BCA CAPABILITY REPORT

FOR

FORESTVILLE RSL

PREMISES

FORESTVILLE RSL CLUB REDEVELOPMENT
22 MELWOOD AVENUE,
FORESTVILLE NSW 2087

Project No. V240021

Date: 17 September 2024

ABN 48 114 242 796
PO Box 2340
Burwood North NSW 2134

VPL CONSULTING
T 0410 667 020
E vlilli@viclilli.com.au

VPL CONSULTING

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1.0 – Executive Summary

The following BCA compliance assessment report has been prepared at the request of Forestville RSL Club for the purpose of the proposed mixed-use development located at 22 Melwood Avenue, Forestville NSW 2087

This report has been prepared to identify the extent of compliance achieved by the architectural documentation against the relevant provisions of the Building Code of Australia (BCA) 2022 and adopted Australian Standards and Disability Discrimination Act.

The building, the subject of this report, is the construction of a mixed-use development consisting of the following:

1. **STAGE 1**
- Five (5) split levels of basement car parking
- Two (2) levels Registered Club and associated Club office and staff areas
- Three (3) levels of residential accommodation (seniors living apartments)

2. **STAGE 2**
- One (1) basement car parking level
- Three (3) levels of residential accommodation (seniors living apartments)
- Gymnasium and Theatre Room

This report will provide the consent authority with a BCA analysis to assist in the determination of the application.

2.0 – Property Description

2.1 – Location

The subject development is to be located at 22 Melwood Avenue, Forestville NSW 2087 which is within the jurisdiction of Northern Beaches Council for the purposes of development approvals.

The subject building is to be located at 22 Melwood Avenue, Forestville NSW 2087 situated with Melwood Avenue to the east, residential development to the north, Forestville Youth Centre to the west and council car park to the south.

2.2 – Building Description

Use/Classification	• Class 2 – Residential (Seniors Living Apartments) • Class 5 – Offices (Level B5) • Class 7a – Carpark • Class 9b – Registered Club • Class 9b – Gymnasium and Theatre Room (Level B
Rise in Storeys	The building has a rise of four (4) storeys
Storeys Contained	The building contains seven (7) storeys
Effective Height	The Building will have an effective of less than 25m (RL 134.700 – 124.000 = 10.7m)
Type of Construction (BCA)	The building is to adopt Type A construction throughout
Floor Area	Class 5 and 9b – Maximum floor area – 8,000m^2 Floor area limitations are not applicable to Class 2 portion Floor area limitations do not apply to a sprinkler protected Class 7a car park.

Volume	Class 5 and 9b – Maximum volume – 48,000m^3 Volume limitations are not applicable to Class 2 portions. Volume limitations do not apply to a sprinkler protected Class 7a car park.
Population	Class 2 – Residential levels are not populated in accordance with BCA Clause D1.13. Class 5 Office – Calculated at rate of one person per 10m^2 (Approx. 130m^2/10m^2 = 13 persons) Class 7a – Basement car parking and plant rooms are being calculated at rate of one person per 30m^2 • Basement Level 1 – 85 Persons • Basement Level 2 – 65 Persons • Basement Level 3 – 45 Persons • Basement Level 4 – 65 Persons • Basement Level 5 – 35 Persons Class 9b Gymnasium – Calculated at rate of one person per 3m^2 (Approx. 85m^2/10m^2 = 29 persons) Class 9b – Theatre Room – 20 seats Class 9b – Registered Club a population of 900 patrons
Climate Zone	Zone 5

3.0 – Building Code of Australia Assessment

3.1 – Structural Provisions (Part B, BCA)

Item	***Comment***
Resistance to actions	The resistance of a building and its structure must be greater than the most critical action effect resulting from different combinations of actions; ▪ the most critical action effect on a building or structure is determined in accordance with Clauses B1D2 of the BCA and the general design procedures contained in AS/NZS 1170.0. Structural engineering regulated design, design declaration and design certification to be provided at the construction certificate stage.
Determination of individual actions	The magnitude of the building's actions must be determined in accordance with the following with Clause B1D3 of the BCA; ▪ Permanent and Imposed Actions – AS 1170.1, ▪ Wind and earthquake actions – AS 1170 Part 2 and 4. Structural engineering regulated design, design declaration and design certification to be provided at the construction certificate stage
Determination of structural resistance of materials and forms of construction	The structural resistance of the building and materials and forms of construction must be determined in accordance with Clause B1D4 of the BCA and the following, as appropriate: ▪ Masonry – AS 3700, ▪ Concrete – AS 3600, AS 5146.1, AS5416.3 and AS 5216, ▪ Steel Construction – AS 4100 and AS 4600, ▪ Composite steel and concrete – AS/NZS 2327, ▪ Aluminium construction – AS/NZS1664.1 or AS/NZS 1664.2, ▪ Piling – AS 2159 ▪ Glazing – AS 2047 Structural engineering regulated design, design declaration and design certification to be provided at the construction certificate stage

3.2 – Fire Resistance and Stability (Section C, BCA)

Item	***Comment***
Non-combustible building elements	In a Type A Construction building, the following elements are required to be non-combustible in accordance with Clause C2D10 of the BCA: ▪ External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation, ▪ The flooring and floor framing of lift pits, ▪ Non-loadbearing internal walls where they are required to be fire-resisting, and a shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible. An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it achieves complies with Clause C2D14 of the BCA. The proposed development can achieve the required prescriptive requirements which will be confirmed at the construction certificate phase.
Fire hazard properties	The fire hazard properties of all materials, assemblies, fixtures and linings are to comply with Clause C2D11 and Specification 7 of Part C of the BCA, as applicable. Further details are required to be provided during the Construction Certificate phase.
Compartmentation	The proposed fire compartments contained within the buildings will not exceed the maximum floor area and volume limitations as specified in Table C3D3 of the BCA.
Protection of equipment.	The following equipment is to be fire separated with construction complying with Clause C3D13 of the BCA. ▪ lift motors and lift control panels; or ▪ emergency generators used to sustain emergency equipment operating in the emergency mode; or ▪ central smoke control plant; or ▪ boilers; or ▪ a battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more. Separation of on-site fire pumps must comply with the prescriptive requirements of Clause E1.3 of the BCA and AS2419.1-2021. Further details are required to be provided during the Construction Certificate phase.

Item	***Comment***
Electricity supply	Electrical equipment is to be fire separated from the building in accordance with Clause C3D14 of the BCA. Any substation and/or main switchboard is to be constructed to achieve a fire-resistance level of 120/120/120 with the door being –/120/30 fire-rated unless higher FRL's required by electrical providers. Further details are required to be provided during the Construction Certificate phase.
Class 2 corridor length	In a Class 2 building, a public corridor, if more than 40m in length, must be provided at intervals of not more than 40m with smoke-proof walls in accordance with Clause C3D15 of the BCA. The design does propose for any corridor having a length of more than 40m. Where compliance does not meet the DTS provisions the non-compliance will be addressed in a Performance Solution in accordance with Clause A2G2 of the BCA and address Performance Requirements C1P2 and E2P2 of the BCA.
Protection of Openings	Openings in an external wall (i.e. a wall that is required to have a fire resistance level) must if situated less 3.0m from a fire-source feature to which it is exposed must be protected in accordance with Clause C4D5 of the BCA. Assessment of the architectural design has revealed that the development does not contain openings situated less than the prescribed distance to an allotment boundary. Doorways to the fire- isolated stairways will be protected in accordance with the provisions of Clause C4D9 of the BCA. Openings to lift shafts will be protected by fire rated lift landing doors in accordance with the provisions Clause C4D11 of the BCA. All doorways to residential sole-occupancy units will be protected by fire door sets in accordance with the provisions Clause C4D12 of the BCA.
Fire sealing of penetrations	All service penetrations must be sealed to the requirements of Clause C4D13 and C4D15 of the BCA. Further details are required to be provided during the Construction Certificate phase.

<table>
<tr><th>Item</th><th>Comment</th></tr>
<tr><td>Bounding construction</td><td>All doorways within the Class 2 portion of the building that provide access to the following need to be protected;

▪ A room opening to a public corridor, public lobby, or the like; or
▪ Sole-occupancy residential units.

For Type A construction, the acceptable method of protect is a self-closing –/60/30 fire door in accordance with Clause C4D12 of the BCA.

The common areas to the residential levels contain openings to the public corridor which does not satisfy the DtS provisions of the BCA.

The proposed non-compliance will be the subject of a Performance Solution in accordance with Clause A2G2 of the BCA to address Performance Requirements C1P2 and E2P2 of the BCA.</td></tr>
<tr><td>Fire Resistance</td><td>The proposed building structure, being reinforced concrete floors, columns and the various shafts and cores, is to comply with the required fire resistance levels as specified in Clause 5C11 and Clause S5C2 of Specification 5 for Type A construction. Refer to Table S5C11a to S5C11G of Specification 5 for the specific FRL’s.

Required fire resistance levels (FRL) are generally as follows;

<table>
<tr><th>Class</th><th>FRL</th></tr>
<tr><td>Class 2</td><td>90/90/90</td></tr>
<tr><td>Class 5</td><td>120/120/120</td></tr>
<tr><td>Class 7a</td><td>120/120/120</td></tr>
<tr><td>Class 9b</td><td>120/120/120</td></tr>
</table>

NB: Permitted concessions to the FRLs to the Class 2 part subject to Specification 18 of Part E1 the BCA.

Where lightweight fire rated construction is proposed for walls, the system must comply with Specification 6 of Section C of BCA and the manufactures tested specification.</td></tr>
</table>

3.3 – Access and Egress (Section D, BCA)

Item	***Comment***
Number of exits required	The number exits in the building will achieve compliance with the provisions of Clause D2D3 of the BCA being at least two (2) exits in the basement car park levels, gymnasium, theatre and the Club. The commercial office and residential portions are required to be provided with one (1) exit. Assessment of the architectural design has revealed that the development achieves compliance.
Fire-isolation of stairways.	Class 2, 5 and 9b portions, all stairways serving as a required exit must fire-isolated if it connects more than three consecutive storeys in accordance with Clause D2D4 of the BCA. The proposed Class 2 part has stairways connecting not more than three (3) storeys and therefore does not require the stairways to be fire-isolated. Class 7a building, all stairways serving as a required exit must fire-isolated as the stairways connect more than three consecutive storeys. Assessment of the architectural design has revealed that the development achieves compliance.
Exit travel distances.	<u>Class 2 – Residential SOUs</u> The exit travel distances on the residential levels exceeds 12 metres to an exit, or a point of choice from which travel in two different directions is available or a distance of more than 40m to an exit in accordance with Specification 18 Clause S18C4 the BCA. The proposed non-compliance will be the subject of a Performance Solution in accordance with Clause A2G2 of the BCA to address Performance Requirements D1P4 and E2P2 of the BCA. <u>Class 2 – Common Areas</u> No point on the floor of a room which is not in a residential sole-occupancy must be more than 20 m from an exit or from a point at which travel in different directions to 2 exits is available with a total travel distance of 40m in accordance with Clause D2D5 of the BCA. Assessment of the design has confirmed the distance of travel on the residential levels is in accordance with the requirements of the BCA.

Item	**Comment**
Exit travel distances Contd.	<u>Class 5, 7a and 9b</u> No point on the floor must be more than 20 m from an exit or from a point at which travel in different directions to 2 exits is available with a total travel distance of 40m in accordance with Clause D2D5 of the BCA. Assessment of the design has confirmed the distance of travel on the Club and commercial portions are in accordance with the requirements of the BCA. The exit travel distances on the car parking levels exceeds 20 metres to an exit, or a point of choice from which travel in two different directions is available and a distance of more than 40m to an exit in accordance with Clause D2D5. The proposed non-compliance will be the subject of a Performance Solution in accordance with Clause A2G2 of the BCA to address Performance Requirements D1P4 and E2P2 of the BCA.
Distance between alternative exits	<u>Class 2</u> Distance between alternate exits is not to exceed a maximum of 60m in accordance with Specification 18 Clause S18C4 of the BCA. <u>Class 5, 7a and 9b</u> Distance between alternate exits is not to exceed a maximum of 60m in accordance with D2D6 of the BCA. Assessment of the design has confirmed the distance of travel on the Club and commercial portions are in accordance with the requirements of the BCA. The distance between alternate exits on the car parking levels exceeds a distance of 60m to an exit in accordance with Clause D2D6 the BCA. The proposed non-compliance will be the subject of a Performance Solution in accordance with Clause A2G2 of the BCA to address Performance Requirements D1P4 and E2P2 of the BCA.
Dimensions of exits.	Aggregate egress widths for the car parking, office, gymnasium, theatre, Club and residential sole occupancy units in the building has been designed to ensure compliance with the provisions of Clause D2D8 of the BCA.

Item	**Comment**
Travel via fire isolated exits	The fire-isolated exits have been designed to comply with the requirements of Clause D2D12 of the BCA providing for a continuous path of travel to the level at which discharge to road or open space is provided. The fire isolated exits discharge at the ground floor level at which direct access to the roadway is provided. It is noted the where the fire-isolated stairway discharges within 6m of an external opening of the building the opening will be required to be protected internally in accordance with Clause C4D5 of the BCA.
Travel via non-fire isolated exits	The non-fire-isolated exits have been designed to comply with the requirements of Clause D2D14 of the BCA providing for a continuous path of travel to the level at which discharge to road or open space is provided.
Discharge from exits	All fire isolated exit discharge to ground floor and level one which have direct access to the public road to which it is connected, the path of travel to the road must be by; ▪ A ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by Part D4 of the BCA. ▪ A stairway in accordance with Clause D2D15 of the BCA. The design generally complies with the requirements of this Clause. Further details are required to be provided during the construction certificate phase.
Electrical distribution boards	Electrical distribution boards located in the path of travel to an exit must be enclosed in a non-combustible enclosure and sealed to prevent the escape of smoke in accordance with Clause D3D8 of the BCA. Further details are required to be provided during the construction certificate phase.
Construction of Stairways.	Stairway design and construction shall comply with the requirements specified in Clause D3D14 of the BCA. Riser (R) dimensions shall be between 115mm-190mm and going (G) dimensions between 250mm -355mm. The quantity (2R+G) shall be between 550mm-700mm. Stairway landing design and construction shall comply with the requirements specified in Clause D3D15 of the BCA. Generally, landings shall be not less than 750mm long and a maximum gradient of 1:50.

Item	**Comment**
Construction of Stairways Contd.	Threshold design and construction shall comply with the requirements specified in Clause D3D16 of the BCA. Generally, the threshold of a doorway must not incorporate a step or ramp at any point closer than the width of the door leaf. Further details are required to be provided during the construction certificate phase.
Balustrades.	Balustrades are to be provided to all stairways, terraces and balconies in accordance with Clause D3D17 to D3D20 and G1D4 of the BCA. Balustrades protecting a difference in levels of over 4m must not have horizontal elements between 150mm and 760mm of the floor that facilitate climbing. Further details are required to be provided during the construction certificate phase.
Handrails	Handrails are to be provided to stairways and ramps as required by Clause D3D22 of the BCA and AS1428.1-2009 Further details are required to be provided during the construction certificate phase.
Egress Doors.	All required doorways will swing in the direction of egress and will be provided with the appropriate hardware in accordance with Clauses D3D24 and D3D26 of the BCA. Further details are required to be provided during the construction certificate phase.
Signs on Doors	All required exit doors to fire-isolated exit are required to be provided with door signage in accordance with Clause D3D28 of the BCA. Further details are required to be provided during the construction certificate phase.
Protection of openable windows	Window openings where the floor is more than 2m above the surface beneath must be protected in accordance with BCA Clause D3D29 of the BCA in the bedrooms for the Class 2 and Class 9b parts of the building.

Item	***Comment***
Access for people with disabilities.	The building is to comply with: ▪ The Disability (Access to Premises — Buildings), Standards 2010; ▪ Part D4 of the BCA; ▪ Australian Standard AS 1428.1-2009. Buildings and parts of buildings must be accessible as required by Clauses D4D2, D4D3 and D4D4 of the BCA, unless exempted by Clause D4D5 of the BCA, which requires access as follows: <u>Class 2 – Residential Sole-occupancy units</u> To the entrance doorway of each sole-occupancy unit. <u>Class 2 – Common areas</u> Where a ramp complying with AS 1428.1 or a passenger lift is installed; ▪ to the entrance doorway of each sole-occupancy unit; and ▪ to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp. <u>Class 7a –</u> To and within all areas normally used by the occupants. Accessible car parking to be provided at the rate of 1 space per 100 spaces. Accessible car parking spaces are to have the minimum dimension and are to be provided with a dedicated share space in accordance with AS2890.6. The car parking spaces are to be located adjacent to the lift cores. Carparking for people with disabilities will be provided in accordance with Clause D4D6 of the BCA and AS2890.6 <u>Class 5 and 9b –</u> To and within all areas normally used by the occupants. It is considered the proposed design is capable of achieving compliance with the provisions of the BCA and adopted standards. A detailed assessment and access report is to be provided during the construction certificate phase.

3.4 – Services and Equipment (Section E, BCA)

Item	***Comment***
Hydrant Systems.	The building will be provided with a hydrant system in accordance with the provisions of Clause E1D2 of the BCA and AS 2419.1-2021. A regulated hydrant system design, design declaration and design certification to be provided at the construction certificate stage.
Hose Reel Systems.	The Class 7a and 9b parts will be provided with a fire hose reel system in accordance with the provisions of Clause E1D3 of the BCA and AS 2441-2005. This system must cover the car park levels as well as all storeys relating to commercial/retail tenancies. A regulated hose reel system design, design declaration and design certification to be provided at the construction certificate stage.
Sprinkler System	Based on the development containing: 1. Class 7a car park containing more than 40 vehicles; and 2. Class 2 residential portion having a rise in more than 3 storeys the development will require a sprinkler system throughout the entire development complying with Clause E1D6, E1D9 and E1D11 and Specification 17 of Part E1 of the BCA. The system is to be designed in compliance with AS2118.1-2017. A regulated sprinkler system design, design declaration and design certification to be provided at the construction certificate stage.
Portable Fire Extinguishers.	Fire extinguishers will be provided in accordance the provisions of Clause E1D14 of the BCA and AS2444-2001. Further details shall be provided for compliance assessment during the construction certificate design phase.

Item	***Comment***
Smoke Hazard Management.	<u>Class 2</u> The Class 2 part will be provided with an automatic smoke detection and alarm system in accordance with the provisions of Clause E2D5 of the BCA and Specification 20 of the BCA. <u>Class 7a</u> The car park mechanical system is required to be designed to Clause E2D12 of the BCA, AS1668.2-2012 and Clause 5 of AS1668.1-2015 except that- ▪ Fans with metal blades suitable for operation at normal temperature; and ▪ Electrical power and control cabling need not be fire rated <u>Class 5 and 9b</u> The Class 5 and 9b parts will be provided with an automatic smoke detection and alarm system in accordance with the provisions of Clause E2D20 of the BCA and Specification 20 of the BCA and AS1670.1-2018. The Class 9b part will be provided with an automatic shutdown of any ducted air-conditioning system in accordance with the provisions of NSW Clause E2D16 and Specification 20 of the BCA. A regulated smoke hazard management system design, design declaration and design certification to be provided at the construction certificate stage.
Lift Services.	The passenger lifts are to be installed in accordance with Clause E3D2 of the BCA and Specification 24 of the BCA. As the development does not have an effective height of more than 12m the lifts are not required to be designed to accommodate a stretcher in accordance with Clause E3D3 of the BCA. A sign must be provided in accordance with Clause E3D4 of the BCA warning against the use of lifts in a fire. The proposed lifts shall also comply with all requirements nominated by AS1735.12 and Clause E3D8 of the BCA with regards to facilities for people with disabilities. A regulated lift design, design declaration and design certification to be provided at the construction certificate stage.

Item	***Comment***
Emergency Lighting	An emergency lighting system will be provided throughout the building in accordance with Clauses E4D2 and E4D4 of the BCA and AS/NZS2293.1-2018. A regulated exit sign system design, design declaration and design certification to be provided at the construction certificate stage.
Exit Signs.	Exit signs will be provided throughout the building in accordance with Clauses E4D5, E4D6 and E4D8 of the BCA and AS/NZS2293.1-2018. A regulated exit sign system design, design declaration and design certification to be provided at the construction certificate stage.

3.5 – Health and Amenity (Section F, BCA)

Item	***Comment***
Damp and External Weatherproofing.	Adequate measures will be employed to ensure compliance Performance Requirement F1P2 of the BCA is achieved in terms of the impact of surface water on the development. It is proposed to manage the disposal of surface water in accordance with F1D3 of the BCA. External waterproofing of the development will be designed in accordance with Clause F1D5 of the BCA. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Wet Areas	The design of the internal wet areas will be undertaken in accordance with Clause F2D2 of the BCA and AS3740. Floor wastes are to be provided in accordance with Clause F2D4 of the BCA. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Roof and Wall Cladding	The wall and roof coverings are to be designed to meet the requirements of Performance Requirement F3P1 of the BCA. It is proposed to prepare a verification report for the construction of the external walls in accordance with Verification Method F3V1 of the BCA. The RC roof construction is to be protected with an external waterproofing membrane complying with F1D5 of the BCA. Full documentation is to be provided for assessment at the Construction Certificate phase.
Sanitary and Other Facilities	<u>Class 2</u> Facilities are to be provided within the residential sole-occupancy units in accordance with the provisions of Clause F4D2 of the BCA. Assessment to the architectural design confirms compliance with the provisions of the BCA has been achieved.

Item	***Comment***
Sanitary and Other Facilities Contd.	<u>Class 5 and 9b</u> Facilities are to be provided within the commercial office and the Club portions are in accordance with the provisions of Clauses F4D4, F4D5 and F4D6 of the BCA. Assessment to the architectural design confirms compliance with the provisions of the BCA has been achieved.
Room Heights	The development is required to achieve compliance with Clause F5D2 of the BCA with respect to achieving the following minimum room heights Class 2 – habitable room 2.4m Class 2 – non habitable room 2.1m Class 5 and 7a – habitable room 2.4m Class 9b – habitable room 2.7m Assessment to the architectural design confirms compliance with the provisions of the BCA has been achieved.
Lighting	The development needs to provide natural light to all habitable rooms contained within the Class 2 portion of the development. Assessment of the design confirms the Class 2 residential sole-occupancy units have generally achieved compliance as required by Clauses F6D2(a) and F6D3 of the BCA. Full documentation is to be provided for assessment at the Construction Certificate phase. Artificial lighting may be provided throughout the remainder of the building in accordance with the provisions of Clause F6D5 of the BCA and AS1680.1-2009. The artificial lighting system is to be designed by an appropriately qualified electrical engineer at the construction certificate phase.

Item	***Comment***
Ventilation	<u>Class 2, 5 and 9b</u> The Club, office and residential portions of the development are required to be provided with ventilation system in accordance with the provisions of Clause F6D6 of the BCA. Ventilation may be provided by natural means as required by Clause F6D7 of the BCA or a mechanical system complying with AS 1668.2- 2012. <u>Class 7a</u> The basement car park is to be ventilated in accordance with Clause F6D11 of the BCA and AS1668.2-2012. Full documentation is to be provided for assessment at the Construction Certificate phase. The mechanical ventilation systems are to be designed by an appropriately qualified mechanical engineer at the construction certificate phase.
Sound insulation	The floor separating the residential units and separating the sole occupancy units from public areas must achieve a sound insulation rating of Rw+Ctr (airborne) of not less than 50 and an Ln,w+Ci (impact) not more than 62 in accordance with Clause F7D5 of the BCA. Walls separating units must achieve a sound insulation rating of Rw+Ctr (airborne) of not less than 50 in accordance with Clause F7D6 of the BCA. Walls separating units from plant rooms, lift shafts, stairways corridors or other public areas must have an insulation rating of Rw (airborne) not less than 50 in accordance with Clause F7D6 of the BCA. Walls separating a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room in another or separating a unit from a lift shaft must be of discontinuous construction in accordance with Clause F7D6 of the BCA. The doorway separating to sole occupancy unit from the public area must have an Rw not less than 30 in accordance with Clause F7D6 of the BCA.

Item	***Comment***
Sound insulation Contd.	Soil, waste and stormwater services must be separated by construction having an Rw+Ctr (airborne) not less than • 40 if the room is a habitable room • 25 if the room is a non-habitable room. in accordance with Clause F7D7 of the BCA. An acoustic report is to be prepared by an appropriately qualified acoustic engineer to verify compliance with the provisions of Part F7 of the BCA at the construction certificate phase.
Condensation management	For a Class 2 building, the following are applicable to the proposed development in accordance with Clause F8D3 of the BCA; Pliable building membrane, if installed within an external wall, must comply with the requirements below; • Comply with AS/NZS 4200.1; and • Be installed in accordance with AS 4200.2; and • Be a vapour permeable membrane for climate zones 6, 7 and 8; and • Be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. All exhaust systems installed in a kitchen bathroom, sanitary compartment or laundry must have a minimum flow rate of— ▪ 25 L/s for a bathroom or sanitary compartment; and ▪ 40 L/s for a kitchen or laundry. in accordance with Clause F8D4 of the BCA. Exhaust from a kitchen must be discharged directly or via a shaft or duct to outdoor air and exhaust from a bathroom, sanitary compartment, or laundry must be discharged to one of the following in accordance with F8D5 of the BCA; ▪ directly or via a shaft or duct to outdoor air; or ▪ to a roof space that is ventilated The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.

3.6 – Ancillary Provisions – (Section G, BCA)

Item	***Comment***
Cleaning of windows	All external windows located 3 or more storeys above ground level are to be provided with a safe manner of cleaning windows as required by NSW Clause G1D5 of the BCA as follows: ▪ All windows are to be capable of being cleaned wholly from within the building (i.e. pivot or reversible windows etc.); or ▪ By a method complying with the Occupational Health and Safety Act 2000 and regulations made under that Act. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Occupiable outdoor areas	An outdoor occupiable area is to be designed in accordance with the provisions of Part G6 of the BCA. All lining, material or assembly in an occupiable outdoor area must comply with Clause C2D11 of the BCA as for an internal element. The construction of exits must comply with Part D2 of the BCA The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.

3.7 – Energy Efficiency (Section J, BCA)

Item	***Comment***
Building Fabric	The energy efficiency of any new external fabric must comply with Part J4 of the BCA as appropriate to Climate Zone 5 and the orientation, exposure and shading of the window. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Building Sealing	Openings in the building such as doors, windows, exhaust fans and ventilation systems must be sealed to the requirements of Part J5 of the BCA as appropriate to Climate Zone 5. In that regard, all external openings must be fitted with appropriate draft seals. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Air-Conditioning and Ventilation System	The air-conditioning and ventilation system of the development is required to be designed to comply with Part J6 of the BCA. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Artificial Lighting and Power	The building is to maintain maximum lighting power levels and control systems as applicable. The design of lighting systems must comply with Part J7 of the BCA. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.
Heated water supply	All heated water supply systems are to be designed to meet the requirements of Clause J8D2 of the BCA and Part B2 Volume 3 of the NCC. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.

Item	***Comment***
Energy monitoring and on-site distributed energy resources	The building is to have facilities energy monitoring in compliance with Clause J9D3 of the BCA. The building is to have provisions for electric vehicle charging equipment in compliance with Clause J9D4 of the BCA. The building is to have provisions for solar photovoltaic and battery systems in compliance with Clause J9D5 of the BCA. The building is capable of compliance subject to detailed design. Full documentation is to be provided for assessment at the Construction Certificate phase.

4.0 – Fire Safety and Other Measures

4.1 – Proposed Fire Safety Measures

In terms of the proposed works the following fire safety measures are proposed to be installed: -

Fire Safety Measure	Minimum Standard of Performance
Automatic fail safe devices	BCA 2022 Clause D3D24 and D3D26
Automatic smoke detection and alarm system	BCA 2022 Clause E2D4, E2D5, E2D12, E2D20 Spec 20 Clause S20C3/S20C4/S20C5, S20C6 AS 1670.1–2018
Automatic fire suppression system	BCA 2022 D1D6, E1D9, E1D11 Specification 17 AS 2118.1-2017
Emergency lighting	BCA 2022 E4.2, E4.4, AS/NZS 2293.1–018
Exit and directional signage	BCA 2022 E4D5, E4D6, E4D8, AS/NZS 2293.1–2018
Fire alarm monitoring system	BCA 2022 Spec 20 Clause S20C8 AS 1670.3–2018
Fire dampers	BCA 2022 C4D15, Spec 13 AS 1668.1–2015, AS1682.1–2015 and AS1682 –2015
Fire doorsets	BCA 2022 C3D13, C3D14, C4D9, C4D12 AS/NZS 1905.1–2015
Fire hydrant systems	BCA 2022 E1D2, AS 2419.1–2021
Fire hose reel systems	BCA 2022 E1D3 AS 2441–2005
Fire safety engineering report addressing: 1. To permit bounding construction to the residential levels to not achieve the required FRL requirements of the BCA 2. To permit the distance of travel to a point of choice to alternative required exits to the car parking levels to exceed the provisions of the BCA 3. To permit the distance of travel to a required exit to the car parking and residential levels to exceed the provisions of the BCA 4. To permit the distance of travel to alternative required exits within the carparking levels to exceed the provisions of the BCA	
Fire seals (protecting openings and service penetrations in fire resisting components of the building)	BCA 2022 C4D15, C4D16, Spec 13, AS4072.1–2005

Fire Safety Measure	Minimum Standard of Performance
Lightweight construction	BCA 2022 C4D12, Manufacturer's specifications AS1530.4–2014
Mechanical air-handling systems	BCA 2022 F6D11, Spec 20 AS1668.2–2012, Clause 5.5 of AS/NZS1668.1–2015
Openings in fire-isolated lift shafts	BCA 2022 C4D11, Spec 24 AS1735.11–1986
Portable fire extinguishers	BCA 2022 E1D14 AS 2444–2001
Warning and operational signs	BCA 2022 D3D28, D4D7, E3D4 Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 Section 108

5.0 – Conclusion

Assessment of the proposed mixed-use development at Forestville RSL Club, 22 Melwood Avenue, Forestville NSW 2087 will in our opinion be capable of achieving compliance with the Building Code of Australia (BCA) 2022 and relevant adopted Australian Standards.

Signed,

Vic Lilli
VPL Consulting Pty Ltd

6.0 – References

6.1 – Basis of Report

This BCA Capability report has been prepared on the basis of the following-

(i) Architectural Plans as prepared by Quattro Architecture

MASTERPLAN SET

Drawing No.	Title	Revision	Date
DA_A_000	Cover Sheet	D	30.08.2024
DA_A_047	Regional Site Plan	D	30.08.2024
DA_A_048	Survey & Surrounds	D	30.08.2024
DA_A_050	Site Analysis	D	30.08.2024
DA_A_051	Site Analysis	D	30.08.2024
DA_A_050	Site Analysis – Car parking	D	30.08.2024
DA_A_050	Site Analysis – Open Space	D	30.08.2024
DA_A_050	Site Analysis – Area Calcs	D	30.08.2024
DA_A_055	Site Plan – Existing	D	30.08.2024
DA_A_098	Site Plan – Basement 3/4/5	D	30.08.2024
DA_A_99	Site Plan- Basement 1/2	D	30.08.2024
DA_A_100	Site Plan – Ground	D	30.08.2024
DA_A_101	Site Plan – Level 1	D	30.08.2024
DA_A_102	Site Plan – Level 2	D	30.08.2024
DA_A_103	Site Plan – Roof	D	30.08.2024
DA_A_200	Elevations	D	30.08.2024
DA_A_201	3D Montage	D	30.08.2024
DA_A_250	Sections	D	30.08.2024

CLUB AND SENIORS LIVING

Drawing No.	Title	Revision	Date
DA_A_1000	Club Cover Sheet	D	30.08.2024
DA_A_1060	Club Site Plan	D	30.08.2024
DA_A_1097	Club – Basement 4/5	D	30.08.2024
DA_A_1098	Club – Basement 3/4	D	30.08.2024
DA_A_1099	Club – Basement 1/2	D	30.08.2024
DA_A_1100	Club Ground Floor	D	30.08.2024
DA_A_1101	Club Level 1	D	30.08.2024
DA_A_1102	Club Level 2	D	30.08.2024
DA_A_1103	Club Roof Plan	D	30.08.2024
DA_A_1104	Club – Unit Type Plans	D	30.08.2024
DA_A_1200	Club – Elevations – Sheet 1	D	30.08.2024
DA_A_1201	Club – Elevations – Sheet 2	D	30.08.2024
DA_A_1250	Club Sections	D	30.08.2024
DA_A_1852	Club Building Finishes	D	30.08.2024

6.0 – REFERENCES

SENIORS LIVING

Drawing No.	Title	Revision	Date
DA_A_2000	Cover Sheet	B	30.08.2024
DA_A_2160	Site Plan	B	30.08.2024
DA_A_2099	Basement Floor Plan	B	30.08.2024
DA_A_2100	Ground Floor	B	30.08.2024
DA_A_2101	Level 1	B	30.08.2024
DA_A_2102	Level 2	B	30.08.2024
DA_A_2103	Roof Plan	B	30.08.2024
DA_A_2200	Unit Type Plan	B	30.08.2024
DA_A_2201		B	30.08.2024
DA_A-2200	Elevations – Sheet 1	B	30.08.2024
DA_A-2201	Elevations – Sheet 2	B	30.08.2024
DA_A-2250	Sections	B	30.08.2024
DA_A-2853	Building Finishes	B	30.08.2024

(ii) Building Code of Australia (BCA) 2022

(iii) Environmental Planning and Assessment Act, 1979, and Regulations.

(iv) Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021