



Building Code of Australia 2019 Amendment 1

BCA ASSESSMENT REPORT

Jindabyne Education Campus
207 Barry Way, Jindabyne 2627 NSW

Prepared for: Schools Infrastructure | Issue date: 12 November 2021

Contents

1	Executive Summary	4
1.1	Performance Solutions - Fire & Life Safety.....	4
1.2	Performance Solutions - Accessibility.....	7
1.3	Design Details Required.....	7
2	Introduction	13
2.1	Purpose.....	13
2.2	Methodology.....	13
2.3	Limitations.....	13
2.4	Current Legislation.....	14
3	Development Description & Assessment Information	15
3.1	Proposed Development.....	15
3.2	Site Description.....	16
3.3	BCA Classification (Clause A3.2).....	17
3.4	Rise in Storeys (Clause C1.2).....	18
3.5	Effective Height (Clause A1.1).....	18
3.6	Type of Construction Required (Clause C1.1 / Table C1.1).....	18
3.7	Floor Area and Volume Limitations (Clause C2.2 / Table C2.2).....	19
3.8	Building Data Summary.....	20
4	Proposed Fire Safety Schedule	21
5	Appendix A – Architectural Plans Reviewed	32
6	Appendix B – Type B construction; FRL of building elements	72
7	Appendix C - Type C construction; FRL of building elements	76
8	Appendix D – Sanitary Facilities Calculations	77

Authorisation

Revision	Comment / Reason for Issue	Issue Date	Prepared by	Reviewed by
2	Revised SD Review	12.11.2021		
			Annika Green	Joel Lewis
				BDC 2335

Revision History

Revision	Comment / Reason for Issue	Issue Date	Prepared By
1	Schematic Design Review	30.06.2021.	Curtis Schumann
2	Revised SD Review	12.11.2021	Annika Green

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1 Executive Summary

Modern Building Certifiers as the appointed BCA Consultant for the proposed development, have reviewed architectural design documents prepared by DJRD Architects (refer appendix A) for compliance with the National Construction Code - Building Code of Australia Volume One 2019 Amendment 1.

1.1 Performance Solutions - Fire & Life Safety

The assessment of the design documentation has revealed that the following areas are required to be assessed against the relevant Performance Requirements of the BCA in accordance with Clause 25 of the Building and Development Certifiers Regulation 2020. The submission for a Crown Approval will need to include verification from a Certifier – Fire Safety, where determined permissible under A2.1 of the BCA, for the following aspects: -

DTS Clause	Description of Non-Compliance	Performance Requirement
D1.2 & NSW Variation	<u>Number of exits required</u> Each storey in a primary or secondary school with a rise in storeys of 2 or more shall have at least 2 exits from each storey.	DP4

The following non-compliances are as follows:

- PSD - the library only has one exit from ground storey in lieu of 2. This is a technical non-compliance.
- HSC (wood building) - the wood and art storerooms only have 1 exit from the ground storey in lieu of 2. This is a technical non-compliance.
- HSC (food and textile building) typically, rooms to ground level of this building only contain one exit in lieu of 2. This is a technical non-compliance.
- HSA - the GLS room on ground floor only contains one exit in lieu of 2. This is a technical non compliance.

These technical non-compliances will require redesign to comply. Alternatively this may be addressed by the fire services engineer as a

performance solution.

D1.4	<u>Travel Distances:</u>	DP4 & EP2.2
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Extended travel distances have been identified throughout the campus. Both extended travel distances to a single exit and extended travel distances to a Point of Choice (POC).

The following areas exceed the maximum allowable travel distance:

- PSC - 25m to a PoC in lieu of 20m
- PSB - 30m to a PoC in lieu of 20m
- PSD 35m to a PoC in lieu of 20 at Ground
- HSA 24m to a PoC in lieu of 20m at Ground and 26m to a PoC in lieu of 20m at Level 1
- HSC - 28m to a PoC in lieu of 20m at ground and 22m to a PoC in lieu of 20m at Level 1

Note that the egress cannot be considered as open space under the BCA definition until a point at which it is open to the sky. Hence all egress distances have been measured beyond the covered walkways and awnings.

D1.5	<u>Distances Between alternative exits</u>	DP4
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Exits must not be less than 9m apart; and note more than 60m apart; and

Located so that alternative paths of travel do not converge such that they become less than 6 m apart.

The following areas exceed the maximum allowable travel distance:

- PSA - 67m between exits in lieu of 60m.

Additionally the proposed exit points within the gym at ground level converge to a point at which the travel in different directions to an exit is less than 6m apart. Architect to note. Redesign is

required.

Note where compliance to the DtS provisions cannot be achieved, a performance solution by the Fire Services Engineer may be considered.

D2.19 &
NSW
Variation

Doorways and doors

DP1

The sliding door in the Multimedia workshop forms part of the required exit for persons egressing from the store rooms and the back end of the multimedia workshop. As this door does not lead directly to open space, it does not comply and will require redesign.

D2.20

Swinging Doors

DP1

There are multiple doors throughout the proposed development that do not swing in the direction of egress. Architect to note that all doors forming part of the required exit are required to swing in the direction of egress.
Redesign required

E1.3

Fire Hydrant Booster Location

EP1.3

The fire hydrant booster is located that is not within sight of the main entry to all buildings on site.

The fire hydrant booster location will be required to be addressed as part of the fire engineering against the performance requirements of the BCA.

Any Performance Solution relating to category 2 items (CP9, EP1.3, EP1.4, EP1.6, EP2.2, EP3.2) will be subject to consultation and approval by Fire and Rescue NSW as part of the Crown Approval process.

MBC acknowledge that any brigade referral would be voluntary as this development is not subject to this legislation.

1.2 Performance Solutions - Accessibility

The assessment of the design documentation has revealed that the following areas are required to be assessed against the relevant Performance Requirements of the BCA in accordance with Clause 25 of the Building and Development Certifiers Regulation 2020. The submission for a Crown Approval will need to include verification from an Accredited Access Consultant, where determined permissible under A2.1 of the BCA, for the following aspects:

DTS Clause	Description of Non-Compliance	Performance Requirement
D3	Refer to Access Report	DP1, DP2, FP2.1

1.3 Design Details Required

The assessment of the design documentation has revealed that the following areas require further details to demonstrate compliance with the prescriptive provisions of the BCA

DTS Clause	Description
C1.9	<p><u>Non-combustible Building Elements</u></p> <p>All external walls and components within, for the Type B school buildings, must be designed to comply with this clause. i.e., Non-combustible external walls.</p> <p>Schedule of materials and method of construction to be provided prior to approval.</p>
C1.14	<p><u>Attachments</u></p> <p>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.</p> <p>This will be applicable to all Type B buildings.</p>
C2.8	<p><u>Separation of classifications in the same storey</u></p> <p>The following areas are required to be fire separated from each</p>

other as follows:

- PSA Ground floor - the class 5 office areas shall be fire separated from the class 6 canteen
- HS.C Ground floor (wood building) - the class 7b storerooms shall be fire separated from the class 9b classroom areas
- HS.A Level 1 - the class 7b store rooms shall be fire separated from the class 9b classroom areas
- HS.C Level 1 Lab - the class 7b store rooms shall be fire separated from the class 9b classroom areas

Note - the store rooms on the ground floor of building HSC (food and textile building) are currently under 10% of the total floor area and subsequently do not require to be fire separated from the rest of the building. if, however, the sizes of these rooms expand as the design develops and exceeds 10% of the total floor area of that storey, they will be required to be fire separated from the remainder of the building.

D1.6 & NSW
Variation

Dimensions of exits and paths of travel to exits

Client to confirm the total staff and student population numbers for each building so that the aggregate widths can be correctly determined.

D1.2/ D1.4,
D1.10

Number of exits / Exit travel distances / Discharge from exits

Please indicate all designed egress points and provide an indication of clear access paths of travel to the road.

Client to additionally confirm the evacuation assembly point and travel to the road.

D1.13

Number of persons accommodated.

The project architect shall provide a detailed assessment of occupant numbers, separated by staff and students.

D2.20

Swinging Doors:

All swinging doors in a required exit must swing in the

direction of egress if they service a building (or part) > 200m².

MBC have identified throughout the campus, multiple doors which swing in the opposite direction of egress.

D2.21 Operation of latch

Doors on a path of travel must be either free latch from the side seeking egress and openable with-out a key or fitted with fail safe devices whereby the door opens automatically when triggered by emergency services.

D3.7 Hearing augmentation

A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed in a room in a Class 9b building.

The system must be designed to comply with this clause and applicable Australian Standards.

D3.9 Wheelchair seating spaces in Class 9b assembly buildings

Further details are required. Architect to confirm if it is proposed to have a tiered seating arrangement in the library adjacent to the circulation stairs. If this is the case, wheelchair seating spaces must be provided. Alternatively, a performance solution from an Access Consultant may be provided.

E1.4 Fire Hose Reels

E1.4 does not apply to classrooms and associated corridors in a primary or secondary school or class 5 office areas.

However, FHR's will be required to all other areas of the proposed development including store rooms, labs, library, hall, kitchen areas, major works etc.

E1.3 Hydrants, booster, and system coverage

A fire hydrant system must be provided to serve a building having a total floor area greater than 500 m².

The system must be designed in accordance with AS2419.1-2005. Hydrant system coverage and Hydrant Booster location to be assessment and confirmed compliant by a Hydraulic Consultant.

E2.2 NSW
Variation

Smoke Hazard Management

A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling System which does not form part of the smoke hazard management system, on the activation of smoke detectors installed complying with Clause 6 of Specification E2.2a.

Mechanical engineer shall verify compliant automatic shutdown if provided.

Stage Areas

A stage > 50m² but not > 150m must be provided with a smoke exhaust system or smoke and heat vents complying with E2.2b of the BCA.

MBC note, both stages within PS Hall & HS Gym will be subject to these requirements as they exceed 50m² in floor area.

FP1.4

Weatherproofing

The current BCA does not provide a DTS provision for achieving compliance with the Performance Requirement FP1.4 of the BCA.

Design details accompanied by a performance solution for compliance with FP1.4 will be required prior to approval.

F4.1

Natural Light

Natural light must be provided in Class 9b buildings – to all general-purpose classrooms in primary or secondary schools.

Architect to demonstrate natural light compliance within design documentation, in particular how natural light will be achieved to windows that open into the underside of the roof as opposed to being open to the sky.

F4.8 Restriction on location of sanitary compartments:

Accessible facility opens into a workplace normally used by more than 1 staff.

The Accessible Unisex Sanitary Facility located within the Food and Textiles Unit appears to open directly into a workspace.

F4.12 Kitchen local exhaust ventilation

Architect and client to advise if the canteen, OSHC kitchen and food tech kitchen is proposed to house any cooking apparatus that meets the above criteria.

Part J Energy Efficiency

To demonstrate compliance with Part J, an energy efficiency report from an ESD consultant will be required prior to approval.

The report must demonstrate compliance with JP1 & JP3. This will most likely form part of the SSDA’s conditions prior to approval.

ESFG Note: MBC is not engaged to review ESFG compliance.

Engineering Services Please ensure all service engineers advise if any performance solutions are proposed as part of the design.

The performance solutions will form part of the fire safety schedule for the buildings.

Allotments Please confirm that the whole development is contained within a single Lot and DP. No amalgamation of lot/DP's is proposed.

The documentation will need further detailing such as door hardware, construction specifications, services design and manufacturer's details, as outlined in Appendix D of this report.

The application for Crown Approval shall be assessed under the relevant provisions of the Environmental Planning & Assessment Act 1979 (As Amended) and the Environmental Planning & Assessment Regulation 2000.

Assessed By

Annika Green

2 Introduction

This BCA Report by Modern Building Certifiers (MBC Group) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD No 15788005). The SSDA is for a new education campus at Jindabyne, comprising of a new primary and high school, located at the Jindabyne Sport and Recreation Centre (JSRC).

2.1 Purpose

The purpose of this report is to assess the current design proposal against the Deemed-to-Satisfy (DtS) provisions of the BCA.

2.2 Methodology

The methodology applied in undertaking this assessment has included: -

- A desktop review of architectural plans, as listed in Appendix A
- Detailed assessment of Sections C, D, E, F, G, H and J (as applicable / relevant) of the BCA
- Discussions with the design development team to gain an understanding of the development proposed.

2.3 Limitations

This report does not include or imply any detailed assessment for design, compliance or upgrading for:

- the structural adequacy or design of the building;
- the inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to); and
- the design basis and/or operating capabilities of any proposed
 - electrical
 - mechanical
 - hydraulic
 - fire protection services.

This report does not include, or imply compliance with:

- the National Construction Code – Plumbing Code of Australia Volume 3
- the Disability Discrimination Act 1992 including the Disability ((Access to Premises – Buildings) Standards 2010 – unless specifically referred to)
- The deemed to satisfy provisions of Part D3 and F2.4 of BCA 2019 Amendment 1
- The deemed to satisfy provisions of Section J of BCA 2019 Amendment 1
- Demolition Standards not referred to by the BCA;
- Work Healthy and Safety Act 2011;

- An out of cycle change to the Building Code of Australia.
- Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Roads and Transport Authority, Local Council, ARTC, Department of Planning and the like; and
- Conditions of Development Consent issued by the Local Consent Authority.

This report has been prepared by MBC in the capacity as the appointed BCA Consultant for the proposed development. This report is an assessment of the proposed development against the DtS provisions of the applicable BCA.

2.4 Current Legislation

The applicable legislation governing the design of buildings in NSW is the Environmental Planning and Assessment Act 1979.

Applicable Building Code of Australia (BCA)

The proposed development will be subject to compliance with the relevant requirements of the BCA as in force at the time that the application for the Crown Approval is made.

Please Note: An out of Cycle BCA may impact this project. BCA 2022 is due to be released and enforced as of the 1st September 2022.

In this regard it is assumed that the Crown Approval application will be made prior to the 1st September 2022, as such this report is based upon the Deemed-to-Satisfy provisions of [BCA 2019 amendment 1](#).

Should the application for Crown Approval be made after 1st September 2022, this report will be required to be updated to reflect any changes made and now required by the BCA.

Should an *out of cycle* change occur to the Building Code of Australia, then this report is required to be updated to reflect any applicable changes made and now required by the BCA.

3 Development Description & Assessment Information

3.1 Proposed Development

The proposed development is for the construction of the Jindabyne Education Campus comprising a new primary school and a new high school at Jindabyne (the proposal). The proposal is located within the JSRC located at 207 Barry Way (the site) and will accommodate approximately 925 students with the capacity for expansion in the future.

The new primary school will be located generally in the northern portion of the site whilst the new high school will be to the south of the site. While the schools are inherently separate identities, with separate student entries, opportunities for integration are provided in a central shared plaza with co-located school administration facilities, as identified in Figure 1 below. This outdoor learning space is activated by the school canteen (shared) and separate core facilities including the primary school hall and library, and the high school gym and library, and provides opportunities for shared community use.

The new primary school will provide for a Core 21 school. This will comprise of 20 home base units and 2 support learning units, administration and staff facilities, covered outdoor learning area (COLA), hall, staff and student amenities, out of school care facilities, library and special programs. Landscaped areas include active and passive open space play areas, and a games court.

The new high school will provide for a stream 2 high school. This is to comprise of 20 general/specialised learning spaces and support learning units, administration and staff facilities, covered outdoor learning area (COLA), hall, staff and student amenities, library, an agricultural learning unit. Landscaped areas include active and passive open space play areas, a sports field and multipurpose games courts.

A new access driveway is proposed off Barry way Road along the western boundary of the site and includes car parking, bus and private vehicle drop-off zones, and delivery zones.

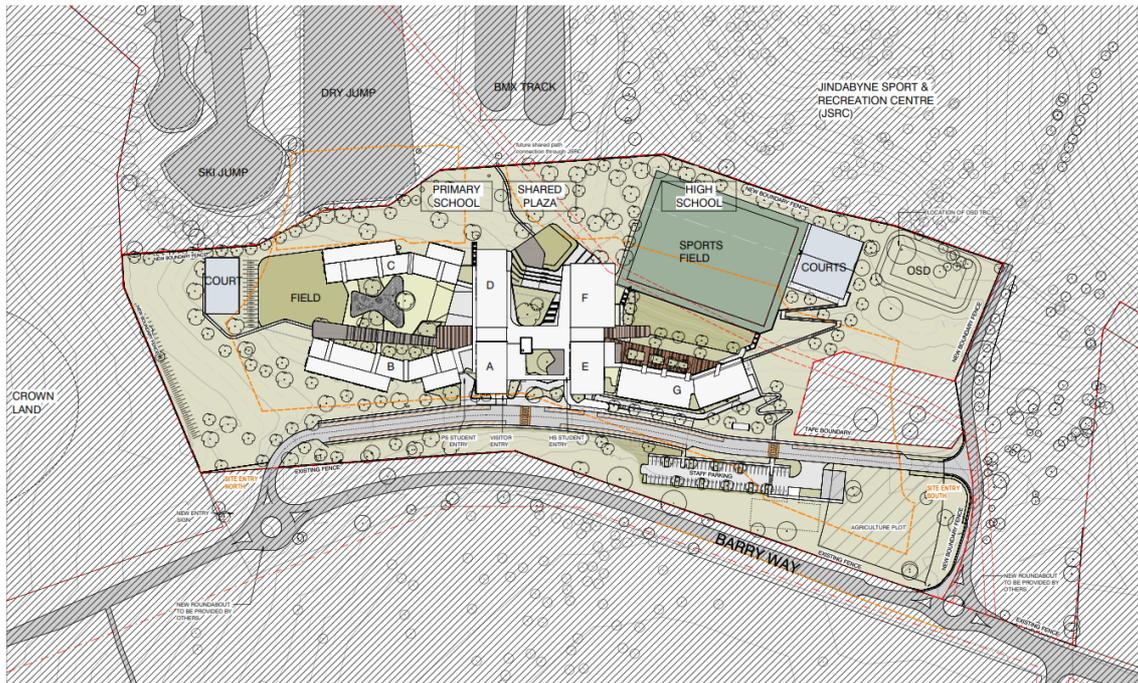


Figure 1 – Proposed Site Plan Source: DJRD

3.2 Site Description

The site of the proposed new education campus at Jindabyne is located within the western extent of the existing JSRC at 207 Barry Way (101 DP1019527). The site is located within the Snowy Monaro Regional Council local government area and is approximately 2.2km south of the Jindabyne town Centre. A site aerial is provided in Figure 1.

The site is approximately 9ha in size, containing a former golf course and three existing workers cottages which were occupied during the construction of the Snowy Hydro Scheme. The majority of the site is undeveloped and contains maintained grasslands and scattered trees. Much of the surrounding land comprises remnant grassland, woodland and agricultural land.

As identified above, the site is within the existing JSRC which is a high performance and community sport centre located directly east of the site. The JSRC has a range of sporting facilities including a synthetic running track, cycling track, netball and tennis courts, fitness and indoor sports centres, and sporting ovals, as well as other services and accommodation facilities. The newly constructed BMX track is located directly east of the site with the new ski jump currently under construction to the northeast.

TAFE NSW have recently lodged a development application for a Connected Learning Centre (CLC) and Mobile Training Unit (MTU) which is proposed to the south of the site. The CLC and MTU will utilise interactive, digitally enabled, flexible, and multipurposed

learning environments to provide high-quality training and learning experiences accommodating a maximum of 20-25 students and 3 teachers.

The surrounding locality is generally rural in character with other land uses also including the Jindabyne Aero Club located to the west of the site on Tinworth Drive, an industrial area to the southwest and the Jindabyne Community recycling centre is located east of the JSRC.



Figure 1: Site aerial - new education campus within the Jindabyne Sport and Recreation Centre. Source: DJRD

3.3 BCA Classification (Clause A3.2)

The proposed development shall contain the following classifications: -

- Class 9b: being a school assembly building.
- Class 5: Administration Building.
- Class 6: Retail (Canteen)
- Class 7b: Storage

3.4 Rise in Storeys (Clause C1.2)

Buildings PS.C and PS.B

The proposed buildings PS.C and PS.B have been assessed to have a rise in storeys of one (1).

Buildings HS.B, HS.C, HS.A, PS.D and PS.A

The proposed buildings have been assessed to have a rise in storeys of two (2).

For the purposes of this report, all buildings have been considered as separate entities and not as a united building. (Note the BCA defines a United Building as – “two or more buildings adjoining each other and are connected and used as one building”).

3.5 Effective Height (Clause A1.1)

Buildings PS.C and PS.B

The proposed buildings PS.C, HS.C and PS.B have been assessed to have an effective height of 0m.

Buildings PS.D, HS.B, HS.C, HS.A and PS.A

The proposed buildings have been assessed to have an effective height as follows:

- PS.D – 4.45m
- HS.B – 4.45m
- HS.C – 4.35m
- HS.A – 4.29m
- PS.A – 4.32m

Please note the definition of effective height of a building was changed 1 May 2016. The BCA now defines effective height as: -

“Effective height means the vertical distance between the floor of the lowest storey included in a determination of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).”

3.6 Type of Construction Required (Clause C1.1 / Table C1.1)

Buildings PS.C, PS.B and HS.A

Buildings PS.C, PS.B and HS. A are required to be Type C Construction. Specification C1.1 outlines the fire resistance required by certain building elements. This has also been

provided in Appendix B. Buildings required to be of Type C Construction have been highlighted in green in the site plan below.

Note where the space below building PS.C is proposed to be utilised as a COLA or the like, this will require the type of construction to be reassessed.

Buildings HS.B, HS.C, HS.A, PS.D and PS.A

Buildings HS.B, HS.C, PS.D and PS.A are required to be Type B Construction and are highlighted in blue in the site plan below. Specification C1.1 outlines the fire resistance required by certain building elements. This has also been provided in Appendix B.

For the purposes of this report, all building proposed as part of this development have been assessed as separate buildings rather than a united building under Part A.07 of the BCA, therefore all roofs will be required to be a separate structure to ensure they are considered separate building. Alternatively, the Fire Engineer may include a shared structure as a fire engineered performance solution.

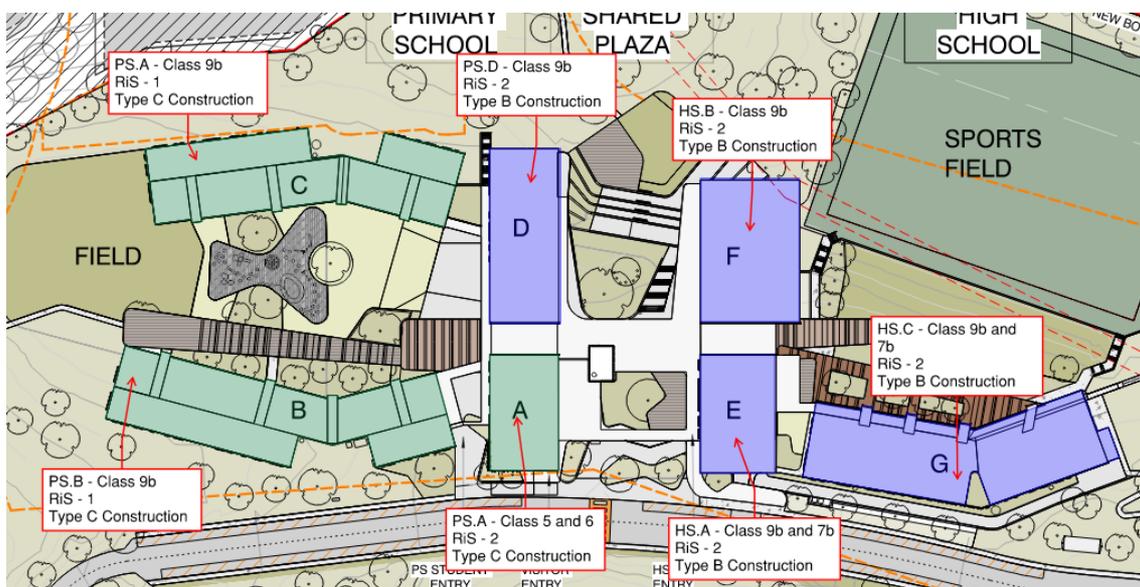


Figure 3 – Type of Construction required per building

3.7 Floor Area and Volume Limitations (Clause C2.2 / Table C2.2)

The development is limited to the following floor area and volume compartment limitations: -

Class		Type A	Type B	Type C
5, 9b or 9c	Max floor area -	8,000m ²	5,500m ²	3,000m ²
	Max volume -	48,000m ³	33,000m ³	18,000m ³
6, 7, 8 or 9a	Max floor area -	5,000m ²	3,500m ²	2,000m ²

3.8 Building Data Summary

Building PS.C				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	General learning spaces, sanitary facilities and associated ancillary	9b	1423m ²	628

Building PS.D				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	Hall, library and associated ancillary	9b	911 m ²	400
Level 1	Library and associated ancillary	9b	628 m ²	314

Building HS.B				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Lower Ground	Classrooms and associated ancillary	9b	563m ²	270
Ground	Gym, stage and associated ancillary	9b	1042 m ²	347

Building HS.C				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	Classrooms, store room and associated ancillary	7b and 9b	F&T – 702m ² Wood – 832m ²	F&T – 350 Wood – 300
Level 1	Gym, stage and associated ancillary	7b and 9b	F&T – 627m ² Wood – 832m ²	F&T – 313 Wood – 260

Building HS.A				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	Classrooms, store room and associated ancillary	9b	565 m ²	282

Level 1	Classrooms, store room and associated ancillary	7b and 9b	509 m ²	255
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Building PS.A				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	Staff office and Canteen	5 and 6	Office – 734 Canteen - 85	Office – 73 Canteen -
Level 1	Staff office and associated ancillary	5	570 m ²	57

Building PS.B				
Part of Development	Use	Class	Floor Area (approx.) m ²	Population (using D1.13)
Ground	Classrooms and associated ancillary	9b	1482 m ²	891

Client to confirm class population numbers so that a more accurate population can be identified.

4 Proposed Fire Safety Schedule

The following is a draft Fire Safety Schedule for the proposed building, listing the likely measures and standards of performance required, this schedule shall be subject of further development and review as part of the Performance Solutions assessment: -

Fire Safety Schedule

Clause 168 of the Environmental Planning and Assessment Regulation 2000

Premises: Jindabyne Education Campus
Address: 207 Barry Way, Jindabyne 2627

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule which, for the purposes of Clause 168 of the Environmental Planning and Assessment Regulation 2000, is deemed to be the current fire safety schedule for the building.

SCHEDULE – Building PS.C Base Building BCA Year 2019-Amendment 1
 Type of Construction C
 Effective Height = 0m

	Measure	Status	Existing Performance Standard
1.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
2.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
3.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
4.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
5.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
6.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015
7.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
8.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
9.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building PS.B Base Building BCA Year 2019-Amendment 1
 Type of Construction C
 Effective Height = 0m

	Measure	Status	Existing Performance Standard
1.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
2.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
3.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
4.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
5.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
6.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015
7.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
8.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
9.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building PS.A Base Building BCA Year 2019-Amendment 1
 Type of Construction C
 Effective Height = 4.32m

	Measure	Status	Existing Performance Standard
1.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
2.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
3.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
4.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
5.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
6.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
7.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building PS.D Base Building BCA Year 2019-Amendment 1
Type of Construction 2
Effective Height = 4.45m

	Measure	Status	Existing Performance Standard
1.	Automatic fail-safe devices	N	BCA 2019 Amd. 1 Clause D2.19, D2.21, AS 1670.1-2018
2.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
3.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
4.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
5.	Fire doors	N	BCA 2019 Amd. 1 Clause C2.12, C2.13, Spec C3.4, AS 1905.1-2015
6.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
7.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
8.	Fire seals (protecting openings and service penetrations in fire resisting components of the building)	N	BCA 2019 Amd. 1 Clause C3.15, Spec C3.15, AS 4072.1-2005, AS 1530.4-2014, Manufacturer's specifications

	Measure	Status	Existing Performance Standard
9.	Fire & Smoke dampers	N	BCA 2019 Clause E2.2,C3.12, C3.15, Spec E2.2, AS/NZS 1668.1-2015, AS 1682.1-2015, AS 1682.2-2015, Manufacturer's specifications
10.	Lightweight construction	N	BCA 2019 Amd. 1 Clause C1.8, Spec C1.8, Manufacturer's specifications
11.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015,
12.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
13.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
14.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building HS.B Base Building BCA Year 2019-Amendment 1
 Type of Construction B
 Effective Height = 4.45m

	Measure	Status	Existing Performance Standard
1.	Automatic fail-safe devices	N	BCA 2019 Amd. 1 Clause D2.19, D2.21, AS 1670.1-2018
2.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
3.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
4.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
5.	Fire doors	N	BCA 2019 Amd. 1 Clause C2.12, C2.13, Spec C3.4, AS 1905.1-2015
6.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
7.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
8.	Fire seals (protecting openings and service penetrations in fire resisting components of the building)	N	BCA 2019 Amd. 1 Clause C3.15, Spec C3.15, AS 4072.1-2005, AS 1530.4-2014, Manufacturer's specifications

	Measure	Status	Existing Performance Standard
9.	Lightweight construction	N	BCA 2019 Amd. 1 Clause C1.8, Spec C1.8, Manufacturer's specifications
10.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015, AS 1668.2-2012
11.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
12.	Smoke and heat vents	N	BCA 2019 Amd. 1 Clause E2.2, NSW Clause H101.22, Spec E2.2c, Spec G3.8, AS 2665-2001
13.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
14.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building HS.A Base Building BCA Year 2019-Amendment 1
 Type of Construction B
 Effective Height = 4.29m

	Measure	Status	Existing Performance Standard
1.	Automatic fail-safe devices	N	BCA 2019 Amd. 1 Clause D2.19, D2.21, AS 1670.1-2018
2.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
3.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
4.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
5.	Fire doors	N	BCA 2019 Amd. 1 Clause C2.12, C2.13, Spec C3.4, AS 1905.1-2015
6.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
7.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
8.	Fire seals (protecting openings and service penetrations in fire resisting components of the building)	N	BCA 2019 Amd. 1 Clause C3.15, Spec C3.15, AS 4072.1-2005, AS 1530.4-2014, Manufacturer's specifications

	Measure	Status	Existing Performance Standard
9.	Lightweight construction	N	BCA 2019 Amd. 1 Clause C1.8, Spec C1.8, Manufacturer's specifications
10.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015, AS 1668.2-2012
11.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
12.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
13.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

SCHEDULE – Building HS.C Base Building BCA Year 2019-Amendment 1
Type of Construction B
Effective Height = 4.35m

	Measure	Status	Existing Performance Standard
1.	Automatic fail-safe devices	N	BCA 2019 Amd. 1 Clause D2.19, D2.21, AS 1670.1-2018
2.	Automatic fire detection and alarm system	N	BCA 2019 Amd. 1 Clause E2.2a, Spec. E2.2a Clause 6, AS 1670.1-2018
3.	Emergency lighting	N	BCA 2019 Amd. 1 Clause E4.2, E4.3 E4.4, AS 2293.1-2018
4.	Exit and directional signage	N	BCA 2019 Amd. 1 Clause E4.5, NSW E4.6 & E4.8, Spec E4.8 AS 2293.1-2018
5.	Fire doors	N	BCA 2019 Amd. 1 Clause C2.12, C2.13, Spec C3.4, AS 1905.1-2015
6.	Fire hose reel systems	N	BCA 2019 Amd. 1 Clause E1.4, AS 2441-2005
7.	Fire hydrant systems	N	BCA 2019 Amd. 1 Clause E1.3, AS 2419.1-2005,
8.	Fire seals (protecting openings and service penetrations in fire resisting components of the building)	N	BCA 2019 Amd. 1 Clause C3.15, Spec C3.15, AS 4072.1-2005, AS 1530.4-2014, Manufacturer’s specifications

	Measure	Status	Existing Performance Standard
9.	Lightweight construction	N	BCA 2019 Amd. 1 Clause C1.8, Spec C1.8, Manufacturer's specifications
10.	Mechanical air handling systems (automatic shutdown)	N	BCA 2019 Amd. 1 Part E Table E2.2, Spec E2.2a, AS/NZS 1668.1-2015, AS 1668.2-2012
11.	Portable fire extinguishers	N	BCA 2019 Amd. 1 Clause E1.6, AS 2444-2001
12.	Fire Engineering Report	N	Any requirements of the Fire Engineering Report shall be listed here as a fire safety measure
13.	Bush Fire Hazard Report	N	Any requirements of the Bush Fire Hazard Report shall be listed here as a fire safety measure

Notes

* Indicate whether the measure is new (N), existing (E) or Modified (M)

5 BCA Assessment – Clause by Clause

BCA Clause	Compliance Provisions	Status	Assessment commentary
Part B - Structural			
B1 – Structural Provisions			
B1.0	Deemed-to-Satisfy Provisions	Noted	Part B1 is applicable
B1.1	Resistance to Action	Noted	The resistance of a building or structure shall be greater than the most critical action effect determined by B1.2 of the BCA, AS/NZS 1170.0-2002 and B1.4 of the BCA.
B1.2	Determination of individual Actions	Further Details Required	<p>The structural design of the building is required to be determined in accordance with the varying “actions” considerations contained within this clause (i.e. permanent actions, imposed actions, wind / snow / earthquake actions).</p> <p>Structural Engineer to note and ensure the proposed design complies prior to the relevant Crown Works Certificate.</p>

B1.4	Determination of Structural resistance of materials and form of construction	Further Details Required	<p>The structural resistance of materials and forms of construction shall be determined in accordance with the following:</p> <ul style="list-style-type: none"> (i) Masonry - AS3700-2018 (ii) Concrete construction - AS3600-2018 (iii) Footings and slabs – AS2870-2011 (iv) Steel construction - AS4100-1998 or AS/NZS 4600-2005 (v) Termite Risk Management - AS3660.1-2014 (vi) Piling - AS2159-2009 (vii) Glazed assemblies - AS2047-2014-amendments 1 & 2 (external), and/or AS1288-2006 (internal) <p>Structural Engineer to note and ensure all structural elements comply with the relevant requirements of this clause</p>
B1.5	Structural software	Not Applicable	Not applicable
B1.6	Construction of buildings in flood hazard areas	Not Applicable	Not applicable to this classification
Specifications			
Spec B1.2	Design of buildings in Cyclonic Areas	Noted	Structural Engineer to note where applicable
Part C – Fire Resistance			
C1 - Fire Resistance			
C1.0	Deemed-to-Satisfy Provisions	Noted	Note

C1.1	Type of Construction Required	Noted	Buildings PS.A, PS.A and PS.B are required to be Type C Construction and comply with Spec C1.1 Table 5 Buildings HS.B, HS.C, PS.D and HS.A are required to be Type B Construction and comply with Spec C1.1 Table 4 Architect to note and ensure the proposed design complies
C1.2	Calculation of Rise in storeys	Noted	Buildings PS.A and PS.B have a rise in storeys of 1. Buildings HS.A, HS.B, PS.D and HS.C have a rise in storeys of 2
C1.3	Buildings of Multiple classification	Noted	Buildings PS.A, PS.A and PS.B are required to be Type C Construction and comply with Spec C1.1 Table 5 Buildings HS.B, HS.C, PS.D and HS.A are required to be Type B Construction and comply with Spec C1.1 Table 4
C1.4	Mixed types of construction	Noted	Buildings PS.A, PS.A and PS.B are required to be Type C Construction and comply with Spec C1.1 Table 5 Buildings HS.B, HS.C, PS.D and HS.A are required to be Type B Construction and comply with Spec C1.1 Table 4
C1.8	Lightweight Construction	Further Details Required	Any lightweight construction must comply to Specification C1.8 provisions within the BCA. Please provide details to confirm compliance to this clause.

<p>C1.9</p>	<p>Non-combustible building elements</p>	<p>Further Details Required</p>	<p>The following building elements and their components must be non-combustible:</p> <ul style="list-style-type: none"> (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) Non-loadbearing internal walls where they are required to be fire-resisting. <p>Architect to note that the requirements of this clause apply to all materials pertained in the external wall of buildings PS.D, HS.B, HS.A and HS.C (bar specifically excluded items under Clause C1.14) and include the facade covering, framing, insulation, certain sarking materials, window packers and the like.</p> <p>The non-combustibility requirements also specifically relate to internal walls that are required to have a FRL. It should be noted that timber framed walls, even as an approved system cannot be utilised within these walls.</p> <p>Architect to note and document all external finishes and provide further wall details of <u>all</u> external and internal walls required to have a FRL for further review as the design progresses.</p>
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C1.10 & NSW Variation	Fire Hazard Properties	Further Details Required	<p>All floor, wall and ceiling lining materials shall comply with C1.10 and Specification C1.10.</p> <p>Architect to note and provide further details as the design progresses. Finishes schedules shall be provided for further review prior to the issue of the relevant Crown Works Certificate with details of the relevant fire hazard indices test data reports to be provided prior to occupation</p>
C1.11	Performance of external walls in fire	Further Details Required	<p>Architect to nominate if and tilt up or precast concrete wall panels are proposed as part of the assessment. Note where proposed, the wall system shall comply with Specification C1.11</p>
C1.14	Ancillary elements	Further Details Required	<p>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 one of the following items specifically nominated under this clause.</p> <p>Architect to note - Attachments to the external walls, both internally and externally must be reviewed prior to selection and installation. Please provide further details of all proposed attachments proposed for further review</p>
C2 - Compartmentation and Separation			
C2.1	Application of Part	Noted	This part is applicable
C2.2	General Floor area and volume limitations	Choose an item.	<p>Limitations not exceeded - refer to section 3.7 of our report for maximum floor areas and volumes.</p> <p>Architect to confirm the proposed volume of the gym of HS.B</p>

C2.7	Separation in fire walls	Further Details Required	<p>The fire walls between each fire compartment must be constructed in accordance with;</p> <p>(i) The fire wall has the relevant FRL prescribed by Specification C1.1 (120/120/120) for each of the adjoining parts, and if these are different, the greater FRL.</p> <p>(ii) Any openings in a fire wall must not reduce the FRL required by Specification C1.1 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C3, i.e. fire doors & fire collars.</p> <p>(iii) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire resisting performance of the fire wall is maintained.</p> <p>Further details of the fire walls are to be provided as the design progresses.</p>
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C2.8	Separation of classifications in the same storey	Further Details Required	<p>The following areas are required to be fire separated from each other as follows:</p> <ul style="list-style-type: none"> - PSA Ground floor - the class 5 office areas shall be fire separated from the class 6 canteen - HS.C Ground floor (wood building) - the class 7b store rooms shall be fire separated from the class 9b classroom areas - HS.A Level 1 - the class 7b store rooms shall be fire separated from the class 9b classroom areas - HS.C Level 1 Lab - the class 7b store rooms shall be fire separated from the class 9b classroom areas <p>Note - the store rooms on the ground floor of building HSC (food and textile building) are currently under 10% of the total floor area and subsequently do not require to be fire separated from the rest of the building. if however, the sizes of these rooms expand as the design develops and exceeds 10% of the total floor area of that storey, they will be required to be fire separated from the remainder of the building.</p>
C2.9	Separation of classifications in different storeys	Further Details Required	<p>Required to Buildings PS.A, HS.A and HS.C</p> <p>For Building HS.A and HS.C the separating floors shall comply with the requirements of Clause 4.1(i) of Specification C1.1</p> <p>For building PS.A the separating floors shall comply with clause 5.1(e) of Specification C1.1</p> <p>Compliance readily achievable. Architect to note the abovementioned requirements and confirm the proposed method of achieving compliance</p>

C2.10	Separation of Lift Shafts	Further Details Required	Architect to note for the proposed lifts in buildings PSD and HSB and provide details demonstrating compliance
C2.12	Separation of equipment	Further Details Required	Architect and client to confirm if there are boilers or battery systems installed in the building that have a total voltage pf 12 volts or more and a storage capacity of 200kWh or more
C2.13	Electricity supply system	Further Details Required	Architect to confirm if there are any switchboards located in any of the buildings. Where this is the case, they shall be separated via 2 hour fire rated construction
C3 – Protection of Openings			
C3.1	Application of Part	Noted	This part is applicable
C3.5	Doorways in fire walls	Further Details Required	Doors in firewalls must achieve an FRL of not less than that required by Specification C1.1 for the fire wall except that each door have an insulation level of at least 30. Fire doors in firewalls must be self-closing or automatic closing. Automatic closing must be triggered by activation of smoke detection system in both fire compartments the fire wall is separating.
C3.6	Sliding Fire doors	Not Applicable	No sliding fire doors proposed.
C3.12	Openings in floors and ceilings for services	Noted	Are any service riser shafts proposed through the building? If so, the shaft must be constructed in accordance with Spec. C1.1.

C3.13	Openings in shafts	Noted	Openings in shafts are required to be protected by a self-closing --/60/30 fire door or hooper or an access panel having an FRL of --/60/30.
C3.15	Openings for service installations	Noted	Any new proposed penetrations must comply with provisions of C3.15 and Spec. C3.15. At OC stage a detailed schedule of every penetration is required to be produced. Advise engaging specialist fire stopping company.
C3.16	Construction joints	Noted	Any proposed joint construction is to comply with the provisions of C3.16 and in accordance to AS 1530.4
Specifications			
Spec C1.1	Fire-Resisting Construction	Further Details Required	<p>Refer to Specification. Architect to note the following:</p> <ul style="list-style-type: none"> external loadbearing columns to building PS.D to have a FRL of 120/-/-. Western wall of HSB is within 18m of HSA and shall have a FRL of 12/30/- Eastern and Southern walls of HSA are within 18m of HSB and 9m of HSC and shall have a FRL of 120/30/30 Northern and Southern walls of HSC (Food and textiles unit) are within 9m and 18m of HSA and HSC (wood building) and shall have a FRL of 120/30/30 Northern and part of Eastern wall is within 9m and 18m of HSC (food and textile unit) and shall have a FRL of 120/30/30 Southern wall of HSA is within 18m of HSC and shall have a FRL of 120/30/- Northern, Western and part of Southern wall of PS.D is

			required to have a 2 hour FRL
Spec C1.8	Structural Tests for Lightweight Construction	Further Details Required	Architect to note where applicable. Details of the tested system are to be provided prior to occupation
Spec C1.10 & NSW Variation	Fire Hazard Properties	Further Details Required	Architect to note and provide details of the proposed finishes and fire hazard test data indices for all proposed products
Spec C1.11	Performance of External Walls in Fire	Further Details Required	Architect to confirm if tilt up panels are proposed
Spec C3.4	Fire Doors, Smoke Doors, Fire Windows and Shutters	Further Details Required	Architect to note where required
Part D - Access and Egress			
D1 - Provision for Escape			
D1.0	Deemed-to-Satisfy Provisions	Noted	Noted
D1.1	Application of Part	Noted	This part is applicable

<p>D1.2 & NSW Variation</p>	<p>Number of exits required</p>	<p>Does Not Comply</p>	<p>Every building must have at least one exit from each storey. Please confirm how egress is to be achieved from rooms CSR, LES and SES in Building HSB.</p> <p>Each storey in a primary or secondary school with a rise in storeys of 2 or more shall have at least 2 exits from each storey.</p> <p>The following non-compliances are as follows:</p> <ul style="list-style-type: none"> • PSD - the library only has one exit from ground storey in lieu of 2. This is a technical non-compliance and will require redesign to comply. Alternatively, this may be addressed by the fire services engineer as a performance solution. • HSC (wood building) - the wood and art storerooms only have 1 exit from the ground storey in lieu of 2 and is a technical non-compliance and will require redesign to comply. Alternatively, this may be addressed by the fire services engineer as a performance solution. • HSC (food and textile building) typically, rooms to ground level of this building only contain one exit in lieu of 2. This is a technical non-compliance and will require redesign to comply. Alternatively, this may be addressed by the fire services engineer as a performance solution. • HSA - the GLS room on ground floor only contains one exit in lieu of 2. This is a technical non-compliance and will require redesign to comply. Alternatively, this may be addressed by the fire services engineer as a performance solution.
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D1.3	When fire-isolated stairways and ramps are required	Not Applicable	The proposed buildings do not connect more than 2 consecutive storeys at any point and are therefore not required to be fire isolated
D1.4	Exit travel distances	Does Not Comply	<p>Travel distance shall be as follows:</p> <p>Class 5, 6, 7, and 9 portions:</p> <ul style="list-style-type: none"> - 20m to a point of choice - 40m total distance to an exit -30m to a single exit serving a storey at the level of egress to the road or open space for class 5 and 6 portions <p>The following areas exceed the maximum allowable travel distance:</p> <ul style="list-style-type: none"> • PSC - 25m to a PoC in lieu of 20m • PSB - 30m to a PoC in lieu of 20m • PSD 35m to a PoC in lieu of 20 at Ground • HSA 24m to a PoC in lieu of 20m at Ground and 26m to a PoC in lieu of 20m at Level 1 • HSC - 28m to a PoC in lieu of 20m at ground and 22m to a PoC in lieu of 20m at Level 1 <p>Note that the egress cannot be considered as open space under the BCA definition until a point at which it is open to the sky. Hence all egress distances have been measured beyond the covered walkways and awnings.</p>

D1.5	Distance between alternative exits	Does Not Comply	<p>Exits must not be less than 9m apart; and note more than:</p> <p>Class 5, 6, 7, 8 or 9 - 60m apart; and</p> <p>Located so that alternative paths of travel do not converge such that they become less than 6 m apart.</p> <p>The following areas exceed the maximum allowable travel distance:</p> <ul style="list-style-type: none"> • PSA - 67m between exits in lieu of 60m. <p>Additionally, the proposed exit points within the gym at ground level converge to a point at which the travel in different directions to an exit is less than 6m apart. Architect to note. \Redesign is required.</p> <p>Note where compliance to the DtS provisions cannot be achieved, a performance solution by the Fire Services Engineer may be considered.</p>
D1.6 & NSW Variation	Dimensions of exits and paths of travel to exits	Further Details Required	Compliance achievable. Client to confirm the total staff and student population numbers for each building so that the aggregate widths can be correctly determined.
D1.9	Travel by non-fire-isolated stairways or ramps	Further Details Required	No non-fire isolated stairways or ramps relied upon

D1.10 & NSW Variation	Discharge from exits	Further Details Required	<p>Exits must not obstructed by potential vehicle blockage by placement of bollards.</p> <p>Egress cannot be considered as open space under the BCA definitions until a point at which it is open to the sky. Hence all egress distances have been measured beyond the covered walkways and awnings.</p> <p>Client to additionally confirm the evacuation assembly point and travel to the road, noting the requirements of part (c) of this clause</p>
D1.13 & NSW Variation	Number of persons accommodated	Further Details Required	Client to advise on staff and student population figures
D1.14	Measurement of distances	Noted	Noted
D1.15	Method of measurement	Noted	Noted
D1.16	Plant rooms, lift machine rooms and electricity network substations: Concession	Noted	Ladders may be provided to plants rooms and the like if not more than 100m2. Plant room stairways to achieve compliance with AS 1657.
D1.17	Access to lift pits	Noted	Where the pit depth is not more than 3 m, be through the lowest landing doors; or where greater than 3m be through specific access complying with D1.17.
D2 – Construction of Exits			
D2.0	Deemed-to-Satisfy Provisions	Noted	Noted
D2.1 & NSW Variation	Application of Part	Noted	This part is applicable

D2.2	Fire-isolated stairways and ramps	Not Applicable	<p>Fire-isolated stairs must be:</p> <ul style="list-style-type: none"> (a) of <i>non-combustible</i> materials; and (b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.
D2.3	Non-fire-isolated stairways and ramps	Further Details Required	<p>Non-fire isolated stairways in a building having a rise in storeys of more than 2 must be constructed of:</p> <ul style="list-style-type: none"> Reinforced concrete; or Steel in no part less than 6mm; or timber that— <ul style="list-style-type: none"> (i) has a finished thickness of not less than 44 mm; and (ii) has an average density of not less than 800 kg/m³ at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.

D2.7	Installations in exits and paths of travel	Further Details Required	<p>Services or equipment comprising—</p> <ul style="list-style-type: none"> (i) electricity meters, distribution boards or ducts; or (ii) central telecommunications distribution boards or equipment; or (iii) electrical motors or other motors serving equipment in the building, <p>may be installed in—</p> <ul style="list-style-type: none"> (iv) a required exit, except for fire-isolated exits specified in (a); or (v) in any corridor, hallway, lobby or the like leading to a required exit, <p>if the services or equipment are enclosed by non-combustible construction or a fire protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure.</p>
D2.8	Enclosure of space under stairs and ramps	Noted	<p>If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space.</p> <p>The space below a required non fire-isolated stairway (including an external stairway) or non fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless—</p> <ul style="list-style-type: none"> i) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and ii) any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.

D2.9	Width of required stairways and ramps	Noted	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.
D2.13 & NSW Variation	Goings and risers	Further Details Required	Risers and goings must comply with D2.13 and have slip resistance as per table D2.14. Architect to cover in Design Compliance Statement and provide further details of the stairs for further assessment.
D2.14	Landings	Further Details Required	750mm landings to be provided at bottom and top of stairs as per D2.14 and landings and stairs nosings throughout to have a slip resistance as per table D2.14. Architect to cover in Design Compliance Statement and provide further details of the stairs for further assessment.
D2.15 & NSW Variation	Thresholds	Further Details Required	No steps are to be located closer to the doors threshold than the width of the door unless the door leads to open space; a step ramp compliant with AS1428.1-2009 can be incorporated. Architect to note – compliance readily achievable with further details to be provided as the design develops.
D2.16 & NSW Variation	Barriers to prevent falls	Further Details Required	Compliant balustrades not less than 1m high with no climbable features between 150mm and 760mm are to be provided wherever it is possible to fall 1m or more. Architect to note – compliance readily achievable with further details to be provided as the design develops.

D2.17	Handrails	Further Details Required	<p>Handrails are to be provided to either side of stairs (one side in fire isolated stairs) in accordance with AS1428.1-2009. Handrail extensions to be provided.</p> <p>Architect to note – compliance readily achievable with further details to be provided as the design develops.</p>
D2.18	Fixed platforms, walkways, stairways and ladders	Further Details Required	<p>A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS 1657 in lieu of D2.13, D2.14, D2.16 and D2.17 if it only serves:</p> <p>(a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, attics and the like</p>
D2.19 & NSW Variation	Doorways and doors	Does Not Comply	<p>a doorway serving as a required exit or forming part of a required exit must not be fitted with a sliding door unless - (A) it leads directly to open space; and (B) the door is able to be opened manually under a force of not more than 110N</p> <p>The GLS rooms on ground floor of the HSC building (wood) utilise sliding doors as the secondary exit. Architect to note and ensure the doors will be able to be opened manually under a force of not more than 110N</p> <p>The sliding door in the Multimedia workshop forms part of the required exit for persons egressing from the store rooms and the back end of the multimedia workshop. As this door does not lead directly to open space, it does not comply and will require redesign.</p>

D2.20.	Swinging doors	Does Not Comply	There are multiple doors throughout the proposed development that do not swing in the direction of egress. Architect to note that all doors forming part of the required exit are required to swing in the direction of egress. Redesign required
D2.21 & NSW Variation	Operation of latch	Further Details Required	Doors shall be readily openable without a key from the side that a person may seek egress by a single handed downward action on a single device located between 900mm and 1100mm. Alternatively door must be readily openable on activation of a fail-safe device.
NSW Variation D2.101	Doors in the path of travel in an entertainment venue	Further Details Required	In a Class 9b building used as an entertainment venue, a doorway in a path of travel must comply with NSW D2.19(b)(v). Note – Architect and client to confirm that the proposed site will not be used as an entertainment venue at any point as this will incur additional requirements.
D3 – Access for People with a Disability			
D3.0	Deemed-to-Satisfy Provisions	Noted	Noted
D3.1	General building access requirements	Further Details Required	Access is required to all areas of the class 5, 6, 7, 8, 9a and 9b portions of the building. Further details of all ramps, walkways, stairs, lifts are required to assess against the requirements of AS1428.1-2009.

D3.2	Access to buildings	Further Details Required	<p>(a) An accessway must be provided to a building required to be accessible—</p> <ul style="list-style-type: none"> (i) from the main points of a pedestrian entry at the allotment boundary & (ii) from another accessible building connected by a pedestrian link; and (iii) from any required accessible carparking space on the allotment. <p>Compliance readily achievable and to be further detailed as the design develops. Architect to note the requirements of this clause and provide further details for assessment as the design progresses.</p>
D3.3	Parts of buildings to be accessible	Further Details Required	<p>Compliance readily achievable and to be further detailed as the design develops. Architect to note the requirements of this clause and provide further details for assessment as the design progresses.</p> <p>Note all doors are required to have sufficient circulation spaces, and it's noted that some doors to staff rooms and ancillary spaces do not appear to have sufficient latch side clearance. Additionally, all door hardware to all doors and gates shall be lever type handles.</p>

D3.4	Exemptions	Noted	<p>The following areas are not required to be accessible:</p> <p>(a) An area where access would be inappropriate because of the particular purpose for which the area is used.</p> <p>(b) An area that would pose a health or safety risk for people with a disability.</p> <p>(c) Any path of travel providing access only to an area exempted by (a) or (b).</p>
D3.6	Signage	Further Details Required	<p>To be provided throughout in accordance with details in D3.6. i.e. tactile and braille indicating levels, sanitary facilities etc.</p> <p>Compliance readily achievable and to be further detailed as the design progresses. Architect to note and provide further details as the design develops.</p>
D3.7	Hearing augmentation	Further Details Required	<p>A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—</p> <p>(i) in a room in a Class 9b building; or</p> <p>(ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or</p> <p>Architect to note this is applicable to the scope of work. Details of the hearing augmentation system is to be provided for further assessment as the design develops towards approval.</p>

D3.8	Tactile indicators	Further Details Required	<p>To be provided in accordance with AS 1428 throughout:</p> <ul style="list-style-type: none"> (i) a stairway, other than a fire-isolated stairway (iv) a ramps, step ramp, kerb ramp <p>TGSI are also required in the absence of suitable barrier to protect from over head obstructions.</p> <p>Compliance readily achievable and to be detailed as the design develops. Architect to note that tactiles are required to be provided to all stairways and ramps. Architect to confirm if any of the proposed stairs create an overhead obstruction as this will require tactiles or a suitable barrier to be provided. Additionally, Architect to note any window frame boxes where they fall within an overhead obstruction as these will additionally require tactiles or a suitable barrier.</p>
D3.9	Wheelchair seating spaces in Class 9b assembly buildings	Further Details Required	<p>Where fixed seating is provided in a Class 9b assembly building, wheelchair seating spaces complying with AS 1428.1 must be provided.</p> <p>(a) The number and grouping of wheelchair seating spaces must be in accordance with Table D3.9.</p> <p>Further details are required. Architect to confirm if it is proposed to have a tiered seating arrangement in the library adjacent to the circulation stairs. If this is the case, wheelchair seating spaces must be provided. Alternatively, a performance solution from an Access Consultant may be provided.</p>

D3.11	Ramps	Choose an item.	On an accessway— (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.
D3.12	Glazing on an access way	Choose an item.	Glazing to be provided visual indicators in accordance with AS1428.1-2009 when able to be confused for a doorway
Specifications			
Spec D3.6	Braille and Tactile Signs	Further Details Required	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by D2.21, D3.6 and Specification F2.9. A compliance statement shall be provided by the architect prior to the issuance of the CWC.
Part E – Services and Equipment			
E1 – Fire Fighting Equipment			
E1.0	Deemed-to-Satisfy Provisions	Noted	Noted

E1.3	Fire hydrants	Performance Solution Proposed	<p>A fire hydrant system shall be provided in accordance with Clause E1.3, and AS2419.1-2005.</p> <p>Architect and Fire Services Consultant to confirm the proposed location of the hydrant booster noting that the booster must be at the boundary of the site and within site of the main entrance of the building.</p> <p>Note a performance solution may be required as the site has multiple buildings and multiple main entrances and will not be able to comply with the requirements of this clause. Fire Services Engineer to note and incorporate it within the Fire Engineering Report.</p>
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E1.4	Fire hose reels	Further Details Required	<p>Fire Hose Reels are not required to provided coverage to class 5 office spaces or classrooms and associated corridors in primary and secondary schools.</p> <p>Note however, the library, gym, store rooms and any areas that are not classrooms are required to be provided with compliant coverage.</p> <p>Fire hose reels shall be provided in accordance with E1.4, AS2444 and located so that they need not pass through any smoke or fire door. Hose reels must be located within 4m of the exit. Architect and fire services consultant to note where fire hose reels are required to serve the library and gym that the exit is taken to be the point where open space is achieved from the awning and not from the door of the building. Therefore, fire hose reels are to be installed 4m from the awning edge.</p> <p>Compliance readily achievable. Architect and Fire Services Consultant to note and provide further details for assessment as the design develops</p>
E1.6	Portable fire extinguishers	Further Details Required	<p>Portable fire extinguishers shall be provided in accordance with Clause E1.6, and AS 2444-2001.</p> <p>Details of the type of portable fire extinguishers proposed and their location shall be provided. This detail shall be certified by a suitably qualified person</p> <p>Note additional portable fire extinguishers may be required to be provided based on ESFG requirements</p>

E1.9	Fire precautions during construction	Noted	Suitable fire extinguishers shall be located adjacent to exits on each storey while the building is under construction. Once the building reaches an effective above 12m fire hydrants, FHRs and the hydrant booster connection shall be commissioned and operational.
E2 – Smoke Hazard Management			
E2.0	Deemed-to-Satisfy Provisions	Choose an item.	Noted
E2.1	Application of Part	Noted	This is applicable to the proposed works
E2.2 & NSW Variation	General requirements	Further Details Required	A smoke hazard management system compliant with the requirements of Table E2.2a and / or Table E2.2b shall be provided in accordance with Clause E2.2, AS1668.1-2015 and AS1670.1-2018 as applicable. Engineering Details of the proposed smoke hazard management system shall be provided. Note also that smoke detection must be installed to activate auto shutdown. This detail shall be certified by a suitably qualified and Chartered Mechanical Engineer
Specifications			

<p>Spec E2.2a & NSW Variation</p>	<p>Smoke Detection and Alarm Systems</p>	<p>Further Details Required</p>	<p>smoke detectors required to activate automatic shutdown of air-handling systems in accordance with Table E2.2b; (ii) must be spaced not more than 20m apart and not more than 10m from any wall, bulkhead or smoke curtain; and (iii) must have a sensitivity in accordance with AS1670.1 in areas other than a multi-storey walkway and mall in a Class 6 building; and (iv) have a sensitivity in accordance with AS1670.1</p> <p>A building or a part of a building used as an assembly building which has a stage –</p> <p>(A) With a floor area of more than 50m² but not more than 150m² must, over the stage, be provided with – (aa) An automatic smoke exhaust system complying with Specification E2.2b; or (bb) Roof mounted automatic smoke-and-heat vents complying with NSW H101.22</p> <p>Architect and Design Engineers to note the requirements of this clause and detail as the design develops and provide verification of compliance to the BCA, Australian Standards and Fire Engineering Report where relevant</p>
<p>E3 – Lift Installations</p>			
<p>E3.0</p>	<p>Deemed-to-Satisfy Provisions</p>	<p>Noted</p>	<p>Noted</p>
<p>E3.1</p>	<p>Lift installations</p>	<p>Further Details Required</p>	<p>An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1. Please provide details of the lifts proposed to be installed including design certification from a suitably qualified engineer.</p>

E3.3	Warning against use of lifts in fire	Further Details Required	Warning signs must be displayed; "DO NOT USE LIFTS IF THERE IS A FIRE". No less than 10mm high that are incised, inlaid or embossed on a metal, wood, plastic or similar plate 60 securely & permanently attached to the wall or provided directly into the surface material of the wall. These shall be near every call button for a passenger lift or group throughout the building. Details demonstrating compliance shall be provided
E3.5	Landings	Further Details Required	Access and egress to and from lift landings shall comply with Section D of the BCA. Details demonstrating compliance shall be provided
E3.6	Passenger lifts	Further Details Required	In an accessible building, every passenger lift shall comply with the limitations of Table E3.6a of the BCA, be provided accessible features as required by Table E3.6b of the BCA and not rely upon a constant pressure device for its operation if the lift car is fully enclosed. Details demonstrating compliance shall be provided
Specifications			
Spec E3.1	Lift Installations	Further Details Required	Details to be provided as the design develops
E4 – Emergency Lighting, Exit Signs and Warning Systems			
E4.0	Deemed-to-Satisfy Provisions	Noted	Noted
E4.2	Emergency lighting requirements	Further Details Required	Emergency Lighting & Exit Signage to be provided to the building in accordance with E4 and AS 2293.1-2018. Compliance readily achievable and to be reflected in the design documentation from the electrical engineer.

E4.4	Design and operation of emergency lighting	Further Details Required	Compliance readily achievable and to be reflected in the design documentation from the electrical engineer. Design verification to be provided prior to the issue of the relevant building approval.
E4.5	Exit signs	Further Details Required	Compliance readily achievable and to be reflected in the design documentation from the electrical engineer. Design verification to be provided prior to the issue of the relevant building approval.
E4.6 & NSW Variation	Direction signs	Further Details Required	Compliance readily achievable and to be reflected in the design documentation from the electrical engineer. Design verification to be provided prior to the issue of the relevant building approval.
E4.8	Design and operation of exit signs	Further Details Required	Compliance readily achievable and to be reflected in the design documentation from the electrical engineer. Design verification to be provided prior to the issue of the relevant building approval.
Part F – Health and Safety			
F1 – Damp and Weatherproofing			
F1.0	Deemed-to-Satisfy Provisions	Performance Solution Proposed	There are not Deemed-to-Satisfy Provisions for Performance Requirement FP1.4 (The prevention of the penetration of water through external walls) This must be addressed by way of Performance Solution
F1.1	Stormwater drainage	Further Details Required	Stormwater drainage shall comply with AS 3500.3-2018. Details of the proposed Stormwater Management System shall be provided. This detail shall be certified by a suitably qualified

			and Chartered Engineer
F1.4	External above ground membranes	Further Details Required	Waterproofing membranes for external above ground use must comply with AS 4654.1-2012 and AS 4654.2-2012. Details demonstrating compliance shall be provided
F1.5	Roof coverings	Further Details Required	The roof must be covered with one of the following materials, concrete roof tiles, terracotta roof tiles, cellulose cement corrugated sheeting, metal sheet roofing, plastic sheet roofing or shingles made of terracotta, fibre cement, timber or slate. Compliance with fire resisting construction and non-combustible construction of Part C must also be achieved as applicable. Where none of the above materials is proposed, a Performance Solution addressing Performance Requirements FP1.4 will be required
F1.6	Sarking	Further Details Required	Sarking-type material used for weatherproofing of rood and walls must comply with AS 4200.1- 2017 and AS 4200.2-2017. Compliance with fire resisting construction and non-combustible construction of Part C must also be achieved as applicable
F1.7	Waterproofing of wet areas in buildings	Further Details Required	Waterproofing of wet areas shall comply with the requirements of Table F1.7 and AS 3740-2010. Details demonstrating compliance shall be provided
F1.9	Damp-proofing	Further Details Required	Moisture from the ground must be prevented from reaching the structure of the building. Where a damp-proof course is provided it must comply with AS 2904-1995 or impervious sheet material in accordance with AS3660.1-2014. Details demonstrating compliance shall be provided

F1.10	Damp-proofing of floors on the ground	Further Details Required	Floors laid on ground shall be provided a vapour barrier in accordance with AS 2870-2011. Details demonstrating compliance shall be provided
F1.12	Subfloor ventilation	Further Details Required	Subfloor spaces must be provided with openings in external walls and internal subfloor walls in accordance with Table F1.12. Details demonstrating compliance shall be provided
F1.13	Glazed assemblies	Further Details Required	Glazed assemblies in an external wall shall comply with AS 2047-2014. The following glazed assemblies need not comply revolving doors, fixed louvres, skylights / roof lights, sliding and swinging doors without a frame, heritage windows or second hand windows, windows constructed onsite which are not design tested. Details demonstrating compliance shall be provided
F2 – Sanitary and Other Facilities			
F2.0	Deemed-to-Satisfy Provisions	Noted	Noted
F2.2	Calculation of number of occupants and facilities	Further Details Required	Compliance readily achievable – refer to the sanitary facilities breakdown in Appendix D of this report. Client to advise the proposed staff and student population numbers for the site.

F2.3	Facilities in Class 3 to 9 buildings	Further Details Required	<p>The following are required:</p> <ul style="list-style-type: none"> - separate sanitary facilities are required to be provided for staff and students - Ambulant sanitary facilities are required to be provided for males and females - adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females - Class 9b sporting venues must be provided with one shower for each 10 participants or part thereof <p>Compliance readily achievable. Client to advise the proposed population of the gym for the purposes of calculating the required showering facilities.</p>
F2.4	Accessible sanitary facilities	Further Details Required	<p>The following is required:</p> <ul style="list-style-type: none"> - Accessible sanitary facilities shall be provided in accessible parts of the building. The facility must contain a pan, washbasin, shelf or bench top and adequate means of sanitary disposal for females - ambulant sanitary facilities for used by males and females must be provided at every bank of toilets - accessible showers must be provided on the basis of not less than 1 shower for every 10 showers or part thereof <p>Compliance readily achievable and to be further documented as the design develops. Architect to note and provide further details of all accessible sanitary facilities and showers and ambulant facilities for review</p>

F2.5	Construction of sanitary compartments	Further Details Required	Sanitary compartments shall have doors and partitions that separate adjacent compartments and extend from the floor level to the ceiling in the case of unisex facilities, to a height of not less than 1.5m above the floor if primary school children are the principal user, 1.8m above the floor in all other cases. The door to a fully enclosed sanitary compartment that does not have 1.2m clear space from pan to door swing shall open outwards or slide or be readily removable from the outside. compliance readily achievable and to be detailed as the design develops
F2.6	Interpretation: Urinals and washbasins	Noted	A closet pan may be used in lieu of a urinal. A urinal is any of the following, individual stall, wall hung unit, 600mm length of a continuous trough A washbasin may be an individual basin or part of a hand washing trough served by a single water tap
F2.7 & NSW Variation	Microbial (legionella) control	Not Applicable	Not applicable in NSW
Specifications			
F3 – Room Heights			
F3.0	Deemed-to-Satisfy Provisions	Noted	Noted

F3.1	Height of rooms and other spaces	Further Details Required	<p>The following heights shall be observed throughout:</p> <ul style="list-style-type: none"> - Class 5, 6 and 7 areas – minimum 2.4m in all habitable rooms and 2.1m in all corridors, passageways and the like - Class 9b building: <ul style="list-style-type: none"> (i) a school classroom or other assembly building or part that accommodates not more than 100 persons – 2.4m (ii) a theatre, public hall or other assembly building or part that accommodates more than 100 persons – 2.7m (iii) a corridor - <ul style="list-style-type: none"> (A) that serves an assembly building or part that accommodates not more than 100 persons – 2.4m; or (B) that serves an assembly building or part that accommodates more than 100 persons – 2.7m <p>Architect to note and provide further details as the design develops</p>
F4 – Light and Ventilation			
F4.0	Deemed-to-Satisfy Provisions	Noted	Noted
F4.1	Provision of natural light	Further Details Required	<p>Natural lighting is required to be provided to all primary and secondary schools to all general purpose classrooms.</p> <p>Architect to note and provide further details verifying compliance.</p>
F4.2	Methods and extent of natural light	Further Details Required	<p>Natural light is to be provided by windows that have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstruction <u>and must be open to the sky.</u></p>

			Architect to note the abovementioned requirements and provide a window schedule for further assessment. Note details of how natural light will be provided for windows that open onto the roof above will be required to be provided.
F4.4	Artificial lighting	Further Details Required	Artificial lighting shall be provided to required stairways, passageways and ramps. Artificial lighting shall comply
F4.5 & NSW Variation	Ventilation of rooms	Further Details Required	Natural ventilation or mechanical ventilation to be provided. Mechanical Engineer to confirm compliance with F4.5 and AS 3666.1. If compliance with DtS not achievable a Performance Solution demonstrating compliance with FP4.3 and FP4.4 may be more appropriate.
F4.6	Natural ventilation	Further Details Required	Natural ventilation provided in accordance with F4.5(a) must consist of openings, windows, doors or other devices which can be opened— (i) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and (ii) open to— (A) a suitably sized court, or space open to the sky; or (B) an open verandah, carport, or the like; or (C) an adjoining room in accordance with F4.7. (b) The requirements of (a)(i) do not apply to a Class 8 electricity network substation. Mechanical Engineer to note and confirm the proposed method of achieving ventilation throughout all buildings

F4.8	Restriction on location of sanitary compartments	Does Not Comply	<p>Sanitary compartments must not open directly into—</p> <ul style="list-style-type: none"> (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person. <p>Accessible facility opens into a workplace normally used by more than 1 staff.</p> <p>The Accessible Unisex Sanitary Facility located within the Food and Textiles Unit appears to open directly into a workspace.</p>
F4.12	Kitchen local exhaust ventilation	Further Details Required	<p>A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where—</p> <ul style="list-style-type: none"> (a) any cooking apparatus has— <ul style="list-style-type: none"> (i) a total maximum electrical power input exceeding 8 kW; or (ii) a total gas power input exceeding 29 MJ/h; or (b) the total maximum power input to more than one apparatus exceeds— <ul style="list-style-type: none"> (i) 0.5 kW electrical power; or (ii) 1.8 MJ/hour gas, <p>per m² of floor area of the room or enclosure.</p> <p>Architect and client to advise if the canteen, OSHC kitchen and food tech kitchen is proposed to house any cooking apparatus that meets the above criteria.</p>
<p>Part H – Special Use Buildings</p>			<p>H1 – Class 9b buildings</p>

H1.1 & NSW Variation	Application of Part	Not Applicable	The proposed stage in the gym building does not have a total floor area greater than 300m ² and therefore the requirements of this part are not applicable to the proposed development
Part J – Energy Efficiency			
J0.0	Deemed-to-Satisfy Provisions	Noted	Part J Report to be provided by Architect or ESD Consultant. ESD Consultant or Architect to certify CC Plans achieve compliance with Part J.
J0.1	Application of Section J	Further Details Required	<p>Compliance with the requirements of this Part is required for all new works. A report from the Energy Efficiency Consultant is required for further review for the new works.</p> <p>Architect to note and ensure plans depict compliance with J0, J1 and J3</p> <p>Note the application of Part J5 also applies to spaces provided with split systems unless the input energy to an air conditioning system is not more than 15W/m² or 15 J/s.m² (54 KJ/hour.m²) - Mechanical Consultant to note where this is proposed and provide comment</p>
J1 – Building Fabric			
J1.2	Thermal construction- general	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J1.3	Roof and ceiling construction	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J1.5	Walls and glazing	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses

J1.6	Floors	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J3 – Building Sealing			
J3.4	Windows and doors	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J3.5	Exhaust fans	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J3.6	Construction of roofs, walls and floors	Further Details Required	Energy Efficiency Consultant to note and assess as the design progresses
J5 – Air Conditioning and Ventilation Systems			
J5.0	Deemed-to-Satisfy Provisions	Further Details Required	Mechanical Engineer to note all applicable requirements of this clause and verify compliance to all applicable requirements as the design develops
J6 – Artificial Lighting and Power			
J6.0	Deemed-to-Satisfy Provisions	Further Details Required	Electrical Engineer to note all applicable requirements of this clause and verify compliance to all applicable requirements as the design develops
J7 – Heated water supply and swimming pool and spa pool plant			
J8 – Facilities for energy monitoring			
J8.0	Deemed-to-Satisfy Provisions	Choose an item.	Electrical Engineer to note all applicable requirements of this clause and verify compliance to all applicable requirements as the design develops

Appendix A – Architectural Plans Reviewed

The following documentation, prepared by Djrd was used in the assessment and preparation of this report: -

Drawing No.	Title	Date	Drawn By	Revision
0001	COVER SHEET	05.03.21	Djrd	B
0002	EXISTING SITE CONTEXT PLAN	05.03.21	Djrd	C
0003	PROPOSED SITE CONTEXT PLAN	05.03.21	Djrd	B
0004	EXISTING SITE PLAN	05.03.21	Djrd	A
0005	DEMOLITION PLAN	05.03.21	Djrd	F
0101	PROPOSED SITE PLAN	05.03.21	Djrd	G
0201	LOWER GROUND FLOOR PLAN	05.03.21	Djrd	F
0202	GROUND FLOOR PLAN	05.03.21	Djrd	E
0203	FIRST FLOOR PLAN	05.03.21	Djrd	B
0204	ROOF PLAN	05.03.21	Djrd	E
0301	ELEVATIONS	05.03.21	Djrd	C
SSDA_0101	SITE PLAN	04.11.21	Djrd	L

Appendix B – Type B construction; FRL of building elements

Building element	Class of building – FRL: (in minutes)			
	Structural adequacy/Integrity/Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is –				
For loadbearing parts –				
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/ 60/ 30	120/ 90/ 60	180/120/ 90	240/180/120
3 to less than 9 m	90/ 30/ 30	120/ 30/ 30	180/ 90/ 60	240/ 90/ 60
9 to less than 18 m	90/ 30/–	120/ 30/–	180/ 60/–	240/ 60/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
For non-loadbearing parts –				
less than 1.5 m	–/ 90/ 90	–/120/120	–/180/180	–/240/240
1.5 to less than 3 m	–/ 60/ 30	–/ 90/ 60	–/120/ 90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN not incorporated in an external wall, where the distance from any fire-source feature to which it is exposed is –				
For loadbearing parts –				
less than 18 m	90/–/–	120/–/–	180/–/–	240/–/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
For non-loadbearing parts –				
	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS –				
All	90/ 90 / 90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS –				
Fire-resisting lift and stair shafts –				
Loadbearing	90/ 90/ 90	120/120/120	180/120/120	240/120/120
Non-loadbearing	–/ 90/ 90	–/120/120	–/120/120	–/120/120
Bounding public corridors, public lobbies and the like –				
Loadbearing	60/ 60/ 60	120/–/–	180/–/–	240/–/–
Non-loadbearing	–/ 60/ 60	–/–/–	–/–/–	–/–/–

Between or bounding sole-occupancy units–				
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion–				
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-
OTHER LOADBEARING INTERNAL WALLS and COLUMNS–				
All	60/-/-	120/-/-	180/-/-	240/-/-
ROOFS				
Any	-/-/-	-/-/-	-/-/-	-/-/-

Building element	Class of building – FRL: (in minutes)			
	Structural adequacy/Integrity/Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is–				
For loadbearing parts–				
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/ 60/ 30	120/ 90/ 60	180/120/ 90	240/180/120
3 to less than 9 m	90/ 30/ 30	120/ 30/ 30	180/ 90/ 60	240/ 90/ 60
9 to less than 18 m	90/ 30/-	120/ 30/-	180/ 60/-	240/ 60/-
18 m or more	-/-/-	-/-/-	-/-/-	-/-/-
For non-loadbearing parts–				
less than 1.5 m	-/ 90/ 90	-/120/120	-/180/180	-/240/240
1.5 to less than 3 m	-/ 60/ 30	-/ 90/ 60	-/120/ 90	-/180/120
3 m or more	-/-/-	-/-/-	-/-/-	-/-/-
EXTERNAL COLUMN not incorporated in an external wall, where the distance from any fire-source feature to which it is exposed is–				
For loadbearing parts–				
less than 18 m	90/-/-	120/-/-	180/-/-	240/-/-
18 m or more	-/-/-	-/-/-	-/-/-	-/-/-
For non-loadbearing parts–				
	-/-/-	-/-/-	-/-/-	-/-/-
COMMON WALLS and FIRE WALLS–				
All	90/ 90 / 90	120/120/120	180/180/180	240/240/240

INTERNAL WALLS–				
Fire-resisting lift and stair shafts–				
Loadbearing	90/ 90/ 90	120/120/120	180/120/120	240/120/120
Non-loadbearing	-/ 90/ 90	-/120/120	-/120/120	-/120/120
Bounding public corridors, public lobbies and the like–				
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-
Between or bounding sole-occupancy units–				
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion–				
Loadbearing	60/ 60/ 60	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/ 60/ 60	-/-/-	-/-/-	-/-/-
OTHER LOADBEARING INTERNAL WALLS and COLUMNS–				
All	60/-/-	120/-/-	180/-/-	240/-/-
ROOFS				
Any	-/-/-	-/-/-	-/-/-	-/-/-

6 Appendix C - Type C construction; FRL of building elements

Building element	Class of building – FRL: (in minutes)			
	Structural adequacy/Integrity/Insulation			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is–				
less than 1.5 m	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
1.5 to less than 3 m	-/-/-	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
3 m or more	-/-/-	-/-/-	-/-/-	-/-/-
EXTERNAL COLUMN				
Less than 1.5 m	90/-/-	90/-/-	90/-/-	90/-/-
1.5 to less than 3 m	-/-/-	60/-/-	60/-/-	60/-/-
3 m or more	-/-/-	-/-/-	-/-/-	-/-/-
COMMON WALLS and FIRE WALLS–				
All	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
INTERNAL WALLS–				
Bounding public corridors, public lobbies and the like–				
All	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Between or bounding sole-occupancy units–				
All	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Bounding a stair if required to be rated–				
All	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
OTHER LOADBEARING INTERNAL WALLS and COLUMNS–				
ROOFS				
Any	-/-/-	-/-/-	-/-/-	-/-/-

7 Appendix D – Sanitary Facilities Calculations

Prior to this assessment being conducted, the school must nominate the total occupancy based on student / staff numbers.

MBC request the Architect to provide a schedule of occupant numbers and then complete the “provided” section of this table below. Post this section being completed, MBC will assess the capabilities of the proposed Sanitary Facilities.

Sanitary Facility Calculations – Primary School Students												
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
PS.C	TBA	Male	50				7	1	7			
		Female	350				10		7			
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
PS.B	TBA	Male	50				7	1	7			
		Female	350				10		7			

Sanitary Facility Calculations – High School Students												
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
HS.C	TBA	Male	50				7	1	7			
		Female	10				1		1			
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
HS.A	TBA	Male	50				7	1	7			
		Female	350				10		11			

Sanitary Facility Calculations – Staff												
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
PS.A	TBA	Male	50				2	1	3			
		Female	75				4		4			
Description of building or part	Occupant Number	Population No.		Required			Provided			Difference		
				WC	U	B	WC	U	B	WC	U	B
PS.D	TBA	Male	25				1	1	2			
		Female	10				1		1			

Key - * signifies a unisex accessible sanitary facility was added to this facility

` signifies a pan was counted as a urinal or vice versa

Red numbers signify a deficiency in facilities

Note – Client to advise of the proposed staff and student population numbers in order to ascertain whether there is surplus or deficiency in the sanitary facilities population numbers.



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