20 February 2024

bmg

Health Infrastructure 1 Reserve Road ST LEONARDS NSW 2065 Attention: Melissa Foong

Dear Elizabeth,

# RE: MUSWELLBROOK HOSPITAL REDEVELOPMENT STAGE 3 – COMMUNITY HEALTH RELOCATION REF BCA & DDA COMPLIANCE STATEMENT

This statement has been prepared to verify that Blackett Maguire + Goldsmith Pty Ltd have undertaken a review of the architectural documentation relating to the Community Health that will accompany the third stage of the redevelopment of Muswellbrook Hospital building against the Building Code of Australia 2022.

## PROPOSED DEVELOPMENT

The proposed development comprises internal alterations and additions to the Lower Ground level of the hospital's main building to relocate the Community Health Services into the existing shell space.





#### COMPLIANCE STATEMENT OBJECTIVES

The objectives of this statement are to:

- a) Confirm that the DA architectural documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- b) Confirm that the proposed new building works can readily achieve compliance with the BCA and relevant DDA/Access requirements pursuant to clause 6.28 of the *Environmental Planning & 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, rather to confirm that the works are capable of achieving compliance. The development will be subject further assessment following receipt of more detailed documentation at the relevant Crown Certificate stage.

#### **REFERENCED DOCUMENTATION**

This report has been prepared based on a review of the preliminary architectural plans relating to Stage 3 of the Muswellbrook Hospital Redevelopment Community Health works.

## Architectural Drawings prepared by dwp

DRAWING NO.	REVISION	DATE	DRAWING NO.	REVISION	DATE
AR-MW-A1200	V	20.08.2023	AR-MW-A1700	В	25.08.2023
AR-MW-A1800	D	25.08.2023	AR-MW-A2000	G	25.08.2023

#### **BUILDING CLASSIFICATION**

The building has been classified as follows:

#### Existing Muswellbrook Hospital

+	BCA CLASSIFICATION:	Class 9a (Patient and Non-Patient Care). (1)
+	IMPORTANCE LEVEL (STRUCTURAL):	4 (2)
+	RISE IN STOREYS:	Three storeys (3) (2)
+	TYPE OF CONSTRUCTION:	Type A <sup>(2)</sup>
+	EFFECTIVE HEIGHT:	<25m <sup>(2)</sup>
+	MAX. FIRE COMPARTMENT SIZE:	5,000m <sup>2</sup> & 30,000m <sup>3</sup>
		+ 2,000m² in Patient Care areas.
+	SPRINKLER PROTECTED THROUGHOUT:	Yes
+	CLIMATE ZONE:	Zone 6

\*Note – (1) The community health fit out works are understood to comprise a Class 9a (non-patient care) space as such the limitations of this clause will not apply. This is to be confirmed by the project team i.e. that the occupants or patients are not undergoing medical treatment and will required physical assistance to evacuate the building during an emergency.

(2) The works will not result in a change to the existing building characteristics



## BCA FIRE SAFETY UPGRADE STRATEGY

The proposed works include alterations and additions to the existing hospital facility through the introduction of a new community health fit out of the existing under croft space associated with the Stage 2 Muswellbrook base hospital (MBH). Fire safety upgrades to an existing hospital is generally triggered on the basis of: -

- + Increased bed numbers
- + Conversion of out-patient or non-patient areas to IPU (patient care)
- + Increase in floor area
- + Increase in any fire and life safety risk to existing (and future) occupants as a result of the new-build works

The primary compliance objective for integration of the new addition's refurbishment works into the existing hospital will be to maintain effective fire separation between the new and existing parts at each floor and or connection between buildings in line with the existing BCA compliance strategy for integration of the MBH stage 2 works.

This strategy will assist to mitigate the requirement to upgrade fire safety deficiencies in the existing hospital. Having regards to the proposed works there is limited interface with the only connection around the community health area. In this regard, the works will need to provide compliant fire separation and extension of sprinklers throughout the community health area to ensure compliance and a suitable level of compliance being achieved to the works being undertaken within the community health part.

## SUMMARY OF KEY BCA COMPLIANCE ISSUES

Arising from our review, whilst compliance with the requirements of the BCA are readily achievable via either a Deemed to Satisfy and/or a Performance Based approach, the following comprises a summary of the key BCA compliance issues that will need to be addressed <u>prior to issue of the Crown Certificate</u>:

CLAUSE	COMMENT		
C2D10 & C2D14	Details demonstrating compliance with respect of combustibility to external walls and any attachments will need to be provided this includes submission of external wall schedule and associated test reports with the application for Crown Certificate.		
C3D3 & C3D6	Final compartmentation plan to be developed and submitted along with the application for Crown Certificate demonstrating compliance with the requirements of this clause and maximum compartmentation limitations		
C3D8 & C4D5	Fire separation minimum 120min is to be maintained between the new works and existing building. Final details to be represented on the compartmentation plan to be provided along with the application for Crown Certificate.		
C3D13 & C3D14	Services consultants will need to confirm the proposed fire rating is nominated as required under these clauses, FRL's of the bounding construction to be noted on architectural documentation accordingly		
D3D15	Detailed stretcher movement diagrams to be provided demonstrating sufficient width to accommodate stretcher movement through the proposed stairways		
D4	<ul> <li>The following is noted having regards to Access for people with disability</li> <li>Compliant door circulation will need to be achieved throughout the new works in accordance with AS1428.1-2009. Further detailed information demonstrating compliance will need to be provided along with the application for Crown Certificate,</li> <li>Extent of external works landscaping to be clarified for the purpose of determining of Access requirements. Wherever new landscaping is proposed as part of the project Access will need to be provided,</li> <li>The location of any new Accessible carparking bays will need to be confirmed, where new accessible carparking is proposed an accessible path of travel will need to be provided as part of the works.</li> </ul>		

#### BCA MATTERS REQUIRING INFORMATION TO BE PROVIDED AND OR PLAN AMENDMENTS



CLAUSE	COMMENT
F4D4 – F4D7	Details to be provided regarding the total number of staff/patients in order to determine the number of sanitary compartments required as part of the proposed works
Section J	A copy of the Section J/JV3 report is to be provided along with the application for Crown Certificate.

#### FIRE SAFETY ENGINEERED PERFORMANCE SOLUTIONS

CLAUSE	COMMENT	
Spec. 5	Final slab edge details will need to be provided for review. Where it is proposed to provide smoke separation to the slab edge in lieu of fire rated construction, the Fire Engineer will need to rationalise providing smoke separation to the slab edge in lieu of fire separation on the basis of the sprinkler system being provided throughout.	
C4D4	Where exposure occurs between adjacent walls of the same fire compartment, two-way protection (internal/external) achieving a minimum FRL of 120/120/120 is proposed, in lieu of protection in both opposing walls.	
D2D15	Where there are steps/stairways proposed in the path of travel from the discharge point of the various egress points of the building and the road. The extent of external landscaping works is to be confirmed in this regard.	
D3D26	Any proposed anti-ligature hardware within the building	
E1D2	Location of Fire Hydrant booster system	
E1D3	Omission of FHR coverage to small fire/smoke separated rooms i.e. comms rooms	
E1D4	Omission of sprinkler coverage to comms rooms Hydraulic consultant to confirm any non-compliances with respect of any recessed sprinkler heads in terms of RTI.	

# OTHER NON-FIRE ENGINEERED PERFORMANCE SOLUTIONS

CLAUSE	COMMENT
D4 & 1428.1	The following will need to be addressed prior to the issuing of the Crown Certificate - Door circulation space and distance between vestibule to the Audiology room



# FIRE SAFETY SCHEDULE

The following comprises a preliminary fire safety schedule containing statutory fire safety measures that will apply to the new building.

Statutory Fire Safety Measure	Design / Installation Standard
Access Panels, Doors & Hoppers	Existing: BCA Clause C3.13, AS/NZS 3009, AS 1530.4 – 2005 and Manufacturer's specifications
Alarm Signalling Equipment	Existing: AS 1670.3 – 2015
Automatic Fail Safe Devices	Existing: BCA Part D2.21 New: BCA Clause D3D26
Automatic Fire Detection & Alarm System	Existing: BCA Spec. E2.2a & AS 1670.1 – 2015 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19 New: BCA Spec. 20 & AS 1670.1 – 2018 & & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Automatic Fire Suppression Systems	Existing: BCA Spec. E1.5 & AS 2118.1 – 1999 New: BCA Spec. 17 & AS 2118.1-2017
Emergency Lifts	Existing: BCA Clause E3.4 & AS 1735.2 – 2001
Emergency Lighting	Existing: BCA Clause E4.4& AS/NZS 2293.1- 2005, AS/NZS 2293.2 New: BCA Clause E4D4 & AS 2293.1 – 2018
Emergency Warning and Intercom System (EWIS)	Existing: BCA E4.9, and AS1670.4-2015 New: BCA Clause E4D9 & AS 1670.4 – 2018
Emergency Evacuation Plan	Existing: AS 3745 – 2010 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19 New: BCA Clause E4D9 & AS 1670.4 – 2018 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Exit Signs	Existing: BCA Clauses E4.5, E4.6 & E4.8; and AS 2293.1 – 2005, AS/NZS 2293.2 New: BCA Clauses E4D5, E4D6, E4D8 & AS 2293.1 – 2018
Fire Blankets	Existing: AS 3504 – 1995 & AS2444 – 2001 New: AS 2444 – 2001 & AS 3504 – 2006
Fire Dampers	Existing: BCA Clause C3.15, AS 1668.1 – 1998 & AS 1682.1 & 2 – 1990 & AS 1851 New: BCA Clause C4D15, AS 1668.1 - 2015 & AS 1682.1 & 2 – 2015 and manufacturer's specification
Fire Doors	Existing: BCA Clause C2.12, C2.13, C3.7, C3.8; and AS 1905.1 – 2015 & AS 1851 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19 New: BCA Clause C3D13, C3D14, C4D3, C4D5, C4D6, C4D8, C4D9; and AS 1905.1 – 2015 and manufacturer's specification
Fire Hose Reels	Existing: BCA Clause E1.4, AS 2441 – 2005 New: BCA Clause E1D3 & AS 2441 – 2005



Statutory Fire Safety Measure	Design / Installation Standard
Fire Hydrant Systems	Existing: Clause E1.3, AS 2419.1 – 2005 & AS 1851 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19 New: BCA Clause E1D4 & AS 2419.1 – 2021 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Walls	BCA Clause C3D6 & C3D8
Fire Seals	Existing: BCA Clause C3.15, AS 1530.4 & AS 4072.1 – 2005 and manufacturer's specification New: BCA Clause C4D15 & AS 1530.4 – 2014, AS 4072.1 – 2005 and manufacturer's specification
Lightweight Construction	Existing: BCA Clause C1.8 & AS 1530.4 – 2014 and manufacturer's specification New: BCA Clause C2D9, AS 1530.4 – 2014 and manufacturer's specification
Mechanical Air Handling Systems (including automatic shutdown)	Existing: BCA Clause E2.2, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012 New: BCA Clause E2D3, AS/NZS 1668.1 - 2015 & AS 1668.2 – 2012
Intumescent Coating (Existing steel columns supporting first floor theatre slab –ground floor consult area -	AS 1530.4 – 2005 & AS4072.1-2005 and manufacturer's specification (Report No WF-379370)
Paths of Travel	Section 109 of the EP&A (Development Certification and Fire Safety) Regulation 2021
Portable Fire Extinguishers	Existing: BCA Clause E1.6, AS 2444 – 2001 New: BCA Clause E1D14 & AS 2444 – 2001
Required Exit Doors (power operated)	BCA Clause D3D24
Smoke Dampers	Existing: AS/NZS 1668.1 – 1998 New: AS/NZS 1668.1 – 2015
Smoke Doors	Existing: BCA Spec.3.4, C2.5, AS 1851 & Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Stand-by Power Systems	Existing: BCA Clause E1.3, E3.4, E4.2 & E4.5; and AS 3000 – 1991
Warning & Operational signs	Section 108 of the EP&A (Development Certification and Fire Safety) Regulation 2021, AS 1905.1 – 2015, BCA Clause C4D7, D3D28, E3D4
Fire Engineered Alternative Solution relating to provide smoke separation to the perimeter slab edge, in lieu of compliant fire separation.	BCA Performance Requirements CP2 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to vary the method of protection afforded to openings within the external walls of the subject which are exposed to adjacent fire compartment within the same building.	BCA Performance Requirements CP2 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to extended travel distances of up to 34m to a single exit in lieu of 20m	BCA Performance Requirements DP4, EP2.2 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19



Statutory Fire Safety Measure	Design / Installation Standard
Fire Engineered Alternative Solution relating to egress via fire compartments that only comprise horizontal exit, in lieu of a fire compartment that has at least one required exit that is not a horizontal exit (i.e. a compliant stairway).	BCA Performance Requirements DP4, DP5, EP2.2 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to having sliding, in lieu of swinging doors in a path of travel to a required exit in a class 9a building.	BCA Performance Requirements DP2 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to have a number of required fire and smoke doors within the new building swing against the direction of egress.	BCA Performance Requirements DP2 Fire Engineering Report prepared by Innova Services, Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to the new fire hydrant booster assembly not being within sight of the main entrance to the building also being located on council's road reserve.	BCA Performance Requirements EP1.3 Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to having unprotected steel beams / trusses penetrate through the required fire walls bounding the hydraulic plant room and the UPS room on level 2. To have unprotected steel members	BCA Performance Requirements CP1 & CP2. Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
penetrate through the required fire wall on ground floor and level 1.	
Fire Engineered Alternative Solution relating to having two way swinging smoke doors on level 1 that will not be capable of preventing 100% smoke leakage from one side of the doorway to the other.	BCA Performance Requirements CP3. Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to have part of the path of travel from the store / pathology room on ground floor reduced to 900mm, in lieu of being at least 1m.	BCA Performance Requirements DP4 & DP6. Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19
Fire Engineered Alternative Solution relating to have a roller shutter within the path of travel from the waiting room on ground floor being a door in the path of travel to a required exit that will not comprise a lever action handle. DP2	BCA Performance Requirements DP2. Fire Engineering Report prepared by Innova Services, Report No. 16198-R01, Revision 3 dated 03/04/19

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



#### DISABILITY (ACCESS TO PREMISES-BUILDINGS) STANDARDS 2010

The Disability (Access to Premises-Buildings) Standards 2010 (the Access to Premises Standards) requires the building to comply with the Access Code (BCA Part D4 & AS 1428.1-2009).

With respect to the proposed new building, compliance with the Access Code is achieved if the building complies with:

- + BCA clauses D4D2 to D4D13;
- + BCA clause E3D7 and E3D8;
- + BCA clauses F4D3, and F4D5 to F4D7.

The referenced plans show that access for people with disabilities will be readily available to and within the building from the existing main points of a pedestrian entry and existing accessible car spaces in accordance with BCA clause D4D2. For the purpose of the current works the affected part will comprise the path of travel from the existing main entrance via the existing lift to the proposed community health part.

Detailed documentation demonstrating compliance with the above BCA provisions and AS 1428.1-2009 will be required for assessment at the Crown Certificate stage. However, our review of the documentation to be provided along with the modification application indicates that compliance with the abovementioned provisions will be readily achievable albeit through Deemed to Satisfy (DtS) and/or by way of a Performance Solution.

#### CONCLUSION

This report confirms that BM+G have undertaken a review of the architectural plans for the third stage of the redevelopment of Muswellbrook Hospital building against the deemed-to-satisfy provisions of the Building Code of Australia 2022 and the Disability (Access to Premises – Buildings) Standards 2010.

It is our experience that such compliance matters raised in this report are not uncommon for a development of this nature and that they can be readily addressed at the Crown Certificate stage. In this instance, we are of the opinion that any amendments required to the design documentation in order to comply with the BCA can be addressed in the preparation of the detailed documentation for Crown Certificate without giving rise to significant changes to the proposal as submitted for Development Application/REF.

Arising from our review, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA.

Yours sincerely,

Jake Hofner Associate Director *BM+G* Building Surveyor – Unrestricted (NSW)