




Project	Farrow Road Multi-deck Carpark Lot 245 Farrow Road, Campbelltown
Report	BCA and Access Assessment Report
Reference	C21389-NCC-r2
Date	27 May 2022
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Document Control

Reference/Revision	Date	Description	BCA Assessment Report
C21389-NCC-r1	24/05/22	Prepared by	Zoe Brown Associate
C21389-NCC-r2	26/05/22	Prepared by	Zoe Brown Associate 

1 Introduction

1.1 Building Location

The building, the subject of this report, is located at Lot 245 Farrow Road, Campbelltown. The building consists of a five (5) storey open deck carpark.

1.2 Objectives

The purpose of this report is to provide an assessment against Building Code of Australia 2019, Amendment 1 (BCA) addressing all relevant clauses therein to identify where the subject building achieves compliance and non-compliance, as well as provide appropriate Performance Solutions where available, which are required to be prepared under separate cover.

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.

1.3 Limitations

This report does not include, nor imply, any audit, assessment, or upgrading of:

1. The structural design of the building;
2. The capacity or design of any electrical, fire, hydraulic or mechanical services; and
3. The Disability (Access to Premises – Building) Standards 2010 and the Disability Discrimination Act 1992 (Cth)

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

4. Any Development Consent conditions;
5. The Liquor Licencing Act 2007;
6. The Work Health and Safety Act 2011;
7. The Swimming Pools Act 1992; and
8. Requirements of Authorities including, but not limited to, WorkCover, RMS, Council, Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like.

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.

1.4 [Reviewed Documentation](#)

This report is based on documentation referenced in Annexure A.

2 Building Description

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

Building Classification:	7a (carpark)	Levels Contained:	5
Rise in Storeys:	5	Effective Building Height (m):	12.9m (RL 74.90 – RL 62.00)
Type of Construction:	Type A	Climate Zone	6 Campbelltown City Council

The building contains the following uses:

Location	Class	Use	Floor Area	Occupants
Ground floor	7a	Car park	2,777m ²	90
Level 01	7a	Car park	2,777m ²	90
Level 02	7a	Car park	2,777m ²	90
Level 03	7a	Car park	2,777m ²	90
Level 04	7a	Car park	2,777m ²	90
Total	7a	Car park	13,885 m²	450

Notes:

- Occupants have been calculated in accordance with table D1.13 of the BCA
- As there are no staff rooms/areas are shown on the floor plans, it is assumed that the carpark will not be staffed. If the building is occupied by staff, sanitary facilities will be required

2.1 Fire Compartments

The following fire compartments have been assumed:

1. The Building has been assessed as one (1) Fire Compartment

2.2 Required Exits

The following have been considered as the exits from the building:

1. Four (4) Fire Isolated exits which connection levels 4, 3, 2, & 1 to Ground floor.
2. The perimeter doors on the ground floor

2.3 Open Deck Carpark

The building has been assessed as an open deck carpark as it is provided with permanent unobstructed openings on 3 sides that are open for not less than ½ the area of the wall concerned.

3 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 minor change if Performance Solutions are proposed, or other options are taken during the Construction Certificate (CC) and/or construction stages.

	Fire Safety Measure	Standard of Performance
1.	Emergency lighting	BCA2019 Amnd 1 Clauses E4.2 and E4.4 AS2293.1-2018
2.	Exit signs	BCA2019 Amnd 1 Clauses E4.5, NSW E4.6 and E4.8 AS2293.1-2018
3.	Fire doors	BCA2019 Amnd 1 Clauses C3.8, C3.11 and Specification C3.4 Clause 2 AS1905.1-2015
4.	Fire hose reel systems	BCA2019 Amnd 1 Clause E1.4 AS2441-2005
5.	Fire hydrant systems	BCA2019 Amnd 1 Clause E1.3 AS2419.1-2005
6.	Portable fire extinguishers	BCA2019 Amnd 1 Clause E1.6 AS2444-2001
7.	Warning and operational signs	BCA2019 Amnd 1 Clauses D2.23 & E3.3 Environmental Planning and Assessment Regulation 2000 (EP&A Reg) Clause 108
8.	Paths of travel	BCA2019 Amnd 1 Parts D1 and D2 EP&A Reg Clause 186

4 Fire Resistance Levels

The following fire resistance levels (FRLs) are required for the various elements of the building. Where the table below refers to a fire source feature (FSF), this is as defined in the BCA as the far boundary of a road, river, lake or the like adjoining the allotment, or a side or rear boundary of the allotment, or an external wall of another building on the allotment which is not a Class 10 building.

Building Element – Type A Construction	Class 7a
Loadbearing External Walls <ul style="list-style-type: none"> - Less than 1.5m from a FSF - 1.5 - 3m from a FSF - 3m or more from a FSF 	120/120/120 120/90/90 120/60/30
Non-Loadbearing External Walls <ul style="list-style-type: none"> - Less than 1.5m from a FSF - 1.5 - 3m from a FSF - 3m or more from a FSF 	-/120/120 -/90/90 -/-/-
External Columns (not incorporated into an external wall) <ul style="list-style-type: none"> - Loadbearing - Non-loadbearing 	120/-/- -/-/-
Common Walls and Fire Walls	120/120/120
Internal Walls - Fire resisting lift and stair shafts – <ul style="list-style-type: none"> - Loadbearing - Non-loadbearing 	120/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like – <ul style="list-style-type: none"> - Loadbearing - Non-loadbearing 	120/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – <ul style="list-style-type: none"> - Loadbearing - Non-loadbearing 	120/-/- -/-/-
Internal Walls – Ventilating, pipe, garbage and the like shafts not used for the discharge of hot products of combustion – <ul style="list-style-type: none"> - Loadbearing - Non-loadbearing 	120/90/90 -/90/90
Other loadbearing internal walls, internal beams, trusses and columns	120/-/-
Floors	120/120/120
Roofs	120/60/30

Notes:

General Concession: Structures housing the lift and hot water plant on the roof are not required to have a FRL (concession available under BCA Specification C1.1 Clause 2.5(c) if the structures are non-combustible).

The Ground Floor does not require a FRL (concession available under BCA Specification C1.1 Clause 3.2 as the floor is laid directly on the ground).

5 Disability (Access to Premises – Building) Standards 2010

The Disability (Access to Premises – Building) Standards 2010 (Premises Standards) is a standard created under the DDA which includes construction standards which generally mirror the accessibility requirements of the BCA.

Clause 2.1 of the Premises Standards apply to new buildings and new building work as per the legislation stated in italic font below, however, given the mirrored requirements of both the BCA and the Premises Standard, compliance with the BCA provides compliance with the Premises Standards.

2.1 Buildings to which Standards apply

(1) Subject to subsection (2), these Standards apply to the following:

- (a) a new building, to the extent that the building is:

 - (i) a specified Class 1b building; or*
 - (ii) a Class 2 building that has accommodation available for short-term rent; or*
 - (iii) a Class 3, 5, 6, 7, 8, 9 or 10 building;**
- (b) a new part, and any affected part, of a building, if the building is:

 - (i) a specified Class 1b building; or*
 - (ii) a Class 2 building that:

 - (A) is a new building; and*
 - (B) has accommodation available for short-term rent; or**
 - (iii) a Class 3, 5, 6, 7, 8, 9 or 10 building;**
- (c) an existing public transport building that is still in use on the target date mentioned in an item in the table in section 3.1.*

As per Clause 2.1(5) of the Premises Standards, an affected part is:

(5) An affected part is:

- (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.*

Therefore, the principal pedestrian entrance to the areas of work proposed is deemed to be the entrance on Farrow Road, leading to the first floor via flights of stairs. Consequently, this entrance and associated stairway, including landings and accessway, are to be made accessible. As this is new work it is discussed in Part 7 of this report.

6 Statement of Compliance

The architectural design documentation as referred to in Annexure A of this report has been assessed against the relevant provisions of the BCA and it is considered that the documentation complies or is capable of complying with the BCA as outlined in Annexure B.

Annexure A – Reviewed Documentation

This report has been based on the documentation listed below:

Architectural Details prepared by Hill Thalys Architecture		
Drawing Number	Revision	Title
DA2.01	A	Site Plan
DA2.10	C	Ground Floor Plan
DA2.11	B	Levels 1-3 and Roof Plan
DA2.31	B	Sections
DA3.10	A	Materials

Annexure B – Detailed Assessment

Outlined below is a detailed assessment of the proposal against the DtS provisions of the BCA.

All relevant DtS Clauses applicable to the proposal have been reference, Clauses not are not relevant have been deleted.

The following abbreviations have been used in the tables below:

PS	-	A Performance Solution is proposed to achieve compliance with this Clause.
CRA	-	<p>“Compliance Readily Achievable” – it is considered that whilst there is insufficient information currently provided to determine strict compliance with the DtS provisions of the BCA the proposed design is capable of comply subject to noting the requirements of the Clause.</p> <p>Additional information or documentation is necessary to confirm compliance. This may be in the form of additional drawing, a specification or design certification.</p>
Complies	-	The proposal shows compliance with the DtS Clause.
DNC	-	The design does not comply with the DtS Clause.
FI	-	Further information is required for assessment of the proposal relative to the DtS Clause.
N/A	-	The DtS Clause is not applicable at this stage to this design.
Noted	-	The DtS Clause provides information not requiring specific assessment of the proposed design.

SECTION B - STRUCTURE			
Clause		Comments	Assessment
Part B1 – Structural Provisions			
B1.0	DtS Provisions	Information only.	Noted
B1.1	Resistance to actions	Resistance to actions must be in accordance with this Clause. Structural Engineer to certify.	CRA
B1.2	Determination of individual actions	The magnitude of individual actions must be determined in accordance with this Clause.	CRA
B1.4	Determination of structural resistance of materials and forms of construction	The structural resistance of materials and forms of construction must be determined in accordance with this Clause. Structural Engineer to certify.	CRA
B1.5	Structural software	Structural software used in computer aided design of a building or structure must comply with the ABCB Protocol for Structural Software in accordance with this Clause. Structural Engineer to certify.	CRA
B1.6	Construction in buildings in flood hazard areas	A Class 2 or 3 building, Class 9a health-care building, Class 9c building or Class 4 part of a building in a flood hazard area must comply with this Clause.	CRA

SECTION C – FIRE RESISTANCE			
Clause		Comments	Assessment
Part C1 – Fire Resistance and Stability			
C1.0	DtS Provisions	Information only.	Noted
C1.1	Type of construction required	The building is to be of Type A Construction.	Noted
C1.2	Calculation of rise in storeys	The rise in storey of the building is 5. The rise in storey is the sum of storeys at any part of the external wall of the building and any storey within the roof space.	Noted
C1.3	Buildings of multiple classifications	This clause does not apply as the development does not include multiple classifications	N/A
C1.4	Mixed types of construction	This clause does not apply as the development does not propose mixed types of construction	N/A
C1.5	Two storey Class 2, 3 and 9c buildings	This clause does not apply as the development does not propose Class 2, 3 or 9c uses	N/A
C1.6	Class 4 parts of buildings	This clause does not apply as the development does not propose Class 4 uses	N/A
C1.7	Open spectator stands and indoor sports stadiums	This clause does not apply as the development does not propose Open spectator stands and indoor sports stadiums	N/A
C1.8	Lightweight construction	Lightweight construction used to achieve an FRL is to comply with this clause and as necessary Specification C1.8.	CRA
C1.9	Non-combustible building elements	Buildings of Type A and B Construction building elements are required to be non-combustible as listed within this Clause. This Clause also provides a list of materials permitted to be used wherever non-combustible materials are required. It is noted that a number of building elements are required to be of non-combustible construction, including the external walls. It should be noted that where a building element is required to be non-combustible all materials forming that element are to be non-combustible. The proposed concrete and steel construction is capable of complying with this provision	CRA
C1.10	Fire hazard properties	Fire hazard properties of all materials to comply with this Clause and Specification C1.10.	CRA

Clause		Comments	Assessment
C1.11	Performance of external walls in fire	This clause does not apply as the development does not propose precast panels	N/A
C1.13	Fire-protected timber: Concession	This clause does not apply as the development does not propose Fire protected timber	N/A
C1.14	Ancillary elements	Ancillary elements other than those listed in this Clause are not to be fixed, installed or attached to internal parts or external face of an external wall that is required to be non-combustible. Details of the proposed colour batten screens is to be confirmed as part of the Construction Certificate phase to confirm the battens are non-combustible.	CRA
Part C2 – Compartmentation and Separation			
C2.0	DtS Provisions	Information only.	Noted
C2.1	Application of Part	Clause C2.2, C2.3 and C2.4 do not apply to this development as it is an open deck carpark.	Noted
C2.2	General floor area and volume limitations	Clause C2.2, C2.3 and C2.4 do not apply to this development as it is an open deck carpark.	Noted
C2.3	Large isolated building	Clause C2.2, C2.3 and C2.4 do not apply to this development as it is an open deck carpark.	Noted
C2.4	Requirements for open spaces and vehicular access	Clause C2.2, C2.3 and C2.4 do not apply to this development as it is an open deck carpark.	Noted
C2.5	Class 9a and 9c buildings	This clause does not apply as the development does not propose Class 9a or 9c uses	N/A
C2.6	Vertical separation of openings in external walls	This clause does not apply as the development as it is an open deck carpark.	N/A
C2.7	Separation by fire walls	This clause does not apply as the development does not propose any fire walls	N/A
C2.8	Separation of classifications in the same storey	This clause does not apply as the development does not propose multiple classifications	N/A
C2.9	Separation of classifications in different storeys	This clause does not apply as the development does not propose multiple classifications	N/A
C2.10	Separation of lift shafts	The lifts connect 4 storeys and are required to be within a Fire Rated Shaft with an FRL not less than 120/120/120. FRLs to be confirmed as part of the Construction Certificate Review	FI
C2.11	Stairways and lifts in one shaft	The fire isolated stairways and lifts are not shown to be located within 1 shaft.	CRA
C2.12	Separation of equipment	Equipment including lift motor rooms, emergency generators sustaining emergency equipment operating in emergency mode, central smoke control plan, boilers or battery areas with a voltage exceeding 24 volts and a capacity exceeding 10 ampere hours are to be fire separated from the remainder of the building in accordance with this Clause.	CRA
C2.13	Electricity supply system	If the main switch room sustains emergency equipment operating in emergency mode, the room is to be separated from the remainder of the building with construction having a FRL of not less than 120/120/120. Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.	CRA
C2.14	Public corridors in a Class 2 and 3 buildings	This clause does not apply as the development does not propose Class 2 or 3 uses	N/A

Clause		Comments	Assessment
Part C3 – Protection of Openings			
C3.0	DtS Provisions	Information only.	Noted
C3.1	Application of Part	Information only.	Noted
C3.2	Protection of openings in external walls	External walls are not required to achieve an FRL in accordance with Spec C1.1 due to separation of fire source features.	N/A
C3.3	Separation of external walls and associated openings in different fire compartments	This clause does not apply as the development does not include multiple fire compartments.	N/A
C3.4	Acceptable methods of protection	External walls are not required to achieve an FRL in accordance with Spec C1.1 due to separation of fire source features.	N/A
C3.5	Doorways in fire walls	This clause does not apply as the development does not propose sliding fire walls	N/A
C3.6	Sliding fire doors	This clause does not apply as the development does not propose sliding fire walls	N/A
C3.7	Protection of doorways in horizontal exits	This clause does not apply as the development does not propose horizontal exits	N/A
C3.8	Openings in fire-isolated exits	The doorways to the fire-isolated exits are to be self-closing -/60/30 fire door sets.	CRA
C3.9	Service penetrations in fire-isolated exits	Fire-isolated exits may not be penetrated by any service other than electrical wiring for lighting and intercom systems, water supply for fire services and other fire related services.	CRA
C3.10	Openings in fire-isolated lift shafts	Lift doors are to achieve an FRL of not less than -/60- and be in accordance with this Clause. Lift indicator panes are also to comply with this Clause.	CRA
C3.11	Bounding construction: Class 2 and 3 buildings and Class 4 parts	This clause does not apply as the development does not propose Class 2 or 3 uses	N/A
C3.12	Openings in floors and ceilings for services	The DtS provisions relating to fire stopping service penetrations through the carpark levels do not apply.	N/A
C3.13	Openings in shafts	Access openings in fire rated service shafts are to be through an access panel, or self-closing fire door, having an FRL of not less than -/60/30.	CRA
C3.15	Openings for service installations	The DtS provisions relating to fire stopping service penetrations through the carpark levels do not apply.	N/A
C3.16	Construction joints	Construction joints in fire rated building elements are to be appropriately treated to maintain the integrity and insulation of the element in which they are located.	CRA
C3.17	Columns protected with lightweight construction to achieve an FRL	Any columns protected with lightweight fire rated materials to achieve a required FRL are to comply with this Clause.	CRA
Specification C1.1 – Fire Resisting Construction			
1	Scope	This Specification contains the requirements for fire resisting construction of building elements.	Noted
2	General Requirements	-	-
2.1	Exposure to FSF	The building is not exposed to a fire source feature	CRA
2.2	Fire protection for support of another part	Where a part of a building required to have a FRL depends on direct vertical or lateral support from another part to maintain its FRL. That supporting part must have a FRL not less than that required by other provisions as set out in this Clause.	CRA
2.3	Lintels	A lintel must have the FRL required for the part of the building in which it is situated unless it does not contribute to the support of a fire door, fire window or fire shutter and it otherwise complies with this Clause.	CRA

Clause	Comments	Assessment
2.4	Method of attachment reduce the fire-resistance of building element	CRA
2.5	General concessions	N/A
2.6	Mezzanine floors: Concession	N/A
2.7	Enclosure of Shafts	CRA
2.8	Carparks in Class 2 and 3 buildings	N/A
2.9	Residential aged care building: Concession	N/A
3	Type A Construction	-
3.1	Fire-resistance of building elements	The building elements are to have FRLs as determined by this Clause. See Part 4 of the Report.
3.2	Concessions for floors	A floor need not have an FRL in accordance with the concessions given in this clause.
3.3	Floor loading of Class 5 and 9b buildings: Concession	If a floor of a Class 5 or 9b building is designed for a live load not exceeding 3kPa then reductions in FRLs are available.
3.4	Roof superimposed on concrete slab: Concession	A roof superimposed on a concrete slab need not have an FRL of it complies with this Clause.
3.5	Roof: Concession	A roof need not have an FRL if its covering is non-combustible and the building meets the requirements of this Clause.
3.6	Rooflights	N/A
3.7	Internal columns and walls: Concession	N/A
3.8	Open spectator stands and indoor sports stadiums: Concession	N/A
3.9	Carparks	As this is an open deck carpark that is a separate building, the building may comply with Table 3.9 under Spec C1.1
3.10	Class 2 and 3 buildings: Concession	N/A
Specification C1.8 – Structural Tests for Lightweight Construction – N/A		
Specification C1.10 – Fire Hazard Properties		
1	Scope	This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in buildings.
2	Application	Linings, materials and assemblies must comply with the appropriate provisions described in Table 1 of this Clause.
3	Floor linings and floor coverings	Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.
4	Wall and ceiling linings	Fire hazard properties of the wall and ceiling linings are to comply with this Clause.
5	Air-handling ductwork	Fire hazard properties of the air-handling ductwork are to comply with this Clause.
6	Lift cars	Fire hazard properties of the lift cars are to comply with this Clause.
7	Other materials	Fire hazard properties of other materials not covered in Clauses 3, 4, 5 or 6 above are to comply with this Clause.
Specification C1.11 – Performance of External Walls in a Fire– N/A		
Specification C1.13 – Cavity Barriers for Fire-Protective Timber – N/A		
Specification C1.13a – Fire-protected timber – N/A		
Specification C2.5 – Smoke-Proof Walls in Health-Care and Aged Care Buildings		
Specification C3.4 – Fire Doors, Smoke Doors, Fire Windows and Shutters		
1	Scope	This Specification sets out requirements for the construction of fire doors, smoke doors, fire windows and fire shutters.
2	Fire doors	Fire doors are to comply with AS1905.1-2015 Amendment 1 and this Clause.

Clause	Comments	Assessment
3 Smoke doors	Smoke doors are to comply with this Clause.	CRA
4 Fire shutters	Fire shutters are to comply with this Clause and the manufacturer's specifications.	CRA
5 Fire windows	Fire windows are to comply with this Clause and the manufacturer's specifications.	CRA
Specification C3.15 – Penetration of Walls, Floors and Ceilings by Services – N/A		

SECTION D – ACCESS AND EGRESS		
Clause	Comments	Assessment
Part D1 – Provisions for Escape		
D1.0 DtS Provisions	Information only.	Noted
D1.1 Application of Part	Information only.	Noted
D1.2 Number of exits required	One exit is required from each portion of the building	Complies
D1.3 When fire-isolated stairways and ramps are required	The stairs are required to be fire isolated as they connect more than 2 storeys	CRA
D1.4 Exit travel distances	No point on the floor must be more than 20m to a point of choice between two exits. Furthermore, a maximum of 40m to an exit is permitted under the DtS provisions.	Complies
D1.5 Distance between alternative exits	The distance between alternative exits must not exceed 60m	Complies
D1.6 Dimensions of exits and paths of travel to exits	Exits are to be a minimum width of 1m.	Complies
D1.7 Travel via fire-isolated exits	Walls within 6.0m of the discharge point of the fire isolated exit to achieve an FRL of 60/60/60.	CRA
D1.8 External stairways or ramps in lieu of fire-isolated exits	This clause does not apply as the development does not propose external stairs	N/A
D1.9 Travel by non-fire-isolated stairways or ramps	This clause does not apply as the development does not propose non-fire isolated exits	N/A
D1.10 Discharge from exits	1.0m pathway to be provided from the discharge of exits to the street.	CRA
D1.11 Horizontal exits	This clause does not apply as the development does not propose horizontal exits	N/A
D1.12 Non-required stairways, ramps or escalators	This clause does not apply as the development does not propose non-required stairs or ramps or escalators	N/A
D1.13 Number of persons accommodated	475 occupants calculated in accordance with this clause.	Noted
D1.14 Measurement of distances	Information only.	Noted
D1.15 Method of measurement	Information only.	Noted
D1.16 Plant rooms, lift machine rooms, electricity network substations: Concession	Access to plant rooms may be in accordance with this provision	N/A
D1.17 Access to lift pits	Access to lift pits to be provided in accordance with these provisions.	CRA
Part D2 – Construction of Exits		
D2.0 DtS Provisions	Information only.	Noted
D2.1 Application of Part	Information only.	Noted
D2.2 Fire-isolated stairways and ramps	The Fire isolated stairs must be non-combustible.	CRA
D2.3 Non-fire-isolated stairways and ramps	This clause does not apply as the development does not propose non-fire isolated stairs or ramps	N/A

Clause		Comments	Assessment
D2.4	Separation of rising and descending stair flights	This clause does not apply as the development does not contain rising stairs	N/A
D2.5	Open access ramps and balconies	This clause does not apply as the development does not propose open access ramps or balconies	N/A
D2.6	Smoke lobbies	This clause does not apply as the development does not require smoke lobbies	N/A
D2.7	Installations in exits and paths of travel	Access to services may not be via the fire isolated exit.	CRA
D2.8	Enclosure of space under stairs and ramps	The space below the fire isolated stairs are not shown to be enclosed to form a cupboard.	CRA
D2.9	Width of required stairways and ramps	This clause does not apply as the stairs are not greater than 2.0m in width.	N/A
D2.10	Pedestrian ramps	This clause does not apply as ramps are not proposed as required exits.	N/A
D2.11	Fire-isolated passageways	This clause does not apply to the development as fire isolated passageways are not proposed.	N/A
D2.12	Roof as open space	This clause does not apply to the development as it does not incorporate a roof as open space	N/A
D2.13	Goings and risers	Stair geometry and treads slip resistance must comply with this Clause.	CRA
D2.14	Landings	Landings are to be in accordance with this provision	CRA
D2.15	Thresholds	Door thresholds comply with this provision	Complies
D2.16	Barriers to prevent falls	Barriers (balustrades) are to comply with this Clause. Please ensure the gap on the top barrier and the handrail is minimized or removed in future drawing	CRA
D2.17	Handrails	Handrails are to comply with this Clause.	CRA
D2.18	Fixed platforms, walkways, stairways and ladders	Where used must comply with AS1657, not proposed at this time.	Noted
D2.19	Doorways and doors	Swinging doors proposed as required exits	Complies
D2.20	Swinging doors	Swinging doors are shown to be swinging in the direction of egress	Complies
D2.21	Operation of latch	Door latch to be in accordance with these provisions. Details to be reviewed at Construction Certificate phase.	CRA
D2.22	Re-entry from fire-isolated exits	This clause does not apply as the building has an effective height of less than 25m.	N/A
D2.23	Signs on doors	Signage is to be located on all fire and smoke doors in accordance with this Clause. For self-closing doors the sign is to stay “FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN” and for the door discharging from a fire-isolated exit “FIRE SAFETY DOOR – DO NOT OBSTRUCT”. The text is to be a minimum of 20mm in height and a colour contrasting to the background of the sign.	CRA
D2.24	Protection of openable windows	Windows to the bedrooms of the Class 2 and 3 parts are to be provided with window locks in accordance with this Clause.	CRA
D2.25	Timber stairway: Concession		N/A
Part D3 – Access for People with a Disability			
D3.0	DtS Provisions	Information only.	Noted
D3.1	General building access requirements	Access to be provided to every level containing accessible car parking.	Noted
D3.2	Access to buildings	An accessway is to be provided from the boundary to the main entrance of the building and to each level containing accessible parking. The development is capable of complying with this provision. Details of any step or threshold ramps to be reviewed as part of the Construction Certificate phase.	CRA

Clause		Comments	Assessment
D3.3	Part of buildings to be accessible	Fire isolated stairs are required to comply with Clause 11(f) & (g) of AS 1428.1	CRA
D3.4	Exemptions	No portion of the building has been exempt in accordance with this provision.	N/A
D3.5	Accessible carparking	1 accessible car space must be provided for every 100 spaces. The development includes 500 car spaces, and therefore a minimum of 5 accessible car spaces is required. A total of 6 accessible spaces are provided and therefore complies	Complies
D3.6	Signage	Braille and tactile signage is to be provided in accordance with this Clause and Specification D3.6, throughout the building. Signage will need to be located to achieve compliance. Signs with single lines of characters must have: a) the line of tactile (braille) characters not less than 1250 mm and not higher than 1350 mm above the floor; and b) be located on the latch side of the door 50-300mm from the architrave. Where this is not possible and only when this is not possible the sign may be placed on the door itself. Where illuminated exit signage is provided to an exit door a braille and tactile sign complying with this Clause is to be provided stating "Exit" and the level number and/or both descriptor, for example "Basement Level, Carpark".	CRA
D3.7	Hearing augmentation	Required in auditoriums, conference room, or the like, ticket booths, reception areas, areas where the public is screened off from the service provider and in class 9b buildings.	N/A
D3.8	Tactile indicators	Tactile indicators are to be provided to warn people that they are approaching a stairway, ramp or overhead obstruction. Tactiles are to comply with this Clause and AS/NZS1428.4.1-2009.	CRA
D3.9	Wheelchair seating spaces in Class 9b assembly buildings	N/A	N/A
D3.10	Swimming pools	N/A	N/A
D3.11	Ramps	On an access way, a series of connected ramps are not to have a combined vertical rise of 3.6m or more. A landing for a step ramp may not overlap a landing for another step ramp or ramp.	N/A
D3.12	Glazing on an accessway	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, must be clearly marked in accordance with AS/NZS1428.4.1-2009.	N/A
Specification D1.12 – Non-Required Stairways, Ramps and Escalators - N/A			
Specification D3.6 – Braille and Tactile Signs			
1	Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by Clause D3.6.	Noted
2	Location of braille and tactile signs	Braille and tactile signage are to be located in accordance with this Clause which sets out signage heights, locations and details of braille and tactile exit signage.	CRA
3	Braille and tactile sign specification	Braille and tactile signage is to have characters in accordance with this Clause.	CRA
4	Luminance Contrast	The luminance contrast of the signage is to comply with this Clause.	CRA
5	Lighting	Braille and tactile signage must be illuminated to ensure the luminance contrast requirements are met at all times during which the sign is required to be read.	CRA
6	Braille	The braille characters are to comply with Clause.	CRA
Specification D3.10 – Accessible Water Entry/Exit for Swimming Pools - N/A			

SECTION E – SERVICES AND EQUIPMENT

Clause		Comments	Assessment
Part E1 – Fire Fighting Equipment			
E1.0	DtS Provisions	Information only.	Noted
E1.3	Fire hydrants	Hydrants required to AS 2419.1 Hydrant design to be provided as part of the Construction Certificate Review	CRA
E1.4	Fire hose reels	Fire Hose reels are required to AS 2441. Fire Hose Reel design to be provided as part of the Construction Certificate Review	CRA
E1.5	Sprinklers	As the building is less than 25m in effective height and is an open deck carpark, sprinkler protection is not required.	N/A
E1.6	Portable fire extinguishers	The building is to be provided with portable fire extinguishers. Within the residential areas a 2.5kg ABE powder extinguisher is to be located within 10m of all unit entry doors.	CRA
E1.8	Fire control centres	This clause does not apply to the development as the building is less than 25m and Class 6, 7, 8 and 9 and has a floor area less than 18,000m ² .	N/A
E1.9	Fire precautions during construction	In a building under construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit. After the building has reached an effective height of 12m the fire hydrant and hose reels are to be operational in at least every storey covered by a roof or floor, except the 2 uppermost storeys. The fire hydrant booster connections must also be installed.	Noted
E1.10	Provisions for special hazards	No special hazards have been identified for this project.	N/A
Specification E1.5 – Fire Sprinkler Systems – N/A			
Specification E1.5a – Class 2 and 3 buildings not more than 25m in effective height – N/A			
Specification E1.8 – Fire Control Centres– N/A			
Part E2 – Smoke Hazard Management			
E2.0	DtS Provisions	Information only.	Noted
E2.1	Application of Part	Part E2 does not apply to Open Deck Carparks.	Noted
E2.2	General requirements	N/A	N/A
E2.3	Provision for special hazards	N/A	N/A
Specification E2.2a – Smoke Detection and Alarm Systems - N/A			
Specification E2.2b – Smoke Exhaust Systems - N/A			
Specification E2.2c – Smoke and Heat Vents – N/A			
Specification E2.2d – Residential fire safety systems – N/A			
Part E3 – Lift Installations			
E3.0	DtS Provisions	Information only.	Noted
E3.1	Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1.	CRA
E3.2	Stretcher facility in lifts	Lifts to accommodate a stretcher at least 600mm x 2000mm x 1400mm	Complies
E3.3	Warning against use of lifts in fire	Warning signage stating DO NOT USE LIFTS IF THERE IS A FIRE is to be provided in accordance with this Clause.	CRA
E3.4	Emergency lifts	Emergency lifts not required	N/A
E3.5	Landings	Access and egress to and from a liftwell landing must comply with Section D.	CRA
E3.6	Passenger lifts	Lifts to comply with this provision	CRA

Clause	Comments	Assessment
E3.7 Fire service controls	Where a lift serves a storey with an effective height of greater than 12 a fire service recall control switch and a lift car fire service drive control switch are to be provided in accordance with this Clause.	CRA
E3.8 Residential care buildings	Where residents in a Class 9a aged care building are on levels which do not have direct access to a road or open space the building is to be provided with at least one lift with a stretcher facility or a ramp, in accordance with this Clause.	N/A
E3.9 Fire service recall control switch	Where required by Clause E3.7 a fire service recall control switch is to be provided in accordance with this Clause.	CRA
E3.10 Lift car fire service drive control switch	Where required by Clause E3.7 a lift car fire service drive control switch is to be provided in accordance with this Clause.	CRA
Specification E3.1 – Lift Installations		
1 Scope	This Specification contains requirements for electric passenger lift installations and electrohydraulic passenger lift installations	Noted
2 Lift cars exposed to solar radiation	A lift car exposed to solar radiation directly, or indirectly through re-radiation must comply with this Clause.	CRA
3 Lift car emergency lighting	A lift car must have emergency lighting complying with this Clause.	CRA
4 Cooling of lift shaft	While in service a lift shaft must have cooling in accordance with this Clause.	CRA
5 Lift foyer access	Where there is a security foyer in a building access may be via locked security doors provided measures as set out in this Clause are in place.	CRA
6 Emergency access doors in a single enclosed lift shaft	Emergency access doors in a single enclosed lift shaft are to be in accordance with this Clause.	CRA
Part E4 – Emergency Lighting, Exit Signs and Warning Systems		
E4.0 DTS Provisions	Information only.	Noted
E4.2 Emergency lighting requirements	The building is to be provided with emergency lighting in accordance with this Clause.	CRA
E4.3 Measurement of distance	Information only.	Noted
E4.4 Design and operation of emergency lighting	The emergency lighting system is to comply with AS2293.1-2005.	CRA
E4.5 Exit signs	Exit signs to be provided in accordance with this provision. Details to be provided as part of the Construction Certificate review	CRA
E4.6 Direction signs	Exit signs to be provided in accordance with this provision. Details to be provided as part of the Construction Certificate review	CRA
E4.7 Class 2 and 3 buildings and Class 4 parts: Exemptions		N/A
E4.8 Design and operation of exit signs	The exit lighting system is to comply with AS2293.1-2004 to 2018.	CRA
E4.9 Emergency warning and intercom systems	EWIS not required for this building.	N/A
Specification E4.8 – Photoluminescent Exit Signs		
1 Scope	This Specification contains the requirements for photoluminescent exit signs	Noted
2 Application	A photoluminescent exit sign must comply with Section 6 and Appendix D of AS2293.1-2005, except as varied by this Specification.	Noted
3 Illumination	If photoluminescent is proposed it is to comply with this Clause.	CRA
4 Pictorial elements	If photoluminescent is proposed it is to comply with this Clause.	CRA
5 Viewing distance	If photoluminescent is proposed it is to comply with this Clause.	CRA
6 Smoke control systems	If photoluminescent is proposed it is to comply with this Clause.	CRA

SECTION F – HEALTH AND AMENITY		
Clause	Comments	Assessment
Part F1 – Damp and Weatherproofing		
F1.0	DtS Provisions	Information only.
F1.1	Stormwater drainage	Stormwater drainage is to comply with AS/NZS3500.3-2015.
F1.4	External above ground membranes	Waterproofing membranes for external above ground use, such as balconies and roofs, must comply with AS4654.1-2012 and AS4654.2-2012.
F1.5	Roof coverings	A roof must be covered with materials set out in this Clause in accordance with the relevant standard also set out in this Clause.
F1.6	Sarking	Sarking type materials used for weatherproofing of roofs and walls must comply with AS4200.1-1994 and AS4200.2-1994.
F1.7	Waterproofing of wet areas in buildings	Waterproofing of wet areas in buildings must comply with this Clause, and AS3740-2010.
F1.9	Damp-proofing	Damp-proofing is to be provided in accordance with this Clause. Where a damp-proof course is provided the material must comply with AS/NZS2904-1995 or impervious termite shields in accordance with AS3660.1-2014.
F1.10	Damp-proofing of floors on the ground	Damp-proofing of floors on the ground is to be in accordance with this Clause. Where required the vapour barrier is to comply with AS2870-2011.
F1.11	Provision of floor wastes	In a Class 2, 3 or 4 building, or part, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste and the floor graded to the floor waste to permit the drainage of water.
F1.12	Sub-floor ventilation	Where provided sub-floor ventilation is to be in accordance with this Clause.
F1.13	Glazed assemblies	Glazed assemblies in external walls or roofs are to comply with AS2047-2014 or AS1288-2006 as required by this Clause and BCA Clause B1.4.
Part F2 – Sanitary and Other Facilities		
F2.0	DtS Provisions	Information only.
F2.1	Facilities in residential buildings	Not residential
F2.2	Calculation of number of occupants and facilities	Noted. 475 occupants have been calculated using table D1.13
F2.3	Facilities in Class 3 to 9 buildings	Class 7 buildings are to be provided with sanitary facilities for employees only. The plans do not indicate staff rooms or areas and therefore it has been assumed that the building will not be occupied by staff and therefore sanitary facilities will not be required.
F2.4	Accessible sanitary facilities	As sanitary compartments are not required, accessible sanitary facilities are also not required.
F2.5	Construction of sanitary compartments	Not applicable
F2.6	Interpretation: Urinals and washbasins	-
F2.7	Microbial (legionella) control	This Clause is deleted from the BCA in NSW, as the installation of hot water, warm water and cooling water systems is regulated in the Public Health Regulation 2012.
F2.8	Waste management	Not applicable to this development as it is not a Class 9a health care building.
F2.9	Accessible adult change facilities	Not applicable to this development.
Specification F2.9 – Accessible adult change facilities – N/A		
Part F3 – Room Heights		
F3.0	DtS Provisions	Information only.

Clause	Comments	Assessment
F3.1 Height of rooms and other spaces	Carpark to achieve a minimum floor to ceiling of at least 2.1m	Complies
Part F4 – Light and Ventilation		
F4.0 DtS Provisions	Information only.	Noted
F4.1 Provisions of natural light	Natural light must be provided to class 2, 4, 3 and 9a/9c buildings in accordance with this part	N/A
F4.2 Methods and extent of natural light	N/A	N/A
F4.3 Natural light borrowed from adjoining room	N/A	N/A
F4.4 Artificial lighting	Artificial lighting to comply with AS 1680	CRA
F4.5 Ventilation of rooms	N/A	N/A
F4.6 Natural ventilation	N/A	N/A
F4.7 Ventilation borrowed from adjoining room	N/A	N/A
F4.8 Restriction on location of sanitary compartments	No sanitary compartments proposed	N/A
F4.9 Airlocks	No sanitary compartments proposed	N/A
F4.11 Carparks	Every storey of a carpark, except an open-deck carpark, must have a system of mechanical ventilation complying with AS1668.2-2012 or a system of natural ventilation complying with Section 4 of AS1668.4-2012. Method to be confirmed as part of the Construction Certificate Review.	CRA
F4.12 Kitchen local exhaust ventilation	N/A	N/A
Part F5 – Sound Transmission and Insulation – N/A		
F5.0 DtS Provisions	Information only.	Noted
F5.1 Application of Part	This Part applies to Class 2, 3 and 9c buildings.	Noted
Specification F5.2 – Sound Insulation for Building Elements – N/A		
1 Scope	This Specification contains details of common forms of construction and their weighted sound reduction index.	Noted
2 Construction DtS	Information only.	Noted
Specification F5.5 – Impact Sound – Test of Equivalence – N/A		
1 Scope	This Specification describes a method of test to determine the comparative resistance of walls to the transmission of impact sound	Noted
2 Construction to be tested	Information only.	Noted
3 Method	Information only.	Noted
Part F6 – Condensation management– N/A		
F6.1 Application of part	Part F6 applies to Class 2 and 4 buildings	N/A

SECTION G – ANCILLARY PROVISIONS

Clause	Comments	Assessment
Part G1 – Minor Structures and Components		
G1.0 DtS Provisions	Information only.	Noted
G1.1 Swimming pools	The swimming pool is to be surrounded with a barrier meeting the requirements of the Swimming Pools Act 1992 and Swimming Pools Regulation 2008 and AS1926.1-2012 and AS1926.2-2007 as applicable. A swimming pool water reticulation system is to comply with AS1926.3-2010.	N/A
G1.2 Refrigerated chambers, strong-rooms and vaults	Refrigerated chambers, strong-rooms and vaults that are of a sufficient size for a person to enter are to have facilities meeting the requirements of this Clause.	N/A

Clause	Comments	Assessment
G1.3 Outdoor play spaces	Outdoor play spaces in a Class 9b early childhood centre are to be provided with a barrier complying with this Clause.	N/A
NSW G1.101 Provision for cleaning windows	A building must be provided with a safe manner of cleaning any windows located 3 or more storeys above the ground level via either windows that can be cleaned wholly from within the building or provision for the cleaning of the windows by a method complying with the WH&S Act 2001 and regulations made under that Act.	N/A
Part G2 – Boilers, Pressure Vessels, Heating Appliances, Fire Places, Chimneys and Flues - N/A		
Specification G2.2 – Installation of Boilers and Pressure Vessels- N/A		
Part G3 – Atrium Construction - N/A		
G3.1 Application of Part	<p>This Part applies to an atrium that connects more than 2 storeys, or more than 3 storeys if each storey is provided with a sprinkler system and one of those storeys is located at a level with direct egress to a road or open space.</p> <p>The void in the centre of the building is not deemed an atrium as it is not enclosed at the top</p>	N/A
Specification G3.8 – Fire and Smoke Control Systems in Buildings Containing Atriums - N/A		
Part G4 – Construction in Alpine Areas- N/A		
G4.0 DtS Provisions	Information only.	Noted
G4.1 Application of Part	This Part applies to any building constructed in an alpine area in addition to other DtS Clauses of the BCA. Where a Clause in this Part and another Clause conflict the provisions of this Part take precedence.	N/A
Part G5 – Construction in Bushfire Prone Areas		
G5.0 DtS Provisions	Information only.	Noted
G5.1 Application of Part	This Part applies to any Class 2 or 3 building and any Class 10a building associated with a Class 2 or 3 building constructed in designated bushfire prone area.	CRA
NSW G5.2 Protection	In a designated bushfire prone area, a Class 2 building, a Class 3 building, a Class 4 part of a building or a Class 9 building that is a special fire protection purpose or a Class 10a building or deck associated with such a building or part must comply with this Clause.	CRA
Part G6 – Occupiable outdoor areas - N/A		
G6.1 Application of Part	This part applies to outdoor occupiable areas	N/A

SECTION H – SPECIAL USE BUILDINGS

Clause	Comments	Assessment
Part H1 – Class 9b Buildings - N/A		
H1.1 Application of Part	<p>The DtS Provisions of this Part apply to every enclosed Class 9b building</p> <p>This building is not class 9b</p>	N/A
NSW Part H101 – Entertainment Venues other than Temporary Structures and Drive-in Theatres – N/A		
NSW Part H102 – Temporary Structures– N/A		
NSW H102.1 Application of Part	This Part applies to temporary structures used as “entertainment venues”.	N/A
NSW Part H103 – Drive-In Theatres		
NSW H103.1 Application of Part	This Part applies drive-in theatres.	N/A
Part H2 – Public Transport Buildings– N/A		
H2.1 Application of Part	This Part applies to the passenger use areas of a Class 9b or Class 10 building used for public transport.	N/A
Part H3 – Farm Buildings and Farm Sheds– N/A		
H3.1 Application of Part	This Part applies to the farm buildings and farm sheds as defined by the BCA.	N/A
Specification H1.3 – Construction of Theatres with Proscenium Walls – N/A		

Clause	Comments	Assessment
1 Scope	This Specification contain the requirements for the construction of proscenium walls for theatres, public halls or the like.	N/A

SECTION J – ENERGY EFFICIENCY

A separate Section J Report is to be obtained to confirm compliance with this Section.

Please contact Credwell Energy on 02 9281 8555 or info@credwell.com.au for further information.