INNOVA SERVICES AUSTRALIA
ABN 94 639 882 465

1 May 2026
Our Ref: 24026-L01-04

Arada
148A Elizabeth Street
Sydney NSW 2000

Attention: **Simon Lee**
Email: s.lee@arada.com

Dear Simon

RESIDENTIAL DEVELOPMENT – 16-20 CARRINGTON ROAD, CASTLE HILL FIRE ENGINEERING STATEMENT (FOR DA SUBMISSION)

INTRODUCTION

The works relate to the construction of a proposed Residential Development located at 16-20 Carrington Road, Castle Hill.

This statement 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 2022 Volume One, Amendment 2, – Building Code of Australia Class 2 to 9 Buildings (NCC).

The purpose of this statement is to assist in the design development process and to assist the Consent Authority in the determination of the DA submission.

DESCRIPTION OF DEVELOPMENT

The development will comprise 445 residential sole-occupancy units within 3 buildings constructed over a common podium and basement car parking levels. The development will be bounded by Carrington Road to the north, Fishburn Crescent to the south, Sexton Avenue to the east, and Middleton Avenue to the west.

In summary, the development will comprise:

- Basement 01 – car parking, ancillary
- Lower Ground – car parking, residential lobbies, residential units, ancillary
- Ground Level – car parking, loading dock, residential lobbies, residential units, ancillary
- Upper Ground Level – residential units, residential lobbies, wellness / gym, multi-function room, communal / music room, external courtyard
- Levels 01 to 09 – residential units (Buildings A, B & C)
- Level 10 – residential units (Buildings A & B); residential units, communal open space (Building C)
- Level 11 – residential units (Buildings A & B); roof (Building C)
- Level 12 – residential units (Building A & B)
- Level 13 – residential units (Building A); residential units, communal open space (Building B)
- Level 14 & 15 – residential units (Buildings A & B)
- Level 16 – residential units, communal open space (Building A); residential unit, plant (Building B)
- Levels 17 to 22 – residential units (Building A)
- Level 23 – communal open space (Building A)
- Roof – Building A

NCC ASSESSMENT DATA

With reference to the BCA Assessment Report prepared for the development by Nest Consulting Group (Ref: 24010.5-BCA, Issue No. 6, dated 1 May 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 7a (car parking) Class 7b (storage)
Rise in Storeys	26
No. of Levels Contained	27
Minimum Type of Construction Required	Type A
Effective Height	Greater than 50 m (~81.3 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
DA-100-001	DA.02	Site Analysis	24-04-2026
DA-100-002	DA.02	Site Plan (Future Context)	24-04-2026
DA-110-006	DA.02	GA Plans: Basement 01	24-04-2026
DA-110-007	DA.02	GA Plans: Lower Ground	24-04-2026
DA-110-008	DA.02	GA Plans: Ground Level	24-04-2026
DA-110-009	DA.02	GA Plans: Upper Ground Level	24-04-2026
DA-110-010	DA.02	GA Plans: Level 01	24-04-2026
DA-110-011	DA.02	GA Plans: Level 02	24-04-2026
DA-110-012	DA.02	GA Plans: Level 03	24-04-2026
DA-110-013	DA.02	GA Plans: Level 04	24-04-2026
DA-110-014	DA.02	GA Plans: Level 05	24-04-2026
DA-110-015	DA.02	GA Plans: Level 06	24-04-2026
DA-110-016	DA.02	GA Plans: Level 07	24-04-2026
DA-110-017	DA.02	GA Plans: Level 08	24-04-2026
DA-110-018	DA.02	GA Plans: Level 09	24-04-2026
DA-110-019	DA.02	GA Plans: Level 10	24-04-2026
DA-110-020	DA.02	GA Plans: Level 11	24-04-2026
DA-110-021	DA.02	GA Plans: Level 12	24-04-2026
DA-110-022	DA.02	GA Plans: Level 13	24-04-2026
DA-110-023	DA.02	GA Plans: Level 14	24-04-2026
DA-110-024	DA.02	GA Plans: Level 15	24-04-2026
DA-110-025	DA.02	GA Plans: Level 16	24-04-2026

Drawing No.	Issue	Title	Date
DA-110-026	DA.02	GA Plans: Level 17	24-04-2026
DA-110-027	DA.02	GA Plans: Level 18	24-04-2026
DA-110-029	DA.02	GA Plans: Level 19	24-04-2026
DA-110-030	DA.02	GA Plans: Level 20	24-04-2026
DA-110-031	DA.02	GA Plans: Level 21	24-04-2026
DA-110-032	DA.02	GA Plans: Level 22	24-04-2026
DA-110-033	DA.02	GA Plans: Level 23	24-04-2026
DA-110-034	DA.02	GA Plans: Roof Level	24-04-2026
DA-200-101	DA.02	Context Elevations: North Elevation	24-04-2026
DA-200-201	DA.02	Context Elevations: East Elevation	24-04-2026
DA-200-301	DA.02	Context Elevations: South Elevation	24-04-2026
DA-200-401	DA.02	Context Elevations: West Elevation	24-04-2026
DA-210-101	DA.02	Elevations: North Elevation	24-04-2026
DA-210-201	DA.02	Elevations: East Elevation	24-04-2026
DA-210-301	DA.02	Elevations: South Elevation	24-04-2026
DA-210-401	DA.02	Elevations: West Elevation	24-04-2026
DA-220-101	DA.02	Internal Elevations: North Elevation	24-04-2026
DA-220-201	DA.02	Internal Elevations: Buildings A & C – East Elevation	24-04-2026
DA-220-301	DA.02	Internal Elevations: Buildings A & B – South Elevation	24-04-2026
DA-220-401	DA.02	Internal Elevations: Buildings B & C – West Elevation	24-04-2026
DA-310-101	DA.02	Sections: Section AA	24-04-2026
DA-310-201	DA.02	Sections: Section BB	24-04-2026

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 Assessment Report prepared for the development by Nest Consulting Group (Ref: 24010.5-BCA, Issue No. 6, dated 1 May 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 (omission of fire rating to base of garbage chute shafts) – NCC Clause C2D2, NCC Specification 5 (S5C8)*
2. *Separation of classifications in the same storey (reduced FRL to Class 7b parts) – NCC Clause C3D9*
3. *Public corridors in Class 2 buildings (corridors > 40 m) – NCC Clause C3D15*
4. *Number if exits required (single exit from ancillary areas) – NCC Clause D2D3*
5. *Exit travel distances (car parking areas) – NCC Clause D2D5*
6. *Exit travel distances (residential areas) – NCC Clause D2D5*
7. *Exit travel distances (ancillary and communal use areas) – NCC Clause D2D5*
8. *Distance between alternative exits (car parking areas) – NCC Clause D2D6*
9. *Distance between alternative exits (residential areas) – NCC Clause D2D6*
10. *Travel via fire-isolated exits (discharge into covered area < 1/3 open) – NCC Clause D2D12*
11. *Discharge from exits (alternative exits not located as far apart as practicable) – NCC Clause D2D15*
12. *Fire hydrants (location of fire brigade booster assembly) – NCC Clause E1D2*
13. *Fire control centres (location of fire control room) – NCC Specification 19*

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 to 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).

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).

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
Certifier – Fire Safety (BDC0801)
MIEAust, CPEng, NER