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National Construction Code Assessment Report

PROJECT: Mixed use Development - HOMEBUSH

LOCATION: 21 PARAMATTA ROAD,
HOMEBUSH
NSW, 2140

STRATHFIELD COUNCIL
RECEIVED

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PREPARED FOR: Hyside Projects

(Subtwo P/L)

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PREPARED BY: Richard Evans

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Revision History:

Revision	Date	Comment
1	29/11/2019	Concept design assessment for DA
2	06/12/2019	Concept design Re-assessment
3	11/12/2019	Report Finalisation and Issue
4	23/12/2019	Report: Re-assess amendments and re-issue

	Name	Date	Signed
Prepared By	Richard Evans	23/12/2019	
Checked By	Peter Hofstetter	09/11/2019	

1.1 Executive Summary

1.2 NCC Year

This report documents the relevant clause by clause review of the proposed works against the deemed to satisfy requirements of the National Construction Code of Australia 2019.

Note: The Building Code of Australia (BCA) is now a part of the National Construction Code Series. Throughout this assessment report, references will be made to the National Construction Code or NCC to refer to what was previously known as Volume One of the Building Code of Australia.

1.3 Performance solutions & Fire Engineering items

The following table is a list of departures, or *feasibly acceptable departures* from the NCC deemed-to-satisfy provisions as required by NCC clause A0.10. Unless stated otherwise, these items may be addressed by a fire engineer with a performance solution. Non-fire engineering performance solutions must be documented by a person with relevant expertise. Note that some items below are suggestions for consideration only and may be subject to discussion with the relevant design consultants:

Clause Name	Description of Performance Solution	Performance clauses	NCC Clause	Addressed in FEB / FER
FRL	Being a mixed-use development, FRLs will vary depending on the classification. Slabs take their FRL from the classification below. It may be possible for the fire engineer to rationalise the FRLs throughout the building. The following loadbearing FRLS apply. If required FRL's are to be rationalised, the Fire Engineering Report must document this as a proposed Performance Based Solution. CERTIS require structural engineering design specifications detailing required FRL's are achieved • Basement carparks – 60 min • Ground floor retail – 180 min • Residential units – 90 min	CP1	Spec C1.1 Table 3	
Exit Travel Distances	For FER purposes, only the most compromised (maximum) travel distance will be listed: • Levels 01 – 04 - Does not comply: ○ 12.2m from furthest compromised point (West), ○ 11.1 m from furthest compromised point (East) • Levels 05 – 07. Does not Comply: ○ 12.2m from furthest compromised point (West), ○ 11.1 m from furthest compromised point (East) • Level 8. Does not Comply: ○ 11.1 m from furthest compromised point (East) ○ Common areas comply with 20m direct to an exit.	DP4	D1.4	
Travel via Fire Isolated Exits	Fire stair s 1 and 2 discharge within 6m of openings in the external wall of the building required to have an FRL.	DP 5	D1.7	

1.4 Drawing mark-ups

This report should be read in conjunction with any attached marked up drawings. Refer to Appendix 7.

2.1 Introduction

2.2 General

The subject property is located within the local government area of STRATHFIELD.

Site location is shown below:

2.3 Purpose of the Report

This report has been prepared, on behalf of Hyside Projects Subtwo P/L to establish compliance to the National Construction Code (NCC) of Australia 2019 .

2.4 Basis of the assessment

This report is based on:

1. Development Application – in remittance phase. No other statutory documents have been submitted for assessment,

2. Architectural plans prepared by SJB Architecture as detailed in the appendix. Job number 6136.

2.5 Statutory Approvals

Other statutory approvals may apply to the building. This may include, but is not limited to the following:

i. Town Planning Development Approval (DA) / Material Change of use Approval

ii. Operational works approval.

iii. Council Plumbing and drainage approval.

iv. Build over sewer approval.

2.6 Planning conditions relating to building work

The following conditions in the town planning approval (DA) relate to building work and must be fulfilled prior to the building approval or Occupation Certificate as indicated below:

Condition Number	Summary	Status
TBA	DA Approval under remittance. Any design requirements in subsequent approvals will need to be considered in terms of the contents of this NCC Report and changes made accordingly	**To be provided in a documented DA Matrix**

2.7 Design and installation / inspection certificates

Certis will provide a separate list of required documentation for the project. This will include items such as design certificates and required clearances. This will usually be provided at the design development stage of a project. Subject to engagement for certification services.

2.8 Exclusions

This report does not consider the following except where specifically mentioned;

i. Local Authority Trade waste

ii. Local Authority Health (food premises).

iii. Aged care compliance (Federal Department of Ageing).

iv. The Disability Discrimination Act 1992.

v. Assessment of Section J of the NCC

vi. Other Statutory Authorities (E.g.: EPA)

3.0 National Construction Code of Australia Description

Note: The Building Code of Australia (BCA) is now a part of the National Construction Code Series. Throughout this assessment report, references will be made to the National Construction Code or NCC to refer to what was previously known as Volume One of the Building Code of Australia

Item / Clause		Description or Requirement	
NCC Version		2019	
A1.1	Effective Height: Note: Taken from RL's shown on drawings and approximated for existing buildings. Existing buildings not subject to this report.	Existing Building A: Under 25m (Sprinkler protected) Existing Building B: Under 25m (Sprinkler protected) Proposed Building C: 78.2m (Sprinkler protected)	
A1.1	Climate Zone	Zone 5	
A3.2	Classification	Class 2 – Residential Class 6 – Retail Class 7a – Carpark	
C1.1	Minimum Type of Construction: Building is considered a UNITED BUILDING in accordance with Part A7 NCC (2019)	Type A construction	
C1.2	Rise in Storeys	24	
C2.2	Proposed Building C: GFA (m^2) – Subject to finalised plans. Floor areas are approximate and will be verified against final plans. Re-configuration on DD plans noted. Note 1 : Floor areas measure to outside of external walls and includes balcony areas, Note 2: GFA to basement is a gross measurement and not a planning measurement. Bin rooms, stair wells , lift shafts and the like are included. GFA calculations to other levels are based on planning definitions of *gross floor area* and exclude stairs and lift shafts and the like.	Basements 1 to 4 Existing – excl. from Bld C	5,118 over four levels
		Ground:	444
		Levels 1 - 7	5,271
		Level 8 -23	910,08
		Roof	N/a to GFA
		Building C Total m^2 Excludes existing basements	16,023

4.1 NCC clause-by-clause assessment

4.2 General Provisions (NCC Section A)

Clause	Title & clause summary	Assessment Comments	Status
Part A7	United Buildings	The subject building is deemed a United building.	**Note**

4.3 Structure (NCC Section B)

Clause	Title & clause summary	Assessment Comments	Status
B1.0-1.4	Structural Provisions	Structural drawings and a design certificate from a registered engineer will be needed: piling, footings, slab work, frames, etc. Note 1 – Basements 1 to 4 sub podium noted as constructed. Piling and sub structural footings assumed to have been dealt with in a separate assessment and approval.	**Further information required.**

4.4 Fire Safety (NCC Section C)

4.4.1 Fire Resistance & Stability (Part C1)

Clause	Title & clause summary	Assessment Comments	Status
C1.1	Type of construction required	The type of fire resisting construction applicable is TYPE A Construction	**Note**
C1.2	Calculation of rise in storeys	The rise in storeys is 24	**Note**
C1.3	Buildings of multiple classification *In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C1.1 on the basis that the classification applying to the top storey applies to all storeys.*	The type of fire resisting construction applicable is TYPE A. Refer Specification C1.1 tbl.3 in appendix and under heading #4.34 in the main body of the report.	**Note**

Clause	Title & clause summary	Assessment Comments	Status
C1.8	Lightweight construction *Rules for use of lightweight construction*	Lightweight construction must comply with Spec. C1.8 if: • Used in a wall system or shaft required to have an FRL or, • Used in any fire resisting covering. Final plans and specifications are required to demonstrate compliance. NOTE: Building deemed able to comply	**Further information required at CC stage**
C1.9	Non-combustible building elements *The following elements must be non-combustible:* • *External walls and common walls including all elements within (excluding gaskets, caulking, sealants, termite management systems, glass, thermal breaks associated with glazing systems and damp-proof courses)* • *Flooring and floor framing of lift pits* • *Non-loadbearing internal walls where they are required to be fire resisting* • *Certain shafts* *Note that gaskets and seals etc. and certain other elements (such as plasterboard) may be used where non-combustible materials are required.*	Please provide the following: • Drawings clearly showing the materials being used for each external building element – including walls, soffits, attachments, awnings etc. • Wall sections showing components of the external wall including cladding, insulation and sarking. Note that insulation is required to be non-combustible. Please provide test certificates confirming non-combustibility tested to AS1530.1. Refer separate document to be provided by Certis - "Documentation required for Certification" details of materials for which test certificates will be required. Sarking is not to exceed 1mm thick and have a flammability index of 5 or less when used in an external wall of a Type A or B construction. Detailed plans and specifications must be remitted for assessment. It is noted that the wall schedules shown on drawing DA – 3401 – 01 for the External materials and finishes *demonstrates that the proposal is able to comply.*	**Further information required at CC stage**
C1.10	Fire hazard properties *Requirements for flammability ratings of floor, wall & ceiling linings. Not required for plasterboard linings.*	Please provide the following: • Drawings / schedules showing location and type of all internal finishes and materials including ceiling insulation, carpets, wall linings, auditorium seating, lift car linings, air handling ductwork. • Test certificates confirming the fire hazard properties for materials. Specifications detailing compliance with group numbers detailed in Specification C1.10 are to be provided prior to the release of the CC. NOTE: Building deemed able to comply	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
C1.14	Ancillary Elements *An ancillary element must not be installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless listed in this clause*	Plans do not provide sufficient detail. Finalised architectural specifications must show any ancillary elements specifically: • Signage, • Awnings and shading structures • Service grates or grilles greater than 2 m^2 in area. *NOTE: Building deemed able to comply. Please note – any future signage installed, such as to retail areas (that may be approved under a regime different to the Base Building approval), must be the subject of a separate assessment to establish compliance.*	**Further information required at CC stage**

4.4.2 Compartmentation and Separation (Part C2)

Clause	Title & clause summary	Assessment Comments	Status
C2.2	General floor area & volume limitations	The Building is class 2,6, and 7 and construction type A. Therefore, the maximum fire compartment size is 8000 m^2 and the Maximum volume allowed is 48,000 m^3. The different classifications contained within the building are fire separated from each other to the degree that the compartment sizes comply. • Class 7a parts – Sprinkler protected, • C2.2 not applicable to Class 2 parts.	**Complies**
C2.3	Large isolated buildings	The floor are limitations are not exceeded	**Not applicable**

Clause	Title & clause summary	Assessment Comments	Status
C2.6	Vertical separation of openings in external walls *In a Type A building Vertical separation is required between openings in external walls. This may be achieved by having 60-minute fire rated separation using one of the following methods:* • *900mm spandrel extending not less than 600mm above the upper surface of the intervening floor; or* • *1100mm horizontal projection from the wall. Balconies may achieve this in some areas.* *Vertical separation is not required between openings in external walls in a fully sprinklered building.*	Finalised plans must demonstrate compliance with the clause prior to the issue of any future building approval. NOTE: Building deemed able to comply. Fire design plans and specifications to demonstrate sprinkler system (other than FPAA system) installed in accordance with BCA Spec. E1.5	**Further information required at CC stage**
C2.7	Separation by firewalls	Please confirm detail of firewalls. E.g. partition plans. Refer specification C1.1 for fire ratings required between fire compartments. NOTE: Building deemed able to comply subject to clarification of all internal fire ratings required to meet the requirements of Spec. C1.1 for separation. Detailed wall types should be included in the plans remitted for final assessment	**Further information required at CC stage**
C2.8	Separation of classifications in the same storey *(a) each building element in that storey must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or* *(b) the parts must be separated in that storey by a fire wall having-* *(i) the higher FRL prescribed in Table 3 or 4; or* *(ii) FRL prescribed in Table 5,* *of specification C1.1 as applicable, for that element for the Type of construction and the classifications concerned.*	Fire separation between classifications is required in the following areas: 1. Basement 1 and 2 - car park and storage areas/bin room areas. Load bearing internal walls are required to achieve FRL 60/-/- per table 3.9 Spec. C1.1, 2. Ground level – Retail parts to building lobby and reception area, NOTE: Building deemed able to comply however the spaces shown on the plans marked as “plant room” or “mechanical plant room” (drawing DA-0204) must detail what type of plant is to be installed.	**Further information required at CC stage**
C2.9	Separation of classifications in different storeys *Slabs separating storeys in Type A construction must have the FRL required for the lower storey*	Concrete slabs	**Complies**

Clause	Title & clause summary	Assessment Comments	Status
C2.10	Separation of lift shafts *A lift shaft is required to be in a fire resisting shaft.*	Assumed the lift shafts are concrete and is assumed to comply. Emergency lifts are required to have a 2-hour fire rating minimum (FRL 120/120/120). Required Emergency lifts to be nominated on plans. Update plans and specifications to demonstrate requirements NOTE: Building deemed able to comply	**Further information required at CC stage**
C2.11	Stairways and lifts in one shaft *A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.*	The lift and stairs are in separate shafts and therefore comply.	**Complies**
C2.12	Separation of equipment *The following equipment must be separated from the rest of the building by 2-hour fire rated construction having doorways protected with -/120/30 fire doors:* • *Lift motors / control panels.* • *Emergency generators used to sustain emergency equipment operating in the emergency mode.* • *Central smoke control plant.* • *Boilers.* • *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.*	Applicable to: 1. Hydrant pumps to be updated on final plans, 2. Basement Levels (all) – Plant rooms and substations, 3. Lift overruns to each building, NOTE: Building deemed able to comply subject to final plans and specifications.	**Further information required at CC stage**
C2.13	Electricity supply system *The following electricity supply systems must be separated from the rest of the building by 2-hour fire rated construction having doorways protected with -/120/30 fire doors:* • *Electricity supply substation.* • *Main switchboard sustaining emergency equipment.* • *Electrical conductors supplying the above.* *Additionally, emergency switchgear must be separated from non-emergency switchgear by metal partitions designed to minimise the spread of a fault.*	Please confirm 2-hour fire rating for walls to main switchboards sustaining emergency equipment and substation rooms. Also nominate door FRLs on door schedule. Electricity substation location and size to be nominated on final plans. NOTE: Building deemed able to comply.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
C2.14	Public corridors in Class 2 & 3 buildings *In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls and doors complying with Clause 2 of Specification C2.5.*	No public corridors noted in excess of 40m	**Complies**

4.4.3 Protection of openings (Part C3)

Clause	Title & clause summary	Assessment Comments	Status
C3.2	Protection of openings in external walls *Exposure to fire source features*	The openings on the Eastern elevation of the building may require protection. Confirmation will be required that this is a publicly owned open space/reserve – currently noted as "Ismay Reserve". If this is deemed an adjoining allotment likely to be sold and developed, then the definition of boundary as a fire source feature will have to be considered and all of the openings on the eastern elevation will be required to comply with this clause.	**Further information required at CC stage**
C3.3	Separation of external walls and associated openings in different fire compartments *Distance between openings*	Not applicable to openings in a class 2 Sole Occupancy unit.	**Not applicable**
C3.4	Acceptable Methods of protection *Fire doors, wall wetting sprinklers and other forms of protection are required to comply with this clause.*	Compliance with this clause will be dependent on outcome of C3.2 above.	**Further information required at CC stage**
C3.5	Doorways in fire walls	Please nominate fire doors on door schedule and provide details. Doors to achieve FRL -/60/30 for Type A construction unless other requirements apply as specified Doors are to be self-closing or automatic closing in accordance with C3.5 (C) and (d).	**Further information required at CC stage**
C3.6	Sliding fire doors	No sliding fire doors noted on plans – sliding doors to lift lobby in basement are not considered fire doors.	**Not applicable**

Clause	Title & clause summary	Assessment Comments	Status
C3.7	Protection of doorways in horizontal exits		**Not applicable**
C3.8	Openings in fire isolated exits *Doors leading into fire isolated exits require -/60/30 self-closing fire doors. Doors discharging to open space will only require a fire rating if exposed to a fire source feature (such as a boundary or external wall of another building).*	Please nominate fire doors on door schedule. NOTE: Building deemed able to comply	**Further information required at CC stage**
C3.9	Service penetrations in fire isolated exits *Services must not penetrate fire isolated exits other than fire services or electrical wiring for lighting within the stair. For example, services ducts should be located outside fire stairs.*	To be confirmed when services drawings are provided. NOTE: Building deemed able to comply	**Further information required at CC stage**
C3.10	Openings in fire isolated lift shafts *(a) Doorways in the lift shafts must be protected by -/60/- fire doors that-* *(i) comply with AS 1735.11; and* *(ii) are set to remain closed except when discharging or receiving passengers.* *(b) Lift indicator panels - A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than -/60/60 if it exceeds 35000mm2 in area.*	Please provided lift drawings showing fire door to lift. NOTE: Building deemed able to comply	**Further information required at CC stage**
C3.11	Bounding Construction: Class 2, 3 and 4 buildings	Details of fire and acoustic separation of walls of Sole occupancy walls will be needed. Please nominate doors on door schedule. NOTE: Building deemed able to comply	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
C3.12	Openings in floors and ceilings for services *(a) Where a service passes through-* *(i) a floor that is required to have an FRL with respect to integrity and insulation; or* *(ii) ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with (b).* *(b) A service must be protected-* *(i) by a shaft with FRL 120/90/90 (-/90/90 if non-loadbearing); or* *(ii) in accordance with C3.15* *(c) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.*	Please provide details of fire rated shafts. NOTE: Building deemed able to comply	Further information required at CC stage
C3.13	Openings in shafts *In a building of Type, A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be protected by-* *(a) if it is in a sanitary compartment - a door or panel which, together with its frame, is non-combustible or has an FRL of not less than -/30/30; or* *(b) a self-closing -/60/30 fire door or hopper; or* *(c) an access panel having an FRL of not less than -/60/30; or* *(d) if the shaft is a garbage shaft - a door or hopper of non-combustible construction.*	Compliance for the garbage shafts/ bin rooms can be achieved with one of the following options: • Fire rated riser (90/90/90) with chute discharging to a fire rated room in the basement (90/90/90 FRL). Garbage hoppers into riser only need be non-combustible; or • Fire rated riser (90/90/90) with no fire rating to room in basement. Fire separation is provided by having garbage hoppers into riser with a -/60/30 FRL. Please confirm fire ratings. NOTE: Building deemed able to comply	Further information required at CC stage

Clause	Title & clause summary	Assessment Comments	Status
C3.15	Openings for service installations *The service, building element and any protection mentioned at the penetrations is to be identical with a protype assembly of the service, building element or protection method has been tested ins accordance with AS 4072.1 AND as 1530.1 and has achieved the required FRL or differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS4072.1* *Penetrations for electrical, mechanical, plumbing etc. should be protected to maintain the fire rating of the element protected. This may be via a tested system such as intumescent mastic or fire collars, or for ventilation – fire dampers.* *a) Where a service passes through:* *i. A floor that is required to have an FRL with respect to integrity and insulation; or* *ii. A ceiling required to have a resistance to the incipient speak of fire, the service must be installed in accordance with (b).* *b) A service must be protected:* *i. By a shaft with FRL 120/90/90(-/90/90 if non-loadbearing); or* *ii. In accordance with C3.15* *c) Where a service passes through a floor which is required to be protected by a fire protective covering, the penetration must not reduce the fire performance of the covering.*	To be checked on inspections. FRL must be confirmed in a report from an Accredited Testing Laboratory. Penetrations of fire rated elements will need to be fire sealed by appropriately licensed contractors using tested systems and products. *Certis requires all completed penetrations to be labelled in accordance with AS4072.1 and that a register is kept of all fire rated penetrations. Certis recommends that the label follow the format suggested in AS 4072.1 as shown below.* **SERVICE PENETRATION AND CONTROL JOINT SYSTEM** **(TO AS 4072.1)** **FRL: –/60/60** Installed by: ..... (Company/name) (Phone No.) Installation date: ..... Installation reference: ..... Manufacturer: ..... (Name, Address, Phone No.) **CONTACT THE ABOVE IN THE EVENT OF DAMAGE OR IF REINSTATEMENT IS REQUIRED**	**Further information required at CC stage**
C3.16	Construction Joints *Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL.*	Advisory note	**Note**
C3.17	Columns protected with lightweight construction to achieve an FRL *This clause simply provides guidance in the application of the NCC*	Please provide details of lightweight construction protecting columns. NOTE: Building deemed able to comply	**Further information required at CC stage**

4.4.4 Fire-Resisting Construction (Specification C1.1)

Clause	Title & clause summary	Assessment Comments	Status
2.1	Exposure to fire source features *Fire source features are boundaries to front, sides and rear of the building or other buildings on the same site*	Advisory note	**Note**
2.2	Fire protection for a support of another part *This clause contains requirements for fire protection of elements supporting other elements with a fire rating.*	Required for Type A construction. NOTE: Building deemed able to comply. Please update detail on plans for construction	**Further information required at CC stage**
2.3	Lintels *A lintel must have the FRL required for the part of the building in which it is situated, unless it does not contribute to the support of a fire door, fire window or fire shutter, and other conditions are satisfied*	Required for Type A construction NOTE: Building deemed able to comply. Please update detail on plans for construction	**Further information required at CC stage**
2.4	Method of attachment not to reduce the fire-resistance of building elements *The method of attaching or installing a finish, lining, ancillary element or service installation to a building element must not reduce the fire-resistance of that element to below that required.*	Please provide fire hazard properties and combustibility test certificates for attachments. Refer separate document to be provided by Certis "Documents required for Occupation Certificate". NOTE: Building deemed able to comply. Please update detail on plans for construction	**Further information required at CC stage**
2.5	General concessions *Concessions may be applicable as follows:* • *Steel columns in selected 1 & 2 storey buildings* • *Timber columns in selected one storey buildings* • *Structures on roof containing selected equipment* • *Curtain and panel walls protected by wall wetting sprinklers* • *Balconies and verandas in selected two storey buildings*	Advisory note	**Note**

Clause	Title & clause summary	Assessment Comments	Status
2.7	Enclosure of shafts *Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building (i.e. generally -/120/120), except that these provisions need not apply to:* • *the top of a shaft which extends beyond the roof covering, other than one enclosing a fire isolated stairway, or;* • *the bottom of a shaft which is non-combustible and laid on ground*	Updated architectural and engineering plans and specifications are required. Compliance for garbage room shafts and the like are required. NOTE: Building deemed able to comply. Please update detail on plans for construction	**Further information required at CC stage**
3.1	Type A fire resisting construction – Fire resistance of building elements *External walls, Common Walls & bases of lift pits must be non-combustible.* *Internal walls w/ an FRL must extend to either:-* • *u/s of floor above; or* • *u/s of FRL roof or non-FRL roof sheeting; or* • *ceiling with resistance to the incipient* • *spread of fire of 60 minutes.* *Loadbearing internal walls, fire walls and shafts must be of concrete or masonry* *Non-loadbearing internal walls w/ an FRL; and non-loadbearing shafts must be non-combustible.*	Being a mixed-use development, FRLs will vary depending on the classification. Slabs take their FRL from the classification below. Please see a full list of all required FRLs for the building in the appendix. Note the following clauses have concessions for Type A construction: • 3.2 – concessions for floors • 3.5 – roof • 3.7- Internal columns and walls • 3.9 – Carparks • 3.10 – Class 2 & 3 buildings NOTE: Building deemed able to comply or consider fire engineered performance- based solution.	**Performance Solution**
3.6	Type A - Rooflights	No rooflights are shown on the plans.	**Not applicable**
4.1(b)	External Walls – combustibility *Any cladding is required to comply with BCA C1.9 and any ancillary elements in external walls must comply with BCA C1.14* *Signage attached to an external wall is subject to compliance with C1.14*	Please provide wall construction details that demonstrate that no combustible materials have been used. For certain materials, such as aluminum composite panels, test certificates will be required demonstrating that the material is tested as non-combustible to AS1530.1. Note also that insulation in an external wall is required to be non-combustible. Refer appendix “Fire hazard properties / combustibility of materials” for details of materials for which test certificates will be required. NOTE: Building deemed able to comply.	**Further information required at CC stage**

4.5 Access & Egress (NCC Section D)

4.5.1 Provision for escape (Part D1)

Clause	Title & clause summary	Assessment Comments	Status
D1.1	Application of part	The provisions of Part D1 do not apply within residential sole-occupancy units.	**Note**
D1.2	Number of exits required *More than 1 exit is required from each storey in the following situations:* • *The building has an effective height of more than 25m* • *basements greater than 50m2.* • *Class 9b building used as an early childhood center* • *certain other class 9 buildings.*	Advisory Note	**Complies**
D1.3	When fire isolated exits are required *Class 2 buildings: Every stairway must be fire-isolated where it connects more than 3 storeys* *Class 5-9: Every stairway must be fire-isolated where it connects more than 2 storeys in a non-sprinkler protected building, or more than 3 storeys in a sprinkler protected building.*	Advisory Note	**Complies**

Clause	Title & clause summary	Assessment Comments	Status

D1.4	Exit travel distances
	Class 2:
	• *the entrance of a unit must be no more than 6m to an exit or point of choice to alternative exits, or 20m to an exit at Ground*
	• *common areas to be no more than 20m from an exit or point of choice to alternative exits*
	Class 5-9:
	• *20m to an exit or point of choice to alternative exits with 40m total distance to one of those exits; or*
	• *30m to a single exit at Ground Level (Class 5 & 6 only)*
		• Basements 1 -4 - Complies
		• Ground Level Class 6 parts. Complies,
		• Levels 01 – 04 - Does not comply:
		  ○ 12.2m from furthest compromised point (West),
		  ○ 11.1 m from furthest compromised point (East)
		• Levels 05 – 07. Does not Comply:
		  ○ 12.2m from furthest compromised point (West),
		  ○ 11.1 m from furthest compromised point (East)
		• Level 8. Does not Comply:
		  ○ 11.1 m from furthest compromised point (East)
		  ○ Common areas comply with 20m direct to an exit.
		• Levels 09 – 19. Complies: Point of choice at 6m,
		• Levels 20 – 24. Complies: Point of choice at 6m
		• Roof Level. Complies
			Performance Solution

D1.5	Distance between alternative exits *Must be not less than 9m apart; and not more than 45m apart for Class 2 and 9a; and not more than 60m apart in all other cases* *Note: the path of travel must be measured through the point of choice.*	Advisory Note	**Complies**
D1.6	Dimensions of exits and paths of travel to exits *Unobstructed width of exit and path of travel to the exit must be not less than that prescribed*	Clear, unobstructed width of 1m (except for doorways) and unobstructed height throughout of 2m (doorways min. 1980mm) in paths of travel to an exit. Requirements for additional widths are not expected to be triggered under cl. D1.6 (C). Refer to D1.13 for design occupancy requirements. Exits are required to be adjusted on the basis of the design occupancy typically 1m plus 250mm for every 25 persons in excess of 100 persons and for populations in excess of 200 persons, 2m plus 500mm for every 75 persons (or part) in excess of 200. NOTE: Building able to comply. Update plans and specifications – Door schedules.	**Complies**

Clause	Title & clause summary	Assessment Comments	Status
D1.7	*Travel via Fire-isolated exits* *Restricts doorways opening directly into a fire-isolated exit* *Provides restrictions on the areas in which fire isolated stairs can discharge.* *Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part* *of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the* *wall must have—* *(i) an FRL of not less than 60/60/60; and* *(ii) any openings protected internally in accordance with C3.4,* *for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall,* *whichever is the lesser.*	The fire isolated exit system (noted on drawing DA-0205 as F.S 1) discharges past the lobby window and within 3m of the door to the retail tenancy. The FRL of the wall is assumed however this lobby window needs to be protected internally in accordance with BCA C3.4.	**Performance Based Solution**
D1.9	Travel via non-fire-isolated stairways or ramps *Distances permitted for travel via a non-fire-isolated stairway* *Class 5-9: distance from the floor via stairway to open space must not exceed 80m*	Applicable to stairs from podium.	**Complies**
D1.10	Discharge from exits *Bollards/ barriers required if there is a risk of vehicles blocking the exits* *Exits discharging to open space that is different level to public road to which it is connected, the path of travel to the road must be by- ramps not steeper than 1:8 or note steeper than 1:14 if required to be DtS under D3 except if 9a a stairway complying with DtS provisions*	Please provide details of bollards or other barriers provided to prevent exits being blocked. NOTE: Building able to comply.	**Further information required at CC stage**
D1.11	Horizontal exits *Note that horizontal exits cannot be counted as a required exit in an early childhood center.*		**Not applicable**

Clause	Title & clause summary	Assessment Comments	Status
D1.13	Number of persons accommodated	The design is to be based on the following maximum permissible population loadings: 1. Retail 3 m^2 / person - GFA 334 m^2 across 2 tenancies – Max loading 111 total. 2. Not applicable to class 2 parts. Note - this clause provides the maximum occupancy loading permitted by gross floor area. Per D1.13 (c), number of persons accommodated can also *be calculated by any other suitable means of assessing its capacity.*	**Note**
D1.16	Plant rooms and lift machine rooms: Concession *Where the plant room does not exceed 100m^2 ladder access is permitted*	NOTE: Building able to comply. Update plans and specifications	**Further information required at CC stage**
D1.17	Access to lift pits	Please confirm lift pit access. NOTE: Building able to comply.	**Further information required**

4.5.2 Construction of exits (Part D2)

Clause	Title & clause summary	Assessment Comments	Status
D2.1	Application of part	This clause provides guidance on the application of the NCC	**Note**
D2.2	Fire-isolated stairways and ramps *A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed—* *(a) of non-combustible materials; and* *(b) so that if there is local failure it will not cause structural damage to, or impair the fire resistance of, the shaft.* *Refer D2.25 for stairways in timber framed buildings fire isolated stairs.*	Concrete stairs will comply with this clause.	**Complies**

Clause	Title & clause summary	Assessment Comments	Status
D2.3	Non-fire isolated stairs and ramps *In a building with a rise in storeys more than 2, stairs ramps and landings to be in accordance with one of the following:* • *Clause D2.2* • *Reinforced or prestressed concrete; or* • *steel in no part less than 6 mm thick; or* • *timber that—* ○ *has a finished thickness of not less than 44 mm; and* ○ *has an average density of not less than 800 kg/m3 at a moisture content of 12%; and* ○ *has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.*	Please provide stair details indicating compliance. NOTE: Building able to comply.	**Further information required at CC stage**
D2.4	Separation of rising and descending stair flights *There must be no direct connection between rising and descending flights at the level of egress*	Consideration to be given to possible effect on stair pressurisation due to separation of rising and descending flights. Mechanical design to demonstrate compliance. NOTE: Building able to comply.	**Further information required at CC stage**
D2.7	Installation in exits and paths of travel *Services or equipment, access to service shafts and any openings to chutes or ducts located in exits and path of travel are to be enclosed by non-combustible construction and smoke seals to the doors.*	Services cupboards are located throughout the building in paths of travel to exits. This will be checked during inspections. Note that this also applies to central communications equipment as well as switchboards. NOTE: Building able to comply. Update plans and specifications	**Further information required at CC stage**
D2.8	Enclosure of space under stairs *Cupboards under stairs must have an FRL of 60mins with doorways fitted with self-closing fire doors.* *No cupboards permitted under fire-isolated stair*	Not applicable within class 2 SOU's. No other enclosures under stairs, to other parts of the building, are shown on plans.	**Complies**
D2.9	Width of stairways *For stairways exceeding 2m in width - intermediate handrails are required for the stair to be counted as having an egress width of more than 2m.*	Please provide handrail details to all stairways. Fire isolated stairs only require 1 handrail. NOTE: Building able to comply.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
D2.10	Pedestrian ramps *The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586.*	Please confirm details of ramp gradients. Slip resistance details to be provided. See Appendix 3 for guidance on slip resistance. NOTE: Building able to comply.	**Further information required at CC stage**
D2.11	Fire-isolated passageways *Passageway to achieve the FRL required by the stair; or in any other case not less than 60/60/60*	Advisory Note	**Not Applicable**
D2.12	Roof as open space *To allow roof to be used as an exit it must have an FRL of 120/120/120*	This clause is applicable to the podium slab.	**Complies**
D2.13	Goings & risers • *Goings and risers must be constant throughout the flight; and* • *Risers must not have any openings greater than 125mm; and* • *Maximum riser is 190mm and minimum going is 250mm.* *Treads must have—* *(A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586; or* *(B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586*	Please provide stair details showing the goings and riser dimensions. It is strongly recommended that the stairs are designed to achieve a rise of not more than 185mm and a going of not less than 255mm. This will allow the builder a reasonable chance to achieve compliance with the legislated maximum and minimums. Certis will be checking the constructed stairs to ensure that the risers and goings are constant throughout the flight. The following tolerances will be permitted: • Maximum variation of 10mm between the largest and smallest rises and goings. • No greater than 5mm difference between consecutive rises / goings. • No tolerance permitted for rises or goings outside the permitted range in the NCC. e.g. rises greater than 190mm or goings shorter than 250mm. Stairs to have maximum 18 risers per flight. Please provide details of slip resistance for nosing's or treads. See Appendix 3 for guidance on slip resistance. NOTE: Building able to comply. Update plans and specifications – Stair Detail	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
D2.14	Landings *Maximum gradient 1:50; and not less than 750mm in length* *Landings must have—* *(A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586; or* *(B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586, where the edge leads to a flight below;*	Please provide details of slip resistance for landings. See Appendix 3 for guidance on slip resistance. NOTE: Building able to comply.	Further information required at CC stage
D2.15	Thresholds *Steps at doorways are not permitted where the doorway does not open to road/open space or external landing*	Please update final plans and specifications. NOTE: Building able to comply.	Further information required at CC stage
D2.16	Balustrades and other barriers • *A balustrade to a height of 1m min. with any openings less than 125mm where the change in level is greater than 1m.* • *Horizontal rails or other similar features are not permitted where the change in level is >4m*	Please provide balustrade details including dimensions. It is recommended that balustrades are specified to be min 1050 mm above FFL to allow for any variations that may occur on site. Where the change in level is greater than 4m, consideration to be given to possible climbing points such as GPOs, gas point, condensing units, shade screens. Barriers to roof top are required to be shown on plans. NOTE: Building able to comply.	Further information required at CC stage
D2.17	Handrails *All stairs and ramps require at least one handrail.* 1. *Located along at least one side of the ramp or flight of stairs,* 2. *Located on both sides if the width is >2m,* 3. *In an accessible stair/ramp, comply with BCA D3.3 and AS1428*	Handrails are to be shown on plans and specifications and included in stair details. NOTE: Building able to comply.	Further information required at CC stage
D2.18	Fixed Platforms and walkways *Areas for maintenance or specialist workers only may comply with AS1657*	Details of maintenance stairs, walkways and ladders to be provided. Roof top and other service areas require compliance – specifically anchor points and service lines. Update plans and specifications. NOTE: Building able to comply. Update plans and specifications	Further information required at CC stage

Clause	Title & clause summary	Assessment Comments	Status
D2.19	Doorways and doors *Doorways are required to comply with this part, namely automatic doors, sliding doors, etc. – battery backup, capable of being opened with a force of less than 110N, etc.*	Please provide door schedule. NOTE: Building able to comply.	Further information required at CC stage
D2.20	Swinging doors *Where the floor area is >200m² the required exit doors are to swing in the direction of egress.* *For less than 200m² floor area, doors may swing against the direction of egress if a hold open device is provided.*	Update plans and specifications NOTE: Building able to comply.	Further information required at CC stage
D2.21	Operation of latch *Exit doors and doors in the path of travel to be readily openable without a key by a single hand downward action or pushing action on a single device located between 900mm and 1.1m from the floor; or* *Doors to be fitted with a fail-safe device which unlocks on activation of alarm and on power failure.* *Where the latch operation device is not located on the door leaf the manual controls to power operated doors must be at least 25mm wide and be proud of the surrounding surface.* *Note that there are other options available for early childhood centres.*	Please provide door schedule. Operation of failsafe on alarm & power failure to be checked on inspection. Please indicate on the electrical drawing's location of the manual control to any power operated doors. This must be located not less than 500mm from an internal corner, and for a hinge door, between 1m and 2m from the door leaf in any position, and for a sliding for, within 2m of the doorway and clear of a surface mounted door in the open position. Note: Braille and tactile signage must also identify the latch operation device. NOTE: Building able to comply. Update plans and specifications	Further information required at CC stage
D2.22	Re-entry from fire isolated exits *Doors of fire-isolated stair cannot be locked from the inside if the building has an effective height of >25m*	Because the building has fire isolated exits serving storeys above an effective height of 25m, the doors in the fire isolated exits must not be able to be locked from the inside unless the doors failsafe open on alarm and- • on every fourth storey the doors are not able to be locked and a sign is fixed to each door stating that re-entry is available; or • at every level, have an intercommunication system or audible or visual alarm operated from within the enclosure provided near each door with a sign fixed adjacent explaining its purpose and method of operation. • You may wish to consider having the intercommunication on only every fourth floor as part of a performance solution. Details to be provided on plans and checked at inspection. NOTE: Building able to comply.	Further information required at CC stage

Clause	Title & clause summary	Assessment Comments	Status
D2.23	Signs on doors *Signs must be used to warn persons of the operation of fire and smoke doors, must be in capital letters not less than 20 mm high in a colour contrasting with the background and state-* *(i) for an automatic door held open by an automatic hold-open device-* *"FIRE SAFETY DOOR-DO NOT OBSTRUCT"; or* *(ii) for a self-closing door-* *"FIRE SAFETY DOOR* *DO NOT OBSTRUCT* *DO NOT KEEP OPEN"; or* *(iii) for a door discharging from a fire-isolated exit-* *"FIRE SAFETY DOOR-DO NOT OBSTRUCT"*	To be checked on inspection	**Condition of Approval**
D2.24	Protection of Openable Windows *A window opening must be provided with protection if the floor outside the window is 2m or more below the floor inside in:* *(i) a bedroom in a Class 2 or 3 building or 4 part of a building; or* *(ii) Class 9b early childhood centre.* *This protection may be achieved by either:* • *having the openable part of the window at 1.7m above the floor, or* • *having a child resistant window restricting device, or* • *installing a balustrade or screen (that can resist force), with no openings permitting a 125mm sphere to pass through.* *The height of a barrier under an openable window that is not in a bedroom in a Class 2, 3 or 4 building or Class 9b early childhood centre must be not less than 865mm above the floor of an openable window 4m or more above the surface beneath. The barrier must not permit a 125mm sphere to pass through it and must not have any horizontal or near horizontal elements between 150mm and 760mm above the floor that facilitate climbing.*	Window schedule required detailing compliance. NOTE: Building able to comply.	**Further information required at CC stage**
D2.25	Timber Stairways: Concession *Applicable to sprinkler protected timber framed buildings*	No timber stairs noted on assessed plans.	**Not applicable**

4.5.3 Access for people with disabilities (Part D3)

Clause	Title & clause summary	Assessment Comments	Status

D3.1	General Building access requirements	*It is recommended that an access consultant be engaged to provide advice on all access issues*
		The general access requirements for the various classifications and areas of the building are as follows:
		• Class 5 to 9 – to and within all areas normally used by the occupants.
		• Class 2
		  • access to the door of each sole occupancy unit and
		  • to one of each type of common space for use in common by the residents.; and
		  • into the adaptable units.
		NOTE: Building able to comply. Update plans and specifications and provide, if available, an access report at Construction Certificate stage.
			Further information required at CC stage

D3.2	General building access requirements
	Access to the building must be provided as follows:
	• *Accessways to be provided:*
	  ○ *from main points of pedestrian entry on the allotment; and*
	  ○ *from another accessible building connected by a pedestrian link*
	  ○ *from any required accessible carparking space on the allotment*
	• *Accessways to be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances.*
	For buildings with an area over 500m², a pedestrian entrance cannot be more than 50m from an accessible pedestrian entrance.
		The site plan indicates that access is likely to be achieved from the allotment boundaries to the pedestrian entries.
		Lifts provide access through the building.
		Accessible parking spaces have been provided to the basement levels. BCA compliant however further planning requirements may be required in the Development Consent.
		Retail parking spaces are not shown on the drawings – further planning requirements may apply.
		NOTE: Building able to comply. Update plans and specifications.
			Further information required at CC stage

Clause	Title & clause summary	Assessment Comments	Status
D3.3	Parts of the buildings to be accessible *Note the following general requirements:* • *Doors are to be a minimum of 850mm clear of obstructions. For swing doors, this typically requires a 920mm door to allow for the width of the door and door stop.* • *Lifts to have: Handrails, controls and lighting to AS1735.12; audible information identifying level, emergency hands free communication.* • *The force to open a door with a door closer should not exceed 20 N (to open, swing or hold the door open).* • *New requirements for door control / handles. For example, the end of the handle should be turned 20mm to prevent a hand slipping off.* • *Increased door circulation spaces.* • *Switches and controls (including light switches) to be located at a height between 900mm-1100mm.* • *Restrictions on carpet pile heights and backings – i.e. pile height or thickness not to exceed 11mm and backing thickness not to exceed 4mm. This effectively prevents the use of underlays.* • *Requirements for 30% luminance contrast between door leaves, walls, architraves etc. Area of luminance contrast (for example architraves) should be minimum 50mm.* • *Increases in the circulation spaces for WC pans (300mm each dimension). This increases the minimum size of rooms for PWD facilities.* • *Fire Isolated stairways require luminance contrast nosing in accordance with clause 11.1(f)&(g) AS 1429.1-2009* *The above is just a highlight of the requirements under the NCC and AS1428.1. The relevant members of the design team and installers should understand the detailed requirements when specifying door hardware, doors, switches. Specifications and drawings should demonstrate compliance with the relevant access provisions - anything not shown on the plans will need to be checked during inspections.*	Please provide the following to enable accessible features to be checked: • stairs including handrails, nosings and tactile indicators. • Ramp details • Door schedules • Carpet details NOTE: Changes to levels noted to basement 1. Compliant ramps do not appear to have been provided on plans. Please update plans and specifications for final assessment. Provide access report if available.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
D3.4	Exemptions *The following areas are not required to be accessible:* • *An area where access would be inappropriate because of the particular purpose for which the area is used;and* • *An area that would pose a health or safety risk for people with a disability; and* • *Any path of travel providing access to the above areas*	The following spaces may be considered for exemption from requiring disabled access: • Storerooms, • Plant rooms, • Enclosures containing essential services NOTE: Building able to comply.	**Further information required at CC stage**
D3.5	Car parking *Accessible car parking spaces to comply with AS2890.6.*	Disabled car parking facilities noted to basement levels 2,3 and 4 and quantity is deemed sufficient. Accessways from disabled car parking spaces to lifts are to be safe and clearly demarcated. If retail parking is designated to basement level 1 then disabled car parking spaces are required in the ratio of 1:50. Design is able to comply. Await any further requirements stipulated in DA Approval.	**Review/ Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
D3.6	Identification of accessible facilities, services and features *Accessible, clear and legible Braille and tactile signage complying with Specification D3.6 and incorporating the international symbol of access or deafness or other symbol as appropriate, in accordance with AS 1428.2009 must identify sanitary facility and lifts.* • *Identify each door required by E4.5 to be provided with an exit sign and state Exit and Level followed by floor level and number* *Note the following requirements for signage:* • *It should be on the latch side of the door, or if this is not possible, on the door itself; and* • *Leading edge of the sign to be 50-300mm from the architrave; and* • *To be white on blue in colour; and* • *Signage to indicate left- or right-hand pan transfer (LH or RH).* • *Signage to be provided at each bank of toilets that doesn't contain an accessible adult changing facility, to direct a person to the location of the nearest accessible adult changing facilities.* • *Signage to be provided as required under D2.21 for operation of latch* *The path of travel from the principal public entrance to these features and facilities should be where their location is not apparent to the building occupant.*	To be checked on inspection – detail preferred, but not strictly required on the plans.	**Condition of Approval**
D3.7	Hearing augmentation	Advisory Note	**Not applicable**
D3.8	Tactile indicators *Accessible, tactile ground surface indicators must be provided to warn people with a vision impairment that they are approaching- (i) if used by the public- (A) a stairway; and (B) a ramp other than a step ramp and kerb ramp; and (ii) in the absence of a suitable barrier- (A) an overhead obstruction less than 2 m above floor level, other than a doorway; and tactile ground surface indicators must be Type B indicators in accordance with AS 1428.4.1 2009.*	Tactile indicator locations to be shown on stair and ramp detail – update plans and specifications. NOTE: Building able to comply.	**Further information required at CC stage**
D3.10	Swimming Pools *Specification D3.10 provides requirements for the accessible water entry/ exit for swimming pools*	Advisory Note	**Not applicable**

Clause	Title & clause summary	Assessment Comments	Status
D3.11	Ramps *A series of ramps must not exceed a vertical rise of more than 3.6 m*	Advisory note.	**Complies**

4.6 Services & Equipment (NCC Section E)

4.6.1 Firefighting equipment (Part E1)

Clause	Title & clause summary	Assessment Comments	Status
E1.3	Fire hydrants	Drawings are required from the fire services consultant (including hydrant plans, H patterns, pump room details, boosters etc.). Booster location is not shown on plans – required. Hydrant points are shown in each fire isolated exit. Hydrant installation and coverage to be in accordance with AS2419.1 – 2005 NOTE: Building able to comply.	**Further information required at CC stage**
E1.4	Fire hose reels *E1.4 does not apply to—* *(a) a Class 2 or 3, 5 building or Class 4 part of a building; or* *(b) a Class 8 electricity network substation; or* *(c) a Class 9c aged care building; or* *(d) classrooms and associated corridors in a primary or secondary school.*	Drawings are required for fire hose reels to carpark areas. See comments under E1.6 regarding the requirements for fire extinguishers in class 2, 3 and 5 buildings. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
E1.5	Sprinklers	Drawings are required from the fire services consultant (including sprinkler layouts, pump room details, boosters, suction points etc.). NOTE: Building able to comply.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
E1.6	Portable fire extinguishers *All Classes of building (See Table E1.6)* *Extinguishers are required to cover class AE or E fire risks associated with emergency switchboards. This will be checked during construction.* *Class 2 or 3 or 5 or Class 4 part where one or more internal fire hydrants are installed, or where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m^2.* *Portable fire extinguishers must be—* *(i) an ABE type fire extinguisher; and* *(ii) minimum size of 2.5 kg; and* *(iii) distributed outside a sole-occupancy unit—* *(A) to serve only the storey at which they are located; and* *(B) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10 m.* *The fire risks in a Class 2 or 3 building or Class 4 part of a building must include risks within any sole-occupancy units, however portable fire extinguishers are not required to be located within a sole-occupancy unit unless the sole-occupancy unit has a floor area greater than 500 m2. For the purposes of this clause, a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment*	Please provide drawings indicating the location, type and size of fire extinguishers. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
E1.8	Fire control centres *Required above 25 m and 6,7, 8 or 9 with a floor area greater than 18,000m^2* *Fire Control Rooms are required for buildings with an effective height greater than 50m:* *i. Impact resistant fire rated masonry to achieve an FRL 120/120/120,* *ii. Services not related to the functioning of the room must not pass through it,* *iii. No openings permitted other than those required for access, ventilation and services,* *iv. All other requirements per clauses 7 – 12 of Spec. C1.8*	Because the building has an effective height of greater than 50m the fire control centre must be contained in a separate fire control room in accordance with BCA spec, C1.8 - required to be shown on the plans to service the whole building. NOTE: Building able to comply.	**Does not comply**

Clause	Title & clause summary	Assessment Comments	Status
E1.9	Fire precautions during construction *Not less than 1 fire extinguisher to suit class A, B and C and electrical fires must be required, once over 12m fire Hydrants and hose reels are to be operation except for the upper 2 stories, booster is to be installed*	Advisory note.	**Note**
E1.10	Provision for special hazards	Advisory note.	**Not applicable**

4.6.2 Fire Sprinkler Systems (Specification E1.5)

Clause	Title & clause summary	Assessment Comments	Status
E1.5	Sprinklers	Specification sets out requirements for the design and installation of fire sprinkler systems.	**Note**

4.6.3 Class 2 and 3 buildings not more than 25m (Specification E1.5a)

Clause	Title & clause summary	Assessment Comments	Status
E1.5a	Class 2 and 3 buildings mot more than 25m in effective height *Refer to specification for concessions*	The development is a united building and will be sprinkler protected throughout.	**Not applicable**

4.6.4 Smoke hazard management (Part E2)

Clause	Title & clause summary	Assessment Comments	Status
E2.2	General Requirements *Notes:* • *Alarms in Class 2 or 3 or Class 4 parts must be interconnected*	The following smoke hazard management systems are required: • Air pressurisation required to fire stairs and associated passageways to comply with AS/NZS 1668.1 • AS 1670.1 smoke detection and alarm system to all classes within the building.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
	• *Stair pressurisation system required to stair in a class 3 residential care building.* • *Detectors in Class 2 and 3 are not required in areas where the area is likely to result in smoke detectors causing spurious signals and a sprinkler system is installed to the buildings (other than a FPAA101D or FPAA101H system).*	• AS 3786 smoke alarms. To be interconnected within the unit. • Automatic shutdown of air handling system on activation of smoke detectors and alarm system (where air is circulated to another fire compartment). • Sprinkler system NOTE: Building able to comply – update plans and specifications.	
E2.3	Provision for special hazards *This clause asks for consideration of additional smoke hazard management measures if a building has special characteristics*	Advisory note.	**Not applicable**
Spec E2.2d	Residential fire safety systems	This clause is to be referenced on the Design from the dry fire consultant.	**Note**

4.6.5 Lift installations (Part E3)

Clause	Title & clause summary	Assessment Comments	Status
E3.2	Stretcher facility in lifts *Required if an emergency lift is required, or the effective height is 12m or more.* *The space required for the stretcher is 600 by 2000mm at a height of 1400mm*	NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
E3.3	Warning against use of lifts in fire *A warning sign must be displayed where it can be readily seen near every call button for the lifts and comply with the details and dimensions of Figure E3.3 and consist of-* *(i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or* *(ii) letters incised or inlaid directly into the surface of the material forming the wall*	To be checked on inspection.	**Condition of Approval**
E3.4	Emergency Lifts *Require for buildings over 25 m and Class 9a not located at street level*	Designated emergency lifts to be clarified - NOTE: Building able to comply.	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
E3.5	Landings	Landings at lifts are generally required to comply with the DTS provisions of Section D 2.14 NOTE: Building able to comply	Further information required at CC stage
E3.6	Passenger lifts *The lifts must-* *i) be provided with a handrail complying with the provisions for a mandatory handrail in AS 1735.12; and* *ii) have minimum internal floor dimensions complying with AS 1735.12; and* *iii) have doors with a minimum clear opening complying with AS 1735.12; and* *iv) be fitted with a series of door opening sensory devices which will detect a 75 mm diameter rod across the door opening between 50 mm and 1550 mm above floor level; and* *v) have car control buttons complying with Section 7 of AS 1735.12.* *Please provide a specification to indicate compliance.*	Drawings required from lift consultant. NOTE: Building able to comply	Further information required at CC stage
E3.7	Fire service controls	To be checked on inspection.	Condition of Approval
E3.8	Aged care building	Advisory note.	Not applicable
E3.9	Fire service recall operation switch	To be checked on inspection.	Condition of Approval
E3.10	Lift car fire service control	To be checked on inspection.	Condition of Approval

4.6.6 Visibility in an Emergency, Exit Signs and Warning Systems (Part E4)

Clause	Title & clause summary	Assessment Comments	Status
E4.1-E4.8	Exit and Emergency lighting	Drawings required for emergency lighting and exit signage. Note that in locations where exit signs are required, braille signage may also be required under D3.6. NOTE: Building able to comply – update plans and specifications.	Further information required at CC stage
E4.9	Emergency warning and intercom systems *Required to comply with AS1670.4 in a building with:* *An effective height of over 25m; or* *Class 3 more than 2 storeys and used as residential part of a primary or secondary school or accommodation for the aged, children or people with disability; or* *Class 3 residential care building: or* *Class 9a with a floor area more than 1000m^2 or a rise more than 2; or* *Class 9b buildings used as a school and have a rise of more than 3 storeys or used as a theatre, public hall or the like, having a floor area more than 1000m2 or a rise of more than 2.*	Drawings required for sound system and occupant system for emergency purposes (including speaker location, WIP phones, manual call points). Note that WIP phones are required in emergency lifts. NOTE: Building able to comply – update plans and specifications.	Further information required at CC stage

4.7 Health & Amenity (NCC Section F)

4.7.1 Damp & Weatherproofing (Part F1)

Clause	Title & clause summary	Assessment Comments	Status
F1.1	Stormwater drainage	Drawings for stormwater drainage. Please confirm whether a siphoned drainage system is proposed. If so, then a performance solution will need to be documented against the NCC performance requirements by an appropriately qualified person (e.g. NPER registered engineer). This would need to be referenced on the design certificate. NOTE: Building able to comply – update plans and specifications.	Further information required at CC stage
F1.4	External above ground membranes	Waterproofing membranes for external above ground use must comply with AS4654 Parts 1 & 2. This will apply to external decks, planter boxes and the like.	**Condition of Approval**
F1.5	Roof coverings	This clause provides guidance on the application of the NCC - NOTE: Building able to comply	Further information required at CC stage
F1.6	Sarking	This clause provides guidance on the application of the NCC - NOTE: Building able to comply	Further information required at CC stage
F1.7	Waterproofing wet areas	Waterproofing to the wet areas are to be in accordance with AS3740 NOTE: Building able to comply	Further information required at CC stage
F1.9	Damp-proofing	The damp proof course is to be provided and comply with AS/NZS 2904 or AS3660.1. NOTE: Building able to comply	Further information required at CC stage
F1.10	Damp-proofing of floors on ground	Vapour barriers to be in accordance with AS 2870 - NOTE: Building able to comply	Further information required at CC stage

F1.11	Floor wastes *Floor wastes are to be installed in bathrooms and laundries in Class 2 and Class 3 buildings and Class 4 parts, where those bathrooms and laundries are above another sole-occupancy unit or public space.* *The aim of this requirement is to minimise water overflows from fixtures in the specified rooms.*	Drawings required showing the location of floor wastes.	**Further information required at CC stage**
F1.12	Sub-floor ventilation	Advisory note	**Not applicable**
F1.13	Glazed assemblies *Requires openings to comply with the AS 2047 requirements for resistance to water penetration.*	Advisory note	**Further information required at CC stage**

4.7.2 Sanitary & other facilities (Part F2)

Clause	Title & clause summary	Assessment Comments	Status
F2.1	Facilities in residential buildings *To specify the minimum acceptable sanitary, bathing, laundry and cooking facilities required in Class 2 buildings, Class 3 buildings (for residents only), Class 9c buildings (for residents only) and Class 4 parts.*	Design as presented demonstrates compliance with this clause.	**Complies**
F2.2	Calculation of the number of occupants and facilities *To provide a method for calculating the number of occupants and facilities for the purposes of this part*	NOTE: Compliance is achievable – update plans and specifications	**Further information required at CC stage**
F2.3	Facilities in Class 3-9 Buildings	Advisory note	**Not applicable**

F2.4	Facilities for people with disabilities *To specify the minimum acceptable sanitary and bathing facilities required for people with a disability in Class 1b, Class 2, Class 3, Class 5-9 and Class 10a buildings* *NCC 2011 requires that each bank of toilets where there are one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with a n ambulant disability in accordance with AS 1428.1 must be provided for use by males and females. Please provide documentation showing details, including grab rails, pan heights etc.*	Dimensioned details of the PWD facilities will be needed to assess compliance. NOTE: Building able to comply	**Further information required at CC stage**
F2.5	Construction of sanitary compartments *Where cubicle door frames are within 1.2m of the pan either of the following must be provided;* • *Outward opening door; or* • *Sliding door; or* • *Have lift-off hinges provided* *In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque at a height of 900mm-1200mm above the finished floor level.*	Plans drawn to minimum scale 1:50 are required for assessment with compliance. NOTE: Building able to comply	**Further information required at CC stage**
F2.6	Interpretation; Urinals and washbasins	This clause provides guidance on the application of the NCC - NOTE: Building able to comply	**Note**
F2.7	Microbial (legionella) control	Applicable only if water heating is provided or central cooling towers are being used as part of the air-conditioning system - NOTE: Building able to comply	**Further information required at CC stage**

Clause	Title & clause summary	Assessment Comments	Status
F2.8	Slop hoppers *Required in class 9a & 9c buildings*	Advisory note.	**Not applicable**
F2.9	Accessible adult change facilities	Advisory note.	**Not applicable**

4.7.3 Room Sizes (Part F3)

Clause	Title & clause summary	Assessment Comments	Status
F3.1	Height of rooms and other spaces *Minimum height of ceiling within the buildings must be as follows;* • *Habitable rooms – 2.4m; and* • *Bathrooms, kitchens and the like -2.1m; and* • *Accessible adult change facility – 2.4m; and* • *Within stairways and landings – 2m; and*	The plans indicate that the development is capable of complying however the final plans remitted for the Construction Certificate application are to contain sections demonstrating compliance.	**Further information required at CC stage**

4.7.4 Light and Ventilation (Part F4)

Clause	Title & clause summary	Assessment Comments	Status
F4.1	Provision of natural light • *Class 2 - all habitable rooms* • *Class 9b – classrooms and playrooms in early childhood centres*	Natural light appears to have been provided to the habitable rooms of all units. Final plans and specifications are required to demonstrate compliance. Window schedules are to be included. NOTE: Building able to comply	**Further information required at CC stage**
F4.2	Methods and extent of natural lighting	This clause provides guidance on the application of the NCC	**Note**
F4.3	Natural light borrowed from adjoining room	This clause provides guidance on the application of the NCC. NOTE: The plans assessed do not show this as a compliance item.	**Not applicable**

Clause	Title & clause summary	Assessment Comments	Status
F4.4	Artificial Lighting	Artificial lighting system to comply with AS1680.0. To be confirmed on electrical consultant's design certificate - NOTE: Building able to comply	**Further information required at CC stage**
F4.5	Ventilation of rooms *Ventilation of habitable rooms must be achieved through either;* • *Natural ventilation – 5 % of floor area of room; or* • *Mechanical ventilation in accordance with AS1668.2 and AS3666.1*	Drawings are required for mechanical ventilation and HVAC arrangements Note that where a dryer is installed to a laundry cupboard, either mechanical ventilation will be required to that space or grilles provided to the cupboard doors. NOTE: Applicable to all parts of the building. Class 2 parts show a combination of mechanical and natural ventilation arrangements. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
F4.6	Natural Ventilation *Natural ventilation must consist of permanent openings such as windows, doors or the like with* • *aggregate openings of 5% of the floor area; and* • *Open to suitable sized court or space open to the sky; or* • *An open veranda or carport; or* • *An adjoining room;* • *An adjoining room* *Note; this does not apply to a class 8 electricity sub station*	The units look capable of complying, but a window schedule is needed to confirm. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
F4.7	Ventilation borrowed from adjoining room	This clause provides guidance on the application of the NCC	**Note**
F4.8	Restriction on position of water closets and urinals *A room containing a closet pan or urinal must not open directly into :* • *A kitchen* • *Restaurant* • *A workplace normally occupied by more than one person*	Advisory note.	**Note**

Clause	Title & clause summary	Assessment Comments	Status
F4.9	Airlocks *To specify requirements for airlocks or mechanical ventilation where toilets open directly into other rooms*	Awaiting details of sanitary provisions.	**Note**
F4.11	Car parks *Every storey of a carpark must be provided with a system of either:* *i. Mechanical ventilation complying with AS1668.2 or,* *ii. Natural ventilation complying with Section 4 of AS1668.4*	Provide mechanical details and design statement for the whole of the building. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**
F4.12	Kitchen local exhaust ventilation *The Deemed-to-Satisfy Provisions require exhaust hoods to comply with both AS/NZS 1668.1 and AS 1668.2.*	If applicable to any of the retail tenancies. NOTE: Dependent on planning use/permissibility.	**Further information required at CC stage**

4.7.5 Sound Transmission and insulation (Part F5)

Clause	Title & clause summary	Assessment Comments	Status
F5.1-F5.7	Sound transmission and insulation.	Details required of sound insulation systems for the following: • Walls (including areas of discontinuous construction). • Floors • Services & pumps. Note that it is recommended that waste pipes be acoustically lagged. Report required from acoustic consultant (recommended). See a detailed list of the requirements for acoustic insulation in the appendix.	**Further information required at CC stage**

4.7.6 Condensation management (Part F6)

Clause	Title & clause summary	Assessment Comments	Status
F6.2	Pliable building membrane	Pliable building membrane to comply with AS 4200.1 and must be located on the exterior side of the primary insulation layer of external wall. Except for single skin masonry and single skin concrete, where pliable building membrane is installed in the external wall, the primary water control layer must be separated from water sensitive materials by a drainage cavity. NOTE: Building able to comply – update plans and specifications and provide detailed wall schedule.	Further information required at CC stage
F6.3 and 6.4	Flow rate and discharge of exhaust and ventilation of roof spaces	An exhaust system installed a kitchen, bathroom, sanitary compartment or laundry must have a minimum rate of 25L/s for a bathroom or sanitary compartment and 40L/s for a kitchen or laundry. Exhaust from a kitchen must discharge directly or via a shaft or duct to outdoor air. Exhaust from a bathroom, sanitary compartment, or laundry must discharge directly or via a shaft or duct to outdoor air or to a roof space that is vented to outdoor air through evenly distributed openings. Please indicate the duct work on the mechanical drawings. NOTE: Building able to comply – update plans and specifications.	Further information required at CC stage

4.8 Ancillary Provisions (NCC Section G)

4.8.1 Minor Structures and Components (Part G1)

Clause	Title & clause summary	Assessment Comments	Status
G1.1	Swimming pools	Although indoor pools are not required to comply with the Pool Fence Standard, it is recommended that he door furniture is located not less than 1500mm above FFL.	**Not applicable**
G1.2	Refrigerated Chambers, Strong Rooms and Vaults *Cold rooms are required to have:* *a) a door that is capable of being opened from the inside without the use of a key;* *b) an internal light controlled only by a switch which is located adjacent the entrance door of the cold room;* *c) an indicator lamp located outside the cold room which is illuminated when the internal light is switched on; and* *d) an alarm that is located outside the cold room but controllable only from the inside and capable of achieving a sound pressure level of 90dB(A)* *e) a door with a clear width of not less than 600mm and a height of not less than 1.5m*	Possibly applicable to some retail tenancies.	**Not applicable**
G1.3	Outdoor Play spaces *(a) Any outdoor play space in a Class 9b early childhood centre must be enclosed on all sides with a barrier which complies with AS 1926.1.* *(b) For the purposes of (a), AS 1926.1 is applied as if there is a swimming pool located outside the outdoor play space, so that the barrier restricts children from exiting the premises without the knowledge of staff in the centre.* *(c) The requirements of (a) do not apply to a wall, including doors and windows, which form part of the Class 9b early childhood centre*	Please provide details of the barriers.	**Not applicable**
Part G2	Boilers, Pressure Vessels, Heating appliances, fireplaces, chimneys and flues	Please confirm if any of these are to be provided.	**Not applicable**

4.8.2 Atrium Construction (Part G3)

Clause	Title & clause summary	Assessment Comments	Status
G3	Atriums	There are no atriums proposed in the development	**Not applicable**

4.8.3 Occupiable Outdoor areas (Part G6)

Clause	Title & clause summary	Assessment Comments	Status
G6	Occupiable Outdoor areas	Applicable to building C as these areas are not for the exclusive use of any designated SOU. NOTE: Building able to comply – update plans and specifications.	**Further information required at CC stage**

4.9 Special Use Buildings (NCC Section H) – Not Applicable

4.10 Energy Efficiency (NCC Section J)

Clause	Title & clause summary	Assessment Comments	Status
J1-J3	Energy Efficiency	*Certis Energy are able to provide an energy efficiency assessment to cover parts J1-J3, JV3 and J0.2, in addition to other ESD requirements i.e. DA Sustainability Reports, Green Star and NABERS Please advise if you would like a fee proposal for these services.* Report required from an energy efficiency consultant confirming compliance with parts J1-J3. NOTE: Compliance with all parts of Section J are required. Building deemed able to comply – update plans and specifications.	Further information required at CC stage
J5	Air conditioning and ventilation systems	Air conditioning and ventilation to comply with Part J5. Compliance should be stated on the mechanical engineer's design certificate - NOTE: Building able to comply	Further information required at CC stage
J6	Artificial lighting and power	Lighting to comply with part J6. Compliance should be specified on the electrical engineer's design certificate. NCC 2019 requires motion sensors to fire stairs NOTE: Building able to comply – update plans and specifications.	Further information required at CC stage
J7.2	Heated water supply	Hot water supply to comply with Part J7. This should be stated on the Hydraulic designer's certificate - NOTE: Building able to comply	Further information required at CC stage

J7.3	Swimming pool heating and pumping	No pool	**Not applicable**
J7.4	Spa pool heating and plumbing	No pool	**Not applicable**
J8	Access for maintenance and facilities for monitoring: *A building with a floor area of more than 2 500 m must have energy meters configured to enable individual time-of-use energy consumption data recording, in accordance with (c), of the energy consumption of—* *(i) air-conditioning plant including, where appropriate, heating plant, cooling plant and air handling fans; and* *(ii) artificial lighting; and* *(iii) appliance power; and* *(iv) central hot water supply; and* *(v) internal transport devices including lifts, escalators and moving walkways where there is more than one serving the building; and* *(vi) other ancillary plant.*	Compliance with J8.3 is required NOTE: Building able to comply	**Further information required at CC stage**

5.0 Other Comments

Item	Title	Assessment and Comment	Status
5.1	Long Service Levy *If the cost of works exceeds $25,000, a levy is payable to the Long Service Corporation.*	Further compliance will be supplied at time of CC	Further information required at CC stage
5.2	FRNSW referral *Referral to Fire Brigade is required for CC applications as follows:* *1. when the design includes performance solutions for category 2 fire safety provisions:* *a. Class 9a building greater than 2,000sqm* *b. Class 2-9 with a fire compartment greater than 2,000sqm* *c. Class 2-9 building greater than 6,000sqm* *2. If the Certifying Authority's licence has conditions requiring referral* *3. When the design includes a performance solution to use external combustible cladding buildings of type A & B construction that don't apply verification method CV3 in its entirety for classes 2-9.* *Note: The application for Initial fire safety report (IFSR) application must be made on the current version of the form. This can be downloaded from the Fire Brigade website https://www.fire.nsw.gov.au/page.php?id=9149. Note: brigade will reject the application if it is not lodged on the current version of the form.*	If it is necessary, an application for assessment by Fire Brigade, will require the following: • Fire engineering report (fire engineering brief and meeting with QFRS required prior). • Drawings showing the following: ○ Hydrant system (including hydrant locations, booster, pumps, tanks). ○ Smoke detection system. ○ Occupant warning system / EWIS. ○ Sprinklers ○ Mechanical (smoke exhaust, a/c shutdown).	Further information required at CC stage
5.3	Certification and other required documentation	Certis will provide a checklist detailing the various other documents required to issue the building approval and final certification. This includes items such as: • Services design certificates. • Town planning approval. • Other approvals and clearances. • Fire hazard properties of materials. Refer separate "Documentation Required for Certification" document. This will generally be provided at the design development stage of the project.	Further information required at CC stage

Item	Title	Assessment and Comment	Status
5.4	Town planning *A copy of the Council Town Planning Departments Approval and endorsed plans of layout must be provided to Certis. The approvals should include the following as appropriate.* • *Subdivision* • *Rezoning* • *Material Change of Use* • *Any Court Order Approvals* *The development Permit (Building) cannot be issued until:* • *The requirements of any of the conditions of the previous and current Town Planning approval and addressed. This only applies if any of the conditions of the approvals are linked to the issue of the Development Permit (Building).* • *The appeal period in relation to the planning approval has lapsed. This applies if there were any submitters to the Development Permit (Planning) application.* *Drawings intended for Development permit (Building) must be generally in accordance with approved plan of layout issued by the Council*	A copy of the Town Planning approval (DA Consent) with Council's endorsed plans is required. For building related matters, the design will be checked for consistency with the approved DA plans and conditions.	**Further information required at CC stage**
5.5	Competent Persons Details • *Professional Indemnity Insurance* • *NER Number* • *NSW Govt Fair Trading License number* • *Description of relevant work experience.*	Individuals providing certification for design or construction of building work must, if required by legislation, hold the appropriate licence. Those who are not required be licensed must provide a CV that demonstrates they have the necessary experience to sign a design or installation certificate. Only company directors can sign on behalf of a company.	**Further information required at CC stage**

6.0 Appendix 2 – Required Fire Resistance Levels (FRLs)

Note: If a non-loadbearing element is able to be used for a purpose where the Deemed-to-Satisfy Provisions prescribe an FRL for structural adequacy, integrity and insulation, that nonloadbearing element need not comply with the structural adequacy criteria.

TYPE A CONSTRUCTION:

Building element	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any *fire-source feature* to which it is exposed is—			
For *loadbearing* parts—			
less than 1.5 m	90/ 90/ 90	120/120/120	180/180/180
1.5 to less than 3 m	90/ 60/ 60	120/ 90/ 90	180/180/120
3 m or more	90/ 60/ 30	120/ 60/ 30	180/120/ 90
For non-loadbearing parts—			
less than 1.5 m	–/ 90/ 90	–/120/120	–/180/180
1.5 to less than 3 m	–/ 60/ 60	–/ 90/ 90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN not incorporated in an *external wall*, where the distance from any *fire-source feature* to which it is exposed is—			
For loadbearing columns	90/–/–	120/–/–	180/–/–
For non-loadbearing columns	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180
INTERNAL WALLS—			
Fire-resisting lift and stair *shafts*—			
Loadbearing	90/ 90/ 90	120/120/120	180/120/120
Non-*loadbearing*	–/ 90/ 90	–/120/120	–/120/120
Bounding *public corridors*, public lobbies and the like—			
Loadbearing	90/90/90	120/-/-	180/-/-
Non-*loadbearing*	–/ 60/ 60	–/–/–	–/–/–
Between or bounding *sole-occupancy units*—			
Loadbearing	90/90/90	120/-/-	180/-/-
Non-loadbearing	–/ 60/ 60	–/–/–	–/–/–
Ventilating, pipe, garbage, and like *shafts* not used for the discharge of hot products of combustion—			
Loadbearing	90/ 90/ 90	120/ 90/ 90	180/120/120
Non-*loadbearing*	–/ 90/ 90	–/ 90/ 90	–/120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES			
and COLUMNS—	90/–/–	120/–/–	180/–/–
FLOORS	90/ 90/ 90	120/120/120	180/180/180
ROOFS	90/ 60/ 30	120/ 60/ 30	180/ 60/ 30

7.0 Appendix 3 - Slip Resistance Classification:

Application	Surface conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

8.0 Appendix 4 – Acoustic Requirements:

Area	Comments	Sound rating
Floors separating units from: • other units • plant rooms • lift shaft • stairway • public corridor • public lobby or the like. • areas of other classifications.	Airborne and impact rating required	$R_w + C_{tr} \geq 50$; and $L_{n,w} \leq 62$
Walls separating units		$R_w + C_{tr} \geq 50$
Walls separating habitable room from: • Laundry, kitchen, bathroom in an adjoining unit.	Discontinuous construction required (20mm air gap). Not to be breached by services.	$R_w + C_{tr} \geq 50$
Walls separating a unit from a plant room or lift shaft.	Discontinuous construction required (20mm air gap). Not to be breached by services.	$R_w \geq 50$
Walls separating a unit from: • stairway • public corridor • public lobby or the like. • areas of other classifications.		$R_w \geq 50$
Door separating unit from a public corridor, lobby or the like.		$R_w \geq 30$
Duct, soil, waste or water supply pipe, including pipes that is located in a floor or wall cavity, serves or passes through more than one room	Adjacent to habitable room (except kitchen):	$R_w + C_{tr} \geq 40$
	Adjacent to non-habitable room	$R_w + C_{tr} \geq 25$

9.0 Appendix 6 – Drawings reviewed for this assessment

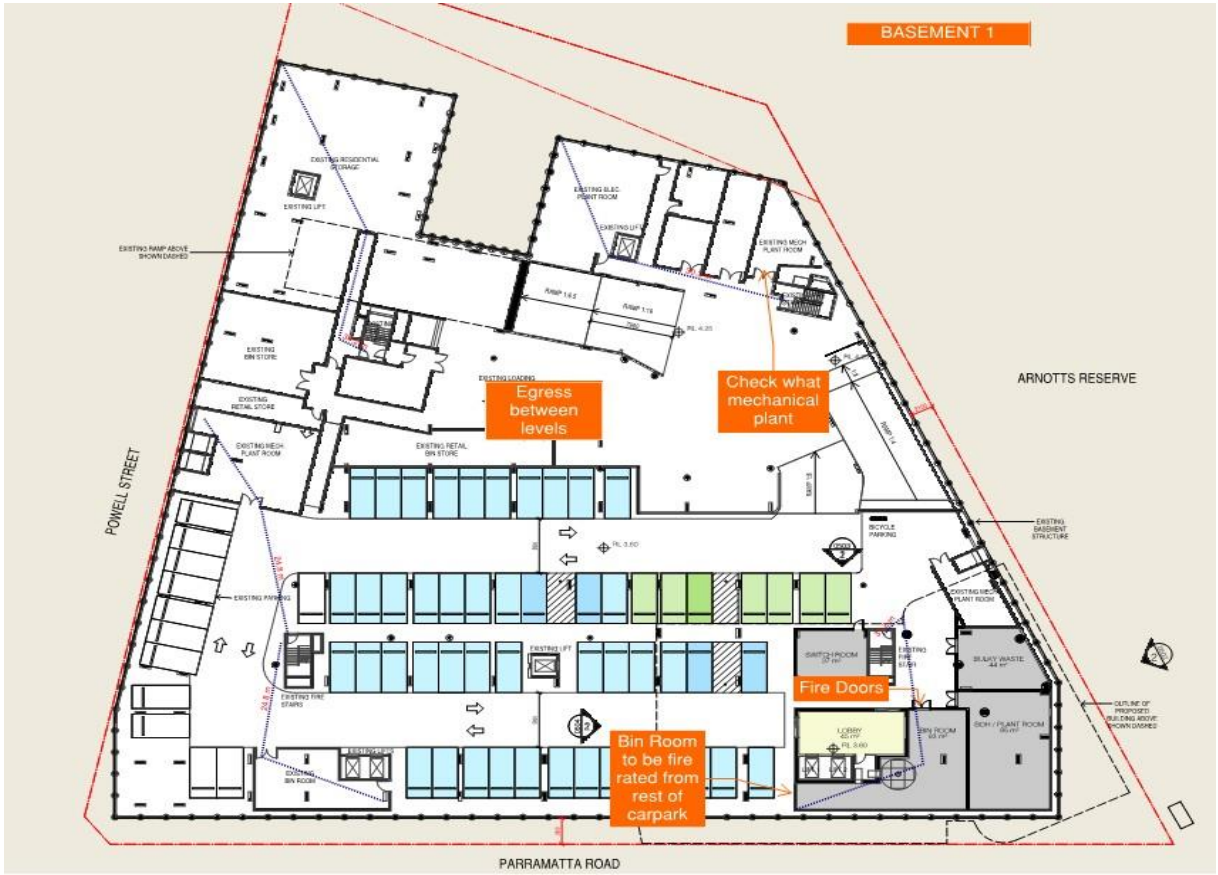
The following drawings were referenced as part of the assessment process in compiling this report (version 4 – DA Assessment):
Note: Drawings listed below are for completeness of record only and form part of the new plan set (series). Only drawings marked in RED have been re-assessed as part of this report (v.4). It is assumed by the author that no changes have been made to the previous versions (as assessed) and re named as part of the new series.

Architectural Drawings – Plan and Revision			
DA 0201/6 Basement 4	DA 0205/6 Ground	DA 0209/8 Level 9 - 20	
DA 0202/6 Basement 3	DA 0206/8 Levels 1 - 4	DA 0210/8 Levels 21 - 23	
DA 0203/6 Basement 2	DA 0207/4 Levels 5 - 7	DA 0211/3 Level 24	
DA 0204/6 Basement 1	DA 0208/9 Level 8	DA 0212/7 Roof	

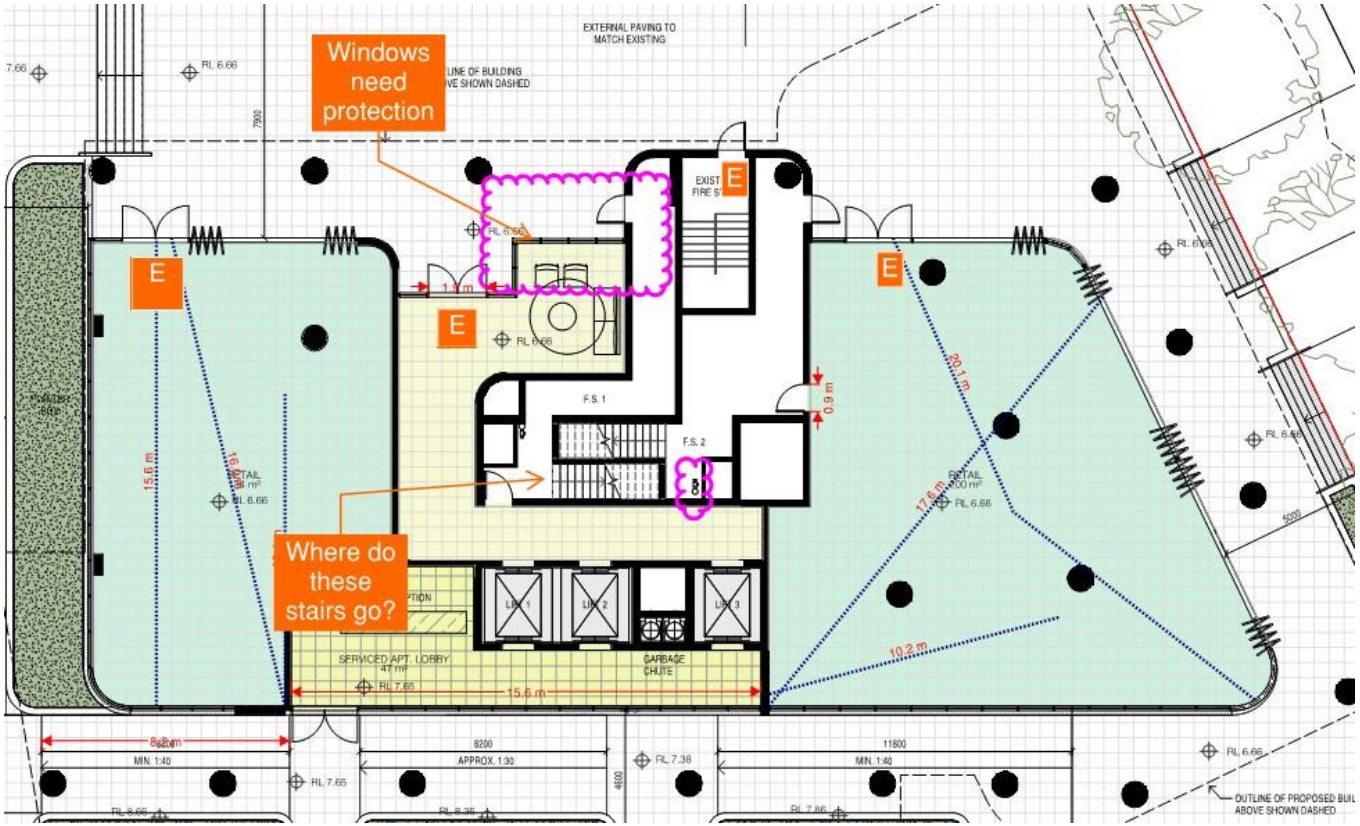
10.0 Appendix 7 – Marked up plans

(Assessed BCA Report V.3)

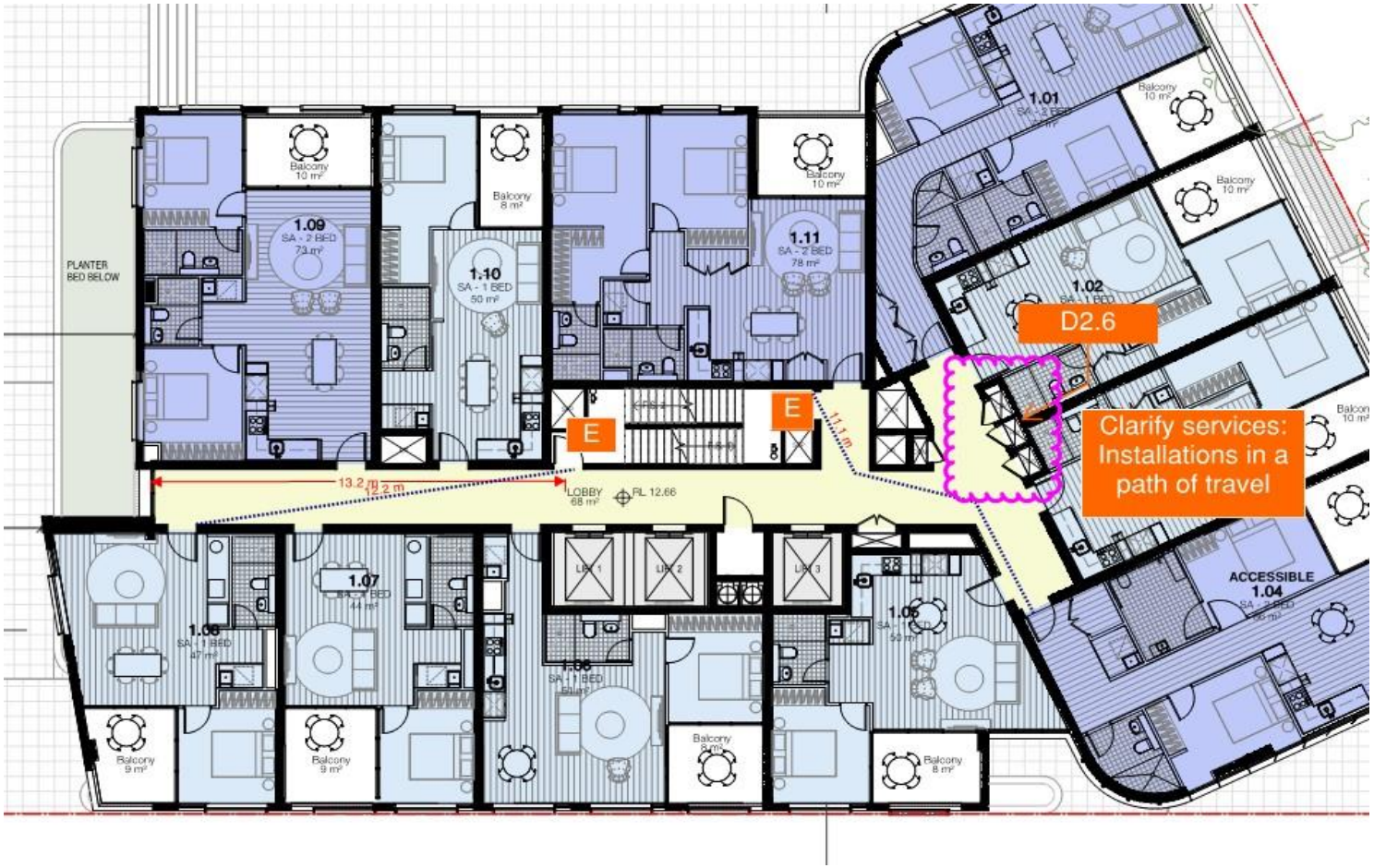
(Assessed BCA Report V.3)



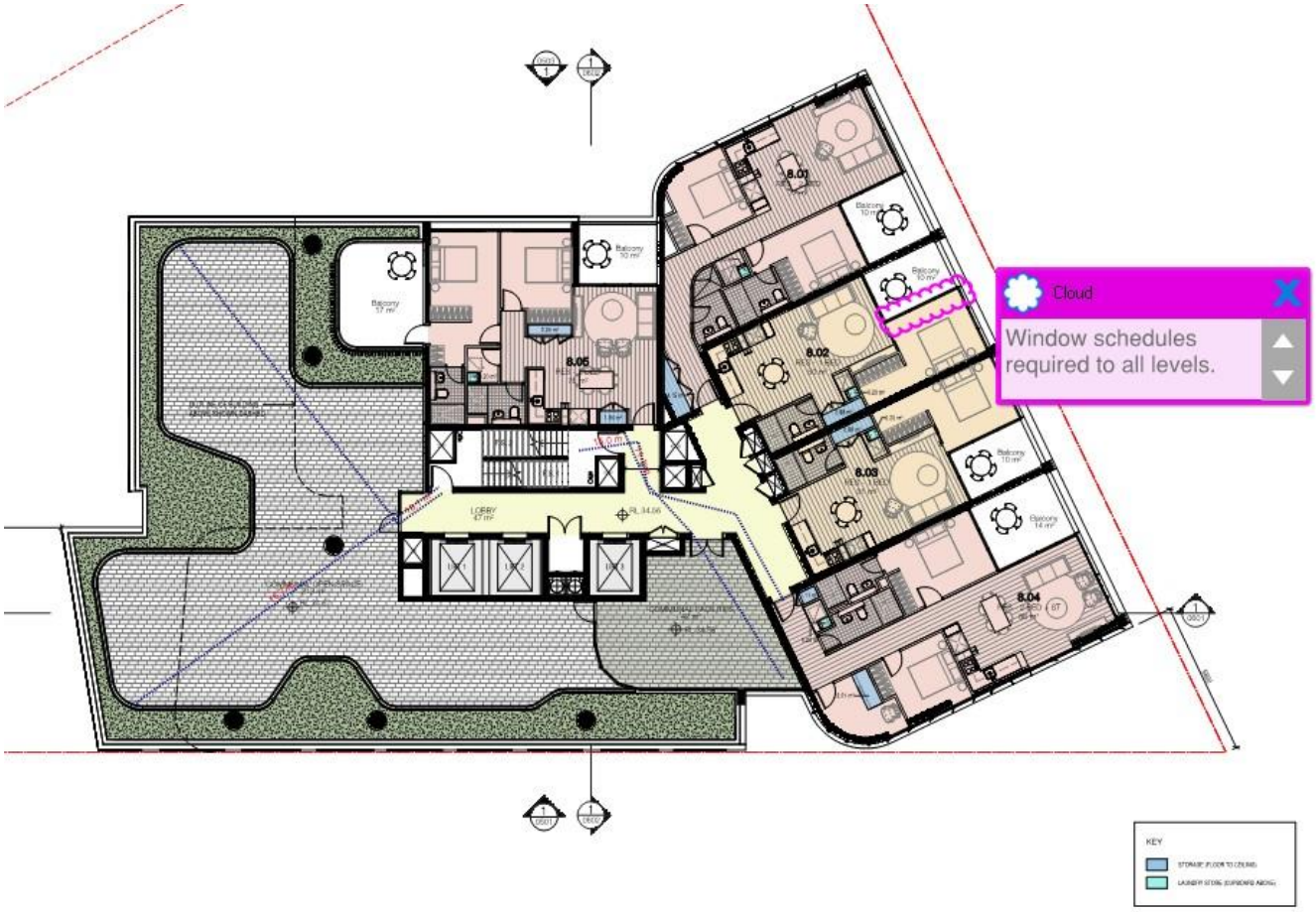
(Assessed BCA Report V.3 – see amended diagram V4)



(Assessed BCA Report V.3)

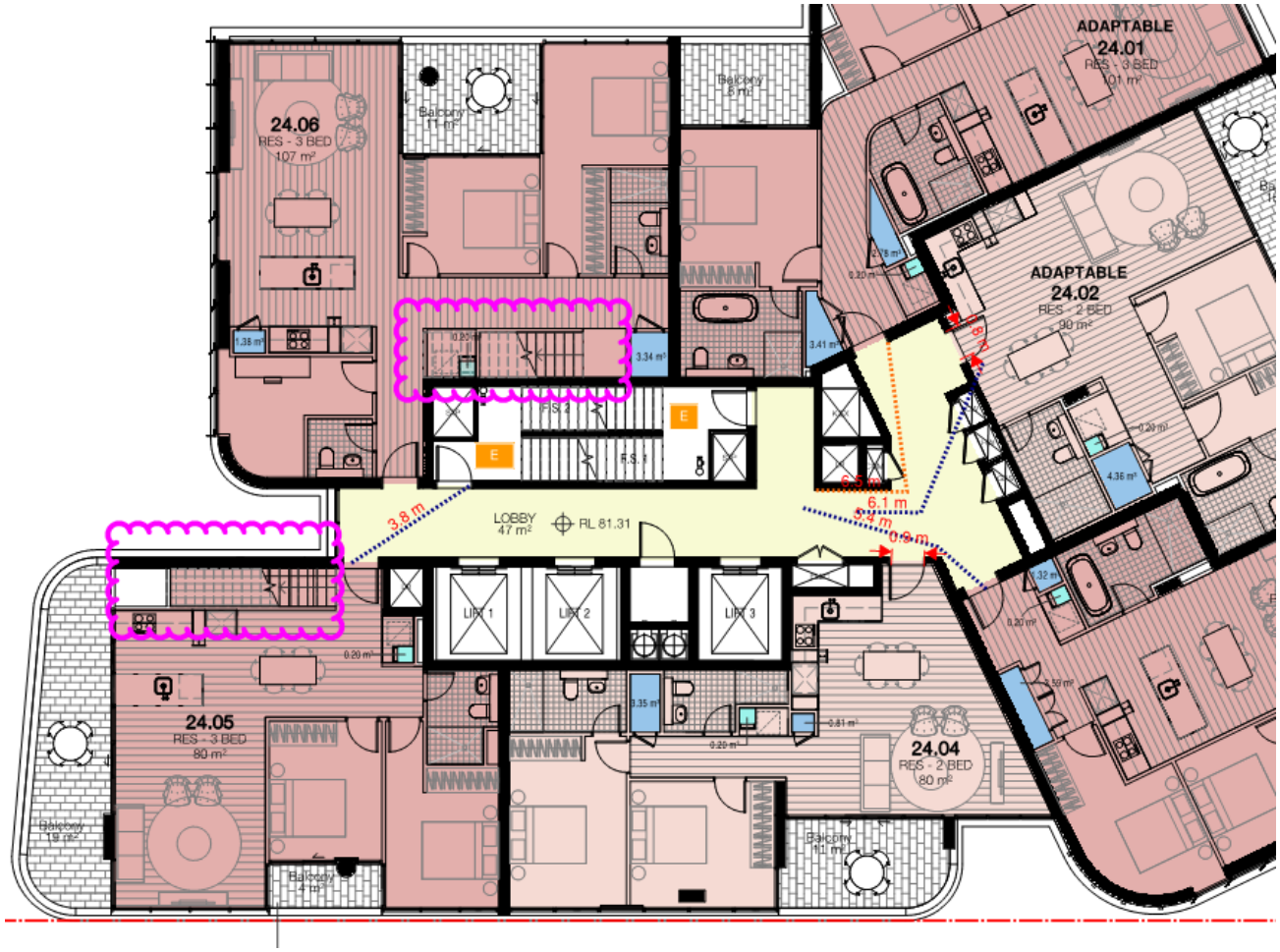


(Assessed BCA Report V.3)

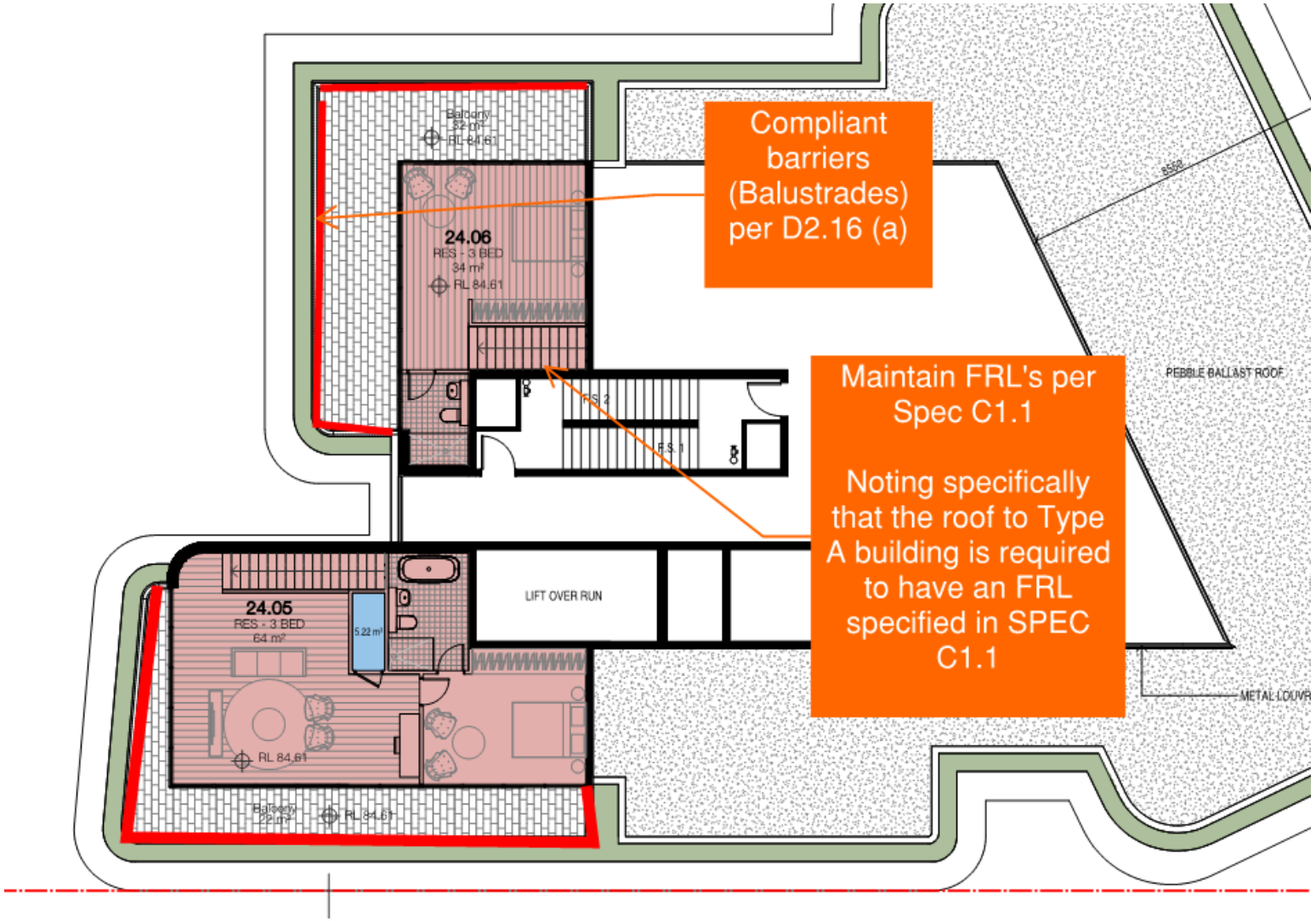


(Assessed BCA Report V.3)

(Assessed BCA Report V.4) Amended L 23



(Assessed BCA Report V.4) Amended L 24 - Roof



(Assessed BCA Report V.4) Amended Ground