

**BCA &
Access**



CREDWELL

**BCA & ACCESS CAPABILITY STATEMENT
ISSUED FOR DEVELOPMENT APPLICATION**


EXP CAPITAL – CHILDCARE CENTRE

RYANS ROAD GILLIESTON HEIGHTS, NSW 2321.

CONTENTS


Document Control	2
Introduction.....	3
1.1. Objectives.....	3
1.2. Limitations.....	3
1.3. DISABILITY DISCRIMINATION ACT	4
1.4. DISABILITY (ACCESS TO PREMISES- BUILDINGS) STANDARDS 2010.....	4
1.5. Reviewed documentation	5
2. Proposed Development	6
2.1. Building location	6
2.2. Proposal	6
2.3. Building description	7
2.4. Classification	7
2.5. Fire Compartmentation	8
2.6. AREAS REQUIRED TO BE ACCESSIBLE.....	8
2.6. AREAS TO BE EXEMPT FROM ACCESSIBILITY REQUIREMENTS	8
2.7. ACCESS TO THE BUILDING.....	8
2.8. ACCESS TO THE PEDESTRIAN ENTRANCE	9
3. Assessment Summary.....	11
3.1. Assessment	11
3.2. Possible Performance Solutions (Fire Safety)	11
3.3. Possible Performance Solutions (Other).....	11
3.4. Design Considerations.....	12
4. Statement of Compliance	14
Annexure A – Reviewed Documentation	15
Annexure B – Fire Safety Measures	16
Annexure C – Matters for Design Development	17
Annexure D – Sanitary Facility Calculations	21

DOCUMENT CONTROL

Reference/Revision	Date		
241115-Capability Statement-r1 Issued for DA	02/02/2024	Prepared by	<div>Zoe Brown Building Surveyor – Unrestricted (A1) BDC 3299</div> <div> Digitally signed by Zoe Brown Date: 2025.02.02 17:35:34+11'00'</div>

For enquiries about this statement please contact Credwell

 info@credwell.com.au

 **+612 9281 8555**

INTRODUCTION

1.1. OBJECTIVES

The purpose of this capability statement is to provide an overview of the key BCA compliance issues identified that must be considered in the design to enable compliance with Volume One of the Building Code of Australia 2022 (BCA).

Part 3 'Assessment Summary' of this capability statement outlines the identified compliance matters that require design consideration and/or assessment as a Performance Solution (to be prepared at a later stage of the development).

It is presumed the assumptions, content, and limitations of this report are reviewed, noted, and understood by the reader. Credwell Consulting are to be contacted to clarify any queries or assumptions made in relation to the contents of this report and further, Credwell Consulting take no responsibility for misinterpretation of any of the content herein.

1.2. LIMITATIONS

This report does not include, nor imply, any assessment of, or compliance with:

1. The National Construction Code – Plumbing Code of Australian Volume 3;
2. Any Development Consent conditions;
3. The Liquor Act 2007;
4. The Work Health and Safety Act 2011;
5. The Swimming Pools Act 1992; ~~and~~
6. Requirements of Authorities including, but not limited to, Fire and Rescue NSW, WorkCover, RMS, Council, Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like;
7. Requirements of BCA Section J;
8. The structural design of the building;
9. The design of any electrical, fire, hydraulic or mechanical services; ~~and~~
10. The inherent derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to).

Interpretations

A number of matters within the BCA are known to be interpretive. Where these matters are encountered, interpretations have been used that are consistent with Credwell Consulting's understanding of standard industry practice.

Dimensions and Tolerances

In some instances, the BCA specifies minimum dimensions for construction. The assessment of plans and specifications includes a review of such minimum dimensions that are relevant to the project, but Credwell Consulting does not guarantee that all relevant minimum dimensions have been assessed where they are not clearly and explicitly denoted/marked on the architectural drawings.

The relevant designer(s) and builder(s) should confirm that all minimum dimensions are achievable on site prior to works and consideration/attention should be given to construction tolerances impacted by wall set outs, applied finishes, and skirtings to corridors and bathrooms. For example, tiling bed thickness on walls and floors can adversely impact critical minimum dimensions relating to access for people with disabilities, stair and corridor widths, and balustrade heights.

1.3. DISABILITY DISCRIMINATION ACT

The Disability Discrimination Act 1992 (Cth) (the “DDA”) is Commonwealth legislation (applies nationally). Amongst other things, it provides an avenue for an affected party to make a complaint of discrimination. Compliance with the BCA does not restrict a complaint of discrimination relating to the provision of access to and within a building from being made under the DDA. However, provided the building complies with the BCA and the Disability (Access to Premises – Building) Standards 2010, such a complaint cannot be successful.

1.4. DISABILITY (ACCESS TO PREMISES– BUILDINGS) STANDARDS 2010

The Disability (Access to Premises – Buildings) Standards 2010 (the “Premises Standards”) was created under the DDA and is also Commonwealth legislation (applies nationally). The Premises Standards identifies buildings to which it applies before specifying construction standards that those buildings are required to comply with. In summary, the Premises Standards are applicable to a new building, a new part of a building, and an affected part of a building, and the construction standards applicable are contained within “Schedule 1 Access Code for Buildings”.

The Premises Standards provides a definition for a new building, a new part of a building, and an affected part of a building. The definition of a new building and a new part of a building is currently considered to be in line with standard dictionary definitions (unless a building or part obtained construction approvals prior to 1 May 2011). However, the term “affected part” is specific to the Premises Standards and is defined by clause 2.1(5) as follows –

- a) *the principal pedestrian entrance of an existing building that contains a new part; and*
- b) *any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.*

The upgrade requirements of the Premises Standards are founded on determining whether a development within an existing building results in the creation of an affected part.

As previously mentioned, the construction standards of the Premises Standards are contained within “Schedule 1 Access Code for Buildings”. It should be noted that this part of the Premises Standards was prepared in consultation with the Australian Building Codes Board (ABCB – publisher of the NCC). As such, the requirements outlined in each document are the same. Therefore, assessment of the proposed development against the relevant requirements of the NCC applicable to access for people with a disability ensures that it also complies with the Premises Standards.

The subject proposed development incorporates construction of a new building; therefore, the entire building must comply with the Premises Standards. An assessment of the building against the relevant requirements of the NCC applicable to access for people with a disability, as outlined in this

Report, is equivalent to an assessment against “Schedule 1 Access Code for Buildings” of the Premises Standards. Therefore, confirmation of compliance with the NCC should also be taken as confirmation of compliance with the Premises Standards.

1.5. REVIEWED DOCUMENTATION

This report is based on documentation referenced in Annexure A.

2. PROPOSED DEVELOPMENT

2.1. BUILDING LOCATION

The development, the subject of this report, is located on the corner of Ryans Road and Kiah Road Gillieston Heights, NSW 2321.

The site adjoins a public road Ryans Road to the east, Kiah Road to the south and all other boundaries adjoin private properties.

The site (182/-/DP1282386) is understood to be vacant of existing buildings, and is currently under development application for subdivision into smaller allotments and proposed public roadways.

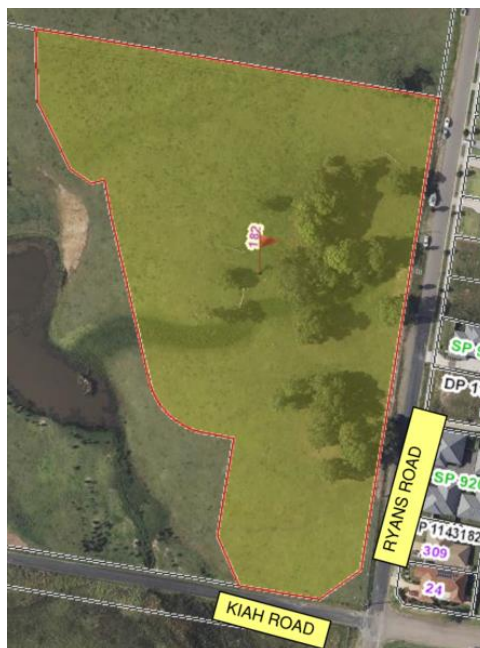


Figure | Satellite image of the proposed site | Source: Six maps

2.2. PROPOSAL

The proposed development consists of the construction of a new single storey early childhood centre with external carparking.

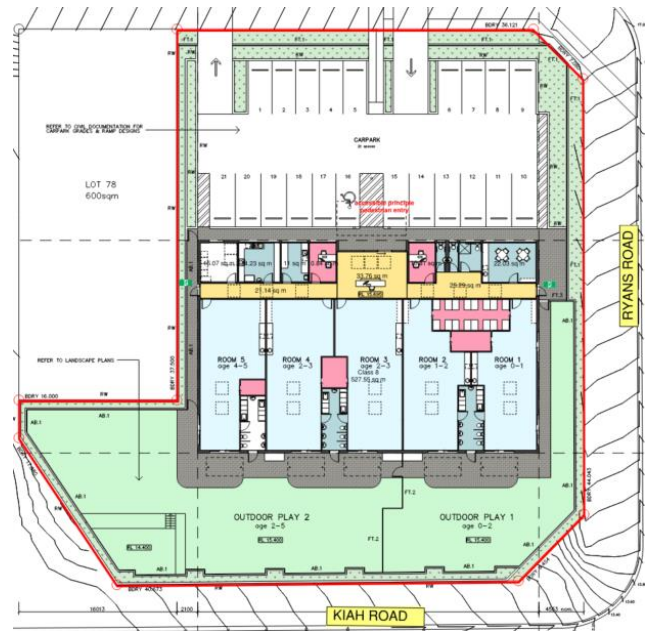


Figure | The proposed development |Source: Shaddock architect

2.3. BUILDING DESCRIPTION

For the purposes of the BCA, the building is described as follows:

Building Classification <i>As per Part A6 of the BCA</i>	9b Early Childcare Centre	Levels Contained <i>Total number of floor levels in the building</i>	1
Rise in Storeys <i>As per BCA Clauses C2D3 & C2D4</i>	1 (SINGLE STOREY)	Effective Building Height (m) <i>As per BCA definition</i>	0 m (SINGLE STOREY)
Type of Construction <i>As per BCA Clause C2D2</i>	Type C	Climate Zone <i>As per BCA Map</i>	5 Maitland City Council

2.4. CLASSIFICATION

Location	Class	Use	Floor Area	Occupants
Ground Floor	9b	Early Childcare Centre	706m ²	Staff 15
		Lobby	81m ²	Children 96
		Office	22m ²	
		Kitchen, Laundry, Staff rm.	60m ²	
		Storage	15m ²	

Note:

In accordance with Clause A6G1 [2019: A6.0], Exemption 1 of the BCA, for the purposes of determining a building classification, where an ancillary use does not occupy more than 10% of the floor area of the storey which it is situated on, it may be absorbed into the dominate use for that level.

Occupant numbers have been provided by the tenant or building owner, within the plans.

The floor areas identified within the above table are in accordance with the BCA definition which may vary from the GFA as determined in accordance with NSW planning legislation.

2.5. FIRE COMPARTMENTATION

In accordance with clause C3D3 of the BCA, as the building is of Type C Construction, and based on the building classification, the size of any fire compartment must not exceed:

- Floor Area: 3,000 m²
- Volume: 18,000 m³

The building has been assessed as a single fire compartment and it is within the limitations of clause C3D3.

2.6. AREAS REQUIRED TO BE ACCESSIBLE

The below table describes the access requirements of the various areas of the building as specified by Clause D4D2 of the BCA. The following table outlines the areas of the development that are required to be accessible, unless exempt under D4D5.

Location	Class	Use	Access requirement
Ground floor	Class 9b	Early Childcare Centre	To and within all areas normally used by the occupants.

2.6. AREAS TO BE EXEMPT FROM ACCESSIBILITY REQUIREMENTS

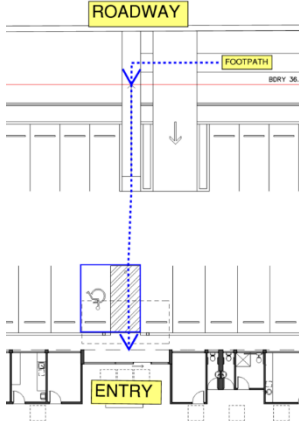
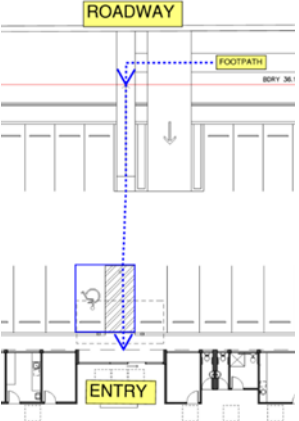
Clause D4D5 of the BCA provides an exemption to areas that due to their use, are not required to be accessible.

The development does not contain any areas which are considered exempt for the purposes of D4D5.

2.7. ACCESS TO THE BUILDING

Clause D4D3(1) of the BCA specifies accessible points of entry into the building and site. The accessways must comply with AS 1428.1 and for the purposes of this assessment, the following accessways are required

Access to Building Requirements	
DtS Provision	Assessment

<p>D4D3 (1) a) The main points of pedestrian entrance into the site at the allotment boundary;</p>	<p>An accessway into the building from the pedestrian entrance into the site at the northern boundary must be provided. The entry location is indicated on the markup below.</p>  <p><i>Figure 1 Mark-up of the site entrance to the building required to be accessible Source: Shaddock Architect</i></p>
<p>D4D3 (1) b) Another accessible building connected by a pedestrian link;</p>	<p>The proposal does not contain a pedestrian link or connection to another building and therefore an assessment against this provision is not applicable.</p>
<p>D4D3 (1) c) Any required accessible carparking space on the allotment.</p>	<p>An accessway into the building from the accessible car spaces located on the allotment to the north on the subject building as marked up below.</p>  <p><i>Figure 1 Mark-up of the pedestrian link from the carpark to the building required to be accessible Source: Shaddock Architect</i></p>

2.8.ACCESS TO THE PEDESTRIAN ENTRANCE

For the purposes of Clause D4D3(2) of the BCA, the following pedestrian doors are required to be accessible:

- Main entry door on the northern façade which adjoins Unnamed roadway via Ryans Road.

Note: Not less than 50% of pedestrian doors are required to be accessible; and as the building contains a floor area of more than 500 m² any entrance which is not accessible cannot be located more than 50m from an accessible entrance.

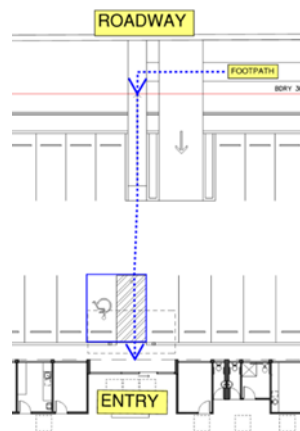


Figure | Mark-up of the entrance doors required to be accessible |Source: Shaddock architect

3. ASSESSMENT SUMMARY

3.1. ASSESSMENT

The reviewed documentation referenced in Annexure A of this report has been assessed against the Deemed-to-Satisfy (DtS) provisions of the BCA. This assessment has identified the following areas where compliance with the BCA will require further consideration.

3.2. POSSIBLE PERFORMANCE SOLUTIONS (FIRE SAFETY)

There are no fire engineered performance solutions proposed at this time.

3.3. POSSIBLE PERFORMANCE SOLUTIONS (OTHER)

The following items relate to areas where a non-fire engineered Performance Solution may be available to justify a deviation from the DtS requirements of the BCA. This report does not form a Performance Solution.

Where a Performance Solution is proposed, the solution is to be prepared by a suitably qualified person in consultation with all stakeholders as part of the Construction Certificate assessment stage

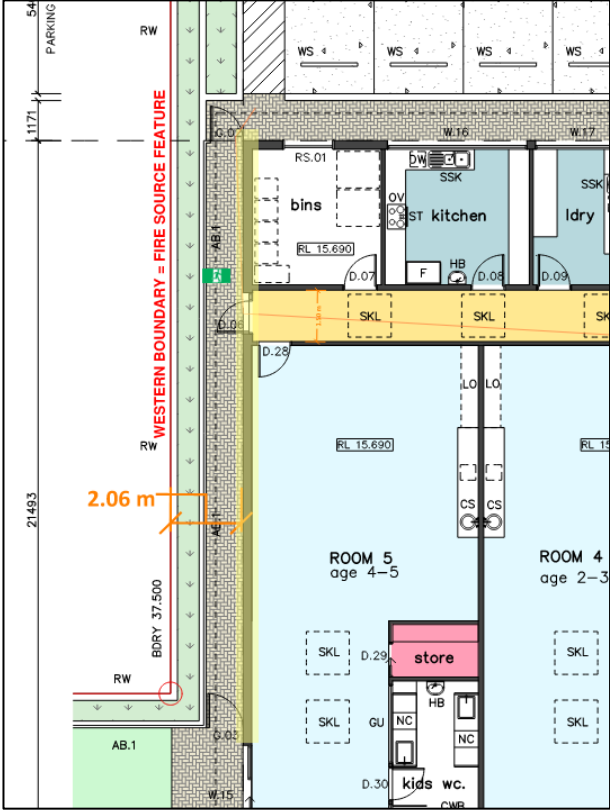
Item	Possible Performance Solution	DtS Provision
1.	<p>External Wall Cladding</p> <p>Clause F3D5 of the BCA specifies that the external wall cladding must be one of the following:</p> <ul style="list-style-type: none"> • Masonry to AS 3700 • Autoclaved aerated concrete to AS 5146.3 • Metal wall cladding to AS 1563.1 <p>The proposed design does not indicate the proposed cladding material, however where not one of the above options, this may be addressed with a performance solution at the Construction Certificate phase in consultation with relevant project stakeholders.</p>	F3D5
2.	<p>Early Childhood Centre Kitchen</p> <p>Clause F4D4(9)(a) specifies that an early childhood centre must be provided with a kitchen that has the ability to facilitate supervision of children from the facilities if the early childhood centre accommodates children younger than 2 years old.</p> <p>The proposed location of the kitchen does not facilitate supervision of the children in accordance with this provision.</p>	F4D4(9)

	This may be addressed with a performance solution at the Construction Certificate phase in consultation with relevant project stakeholders.	
3.	<p>Natural Light Early Childhood Centre Cot Room</p> <p>Clause F6D2 specifies that all playrooms, or the like for the use of children, in an early childhood centre must be provided with natural light.</p> <p>The BCA guide contains guidance on which rooms are not considered as a “children’s room”. This list does not include sleeping or cot rooms and therefore it is deemed that these areas must be provided with natural light.</p> <p>The cot room within the development does not contain a window or skylight and therefore natural light is not achieved in accordance with F6D2 and F6D3.</p> <p>This may be addressed with a performance solution at the Construction Certificate phase in consultation with relevant project stakeholders.</p>	F6D2 F6D3

3.4.DESIGN CONSIDERATIONS

Credwell have undertaken a preliminary BCA assessment of the plans referenced in Annexure A and found that the following elements of the design require design amendment. These elements must be reviewed in further detail as part of the design development / Construction Certificate phase.

Item	Design Consideration	DtS Provision
1.	<p>Fire Resisting Construction</p> <p>The western wall which is within 3.0m (2.06m measured) from the side boundary is required to achieve an FRL of not less than 60/60/60 to meet the requirements of Specification 5. Furthermore, the openings in this wall (such as doors) must be fire rated in accordance with clause C4D5.</p> <p>This must be considered as part of the Construction Certificate phase.</p> <p>Alternatively, if the wall is moved such that it is not closer than 3.0m from the side boundary, the external wall and openings will not be required to achieve an FRL.</p>	Spec 5 C4D3

Item	Design Consideration	DtS Provision
		

4. STATEMENT OF COMPLIANCE

The architectural design documentation prepared for submission for the Development Application (as referred to in Annexure A of this report) have been assessed against the relevant provisions of the BCA. This assessment was limited to an assessment of the BCA in order to identify any key items that must be included in the design. It is considered that the documentation complies or is capable of complying with the BCA subject to resolution of items identified in this Report.

Sufficient construction documentation is required in order to undertake a full assessment prior to the application for Construction Certificate.

ANNEXURE A – REVIEWED DOCUMENTATION

This report has been based on the documentation listed below:

Architectural Details prepared by Shaddock Architects, Project reference 1302		
Drawing Number	Revision	Title
A04	7	Area Diagram
A03	7	Proposed Floor Plan
A05	7	Elevations 1
A06	7	Elevations 2

ANNEXURE B – FIRE SAFETY MEASURES

Given the assessment in this report, the following fire safety measures are required to be installed in the building. This list is subject to change if Performance Solutions are proposed, or other options are taken during the Construction Certificate (CC) and/or construction stages.

Proposed (new) Fire Safety Measures

Item No.	Fire Safety Measure	Minimum Standard of Performance
1.	Emergency lighting	BCA 2022 Clauses E4D2 and E4D4 AS/NZS 2293.1-2018 (amendment 1)
2.	Exit signs	BCA 2022 Clauses E4D5, NSW E4D6 and E4D8 AS/NZS 2293.1-2018 (amendment 1)
3.	Fire hose reel systems	BCA 2022 Clause E1D3 AS 2441-2005 (amendment 1)
4.	Fire hydrant systems	BCA 2022 Clause E1D2 AS 2419.1-2021
5.	Mechanical air handling systems (automatic shutdown)	BCA 2022 Clause NSW E2D16 and Specification 20 AS 1668.1-2015 (amendment 1)
6.	Portable fire extinguishers	BCA 2022 Clause E1D14 AS 2444-2001
7.	Smoke detectors	BCA 2022 Part E2 Clause NSW E2D16 and Specification 20 Clause C6 AS1670.1-2018 (amendment 1)
8.	Performance Solutions	<i>This will be completed upon receipt of the final Fire Engineering Report at the CC stage</i>

ANNEXURE C – MATTERS FOR DESIGN DEVELOPMENT

For the purposes of this report, general arrangement floor plans, elevations and sections have been reviewed to determine whether the building is capable of complying with the BCA.

Construction Documentation is to be provided and reviewed by Credwell prior to the issuance of the BCA Report for the purposes of the Construction Certificate application. A detailed list of information required for review will be provided by Credwell upon engagement for the Construction Certificate stage assessment.

The following matters are to be addressed by further information for review at the design development phase prior to the application for construction certificate. The documented is to be issued by the architect or relevant design consultant.

Architectural Design Certification (Registered Architect)

1. The building elements of the proposed works have been designed to have the FRL relevant in accordance with BCA 2022 Clause C2D2 and Specification 5 where applicable:
 - S5C1 to S5C10
 - S5C24 and S5C25
2. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works will comply with the fire hazard properties in accordance with BCA 2022 Clause NSW C2D11 and Specification 7.
3. The electricity substation, any main switch room sustaining emergency equipment required to operate in emergency mode, will be separated from the remaining building with construction having an FRL of 120/120/120 and provided with self-closing -/120/30 fire doors in accordance with BCA 2022 Clause C3D13.
4. Travel distances to exits will be in accordance with BCA 2022 Clause D2D5.
5. The alternative exits will be distributed uniformly around the storey and will not be less than 9m apart, and not more than 45m apart in the residential portion or patient care areas in the health-care building or 60m, in accordance with BCA 2022 Clause D2D6.
6. The dimensions of exits and paths of travel to exits will be provided in accordance with BCA 2022 Clauses D2D7-D2D11 and NSW D2D8 (5) and NSW D2D9.
7. The discharge points of exits will be in accordance with BCA 2022 Clause D2D15 and NSW D2D15 (6).
8. The construction of EDB'S will be in accordance with BCA 2022 Clause D3D8 with the enclosure bounded by a non-combustible or fire protective covering and smoke seals provided around the perimeter of the doors at each level.
9. Door thresholds are to be provided in accordance with BCA 2022 Clause NSW D3D16.
10. The doorways and doors will be in accordance with BCA 2022 Clause D3D24 & D3D25 and NSW D3D24(2).
11. The door latching mechanisms to the proposed exit doors will be in accordance with BCA 2022 Clause D3D26 and NSW D3D26 (5 & 6).

12. The openable portion of a window in a Class 9b early childhood centre must be protected with a restricting device or secure screen that does not allow a 125mm sphere to pass through the opening or screen and resist an outward horizontal action of 250N in accordance with BCA 2022 Clause D3D29.
13. The new works will be accessible in accordance with BCA 2022 Part D4 and with AS1428.1-2009, with particular note to door circulation spaces, access way widths, turning spaces, passing spaces and floor coverings.
14. Accessible car parking will be in accordance with BCA 2022 Clause D4D6.
15. Braille and tactile signage will be in accordance with BCA 2022 Clause D4D7 and Specification 15.
16. Hearing augmentation system will be provided in accordance with BCA 2022 Clause D4D8.
17. Tactile ground surface indicators will be provided in accordance with BCA 2022 Clause D4D9 and AS1428.4.1-2009.
18. On an access way, where there is no chair rail, handrail, or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, will be clearly marked in accordance with AS1428.1-2009 and comply with BCA 2022 Clause D4D13.
19. Fire precautions whilst the building is under construction will be in accordance with BCA 2022 Clause E1.D16.
20. The new roof covering will be in accordance with BCA 2022 Clause F3D2.
21. Any sarking proposed including waterproofing of roofs and walls must comply with AS/NZS4200.1-2017 and AS4200.2-2017 and will be installed in accordance with BCA 2022 Clause F3D3.
22. Damp proofing of the proposed structure will be carried out in accordance with BCA 2022 Clauses F1D6 and F1D7.
23. Sub-floor ventilation will be provided in accordance with BCA 2022 Clause F1D8 and Table F1D8.
24. Sanitary facilities will be provided in the building in accordance with BCA 2022 Clauses F4D2 and F4D4.
25. Accessible sanitary facilities will be provided in the building in accordance with BCA 2022 Clause F4D5, F4D6, F4D7 and AS1428.1-2009.
26. The construction of the sanitary facilities will be in accordance with BCA 2022 Clause F4D8.
27. Ceiling heights to the new areas will be in accordance with BCA 2022 Clause F5D2.
28. Natural light will be provided in accordance with BCA 2022 Clauses F6D2, F6D3 and F6D4. While artificial lighting shall be provided in accordance with BCA 2022 Clause F6D5.
29. Natural ventilation will be provided in accordance with BCA 2022 Clauses NSW F6D6, F6D7 and F6D8.
30. The sanitary compartments will either be provided with mechanical exhaust ventilation or an airlock in accordance with BCA 2022 Clause F6D10.
31. A means of cleaning windows in accordance BCA 2022 NSW G5D5 and the Work Health and Safety (WHS) Act. 2011 and Regulations made under that Act.
32. Outdoor play spaces associated with the early childhood centre will be in accordance with BCA 2022 Clause G1D4 and AS1926.1-2012.
33. The stoves, heaters or similar appliances installed in the building will be in accordance with AS/NZS2918-2018 and AS/NZS1200-2000 and in complying with Clause G2D2 and Specification 30.

34. Essential fire or other safety measures must be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation, 2021.
35. Insulation will be in accordance with AS/NZS4859.1-2018 and will be installed as required by BCA 2022 NSW J4D3.
36. The building will be constructed in accordance with BCA 2022 Section J.
37. Wall and glazing will be in accordance with BCA 2022 J4D6 and NSW J4D6.
38. The building will be sealed in accordance with BCA 2022 Part J5 including NSW Variations.
39. Energy Monitoring for Facilities will be provided in accordance with BCA 2022 Clause J9D3.

Electrical Services Design Certification - Electrical Engineer

40. Emergency lighting will be installed throughout the development in accordance with BCA 2022 Clauses E4D2 and E4D4 and AS 2293.1-2018 (amendment 1).
41. Exit signage will be installed in accordance with BCA 2022 Clauses E4D5, NSW E4D6, E4D7, E4D8 and AS 2293.1-2018 (amendment 1).
42. Artificial lighting will be installed throughout the development in accordance with BCA 2022 Clause F6D5 and AS/NZS1680.0-2009.
43. Lighting power and controls will be installed in accordance with BCA 2022 Part J6.

Dry Fire Services Design Certification - Fire Systems Designer (detection and alarm systems)

44. An smoke alarm will be installed throughout the building in accordance with BCA 2022 NSW Clause E2D16, Specification 20 S20C6 and AS 1670.1-2018 (amendment 1).

Wet Fire Services Design Certification - Fire Systems Designer (fire hydrant and fire hose reel)

45. Fire hydrants will be installed in accordance with BCA 2022 Clause E1D2 and AS2419.1-2021
46. Fire hose reels will be installed in accordance with BCA 2022 Clause E1D3 and AS2441-2005

Weatherproofing Design Certification – Facade Engineer / Architect

47. Damp-proofing must comply with BCA 2022 Clause F1D6 and F1D7.
48. Subfloor ventilation must comply with BCA 2022 Clause F1D8.
49. The roof must be covered in accordance with BCA 2022 Clause F3D2.
50. Sarking type materials used for weatherproofing walls and roofs must be in accordance with BCA 2022 Clause F3D3, AS 4200.1 and AS 4200.2
51. All new glazing to be installed throughout the development will be in accordance with BCA 2022 Clause F3D4 and AS1288-2006 and AS2047-2014.
52. All wall cladding will be in accordance with BCA 2022 Clause F3D5.

Waterproofing Design Certification – Waterproofing specialist / Architect

53. External above ground waterproofing membranes must comply with BCA Clause F1D5, AS4654.1-2012 and AS4654.2-2012.
54. Waterproofing of all wet areas within building will be carried out in accordance with BCA 2022 Clauses F2D2 & F2D3 and AS3740-2010.

Civil Services Design Certification – Civil Engineer

55. Stormwater drainage will be provided in accordance with BCA 2022 Clause F1D3 and AS3500.3-2018.

Hydraulic Services Design Certification – Hydraulic Designer

56. Portable fire extinguishers will be installed in accordance with BCA 2022 Clause E1D14 and AS2444-2001.
57. The heated water supply systems will be designed and installed to BCA Volume 3 – Plumbing Code and BCA 2022 Clause J7.2.

Mechanical Services Design Certification – Mechanical Engineer

58. Automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) will be installed in the building in accordance with BCA 2022 NSW E2D16 and AS 1668.1-2015 (amendment 1).
59. Where not naturally ventilated the building will be mechanically ventilated in accordance with BCA 2022 NSW F6D6 and AS1668.2-2012.
60. The air conditioning and ventilation systems will be designed and installed in accordance with BCA 2022 Part J6.

Structural Design Certification – Structural Engineer

61. The material and forms of construction for the proposed works will be in accordance with BCA 2022 Clauses B1D3, B1D4 and B1D6 as follows:
 - Dead and live loads – AS/NZS1170.1-2002
 - Wind loads – AS/NZS1170.2-2011
 - Masonry – AS3700-2018
 - Concrete Construction – AS3600-2018
 - Steel Construction – AS4100-1998
 - Aluminium Construction – AS/NZS1664.1-1997 or AS/NZS1664.2-1997
 - ABCB Standard for Construction of Building in Flood Hazard Areas
62. The structural building elements of the proposed works have been designed to have the FRL relevant in accordance with BCA 2022 Clause C2D2 and Specification 5 where applicable:
 - S5C1 to S5C10
 - S5C24 and S5C25 Type C Construction.

ANNEXURE D – SANITARY FACILITY CALCULATIONS

The development must be provided with sanitary facilities in accordance with Part F4 of the BCA. This annexure outlines the minimum number of facilities required to achieve compliance.

Assessment notes:

- Unisex Accessible WCs are counted once each for males and females
- The occupant numbers are outlined in part 2 of this report (15 staff and 96 children)

Required Number of Sanitary Facilities				
Use	Occupant no.	Pan	Basin	Comments
Class 9b early childhood centre children [total number: 96] <i>BCA table F4D4g</i>	96	7	7	<i>Complies. 8 pans and 8 basins are shown on the proposed plans.</i>

Staff: The unisex accessible WC provided caters for up to 20 staff which complies as only 15 staff are proposed in the facility.

Table F4D4g: Sanitary facilities in Class 9b buildings – early childhood centres			
User group	Facility type	Design occupancy	Number
Children	Closet pans	1 - 30	2
		>30	Add 1 per 15
	Washbasins	1 - 30	2
		>30	Add 1 per 15

Table Notes

(1) Urinals are not *required* for a Class 9b *early childhood centre*.

(2) Facilities for use by children must be—

- (a) junior pans; and
- (b) washbasins with a rim height not exceeding 600 mm; and
- (c) accessible from both indoor and outdoor play areas.