#### 24 April 2025

92 North Steyne Pty Ltd C/- Lighthouse Project Group Suite 302, 100 Walker Street NORTH SYDNEY NSW 2060



Dear Oscar,

REFERENCE: 92 NORTH STEYNE, MANLY NSW 2095

**RESIDENTIAL FLAT BUILDING** 

**BUILDING CODE OF AUSTRALIA (BCA) CAPABILITY STATEMENT** 

Concise Certification Pty Ltd have been commissioned by 92 North Steyne Pty Ltd C/- Lighthouse Project Group to undertake a detailed desktop assessment of the proposed development at the above premises, against the requirements of the National Construction Code Series (Volume 1) - Building Code of Australia 2022 (BCA).

It is understood that the proposed development will be the subject of a Development Application (DA) and this BCA Capability Statement has been prepared in support of the submission to Council for its consideration as part of the Development Application (DA) pursuant to S4.16 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The following Concise Certification Pty Ltd Team Members have contributed to this assessment:

- Darko Kardum (Senior Building Surveyor) Report Author
- Steven Rodriguez (Director / A1 Registered Certifier Unrestricted) Report Peer Review
- Luke Oldfield (Director / A1 Registered Certifier Unrestricted) Quality Assurance

Our assessment of the concept design documentation was based on the following:

- National Construction Code Series Volume 1 Building Code of Australia 2022 (BCA)
- National Construction Code Series Guide to the Building Code of Australia 2022
- Environmental Planning & Assessment Act 1979
- Environmental Planning & Assessment Regulation 2021
- Environmental Planning and Assessment (Development Certification & Fire Safety) Regulation 2021
- Access to Premises Building Standards 2010
- Architectural Plans prepared by Platform Architects

Plan Number	Revision	Date	Plan Number	Revision	Date
DA0000	DA1	17/04/2025	DA0050	DA1	17/04/2025
DA0100	DA1	17/04/2025	DA0120	DA1	17/04/2025
DA0121	DA1	17/04/2025	DA0122	DA1	17/04/2025
DA0123	DA1	17/04/2025	DA0400	DA1	17/04/2025
DA0500	DA1	17/04/2025	DA1000	DA1	17/04/2025
DA1001	DA1	17/04/2025	DA1002	DA1	17/04/2025
DA1003	DA1	17/04/2025	DA1004	DA1	17/04/2025
DA1005	DA1	17/04/2025	DA1006	DA1	17/04/2025
DA2000	DA1	17/04/2025	DA2001	DA1	17/04/2025
DA2002	DA1	17/04/2025	DA2003	DA1	17/04/2025
DA3000	DA1	17/04/2025	DA3001	DA1	17/04/2025
DA3002	DA1	17/04/2025	DA3003	DA1	17/04/2025
DA4000	DA1	17/04/2025	DA5000	DA1	17/04/2025

DA5100	DA1	17/04/2025	DA5200	DA1	17/04/2025
DA5201	DA1	17/04/2025	DA5300	DA1	17/04/2025
DA5301	DA1	17/04/2025	DA5302	DA1	17/04/2025
DA5310	DA1	17/04/2025	DA5311	DA1	17/04/2025
DA5312	DA1	17/04/2025	DA5400	DA1	17/04/2025
DA5401	DA1	17/04/2025	DA5500	DA1	17/04/2025

#### **STATEMENT OBJECTIVES:**

The key objectives of the report are as follows:

- Undertake a high-level assessment of the proposed development against the deemed to satisfy provisions of the National Construction Code Series Volume 1 **Building Code of Australia 2022**.
- Identify any Deemed-to-Satisfy compliance departures that require further resolution/attention for by either way of design change or Performance Based Solutions prior to the submission of the Construction Certificate application.
- Identify essential fire safety measures and building works that are applicable to the subject building and that may be requiring upgrade to comply with the provisions of Section 14, 19 & 79 of the Environmental Planning and Assessment (Development Certifiers & Fire Safety) Regulation 2021 (formally known as Clauses 143, 145 & 166).
- Enable the certifying authority to satisfy its statutory obligations under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.
- Identify essential fire safety measures and building works that are applicable to the proposed development in accordance with Section 79 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.
- Verify that the referenced documentation has been reviewed by an appropriately qualified Building Surveyor and A1 Registered Certifier and compliance with the BCA / Access to Premises – Building Standard 2010 is readily achievable.
- Issue a collaborated fire engineering summary outlining the key compliance matters identified by the
  design team as deemed to satisfy departures requiring consideration by the project Fire Safety Engineer
  in order to assist in the preparation of the Fire Engineering Brief & Fire Engineering Brief Questionnaire
  (where required) to Fire & Rescue NSW).
- Verify that the referenced documentation has been reviewed by an appropriately qualified Building Surveyor and Accredited Accessibility Consultant and demonstrate that compliance with the BCA / Access to Premises – Building Standard 2010 is readily achievable.
- Enable the Registered Certifier to satisfy its statutory obligations under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, whilst also taking into due consideration the provisions under Sections 28 and 29 of Part 3 of the Building and Development Certifiers Act 2018 and Clauses 24 and 25 of Part 4 of the Building and Development Certifiers Regulation 2020.
- Accompany the original submission of the Section 4.16 **Development Application (DA)** to Council to enable the Consent Authority to be satisfied that the building design is capable of complying with the BCA and that subsequent compliance with the Fire & Life Safety, Accessibility, Health & Amenity and Energy Efficiency requirements of the BCA, will not give rise to design changes to the building which may necessitate the submission of further applications under Section 4.55 (Modifications) of the Environmental Planning and Assessment Act, 1979.

This Capability Statement is not intended to identify all issues of compliance or non-compliance with the BCA with such other issues to be appropriately addressed prior to issue of the Construction Certificate approval. Rather this Capability Statement serves to confirm that the design can be readily addressed without the need for redesign and/or resubmission to the Local Consent Authority.

The findings of this BCA Report do not relieve the PCA of their statutory obligations under the EP&A Act & BPB Act and they are to be satisfied that the proposal meets their requirements prior to approval.

#### **SITE & BUILDING DESCRIPTION:**

The existing site, the subject of this capability statement, is located at 92 North Steyne, Manly NSW 2095 and is legally identified as SP478.

The site is generally rectangular in shape and has approximate site area of  $310m^2$ , The subject site has a single street frontage being 92 North Steyne to the East and The North side of the site adjoins an existing five (5) Storey mixed use building, whilst the Southern side adjoins a four (4) storey residential apartment building. The Western side adjoins existing two (2) two storey residential dwellings.

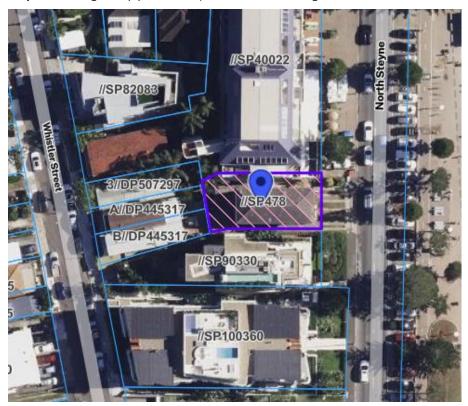


Figure 1 – Satellite Image (Source: Spatial Information "Explorer" March 2025)

The site is currently occupied by a residential flat building which is proposed to be demolished to make way for the 5 storey residential flat development with three (3) Residential Sole Occupancy units and basement Carparking.

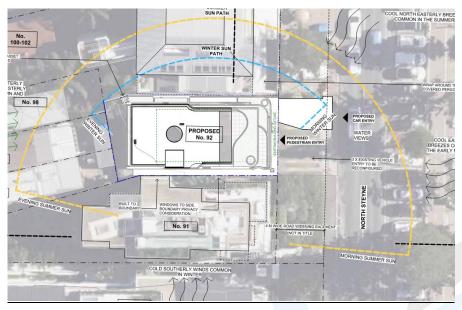


Figure 2 – Proposed Site Analysis Plan - (Source: Platform Architects)



Figure 3 – Floor Plans – (Source: Platform Architects)

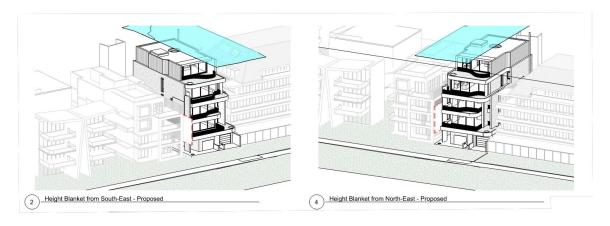




Figure 4 – 3D Perspectives 92 North Steyne (Source: Platform Architects)

#### **RELEVANT VERSION OF THE BCA:**

Pursuant to Section 69 of the Environmental Planning and Assessment Regulation 2021 and Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, all new building work must comply with the current provisions of the National Construction Code Series (Volume 1) Building Code of Australia (BCA).

At the date of this assessment, it is understood that a Part 6 Construction Certificate Application for the entrance floor (principal pedestrian entrance) will not be registered and accepted on the NSW Planning Portal prior to the 1<sup>st</sup> May 2025 <u>Pursuant to clause 19 Environmental Planning & Assessment Act</u> (development Certification and Fire Safety) Regulation 2021.

In this regard, the relevant rendition of the BCA for the development will be **BCA 2025** and although the draft provision of BCA 2025 have been considered, re-assessment of the design will be required to be carried out upon formal release of this BCA Edition from the Australian Building Codes Board (ABCB) and prior to further determination at the Construction Certificate stages.

#### **BUILDING CODE OF AUSTRALIA 2022 COMPLIANCE:**

Arising from our preliminary assessment of the proposed development against the Deemed-to-Satisfy provisions <u>and</u> Performance Requirements of National Construction Code Series (Volume 1 - Amendment 1) – Building Code of Australia 2022, the following key characteristics are noted.

#### **KEY BUILDING CHARACTERISTICS:**

The principal building characteristics as defined by the BCA are noted as follows:

BUILDING CHARACTERISTICS		
- BCA CLASSIFICATION:	Class 2 (Residential SOU's), Class 7a (Carpark)	
- RISE IN STOREYS:	Five (5)	
- STOREYS CONTAINED:	Six (6)	
- TYPE OF CONSTRUCTION:	Type A Construction	
- EFFECTIVE HEIGHT:	>12m & <25m (RL18.760 – RL5.660 = 13.10m)	
- FIRE COMPARTMENTS SIZES:	Complies	
- CLIMATE ZONE:	Climate Zone 5	
- MINIMUM FIRE SERVICES:	Sprinklers (AS2118.1-2017 or AS2118.4-2012), Hydrants (AS2419.1-2021), Fire Hose Reels (AS2441-2005) Smoke Detection (AS1670.1-2018)*, Smoke Alarms (AS3786-2014)*, Extinguishers (AS2444-2001), Stretcher Lifts (BCA Clause E3D3), Drenchers (AS2118.2-2021), Fire Doors (AS1905.1-2015), Fire Seals (AS1530.1-2014), Emergency Lights & Exit Signs (AS2293.1-2018) + Fire Safety Engineering – refer to Appendix for detailed Preliminary Fire Safety Schedule	
- SPECIAL CONSIDERATIONS:	Coastal Construction – (Materials to be compatible for corrosion where the site is within proximity of breaking surf), Electric Vehicle Charges, Roof top Solar Panels, Battery Energy Storage Systems, Car lift, Egress Discharge Arrangements,	

\*Note 1: The Standard of Performance above are subject to change under BCA 2025 – e.g. Smoke Detection (AS1670.1-2021, Smoke Alarms (AS3786-2023), etc

<u>Note 2</u>: The floor area of storage areas within the Basement Carpark Levels are considered to occupy less than 10% of the floor area of the storey they are situated within and therefore, these areas adopt the classification of the Class 7a. Confirmation is to be provided by the architect and should these areas change, a reassessment of the design is required at the Construction Certificate application stage.

#### **FIRE SOURCE FEATURES:**

The site is situated over a single allotment and the distances from the nearest Fire Source Features / allotment boundaries are as follows:

FIRE SOURCE FEATURE	DISTANCE TO FIRE SOURCE FEATURE
- NORTH SIDE	<3m from the side allotment boundary – Approximately 0m
- SOUTH SIDE	<3m from the side allotment boundary – Approximately 0m
- EASTERN SIDE	>6m from the far boundary of North Steyne – Approximately 20m
- WESTERN SIDE	<3m from the side allotment boundary – Approximately 2.4m

**Note:** Refer to BCA Specification 5 and Clause C4D5 for further commentary regarding fire source features and requirements for fire protection etc.

#### **FLOOR AREA / VOLUME:**

The maximum permissible fire compartment sizes for the different classification in the development must comply with the limitations of BCA Table C3D3 (C2.2) as detailed for each classification detailed below:

CLASSIFICATIONS	FIRE COMPARTMENT SIZES	COMPLIES
- CLASS 2 - (Residential SOU's)	NA*	Yes
- CLASS 7a - (Carpark)	NA*	Yes

Note: Fire compartmentation limitations do not apply to Class 2 Residential SOU's and sprinkler protected carpark.

#### **DESIGNATED EXITS**

The following details the proposed Designated Exits from the building are as follows:

LEVEL	DESIGNATED EXITS
- BASEMENT FLOOR	1x Fire Stair an 1x Non -Fire Isolated Stair
- GROUND FLOOR	Main Entry Lobby& Exit Stair Discharge Point
- LEVEL 01	1 x Fire Stair
- LEVEL 02:	1x Fire Stair
- LEVEL 03	1x Fire Stair
- LEVEL 04	No Exits – Two (2) storey SOU's with Entry Doors located on level 3

**Note**: Refer to Section D of the BCA regarding number of exits and other egress arrangement commentary.

# SUMMARY OF KEY BCA COMPLIANCE MATTERS NEEDING ADDRESSING AT THE CONSTRUCTION CERTIFICATE STAGE

The following comprises a summary of the Key BCA 2022 (and draft BCA 2025) compliance matters identified during the preliminary Development Application (DA) Assessment Stages, which will require further consideration at the Construction Certificate stages.

For ease of the readers reference, new BCA 2022 Clauses have been listed together with their previous 2019 superseded references in brackets and upper font e.g. BCA Clause C2D14 (C1.14).

The following matters are to be considered & addressed to the satisfaction of the PC as part of the Construction Certificate application.

Relevant BCA Clauses	Description of Compliance Matter Requiring Resolution			
BCA Parts B1D2 to B1D4 (Structural	BCA Part B1 & Spec 5 (Part B & Spec C1.1) specifies the key structural requirements and FRL's for buildings and the design must comply with the referenced documentation in Schedule 2 of the BCA.  Note: Design Certification, Design Declarations and Regulated plans (as required under the Design			
Performance)	and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.			
BCA Clause C2D2	BCA Clause C2D2 <sup>(C1,1)</sup> specifies the methods required to determine the Type of Construction of a building.			
(Type of Construction) & Spec 5	<u>BCA Clause C4D12 - specifies the requirements for fire separation of SOU's from Public Corridors and other areas</u>			
(FRL's)	BCA Specification 5 (Spec C1.1) specifies FRL's required to key building elements.			
& BCA Clause	In this regard, the following areas have been identified as matters which may be requiring further design consideration at the Construction Certificate stage;			
C4D12 (Bounding	a) <u>Ground Floor to Level 1</u> –The floor separating the Class 7a (Carpark) and the Class 2 (Residential SOU) above is to achieve an FRL of 120/120/120;			
Construction)	b) Ground Floor to Level 3: The floors there above between the remainder of the Class 2 (Apartments) would only be required to achieve a minimum FRL of 90/90/90 and must also achieve a minimum thickness of 200mm including all set down to wet areas and balconies;			
	c) <u>External Walls</u> - Loadbearing and/or Non-Loadbearing walls are located within 3m of the side and rear allotment Boundaries and are therefore required to achieve an FRL of 120.120.120 for the carpark part and 90/90/90 for the residential parts in both directions;			
	d) <u>Bounding Construction - Lift Landing Doors1</u> - The Lift landing doors open directly into SOU and lift landing door will only achieve and FRL of -/60/- in lieu of the required -/60/30 tested to AS1905.1-2015			
	e) <u>Bounding Construction Junctions</u> – Cavity fire stopping details will be required for the floor junctions, namely, the cavity fire stopping details between the concrete floor slab and the external masonry walls where the floors do not extend past the external walls at each level which may create cavities from the SOU below to the SOU above;			
	f) <u>Services Shafts –</u> Ensure all services shafts have nominated FRL's and wall types are specifically designed to ensure they achieve the required FRL's in both directions and top and bottom of the shafts are to be fire rated if they are not laid directly of the ground or do not extend past the roof covering.			
	In addition to the above, service shafts with penetrations in slabs are also to be selected appropriately to ensure they cater for human impact.			
	Fire Engineered Performance Solution: It is understood that the design team will engage an Accredited Fire Safety Engineer to develop a Performance Solution to rationalise the extent of FRL protection and the lift landing doors by demonstrating compliance with all relevant BCA Performance Requirement (C1P1/C1P2). (CP1 & CP2).			
	Additionally, where slab set downs within the residential wet areas are proposed and the slab thicknesses cannot achieve 200mm thick (as required by AS3600-2018), the report will need to also demonstrate compliance with all relevant BCA Performance Requirement B1P1 (BP1.2)			
	Note: Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.			

#### C2D10 & C2D14 (Non-Combustible Building Elements & Ancillary Elements)

<u>BCA Clause C2D10 (C1.9)</u> requires external walls and all elements associated elements to be non-combustible or meet the concessions of this clause. This includes cladding, insulations, plasterboard linings etc.

<u>BCA Clause D2D14 (C1.14)</u> requires ancillary elements to meet the criteria of this clause and permits combustible materials on the premise that compliance is achieved with specified criteria.

- a) <u>Planter boxes</u>: Rationalisation of the extent of combustibility properties proposed to the waterproofing membranes to above ground planter boxes
- b) Render Finishes -There may be polymer type Render coatings or any other linings which may not strictly comply with the concessions under BCA cl.C2D10 and/or AS1530.1 for combustibility and test reports or Codemark Certificates are to be furnished at the Construction Certificate stage confirming the product and system is non-combustible

**Fire Engineered Performance Solution:** Where any part of the external walls is not A\$1530.1-1994 tested or does not fall within the definition of non-combustible or exempted under C2D10 or D2D14 of the BCA, it is understood the design team will engage an Accredited Fire \$afety Engineer to confirm whether a Performance Based Solution can be prepared to rationalise combustibility provisions and the report will need to demonstrate compliance with all relevant BCA Performance Requirement C1P2 & C1P4|CP2 & CP4|

<u>Note:</u> Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier

#### BCA Clause C2D11 & G6D2 (Early Fire Hazard Properties)

<u>BCA Clause C2D11</u> Provides the requirements for the fire hazard properties for all internal linings, material and assemblies.

In this regard, the following areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer;

a) Poly/Plastic Pedestal Pavers supports - Where plastic/poly pedestal pavers are proposed to be used on balconies, roof top and common areas, these may not comply with the required Fire Hazard Properties in accordance with Specification 7 of the BCA 2022 and will require justification via a performance based solution

**Fire Engineered Performance Solution**: It is understood that the design team may engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the Early Fire Hazard Properties of the pedestal pavers supports by demonstrating compliance with BCA Performance Requirement C1P2, C1P4 CP2 & CP4).

Note 1: Refer to C2D11, Subclause 3 of this clause provide a list of materials and assemblies exempt from the provisions above

Note 2: Refer to Specification 7 which sets out the requirements for all fire hazard properties of linings, materials and assemblies in Class 2-9 buildings as set out in Table S7C2.

<u>Note 3:</u> The Supporting Fire Test and Design Certification to the satisfaction of the Registered Certifier are to be provided with the Construction Certificate application.

<u>Note 4:</u> Design Certification, Design Declarations and Regulated plans (as required under the Design and Building Practitioners Act), together with copies of the Performance Based Design Brief and Fire Safety Engineering Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier

#### BCA Clauses C4D3 & C4D5 (Protection of openings)

<u>BCA Clauses C4D3 & C4D5 -</u> requires openings situated in the external walls located within 3m of the fire source features to be protected or addressed under performance solutions.

**In this regard, the following** areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer

a) Openings in the External Walls – Rationalisation of the extent of protection proposed to openings in the external walls located within 3m of the allotment boundaries along the Northern, Southern, and Western elevations.

**Fire Engineered Performance Solution:** It is understood that the design team will engaged the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the extent of protection required to the affected openings by demonstrating compliance with all relevant BCA Performance Requirement C1P2, C1P8 CP2 & CP8).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Where Fire Safety Engineering is proposed, a copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.

#### BCA Clause D2D5 (Exit Travel Distances)

<u>BCA Clause D2D5 (D1.4)</u> specifies the maximum egress travel distances permissible from a point on the floor to a point of choice where alternative exits are available or from a point on the floor to the nearest exits.

In this regard, the following areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

a) <u>Ground Floor</u> - Egress travel distances from the worst effected part of northern parts within the carpark to the single exit (building overhang) is up to 24m (in lieu of 20m).

**Fire Engineered Performance Solution:** It is understood that the client will engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise extended travel distances by demonstrating compliance with the relevant BCA Performance Requirements D1P4 & E2P2 (DP4 & EP2.2).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.

### BCA Clause D2D12 (Travel Via Fire-Isolated Exits)

<u>BCA Clause D2D12 (D1.7)</u> requires fire isolated stairs to discharge directly to open space and where travel to the road necessitate passing within 6m of the external wall, the openings within the external wall required to be protected internally. The clause also regulates the door access provisions associated with fire stairs in certain circumstances;

&
BCA Clause
D2D15
(Discharge

From Exits)

BCA Clause D2D15 (D1.10) specifies the requirements the discharge of exits and the path of travel to the road.

In this regard, the following areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

a) Ground floor Fire Stair Discharge - Upon discharge from the Fire Stairs occupants need to pass within 6m of the external walls and openings of the building to reach the road and as such, the external walls within 6m of the path of travel to the road require an FRL of 60/60/60 mins rated in both directions and all effected openings are required to be self-closing and internally protected with drenchers, fire windows, shutters, fire doors or the like.

<u>In addition</u>, the discharge of the Fire Stairs at this point is not directly connected to a road and necessitates occupants to travel back beneath the building's undercrofts to reach the road due to the buildings design feature. As such, this exit arrangement requires justification via a Performance Based Solution.

**Fire Engineered Performance Solution:** It is understood that the design team will engage a C10 Fire Safety Engineer to develop a Performance Based Solution to rationalise egress stair discharge arrangements and the report will need to demonstrate compliance with all relevant BCA Performance Requirement (CIP2, D1P4, D1P5, E2P2) (CP2/DP4/DP5/EP2.2).

Note: Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.

#### BCA Clause D3D5

<u>BCA Clause D3D5 (D2.4)</u> specifies that there must be separation between rising and descending stair flights.

(Rising & Descending Stairs) In this regard, the following areas\_have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Solutions by the project Fire Safety Engineer

a) <u>Fire Stair Rising & Descending Arrangements</u> – Fire Stair connects both the Basement carpark and the upper Residential levels and due to spatial limitations there is no physical smoke separation documented at the discharge level.

**Fire Engineered Performance Solution:** It is understood that the design team may engage a C10 Fire Safety Engineer to develop a Performance Based Solution to rationalise egress stair arrangements and the report will need to demonstrate compliance with all relevant BCA Performance Requirement D1P4, D1P5 & E2P2 (DP4/DP5/EP2.2).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.

#### BCA Clause D3D13 (Roof as open

Space)

<u>BCA Clause D3D13 (102.12)</u> specifies requirements for a roof where an exit discharges over a roof to reach the road and open space.

In this regard, the following areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

a) Ground Floor Exit Discharge - The exits from the building discharge onto the podium on Ground Floor which is considered roof as open space. As such, the concrete floor slab will need to achieve a min FRL of 120/120/120 and any openings (including openings in the external plane) within 3m of the path of travel to reach the road will require justification via a Performance Based Solution.

**Fire Engineered Performance Solution:** It is understood that the design team will engage the services of an Accredited Fire Safety Engineer to prepare a Performance Based Solution to rationalise the departures associated with openings within 3m of the path of travel along roof as open space. In this regard, the report is to demonstrate compliance with BCA Performance Requirement C1P2 & D1P4(CP2/DP4).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided.

# BCA Clause D3D14

(Goings and Risers)

&

BCA Clause F5D2 (Heights of Rooms & Other

Spaces)

<u>BCA Clause D3D14</u> specifies requirements for stairway goings and risers.

<u>BCA Clause F5D2</u> specifies the minimum height requirements for rooms, stairs and other spaces **In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions

a) <u>Level 3 & 4 Spiral Stairs</u> – There are internal private spiral stairs connecting the two storey Residential SOU's where the tread and risers are not consistent between consecutive steps and the head height clearances are less than 2.0m and as such, these stairs may require justification via a Performance Based Solution.

**BCA Performance Solution:** It is understood that the design team will engage the services of BCA Consultant to consider a Performance Based Solution to rationalise to rationalise the departures associated with Spiral Stairs. In this regard, the report is to demonstrate compliance with BCA Performance Requirement D1P2 & F5P1 (DP2/FP3.1).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Copies of any Performance Based Design Brief and Performance Solution Reports are to also be provided.

#### BCA Clause D3D17 to D3D21 (Balustrades and other Barriers)

<u>BCA Clause D3D17 to D3D21</u>- specifies requirements for balustrades and other barriers located with a building where the floor is greater than 1.0m from the surface beneath.

In this regard, the following areas had been identified as matters that were requiring further design consideration.

a) <u>Balustrades above/ Adjacent to Concrete upturns</u>—There are balustrades that are serving balconies on floors that are more that 4m from the surface below, which may have climbable elements between 150mm and 760mm from the finished floor level. (i.e. Concrete / planter upturn) given the open style balusters proposed

Note 1: Careful consideration will be required to the upper areas (where BBQ or joinery is proposed to ensure there are no climbable elements in this vicinity of the barrier/balustrades. The reminder of the barriers are to also ensure no fixed lights, GPO's, Taps or the like are installed to maintain the barrier free from footholds.

Note 2: Architectural Details and Specifications are to be prepared by a suitably qualified design practitioner (Registered Architect). Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier

#### BCA Clause D3D24 (Doorways)

8.

BCA Cause D3D26 (Operation of Latch) <u>BCA Clause D3D24 (102.19)</u> specifies the requirements for exit doors serving a building and provide restrictions in certain circumstances.

<u>BCA Clause D3D26 (D2.21)</u> specifies the requirements for door latch hardware to egress doors in a path of travel or at a designated exit.

**In this regard, the following areas** had been identified as matters that were requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

(a) <u>Basement Levels B01 & B02 – There</u> may be roller shutter doors or tilt-up doors to the each individual allocated Carparking Spaces (Garages) which will form a non-compliant doorway along a path of travel to an exit. As such, compliant personnel doors are required to be

provided with free access in the direction of egress from within each garage or alternatively this arrangement is to be justified via a fire engineered performance based solution.

**Fire Engineered Performance Solution:** It is understood that the client will engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise any door and door latch hardware departures associated with the roller shutter or tilt up doors to the basement level carparking spaces by demonstrating compliance with BCA Performance Requirements (D1P2 & E2P2 (DP2/EP2.2)).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Copies of any Performance Based Design Brief and Performance Solution Reports are to also be provided.

#### BCA Clause D3D29 (Protection of Openable Windows)

<u>BCA clause D3D29</u> – specified the requirements for openable windows to be provide with a means of protection where the floor below is located 2m or more.

In this regard, the following areas had been identified as matters that were requiring further design consideration and/or justification via Performance-Based Alternative Solutions;

a) <u>Windows Sill Hights</u> – There may be openable windows which have a sill heigh that is less than 865mm or have climbable elements between 150mm & 760mm from the finished floor where there is a fall of more that 4m from the openable windows to surface below.

**BCA Performance Solution:** It is understood that the design team may engaged the services of a BCA consultant to consider a Performance Based Solution to rationalise the departures with climbable elements in barriers below openable windows by demonstrating compliance with all relevant BCA Performance Requirements (D1P3) DP3.

Note: Architectural Details and Specifications are to be prepared by a suitably qualified design practitioner (Registered Architect). Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Where a Performance Solution is proposed, a copy of the Performance Solution Report is to also be provided and accompanied by a BCA Performance Based Design Brief.

#### BCA Part D4, AS1428.1 (Accessibility requirements)

BCA Part D4 (D3) requires accessibility compliance to be achieved.

Accessibility Compliance Report: It is understood that an access consultant has been engaged to review the proposed development and provide an Accessibility Capability Statement in support of the Development Application (DA) to Council and to ensure that all aspects of the Adaptable Housing/ADG provisions, DDA, A\$1428.1-2009 and Part D4 of the BCA, have been addressed.

<u>Note:</u> Architectural Details, Design Certification and copies of the Performance Based Design Brief and Accessibility Compliance Reports are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.

#### BCA Clause E1D2 (Fire Hydrants)

<u>BCA Clause E1D2 (E1.3)</u> requires hydrants coverage to the building in accordance with AS2419.1-2021 **In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

- a) <u>Fire Hydrant Landing Valve Location</u> Hydrants must not reduce the minimum 1.0m unobstructed egress widths (unless otherwise addressed via a Performance Based Solution);
- b) <u>Coverage Plans</u> Detailed sweep coverage plans with dimensions are to accompany the Construction Certificate application;
- c) <u>Fire Hydrant Design Departures</u> Any departures associated with the systems Standard of Performance (AS2419.1-2021) needs to be identified by the Registered Design Practitioner/Competent Fire Safety Practitioner for the Registered Certifier and Fire Safety Engineers consideration.

**Fire Engineered Performance Solution:** Where any part of design is proposed to deviate (subject to design engineers' advice) the design team will engage an Accredited Fire Safety Engineer to develop a Performance Based Solution and the report will need to demonstrate compliance with all relevant BCA Performance Requirement E1P3 (EP1.3).

Note 1: The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.

<u>Note 2:</u> Architectural Details and Specifications are to be provided ensuring they cross reference any Fire Engineering requirements. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report

prepared by an Accredited Certifier - Fire Safety and who is also Registered Design Practitioner, is to also be provided. **BCA Clause** BCA Clause E1D3 specifies the requirements for Fire Hose Reels in Buildings. E1D3 In this regard, the following areas have been identified as matters which may be requiring further (Fire Hose design consideration at the Construction Certificate stage. Reels) Fire Hose Reel Coverage - Fire Hose Reel coverage is required to all areas of the carpark level levels where internal hydrant have been provided. Fire hose reels are to be located within 4m of an exit and they must not encroach into the minimum 1.0m obstruction width required for the path of travel to an exit; b) <u>Fire Hose Reel Coverage Plans</u> - Detailed sweep coverage plans with dimensions are to accompany the Construction Certificate application; Fire Hose Reel Design Departures – Any departures associated with the systems Standard of Performance (AS2441.1-2005) needs to be identified by the Registered Design Practitioner/Competent Fire Safety Practitioner for the Registered Certifier and Fire Safety Engineers consideration. Note 1: The fire services design engineer must demonstrate that they are Competent Fire Safety Practitioner (CFSP) and they must be on the Register of the Fire Protection Association Australia (FPAA). Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards. Note 2: Architectural & Fire Services Details and Specifications are to be provided ensuring they cross reference any Fire Engineering requirements. Design Certification and Design Compliance Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. **BCA Clauses** BCA Clauses E1D4, E1D5, E1D6, E1D9 (E1.5) requires sprinklers to buildings in accordance with A\$2118.1-E1D4, E1D5, 2017. E1D6, E1D9 & In this regard, the following areas have been identified as matters which may be requiring further Specification design consideration and/or justification via Performance-Based Alternative Solutions by the project 17 & 18 Fire Safety Engineer; (Sprinklers) <u>The mian sprinkler control / stop valve –</u> the BCA requires the main stop valve to be accessible directly from the roadway and this is to be detailed o the plans; <u>Fire Sprinkler Clearances</u> -Sprinkler heads proposed to the storage areas for clearances purposes may require addressing via a fire engineered Performance Based Solution. Fire services consultant to confirm sprinkler clearance and coverage; <u>Design Departures</u> – Rationalisation of any departures associated with the systems Standard of Performance (AS2118.1-2017) identified by the Registered Design Practitioner/Competent Fire Safety Practitioner. Fire Engineered Performance Solution: It is understood that the client will engage the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise the extent of fire services infrastructure arrangements by demonstrating compliance with the relevant BCA Performance Requirement E1P4 (EP1.4). Note: Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided **BCA** Clause BCA Clause E1.6 - requires Portable Fire Extinguishers to be installed within 10m of the SOU entry doors. E1D14 In this regard, the following areas have been identified as matters which may be requiring further (Portable Fire design consideration and/or justification via Performance-Based Alternative Solutions by the project Extinguishers) Fire Safety Engineer Residential Levels - Portable Fire extinguishers are to be within 10m of each SOU door, and given the entry door to the SOU's are directly in to the fire stair, extinguishers cannot be located in the fire stair and this will need to be addressed via performance based solution. Fire Engineered Performance Solution: It is understood that the client will engaged the services of an Accredited Fire Safety Engineer to consider a Performance Based Solution to rationalise departures associated with the location of portable fire extinguisher within the residential parts of the building by demonstrating compliance with BCA Performance Requirements E1P2 (EP2) Note: Architectural details, Design Certification and Design Declarations (as required under the

Design and Building Practitioners Act) are to be provided with the Construction Certificate

application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided

#### BCA Clause E1D17 & E2D21 (Provision for Special Hazards)

BCA Clause E1D17 & E2D21 – Provision for Special Hazards (E1.10 & E2.3) specifies additional requirements needing consideration for firefighting operations.

**In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

- (a) <u>Solar Panels</u> Photo voltaic panels are proposed on the Roof of the build and these need to be identified in the FEBQ/FER. Where battery storage systems are proposed, these may need to be contained in separate fire rated enclosures.
- (b) <u>Electric Vehicles & Electric Vehicles charging Facilities</u> The provision of any electric vehicle charging facilities in the carparks needs to be identified in the FEBQ/FER.

**Fire Engineered Performance Solution:** It is understood that the design team will engaged the services of an Accredited Fire Safety Engineer to prepare a Performance Based Solution to rationalise several BCA DTS departures and the above Special Hazard Provisions will need to be considered accordingly.

Note: Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier – Fire Safety and who is a Registered Design Practitioner, is to also be provided..

#### BCA Clause E2D3 & Specification 20 (Smoke Hazard Management)

<u>BCA Clauses E2D3, E2D4 & Specification 20 & 21</u> specifies smoke hazard management systems applicable to buildings and in this case, the following are required;

- a) AS3786-2014 Smoke Alarm System within each SOU
- b) AS1670.1-2018 Automatic Fire Detection and Alarm System throughout all common areas.
- c) A\$1670.1-2018 Building Occupant Warning throughout all \$OUs and common areas.
- d) AS1670.3 -2018 Alarm System Monitoring at the FDCIE (fire panel).
- e) AS2118.1-2017 or AS2118.4-2012 Sprinkler System throughout

In this regard, the following areas have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions by the project Fire Safety Engineer;

- a) <u>Smoke Detection Systems No Smoke Detection details</u> were provided for our review. Detection systems are typically required throughout all common areas in the Carpark and Residential Corridors as a compensatory measure to DTS deviations within the Fire Engineering Strategies for the building
- b) <u>Smoke Alarms Systems</u> Smoke alarms within the SOU's are to strictly comply with Specification 20 and Subclause S20C3 and be located in hallways between bedrooms and any other areas, located directly in front of bedroom doors near living areas and not located near ceiling fans or supply AC vents. Smoke alarms are to be interconnected within each respective unit and be located 300mm from intersecting walls.
- c) <u>Building Occupant Warning System</u> Given the building will be provided with a combined clause \$20C5 smoke detection and alarm system, the concession provided by clause \$20C7 are not applicable and a minimum of 75dB(A) is to be provided throughout all areas (internal and external areas) of the building in accordance with A\$1670.1-2018;
- d) <u>Smoke Hazard management Design Departures</u> Any departures associated with the systems Standard of Performance (/AS2118.1-2017 / AS1670.1-2018 / AS3786 2014) needs to be identified by the Competent Fire Safety Practitioner for the design team and Registered Certifiers consideration.

**Fire Engineered Performance Solution:** Where any part of design is proposed to deviate (subject to design engineers' advice) the design team will engage a Fire Safety Engineer to develop a Performance Based Solution to rationalise certain aspects of the Smoke Hazard Management System designs and the report will need to demonstrate compliance with all relevant BCA Performance Requirements (E2P2)(EP2.2).

<u>Note 1:</u> The Fire Services Design Engineer must be an Accredited Practitioner - (Fire Safety) having relevant accreditation with the Fire Protection Association of Australia (FPAA) or the Department of Fair trading. Furthermore, the designer must have suitable qualifications in the respective fields they are designing to, and their design details and certifications are to identify any shortfalls or departures associated with the either the BCA or the relevant Australian Standards.

Note 2: Architectural Details and Specifications are to be provided ensuring they cross reference any Fire Engineering requirements. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. A copy of the Fire Engineers Report prepared by an Accredited Certifier - Fire Safety and who is also Registered Design Practitioner, is to also be provided.

BCA Clause F1D5 (External Waterproofing)

BCA Clause F2D2 (Waterproofing of Wet Areas)

<u>BCA Clause F1D5</u> specifies the requirements for external waterproofing membranes.

BCA Clause F2D2 specifies the requirements for waterproofing of internal wet areas.

Class 2 buildings must have building elements in a wet area (bathroom, shower, laundry, powder room) that are water resistant or waterproofed in accordance with Specification 26 and AS3740-

Please ensure the new standard is reviewed to ensure appropriate details are adopted in the proposed design, noting 1:100 falls are now required at the membrane substrate level (concrete floor) and additionally, 1:80 falls are required throughout on the FFL in Internal wet areas as per BCA Clause F2D4 which takes precedence over the Standard. Where 1:80 falls cannot be achieved, this will need to be addressed via a performance based solution prepared by a Professional Waterproofing Consultant

In this regard, the following areas have been identified as matters which may be requiring consideration by either way of redesign or via justification from the project Architect or waterproofing consultant via a performance based solution:

- a) External Waterproofing/Freeboard heights Architect/Hydraulic/Façade Engineer/s to determine freeboard heights and design door threshold/step down accordingly. They are also to design external waterproofing membranes to walls, planter boxes, podium roof tops, concrete roofs etc:
- b) <u>Pedestal Paver Systems</u> Where Poly Paver / Pedestal Paver systems are proposed to balconies, terraces, podium common areas etc, they will require Performance Based Solutions as the pavers do not provide the required 1:80 falls required to finished floor levels as per the
  - In this regard, 1:80 falls or positive falls are typically required at the concrete substrate level as part of the justification from the Waterproof Consultant developing the Performance Based Design Brief/BCA Performance Solution Report;
- c) Windows in Showers there are windows in showers that may not strictly comply with the provision of AS3740.1-2021.

BCA Performance Solution: Where any part of design is proposed to deviate (subject to design engineers' advice) the design team will engage a Professional Waterproofing Consultant to develop a Performance Based Solution to rationalise certain aspects of the waterproofing system designs and the report will need to demonstrate compliance with all relevant BCA Performance Requirements (F1P2 & F2P1) (FP1.7).

Note 1: Architect and Builder to refer to Specification 26 for specific design details. Definitions for explanations of Water Resistant and Waterproofed are also referenced in Specification 26.

Note 2: Drainage/Puddle floor waste flanges are required to ALL floor wastes. Shower roses which are ceiling mounted require waterproofing application to extend to the full height to the wall and ceilings to be water resistant. Falls to floor wastes in all internal wet areas are to be 1:80.

Note 3: Architectural, Hydraulic and Waterproofing Details and Specification are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Where design departures are proposed, a Performance Based Solutions addressing BCA performance Requirement F1P2 & F2P1 is to be prepared by the waterproofing consultant and a copy of the Report is to also be provided.

BCA Clause F3D1, F3D2, F3D3, F3D4 & F3D5

(Wall Cladding / External Wall Weather proofing)

**BCA Clauses** F8D2 to F8D5 (Condensation Management)

BCA Clause F3D5 (New Clause supplementing F1.0) specifies the need for the designers to ensure the external walls are designed to prevent water and moisture ingress.

In this regard, the following areas have been identified as matters which may be requiring consideration;

- External Wall Weatherproofing/Facade Engineering: In order to comply with the deemed to satisfy provisions, the architect and façade engineers must design the building envelope and surrounding surfaces in accordance with Clauses F3D2, F3D3, F3D4 & F3D5 and where this cannot be achieved, a Performance based solution addressing BCA Performance Requirement F3P1 is required;
- Condensation Management: The provisions of Clauses F8D2 to F8D5 need to also be considered in the external wall design.

BCA Performance Solution: Façade Engineer to prepare a report to assess water and moisture ingress via the external walls and roof whilst considering BCA Clauses F3D1, F3D2, F3D3, F3D4 F3D5 and F8D2 to F8D5 and also develop a Performance Based Solution to address BCA Performance Requirement F3P1<sup>(FP1.4)</sup> as it is unlikely that the external wall cladding will comply with these provisions accordingly.

<u>Note 1:</u> External cladding that does not consist of the above options will need to be subject to performance based solutions.

<u>Note 2:</u> External wall claddings in buildings of Type A Construction must be non-combustible and tested in accordance with A\$1530.1-1994 as required by BCA Clause C2D10.

Note 3: External waterproofing membranes in accordance with F1D5 and AS4654.1 or 2 - 2013 are not permissible for vertical or near vertical surfaces and relate to horizontal surfaces only.

Note 4: BCA 2025 requires basements to be weatherproofed which BCA 2022 did not.

Note 5: Architectural and/or Façade Engineering Details, Specifications & Design Certification are to be provided, with the Construction Certificate application to the satisfaction of the Registered Certifier. Where design departures are proposed, a Performance Based Solution addressing BCA performance Requirement F3P1, is to be prepared by the Façade Engineer and a copy of the Report is to also be provided.

#### BCA Clause F5D2 (Heights of Rooms & Other Spaces)

<u>BCA Clause F5D2 (F3.1)</u> specifies the minimum height requirements for rooms, stairs and other spaces **In this regard, the following areas** have been identified as matters which may be requiring further design consideration and/or justification via Performance-Based Alternative Solutions

a) <u>Carpark Storage Spaces</u> –The minimum sprinkler head clearances required for sprinklers within the storage cages/rooms may reduce the head heigh clearance of the room to be less than the minimum 2.1m and this will required addressing via performance based solution.

**BCA Performance Solution:** It is understood that the design team will engaged the services of BCA Consultant to consider a Performance Based Solution to rationalise any departures associated with reduced head heigh clearances and the report is to demonstrate compliance with BCA Performance Requirement D1P2 & F5P1 (DP2/FP3.1).

<u>Note:</u> Architectural details, Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier. Copies of any Performance Based Design Brief and Performance Solution Reports are to also be provided

#### BCA Part J (Energy Efficiency)

BCA Section J specifies the energy efficiency provision applicable to the building.

The Class 2 Building part will be subject to the Building Sustainability Index (BASIX) which will require the recommendations on the certificate to be clearly demonstrated on the Construction Certificate drawings

Detailed Section J compliance report to be provided at the Construction Certificate stage. In addition, the DTS requirements of NSW Variations of Section J (Energy Efficiency) of the BCA will need to apply to the proposed Class 2 parts of the development. Refer to NSW Variation Clauses J2D2(2), J3D5, J3D6 J4D2, J4D3, J3D10(3), J3D10(5), J3D10(6), J5D2 to J5D5, J6D2 to J6D13, J8D2 & Part B2 of the PCA, J9D3, J9D4 and J9D5.

The building is located in **Climate Zone 5** and the relevant provisions of the BCA are to be applied to each classification concerned adoringly.

<u>Note 1:</u> In order to demonstrate compliance, it is understood that a Section J report and Verification report from an qualified ESD Consultant will be submitted with the Construction Application.

Note 2: BCA 2025 has increased requirements for EV charging provisions which vary from those of BCA 2022.

Note 3: Architectural & ESD Consultant Details and Specifications prepared by a suitably Registered design practitioner (Registered Architect & ESD Consultant) are to be provided. Design Certification and Design Declarations (as required under the Design and Building Practitioners Act) are also to be provided with the Construction Certificate application to the satisfaction of the Registered Certifier.

It is important to note that the above is not an exhaustive list of the matters requiring attention and the summary above only identified the requiring design consideration and/or Performance Based Solutions.

#### **CONCLUSION:**

This report contains an assessment of the referenced architectural documentation for the proposed development located at 92 North Steyne Manly, against the Deemed-to-Satisfy provisions and Performance Requirements of the National Construction Code Series (Volume 1) Building Code of Australia.

In this regard, the relevant rendition of the BCA for the development may be **BCA 2025** and although the draft provision of BCA 2025 have been considered, re-assessment of the design will be required to be carried out upon formal release of this BCA Edition from the Australian Building Codes Board (ABCB) and prior to further determination at the Construction Certificate stages.

The detailed desktop assessment of the building was carried out against the technical provisions of the BCA. It is noted that the proposed development must comply with the relevant requirements and this can be achieved by complying with the following:

- a) Complying with the Deemed-to-satisfy (DTS) Provisions; or
- b) Formulating a Performance Solution which considers one or more of the BCA Assessment methods and which
  - i) Complies with the Performance Requirements; or
  - ii) Is shown to be at least equivalent to the DTS provisions; or
- c) A combination of the above.

In accordance with the above, Concise Certification can verify that the proposed building design will entail a combination of compliance with the DTS provisions and Performance Requirements of the BCA, by virtue of the justification of Performance Based Solutions prepared by a C10 Accredited Fire Safety Engineer, Access Consultant, ESD Consultant and Façade Engineer, however the findings of these report at the Construction Certificate Stage should not in any way detrimentally alter the design presented to Council as part of the Development Application (DA) application.

In view of the above assessment we can confirm that subject to the above measures being appropriately addressed by the project Fire Safety Engineer, Access Consultant, Design Consultants and other key Stakeholders, that compliance with the BCA is readily achievable.

We trust that the above submission is of assistance to the Department of Planning, Housing and Infrastructure and we are confident that any design modifications required to the building in order to satisfy the fire and life safety, accessibility requirements, health & amenity requirements and the energy efficiency provisions of the BCA will not necessitate the need for submission of a further application under Section 4.55 of the Environmental Planning & Assessment Act 1979.

Should you require further assistance or clarification please do not hesitate to contact the undersigned at <a href="mailto:darko@concise.com.au">darko@concise.com.au</a> or on 0431 194 363.

Kind Regards,

Ďarko Kardum

Senior Building Surveyor

Concise Certification Pty Ltd

Refer to Attached Appendix - Fire Safety Schedule

## **APPENDIX: PRELIMINARY FIRE SAFETY SCHEDULE**

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule, which, for the purposes of Part 10 and Part 11 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, which will be deemed to be the current fire safety schedule for the building.

Statutory Fire Safety Measure	Design/Installation Standard
Alarm Signalling Equipment	BCA 2022 - Clause E1D4, Specifications 17 & 18 & 20, AS 1670.3 – 2018* and Manufacturer's Specification
Automatic Fail-Safe Devices  - Including fail safe devices to garage doors	BCA 2022 - Clause D3D26 and Manufacturer's Specification + Fire Engineered Performance Based Solution
Automatic Fire Detection and Alarm System	BCA 2022 - Clause E2D3, E2D8 BCA Specification 20, A\$ 1670.1 – 2018* & Manufacturer's Specifications + Fire Engineered Performance Based Solution
Automatic Fire Suppressions System	BCA 2022 - Clause E1D4, E1D6,& E1D9 Specifications 17 & 18 AS 2118.1 – 2017 or AS 2118.4-2012, Manufacturer's Specifications + Fire Engineered Performance Based Solution
Building Occupant Warning System	BCA 2022 - Clause E2D8, BCA Specification 20 and AS 1670.1 – 2018* and Manufacturer's Specifications + Fire Engineered Performance Based Solution
Emergency Lighting	BCA 2022 - Clause E4D2, E4D3 & E4D4 & AS 2293.1 - 2018 and Manufacturer's Specifications
Exit Signs	BCA 2022 - Clauses E4D5, E4D6 & E4D8 (and AS 2293.1 – 2018 and Manufacturer's Specifications
Fire & Smoke Dampers	BCA 2022 - Clause C4D15, AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 and Manufacturer's Specifications
Fire Doors	BCA 2022 - Clause C3D13, C3D14, C4D5, C4D11, C4D12, D3D9 and AS 1905.1 – 2015, AS 1530.4-2014 and Manufacturer's Specifications + Fire Engineered Performance Based Solution
Fire Hose Reels	BCA 2022 - Clause E1D3 & AS 2441 – 2005 and Manufacturer's Specifications
Fire Hydrant Systems	BCA 2022 - Clause E1D2 & AS 2419.1 – 2021 Manufacturer's Specifications + Fire Engineered Performance Based Solution
Fire Resisting Elements & Structures	BCA 2022 – Clause C2D2 & Specification 5, AS 1530.4-2014 + Fire Engineered Performance Based Solution
Fire Seals  - Protecting openings in fire-resisting components of the building	BCA 2022 - Clause C4D15 & AS 1530.4 – 2014 & AS 4072.1 – 2005, Manufacturer's Specifications
Lightweight Construction  - Including Cavity Fire Stopping	BCA 2022 - Clause C2D9 Specification 5 & 6 & AS 1530.4 – 2014 and Manufacturer's Specifications
Mechanical Air Handling Systems  - Carpark Exhaust Systems	BCA 2022 - Clause E2D3, E2D12, F6D11, & Specification 20 AS/NZS 1668.1 – 2015, AS 1668.2 – 2012*, AS1670.1-2018* and Manufacturers Specifications
Paths of Travel  - Fire Exits and Fire Exit Doors	BCA 2022 – Part D3 & Section 109 of the EP&A (Development Certification and Fire Safety) Regulation + Fire Engineered Performance Based Solution
Portable Fire Extinguishers	BCA 2022 - Clause E1D14 & AS 2444 - 2001
Smoke and Heat Alarms  - Located within Sole Occupancy Units	BCA 2022 – Clause E2D8 and Specification 20 and AS3786- 2014* and Manufacturer's Specification
Wall-Wetting Sprinklers  - Where proposed to protect Openings	BCA 2022 - Clause C4D5, & AS 2118.2 – 2021 and Manufacturer's Specification + Fire Engineered Performance Based Solution

Statutory Fire Safety Measure	Design/Installation Standard
Warning & Operational Signs  - Fire Safety Notices, Braille Signage, Lift Warning Signs, Fire Services Block Plans & other	BCA 2022 - Clauses D4D7 and E3D4 + Fire Engineered Performance Based Solution
Fire Engineered Performance Solutions (Refer to Summary in table in the report above)	The relevant Performance Requirements associated with the proposed Fire Engineered Performance Solutions:  - C1P1, C1P2, C1P4 & C1P8  - D1P2, D1P4 & D1P5  - E1P3, E1P2, E1P4 & E2P2

\*Note 1: The Standard of Performance above are subject to change under BCA 2025 – e.g. Smoke Detection (AS1670.1-2021, AS1670.3-2021, AS3786-2023, AS1668.2-2024, etc).

<u>Note 2:</u> The above Performance Based Solutions include fire safety provisions and pursuant to Section 27 of the EP&A (Development Certification and Fire Safety) Regulation 2021, formal Fire Engineering Brief and Report referrals to Fire & Rescue NSW will be require prior to the Construction Certificate application stages.