

18 June 2026
Our Ref: 26123-L01-01

Abadeen

Plaza Building Australia Square
Level 5, 95 Pitt Street
Sydney NSW 2000

Attention: Adrian Giardina
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Dear Adrian

494-500 & 516 MILITARY ROAD, MOSMAN FIRE ENGINEERING STATEMENT (FOR SSDA SUBMISSION)

INTRODUCTION

The proposed works relate to the construction of a new Mixed-Use Development located at 494-500 & 516 Military Road, Mosman.

This document provides advice with regards to the proposed use of Performance Solutions to address identified fire safety related departures to the Deemed to Satisfy (DtS) provisions of the National Construction Code 2025 Volume One – Building Code of Australia Class 2 to 9 Buildings (NCC).

The purpose of this document is to assist in the design development process and to assist the Department of Planning, Housing and Infrastructure (DPHI) in the determination of the SSDA submission.

DESCRIPTION OF DEVELOPMENT

The subject site is located at 494-500 & 516 Military Road, Mosman and comprises six irregular shaped allotments with a combined site area of approximately 3,170 m². The site is generally bounded by Military Road to the south, Hale Road to the west, Lang Street to the north-west, Mackie Lane to the east and adjoining residential development to the north.

The site currently contains a mix of existing commercial and residential development and is understood to be proposed to be consolidated into a single allotment as part of the proposed development and subdivision process.

The proposed development will comprise:

- 2 residential building components ranging from 6 to 8 storeys in height above ground level;
- 2 basement levels containing car parking, loading, plant, and associated building services infrastructure;
- Approximately 103 residential apartments comprising a mix of 1 bedroom, 2 bedroom and 3 bedroom dwellings;
- Ground floor retail tenancies fronting Military Road with associated back-of-house and service areas;
- Residential lobby and communal facilities areas; and
- Associated landscaping, deep soil planting areas, publicly accessible open space and site infrastructure works

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NCC ASSESSMENT DATA

With reference to the BCA Capability Report prepared by Concise Certification Pty Ltd (Ref: BCAR-260105, Issue No. 01 (Draft), dated 16 June 2026), the relevant NCC Assessment Data for the subject development is summarised in Table 1.

Table 1: Relevant NCC Assessment Data

NCC Reference	NCC Assessment
Classification	Class 2 (residential units) Class 6 (retail tenancies) Class 7a (car parking) Class 7b (waste storage & collection area)
Rise in Storeys	11
No. of Levels Contained	13
Minimum Type of Construction Required	Type A
Effective Height	Greater than 25 m (~31.8 m)
Maximum Fire Compartment Size	As applicable for Type A construction

REFERENCED DRAWINGS

Table 2: List of Referenced Architectural Drawings

Drawing No.	Issue	Title	Date
DA000	A	Cover Page	-
DA101	A	Site & Roof Plan	16-06-2026
DA200	A	Plan – Basement 2	16-06-2026
DA201	A	Plan – Basement 1	16-06-2026
DA202	A	Plan – Lower Ground Floor	16-06-2026
DA203	A	Plan – Ground Floor	16-06-2026
DA204	A	Plan – Level 1	16-06-2026
DA205	A	Plan – Level 2	16-06-2026
DA206	A	Plan – Level 3	16-06-2026
DA207	A	Plan – Level 4	16-06-2026
DA208	A	Plan – Level 5	16-06-2026
DA209	A	Plan – Level 6	16-06-2026
DA210	A	Plan – Level 7	16-06-2026
DA211	A	Plan – Level 8	16-06-2026
DA212	A	Plan Roof	16-06-2026
DA300	A	Elevations	16-06-2026
DA301	A	Elevations	16-06-2026
DA302	A	Section AA – Building A	16-06-2026
DA303	A	Section BB – Building B	16-06-2026
DA304	A	Perspective 01	16-06-2026
DA305	A	Perspective 02	16-06-2026

ACHIEVING COMPLIANCE WITH THE NCC

Compliance with the NCC is achieved by satisfying the Performance Requirements. Clause A2G1(2) of the NCC states that the Performance Requirements can be satisfied by one of the following:

- (a) Performance Solution.*
- (b) Deemed-to-Satisfy Solution.*
- (c) A combination of (a) and (b).*

Clause A2G2(1) of the NCC states that a Performance Solution is achieved by demonstrating:

- (a) compliance with all relevant Performance Requirements; or*
- (b) the solution is at least equivalent to the Deemed-to-Satisfy Provisions.*

Clause A2G2(2) of the NCC states that a Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of the following Assessment Methods:

- (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.*
- (b) A Verification Method including the following -*
 - (i) the Verification Methods in the NCC.*
 - (ii) Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements.*
- (c) Expert judgment.*
- (d) Comparison with the Deemed-to-Satisfy Provisions.*

Clause A2G2(3) of the NCC states Where a Performance Requirement is satisfied entirely by a Performance Solution, in order to comply with (1) the following method must be used to determine the Performance Requirement or Performance Requirements:

- (a) Identify the relevant Performance Requirements from the Section or Part to which the Performance Solution applies.*
- (b) Identify Performance Requirements from other Sections or Parts that are relevant to any aspects of the Performance Solution proposed or that are affected by the application of the Performance Solution.*

Clause A2G2(4) of the NCC states Where a Performance Solution is proposed to be satisfied by a Performance Solution, the following steps must be undertaken:

- (a) Prepare a performance-based design brief in consultation with relevant stakeholders.*
- (b) Carry out analysis, using one or more of the Assessment Methods listed in (2), as proposed by the performance-based design brief.*
- (c) Evaluate results from (b) against the acceptance criteria in the performance-based design brief.*
- (d) Prepare a final report that includes-*
 - (i) All Performance Requirements and/or Deemed-to-Satisfy Provisions identified through A2G2(3) or A2.4(3) as applicable; and*
 - (ii) Identification of all Assessment Methods used; and*
 - (iii) Details of step (a) to (c); and*
 - (iv) Confirmation that the Performance Requirement has been met; and*
 - (v) Details of conditions or limitations, if any exist regarding the Performance Solution.*

IDENTIFIED DEPARTURES TO DTS PROVISIONS OF NCC

With reference to the BCA Capability Report prepared by Concise Certification Pty Ltd (Ref: BCAR-260105, Issue No. 01 (Draft), dated 16 June 2026), it is likely that Performance Solutions are proposed to be developed to address departures to the following DtS provisions of the NCC:

1. Enclosure of shafts – NCC Clauses C2D2, C4D13, NCC Specification 5 (S5C8)

To permit the Waste Chute Rooms at Lower Ground and Basement 1 to form the base of the fire rated garbage chute shafts.

2. Fire-resisting construction / Separation of classifications – NCC Clauses C2D2, C3D8, C3D9, C3D10, C4D6, Specification 5 (S5C11)

To permit FRLs listed in Tables S5C11a - S5C11g for building elements associated with the Class 6 retail tenancies on the ground floor level to be reduced from 180 minutes to 120 minutes.

3. Fire-resisting construction / Separation of classifications – NCC Clauses C2D2, C3D8, C3D9, C3D10, C4D6, Specification 5 (S5C11)

To permit FRLs listed in Tables S5C11a - S5C11g for building elements associated with the Class 7b Loading Dock / Waste Storage Areas located on Ground Floor of Building B to be reduced from 240 minutes to 120 minutes.

4. Fire-resisting construction – NCC Clause C2D2, Specification 5 (S5C11)

To permit the use of a non-combustible rockwool to provide fire separation between the perimeter slab edges and the external walls of the building.

To permit the use of a non-combustible rockwool to provide fire separation to the gap formed between the internal bounding walls to the SOUs and the external walls.

5. Fire-resisting construction – NCC Clause C2D2, Specification 5 (S5C11)

To permit the loadbearing external columns on Level 9 (Rooftop), supporting the roof canopies, to not achieve an FRL as required by Table S5C11c.

To permit the roof canopies to be of non-combustible construction without achieving an FRL as required by Table S5C11g.

6. Fire hazard properties – NCC Clauses C2D11, G6D2

To permit the use of pavers to open balconies to be supported by plastic pedestals which have not been tested to achieve a Critical Radiant Heat Flux of 2.2 kW/m² or more and therefore does not satisfy the fire hazard property requirements under by Table S7C3.

7. Ancillary elements – NCC Clause C2D14

To permit planter boxes (deemed ancillary elements where they adjoin the external walls of the building) which:

- Typically contain combustible material such as plastic planting beds/trays, geotextile fabrics for filtration and flexible pipework for irrigation.
- Requires a waterproofing membrane to be applied to the external wall behind the planter box which extends more than 250 mm above finish ground level.

8. Public corridors in Class 2 Buildings – NCC Clause C3D15

To permit public corridors in Building A to exceed 40 m in length without being separated by smoke proof construction as follows:

- Lower Ground and Upper Ground Levels: Up to 55m
- Levels 1-4: Up to 45m

9. Smoke doors – NCC Specification 12 (S12C4)

To permit the smoke door within the public corridor on the upper ground floor to swing inwards against the direction of egress, in lieu of swinging in both directions.

10. Exposure between compartments – NCC Clauses C4D4, C4D5

To vary the method of fire separation at the external walls between the Class 2 lobby of Building B and the Class 7b Bin Holding Area, being separate fire compartments within the same building (i.e. to permit the external walls of the Class 7b Bin Holding Area to not achieve a 60/60/60 FRL and the doorway to remain unprotected based on the external wall of the Building B Lobby achieving an FRL of 120/120/120 in both directions so that there is no exposure between adjoining fire compartments for at least 4 m).

11. Openings in fire-isolated lift shafts – NCC Clause C4D11

Fire rated lift landing doors used throughout the development are not expected to comply with AS 1735.11-1986, noting that the FRL of the majority of fire rated lift landing doors used in Australia has been verified in a Fire Assessment Report which relies on testing to BS 476-22 (European fire test) rather than AS 1530.4 (Australian standard fire test) as required by Clause 2.2.1 of AS 1735.11-1986.

12. Number of exits required – NCC Clause D2D3

To permit Building B to be served by a single exit in lieu of two exits as otherwise required for a building with an effective height of more than 25 m, on the basis that Building B, if assessed as a separate building from Building A, would have an effective height of less than 25 m.

13. Exit travel distances – NCC Clause D2D5

To permit exit travel distances to exceed the DtS maximums as follows:

Basement B1

- Up to 25 m to a point of choice between alternative exits in lieu of 20m (allowing for plant equipment).

Upper Basement

- Up to 28 m to a point of choice between alternative exits in lieu of 20 m.
- Up to 45 m to one of two alternative exits in lieu of the DtS max. of 40 m.

14. Exit travel distances – NCC Clause D2D5

To permit the following travel distances:

- Building A – Travel distance from SOUs to a point of choice between alternative exits of up to 9 m in lieu of 6 m.
- Building A – Travel distance from the Roof Level to a point of choice between alternative exits of up to 22 m in lieu of 20 m.
- Building B, Levels 1-3 – Travel distance to a single exit of up to 12.4 m in lieu of 6 m.
- Building B, Level 4 – Travel distance to a single exit of up to 9 m in lieu of 6 m.

15. Fire-Isolated Exit Discharge Location and Width – NCC Clauses D2D10, D2D12

To permit the fire-isolated exit serving basement level and the fire isolated exit serving the upper levels of Building A to converge into a common fire-isolated passageway, in lieu of being provided with separate fire-isolated passageways. Further, to permit the width of the shared fire-isolated passageway to be reduced to 1m, in lieu of the DtS required minimum width of 2m.

This applies to the fire isolated exits and shared fire-isolated passageway located at ground level between Retail Tenancy 1 and the Retail Lift.

16. Height of exits and paths of travel to exits / Height of rooms and other spaces – NCC Clauses D2D7, F5D2

To permit the unobstructed ceiling height within the residential storage cages on the basement levels to be reduced to 1.8 m (worst case), in lieu of being not less than 2 m as required by BCA Clause D2D7 and not less 2.1 m as required by BCA Clause F5D2.

Note: The reduction in ceiling height is to ensure that a minimum clearance of 500mm will be provided between the top of the storage cages and the sprinkler heads.

17. Width of exits and paths of travel to exits – NCC Clause D2D8

To permit the width to be less than the minimum required 1 m in the following locations:

- within storage cages at the Basement Levels (~800 mm);
- within the fire-isolated exits between the handrail and hydrant landing valve (~900 mm);
- within the Fire Pump Room in between pumpset plinths (~600 mm);
- within plant rooms between equipment (~600 mm);
- at pinch points between columns/storage cages and car spaces (~600 mm).

18. Travel via fire-isolated exits – NCC Clause D2D12

To permit the fire-isolated exits discharge into covered alcoves adjoining Military Road, Lang Street and Mackie Lane which are not open for 1/3 of the perimeter.

19. Roof as open space – NCC Clause D3D13

The paths of travel from the building on the Ground and Lower Ground Level will require travel over the roof of the storey below (which is defined as roof as open space), and this will necessitate passing within 3 m of openings within the roof, which are formed by drainage outlets and the like.

20. Fire hydrants – NCC Clause E1D2

To omit the pressurisation to the fire isolated exit at Basement Level; noting that:

- Although the pump room door opens on to an airlock which then opens on to a fire isolated stair, fire isolated stair discharges to a non-fire isolated stairway instead of directly to open space as required by Clause 6.11.2(c)(ii)(A) of AS 2419.1-2021; and
- The use of the word “and” instead of “or” between subclauses (A) and (B) of 6.11.2(c)(ii) technically results in the need for pressurisation even if the fire isolated stair discharged directly to open space.

21. Fire hydrants / Fire sprinkler systems – NCC Clause E1D2, NCC Specification 17 (S17C2)

To permit the fire booster assemblies to not be within sight of the principal entrance to the building required by Clause 7.3.1(c) of AS 2419.1 2021 due to fact that there are multiple entries to the development.

22. Fire sprinkler systems – NCC Clause E1D4, NCC Specification 17 (S17C2)

To permit the use of the relevant concessions available under the BCA DtS provisions and applicable Referenced Standards available to sprinkler protected buildings despite the fact that a sprinkler system is not technically provided throughout the subject building to the requirements of AS 2118.1-2017 (as required by Spec. 17) due to the proposed Performance Solutions to vary the design of the sprinkler system and/or omit sprinkler coverage to certain building parts. The concessions permitted to be relied upon for the building include:

- Clause C3D2 / C3D3 – Fire compartment limitations.
- Clause C3D7 – Vertical separation of openings in external walls.
- Specification 7 – Fire hazard properties – Floor lining and floor coverings, and Wall and ceiling linings.
- Clause E1D2 / AS2419.1-2021 – Concessions for the hydrant system and associated building parts.

23. Fire sprinkler systems – NCC Clause E1D4, NCC Specification 17 (S17C2)

Permit the sprinkler control valve to be located within the fire-isolated stairs in lieu of a secured enclosed room that has direct access from open space.

24. Fire sprinkler systems – NCC Clause E1D4, NCC Specification 17 (S17C2)

To justify the omission of sprinkler protection to the Main Switch Board (MSB) and Comms room located within the basement carpark, noting that sprinkler protection would otherwise be required under the DtS provisions as the enclosure is understood to contain Low Voltage equipment (as defined by AS3000) and does not meet the criteria for the sprinkler omission concession under Clause 3.1.3(a) of AS2118.1 (which is limited to normally unoccupied High Voltage electrical rooms).

25. Fire sprinkler systems – NCC Clause E1D4, NCC Specification 17 (S17C2)

To permit the vertical portions of the combined fire hydrant / sprinkler system ring main serving Building B to be located within a single fire-isolated stairway in lieu of separate fire-rated exits or fire-rated riser shafts as required by Clause 2.6.2 of AS 2118.6-2012, on the basis that Building B, if assessed as a separate building from Building A, would have an effective height of less than 25 m.

26. Smoke hazard management – NCC Clause E2D6

To omit the requirement of zone pressurisation system to the Class 6 retail areas.

Note: At this stage of the design, the identified departures to the DtS provisions of the NCC are not exhaustive, and additional departures resulting in the development of additional Performance Solutions may arise throughout the detailed design process leading up to when a Construction Certificate is issued. This is routine practice for development of this scale and nature, and the level of detail that this statement has been prepared is appropriate to this stage of the project lifecycle.

REQUIRED FIRE SAFETY SYSTEMS

The following fire safety systems will be required to be installed throughout the subject development:

- Fire hydrants – NCC Clause E1D2, AS 2419.1-2021
- Fire hose reels – NCC Clause E1D3, AS 2441-2005
- Fire sprinklers – NCC Specification 17, AS 2118.1-2017, AS 2118.6-2012
- Portable fire extinguishers – NCC Clause E1D14, AS 2444-2001
- Automatic smoke detection and alarm system – NCC Specification 20, AS 1670.1-2018
- Stair pressurization systems – NCC Clause E2D4, AS 1668.1-2015
- Emergency lighting and exit signs – NCC Clauses E4D2, E4D4, E4D5 & E4D8, AS/NZS 2293.1-2018
- Emergency lifts – NCC Clause E3D5
- Emergency warning and intercom systems – NCC Clause E4D9, AS 1670.1-2018

Note: The above list may change or vary during the detailed design process and / or as a result of the future Fire Engineering Assessment and liaison with Fire & Rescue NSW (FRNSW). FRNSW is welcome to provide input during the Public Exhibition of this SSDA. Any feedback Agency stakeholders will be addressed as part of the Response to Submissions package for this project.

CONCLUSION

Innova Services Australia Pty Ltd has reviewed the proposed design and the identified departures to the DTS provisions of the NCC and advise that Performance Solutions can be developed that will be capable of demonstrating compliance with the relevant Performance Requirements of the NCC. The appropriate stage for this to occur would be post-approval design development before a Construction Certificate is issued.

The Fire Engineering process will require liaison with relevant stakeholders during the detailed design process, including Fire & Rescue NSW (FRNSW). This process may result in changes to the design to ensure an acceptable outcome for all relevant stakeholders. FRNSW is requested to consider this statement with appropriate regard for matters that can be readily resolved before a Construction Certificate is issued rather than before this SSDA is determined. This will ensure adequate design coordination without prejudicing assessment timeframes for this project.

Should you require any additional information with regards to the above please do not hesitate to contact the undersigned.

Yours Faithfully

Innova Services Australia Pty Ltd



Jason Powell

Director

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