior to issue of the Construction Certificate to reference any proposed Fire Engineering Report and incorporate any additional measures required by the proposed Performance Solutions.



4.0 Conclusion

This report contains an assessment of the referenced architectural documentation for the proposed Tenambit Community Centre development located at Tyrell Street, Tenambit NSW 2323, against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia 2022.

In view of the above assessment, we can confirm that subject to the above measures being appropriately addressed by the project design team, compliance with the provisions of the BCA is readily achievable.

In addition, it is considered that such matters can adequately be addressed in the preparation of the Construction Certificate documentation without giving rise to any inconsistencies with the Development Approval.

Should you require further assistance or clarification please do not hesitate to contact the undersigned on 02 4047 4955 or jacob@bmplusg.com.au

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