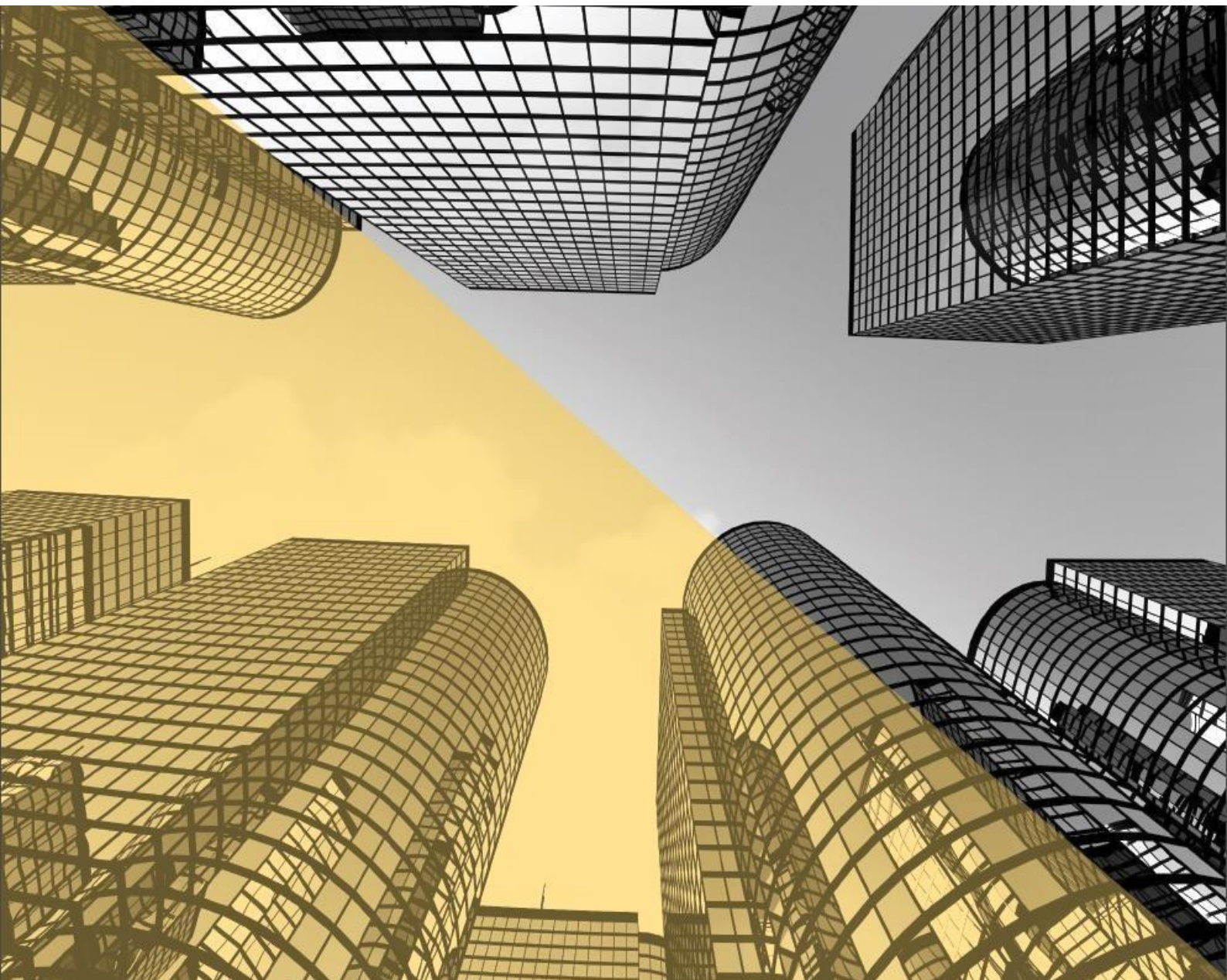


Home Consortium- Penrith, Early Childhood Centre.

NATIONAL CONSTRUCTION CODE, BUILDING CODE OF AUSTRALIA 2019.1 DESIGN REVIEW



31 Aug 2020





HENDRY

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CONCEPT DESIGN

Project: Construction of a new Early Childhood Centre

Location: 72 Mulgoa Rd, Jamisontown
NSW 2750

Prepared For: Home Co

Hendry Ref. No.: 20200383

No of pages: 9

Revision: 1


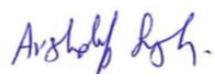

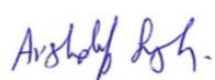
Council: Penrith City Council

Prepared By: Kingsley Lunt



Contents

1.0 EXECUTIVE SUMMARY	4
2.0 INTRODUCTION	4
2.1 General	4
2.2 Assessment Approach	4
2.3 Basis of the assessment	5
2.4 Scope and Exclusions	5
3.0 BUILDING CODE OF AUSTRALIA DESCRIPTION	5
4.0 PERFORMANCE SOLUTIONS	6
5.0 CONCLUSION	6
APPENDIX 1 - REQUIRED FIRE RESISTANCE LEVELS (FRLs)	7
APPENDIX 2 - PRINCIPLE ACCESSIBILITY REQUIREMENTS FOR.....	8
ACCESSIBLE BUILDINGS/ PARTS.....	8
APPENDIX 3 – REFERENCED DOCUMENTATION	9

REVISION HISTORY				
Revision	Date	Detail of Revision	Prepared by	Reviewed
1	08/07/20	DRAFT	 Kingsley Lunt	 Arsh Mohi
2	31/08/20	REVISED BUILDING LOCATION	 Kingsley Lunt	 Arsh Mohi



1.0 Executive Summary

This report presents a desk top building assessment review of the Concept Design documentation for the proposed construction of an early childhood centre at 72 Mulgoa Rd, Jamisontown for Home Consortium-Penrith.

The proposed works have been found capable of National Construction Code (NCC) Building Code of Australia Volume 1, 2019 amendment 1 (BCA) compliance subject to further detailing prior to the issuance of a Construction Certificate in accordance with the Environmental Planning and Assessment Act 1979 and Regulation 2000.

The assessment methodology of the desktop review was reviewing the proposed documentation against the relevant Deemed to Satisfy provisions to demonstrate compliance with the relevant Performance Requirements of the BCA. The assessment identified the design may either address the building's location adjacent to an existing large isolated building by way of a Deemed to Satisfy Solution, a Performance Solution or a combination of both to meet the relevant Performance Requirements of the BCA.

2.0 INTRODUCTION

2.1 General

The proposed building is located at 72 Mulgoa Rd, Jamisontown NSW 2750, Lot 200/-/DP1230338. The subject property is located within the local government area of Penrith City Council. The land is zoned as B5: Business Development under the Penrith Local Environmental Plan 2010.

Site location is shown below:

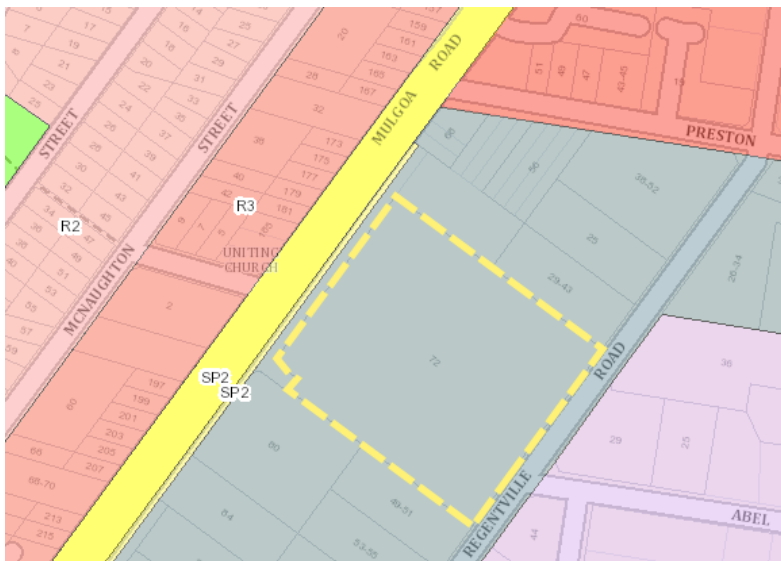


Figure 1- 72 Mulgoa Rd, Jamisontown NSW 2750, Lot 200/-/DP1230338

2.2 Assessment Approach

Project assessments were undertaken against of the Environmental Planning & Assessment (EP&A) Act 1979, the EP&A Regulation 2000 and the Deemed to Satisfy provisions of the BCA 2019.1 in force in NSW at the time of this assessment. In addition, this report may provide further commentary on the Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) for matters relating to access and facilities for people with disabilities.



The approach taken in preparing this report was:

- i. To identify those matters that depart or vary from BCA and Premises Standards Deemed to Satisfy provisions including those requiring verification through a fire engineering or expert access consultant appraisal.
- ii. To comment on whether further information is necessary to enable a more thorough assessment of the key issues identified in the development.

2.3 Basis of the assessment

This report is based on a preliminary review of the documentation as detailed in the appendix 3 against the deemed to satisfy provisions of the BCA volume 1 2019.1 in order to determine its capability of compliance with the relevant Performance Requirements.

2.4 Scope and Exclusions

The report was prepared on the basis of a desktop review of preliminary documentation and drawings against the relevant Deemed to Satisfy provisions of the BCA 2019.1. The following legislation and standards were not subject of the review and the report should not be relied upon to limit the responsibility of relevant parties from compliance with the below listed or any other applicable legislation.

- i. National Construction Code – Volume 3, Plumbing Code of Australia
- ii. Plumbing and Drainage Act 2011
- iii. Plumbing and Drainage Regulation 2017
- iv. Children (Education and Care Services National Law Application) Act 2010
- v. Children (Education and Care Services) Supplementary Provisions Regulation 2012
- vi. Public Health Regulation 2012
- vii. Work Healthy and Safety Act 2011
- viii. Work Healthy and Safety Regulation 2017
- ix. Gas and Electricity (Consumer Safety) Act 2017
- x. Gas and Electricity (Consumer Safety) Regulation 2018
- xi. Food Regulation 2015
- xii. Work Cover
- xiii. Dangerous Goods (including Gas Installations)
- xiv. Local Government Act 1993
- xv. Local Government (General) Regulation 2005
- xvi. Local Consenting Authority Plumbing and Drainage
- xvii. Local Consenting Authority Trade Waste
- xviii. Water Supply Authority
- xix. Electricity Supply Authority
- xx. Conditions of Development Consent issued by the Local Consent Authority
- xxi. Comments are offered on matters relating to the Premises Standards made under the federal Disability Discrimination Act (DDA), however this report does not constitute a DDA audit and cannot be read as such
- xxii. Structural and services documentation has not been reviewed
- xxiii. Assessment of Section J of the BCA

3.0 BUILDING CODE OF AUSTRALIA DESCRIPTION

Item / Clause	Description or Requirement
BCA Version	2019 amendment 1
Effective Height	<12



Item / Clause	Description or Requirement
Climate Zone	6
Classification	9b
Importance Level (B1.2) * <i>* To be confirmed by structural engineer</i>	2
Minimum Type of Construction	Type C
Rise in Storeys	1
General Floor Areas approx. (m ²)* <i>* Floor areas measurement of subject tenancy only</i>	1,536.64

4.0 PERFORMANCE SOLUTIONS

The relevant BCA Performance Requirements are deemed as capable of compliance by meeting the relevant Deemed to Satisfy provisions of the BCA Vol 1 2019.1, however the development may either address the building's location adjacent to an existing large isolated building by way of a Deemed to Satisfy Solution, a Performance Solution or a combination of both to meet the relevant Performance Requirements of the BCA. Where Performance Solutions are proposed, these are to be developed by a C10 registered Certifier (fire safety) and follow the set process of the Environmental Planning and Assessment Act and Regulation.

5.0 CONCLUSION

A preliminary assessment of the proposed design documentation has been undertaken. It has been determined that the proposed new works are capable of compliance with the relevant Performance Requirements of the NCC BCA Vol 1 2019.1. It is noted there is an existing building located on the lot which (due to compartment size) would have been classified as a Large Isolated Buildings under the relevant Deemed to Satisfy provisions of the BCA. The proposed building is to be located within 6m from the existing building. The Construction Certification of the building would therefore require consideration of the Cl. 143 of the EP&A Reg to ensure fire and structural capacity of the buildings on site is sufficient.

The subject works will require further detailing at Construction Certificate phase, including (inter alia) any proposed fire services works which are to be undertaken by an Accredited Practitioner (fire safety) registered with the Fire Protection Association (FPA).



APPENDIX 1 - REQUIRED FIRE RESISTANCE LEVELS (FRLs)

TYPE C CONSTRUCTION:

TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS Building element	Class of building—FRL: (in minutes)			
	<i>Structural adequacy/Integrity/Insulation</i>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any <i>fire-source feature</i> 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 not incorporated in an <i>external wall</i> , where the distance from any <i>fire-source feature</i> to which it is exposed is—				
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—	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90	90/ 90/ 90
INTERNAL WALLS-				
Bounding <i>public corridors</i> , public lobbies and the like—	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Between or bounding <i>sole-occupancy units</i> —	60/ 60/ 60	-/-/-	-/-/-	-/-/-
Bounding a stair if <i>required</i> to be rated—	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60	60/ 60/ 60
ROOFS	-/-/-	-/-/-	-/-/-	-/-/-



APPENDIX 2 - PRINCIPLE ACCESSIBILITY REQUIREMENTS FOR ACCESSIBLE BUILDINGS/ PARTS

Access for wheelchair users and people with disabilities in accessible areas generally must be to AS1428.1-2009. Principle requirements are:

- Continuous accessible paths of travel throughout
- Minimum 1m wide travel paths with maximum 3-5mm joints, lips, level changes etc.
- No deep pile carpets or grates with large slots.
- Walls or 75-150mm kerbs at travel path sides or if level change occurs to cause a wheelchair hazard.
- 1.8m wide x 2m long wheelchair passing spaces at 20m intervals in passageways where a direct line of sight is not available.
- Turning spaces at 20m intervals and within 2m of dead end access ways. 1.5m x 1.5m 90 deg turning spaces (with splayed internal corner) and 1.54m x 2.07m long 180 deg turning spaces are required including at dead ends in passageways.
- Step ramps, kerb ramps and threshold ramps as prescribed.
- 1:14 maximum ramps with 9m between landings.
- 1.9m x 1 in 10 (maximum 190mm rise) step ramps
- 1.52m x 1 in 8 (maximum 190mm rise) kerb ramps.
- 30-50mm handrails with 300mm extensions and curls and 50mm clearances on both sides of steps, ramps, etc.
- 850mm clear width doors with 340 - 900mm latch side clearances and 1220-1670mm approach clearances depending on arrangements.
- Stairs and ramps set back from building lines and corridors to allow space for handrail extensions and TGSIs.
- Decals to glazing.
- 900-1100mm door hardware height.
- Lever handle hardware with low opening forces.
- Landings at doorways, direction changes and at intervals on ramps and inclined walkways.
- Walkways with colour contrast borders.
- Flat even surfaces.
- Colour contrasted hand rails and door frames.
- "D" pull handles to doors.
- Continuous protected paths from disabled person's car spaces to lifts, access points, etc.
- Ambulant disabled person's toilets with grab rails and outward swinging doors or longer cubicles.
- Prescribed types of water entry arrangements for swimming pools depending on pool size.
- Non fire enclosed stairs with opaque risers.
- Fire stairs and non-fire enclosed stairs with colour contrasting nosing strips.
- All switches and controls 900-1100mm above floor level.

The following general requirements apply to accessible toilets:

- Unisex facility.
- ~1.9 x 2.7m or 2.3 x 2.4m minimum room dimensions depending on arrangements. (~2.2m x 1.6m if AS1428.1-2001 concession applies).
- 30-40mm grab rails with 50-60mm clearances.
- Doors with appropriate clearances and circulation spaces and able to be operated externally in emergencies
- Washbasins with clearances as required.
- Shielded hot water pipes.
- Mirror, shelf, dispensers and coat hooks.
- Mirrored layout for alternative facilities (Left Hand/ Right Hand).



APPENDIX 3 – REFERENCED DOCUMENTATION

- i. Architectural plans, Project: Centre Based Childcare: DA Issue prepared by Five Cannons Architecture date 25.08.2020
 - a. Cover sheet
 - b. Overall site plan
 - c. Area plan
 - d. Site plan (existing)
 - e. Site / site analysis plan (proposed)
 - f. Shadow study
 - g. Proposed floor plan
 - h. Roof plan
 - i. Licensing plan
 - j. Elevations
 - k. External finishes elevations
 - l. Sections
 - m. 3d perspectives