

# **BCA COMPLIANCE ASSESSMENT REPORT**

# MASTER PLAN REVIEW FOR ST CATHERINE'S SCHOOL

# 26 ALBION STREET, WAVERLY NSW 2024

DATE ► 28 JULY 2014 PREPARED FOR ► SANDRICK PROJECT DIRECTIONS REPORT No. ► 5053 - REV 01 PREPARED BY ► AE&D



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REVISION STATUS						
REVISION	DATE	STATUS	AUTHOR	REVIEWER		
5053 (M) – REV 00	14.04.14	MASTER PLAN AND RPAC REVIEW	JS	MZ		
5053(M) – REV 01	28.07.14	MASTER PLAN REVIEW	JS	MZ		

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# 1.0 INTRODUCTION

AED has been commissioned by St Catherine's School Waverly to assist with the preparation of an Environmental Impact Statement to accompany the DA for the school, which is located at 26 Albion Street, Waverly. The DA seeks concept approval for the school's Campus Master plan and this report relates to the master plan component of the proposal only. A separate report has been provided for the new Research, Performing Arts and Aquatic Centre (RPAC) building.

The primary purpose of this report is to review the design philosophy concerning the capability of the design to meet the Building Code of Australia 2014 requirements.

This report provides a BCA assessment under Section 3.0 that summarises the designs capability of compliance with the BCA.

#### 1.1 Basis of Report

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

• Architectural plans prepared by PD Mayoh Ptd Ltd, Project Number 1212:

#### Masterplan Drawings:

- Drawing No A.MP.020, Issue A, dated 03/07/14 Master Plan Level 1
- Drawing No A.MP.031, Issue A, dated 03/07/14 Sections E, F & G RPAC
- Drawing No A.MP.030, Issue A, dated 03/07/14 Sections A, B, C & D
- Drawing No A.MP.021, Issue A, dated 03/07/14 Master Plan Level 2
- Drawing No A.MP.022, Issue A, dated 03/07/14 Master Plan Level 3
- Drawing No A.MP.023, Issue A, dated 03/07/14 Master Plan Level 4
- Drawing No A.MP.024, Issue A, dated 03/07/14 Master Plan Level 5
- Drawing No A.MP.025, Issue A, dated 03/07/14 Master Plan Level 6
- Drawing No A.MP.026, Issue A, dated 03/07/14 Master Plan Level 7
- Drawing No A.MP.027, Issue A, dated 03/07/14 Master Plan Level 8
- Drawing No A.MP.028, Issue A, dated 03/07/14 Master Plan Roof Plan

# 1.2 Purpose of the Report

The purpose of this report is to:

- Provide a high level Building Code of Australia (BCA) assessment of the proposed development against the Deemed-to-Satisfy (DTS) Provisions of the BCA 2014 with specific regard to Section C (Fire Resistance), Section D (Access and Egress), Section E (Services and Equipment), Section F (Health and Amenity) and Section J (Energy Efficiency) of the BCA 2014; and
- To identify the DTS non-compliances with the BCA 2014 that could affect the proposed development; and
- Make compliance recommendations to address the identified DTS non-compliances with the BCA 2014, specifically by either recommending design changes to accommodate DTS compliance OR suggesting Alternative Solutions to demonstrate compliance with the relevant Performance Requirements of the BCA.

# 1.3 Limitations of the Report

This report excludes any works not outlined above, however specifically excludes the following:



- Reporting on hazardous materials, OH&S matters or site contamination;
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistance levels of the building OR assessment of plumbing and drainage installations, including stormwater;
- Consideration of any fire services operations (including hydraulic, electrical or other systems);
- Assessment of plumbing and drainage installations, including stormwater;
- Assessment of mechanical plant operations, electrical systems or security systems;
- Consideration of energy or water authority requirements;
- Consideration of Council's local planning policies;
- Environmental or planning issues;
- Requirements of statutory authorities;
- Sections G, H and I of the BCA are not considered;
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out.
- This assessment does not consider BCA Part D3, F2.4 and E3.6. A separate access report is understood to be provided.
- This is not a clause by clause BCA assessment.

# 2.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the Masterplan development under the Building Code of Australia 2014 (BCA) in respect to the compliance assessment:

BCA Building Classification/s	MasterplanDame Joan CentreClass 9b (Band rooms, Drama "Playbox" theatre, Ballet Studio, drama classroom)Nan Hind Centre Class 9b (classrooms)
	Junior School Class 5 (office) Class 6 (uniform shop) Class 9b (school)
	Jo Karaolis Sports Centre Class 9b (Sports centre)
	JB Hall, Administration, J Block, St Johns, Isabel Hall Wing,– Assessed as one building Class 5 (office) Class 7a (carpark) Class 7b (storage) Class 9b (classroom)
	Lenthall / Boarding House – Assessed as one building. Class 3 (Dormitory accommodation)
Building rise in storeys	Masterplan Nan Hind Centre Four (4) (determined in accordance with C1.2 of the BCA)



	<b>Junior School</b> Four (4) (determined in accordance with C1.2 of the BCA)
	<b>Jo Karaolis Sports Centre</b> Three (3) (determined in accordance with C1.2 of the BCA)
	JB Hall, Administration, J Block, St Johns, Isabel Hall Wing – Assessed as one building by virtue of the fire stair connection. Four (4) (determined in accordance with C1.2 of the BCA)
	<b>Dame Joan Centre</b> Assume five (5) (determined in accordance with C1.2 of the BCA) – <b>Required to be verified</b>
	Lenthall / Boarding House – Assessed as one building. Three (3) (determined in accordance with C1.2 of the BCA)
Type of Construction	<u>Masterplan</u>
	Nan Hind Centre A (determined in accordance with C1.1 of the BCA)
	Jo Karaolis Sports Centre A (determined in accordance with C1.1 of the BCA)
	Junior School A (determined in accordance with C1.1 of the BCA)
	Dame Joan Centre A (determined in accordance with C1.1 of the BCA)
	JB Hall, Administration, J Block, St Johns, Isabel Hall Wing – Assessed as one building A (determined in accordance with C1.1 of the BCA)
	Lenthall / Boarding House – Assessed as one building. A (determined in accordance with C1.1 of the BCA)



# 3.0 BCA ASSESSMENT SUMMARY

#### Section B: Structure

1. All proposed components must comply with the applicable Australian Standards. The design indicates that compliance can be readily achieved. Design certification from the consultant team will be required at Construction Certificate stage.

#### Section C: Fire Resistance & Stability

1. All new works are readily capable of achieving compliance the DTS and performance requirements of Section C of the BCA. Design certification from the consultant team will be required at Construction Certificate stage.

#### Section D: Fire Resistance & Stability

#### Part D1 - Provision for escape

- 1. Travel distance throughout the Junior School is readily capable of meeting the DTS provisions of the BCA.
- 2. Travel distance throughout the Dame Joan building is readily capable of achieving compliance with the performance requirements of the BCA under an alternative solution.
- 3. Travel distance from the JB Hall Site Redevelopment on Level 7 via the proposed open stair adjacent science labs 7 and 8 is readily capable of complying with the DTS provisions or the performance requirements of the BCA. This may necessitate the provision of additional fire safety systems to be installed throughout the building i.e. sprinklers.
- 4. Travel distance from the Tas Textiles room, JB Hall Site Redevelopment on Level 6 is readily capable of achieving DTS compliance via minor design updates or satisfying the performance requirements of the BCA under a performance based solution.
- 5. Travel distance throughout the administration Building on Level 6 is readily capable of complying with the DTS provisions or the performance requirements of the BCA. This may necessitate the provision of additional fire safety systems to be installed throughout the building i.e. sprinklers.
- 6. Travel distance throughout the Lenthall / boarders Building, Level 4 is readily capable of achieving DTS compliance via minor design updates.
- 7. The discharge from the Nan Hind Centre fire stairs will necessitate occupants to pass within 6m of openings of the same building. The design is generally capable of meeting the DTS provisions of the BCA or satisfying the performance requirements under an alternative solution. This may necessitate the provision of additional fire safety systems to be installed throughout the building i.e. drenchers.
- 8. The path of travel to the road following discharge from the new open stair located between the JB Hall building and St Johns Building will require occupants to pass beneath the building to reach a road. This is readily capable of achieving compliance with the performance requirements of the BCA under an alternative solution.
- 9. Discharge from the Jo Karaolis Sports Centre necessitates occupants to pass beneath the research centre undercroft or via the covered link adjacent chapel. This is readily capable of achieving compliance with the performance requirements of the BCA under an alternative solution.



10. Egress from the various buildings has been reviewed and is considered to be able to readily comply with the deemed to satisfy or performance provisions of the BCA. Design certification from the consultant team will be required at Construction Certificate stage.

# Part D2 - Construction of Exits

1. Construction of all new exits is readily capable of meeting the DTS provisions or the performance requirements of the BCA. Design certification from the consultant team will be required at Construction Certificate stage.

# Part D3 - Access for People with a Disability

1. Access for people with a disability is the subject of a separate report and excluded from this BCA assessment (See limitations and exclusions of this report).

#### Section E: Services and Equipment

 All fire safety systems and lifts proposed to be installed or modified are readily capable of achieving compliance with the DTS and performance requirements of the BCA. Design certification from the consultant team will be required to be provided at Construction Certificate stage demonstrating design compliance.

#### Section F: Health and Amenity

- All new works forming part of the master plan works are required to comply with Section F (F1-F4) of the BCA. Compliance is readily achievable with the DTS requirements of the BCA. Design certification will be required to be provided at Construction Certificate stage demonstrating compliance.
- 2. It is likely that occupant numbers will increase in certain building. Occupant numbers for each building forming part of the master plan will be required at CC stage to determine compliance with the provision of clause F2.3 for sanitary facilities.

# Section J: Energy Efficiency

 All new works proposed as part of the master plan will be required to comply with Parts J1 through to J8 (excluding part J4). Compliance is readily achievable with the DTS and performance requirements of the BCA. A Section J report by a qualified consultant will be required at CC stage. Electrical and Mechanical services consultants comments will also be required to address the relevant Part J clauses during CC stage



# 4.0 CONCLUSION

This report provides a Building Code of Australia 2014 (BCA) compliance overview of the proposed Masterplan for St Catherine's School at 26 Albion Street, Waverly.

The primary purpose of this report was to assess the Masterplan and to confirm that the design is at a point where the inherent BCA philosophies have been verified. The finer details of the design with respect to BCA 2014 compliance will be required to be finalised prior to the issue of the Construction Certificate.

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