

BUILDING CODE OF AUSTRALIA ASSESSMENT REPORT



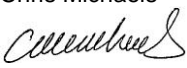

Block 4N

Project:

Central Park, Block 4N

Client: Central Park JV No. 2
Report: RE142561 Issue 2
Date: 22 October 2014

Report Revision History
Report No: RE142555

Revision	Date Issued	Comment	Prepared By	Verified By
Draft	09.09.14	Draft issue for comment	Chris Michaels	
Issue 1	16.10.14	Issued for planning submission	Chris Michaels 	Adam DeLooze 
Issue 2	22.10.14	Re Issued for planning submission following receipt of comments	Chris Michaels 	Adam DeLooze 

Disclaimer

The information contained in this report is provided for the sole use of the recipient and no reliance should be placed on the information by any other person. In the event that the information is disclosed or furnished to any other person, City Plan Services Pty Ltd accepts no liability for any loss or damage incurred by that person whatsoever as a result of using the information.

Table of Contents

1.0	EXECUTIVE SUMMARY	4
2.0	INTRODUCTION	6
1.1	GENERAL	6
1.2	PURPOSE OF THE REPORT	6
1.3	REPORT BASIS	6
1.4	EXCLUSIONS & LIMITATIONS	7
3.0	BUILDING CODE OF AUSTRALIA ASSESSMENT	8
3.1	CLASSIFICATION (A3.2)	8
3.2	EFFECTIVE HEIGHT (A1.1)	9
3.3	RISE IN STOREYS (C1.2)	9
3.4	TYPE OF CONSTRUCTION (C1.1)	9
4.0	BUILDING CODE OF AUSTRALIA ASSESSMENT	10
4.1	STRUCTURE (BCA SECTION B)	10
4.2	FIRE RESISTANCE (BCA SECTION C)	11
4.3	FIRE-RESISTING CONSTRUCTION (SPECIFICATION C1.1)	15
4.4	ACCESS & EGRESS (BCA SECTION D)	17
4.5	SERVICES & EQUIPMENT (BCA SECTION E)	25
4.5	HEALTH & AMENITY (BCA SECTION F)	27
4.6	ANCILLARY PROVISIONS (SECTION G)	30
4.7	ENERGY EFFICIENCY – (SECTION J – CLASS 3 - 9 BUILDINGS)	30
4.7.1	<i>External fabric (Part J1)</i>	30
4.7.2	<i>External Glazing (Part J2)</i>	31
4.7.3	<i>Building Sealing (Part J3)</i>	32
4.7.4	<i>Air Conditioning and Ventilation Systems (Part J5)</i>	32
4.7.5	<i>Artificial Lighting and Power (Part J6)</i>	33
4.7.6	<i>Hot Water Supply and Swimming Pool and Spa Pool Plant (Part J7)</i>	34
4.7.7	<i>Access for Maintenance and Facilities for Energy Monitoring (Part J8)</i>	34
4.8	ENERGY EFFICIENCY – (SECTION J – CLASS 2 & 4 BUILDINGS)	34
4.8.1	<i>Building Fabric (NSW Part J(A)1)</i>	34
4.8.2	<i>Building Sealing (NSW Part J(A)2)</i>	35
4.8.3	<i>Air-Conditioning and Ventilating system (NSW Part J(A)3)</i>	36
4.8.4	<i>Hot Water Supply (NSW Part J(A)4)</i>	37
4.8.5	<i>Access for Maintenance (NSW Part J(A)5)</i>	37
5.0	FIRE SAFETY SCHEDULE	38
6.0	SUMMARY OF NON-COMPLIANCE ISSUES	40
7.0	CONCLUSION	40
	APPENDIX 1	42

1.0 EXECUTIVE SUMMARY

The State Significant Development Application seeks approval for the redevelopment of Block 4N as a mixed use building, with associated non-residential/retail uses located on ground floor. Specifically, the proposal includes the following uses:

- Residential – 3,518 m² located on levels 11 to 16 consisting of 48 permanent residential apartments
- Retail – 236 m² located on the ground level with frontage to Central Park Ave
- Hotel – 13,986 m² located from ground to level 18 – approximately 283 hotel rooms
- Commercial – 6,146 m² located on levels 5 to 10
- Childcare Centre (shell space) – 1,080m² located on level 3 and 4.
- Existing Australia Hotel and Terraces (Heritage Pub and Terraces) – 789 m²

The existing Australia Hotel and adjoining Abercrombie Street terraces will be retained, with the design creating a publicly accessible courtyard behind the terraces, accessible from Broadway and Abercrombie Street.

A combined basement below Block 1 and 4N is proposed, that will accommodate all car parking, bicycle parking, residential and commercial storage, waste handling, back of house facilities, building plant and services. The basement will have a connection into Block 4S and Central Park's Central Thermal Plant. Service Vehicle loading is provided via the Abercrombie Street access ramp, and car park access for residents, hotel guests, office, retail and childcare drop off carspaces provided via Central Park Avenue.

This report has been prepared, on behalf of Frasers Property Australia Pty Ltd, to establish compliance to the Building Code of Australia and relevant Acts and Regulations of the planning development application documentation for the proposed works. Unless specifically noted this assessment and report deals with the proposed building works.

The following non-compliance's with the deemed-to-satisfy provisions of the BCA, in relation to the proposed building work, have been identified and are proposed to be dealt by justification against the performance requirements of the BCA in accordance with BCA Clause A0.5 (b).

C2.7 Separation by fire walls	Glazed construction forming part of the fire walls is required to be performance justified. The Australian Hotel is to be assessed as a separate building for the purposes of the BCA. The terraces are also to be assessed as separate buildings for the purposes of the BCA. Separation is to be performance justified as it incorporates horizontal separation elements and non-fire rated vertical separating elements.
C2.14 Public corridors in Class 2 & 3 buildings	The building contain public corridors more than 40 m in length as follows: Hotel Levels 04 & Level H5 - H18: 62 m
C3.3 Separation of external walls and associated openings in different fire compartments	Location of fire walls are to be identified during design development (refer to C2.7). External wall openings, such as windows, within the minimum setbacks identified in this clause, which have not protected in accordance with this clause are to be performance justified.
Clause 3.1 of Specification	The fire compartment containing the loading dock attracts 4 hrs fire

C1.1	resistance. Performance justification is proposed.
D1.2 Number of exits required	The Level 01 & 02 retail above the loading bay entrance only has access to only one exit. This is to be assessed by performance justification against the relevant performance requirements of the BCA.
D1.4 Exit travel distances	<p>The Hotel contains a hotel rooms on Level 02 (north end) that are up to 8.7 m from a point of choice. Performance justification is proposed. The following areas have has travel of more than 20 m to point of choice:</p> <ul style="list-style-type: none">• The Level 01 & 02 retail tenancy above the loading bay entrance: 22 m to the exit stair on an open floor plan• Basement car park 04, 03 & 02, 01 & 00: up to 30 m <p>Performance justification is proposed.</p> <p>The carpark has travel of more than 40 m to point of choice in the following areas:</p> <ul style="list-style-type: none">• Basement 04: up to 60 m• Basement 03 & 02 : up to 55 m• Basement 01: generally up to up to 60 m however some plant rooms at the southern end have travel up to 70 m.• Basement 00: 45 m <p>Performance justification is proposed.</p>
D1.5 Distance between alternative exits	Exits required as alternative means of egress must be located not less than 9m apart and located so that the alternative paths of travel do not converge such that they become less than 6m apart. The Level 02 Hotel south fire stair is 5.7m from the open stair.
D1.7 Travel via fire isolated exits	<p>Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or a covered area in accordance with this clause. The discharge of the fire stairs do not comply as they are:</p> <p>(a) within a covered area that is not open for at least 1/3 of its perimeter; and</p> <p>(b) The south west basement stair discharge is 14 m to open space.</p>
E1.3 Fire hydrants	The hydrant booster is located in Block 1. This requires performance justification.
E1.8 Fire control room	A fire control room in accordance with Specification E1.8 must be provided. The location of the fire control room in Block 1 is to be performance justified.
E2.2 Smoke Hazard Management	<p>The Class 9b portion on Level 01 (conference) is located in a fire compartment more than 2000 m² and therefore requires smoke exhaust. This is to be performance justified.</p> <p>Sequencing of evacuation of the united building (Building 1 & 4N and basements) on activation smoke/fire alarm is to be performance justified.</p> <p>Zone smoke control is not proposed to the loading dock. Performance justification is proposed.</p>

The design as proposed is capable of complying with the Building Code of Australia, and will be subject to construction documentation that will provide appropriate details to demonstrate compliance. This report has identified areas of non-compliance with the deemed-to-satisfy provisions and indicates the design intent to demonstrate compliance with the Performance Requirements of the BCA. Whilst the performance based solutions are to be design developed, it is my view that the solutions will not impact on the current design.

2.0 INTRODUCTION

1.1 General

The State Significant Development Application seeks approval for the redevelopment of Block 4N as a mixed use building, with associated non-residential/retail uses located on ground floor. Specifically, the proposal includes the following uses:

- Residential – 3,518 m² located on levels 11 to 16 consisting of 48 permanent residential apartments
- Retail – 236 m² located on the ground level with frontage to Central Park Ave
- Hotel – 13,986 m² located from ground to level 18 – approximately 283 hotel rooms
- Commercial – 6,146 m² located on levels 5 to 10
- Childcare Centre (shell space) – 1,080m² located on level 3 and 4.
- Existing Australia Hotel and Terraces (Heritage Pub and Terraces) – 789 m²

The proposal has a total GFA of 25,755 m² of which 22,237 m² is to be used for non-residential purposes and 3,518 m² is to be used for residential purposes.

Hotel facilities, including concierge, storage, swimming pool, spa, gym, conference facilities, will be located within the building. The hotel swimming pool, spa and gym will also be made available to permanent residents. Separate entries and lobbies are proposed to the commercial office, childcare, hotel and permanent residential.

The existing Australia Hotel and adjoining Abercrombie Street terraces will be retained, with the design creating a publicly accessible courtyard behind the terraces, accessible from Broadway and Abercrombie Street.

A combined basement below Block 1 and 4N is proposed, that will accommodate all car parking, bicycle parking, residential and commercial storage, waste handling, back of house facilities, building plant and services. The basement will have a connection into Block 4S and Central Park's Central Thermal Plant. Service Vehicle loading is provided via the Abercrombie Street access ramp, and car park access for residents, hotel guests, office, retail and childcare drop off carspaces provided via Central Park Avenue. The basement will accommodate a total of 130 car parking spaces for the proposed Block 4N use. Additional spaces are provided within the basement that will service Block 1 and the Brewery Yard building as shown on the Architectural Plans.

1.2 Purpose of the Report

This report has been prepared, on behalf of Frasers Property Australia Pty Ltd, to establish compliance to the Building Code of Australia and relevant Acts and Regulations of the development application documentation for the proposed works.

1.3 Report Basis

This report is based on:

- i. Architectural plans prepared by Foster & Partners, as identified in the attached Appendix 1.
- ii. The Building Code of Australia 2014, inclusive of NSW variations (See Note 1).

- iii. Environmental Planning and Assessment Act 1979.
- iv. Environmental Planning and Assessment Regulation 2000.

Notes (1) Building Code of Australia (BCA) 2014 was adopted in NSW on 1 May 2014. The amendment of the BCA in force at the date of lodgement of a Construction Certificate application is the version called up by Clause 98 of the Environmental Planning & Assessment Regulation 2000 for the purpose of the building design. Therefore comments may be subject to changes to comply with updated versions of the Building Code of Australia.

1.4 Exclusions & Limitations

This report has been prepared based on the following limitations and exclusions;

- i. This report does not deal with the Australian Hotel or the Terraces unless specifically mentioned.
- ii. Structural design or design of the building, and
- iii. The design basis and/or operating capabilities of electrical, mechanical, hydraulic or fire protection services, and
- iv. This report does not consider heritage significance, and
- v. This report does not include or imply compliance with;
 - a) The Disability Discrimination Act 1992;
 - b) Demolition Standards not referred to by the BCA;
 - c) Occupational Health & Safety Act;
 - d) Construction Safety Act;
 - e) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Sydney Water, Electricity Supply Authority, WorkCover, TR&MS, Council and the like; and
 - f) Requirements of planning legislation, and
 - g) Any conditions of Development Consent.
- vi. The use of this report is limited to its intended purposes and shall not be relied upon by any other party.

3.0 BUILDING CODE OF AUSTRALIA ASSESSMENT

3.1 Classification (A3.2)

The proposed building consists of a mixture of classifications, as follows.

Basement	Basement 04 - 02:	Class 7a Carpark
	Basement 01:	Class 7a Carpark Class 7b Loading dock
	Basement 00:	Class 3 Hotel (ancillary) Class 5 Office Class 7a carpark
Hotel	Level 00:	Class 6 Restaurant Class 9b Assembly
	Level 01:	Class 9b Conference
	Level 02:	Class 3 Hotel Class 5 Office
	Level 03:	Class 9b Assembly
	Level 04 & H5- H18:	Class 3 Hotel
	Roof level:	Class 3 Ancillary plant
Office/Child Care/ Residential	Level 00:	Class 5 Office Class 9b Child care Class 6 Retail
	Level 01:	Class 6 Retail
	Level 02:	Class 6 Retail
	Level 03 - 04:	Class 9b Childcare
	Level 05 - 10:	Class 5 Office
	Level 11 - 16:	Class 2 Residential
	Roof level:	Plant
Australian Hotel	Level 00:	Class 6 Retail
	Level 01:	Class 6 Retail
	Level 02:	Class 6 Retail
Terraces	Level 00:	Retail Use
	Level 01:	Retail Use

3.2 Effective Height (A1.1)

The proposed building will have an effective height of 63.15 m (RL 73.4 (L18) - RL 10.25 (GF)).

3.3 Rise in Storeys (C1.2)

The proposed building will consist of a rise in storeys of nineteen (19)

3.4 Type of Construction (C1.1)

Type A construction in accordance with Specification C1.1 of the BCA, is the applicable type of construction.

4.0 BUILDING CODE OF AUSTRALIA ASSESSMENT

4.1 Structure (BCA Section B)

BCA Clause	Title	Assessment and Comment	Status
B1.1	Resistance to actions	The resistance of the building must be greater than the most critical action effects resulting from different combinations of actions as required by this clause.	Note
B1.2	Determination of individual actions	<p>The building is to be designed and constructed to accommodate the magnitude of individual actions, in accordance with this clause, generally covering;</p> <ul style="list-style-type: none"> (a) Permanent actions (b) Imposed actions (c) Wind, snow and ice and earthquake actions (d) Other specified actions <p>A structural engineer is to provide design certification at the Construction Certificate stage that the building has been designed to the relevant structural standards and maintain appropriate supervision during construction to certify that the structure has been constructed in accordance with the design.</p>	The proposed building is capable of complying
B1.4	Determination of structural resistance of materials & forms of construction	<p>The structural resistance of the following materials and forms of construction must be determined, in accordance with this clause;</p> <ul style="list-style-type: none"> (a) Masonry (b) Concrete construction (c) Steel construction (d) Composite steel and concrete (e) Aluminium construction (f) Timber construction (g) Piling (h) Glazing assemblies (i) Termite risk management (j) Roof construction (k) Particleboard structural flooring (l) Garage doors (m) Lift shafts <p>A structural engineer is to provide design certification at the Construction Certificate stage that the building has been designed to the relevant structural standards and maintain appropriate supervision during construction to certify that the structure has been constructed in accordance with the design.</p> <p>Should any primary building element be constructed of timber, termite risk management will be required to be provided in accordance with this clause.</p>	The proposed building is capable of complying
B1.5	Structural Software	Structural software used in computer aided design is to comply with the requirements of this provision. A Structural engineer is to provide design certification at the Construction Certificate stage.	The proposed building is capable of complying
B1.6	Construction of buildings in flood hazard areas	A Class 2 or 3 building, Class 9a health-care building, Class 9c aged-care building or Class 4 part of a building, in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas. Design certification will be provided at CC application stage from the Civil Engineer, Architect, Structural Engineer and Services Engineers.	The proposed building is capable of complying

4.2 Fire Resistance (BCA Section C)

BCA Clause	Title	Assessment and Comment	Status
C1.1	Type of construction required	The type of fire resisting construction applicable is Type A construction. Type A construction is the highest of the fire resistant of the types of construction.	Note
C1.2	Calculation in rise in storeys	The building has a rise in storeys of nineteen (19).	Note
C1.8	Lightweight construction	Any proposed lightweight construction shall be designed and installed to comply with the provisions of Specification C1.8 and satisfy the relevant tests.	The proposed building is capable of complying
C1.10	Fire hazard properties	Proposed building materials, floor materials, floor coverings, wall and ceiling lining materials are to be selected to comply with the required fire hazard properties of Specification C1.10. Evidence of compliance (test certificates) shall be obtained from the supplier or manufacturer.	The proposed building is capable of complying
C1.11	Performance of external wall in fire	The building has a rise in storeys of more than 2 and the requirements of this provision do not apply.	N/A
C2.2	General floor area and volume limitations	The building complies with the general floor area and volume limitations identified by this clause. The Level 00, 01 and part Level 02 (largest non-residential fire compartment) has a floor area of 3,375 m ² .	The proposed building is capable of complying
C2.6	Vertical separation of openings in external walls	The building is proposed to be sprinkler protected therefore vertical separation is not required.	Complies
C2.7	Separation by fire walls	The following internal fire walls are required: 1. Wall separating Basement 00 Hotel from carpark and loading bay. 2. Wall separating hotel Level 02 from void under Hotel pool. 3. Wall separating Level 02 Hotel from the remainder of the building. 3. Wall separating Level 03 & 04 Hotel form Child care 4. Wall separating Level 04 - 10 Hotel from Office. Glazed construction forming part of the fire walls is required to be performance justified. The Australian Hotel is to be assessed as a separate building for the purposes of the BCA. The terraces are also to be assessed as separate buildings for the purposes of the BCA. Separation is to be performance justified as it incorporates horizontal separation elements and non-fire rated vertical separating elements.	Alternative solution Alternative solution
C2.8	Separation of classifications in the same storey	Fire walls are proposed to separate different classifications as specified above in C2.7. The Level 00, 01 and part Level 02 (excluding hotel) is to adopt the fire resistance levels applicable for Class 6 buildings.	The proposed building is capable of complying
C2.9	Separation of classifications in different storeys	The floors between parts of different classifications must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey. The Level 00, 01 and part Level 02 (excluding hotel) is to adopt the fire resistance levels applicable for Class 6 buildings.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
C2.10	Separation of lift shafts	The lift shafts are required to be separated from the rest of the building with walls having an FRL of not less than that required by Table 3 of Specification C1.1.	The proposed building is capable of complying
C2.11	Stairways and lifts in one shaft	The stairs and lift shaft are located in different shafts.	The building complies
C2.12	Separation of equipment	The following equipment, if installed in the building, is to be fire separated from the remainder of the building by 120/120/120 FRL construction: a) Boilers b) Lift motors and control panels c) Emergency generators used to sustain emergency equipment operating in emergency mode; or d) Central smoke control plant; or e) Batteries installed in a building that have a voltage exceeding 24 volts and capacity exceeding 10ampere hours.	The proposed building is capable of complying
C2.13	Electricity supply system	Fire separation of substations is to be in accordance with this clause and the specific fire resistant construction requirements from the energy authority. A main switchboard board, sustaining emergency equipment, is to be fire separated from the remainder of the building by 120/120/120 construction. All switchboards in the electrical distribution system, which sustain the electricity supply to the emergency equipment, must provide full segregation by way of enclosed metal partitions designed to prevent the spread of any fault from non-emergency equipment switchgear to the emergency equipment switchgear. Electrical conductors and switchboards are required to comply with this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
C2.14	Public corridors in Class 2 & 3 buildings	The building contain public corridors more than 40 m in length as follows: Hotel Level 04 & Level H5 - H18 62 m Performance justification is proposed.	Alternative solution
C3.2	Protection of openings in external walls	Protection is not required due to the setback from boundaries and setback from other buildings. Note that the privately owned public accessible pedestrian ways to the east and south have been assessed as part of the united building as the basement carpark extends thereunder.	Note
C3.3	Separation of external walls and associated openings in different fire compartments	Location of fire walls are to be identified during design development (refer to C2.7). External wall openings, such as windows, within minimum setbacks identified in this clause, and not protected in accordance with this clause, are to be performance justified.	Alternative solution
C3.5	Doorways in fire walls	Doorways in fire walls are required to be protected in accordance with this clause.	The proposed building is capable of complying
C3.6	Sliding fire doors	The sliding fire doors are not proposed.	N/A

BCA Clause	Title	Assessment and Comment	Status
C3.8	Openings in fire isolated exits	The fire-isolated exits are required to be protected by -/60/30 self closing fire doors. Construction documentation should demonstrate compliance. Fire isolated exits do not contain windows.	The proposed building is capable of complying
C3.9	Service penetrations in fire isolated exits	Service are not to penetrate through fire isolated exits unless permitted by this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
C3.10	Fire isolated lift shafts	The lift doors are required to be -/60/- fire doors and comply with this provision. A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than -/60/60 if it exceeds 35 000 mm ² in area. Construction documentation should demonstrate compliance	The proposed building is capable of complying
NSW C3.11	Bounding construction	Doors from sole occupancy units opening into enclosed public corridors are required to be protected by -/60/30 self closing fire doors. A doorway from any other room not within a SOU, must be protected by -/60/30 self closing fire doors if it opens to a public corridor, public lobby or the like within the residential portion of the building. Doorways for garbage room enclosure within the public corridors would also be required to comply with the above requirements. The residential common external circulation areas are assessed as open balconies. In a Class 2 or 3 building where a path of travel to an exit does not provide a person seeking egress with a choice of travel in different directions to alternative exits and is along an open balcony, landing or the like and passes an external wall of— (i) another sole-occupancy unit; or (ii) a room not within a sole-occupancy unit, then that external wall must— (iii) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and (iv) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and (v) have any windows or other openings— (A) protected internally in accordance with C3.4; or (B) located at least 1.5 m above the floor of the balcony, landing or the like. Construction documentation to demonstrate compliance.	The proposed building is capable of complying
C3.12	Openings in floors and ceilings for services.	Fire separation between floors is required to be maintained where services penetrate through floors unless the services are located in fire rated shafts. Construction documentation to demonstrate compliance.	The proposed building is capable of complying
C3.15	Openings for service installations	Services that penetrate a building element must be protected utilising one of the options listed under this clause. Construction documentation to demonstrate compliance.	The proposed building is capable of complying
C3.16	Construction joints	Construction joints in building elements required to be fire resistant are required to be protected in accordance with this clause.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
C3.17	Columns protected with lightweight construction to achieve an FRL	A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire. Details are to be provided with the construction documentation.	The proposed building is capable of complying

4.3 Fire-Resisting Construction (Specification C1.1)

BCA Clause	Title	Assessment and Comment	Status
2.1	Exposure to fire source features	The requirements of this provision apply to the subject building.	Note
2.2	Fire protection for support of another part	When determining FRL's applicable to a particular building element, the requirements of this clause are required to be complied with.	The proposed building is capable of complying
2.3	Lintels	Lintels are to be protected as required by the requirements of this clause.	The proposed building is capable of complying
2.4	Attachment not to impair fire resistance	<p>A combustible material may be used as a finish or lining to a wall or roof, or in a sign, sunscreen or blind, awning, or other attachment to a building element which has the required FRL if—</p> <p>(i) the material is exempted under C1.10 or complies with the fire hazard properties prescribed in Specification C1.10; and</p> <p>(ii) it is not located near or directly above a required exit so as to make the exit unusable in a fire; and</p> <p>(iii) it does not otherwise constitute an undue risk of fire spread via the facade of the building.</p> <p>The attachment of a facing or finish, or the installation of ducting or any other service, to a part of a building required to have an FRL must not impair the required FRL of that part.</p> <p>Details demonstrating compliance are to be provided with the construction documentation.</p>	The proposed building is capable of complying
2.5	General concessions	Roof top plan rooms need not have an FRL if they are non-combustible and they only contain equipment specified in this clause.	Note
2.6	Mezzanine floors: concession	The building does not contain mezzanine's that are subject to this provision.	N/A
2.7	Enclosure of shafts	The shafts are to be enclosed at the top and bottom in accordance with the requirements of this clause.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
3.1	Fire resistance of building elements	<p>The building is required to be designed to comply with the required fire resistance levels applicable to Type A construction. The following fire resistance requirements generally apply:</p> <p style="padding-left: 40px;">Residential & Hotel - 1½ hrs Office – 2 hrs Retail – 3 hrs Child care – 2 hrs Assembly / conference - 2 hrs Carpark - 2 hrs Loading dock - 4 hrs</p> <p>Please note that Level 00, 01 & Part 02 is one fire compartment and is required to be provided with 3 hrs fire resistance levels due to the class 6 uses in this fire compartment.</p> <p>The Austalian Hotel is to be assessed as a separate building. The Terraces are to be assessed as a separate building.</p> <p>The fire compartment containing the loading dock attracts 4 hrs fire resistance. Performance justification is proposed.</p> <p>External walls, common walls and the flooring and floor framing of lift pits must be non-combustible. Particular attention is required to the use of aluminum composite panels, which are combustible, and therefore will not comply unless they are designed as an 'attachment' to an external wall. Details are to be provided with the construction certificate documents.</p> <p>Internal walls required to have an FRL with respect to integrity and insulation must be design in accordance with this clause.</p> <p>A loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be of concrete or masonry.</p>	<p>The proposed building is capable of complying,</p> <p style="text-align: right;">Alternative solution</p>
3.5	Roof: Concession	<p>The roof is not required to have an FRL, in a sprinkler protected building, however the covering of the roof must be non-combustible.</p>	<p>The proposed building is capable of complying</p>
3.6	Roof lights	<p>Rooflights are not proposed</p>	<p>The proposed building is capable of complying</p>

4.4 Access & Egress (BCA Section D)

BCA Clause	Title	Assessment and Comment	Status
D1.2	Number of exits required	<p>Not less than 2 exits must be provided from each storey.</p> <p>The Level 01 & 02 retail above loading bay entrance only has access to one exit. This is to be assessed by performance justification against the relevant performance requirements of the BCA.</p> <p>The alternative exit is required to be identified from the Basement 01 & 00 Aust grid Substations</p>	Alternative solution
D1.3	When fire isolated exits are required	<p>All stairs are required to be fire isolated except for:</p> <ul style="list-style-type: none"> • the stair connecting Hotel foyer and Hotel conference • the new stair serving the sprinkler protected Australian Hotel • The stair serving the south western retail. 	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
D1.4	Exit travel distances	<p>Class 2 residential & Class 3 hotel part - The entrance doorway of any sole-occupancy unit must be not be more than 6m from an exit or from a point from which travel in different directions is available or 20m from a single exit serving the storey at the level of egress to a road or open space.</p> <p>No point on the floor of a room which is not in a sole-occupancy unit must be more than 20m from an exit or from a point at which travel in different directions to 2 exits is available.</p> <p>The Hotel contains hotel rooms on Level 02 (north end) that are up to 8.7 m from a point of choice. Performance justification is proposed.</p> <p>Class 5, 6 & 9b parts - No point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40m.</p> <p>The following areas have travel of more than 20 m to a point of choice:</p> <ul style="list-style-type: none"> • The Level 01 & 02 retail tenancy above the loading bay entrance: 22 m to the exit stair on an open floor plan • Basement car park 04, 03 & 02, 01 & 00: up to 30 m <p>Performance justification is proposed.</p> <p>The south west corner plant room of B01, minor amendment is required to reduce the distance to a point of choice to not more than 30 m.</p> <p>The carpark has travel of more than 40 m to a point of choice in the following areas:</p> <ul style="list-style-type: none"> • Basement 04: up to 60 m • Basement 03 & 02 : up to 55 m • Basement 01: generally up to up to 60 m however some plant rooms at southern end have travel up to 70 m. • Basement 00: 45 m <p>Performance justification is proposed.</p> <p>Access into the north western fire stair is to be identified on Basement 2.</p> <p>Access into the south west fire stair is required from the loading dock.</p> <p>Egress from the north east corner of Basement 01 is to be clarified. Appears only to be accessible from this level via a 1:6.5 vehicular ramp. Internal design change is required to rationalise access within justifiable limits and protected paths.</p> <p>Pedestrian egress is to be clarified adjoining the 1:11 ramp on Basement Level 00.</p>	<p>Alternative solution</p> <p>Alternative solution</p> <p>Alternative solution</p>

BCA Clause	Title	Assessment and Comment	Status
D1.5	Distance between alternative exits	<p>Exits that are required to serve as alternative means of egress must not be more than 45m apart in a residential building and not more than 60m in all other parts.</p> <p>Exits required as alternative means of egress must be located not less than 9m apart and located so that the alternative paths of travel do not converge such that they become less than 6m apart. The Level 02 Hotel south fire stair is 5.7m from the open stair. Performance justification is proposed.</p> <p>Distance between alternative exits in the basement are up to:</p> <ul style="list-style-type: none"> • Baseman 04: 70 m • Basement 03 & 02 : 66 m • Basement 01: 86 m <p>Performance justification is proposed.</p> <p>From south west corner plant room of B01, minor amendment is required to reduce the distance between alternative exits to justifiable limits.</p>	<p>Alternative solution</p> <p>Alternative solution</p>
NSW D1.6	Dimensions of exits and paths of travel to exits	<p>A required exit and path of travel to an exit are required to be a minimum unobstructed height of not less than 2m and minimum width of 1m.</p> <p>Population numbers have been determined in accordance with D1.13.</p>	The proposed building is capable of complying
D1.7	Travel via fire isolated exits	<p>A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from—</p> <ul style="list-style-type: none"> (i) a public corridor, public lobby or the like; or (ii) a sole-occupancy unit occupying all of a storey; or (iii) a sanitary compartment, airlock or the like. <p>The building design complies.</p> <p>Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or a covered area in accordance with this clause. The discharge of the fire stairs do not comply as they are:</p> <ul style="list-style-type: none"> (a) within a covered area that is not open for at least 1/3 of its perimeter; and (b) The south west basement stair discharge is 14 m to open space. <p>Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have an FRL of not less than 60/60/60 and any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. External paths of travel connecting the discharge of fire isolated exits to the street are to be identified on plan. Openings within 6 m of the path of travel are to be protected or performance justified. The north wall bounding the Loading dock entry ramp is required to be fire rated.</p>	<p>The building complies</p> <p>Alternative solution</p> <p>The building is capable of complying</p>
D1.8	External Stairs or ramps in lieu of Fire-isolated exits	External stairs are not provided in lieu of fire isolated exits.	N/A

BCA Clause	Title	Assessment and Comment	Status
D1.9	Travel via non-fire-isolated stairways or ramps	Travel from the non-fire isolated stairs complies with the requirements of this provision.	The proposed building complies
D1.10	Discharge from exits	<p>The discharge point of the fire isolated exits is required to be connected to the road by a minimum 1 m wide path and where there is a change of level, the path must contain a complying stair or ramp.</p> <p>The BCA also specifies that exits must not be blocked at a point of discharge and where necessary suitable barriers must be provided to prevent vehicles from blocking the exit or access to it.</p> <p>The discharge point of alternative exits must be located as far apart as practical.</p> <p>Where egress to the road involves passing through a large gated entrance, a swinging pass door must be provided within the gate, complying with the BCA.</p>	The proposed building complies
D1.11	Horizontal exits	Horizontal exits are not proposed.	N/A
D1.12	Non-required stairways, ramps or escalators	Non-required stairways, ramps or travelators are not proposed.	N/A
D1.13	Number of persons accommodated	Populations have been assessed in accordance with Table D1.13.	Note
D1.16	Plant rooms and lift rooms: concession	<p>A ladder may be used in lieu of a stairway to provide egress from certain plant rooms as permitted by this clause. Where permitted, the ladder:</p> <p>(iii) must comply with—</p> <p>(A) AS 1657 for a plant room or a Class 8 electricity network substation; and</p> <p>(B) AS 1735.2 for a lift machine room.</p>	The proposed building is capable of complying
D1.17	Access to lift pits	Access to lift pits must, where the pit depth is not more than 3m, may be through the lowest landing doors. Where the lift pit depth is more than 3 m, additional access requirements apply in accordance with this clause. The Construction Certificate plans are to demonstrate compliance.	The proposed building is capable of complying
D2.2	Fire-isolated stairways and ramps	A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed of non-combustible materials and so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.	The proposed building is capable of complying
D2.3	Non-fire isolated stairs and ramps	The non fire isolated stairs are required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying
D2.4	Separation of rising and descending stair flights	<p>If a stairway serving as an exit is required to be fire-isolated there must be no direct connection between—</p> <p>(i) a flight rising from a storey below the lowest level of access to a road or open space; and</p> <p>(ii) a flight descending from a storey above that level.</p> <p>Any construction that separates or is common to the rising and descending flights must be—</p> <p>(i) non-combustible; and</p> <p>(ii) smoke proof in accordance with Clause 2 of Specification C2.5.</p>	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
D2.7	Installation in exits and paths of travel	<p>Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp.</p> <p>Gas or other fuel services must not be installed in a required exit.</p> <p>Electrical or telecommunications cupboards opening onto a corridor or the like must be of non-combustible construction and smoke sealed from the corridor (including metal lining to inside face of door and smoke seals to door).</p> <p>Only electrical wiring associated with services specified in this clause, are permitted to be installed in a fire isolated exit.</p>	The proposed building is capable of complying
D2.8	Enclosure of space under stairs and ramps	The space below the required fire-isolated stairways must not be enclosed to form a cupboard or similar enclosed space.	The proposed building is capable of complying
D2.9	Width of stairways	The required width of a stairway must be measured in accordance with this clause.	Note
D2.10	Pedestrian ramps	<p>A ramp serving as a required exit must—</p> <ul style="list-style-type: none"> (i) where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS 1428.1; or (ii) in any other case, have a gradient not steeper than 1:8. <p>The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586.</p>	The building is capable of complying
D2.11	Fire-isolated passageways	The enclosing construction of the fire-isolated passageways on the ground floor must have an FRL when tested for a fire outside the passageway in another part of the building of not less than that required for the stairway shaft.	The proposed building is capable of complying
D2.12	Roof as open space	<p>If an exit discharges to the roof of a building, the roof must –</p> <ul style="list-style-type: none"> (a) Have an FRL of not less than 120/120/120; and (b) Not have any rooflights or other openings within 3 m of the external path of travel 	The proposed building is capable of complying
NSW D2.13	Goings & risers	<p>Goings and risers are to be designed to comply with this clause, including opening sizes, going and riser dimensions and non-slip finish or non-skid nosings.</p> <p>The stairway must have treads which have—</p> <ul style="list-style-type: none"> (A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or (B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586. <p>The going dimension of tapered treads to the hotel curved stairway are to be designed to comply with this clause.</p>	The proposed building is capable of complying
D2.14	Landings	<p>Landings are to be designed in accordance with this clause.</p> <p>Landings must have—</p> <ul style="list-style-type: none"> (A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or (B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586, where the edge leads to a flight below. 	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
NSW D2.15	Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— (i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.	The proposed building is capable of complying
NSW D2.16	Balustrades and other barriers	Balustrades are to be provided in accordance with this clause.	The proposed building is capable of complying
D2.17	Handrails	Handrails are to be provided to stairs and ramps and designed to comply with this clause. Particular attention is required to the design of handrails to assist people with disabilities and handrails in residential units. The Construction Certificate application plans are to demonstrate compliance.	The proposed building is capable of complying
D2.18	Fixed platforms, walkways, stairways & ladders	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail, balustrade or other barrier attached thereto may comply with AS 1657 in lieu of D2.13, D2.14, D2.16 and D2.17 if it only serves: (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or (b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part.	The proposed building is capable of complying
NSW D2.19	Doorways and doors	A doorway serving as a required exit or forming part of a required exit must be designed in accordance with this clause. Particular attention is required to the restriction on use, of sliding doors, roller shutter, tilt up-doors and power operated doors. Sliding doors must be able to be opened manually under a force of not more than 110 N. Particular attention is required to the large sliding door on the ground floor.	The proposed building is capable of complying
D2.20	Swinging doors	Swinging doors are required to be designed in accordance with this clause in relation to direction of swing; encroachment on stairways, ramps and passageways; and hold open devices. The entry gates off Broadway and Australian street are required to swing in the direction of egress without encroaching onto the street.	The proposed building is capable of complying
NSW D2.21	Operation of latch	All the doors in the required exits, doors forming part of the required exits, and doors within paths of travel must be readily openable in accordance with this clause. The doors to the fire stairs on the Hotel Level 01 are to have panic bars. The final discharge doors to the hotel fire stairs are to have panic bars.	The proposed building is capable of complying
D2.22	Re-entry from fire-isolated exits	Doors of a fire-isolated exit must not be locked from the inside a fire-isolated exit serving any storey above an effective height of 25 m, throughout the exit. This requirement does not apply to a door fitted with a fail-safe device that automatically unlocks the door upon the activation of a fire alarm and— (i) on at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or (ii) an intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is fixed adjacent to such doors explaining its purpose and method of operation.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
D2.23	Signs on doors	<p>A sign (“FIRE SAFETY DOOR—DO NOT OBSTRUCT” or ‘FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN”, as appropriate), must be installed where it can readily be seen on, or adjacent to the following;</p> <ul style="list-style-type: none"> • A required fire door providing direct access to a fire-isolated exit, • door leading from a fire isolated exit to a road or open space, <p>in accordance with this clause.</p>	The proposed building is capable of complying
D2.24	Protection of openable windows	<p>Window openings must be protected in accordance with this clause. A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in a bedroom in a Class 2, 3 or 4 building or a Class 9b early childhood centre. Where the lowest level of the window opening is less than 1.7 m above the floor the openable portion of the window must be protected with;</p> <ul style="list-style-type: none"> • a device to restrict the window opening; or • a screen with secure fittings. <p>A device or screen must not permit a 125 mm sphere to pass through the window opening or screen and resist an outward horizontal action of 250 N against the following;</p> <ul style="list-style-type: none"> • window restrained by a device; or • screen protecting the opening; and <p>have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.</p> <p>A barrier with a height not less than 865 mm above the floor is required to an openable window when a child resistant release mechanism is provided and for openable windows 4m or more above the surface beneath. The barrier must not permit a 125 mm sphere to pass through it and must not have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.</p> <p>Construction documentation should also demonstrate compliance.</p>	The proposed building is capable of complying
D3.1	General building access requirements	<p>Access for people with disabilities is to be provided in accordance with this clause.</p> <p>The hotel requires 9 accessible units plus 1 additional accessible unit for every 30 units or part thereof in excess of 200.</p> <p>The door leaf widths to the rooms on Level 03 of the hotel are to provide the required widths for accessibility (min 850 mm clear width at door leaf)</p> <p>Construction documentation should demonstrate compliance.</p>	The proposed building is capable of complying
D3.2	Access to buildings	<p>An accessway must be provided to a building required to be accessible—</p> <ol style="list-style-type: none"> i. from the main points of a pedestrian entry at the allotment boundary; and ii. from another accessible building connected by a pedestrian link; and iii. from any required accessible carparking space on the allotment. <p>In a building required to be accessible, an accessway must be provided through building pedestrian entrances as required by this clause. The Construction Certificate application plans are to demonstrate compliance.</p>	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
D3.3	Parts of building to be accessible	<p>Every ramp and stairway (except for ramps and stairways in areas exempted by D3.4) must comply with—</p> <ul style="list-style-type: none"> i. for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and ii. for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and iii. for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1-2009. <p>The Construction Certificate application plans are to demonstrate compliance.</p> <p>Every passenger lift must comply with E3.6.</p>	The building is capable of complying
D3.4	Exemptions	<p>The following areas are not required to be accessible:</p> <ul style="list-style-type: none"> (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b). 	Note
D3.5	Accessible Car parking	<p>Accessible carparking spaces are required at a rate of:</p> <ul style="list-style-type: none"> • Class 6 retail - 1 per 50 carspaces, or part thereof • Class 3 hotel – by multiplying the total number of carparking spaces by the percentage of accessible units to the total number of units. <p>Carparking is to comply with AS/NZS 2890.6-2009. The Construction Certificate application plans are to demonstrate compliance.</p>	The building is capable of complying
D3.6	Signage	<p>Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 must identify each—</p> <ul style="list-style-type: none"> i. sanitary facility, except a sanitary facility within the sole-occupancy unit of the Class 3 component, and ii. a space with a hearing augmentation system. <p>Each doorway required to be provided with an exit sign under E4.5 must be identified with "EXIT" and "LEVEL" followed by the floor level number.</p> <p>Signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use.</p> <p>Signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility.</p> <p>Where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility (Hotel Level 00 south), directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.</p>	The building is capable of complying
D3.7	Hearing augmentation	<p>A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed in the conference rooms.</p>	The building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
D3.8	Tactile indicators	Tactile ground surface indicators are required to be provided as required by this clause. Tactile ground surface indicators are required to comply with sections 1 and 2 of AS/NZS 1428.4.1. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
D3.9	Wheelchair seating spaces in Class 9b assembly buildings	N/A	N/A
D3.10	Swimming Pools	Not less than 1 means of accessible water entry/exit in accordance with Specification D3.10 must be provided to the swimming pool if the perimeter of the pool is more than 40 m. The accessible entry/exit must be by means of; (i) a fixed or movable ramp and an aquatic wheelchair; or (ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or (iii) a platform swimming pool lift and an aquatic wheelchair; or (iv) a sling-style swimming pool lift. Latching devices on gates and doors forming part of a swimming pool safety barrier need not comply with AS 1428.1. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
D3.11	Ramps	On an accessway— (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.	The proposed building is capable of complying
D3.12	Glazing on an accessway	On an accessway, 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 1428.1.	The proposed building is capable of complying

4.5 Services & Equipment (BCA Section E)

BCA Clause	Title	Assessment and Comment	Status
E1.3	Fire hydrants	A fire hydrant system must be provided in accordance with this clause to serve the whole building and must also be installed in accordance with AS2419.1. Hydrants must only serve the storey in which they are located. The hydrant booster is located in Block 1. This requires performance justification.	Alternative solution
E1.4	Fire hose reels	FHR's are to be provided in accordance with this clause. FHR's are to be identified on plans. Note that fire hose reels are not required in the residential Class 2 and Class 3 portions. Refer to E1.3 for portable fire extinguisher requirements.	The proposed building is capable of complying
E1.5	Sprinklers	A sprinkler system must be installed throughout the whole building and must comply with Specification E1.5.	The proposed building is capable of complying
E1.6	Portable fire extinguishers	Portable fire extinguishers are to comply with this provision and sections 1, 2, 3 and 4 of AS2444. Particular attention is required to the provision of portable fire extinguishers in the Class 2 & 3 residential building portion in lieu of fire hose reels.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
E1.8	Fire control centres	A fire control room in accordance with Specification E1.8 must be provided. The location of the fire control room in Block 1 is to be performance justified.	Alternative solution
E1.9	Fire precautions during construction	In a building under construction portable fire extinguishers and hydrants are required to be provided as required by this clause.	The proposed building is capable of complying
E1.10	Provision for special hazards	There are no special hazards.	N/A
E2.2	General requirements (Smoke Hazard Management)	<p>The following smoke hazard management measures are required:</p> <ul style="list-style-type: none"> • Pressurisation of fire isolated stairs • Zone smoke control to Class 5, 6, 7b & 9b portions • A sprinkler system • The class 2 (residential) building and Class 3 hotel building are required to be provided with a smoke detection and alarm system in accordance with Spec E2.2a. • Smoke detectors to activate smoke control systems • Shutdown of certain air-handling systems <p>Zone smoke control is not proposed to the loading dock. Performance justification is proposed.</p> <p>The Class 9b portion on Level 01(conference) is located in a fire compartment more than 2000 m² and therefore requires smoke exhaust. This is to be performance justified.</p> <p>The fire compartment containing Class 9b portions must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000l/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 11 of AS/NZS 1668.1) which does not form part of the smoke hazard management system, on activation of-</p> <p>(i) smoke detectors installed complying with Clause 5 of Specification E2.2a; and</p> <p>any other installed fire detection and alarm system, including a sprinkler system complying with Specification E1.5.</p> <p>Sequencing of evacuation of the united building (Building 1 & 4N and basements) on activation smoke/fire alarm is to be performance justified.</p>	<p>The proposed building is capable of complying</p> <p>Alternative solution</p> <p>Alternative solution</p> <p>The proposed building is capable of complying</p> <p>Alternative solution</p>
E2.3	Provision for special hazards	There are no special hazards.	N/A
E3.1	Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1. Particular attention to Clause 5 of Specification E1.3 is required, relating to auto unlock for doors to security foyers and CCTV and intercom systems to locked foyer areas. The Construction Certificate application documents are to demonstrate compliance.	The building is capable of complying
E3.2	Stretcher facility in lifts	<p>A stretcher facility in accordance with must be provided in at least one emergency lift required by E3.4 in each building part.</p> <p>The stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level</p>	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
E3.3	Warning against use of lifts in fire	Warning signage for the passenger lifts is to be provided in accordance with this clause.	The proposed building is capable of complying
E3.4	Emergency lifts	Emergency lifts are to be provided in accordance with this clause.	The proposed building is capable of complying
E3.5	Landings	Access and egress to and from liftwell landings must comply with the DTS provision of Section D.	The proposed building is capable of complying
E3.6	Passenger lifts	Every passenger lift must comply with the requirements of this provision, including lift type; accessible features; and restrictions on the use of constant pressure devices for operation of the lift.	The proposed building is capable of complying
E3.7	Fire service controls	Where lifts serve any storey above an effective height of 12m, the following must be provided: (a) A fire control switch complying with E3.9 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. (b) A lift car fire service drive control switch complying with E3.10 for every lift.	The proposed building is capable of complying
E3.8	Aged care buildings	N/A	N/A
E3.9	Fire service recall operation switch	Each group of lifts must be provided with one fire service recall control switch where fire service controls are required by E3.7. Fire recall operation switches are to comply with the requirements of this provision.	The proposed building is capable of complying
E3.10	Lift car fire service drive control switch	Lift car fire service drive control switch required by E3.7 must be activated from within the car and the switch must comply with the requirements of this clause.	The proposed building is capable of complying
E4.2	Emergency lighting requirements	Emergency lighting must be provided in accordance with this clause. Emergency lighting is required to comply with AS2293.1-2005.	The proposed building is capable of complying
E4.5	Exit signs	Exit signage must be provided in accordance with this clause. Exit signage is required to comply with AS2293.1-2005 and be clearly visible at all times.	The proposed building is capable of complying
NSW E4.6	Direction signs	If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.	The proposed building is capable of complying
E4.9	Sound systems and intercom systems for emergency purposes	A sound system and intercom system for emergency purposes complying where applicable with AS1670.4-2004 must be installed in the building.	The proposed building is capable of complying

4.5 Health & Amenity (BCA Section F)

BCA Clause	Title	Assessment and Comment	Status
F1.0	Deem to satisfy provisions	Performance requirement FP1.4, for the prevention of the penetration of water through external walls, is required to be complied with.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
F1.1	Stormwater drainage	Stormwater drainage is required to be designed to comply with AS/NZS3500.3-2003.	The proposed building is capable of complying
F1.4	External above ground membranes	Waterproofing membranes for external above ground use must comply with AS4654.1-2012 & AS4654.2-2012.	The proposed building is capable of complying
F1.5	Roof coverings	Lightweight metal roof sheeting is to comply with AS1562.1.	The proposed building is capable of complying
F1.6	Sarking	Sarking-type materials used for weatherproofing of roofs and walls are required to comply with AS/NZS 4200 Parts 1 and 2.	The proposed building is capable of complying
F1.7	Waterproofing of wet areas in buildings	Waterproofing of wet areas is required to comply with this clause.	The proposed building is capable of complying
F1.9	Damp-proofing	Damp proof course is required to be provided to walls to comply with this clause.	The proposed building is capable of complying
F1.10	Damp-proofing of floor on ground	Damp-proofing is required to be provided in accordance with the requirements of this provision.	The proposed building is capable of complying
F1.11	Provision of floor wastes	In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have— (a) a floor waste; and (b) the floor graded to the floor waste to permit drainage of water.	The proposed building is capable of complying
F1.12	Sub-floor ventilation	There is no sub floor space.	N/A
F1.13	Glazed assemblies	Proposed glazed assemblies identified in this clause are to comply with the AS 2047 requirements for the resistance to water penetration.	The proposed building is capable of complying
F2.1	Facilities in residential buildings	<p>The Class 2 residential portion of the building is to be provided with appropriate facilities in accordance with Table F2.1. Generally provision of the following facilities within each unit will comply.</p> <ul style="list-style-type: none"> • A bath or shower • A closet pan & wash basin • Kitchen • Wash tub and space for washing machine and drier <p>The Class 3 hotel residential portion of the building is to be provided with appropriate facilities in accordance with Table F2.1. Generally provision of the following facilities within each unit will comply.</p> <ul style="list-style-type: none"> • A bath or shower; and • A closet pan & wash basin. • Facilities for employees <p>Sanitary facilities are provided as required.</p> <p>A Class 2 residential caretaker's facility comprising a closet pan and wash pan is available on Basement 01.</p>	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
F2.3	Facilities in Class 3 to 9 buildings	Sanitary facilities must be provided in accordance with this clause and Table F2.3. Sanitary facilities for retail staff are to be identified. Required facilities in the child care centre are to be provided by the fitout design.	The proposed building is capable of complying
F2.4	Accessible sanitary facilities	Unisex sanitary compartments must be provided on every storey containing sanitary facilities and where a storey has more than 1 bank of sanitary compartments, at not less than 50% of these banks in accordance with AS1428.1-2009. In addition to the unisex sanitary compartment, each bank of toilets must be provided with a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 and must be provided for use by males and females. An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels. The circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1.	The proposed building is capable of complying
F2.5	Construction of sanitary compartments	The construction of sanitary compartments is required to comply with this requirement. The hinge side of doorways located less than 1.2m from the closet pan are required to swing outwards, slide or be capable of being removed from the outside (lift off hinges).	The proposed building is capable of complying
F3.1	Height of rooms and other spaces	The minimum ceiling height requirements are to comply with the requirements of this provision. The ceiling height in the conference rooms and adjoining corridor in the Level 01 hotel are to be not less than 2.7 m.	The proposed building is capable of complying
F4.1 – F4.3	Provision of natural light	Natural lighting must be provided in all : <ul style="list-style-type: none"> • habitable rooms of the Class 2 residential units • all bedrooms in the Class 3 hotel • all playrooms and the like in the childcare centre, in accordance with these clauses.	The proposed building is capable of complying
F4.4	Artificial lighting	Artificial lighting is to be provided in accordance with AS/NZS1680.0 and in accordance with this clause to the common room.	The proposed building is capable of complying
F4.5 - F4.7	Ventilation of rooms	Ventilation is to be provided by natural or mechanical means in accordance with this provision and Clause F4.6.	The proposed building is capable of complying
F4.8	Restriction on the position of water closets and urinals	A room containing a closet pan or urinal must not open directly into certain rooms, unless permitted by F4.9.	The building complies
F4.9	Airlocks	Mechanical ventilation and screening of doors is to be provided as required by this clause.	The proposed building is capable of complying
F4.12	Kitchen local exhaust	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1-1998 and AS 1668.2-1991 as required by this clause.	The proposed building is capable of complying
F5.1	Application of part	The sound insulation requirements of F5.2, F5.3, F5.4, F5.5, F5.6 & F5.7 only apply to the Class 2 & 3 component of the building.	Note

BCA Clause	Title	Assessment and Comment	Status
F5.2	Determination of airborne sound insulation ratings	Determination of airborne sound insulation ratings is to be in accordance with this clause.	The proposed building is capable of complying
F5.3	Determination of impact sound insulation ratings	Determination of impact sound insulation ratings is to be in accordance with this clause. Particular attention is required to the requirements for discontinuous construction. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
F5.4	Sound insulation rating of floor	Sound insulation of floors is required to be in accordance with this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
F5.5	Sound insulation of walls	Sound insulation of walls and doors is required to be in accordance with this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
F5.6	Sound insulation rating of services	Services that serves or pass through more than one SOU must achieve the required ratings specified by this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying
F5.7	Sound isolation of pumps	A flexible coupling must be installed at the point of connection between service pipes in a building and any circulating or other pump. Construction documentation should demonstrate compliance.	The proposed building is capable of complying

4.6 Ancillary Provisions (Section G)

BCA Clause	Title	Assessment and Comment	Status
G1.1	Swimming Pools	Where required by the Swimming Pool Act 1992 and the Swimming Pools Regulation 2008, swimming pool fencing is required to be installed in accordance with AS1926.1-2007 & AS1926.1-2007. A pool fence is required to separate the swimming pool area from the doors accessing the common corridor. Construction documentation should demonstrate compliance. A water recirculation system in a swimming pool with a depth of water more than 300 mm must comply with AS 1926.3-2010.	The proposed building is capable of complying
G1.2	Refrigerated chambers, strongrooms & vaults	Refrigerated chambers, strongrooms & vaults to comply with the requirements of this provision.	The proposed building is capable of complying
NSW G1.101	Provision for the cleaning of windows	The method of provision for the cleaning of windows is required to be in accordance with this clause. Construction documentation should demonstrate compliance.	The proposed building is capable of complying

4.7 Energy Efficiency – (Section J – Class 3 - 9 buildings)

4.7.1 External fabric (Part J1)

BCA Clause	Title	Assessment and Comment	Status
------------	-------	------------------------	--------

BCA Clause	Title	Assessment and Comment	Status
J1.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 2 to 9 building in accordance with this clause.	Note
J1.2	Thermal Construction General	Required insulation, reflective insulation and bulk insulation is to be installed in accordance with this clause and AS/NZS 4859.1.	The proposed building is capable of complying
J1.3	Roof and Ceiling Construction	A roof or ceiling that is part of the envelope must be designed and constructed and achieve the required Total R-Value and in accordance with this clause, including the provision of thermal breaks.	The proposed building is capable of complying
J1.4	Roof Lights	Roof lights, including any associated shaft and diffuser, that form part of the envelope, must be designed and constructed in accordance with this clause.	The proposed building is capable of complying
J1.5	Walls	<p>Walls that form part of the envelope, must be designed and constructed in accordance with this clause including the provision of thermal breaks..</p> <p>Each part of an external wall that is part of the envelope must satisfy one of the options in Table J1.5a. Generally walls are required to achieve a total R-Value of 2.8.</p> <p>Any internal wall forming part of the <i>envelope</i> must achieve the total R-value in Table J1.5b. Generally walls are required to achieve a total R-Value of 1.0 or 1.8.</p> <p>A wall that—</p> <ul style="list-style-type: none"> (i) is required to achieve a minimum Total R-Value; and (ii) has lightweight external cladding such as weatherboards, fibre cement or metal sheeting fixed to a metal frame; and (iii) does not have a wall lining or has a wall lining that is fixed directly to the metal frame, <p>must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed between the external cladding and the metal frame.</p> <p>Detail of the wall construction and Total R-Value is to be provided with the construction documentation to demonstrate compliance.</p>	The proposed building is capable of complying
J1.6	Floors	A floor that is part of the envelope is required to comply with this clause.	The proposed building is capable of complying

4.7.2 External Glazing (Part J2)

BCA Clause	Title	Assessment and Comment	Status
J2.4	Glazing	Glazing must be designed in accordance with J2.4 to achieve the aggregate air-conditioning energy value. A glazing calculator results are to be provided with the construction documentation to demonstrate compliance.	The proposed building is capable of complying
J2.5	Shading	Required shading must be designed in accordance with the requirements of this condition.	The proposed building is capable of complying

4.7.3 Building Sealing (Part J3)

BCA Clause	Title	Assessment and Comment	Status
J3.2	Chimneys and flues	Solid fuel burning appliances are not proposed and the requirements of this provision do not apply.	N/A
J3.3	Roof Light	Roof lights are not proposed.	N/A
J3.4	Windows and doors	<p>External windows and doors are required to be sealed to restrict air infiltration. The requirements of this provision do not apply where external windows and doors are designed in accordance with AS2047, to fire doors or louvered windows or doors.</p> <p>An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, revolving door or the like, other than—</p> <ul style="list-style-type: none"> (i) where the conditioned space has a floor area of not more than 50 m²; or (ii) where a café, restaurant, open front shop or the like has— <ul style="list-style-type: none"> (A) a 3 m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and (B) at all other entrances to the café, restaurant, open front shop or the like, self-closing doors. <p>Details are to be provided with the construction documentation submitted with the construction certificate.</p>	The proposed building is capable of complying
J3.5	Exhaust Fans	<p>A miscellaneous exhaust fan must be fitted with a sealing device such as a self-closing damper or the like when serving a;</p> <ul style="list-style-type: none"> (a) conditioned space; or (b) a habitable room in climate zone 4, 6, 7 & 8. 	The proposed building is capable of complying
J3.6	Construction of roofs, walls and floors	Roofs, ceilings, walls, floors and any openings are required to be designed and constructed to minimise air leakage in accordance with this clause.	The proposed building is capable of complying
J3.7	Evaporative Coolers	Evaporative coolers are not proposed.	N/A

4.7.4 Air Conditioning and Ventilation Systems (Part J5)

BCA Clause	Title	Assessment and Comment	Status
J5.2	Air Conditioning and Ventilating system	Any proposed air-conditioning systems and mechanical ventilation systems are required to comply with the requirements of this provision.	The proposed building is capable of complying
J5.3	Time Switch	The mechanical ventilation system and air conditioning system design would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying
J5.4	Heating and chilling systems	Any heating or cooling system for air-conditioning would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
J5.5	Miscellaneous exhaust system	A miscellaneous exhaust system with an air flow rate of more than 1000 L/s, that is associated with equipment having a variable demand such as a stove in a commercial kitchen or a chemical bath in a factory is required to be design to comply with this clause.	The proposed building is capable of complying

4.7.5 Artificial Lighting and Power (Part J6)

BCA Clause	Title	Assessment and Comment	Status
J6.2	Artificial lighting	Artificial lighting is to be designed in accordance with this provision.	The proposed building is capable of complying
J6.3	Interior artificial lighting and power control	Artificial lighting and power control are to be designed and provided in accordance with this provision.	The proposed building is capable of complying
J6.4	Interior decorative and display lighting	Interior decorative and display lighting, such as for foyer mural or art display, must be controlled in accordance with this clause.	The proposed building is capable of complying
J6.5	Artificial lighting around the perimeter of a building	Artificial lighting around the perimeter of a building must be designed to comply with this clause.	The proposed building is capable of complying
J6.6	Boiling water and chilled water storage units	Power supply to a boiling water or chilled water storage unit is required to be controlled by a time switch in accordance with Spec J6.	The proposed building is capable of complying

4.7.6 Hot Water Supply and Swimming Pool and Spa Pool Plant (Part J7)

BCA Clause	Title	Assessment and Comment	Status
J7.2	Hot Water Supply	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia.	The proposed building is capable of complying
J7.3	Swimming pool heating and pumping	Swimming pool heating and pumping must be designed to comply with this clause.	The proposed building is capable of complying
J7.4	Spa pool heating and pumping	Spa pool heating and pumping must be designed to comply with this clause.	The proposed building is capable of complying

4.7.7 Access for Maintenance and Facilities for Energy Monitoring (Part J8)

BCA Clause	Title	Assessment and Comment	Status
J8.2	Access for maintenance	Access for maintenance must be provided to services, equipment and other building elements identified in this clause	The proposed building is capable of complying
J8.3	Facilities for energy monitoring	The building must have a facility to record the consumption of gas and electricity. A building with a floor area of more than 2,500 m ² must have the facility to record individually the energy consumption of services identified in this clause.	The proposed building is capable of complying

4.8 Energy Efficiency – (Section J – Class 2 & 4 buildings)

The provisions of this Section J(A) are designed to complement the requirements of BASIX which are implemented via a Development Consent or Complying Development as applicable. BASIX is a web-based planning tool design to assess the potential performance of certain residential buildings against a range of sustainability indices.

4.8.1 Building Fabric (NSW Part J(A)1)

BCA Clause	Title	Assessment and Comment	Status
NSW J(A)1.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to thermal insulation in a Class 2 building or Class 4 part of a building where a development consent or environmental planning instrument requires it. The Deemed-to-Satisfy provisions of this Part for thermal breaks apply to all Class 2 buildings and Class 4 parts.	Note
NSW J(A)1.2	Thermal construction	Class 2 buildings and Class 4 parts of buildings must comply with the national BCA provisions of J0.2(b) to (e) - except that the reference to "Where <i>required</i> "• in J1.2 is deemed to refer to "Where a development consent specifies that insulation is to be provided as part of the development."•	Note

BCA Clause	Title	Assessment and Comment	Status
J1.2	Thermal construction — general	Thermal insulation is required to be installed in accordance with AS/NZS 4859.1 and the general requirements the J1.2 (national provisions) where a development consent or environmental planning instrument requires it.	The proposed building is capable of complying
J1.3(c)	Roof and ceiling construction – compensating for a loss of ceiling insulation	Ceiling insulation is to comply with this clause	The proposed building is capable of complying
J1.3 (d)	Roof and ceiling construction – thermal breaks	A thermal break is required to be provided between external cladding and framing in accordance with J1.3(d).	The proposed building is capable of complying
J1.5(f)	Walls - thermal breaks	A thermal break is required to be provided between external cladding and framing in accordance with J1.5(f)	The proposed building is capable of complying
J1.6 (c) & (d)	Floors – floor edge insulation	Floor edge insulation is to comply with this clause	The proposed building is capable of complying

4.8.2 Building Sealing (NSW Part J(A)2)

BCA Clause	Title	Assessment and Comment	Status
NSW J(A)2.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building, but exclude the following: (a) a building in climate zones 2 and 5 where the only means of air-conditioning is by using an evaporative cooler; and (b) a building ventilation opening that is necessary for the safe operation of a gas appliance. (c) parts of those buildings that cannot be fully enclosed	Note
NSW J(A)2.2	Compliance with BCA provisions	The following national provisions apply; i. J3.2 Chimneys and flues ii. J3.3 Roof Lights iii. J3.4 External Doors and windows iv. J3.5 Exhaust fans v. J3.6 Construction of roofs, walls and floors vi. J3.7 Evaporative coolers	Note
J3.2	Chimneys and Flues	Open solid-fuel burning appliances are not proposed	N/A
J3.3	Roof lights	Roof lights are required to be sealed or capable of being sealed, where serving a conditioned space or a habitable room in climate zones 4, 5, 6, 7 & 8. Details are to be provided with the construction documentation submitted with the construction certificate.	The proposed building is capable of complying

BCA Clause	Title	Assessment and Comment	Status
J3.4	External doors and windows	<p>External windows and doors are required to be sealed to restrict air infiltration. The requirements of this provision do not apply where external windows and doors are designed in accordance with AS2047, to fire doors or louvered windows or doors.</p> <p>An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, revolving door or the like, other than—</p> <ul style="list-style-type: none"> (i) where the conditioned space has a floor area of not more than 50 m²; or (ii) where a café, restaurant, open front shop or the like has— <ul style="list-style-type: none"> (A) a 3 m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and (B) at all other entrances to the café, restaurant, open front shop or the like, self-closing doors. <p>Details are to be provided with the construction documentation submitted with the construction certificate.</p>	The proposed building is capable of complying
J3.5	Exhaust fans	An exhaust fan must be fitted with a sealing device to prevent air infiltration in a conditioned space and in climate zones 4, 6, 7 and 8. Details are to be provided with the construction documentation submitted with the construction certificate.	The proposed building is capable of complying
J3.6	Construction of roofs, walls and floors	Roofs, external walls, external floors and any openings are required to be designed and constructed to minimise air leakage. Details are to be provided with the construction documentation submitted with the construction certificate.	The proposed building is capable of complying

4.8.3 Air-Conditioning and Ventilating system (NSW Part J(A)3)

BCA Clause	Title	Assessment and Comment	Status
NSW J(A)3.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building.	Note
NSW J(A)3.2	Compliance with BCA provisions	<p>Class 2 buildings and Class 4 parts of buildings must comply with the following national BCA provisions;</p> <ul style="list-style-type: none"> i. J5.2 Air conditioning and ventilating systems ii. J5.3 Time Switches iii. J5.4 (a) and (c) to (i) Heating and cooling systems iv. J5.5 Ancillary exhaust systems 	The proposed building is capable of complying
J5.2	Air conditioning and ventilation systems	The mechanical design would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying
J5.3	Time switch	The mechanical design would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying
J5.4(a) and (c) to (i)	Heating and cooling systems	The mechanical design would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying
J5.5	Ancillary exhaust systems	The mechanical design would be required to be designed in accordance with the requirements of this provision.	The proposed building is capable of complying

4.8.4 Hot Water Supply (NSW Part J(A)4)

BCA Clause	Title	Assessment and Comment	Status
NSW J(A)4.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building and a Class 4 part of a building.	Note
NSW J(A)4.2	Compliance with the BCA provisions	Class 2 buildings and Class 4 parts of buildings must comply with the national BCA provisions of J7.2.	The proposed building is capable of complying
J7.2	Hot water supply	A hot water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume three – Plumbing Code of Australasia.	The proposed building is capable of complying

4.8.5 Access for Maintenance (NSW Part J(A)5)

BCA Clause	Title	Assessment and Comment	Status
NSW J(A)5.1	Application of part	The Deemed-to-Satisfy Provisions of this Part apply to a Class 2 building except within a sole occupancy unit.	Note
NSW J(A)5.3	Access for maintenance	Class 2 buildings must comply with the national provision of J8.2 and J8.3.	Note
J8.2	Access for maintenance	Access for maintenance must be provided to services, equipment and other building elements identified in this clause	The proposed building is capable of complying
J8.3	Facilities for energy monitoring	The building must have a facility to record the consumption of gas and electricity. A building with a floor area of more than 2,500 m ² must have the facility to record individually the energy consumption of services identified in this clause.	The proposed building is capable of complying

5.0 FIRE SAFETY SCHEDULE

The following table is a list of the required fire safety measures for this development. This list is to be treated as a guide as to what the buildings are considered to require.

FIRE SAFETY MEASURES	PROPOSED STANDARD OF PERFORMANCE
Access panels, doors & hoppers to fire resisting shaft	BCA2014 C3.13 & AS1905.1-2005, AS1905.2-2005
Automatic fail safe devices	Spec C3.4 automatic smoke doors. D2.21 (b)(iv) auto unlock of doors D2.22 (re-entry from fire stairs)
Automatic fire detection and alarm system	BCA 2014 E2.2, Spec E2.2a & AS1670.1-2004 Amdt 1, AS 3786-1993 Amdt 1, 2, 3 & 4. AS/NZS 1668.1-1998 Amdt 1 BCA 2014 Spec G3.8
Automatic fire suppression system	BCA 2014 E1.5, Spec E1.5 & AS2118.1-1999 amdt 1, AS2118.6-2012 BCA 2014 Spec G3.8
Building occupant warning system	BCA 2014 Spec E2.2a (Clause 6) & of AS1670.1-2004 (Amdt 1) (Clause 3.22)
Emergency Lifts	BCA2014 E3.4 & Spec E3.1
Emergency lighting	BCA 2014 Clause E4.2, E4.3, E4.4 & AS 2293.1 – 2005 Amdt 1 BCA 2014 Spec E1.8 Clause 12 (Emergency lighting for fire control room)
Sound systems & intercom systems for emergency purposes	BCA2014 E4.9 & AS1670.4-2004
Exit signs	BCA2014 E4.5, E4.6, E4.8 Spec E4.8 & AS 2293.1-2005 Amdt 1
Exit signs (non-illuminated)	BCA2014 Clause E4.7
Fire blankets	AS2444-2001
Fire control centres and rooms	BCA 2014 E1.8 & Spec E1.8
Fire dampers	BCA 2014 C3.12, C3.15 & AS/NZS1668.1-1998 Amdt 1, AS 1668.2-2012, AS1682.1-1990, AS1682.2-1990
Fire doors	BCA 2014 Spec C3.4 & AS/NZS 1905.1 – 2005
Fire rated lift landing doors	BCA 2014 C3.10 & AS 1735.11-1986
Fire Hose reel systems	BCA 2014 E1.4 & AS 2441-2005 Amdt 1.
Fire hydrant systems	BCA 2014 E1.3 & AS 2419.1-2005 Amdt 1
Fire seals protecting openings in fire resisting components of the building	BCA2014 C3.12, C3.15 & Spec C3.15 AS 4072.1-2005 Amdt 1 AS 1530.4.-2005
Fire shutters	BCA 2014 C3.4 & Spec C3.4
Fire windows	BCA 2014 C3.4 & Spec C3.4
Lightweight construction	BCA 2014 C1.8 & Spec C1.8

Mechanical air handling system	BCA 2014 E2.2, Table E2.2, Spec E2.2a & AS/NZS 1668.1-1998 Amdt 1 Class 7a carpark building mechanical ventilation systems - BCA 2013 E2.2, Table E2.2a and clause 5.5 of AS/NZS 1668.1 Amdt 1 BCA 2014 Spec G3.8
Portable fire extinguishers	BCA 2014 E1.6 & AS 2444-2001
Pressurising system	BCA 2014 Clause E2.2 & AS/NZS1668.1-1998 Amdt 1 BCA 2014 Spec G3.8
Smoke alarms and heat alarms	BCA2014 E2.2, Spec E2.2a & AS 3786-1993 Amdt 1, 2, 3 & 4
Smoke exhaust system	BCA 2014 E2.2, Spec E2.2b & AS/NZS 1668.1-1998 Amdt 1 BCA 2014 Spec G3.8
Smoke dampers	BCA 2014 E2.2, & Spec C2.5 (class 9a & 9c)
Smoke detectors and heat detectors	BCA2014 E2.2, Spec E2.2a & AS1670.1-2004 BCA 2014 C3.5 for automatic fire doors in fire walls; C3.8 automatic fire doors to fire isolated exits; C3.11 automatic closing doors in bounding construction; Spec C3.4 automatic closing smoke doors
Smoke doors	BCA 2014 Spec C3.4
Wall wetting sprinkler and drencher systems	BCA 2014 C3.4
Warning and operational signs	EPA Regulation (reg 183), BCA 2014 E3.3 (lifts), BCA 2014 C3.6 sliding doors, BCA 2014 NSW D2.19(b)(v)(C) Notices on doors in sight of audience, BCA 2014 D2.23 Signs on exit doors
Zone smoke control system	BCA2014 E2.2 & AS/NZS1668.1-1998

6.0 SUMMARY OF NON-COMPLIANCE ISSUES

The following is a summary table of non-compliance with the deemed-to-satisfy provisions of the BCA, identification of the Performance Requirements of the BCA and the appropriate justification method.

SUMMARY OF NON-COMPLIANCE ISSUES WITH DEEMED-TO-SATISFY PROVISIONS OF BCA

BCA CLAUSE	Performance Requirements	ISSUE
C2.7 Separation by fire walls	CP2	<p>Glazed construction forming part of the fire walls is required to be performance justified.</p> <p>The Australian Hotel is to be assessed as a separate building for the purposes of the BCA. The terraces are also to be assessed as separate buildings for the purposes of the BCA. Separation is to be performance justified as it incorporates horizontal separation elements and non-fire rated vertical separating elements.</p>
C2.14 Public corridors in Class 2 & 3 buildings	CP2 & EP2.2	<p>The building contain public corridors more than 40 m in length as follows:</p> <p>Hotel Level 04 7 Level H5- H18: 62 m</p>
C3.3 Separation of external walls and associated openings in different fire compartments	CP2	<p>Location of fire walls are to be identified during design development (refer to C2.7). External wall openings, such as windows, within the minimum setbacks identified in this clause, which have not protected in accordance with this clause are to be performance justified.</p>
Clause 3.1 of Specification C1.1	CP1 & CP2	<p>The fire compartment containing the loading dock attracts 4 hrs fire resistance. Performance justification is proposed.</p>
D1.2 Number of exits required	DP4	<p>The Level 01 & 02 retail above the loading bay entrance only has access to only one exit. This is to be assessed by performance justification against the relevant performance requirements of the BCA.</p>
D1.4 Exit travel distances	DP4	<p>The Hotel contains a hotel rooms on Level 02 (north end) that are up to 8.7 m from a point of choice. Performance justification is proposed.</p> <p>The following areas have has travel of more than 20 m to point of choice:</p> <ul style="list-style-type: none"> • The Level 01 & 02 retail tenancy above the loading bay entrance: 22 m to the exit stair on an open floor plan • Basement car park 04, 03 & 02, 01 & 00: up to 30 m <p>Performance justification is proposed.</p> <p>The carpark has travel of more than 40 m to point of choice in the following areas:</p> <ul style="list-style-type: none"> • Basement 04: up to 60 m • Basement 03 & 02 : up to 55 m • Basement 01: generally up to up to 60 m however some plant rooms at the southern

		end have travel up to 70 m.
		<ul style="list-style-type: none"> Basement 00: 45 m
		Performance justification is proposed.
D1.5 Distance between alternative exits	DP4	Exits required as alternative means of egress must be located not less than 9m apart and located so that the alternative paths of travel do not converge such that they become less than 6m apart. The Level 02 Hotel south fire stair is 5.7m from the open stair.
D1.7 Travel via fire isolated exits	DP5	Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway to a road or open space or a covered area in accordance with this clause. The discharge of the fire stairs do not comply as they are: <ul style="list-style-type: none"> (a) within a covered area that is not open for at least 1/3 of its perimeter; and (b) The south west basement stair discharge is 14 m to open space.
E1.3 Fire hydrants	EP1.3	The hydrant booster is located in Block 1. This requires performance justification.
E1.8 Fire control room	EP1.6	A fire control room in accordance with Specification E1.8 must be provided. The location of the fire control room in Block 1 is to be performance justified.
E2.2 Smoke Hazard Management	EP2.2	The Class 9b portion on Level 01 (conference) is located in a fire compartment more than 2000 m ² and therefore requires smoke exhaust. This is to be performance justified.
		Sequencing of evacuation of the united building (Building 1 & 4N and basements) on activation smoke/fire alarm is to be performance justified.
		Zone smoke control is not proposed to the loading dock. Performance justification is proposed.

7.0 CONCLUSION

The design as proposed is capable of complying with the Building Code of Australia, and will be subject to construction documentation that will provide appropriate details to demonstrate compliance. This report has identified areas of non-compliance with the deemed-to-satisfy provisions and indicates the design intent to demonstrate compliance with the Performance Requirements of the BCA. Whilst the performance based solutions are to be design developed, it is my view that the solutions will not impact on the current design.

Chris Michaels
For and on behalf of City Plan Services Pty Ltd

APPENDIX 1

Assessed plans prepared by Foster + Partners

Plan Title	Drawing No	Revision	Date
B4N – Level 00	A-SK-0789	-	15/10/14
B4N – Level 01	A-SK-0789	-	15/10/14
B4N – Level 02	A-SK-0789	-	15/10/14
B4N – Level 03	A-SK-0789	-	15/10/14
B4N – Level 04	A-SK-0789	-	15/10/14
B4N – Level 05	A-SK-0789	-	15/10/14
B4N – Levels 06-07 Office / Levels H06- H08 Hotel	A-SK-0789	-	15/10/14
B4N – Level 11 Residential / Level H13 Hotel	A-SK-0789	-	15/10/14
B4N – Level 12 Residential / Level H14 Hotel	A-SK-0789	-	15/10/14
B4N – Roof Level	A-SK-0789	-	15/10/14
B4N – Top Roof Level	A-SK-0789	-	13/10/14
B4N – Section 01	A-SK-0789	-	-
B4N – Section 02	A-SK-0789	-	-
B4N – Section 03	A-SK-0789	-	-
B4N – Section 04	A-SK-0789	-	-