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# Building Code of Australia & Accessibility (DDA)

## Design Compliance Report – Development Application

## Proposed mixed use development

## Pacific Highway, Lindfield

| | |
|---|---|
| **Report Number & Revision:** | MSA1668_REV03 |
| **Prepared For:** | C/- Olsson & Associates Architects & Fox Johnston |
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### Revision History & Quality Management

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## Executive Summary

This report has assessed the Development Application (DA) level design documentation for the proposed **mixed-use development with associated carparking**, known as the 'Lindfield Village Living (LVL) Project at Lindfield NSW under the provisions of the Building Code of Australia (BCA) and relevant provision for "Access for People with Disabilities".

The primary purpose of the report is to assess the development design and identify any significant non-compliance matters in comparison to the current deemed-to-Satisfy (DTS) provisions of the BCA. Assessment is limited to those issues ascertainable from the current level of detail.

Subject to the recommendations contained in Section 3.0 of this report (and as detailed in the Table below), the development can readily comply with the requirements of the BCA.

Based on the reviewed design, the following matters will not comply with the deemed-to-satisfy provisions of the BCA and will need to be addressed by Performance Solution at Construction Certificate (CC) stage.

| # | DTS Clause | Description of Issue. |
|---|---|---|
| 1. | - | *Effective Height*<br><br>Refer to comments in Section 2.2 of this report. The effective height of the proposed building will exceed 25m.<br><br>This occurs as the 'buildings' are connected via the common basement levels (and therefore form a single building for the purposes of BCA assessment).<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage (Refer to PBC Letter dated 04.12.2018)* |
| 2. | D1.4 | *Exit Travel Distances*<br><br>In the residential component, there are SOU doors which are more than 6m from an exit or POC to alternative exits, and points on the floor of the common areas which are more than 20m to exit or POC. (refer to Section 3.0 of this report for further details).<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage (Refer to PBC Letter dated 04.12.2018).* |
| 3. | D1.7 | *Travel via fire isolated exits*<br><br>The fire isolated exits serving the residential levels are proposed to discharge into covered areas (which does not satisfy BCA D1.7).<br><br>The door to the fire isolated exit serving the services/storage area in Basement Level 1 opens directly into the storey (which is not considered to be a 'SOU occupying the whole of the storey').<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage (Refer to PBC Letter dated 04.12.2018)* |

| # | DTS Clause | Description of Issue. |
|---|---|---|
| 4. | D3.1<br>D3.2 | *Access for people with disabilities*<br><br>The entrance to Building D from Tryon Place must be accessible. In this regard a stairway platform lift can be provided, or alternatively, this issue must be addressed via Performance Solution at CC stage. |

# 1.0 Introduction

This report has assessed the Development Application (DA) level design documentation for the proposed **mixed-use development with associated carparking**, known as the 'Lindfield Village Living (LVL) Project at Lindfield NSW under the provisions of the Building Code of Australia (BCA) and relevant provision for "Access for People with Disabilities".

## 1.1 Basis of Report

The key basis of this report is to address compliance with the significant requirements of the Building Code of Australia (BCA) and relevant disabled access provisions relevant to the new building works.

The scope of services is limited to assessment against Sections C - **Fire Resistance,** Section D - **Access & Egress**, Section E - **Services & Equipment,** Section F - **Health and Amenity,** Section G **– Ancillary Provisions** of the BCA, and relevant Access Provisions as detailed in Section 1.2 below.

## 1.2 Assessed Information

This report is based on the following:

- Desktop assessment of Architectural Plans prepared by Fox Johnston & Olsson & Associates (refer to Attachment A)
- The National Construction Code – Building Code of Australia (BCA), prepared by the Australian Building Codes Board.

  *Note: A reference to the "BCA" in this report is a reference to the Building Code of Australia 2016*
- The Guide to the BCA, prepared by the Australian Building Codes Board.
- Commonwealth Disability (Access to Premises) Standards 2010
- Relevant provisions of AS1428.1-2009 "Design for Access and Mobility – Part 1: General Requirements for Access New Building Works" published by Standards Australia.
- Ku-Ring-Gai Council Development Control Plan Number 31 – Access
- Letter from Performance Based Consulting (PBC) dated 04.12.2018 relating to proposed Performance Solutions.

## 1.3 Purpose of Report

The purpose of this report is to assess the following:

- Assessment of the proposed works under the current BCA and relevant Disabled Access Provisions and detail any significant departures (or those which have the ability to affect the current design);

- Provide recommendations to best address any significant departures from the requirements of BCA and relevant Disabled Access Provisions

## 1.4 Limitations of Report

- Design changes required by Performance Solutions (made after Development Consent is granted) may necessitate further Council approval under Section 4.55 of the EP&A Act 1979.

- The assessment is limited to a desktop assessment only and has not included site assessment or physical assessment of the property in any way.

- Some requirements of the BCA are recognised as being interpretive in nature. Where these matters are encountered, interpretations are made in accordance with MSA policy. Specific relevant interpretations relevant to this assessment are included in Section 2.3 "BCA Interpretation Notes".

- Assessment beyond the compliance matters ascertainable on the current documentation is beyond the scope of this report. Further assessment of the detailed design is recommended upon approval of the DA.

- Section J Energy Efficiency Assessment is beyond the scope of this report.

- An assessment of the provisions of BCA F1 (Damp & Weatherproofing) is not included in this report. Details would typically be provided at Construction Certificate Stage.

- Reporting on hazardous materials, OH&S matters or site contamination

- Detailed assessment of any engineering matters – e.g.: structural, electrical, hydraulic, mechanical, fire

- Heritage significance

- Environmental or planning issues

- Requirements of statutory authorities

- Provision of any Construction Certification under Part 4A of the Environmental Planning & Assessment Act 1979

# 2.0 Building Characteristics

## 2.1 Building Description

The development primarily comprises 4 'blocks' (described as Buildings A-D) of residential sole occupancy units (SOU's) constructed over 3 levels of common basement carparking & common storage. Communal facilities proposed at ground floor and roof level (including a swimming pool at ground floor level).

A single retail unit is also proposed at ground floor level.

## 2.2 BCA Assessment Data

The following BCA assessment data is relevant to the proposal under the current BCA.

**Table 2.2 BCA Assessment Data**

| | |
|---|---|
| **BCA Building Classification:**<br><br>***BCA A3.2, A3.3*** | 2 – Residential SOU's<br><br>6 – Retail Unit<br><br>7a – Car parking (Basement)<br><br>7b* – Storage<br><br>*The basement carparking levels also contain storage rooms/spaces. Where the cumulative floor area of the storage components is:<br><br>1. Less than 10% of the total floor area of the storey in which they are located – then the storage parts may be considered as part of the Class 7a carpark.<br><br>2. More than 10% of the total floor area of the storey in which they are located (e.g. storage component in Basement Level 1) – then the storage parts must be classified as Class 7b parts. |
| **Rise in Stories**<br><br>***BCA C1.2*** | 6 – (or more than 3) |
| **Type of Construction**<br><br>***BCA C1.1*** | Type A |
| **Floor Area Limitations for Type of Construction**<br><br>***BCA C2.2*** | The Class 2 parts of the building are generally not subject to floor area/volume fire compartment limitations<br><br>The Class 7a fire compartment is assumed to be sprinkler protected and therefore not subject to the floor area + volume limitations of Table C2.2. |

| | |
|---|---|
| **Effective Height** | To be confirmed with detailed sections - Note however:<br><br>Basement 2 – appears to be the lowest storey counted in the rise in storeys (RL 97.4)<br><br>Level 6 appears to be the top most storey – the floor of which has a RL of 124.1<br><br>On this basis, the building is currently considered to have *an effective height* ***of more than 25m*** (26.7m). Refer to recommendations<br><br>The roof of Buildings C & D is assumed not to be counted in the rise in storeys (in this regard the 'awning' proposed at roof level requires assessment by the fire engineer) |
| **Other - Tyron Place Boundaries** | MSA is of the understanding that Tyron Place will be reclassified as a *public road*, as part of the subject development. |

## 3.0 BCA / Access Assessment & Recommendations

The following table provides a 'clause by clause' assessment of the proposed development against the requirements of the BCA and relevant Disabled Access Provisions.

The compliance status and comment/recommendation are indicated (shaded) in the right-hand column as follows:

Complies – The design is considered to meet the requirements of the clause.

Does not comply – The design does not meet the requirements of the clause OR further information is required to determine compliance OR A Performance Solution is required to address this issue.

Compliance Readily Achievable (CRA) within the constraints of the current design*

Not Applicable (NA). The clause is informational or does not apply to the subject design

**Clauses marked CRA. It should be noted that compliance with these items is not expected to necessitate significant design changes, and therefore can be addressed at Construction Certificate (CC) Stage, e.g. either in the CC architectural plans, or in a BCA Compliance Specification.*

Note re effective height. For the purposes of this assessment, the building is considered to have an effective height of less than 25m (noting that the fire separation of 'buildings' is proposed to be addressed by the fire engineer as a performance solution at CC stage).

## Table 3.0 –BCA Clause by Clause Assessment

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| **SECTION B - STRUCTURE** | | |
| Part B1 Structure | All buildings and structures should be designed by appropriately qualified structural engineers in accordance with Part B1 of the BCA and AS 1170 (SAA Loading Code), AS 1684, AS 1720, AS 2870, AS3600, AS4100 and/or other relevant structural codes. | Structural engineer to certify at Construction Certificate (CC) stage. |
| Clause B1.4 Glazing | All glazing must be selected and installed in accordance with AS2047 & AS1288. | A plan or spec notation to this effect is required. (at CC Stage) |
| **SECTION C - FIRE RESISTANCE** | | |
| **Part C1 Fire Resistance & Stability** | | |
| C1.1 Type of Construction Required | The required type of construction is determined using Table C1.1 and depends on the rise in storeys of the building and Classification of the top storey.<br><br>BCA Specification C1.1 provides the requirements (including Fire Resistance Levels (FRL)) for buildings elements in each type of Construction for each Classification. | Note the following FRLs generally required for each Classification in the subject building:<br>• Class 2– 90 mins<br>• Class 6 – 180 mins<br>• Class 7a– 120 mins<br>• Class 7b – 240mins (refer to comments in Section 2.2 of this report in relation to storage areas in the basement levels).<br><br>*Details for the proposed construction material and FRL's should be provided on the architectural plans, and where necessary on the structural plans (at CC stage).*<br><br>*Care should be taken with the selection of any external cladding materials – it is recommended that the materials be approved by the Accredited Certifier/PCA prior to installation.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | | *Note re Skylights/Roof Lights*<br><br>*Skylights must be not less than 3m from any rooflight or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL and not less than 3m from any rooflight or the like in an adjoining fire-separated section of the building.* |
| C1.2 Calculation of Rise In Stories | Informational Clause - Provides details for how to calculate the rise in storeys | The building will have a rise in storeys of 8 (or more than 3). |
| C1.3 Buildings of Multiple Classifications | Informational clause relating to buildings containing more than 1 Classification. | The top floor of the building is occupied by a Class 2 part. Therefore, for the purposes of determining the required type of construction, the whole building is treated as a Class 2 building. |
| C1.4 Mixed Types of Construction | Informational clause relating to the requirements for buildings containing more than 1 type of construction. | The building will be of Type A construction throughout |
| C1.5 Two Storey Class 2, 3 or 9 buildings | Provides a concession for construction type in certain Class 2, 3 and 9b buildings. | The building has a rise in storeys of more than 2 and contains Class 7 parts – therefore this concession cannot be applied. |
| C1.6 Class 4 Parts | Provides construction type requirements for Class 4 parts | The building contains no Class 4 parts. |
| C1.7 Open Spectator Stands | Provides construction type requirements for buildings containing open spectator stands. | The building is not an open spectator stand. |
| C1.8 Lightweight Construction | Provides requirements for lightweight construction where used in fire rated walls or to protect steel columns | Any proposed fire rated lightweight construction must be confirmed as complying with Specification C1.8 by the Structural Engineer (not currently indicated on the plans). |
| C1.9 Non-combustible Building Elements | In a building *required* to be of Type A or B construction, the following building elements and their components must be *non-combustible*:<br><br>(i) *External walls* and *common walls*, including all components incorporated in them including the facade covering, framing and insulation.<br><br>(ii) The flooring and floor framing of lift pits. | *Details for the proposed construction materials in accordance with this clause should be provided on the architectural plans, and where necessary on the structural plans (at CC stage).* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | (iii) Non-*loadbearing internal walls* where they are *required* to be *fire-resisting*.<br><br>(b) 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* construction in—<br><br>(i) a building *required* to be of Type A construction; and<br><br>(ii) a building *required* to be of Type B construction, subject to **C2.10**, in—<br><br>(A) a Class2,3 or9building; and<br><br>(B) a Class5,6,7 or8buildingifthe *shaft* connects more than2 *storeys*.<br><br>(c) A *loadbearing internal wall* and a *loadbearing fire wall*, including those that are part of a *loadbearing shaft*, must comply with **Specification C1.1**.<br><br>(d) The requirements of **(a)** and **(b)** do not apply to gaskets, caulking, sealants and damp-proof courses.<br><br>(e) The following materials may be used wherever a *non-combustible* material is *required*:<br><br>(i) Plasterboard.<br><br>(ii) Perforated gypsum lath with a normal paper finish.<br><br>(iii) Fibrous-plaster sheet.<br><br>(iv) Fibre-reinforced cement sheeting.<br><br>(v) Pre-finished metal sheeting having a *combustible* surface finish not exceeding 1 mm thickness and where the *Spread-of-Flame Index* of the product is not greater than 0.<br><br>(vi) Bonded laminated materials where—<br><br>(A) each lamina, including any core, is *non-combustible*; and<br><br>(B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2mm; and | |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | (C) the *Spread-of-Flame Index* and the *Smoke-Developed Index* of the bonded laminated material as a whole do not exceed 0 and 3 respectively | |
| C1.10 Fire Hazard Properties | Linings, materials and assemblies must be 'non-combustible' or comply with BCA Specification C1.10.<br><br>*Note - Paint or fire-retardant coatings must not be used to achieve compliance with fire hazard properties requirements.* | *Details of proposed materials linings and assemblies to be provided in the CC documentation.* |
| C1.11 Performance of External Walls in Fire | Tilt up or pre-cast concrete panels must comply with BCA Specification C1.11 | The proposed design does not appear to contain tilt-up panels. |
| C1.12 Combustible materials | Informational clause – providing details for non-combustible materials | Noted - Informational clause only |
| C1.13 Fire-protected timber: Concession | *Fire-protected timber* in a Class 2,3 or 5 building may be used wherever an element is *required* to be *non-combustible*, provided—<br><br>(a) the building is—<br><br>(i) a separate building; or<br><br>(ii) a part of a building—<br><br>(A) which only occupies part of a *storey*, and is separated from the remaining part by a *fire wall*; or<br><br>(B) which is located above or below a part not containing *fire-protected timber* and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a *fire wall* for the lower *storey*; and<br><br>(b) the building has an *effective height* of not more than 25 m; and<br><br>(c) the building has a sprinkler system throughout complying with **Specification E1.5**;and<br><br>(d) any insulation installed in the cavity of the timber building element *required* to have an FRL is *non-combustible*; and<br><br>(e) cavity barriers are provided in accordance with **Specification C1.13**. | Noted - Informational clause only |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | | |
| C1.14 Ancillary elements | 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 is one of the following:<br>(a) An *ancillary element* that is *non-combustible*.<br>(b) A gutter, downpipe or other plumbing fixture or fitting.<br>(c) A flashing.<br>(d) A grate or grille not more than2m$^2$in area associated with a building service.<br>(e) An electrical switch, socket-outlet, cover plate or the like.<br>(f) Alight fitting.<br>(g) A *required* sign.<br>(h) A sign other (refer to clause for concessions)<br>(i) An awning, sunshade, canopy, blind or shading hood (refer to clause for concessions) | *Details to be provided at CC stage.* |
| **Part C2 Compartmentation & Separation** | | |
| C2.2 General Floor Area & Volume Limitations | Floor areas and volumes of fire compartments must be in accordance with BCA Table C2.2. | Floor areas and volumes of fire compartments are less than the maximum allowed for Type A construction. |
| C2.3 Large Isolated Buildings Note requirements of NSW C2.3 | Provides concessions from the fire compartment floor area and volume limitations of BCA C2.2 for 'large isolated buildings'. | The building is not considered to be a 'large isolated building'. |
| C2.4 | Provides requirements for open space and vehicular access for large isolated buildings | As above |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| Requirements for Open Space & Vehicular Access | | |
| C2.5 Class 9a & 9c Buildings | Class 9a and 9c buildings are subject to further requirements in terms of smoke and fire compartmentation.<br><br>Note BCA NSW C2.5 contains variations to this clause (Applicable in NSW) | The building is not a Class 9a or 9c building |
| C2.6 Vertical Separation of openings in external walls | In buildings required to be of Type A construction, openings in external walls are required to be protected with vertical spandrels or horizontal slabs to prevent fire from spreading from a storey below.<br><br>Vertical separation must be in the form of:<br><br>• 'Vertical spandrels' which must be non-combustible, have a FRL of at least 60/60/60, and a height of at least 900mm. At least 600mm must be above the surface of the intervening floor; OR<br><br>• Horizontal Slab separation (e.g. balcony) – which must have a FRL of not less than 60/60/60 and extend outwards of the opening not less than 1100mm and horizontally not less than 450mm from the side of the opening. | Vertical separation of opening in external walls must be provided in accordance with this clause. Specific attention should be paid to the following areas:<br><br>1. Openings being protected by balcony slabs – ensure slab extends outwards 1100mm and horizontally 450mm from the opening being protected.<br><br>*Dimensions of spandrels /balcony slabs to be nominated on CC level plans.* |
| C2.7 Separation by Fire Walls | Provides the requirements for fire wall construction. | See comments in C2.8 below. |
| C2.8 Separation of Classifications in the same storey | Where a building has different Classifications in the same storey:<br><br>• The Classifications must be separated by a fire wall (with the 'higher' FRL); OR<br>• The entire storey must be constructed to the 'higher FRL' | Separation of the storage (Class 7b) and residential (Class 2) at basement level 1 must be provided by a fire wall achieving an FRL of at least 240/240/240<br><br>*Details for the proposed construction material and FRL's should be provided on the architectural plans, and where necessary on the structural plans (at CC stage).* |
| C2.9 Separation of Classifications | Where a building contains different Classifications and one Classification is situated above, they must be fire separated as follows: | The floor which separates the storeys of differing Classifications must achieve the FRL not less than that required for the lower storey. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| in different stories | a) Type A Construction – the separating floor must achieve the required FRL (under BCA Spec C1.1) for the lowest storey<br>b) Type B/C Construction – where one of the Classifications is 2/3/4, the separating floor must achieve a FRL of 30mins, RISF not less than 60mins or be lined to the underside with a 'fire protective covering' | E.g. a floor separating the Class 7b parts from the Class 2 above must be not less than 240/240/240.<br><br>*Details for the proposed construction material and FRL's should be provided on the architectural plans, and where necessary on the structural plans (at CC stage).* |
| C2.10 Separation of lifts shafts | The following lift shafts are required to achieve a FRL:<br><br>a) General - lifts connecting more than 2 storeys<br>b) Lifts in Class 9a or 9c buildings<br>c) 'Emergency Lifts'<br><br>Openings for landing doors and services must be protected in accordance with the requirements of BCA Part C3. | The proposed lift shafts must have a FRL in accordance with the requirements of Table of Specification C1.1 (relevant for the Classifications concerned).<br><br>*Details for the proposed construction material and FRL's should be provided on the architectural plans, and where necessary on the structural plans (at CC stage).* |
| C2.11 Stairways and lifts in one shaft | Stairs and lifts must not be in the same shaft if either is required to be 'fire isolated' | The lifts are typically proposed in their own shafts. |
| C2.12 Separation of Equipment | The following equipment is required to be fire separated from the remainder of the building:<br><br>• Lift motors or control panels<br>• Emergency generators for emergency equipment<br>• Central smoke control plan<br>• Boilers<br>• Batteries (>24V & exceeding 10 ampere hours)<br>• Fire pumps | Any equipment specified by this clause must be separated by 120/120/120 construction, including boilers, batteries, diesel pumps etc.<br><br>Full details of equipment to be provided (*note that a fire hydrant pump room required to be fire separated from the remainder of the building*)<br><br>*Details to be submitted at CC stage -* |
| C2.13 Electrical Supply | Substations, main switchboards (where sustaining emergency equipment) and certain electrical conductors must be fire separated from the remainder of the building. | *Details to be submitted at CC stage.*<br><br><u>Note – fire separation requirements of Energy Australia typically exceed those of the BCA.</u> |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| C2.14 Public corridors in Class 2 & 3 Buildings | Where 'public corridors' in a Class 2 or 3 building exceed a length of 40m, they must be subdivided into smoke compartments (at intervals of not more than 40m). | The 'public corridors' (being the enclosed corridors as defined in the BCA) in the Class 2 components do not exceed a length of 40m (refer to comments in Section 2.2 of this report for further details) |
| **Part C3 Protection of Openings** | | |
| C3.2 Protection of openings in external walls Note NSW C3.2 ((a) deleted) | Openings in external walls of buildings must be protected in accordance with BCA C3.4 where they are:<br>• Less than 3m from an allotment boundary (other than the boundary of a road, river or lake etc); or<br>• 6m from the far side of a boundary with road, river or lake etc; or<br>• 6m from the external wall of another building on the allotment | Openings in external walls which are less than 3m from a fire source feature (being the side/rear allotment boundaries or the far side of an adjoining road/lane) must be protected in accordance with BCA C3.4.<br>*The external walls are proposed to be setback at least 3m from side/rear boundaries.* |
| C3.3 Separation of external walls and associated openings in different fire compartments | External walls (and associated openings) of different fire compartments must be fire rated/protected where they are exposed to one another (refer to Table C3.3) | The external walls (& associated openings) of the storage area at basement level 1 and the residential portion should be separated in accordance with this clause.<br>*Details would typically be provided at CC stage.* |
| C3.4 Acceptable Methods of Protection | Openings required to be protected under Clause C3.2 (or C3.3) above must be protected as follows:<br>(i) Doorways—<br>(A) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or<br>(B) /60/30 fire doors that are self-closing or automatic closing.<br>(ii) Windows—<br>(A) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or | Informational clause |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | (B) /60/ fire windows that are automatic closing or permanently fixed in the closed position; or<br><br>(C) /60/ automatic closing fire shutters.<br><br>(iii) Other openings—<br><br>(A) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or<br><br>(B) construction having an FRL not less than /60/.<br><br>(b) Fire doors, fire windows and fire shutters must comply with Specification C3.4. | |
| C3.5 Doorways in Fire Walls | • The aggregate width of doorways in fire walls must not exceed ½ of the length of the fire wall.<br><br>• The doorways can be protected with 1 or 2 doors to achieve the required FRL<br><br>• Doors must be self or automatic closing | Refer to comments in Clause C2.8 above. |
| C3.6 Sliding Fire Doors | Sliding fire doors must automatically close in accordance with this clause and be provided with warning signage | There are no sliding fire doors proposed. |
| C3.7 Protection of Doorways in horizontal exits | Doors in horizontal exits must achieve the same FRL as that of the fire wall<br><br>Doors must be self or automatic closing | There are no horizontal exits proposed. |
| C3.8 Openings if fire isolated exits | Doorways serving the fire isolated exit must be protected with a self-closing fire door achieving a FRL of not less than -/60/30. | *Details to be submitted at CC stage* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | Where the window in the external wall of a fire isolated exit is within 6m and exposed to a window or other opening in a wall of the same building it must be protected externally in accordance with Clause C3.4. | |
| C3.9 Service Penetrations in fire-isolated exits | Service penetrations in fire exits must comply with this clause. Generally, only electrical wiring and water supply pipes for fire services are permitted within the exits. | *Details to be submitted at CC stage.* |
| C3.10 Openings in Fire isolated lift shafts | The entrance doorways must be protected with fire doors (achieving a FRL of not less than -/60/- which comply with AS1735.11 and are set to remain in the closed position (except when discharging or receiving passengers)<br><br>The lift indicator panels and the like must be backed with construction achieving a FRL of not less than -/60/60 – if it exceeds an area of 35,000mm$^2$ | *Details to be submitted at CC stage.* |
| C3.11 Bounding Construction | Applies to Class 2 and 3 buildings and Class 4 parts<br><br>The entrance doorways of the sole occupancy units, which open onto a public corridor must be protected with a self-closing fire door achieving a FRL of not less than -/60/30.<br><br>In a Class 2 or 3 building, where the path of travel to an exit does not provide a person seeking egress with a choice of travel in different directions to alternative exits and is along an open balcony, landing or the like and passes the external wall of another unit or other room, then that wall must be fire rated and openings protected internally.<br><br>Note NSW C3.11 Bounding Construction: Class 2, 3, 4 and 9b buildings | *Details to be submitted at CC stage.* |
| C3.12 Openings in floors and ceilings for services | Services penetrations must be protected in accordance with this clause. See C3.15 below also. | *Details to be submitted at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| C3.13 Openings in Shafts | Openings in shafts required to be fire rated to be protected in accordance with this Clause. | *Details to be submitted at CC stage.* |
| C3.15 Openings for Service Installations | Services must be protected against the spread of fire when penetrating any building element that is required to be fire-rated (i.e., separating floor/wall/shaft).<br><br>All cable penetrations through floors or fire walls must be fire stopped in accordance with BCA C3.15 and AS1530.4. | *Details to be submitted at CC stage.* |
| C3.16 Construction Joints | Fire-rated mastic or other approved product tested to AS1530.4 is required to seal gaps in fire rated construction. | *Details to be submitted at CC stage.* |
| C3.17 Columns protected in lightweight construction to achieve FRL | Columns protected in lightweight construction which penetrate a building element required to achieve a FRL or a RISF must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or RISF. | *Details to be submitted at CC stage.* |
| **SECTION D<br>ACCESS & EGRESS** | | |
| **Part D1<br>Provision for Escape** | | |
| D1.2 Number of Exits required Note NSW D1.2 | At least one exit must be provided from each storey of every building<br><br>At least 2 alternative exits must be provided from:<br><br>• Every storey of a building which has an effective height of more than 25m<br>• Basement storeys where egress from the building involves a vertical rise of 1.5m or more (some small basements provided with an exemption)<br>• Class 8 buildings with a rise in storeys of more than 6<br>• A storey which contains a 'patient care area' | The design generally complies |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | • A storey which contains sleeping areas in a Class 9c building<br>• Every storey in a child care centre<br>• Each storey of a primary/secondary school with a rise in storeys of 2 or more<br>• Any storey in a Class 9 building which accommodates more than 50m<br><br>Additional requirements apply to Class 9a and 9c buildings and to open spectator stands.<br><br>Egress is not permitted to be provided through another sole occupancy unit. | |
| D1.3<br>When Fire Isolated exits are required | Exits are required to be fire isolated depending on the Classification of the building and number of storeys connected.<br><br>The following general requirements apply (exits are required to be fire isolated in the following circumstances):<br><br>• Class 2 buildings – 3 consecutive storeys<br>• Class 3 buildings – 2 consecutive storeys<br>• Class 5-9 buildings (2 consecutive storeys)<br>• Class 9a (patient care parts) & 9c buildings – all exits to be fire isolated. | Fire isolated appear to be provided generally as required.<br><br>*Refer to comments in D1.7 in relation to the discharge of fire exits (the point of discharge from each exit needs to be clarified.* |
| D1.4<br>Exit Travel Distances | • Class 2 & 3 buildings<br>  ○ The distance between the entrance door of a Sole Occupancy Unit (SOU) and an exit or Point of Choice (POC) to 2 alternative exits must not exceed 6m (20m on ground floor)<br>  ○ From all parts not in a SOU – 20m to exit or POC<br>• Class 4 buildings – entrance door of SOU to exit or POC must not exceed 6m<br>• Class 5, 6, 7, 8 or 9 buildings – 20m to exit or POC | Note – for the purposes of this assessment, travel distances in the basement carparking levels have been measured without considering the cars in a carpark as being obstructions (see commentary in the Guide to the NCA 2016 "*cars in a carpark and some non-built or non-fixed obstructions are not taken into account in the calculation of travel distance. However, there may be occasions when such matters must be taken into account*". Where travel distances are measured around carparking spaces (i.e. along common aisles etc), they will not satisfy BCA D1.4. Where deemed necessary by the Accredited Certifier/PCA, the design may require support via Performance Solution. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | Additional requirements apply to Class 9 buildings, and open Spectator stands | The following travel distance non-compliance are required to be addressed via Performance Solution:<br><br>• Basement 1 – carpark supply and plant room - there are points on the floor more than 20m from an exit or POC to 2 alternative exits (furthermore there are points which are more than 40m from the nearest exit).<br>• Ground/Site + L1 – There are SOU entrance doorways in Building D which are more than 6m (up to ≈10m) from an exit (or POC)<br>• Level 1 & 2 - There are SOU entrance doorways in Building C which are more than 6m (up to ≈11.5m) from an exit (or POC)<br>• Level 1 & up– Building B the entrance doors to some units are marginally more than 6m to the single exit.<br>• Level 1 & up– Building A - There are SOU entrance doorways which are more than 6m (up to ≈10m) from an exit (or POC)<br>• Roof – there are points on the southern part of the roof (above Building C) which are more than 20m from an exit or POC.<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage.* |
| D1.5 Distance Between Alternate Exits Note NSW D1.6 | Alternative exits must:<br><br>• Be not less than 9m apart<br>• Be not more than 45m apart in a Class 2 or 3 building (or patient care area in a Class 9a building)<br>• Be not more than 60m apart in any other case<br>• Be located so that alternative paths of travel do not converge to be less than 6m apart. | The distance between alternative exits is generally compliant (noting comments in D1.4 above in relation to exclusion of cars in carpark). |
| D1.6 Dimensions of Exits and paths of Travel to Exits | Exits and paths of travel to exits are required to be unobstructed for a width of no less than 1000mm wide and a height of no less than 2000mm – see D2.17 also.<br><br>Additional exit width must be provided where the storey or part accommodates more than 100 people, or is in a Class 9a or 9c building. | The exit doors are required to be not less than 750mm clear. (<u>note that doors in an accessible pathway must be not less than 850mm clear - refer to Part D3 of the report for further details)</u><br><br>*Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| D1.7<br>Travel via Fire Isolated Stairs | • Doors from rooms must not open directly into a fire isolated exit (unless the room is a public corridor, lobby, SOU occupying the whole of storey, or sanitary compartment.<br>• Fire isolated exists must provide independent egress from each storey served and discharge directly to:<br>  ○ A road or open space<br>  ○ A covered area of the building which is suitably open<br>• Where a path of travel from a fire isolated exit involves passing within 6m of the external wall of the building, the external wall must be fire rated and openings protected in accordance with BCA C3,4. | The fire isolated stairs typically discharge into covered areas (which do not satisfy BCA D1.7 in terms of perimeter openings)<br><br>Note that additional protective measures to openings in external walls which are exposed to the paths of travel from the fire exits will be required.<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage.* |
| D1.8<br>External Stairways or ramps in lieu of Fire Isolated Stairs | This clause permits external stairways to be used in lieu of fire isolated exits – providing the external stairs are suitably protected. | There are no external stairs being used in lieu of fire isolated exits. |
| D1.9<br>Travel by non-fire-isolated stairs | • Non-fire-isolated exits serving as a required exit must provide a continuous measure of travel by its own flights and landings to the level at which egress to a road or open space is provided.<br>• The distance between the doorway of an SOU and the point of egress to a road or open space must not exceed – 30m (Type C construction) or 60m in any other case.<br>• The distance between any point on the floor and the point of egress to road/open space in a Class 5, 6, 7, 8 or 9 building must not exceed 80m.<br>• The distance between the point of discharge of a non-fire isolated stair and a doorway leading to road open space must not exceed 15m for Class 2 or 3 buildings, or 20m for Class 5, 6, 7, 8 or 9 buildings<br>• In Class 2 or 3 buildings – non-fire isolated exits must provide separate egress to road/open space and be smoke separated at the level of discharge. | Travel via non-fire isolated stairs is generally in accordance with this clause. |
| D1.10<br>Discharge from Exits | Barriers must be provided where necessary to prevent exits being obstructed by vehicles. | The path of travel between the exits and the street is assumed to be on grade.<br><br>Any gates serving external travel paths must not obstruct egress to the street. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| Note NSW D1.10 | The path of travel between an exit and the street must be not less than 1m wide and be provided with stairs and or ramps complying with BCA Part D2/D3<br><br>Additional requirements apply to Class 9b building/open spectator stands. | *Details demonstrating compliance to be provided at CC stage.* |
| D1.11 Horizontal Exits | • Horizontal exits must not be used between SOUs or from a childcare centre or primary/secondary school.<br><br>• Sufficient space must be allocated on either side of the fire wall serving as a horizontal exit.<br><br>• Additional requirements apply in Class 9a or 9c buildings. | There are no horizontal exits relied upon for the purposes of this assessment. |
| D1.12 Non-required stairways, ramps or escalators | • Non-fire-isolated stairs, ramps or escalators must not connect more than 2 consecutive storeys (or 3 consecutive storeys in a sprinkler protected building)- assuming one of the storeys connected provides direct egress to road/open space.<br><br>• Some exemptions apply to open spectator stands, stadiums, carparks and external stairs.<br><br>• Additional requirements apply in Class 9a or 9c buildings. | There are no non-required stairs/ramps in the subject development. |
| D1.13 Number of Persons Accommodated | Provides methods for calculating number of occupants for different building uses. | Informational clause only. |
| D1.14 Measurement of Distances | Provides details for how to measure distances for exits. | Informational clause only. |
| D1.15 Method of Measurement | Provides further details for how to measure egress distances. | Informational clause only. |
| D1.16 Plant Rooms and lift Motor Rooms: Concession | Provides concessions for egress requirements in certain plantrooms. | Informational clause only. |
| D1.17 | Provides requirements for access/egress to/from lift pits. | There are no lift pits indicated on the plans. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| Access to lift pits | | |
| **Part D2 Construction of Exits** | | |
| D2.1 Application of Part Note NSW D2.1 | With the exception of certain clauses (relating to stair construction, handrails, balustrades, door hardware and window fall protection, this Part does not apply to the internal parts of a SOU in residential buildings. | Informational clause only. |
| D2.2 Fire-Isolated stairways and ramps | The fire isolated stairs must be of non-combustible construction and be design such that if there is local failure it will not cause structural damage to or impair the fire resistance of the shaft. | *Details to be provided on the architectural and structural plans at CC stage.* |
| D2.3 Non-fire Isolated stairways and ramps | Non-fire isolated stairs/ramps in a building having a rise in storeys of more than 2 are required to be constructed in concrete, 6mm steel or 44mm thick timber (additional requirements apply in relation to glue and timber density). | *Details to be provided on the architectural and structural plans at CC stage.* |
| D2.4 Separation of Rising and Descending Stairs | In a fire isolated stair, rising and descending stair flights must be physically separated by non-combustible smoke proof construction. | The rising + descending flights must be fire + smoke separated at the level of discharge.<br><br>*Details to be provided at CC stage.* |
| D2.5 Open Access ramps and balconies | Provides requirements for open access ramps/balconies which are provided to meet smoke hazard management requirements of BCA E2.2a. | There are no open access ramps or balconies required to be provided for smoke hazard management. |
| D2.6 Smoke Lobbies | Provides requirements for smoke lobbies (where required by BCA D1.7) | Smoke lobbies are not required to be provided. |
| D2.7 Installations in Exits and Paths of Travel | • Electrical distribution and telecommunications, boards etc. where located in a path of travel to an exit, must be enclosed in non-combustible construction, with openings suitably smoke sealed.<br>• Gas services must not be located in a required exit<br>• Wiring associated with fire, security, lighting may be installed in a fire isolated exit | *Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | • Access to service shafts (other than for fire services) must not be provided from a fire isolated exit. | |
| D2.8 Enclosure of Space Under Stairs and ramps | • The space below a fire isolated stairway must not be enclosed for form a storage cupboard or similar.<br>• The space below a non-fire-isolated exit may be enclosed, providing the enclosure achieves a FRL of at least 60/60/60 & the access doorway is protected with a self-closing fire door | There are no enclosures currently indicated on the plans. |
| D2.9 Width of Stairs | Information clause confirming that a required stairway which exceeds a width of 2m is only counted as having a width of 2m – unless intermediate handrails/barriers are provided. | Informational clause only. |
| D2.10 Pedestrian Ramps | • Fire isolated ramps may be used in lieu of fire isolated stairways<br>• Ramps must not exceed a grade of 1:14 where required to be 'accessible', or 1:8 in any other case.<br>• Ramp surface must be slip resistant. | *Details to be provided at CC stage.* |
| D2.11 Fire-Isolated Passageways | Fire isolated passageways must generally achieve a FRL consistent with the stair/ramp to which it is connected OR 60/60/60 in any other case. | There are no fire isolated passageways currently proposed. |
| D2.12 Roof as Open Space | If an exit discharges to the roof of a building, the roof must achieve a FRL of 120/120/120 and not contain any openings/rooflights etc within 3m of the path of travel. | The roof of the carpark is (in part) being relied upon for 'open space'. Ensure that there are no openings in the roof within 3m of the paths of travel from the exits to the street.<br><br>*Details to be provided at CC stage.* |
| D2.13 Goings & Risers Note NSW D2.13 | Stairways must have:<br><br>• A minimum 2 risers (single steps not permitted), and maximum 18 risers in each flight<br>• Going/riser/quantity dimensions in accordance with BCA Table D2.13<br>• Constant riser/going dimensions (variation 5mm between treads and 10mm overall permitted)<br>• Risers which will not permit a 125mm sphere to pass through<br>• Slip resistant treads | *Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | • Required exits must not contain winders in lieu of a quarter landing (up to 3 winders in a quarter landing are permitted in non-required stairs and in residential SOUs')<br>• Solid treads required where stair exceed 10m in height or 3 storeys<br>• In a Class 9b building – not more than 36 risers are permitted in consecutive flights without a change in direction of at least 30 degrees | |
| D2.14 Landings | • Landings must have a grade not steeper than 1:50<br>• Be not less than 750mm long<br>• Be slip resistant as per BCA Table D2.14 | Landings appear to be provided as required, however full details should be provided at CC stage.<br><br>*Details to be provided at CC stage.* |
| D2.15 Thresholds Note NSW D2.15 | Internal doorways must not contain a step/ramp within the door threshold<br><br>A single 190mm step is typically permitted for external doorways which are not required to be accessible.<br><br>Accessible doorways must be provided with a threshold ramp or landing + step ramp in accordance with AS1428.1<br><br>Additional requirements apply to Class 9a/9c buildings | *Details to be provided at CC stage.* |
| D2.16 Balustrades and other Barriers Note NSW D2.16 | The following general requirements are applicable<br><br>• Balustrades to balconies and landings must be not less than 1,000mm in height<br>• Balustrades to the sides of stairs must be not less than 865mm high, measured along the nosing line<br>• Balustrades must not have any openings which would allow a 125mm sphere to pass through<br>• Balustrades serving a floor which is more than 4m above the surface beneath must not incorporate 'climbable elements' in the zone between 150mm and 760mm above the floor<br>• Balustrades are also required to operable windows where the sill height is less than 865mm and it is possible for a person to fall more than 4m.<br>• Balustrades in fire isolated stairs must comply with BCA Clause D2.16 (g) & (h) (i) (no opening >300mm & where rails are used the rail must not | *Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | permit a 150mm sphere to pass through the nosing line and the bottom rail, openings between rails not to exceed 460mm) | |
| D2.17 Handrails | A handrail is required to at least one side of every stairway or ramp (and to both sides where the stair has a width of 2m or more)<br><br>Handrails must be at a height of not less than 865mm above the stair nosing line (additional handrail at 665-750mm to be provided in primary schools)<br><br>The handrail must be continuous between stair flight landings and have no obstructions that will tend to break a hand-hold (except for newel posts, ball type sanctions or the like).<br><br>Handrails required to assist people with disabilities must comply with BCA D3.3.<br><br>In a required exit, the handrail must comply with Clause 12 of AS1428.1. This typically requires the handrail to have a continuous height to the stair nosing line & around landings, and also incorporate extensions/terminations at the top and bottom as per AS1428.1.<br><br>Additional requirements apply to Class 9a and 9c buildings. | It is suggested that the location of handrails be shown on the plans.<br><br>*Note the additional handrail requirements in Part D3*<br><br>*Full details to be provided at CC stage.* |
| D2.18 Fixed Platforms, walkways and ladders | Informational clause only noting fixed platforms, walkways and ladders for access can be in accordance with AS1657 to service/plant areas or in low-use areas in a residential SOU. | Informational clause. |
| D2.19 Doorways & Doors Note NSW D2.19 | • Doors in required exits must not be fitted with roller shutters/tilt up doors (except in Class 6-8 SOUS with a floor area of not more than 200m$^2$, and where only one exit is required, and the door is held open when in use.<br><br>• Doors in required exits must not be sliding unless the door leads directly to road/open space (and can be manually opened with force less than 110 N) | Swinging or sliding doors are typically proposed as required. |

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| | • Where power operated doors are provided they must open automatically on power failure or fire alarm trip.<br><br>• Additional requirements apply to Class 9a and 9c buildings. | |
| D2.20 Swinging Doors | • Swinging egress doors must not impede/obstruct egress width within an exit<br>• Doors must generally swing in the direction of egress (except where serving parts of the building with a floor area of 200m$^2$) | The final egress doors and doors serving as exits swing in the direction of egress as required. |
| D2.21 Operation of Latch<br>Note NSW D2.21 | • Exit doors and doors in a path of travel to an exit must generally be readily operable without a key from the side that faces a person seeking egress by a single handed downward action or pushing action on a single device which is located between 900mm and 1100mm above the floor.<br><br>• Some concessions are provided to certain buildings – including doors in a residential SOU, childcare centers, banks, jails, metal health facilities. Doors which open automatically on the activation of a fire trip are also provided with a concession under this clause.<br><br>• Additional requirements apply to assembly buildings accommodating more than 100 people (which generally requires that panic bars be provided) | *Details to be provided at CC stage.* |
| D2.22 Re-entry from Fire isolated exits | Doors in fire isolated exits in Class 9a/9c buildings and buildings with an effective height exceeding 25m must not be locked from the inside of the exit.<br><br>Some exemptions can be applied where security measures are implemented. | NA to subject building |
| D2.23 Signs on Doors | Signage must be provided to fire exit doors. | Signage to be provided to fire egress doors as required by this clause.<br><br>*Details to be provided at CC stage.* |
| D2.24 Protection of openable windows | This clause applies to all windows serving a bedroom in the Class 2/3/4 buildings and in Class 9b buildings. | *Details to be provided at CC stage.* |

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| | Where the window (serving a floor more than 2m from the surface beneath) has a sill height of less than 1.7m, the openable portion of the window must be fitted with:<br><br>A device to restrict the window openings; or<br>A screen with secure fittings *(refer to Clause D2.24 for requirements)*<br><br>Note balustrading may also be required to windows. | |
| D2.25 Timber Stairways: Concession | Provides a concession allowing timber stairways to be used in fire exits subject to protective measures being provided. | Informational Clause |
| **Part D3**<br>**Access for People with Disabilities** | | |
| D3.1 General Building Access Requirements | BCA Table D3.1 provides the requirements for access to buildings – primary based on Classification. Areas required to be accessible are typically required to comply with AS1428.1. Requirements are summarised as follows:<br><br>• Class 2, 3 & 9c buildings – *Common areas* - Access must be provided from a pedestrian entrance required to be accessible to at least one floor containing sole occupancy units and to the entrance doors of each sole occupancy unit on that level and where levels are served by a passenger lift, to all unit entrances and common areas of the levels served by a lift. Access must also be provided to one of each type of common room/space for use by residents (kitchens, gyms, pools, laundries, lounge rooms and the like)<br><br>• Class 3 & 9c – SOUS (Accessible SOUs must be provided in accordance with Table BCA D3.1 – the number is calculated on the total number of SOU's provided. Accessible SOU's must be representative of the rooms available and not more than 2 accessible SOUs can be provided adjacent one another. | Access must be provided to the entrance doors of all sole occupancy units, and to and within all common areas (including the pool).<br><br>It appears that general compliance can be achieved, the following should be noted:<br><br>1. Compliance circulation space (min 1.5m x 1.5m) should be provided in front of lifts.<br>2. The corridors in the Class 2 component must be typically not less than 1540mm wide (so as to permit a wheelchair user to perform a 180-degree turn)<br>3. The common garbage rooms at each residential level must be accessible (this appears generally achievable, although minor amendments may need to be made to ensure an L dimension of 1670mm can be achieved in front of the access doorways) |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | • Class 5, 6, 7b, 8, 9a & 9b buildings – Access must be provided to and within all areas normally used by the occupants (additional requirements apply to Class 9b buildings which are not schools).<br><br>• Class 7a buildings – Access must be provided to and within any level containing accessible carparking spaces. | |
| *Ku-Ring-Gai Council Access DCP Part 7C.4* | *The DCP generally requires the following:*<br><br>***Accessible Housing***<br><br>*All residential flat buildings and apartments are to be designed to Silver Level under the Livable Housing Design Guidelines.*<br><br>*At least 15% or part thereof, of all residential flat buildings are to be designed to Platinum Level under the Livable Housing Design Guidelines.*<br><br>***Note:*** *For details on Liveable Housing Design Guidelines refer to www. livablehousingaustralia.org.au.*<br><br>*At least 70% of all dwellings are to be visitable.* | *The building proposes 134 residential units, with 20 being platinum level (approx. 14.8%). – Refer to Attachment B for detail of proposed platinum level units.*<br><br>*<u>Where required by Council at DA stage, an additional platinum level unit must be provided.</u>*<br><br>*Full details for the fitout of platinum/visitable apartments should be provided at CC stage.* |
| D3.2 Access to Buildings | An access way must be provided to the building from:<br><br>• the main points of pedestrian entry at the allotment boundary<br>• from another accessible building connected by a pedestrian link<br>• any accessible carparking space on the allotment<br><br>Access must be provided through the 'principal pedestrian entrance' and not less than 50% of all entrances. Where the floor area of the building exceeds 500m$^2$, a non-accessible entrance must not be located more than 50m from an accessible entrance. | It is understood by MSA that Tyron Place is to be re-classified as a public road.<br><br>In relation to Building D, there appears to be 2 main points of pedestrian entry from Tryon Lane (one at Basement 1 level via the stairs at the northern portion, and the second at Ground Site level via the pedestrian pathway).<br><br>These 2 entrances are >50m apart – which does not satisfy the requirements of this clause.<br><br>*This issue is proposed to be addressed via Performance Solution at CC stage.* |

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| | | It is assumed that access between the Pacific Highway pedestrian entrance and the entrances to Block C (at lower ground floor) is available via the passenger lift in Block B.<br><br>Accessible directional signage will need to be implemented at street entrances to indicate the location of accessible entrances to each building.<br><br>*Details to be provided at CC stage.* |
| D3.3<br>Parts of building to be accessible | • Ramps (other than fire isolated ramps) must comply with Clause 10 of AS1428.1-2009.<br>• Stairways (other than the fire isolated stairways) are required to comply with Clause 11 of AS1428.1-2009.<br>• Fire isolated stairways are required to comply with Clause 11.1 (f) and (g) of AS1428.1<br>• Every passenger lift must comply with BCA 3.6<br>• Concessions from passenger lift requirements in 3 storey Class 5,6,7b or 8 buildings with a floor area of less than 200m$^2$ for the upper storeys.<br>• Specific requirements apply in relation to carpets in accessible areas. | *Details to be submitted at CC stage* |
| D3.4<br>Exemptions | Access into certain areas are provided with a concession from the general access requirements.<br><br>• Areas where it would be inappropriate because of the use of the particular area<br>• An area that posses a health/safety risk for people with a disability | The concessions granted by this clause may be applied to the service/maintenance areas where deemed appropriate by the Certifying Authority (details to be provided at CC stage). |
| D3.5<br>Accessible Carparking | Accessible carparking must comply with AS2890.6 and be provided in accordance with BCA Table D3.5.<br><br>The number of accessible carparking spaces depends on the Classification of the building and the total number of carparking spaces provided. | Access is generally provided to the Class 7a component containing carparking spaces via the passenger lift.<br><br>*Typically, accessible carparking spaces should be provided for each of the adaptable/livable/accessible units. Refer to comments above in relation to the required number of platinum level units.*<br><br>*Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
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| | | |
| D3.6 Signage | Signage in accordance with Specification D3.6 must be provided to:<br><br>• Facilities<br>• Spaces with hearing augmentation<br>• Exit doors provided with an exit sign<br>• At a non-accessible building entrance. | *Details to be provided at CC stage.* |
| D3.7 Hearing Augmentation | Hearing Augmentation must be provided where there is an in-built amplification system (other than one for emergency purposes) in:<br><br>• A room in a Class 9b building<br>• In an auditorium, conference room, meeting room<br>• At any ticket office, tellers booth, reception area or the like where the public is screened from the service provider. | There is no hearing augmentation required or proposed (assumed). |
| D3.8 Tactile Indicators | Tactile ground surface indicators (TGSI) complying with AS1428.4.1must be provided to:<br><br>• Stairs/escalators/ramps/moving walkways<br>• Trafficable areas where an overhead obstruction is less than 2m in height | It is noted that TGSI's should be provided to all common use stairs/ramps (except within fire isolated stairs)<br><br>*Details to be submitted at CC stage.* |
| D3.9 Wheelchair seating spaces in Class 9b assembly buildings | Wheelchair seating spaces complying with AS1428.1 must be provided in Class 9b buildings in accordance with BCA D3.9 & Table D3.9 | There are no Class 9b parts proposed. |
| D3.10 Swimming Pools | Where a pool is required to be accessible, at least one accessible entrance must be provided (ramp/lift with aquatic wheelchair, zero depth entry).<br><br>Note where the perimeter of the pool exceeds 70m at least one accessible entrance must be provided by a means other than a sling style lift. | The proposed pool must be provided with an accessible entrance point in accordance with this clause. The plans should nominate an accessible entrance point.<br><br>*Details to be submitted at CC stage* |
| D3.11 Ramps | • A series of connected ramps must not have a combined vertical rise of more than 3.6m | There are no ramps subject to this clause. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | • A landing for a step ramp must not overlap a landing for another step ramp or ramp. | |
| D3.12 Glazing On Accessways | Glazing on an accessway must comply with AS1428.1 | Glazing to comply where required<br><br>*Details to be submitted at CC stage* |
| **SECTION E SERVICES & EQUIPMENT** | | |
| **Part E1 Fire Fighting Equipment** | | |
| E1.3 Fire Hydrants | Where the floor area of a building is considered over 500m$^2$ (and the fire brigade is available to attend a fire), the building must be provided with Fire Hydrant coverage in accordance with BCA E1.3 and AS2419.1.<br><br>Attention should be paid to the location of the fire hydrant pump room (which is required to be accessed via open space or from a fire isolated exit). The pump room is also required to be fire separated from the remainder of the building in construction achieving a FRL of not less than 120/120/120.<br><br>Attention should also be paid to the location of the booster – which is required to be not less than 10m from the building (or in a shielded part of the external wall) and in site of the main entrance to the building. As the building has more than 1 main entrance – advice from a hydraulic consultant and/or Fire and Rescue NSW should be sought (as the location of the booster may have an impact on the current design). | *A hydraulic engineer should provide full design documentation prior to the issue of a Construction Certificate, which confirms that a fire hydrant system has been designed in accordance with BCA Clause E1.3 and AS2419.1-2005.*<br><br>Attention should also be paid to the **location of the booster** – which is required to be not less than 10m from the building (or in a shielded part of the external wall) and in site of the main entrance to the building. Early advice from a hydraulic consultant and/or Fire and Rescue NSW should be sought (as the location of the booster may have an impact on the current design). |
| E1.4 Fire Hose Reels | Where the building is provided with an internal fire hydrant system or incorporates a fire compartment with a floor area of more than 500m$^2$, it must be provided with a fire hose reel system in accordance with BCA E1.4 and AS2441.<br><br>Note that fire hose reels are not required in a:<br><br>• Class 2/3/4 building | Fire hose reels are required to serve the Class 6 & 7 parts of the building in accordance with AS2441-2005.<br><br>*A hydraulic engineer should provide design documentation prior to the issue of a Construction Certificate, which confirms that a fire hose reel system has been designed in accordance with BCA Clause E1.4 and AS2441-2005.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | • Class 8 electrical substation<br>• Class 9c building<br>• Class 9b primary or secondary school Classrooms/corridors. | |
| E1.5 Sprinklers | A building must be provided with a sprinkler system complying with BCA E1.5, Specification E1.5 and AS2118.1 - where required by BCA Table D1.5. The following buildings typically required sprinkler systems:<br><br>• Buildings with an effective height of more than 25m<br>• Class 3/9a buildings used as residential aged care<br>• Class 6 buildings with floor area of more than 3,500m$^2$ or volume of 21,000m$^3$<br>• Class 7a (non-open deck) carparks accommodating more than 40 vehicles<br>• Certain Class 9b buildings, large isolated buildings and containing an atrium<br>• Buildings with a floor area of more than 2000m$^2$ or volume of more than 12,000m$^3$ and containing an 'excessive hazard' | A sprinkler system is required to be provided throughout the carparking levels (which accommodate more than 40 vehicles).<br><br>*A hydraulic engineer should provide design documentation prior to the issue of a Construction Certificate, which confirms that a sprinkler system has been designed in accordance with BCA Clause E1.5 and AS2118.1-1999.* |
| E1.6 Portable Fire Extinguishers | Portable fire extinguishers must be provided throughout the building in accordance with BCA E1.6, Table E1.6 and AS2444. | *Details to be submitted at CC stage.* |
| E1.8 Fire Control Centre | A fire control centre in accordance with BCA Specification E1.8 is required to be provided in a building with an effective height of more than 25m or a Class 6-9 building with a floor area exceeding 18,000m$^2$ | A fire control centre is required to be provided in the subject building, if the total floor area exceeds 18,000m$^2$.<br><br>*Details to be submitted at CC stage (where required)* |
| E1.9 Fire Precautions during construction | Buildings under construction are required to be provided with portable fire extinguisher and hydrant coverage. | *Details to be submitted at CC stage.* |
| E1.10 Provision for Special Hazards | Suitable additional provision must be made for firefighting where it is considered that the building incorporates a *special hazard*. | It is assumed that the building will not incorporate any additional hazards. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| **Part E2**<br>**Smoke Hazard Management** | | |
| E2.2 General Requirements Note: NSW Table E2.2b Specific Provisions Note NSW Specification E2.2a Smoke Detectors and Alarms Systems | Buildings must be provided with smoke hazard management in accordance with BCA Table E2.2a (and BCA E2.2b for certain Class 6 & 9b buildings) | The building is required to be provided with the following in relation to smoke hazard management:<br>1. The building must be provided with a smoke detection and alarm system in accordance with Specification E2.2a: and<br>2. The mechanical ventilation to the Class 7a part, must comply with Clause 5.5 of AS1668.1.<br>3. The stairs serving the basement levels (where serving levels more than 2 storeys below ground), must be provided with a system of automatic stair pressurization.<br>*An electrical/fire services engineer (as appropriate) should provide design details and certification at CC stage.* |
| E2.3 Provision for Special Hazards | Suitable additional provision must be made for smoke hazard management where it is considered that the building incorporates a *special hazard*. | It is assumed that the building will not incorporate any additional hazards. |
| **Part E3**<br>**Lift Installations** | | |
| E3.2 Stretcher Facility in Lifts | Stretcher facilities comprising a space which is able to accommodate a patient lying on it horizontally by providing a clear space not less than 600mm wide x 2000mm long x 1400mm high. | *Details to be provided at CC stage.* |
| E3.3 Warning Against the use of lifts in Fire | Warning signage must be provided near every call button for the lifts in accordance with this Clause. The sign must state:<br>**"DO NOT USE LIFTS IF THERE IS A FIRE"**<br>In 10mm high capital letters or 8mm high lower-case letters | *Details to be provided at CC stage.* |
| E3.4 Emergency Lifts | Emergency lifts are required to be provide in buildings with an effective height of more than 25m and in certain Class 9a buildings. | Emergency lifts are not required as the building has an effective height of less than 25m. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| E3.5 Landings | Access and egress via the lift landings must comply with the DTS provisions of Section D. | Access and egress via the lift landings is generally in accordance with the DTS provisions of Section D. |
| E3.6 Passenger Lifts | The lifts in 'accessible areas' must be one of the types identified in Table E3.6a and have accessible features in accordance with Table E3.6b, and not rely on a constant pressure device for its operation if the lift car is fully enclosed. | Assuming the lift travels more than 12m, the size of the lift car should be not less than 1400 wide x 2000mm deep. (note that additional depth is required for stretcher facilities).<br><br>*Details to be provided at CC stage.* |
| E3.7 Fire Service Controls | Where lifts serve a storey with an effective height of more than 12m – fire service controls must be provided. | *Details to be provided at CC stage.* |
| E3.8 Aged Care Buildings | Upper levels of Class 9c aged care buildings must be provided with a lift with stretcher facilities or a ramp complying with AS1428.1 – which discharges to the level of road/open space. | *Details to be provided at CC stage.* |
| E3.9 Fire Service Recall Operation Switch | Where a lift is required to be provided with fire service controls under BCA E3.7 – fire service recall switch must be provided in accordance with this Clause | *Details to be provided at CC stage.* |
| E3.10 Lift car service drive control switch | Where a lift is required to be provided with fire service controls under BCA E3.7 – fire service drive control switch must be provided in accordance with this Clause | NA |
| **Part E4 Visibility in and Emergency, Exit Signs and Warning Systems** | | |
| E4.2 Emergency Lighting Requirements | Emergency lighting in accordance with AS2293.1 must be provided in:<br><br>• Fire exits<br>• Class 5- 9 buildings with floor area exceeding 300m$^2$<br>• Egress pathways in Class 2-4 buildings<br>• Non-fire isolated stairs<br>• Certain Class 9 buildings<br>• Fire control rooms | *Design Engineer to certify their design meets BCA and AS2293.1-2005 at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| E4.3 Measurement of Distance | Informational clause relating to method of measurement. | Informational |
| E4.4 Design and Operation of Emergency Lighting | Emergency lighting systems must comply with AS2293.1 | See E4.2. |
| E4.5 Exit Signs | Exit signs must be provided to:<br>• Doors leading to internal and external stairs/ramps serving as a required exit<br>• Horizontal exits<br>• A door serving as or in a required exit in an area required to be provided with emergency lighting under BCA E4.2 | *Design Engineer to certify their design meets BCA and AS2293.1-2005 at CC stage.* |
| E4.6 Direction Signs NSW E4.6 Direction Signs | Where an exit is not apparent to an occupant, directional signage is required to be installed. | *Design Engineer to certify their design meets BCA and AS2293.1-2005 at CC stage.* |
| E4.7 Class 2 & 3 Buildings & Class 4 Parts: Exemption | Provides a concession from BCA E4.5 to doors in Class 2-4 buildings provided with non-illuminated exit signage. | The exemptions allowed by this clause are noted and can be applied to the Class 2 parts. |
| E4.8 Design & Operation of Exit Signs | Exit signage must comply with AS2293.1 (and BCA Specification E4.8 for photoluminescent exit signs) | Informational clause only. |
| E4.9 Sound Systems and Intercom Systems for Emergency Purposes | A sound system and intercom system for emergency purposes (SISEP) complying with AS1670.3 is required to be provided in:<br>• building has an effective height of not more than 25m.<br>• a Class 3 building having a rise in storeys of more than 2 and used as a residential part of a school or accommodation for the aged/children or people with a disability<br>• Class 3 building used as a residential aged care building<br>• Certain Class 9a and 9b buildings | Not required in subject building. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | | |
| **SECTION F<br>HEALTH & AMENITY** | | |
| **Part F2**<br>**Sanitary & Other Facilities** | | |
| F2.1 Facilities in residential buildings | Facilities must be provided to residential buildings as follows:<br>• Class 2, 4 & 9c buildings – kitchen, bath/shower, WC, washbasin & laundry facilities + WC & washbasin for employees where >10 SOU's are provided<br>• Class 3 buildings – bath/shower | The required facilities appear to have been provided in each unit.<br>Caretakers facilities (WC + washbasin) to be provided at or near ground level.<br>*Full details to be provided at CC stage.* |
| F2.2 Calculation of number of occupants and fixtures | • Number of occupants to be calculated as per BCA D1.13<br>• Sanitary facilities to be generally provided assuming a 50:50 male:female split<br>• A unisex accessible sanitary facility can be counted once for each sex | Informational clause only. |
| F2.3 Facilities for Class 3 to 9 Buildings | Facilities to be provided in accordance with BCA F2.3 and Table F2.3, noting:<br>• Separate facilities typically required for males and female<br>• Separate facilities required for staff and student in schools<br>• Specific kitchen, laundry and bathing facilities required to be provided in Class 9a buildings<br>• Specific facilities are required to be provided in child care centres – including junior toilet pans & basins, kitchen facilities, laundry facilities and nappy changing benches | (Accessible) Facilities for the Class 6 part must be provided.<br>*Full details to be provided at CC stage* |
| F2.4 Facilities for People with Disabilities | • Accessible sanitary & shower facilities complying with AS1428.1 must be provided in accordance with BCA Table F2.4 (a) and (b)<br>• At each bank of toilets where there are one or more toilets in addition to an accessible WC, at least one male and one female toilet must be provided to assist those with ambulant disabilities in accordance with AS1428.1 | The design of the common accessible facilities at ground/site level must be in accordance with AS1428.1-2009.<br>It should be noted that at least one male and one female WC should be suitable for use by people with an ambulant disability in accordance with AS1428.1 – details to be provided on the plans. |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | | *Details to be provided at CC stage.* |
| F2.5 Construction of Sanitary Compartments | • Sanitary compartments (except in child care centres) must have doors and partitions to provide privacy<br>• In enclosed sanitary compartments, where the distance between the closet pan and the nearest part of the doorway of an inwards swinging door is less than 1.2m, the door must be fitted with lift off hinges. | *Details to be provided at CC stage.* |
| F2.6 Interpretation: Urinals and washbasins | • Urinals may be individual stalls or a length of 600mm in a trough<br>• A closet pan may be used in lieu of a urinal<br>• Washbasins may be single basins or part of a trough provided with a tap | Informational clause. |
| **Part F3 Room Sizes** | | |
| F3.1 Height of Rooms and other spaces | The following general ceiling height requirements apply:<br><br>• Habitable areas – generally 2.4m<br>• Non-habitable areas – including bathrooms, hallways, corridors, storerooms – generally 2.1m<br>• Above a stairway – 2m<br>• Additional requirements apply in Class 9 buildings. | 2400mm required to habitable rooms and 2100mm to non-habitable including sanitary compartments.<br><br>Elevations and sections are required to demonstrate compliance. |
| **Part F4 Light & Ventilation** | | |
| F4.1 Provision of natural light | Natural light is required to be provided to habitable/sleeping rooms in Class 2, 3, 4 and 9 buildings | Natural light generally provided to all habitable rooms. |
| F4.2 Methods and extent of natural lighting | Natural light must be provided from:<br><br>• Windows (with an aggregate light transmitting area of not less than 10% of the floor area of the area which they serve); or<br>• Skylights with an aggregate light transmitting area of not less than 3% of the floor area of the area which they serve; or<br>• A combination of both<br><br>Windows must typically be setback from the boundary/wall of the building or other building on the allotment: | The light must come from windows with a light transmitting area of not less than 10% of the floor area of the area which they serve.<br><br>*A full window schedule should be submitted to demonstrate compliance.*<br><br>*Particular attention should also be paid to windows where the sill height is required to be raised (under Clause C2.6 or D2.24)* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| | • Generally at least 1m (or 3m for sleeping rooms in a Class 9a building)<br>• 50% of the square room of the height of the wall in which the window ins located. I.e. the higher the wall the greater the setback required.<br><br>Note in Class 9b childcare centres, at least 50% of the windows must have sill height not greater than 500mm from the floor level. | |
| F4.3 Natural light borrowed from adjoining room | This clause allows natural light in Class 2-4 buildings to be borrowed from an adjoining room.<br><br>The room providing the borrowed light must be provided with windows which have a light transmitting area of at least 10% (or skylights with an area or 3%) of the combined floor area of both rooms. | Borrowed natural light is not proposed to be utilised. |
| F4.4 Artificial lighting | Artificial lighting complying with AS1680.0 must be provided to:<br><br>• all required stairs, ramps and passageways<br>• areas not provided with natural light (or areas that may cause a hazard when people are seeking egress) | *Details to be provided at CC stage.* |
| F4.5 Ventilation of Rooms Note NSW F4.5 | Any room occupied by a person for any purpose must be provided with either:<br><br>• natural ventilation complying with BCA F4.6 or:<br>• mechanical ventilation in accordance with AS1668.2 | *Details to be provided at CC stage.* |
| F4.6 Natural Ventilation | Natural ventilation must constitute 5% of the floor area of the area serving and open to a suitable outdoor, covered open area or adjacent shared room with suitable natural ventilation openings. | *Details to be provided at CC stage.* |
| F4.7 Ventilation borrowed from adjoining room | Natural ventilation can be borrowed from an adjoining room providing adjacent room is provided ventilating area that is 5% (or 10% in Class 5-9 buildings) of the both the subject room and the adjoining room combined. | It appears that the building will not rely on 'borrowed' natural ventilation. |
| F4.8 | Generally sanitary compartments must not open directly into: | *Details to be provided at CC stage.* |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| Restriction of position of water closets and urinals | • A kitchen, pantry, public dining area or restaurant<br>• Dormitory in a Class 3 building<br>• Room used for public assembly<br>• Workplace normally occupied by more than 1 person | |
| F4.9 Airlocks | Airlocks can be used between a sanitary compartment and area described in BCA F4.8 above.<br><br>In a Class 5-9 building, airlocks must have a floor area of at least 1.1m$^2$ and be fitted with self-closing doors. Alternatively, the sanitary compartment must be provided with mechanical exhaust and the doorway suitably screened from view. | See comments in Clause 4.8 above. |
| F4.11 Carparks | Carparks (excluding open deck carparks) must be provided with:<br><br>• A system of mechanical ventilation in accordance with AS1668.2; or<br>• A system of natural ventilation complying with Section 4 of AS1668.4 | The mechanical ventilation system serving the carpark must comply with AS1668.2.<br><br>*Details to be provided at CC stage.* |
| F4.12 Kitchen local exhaust | A commercial kitchen must be provided with an exhaust hood in accordance with AS1668.1 & AS1668.2 | There are no commercial kitchens proposed on the current plans. |
| **Part F5 Sound Transmission** | | |
| F5.2 Determination of airborne sound insulation ratings | A form of construction required to achieve a sound insulation rating may achieve be determined in accordance with AS/NZS 1276.1 or ISO 717.1 or comply with Specification F5.2 | *Details to be provided at CC stage.* |
| F5.3 Determination of impact sound insulation ratings | Walls in the Class 2 & 3 parts, where required to have an impact sound insulation rating must be of discontinuous construction i.e. provided with a 20mm cavity between the leaves | |
| F5.4 | The floor separating storeys must comply with F5.4 of the BCA (Rw + Ctr (airborne) not less than 50 and Ln,w+Cl (impact) of not more than 62). | |

| BCA DEEMED-TO-SATISFY PROVISION | SUMMARY OF REQUIREMENT | COMPLIANCE COMMENT/STATUS/RECOMMENDATION |
|---|---|---|
| Sound Insulation of floors between units | | |
| F5.5 Sound insulation of walls between units | Walls between residential SOUs must achieve an Rw + Ctr (airborne) not less than 50 and a Rw (airborne) if it separates a SOU from a plant room, lift or stair shaft, public corridor or the like – or parts of a different Classification. Noting, discontinuous construction is also required (i.e. 20mm cavity) to separate a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit. | |
| F5.6 Sound insulation rating of services | Service pipes must be sound insulated in accordance with this clause. | |
| F5.7 Sound isolation of pumps | Flexible couplings must be used at the point of connection between service pipes and circulating pumps. | |

## 4.0 Conclusion

This report has assessed the Concept DA level design documentation for the proposed **mixed use development with associated carparking**, known as the 'Lindfield Village Living (LVL) Project at Lindfield NSW under the provisions of the Building Code of Australia (BCA), including relevant provision for "Access for People with Disabilities".

It is understood that this report will be submitted to Council to support the Development Application for the subject building.

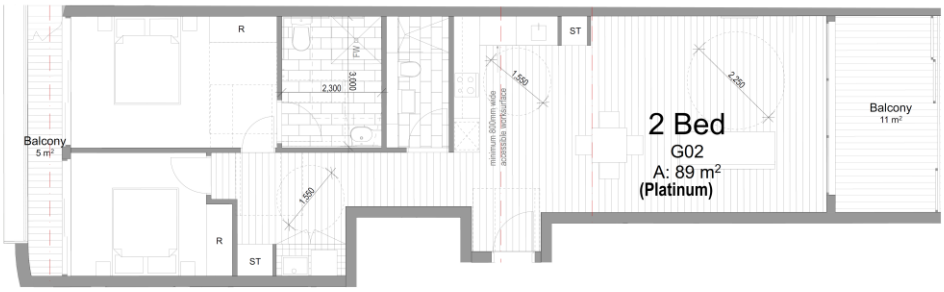
The primary purpose of the report was to assess the development design and identify any significant non-compliance matters in comparison to the current deemed-to-Satisfy (DTS) provisions of the BCA. Assessment is limited to those issues ascertainable from the current level of detail.

Subject to the recommendations contained in Section 3.0 of this report, the development can readily comply with the requirements of the BCA.

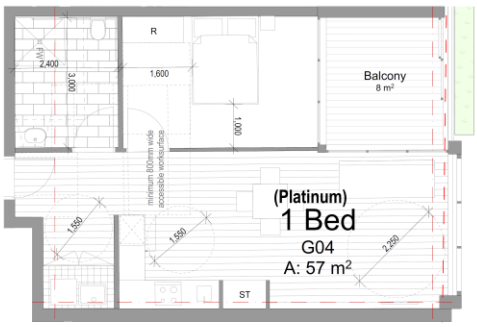
Further assessment of the detailed design should also be undertaken upon determination of the Development Application, and prior to the Construction Certificate being issued.

| | Sheet Number | Sheet Name | Size | Scale | Current Revision ID |
|---|---|---|---|---|---|
| **100, Site Plans** | | | | | |
| | A-100-000 | Site Analysis | A1 | 1:300 | A |
| | A-100-001 | Site Plan | A1 | 1:500 | A |
| | A-100-002 | Site Photographs | A1 | | A |
| **200, Demolition Plans** | | | | | |
| | A-200-000 | Demolition Plan | A1 | 1:300 | A |
| **200, Excavation Plans** | | | | | |
| | A-300-000 | Excavation Plan | A1 | 1:300 | A |
| **400, GA Plans** | | | | | |
| | A-400-000 | Basement 3 | A1 | 1:200 | A |
| | A-400-001 | Basement 2 | A1 | 1:200 | A |
| | A-400-002 | Lower Ground | A1 | 1:200 | A |
| | A-400-003 | Ground/Site Level | A1 | 1:200 | A |
| | A-400-004 | Level 1 | A1 | 1:200 | A |
| | A-400-005 | Level 2 | A1 | 1:200 | A |
| | A-400-006 | Level 3 | A1 | 1:200 | A |
| | A-400-007 | Level 4 | A1 | 1:200 | A |
| | A-400-008 | Level 5 | A1 | 1:200 | A |
| | A-400-009 | Level 6/Roof | A1 | 1:200 | A |
| | A-400-010 | Roof | A1 | 1:200 | A |
| **500, Elevation[s]** | | | | | |
| | A-500-000 | North & South Elevation | A1 | 1:200 | A |
| | A-500-001 | East & West Elevation | A1 | 1:200 | A |
| | A-500-002 | Sectional Elevations | A1 | 1:200 | A |
| **510, Section[s]** | | | | | |
| | A-510-000 | Sections | A1 | 1:200 | A |
| | A-510-001 | Lane & Driveway Sections | A1 | 1:100, 1:200 | A |
| **600, Shadow Diagram** | | | | | |
| | A-600-000 | Sun's Views [8am - 12:30am] | A1 | | A |
| | A-600-001 | Sun's Views [1pm - 4pm] | A1 | | A |
| | A-600-002 | Shadow Elevation | A1 | | A |
| | A-600-003 | Shadow Elevation | A1 | | A |
| | A-600-004 | Shadow Elevation | A1 | | A |
| | A-600-005 | Neighbour Shadow Diagram | A1 | | A |
| | A-600-006 | Neighbour Shadow Diagram | A1 | | A |
| **610, Shadow Diagrams Plan View** | | | | | |
| | A-610-000 | Shadows - 8am - 9:30am | A1 | 1:1000 | A |
| | A-610-001 | Shadows - 10am - 11:30am | A1 | 1:1000 | A |
| | A-610-002 | Shadows - 12am - 1:30pm | A1 | 1:1000 | A |
| | A-610-003 | Shadows - 2pm - 3:30pm | A1 | 1:1000 | A |
| **620, GFA** | | | | | |
| | A-620-000 | GFA | A1 | 1:300 | A |
| | A-620-001 | GFA | A1 | 1:300 | A |
| | A-620-002 | GFA | A1 | 1:300 | A |
| | A-620-003 | GFA | A1 | 1:300 | A |
| **630, Solar Study** | | | | | |
| | A-630-000 | Solar Study | A1 | | A |
| **640, Cross Ventilation** | | | | | |
| | A-640-000 | Cross Ventilation | A1 | | A |
| **650, Landscape Area** | | | | | |
| | A-650-000 | Landscape Area | A1 | | A |
| **660, Communal open space** | | | | | |
| | A-660-000 | Communal Open Space | A1 | | A |
| **670, Deep Soil** | | | | | |
| | A-670-000 | Deep Soil | A1 | 1:200 | A |
| **680, Site Coverage** | | | | | |
| | A-680-000 | Site Coverage | A1 | | A |
| **690, NDL [15%]** | | | | | |
| | A-690-000 | Non-Direct Light [15%] | A1 | | A |
| **700, Finishes** | | | | | |
| | A-700-000 | Schedule of Finishes | A1 | | A |
| **800, Height limit** | | | | | |
| | A-800-000 | Height Limit | A1 | | A |
| | A-800-001 | Roof plane overlay Survey(SS) | A1 | 1:200 | A |
| **801, Acoustic Study** | | | | | |
| | A-801-001 | Acoustic Section | A1 | 1:20 | A |
| | A-801-002 | Acoustic Diagrams | A1 | | A |
| **802, Platinum & Adaptable apartment** | | | | | |
| | A-802-001 | Platinum apartments | A1 | 1:100 | A |
| **803, Unit Mix Building** | | | | | |
| | A-803-001 | Unit mix By Building | A1 | | A |
| **804, Master Plan Comparison** | | | | | |
| | A-804-001 | M Plan Shadow Comparison | A1 | | A |
| **805, Notifications Plan** | | | | | |
| | A-805-001 | Notification Plan | A4 | 1:800 | A |
| | A-805-002 | Notification North & South Elevation | A4 | 1:500 | A |
| | A-805-003 | Notification East & West Elevation | A4 | 1:500 | A |
| **806, CGI** | | | | | |
| | A-806-000 | Artistic Impression | A1 | | A |

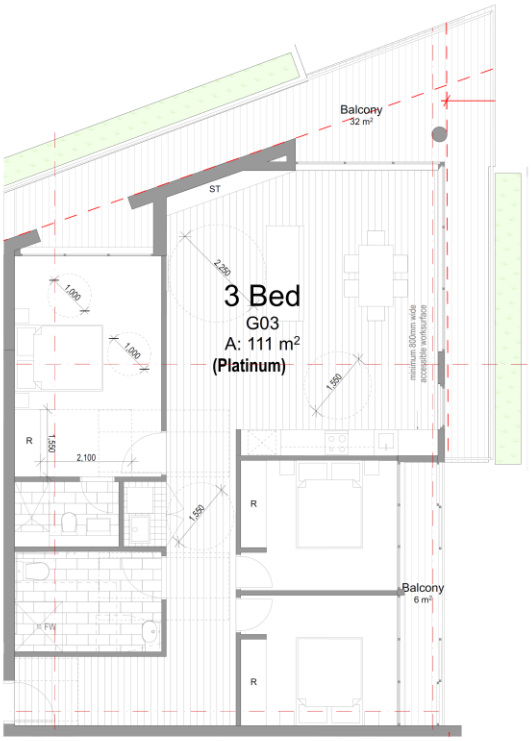
# Attachment B – Platinum Level Units




APT CG02,C102,C202,C302,C402,C502




APT CG04,C104,C204,C304
APT DG05,D105,D205,D305




APT CG03,C103,C203,C303,C403,C503