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**577-579 Sydney Road,
Seaforth**

**Proposed Change of Use and
Strata Application**

**BCA Assessment Report for DA
Submission**

Prepared for: John Koutsounadis

Project No: M450/Rev 1a

30 June 2021

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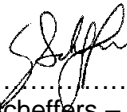
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REPORT REVISION STATUS		
REVISION	DATE	STATUS
1	16 June 2021	DA submission
1a	30 June 2021	Updated terminology for Tenancy No. 1 (proposed café)

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Signature
Graham Scheffers – Registered Certifier (Building – A1 unrestricted)
GRS Building Reports Pty Ltd
Accreditation No. 0364 (BDC)
Date: 30 June 2021

Executive Summary

The building, the subject of this Building Code of Australia, (BCA) Fire and Life Safety Report, is an existing 2 storey mixed commercial / residential building located at 577-579 Sydney Road, Seaforth.

The proposal is for lodgement of a Development Application for the Strata Subdivision of the entire building and the internal fitout of Tenancy 1 (Storage / garage area) for use as a cafe.

The development comprises a number of commercial tenancies and a single Residential Sole Occupancy Unit (SOU) in a 2 storey building. There is 1 internal enclosed stairway connecting both storeys of the building.

The site is a triangular shape with the street frontage to Sydney Road to the west, an adjacent residential property to the southern boundary and an adjacent commercial / residential property to the eastern boundary.

There is a detached building to the rear of the site that comprises 4 individual sanitary facilities. This building is predominantly masonry walls with metal clad roof.

The main building includes the following: -

Ground Floor -

Four (4) Commercial tenancies Nos. 1 to 4, each accessed from the street front. Tenancy No. 4 also had a doorway opening to the common stairway. The common internal stairway also provides access to the rear courtyard. The Commercial tenancies are as follows;

- Tenancy No. 1 – Existing storage / garage area proposed to undergo a change of use as a café. Works include removal of timber intermediate floor, access stair and infilling wall opening to adjacent Tenancy No. 2. New facades are proposed to the front and rear of the tenancy.
- Tenancy No. 2 – Existing beauty salon tenancy.
- Tenancy No. 3 – Existing beauty salon tenancy.
- Tenancy No. 4 – Existing travel agency tenancy.

1st Floor Level

One Commercial (Educational) tenancy and One (1) Residential SOU's accessed from the common internal stairway.

The main building is constructed from masonry walls, concrete floors separating each level and timber frame roof with metal and asbestos sheeting.

An assessment of the proposed strata subdivision and change of use to café for Tenancy 1 (Storage / garage area) detailed in the DA Architectural Plans has been undertaken in accordance with the relevant provisions of the Building Code of Australia 2019 (BCA).

Section 3.1 provides details and comments of the BCA Assessment to address the relevant provisions of BCA Parts C, D (Parts D1 & D2) and E whilst having regard to Clause 93 &/or 94 of the Environmental Planning and Assessment Regulation 2000 with recommendations for consideration with the Development Application.

In addition to Section 3.1, the provisions where further clarification or documentation is also necessary for submission with the Construction Certificate is detailed in Annexure A of this Report.

The Report includes the following Annexures:

1. Annexure A – BCA Clause by Clause Deemed-To-Satisfy Assessment (DtS) of the subject building.
2. Annexure B – Schedule of Essential Fire Safety Measures.

1. Introduction

1.1 Background

The building, the subject of this Building Code of Australia, (BCA) Fire and Life Safety Report, is an existing 2 storey mixed commercial / residential building located at 577-579 Sydney Road, Seaforth.

GRS Building Reports Pty Ltd has been engaged by John Koutsounadis to undertake a BCA Assessment Report for the subject proposed strata subdivision and change of use to café for Tenancy 1 (Storage / garage area) for the purposes of reviewing the Development Application Architectural Design Drawings.

1.2 Aim

The aim of this Report is to:

1. Undertake an assessment of the existing building detailed in the Development Application Architectural Design Drawings for the purposes of submission with the DA in accordance with the relevant provisions of the Building Code of Australia 2019, (BCA), i.e. Undertake a BCA Clause-by-Clause assessment as detailed in Annexure A.
2. Identify existing and proposed Essential Fire Safety Measures applicable to the subject building as detailed in Annexure B.

1.3 Documentation

The following documentation was relied upon when preparing this Report:

- Building Code of Australia 2019, Amendment 1 (BCA).
- Architectural documentation for change of use and strata subdivision prepared by David Tory, Drawing Nos. DA 01 to DA 13, Issue 03, dated 15 June 2021.

1.4 Reporting Team

This Report was prepared on behalf of GRS Building Reports Pty Ltd by Graham Scheffers, a Registered Grade A1 Certifier (NSW Dept of Fair Trading) and Building Code Consultant following an inspection carried out on 3 June 2021.

1.5 BCA Terms and Definitions

The following terms are based on BCA definitions;

- **Fire Source Feature:** means-
 - (a) The far boundary of a road, river, lake or the like adjoining the allotment; or
 - (b) A side or rear boundary of the allotment; or
 - (c) An external wall of another building on the allotment which is not a Class 10 building.
- **Open Space** means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.
- **Rise in Storeys** means the greatest number of storeys calculated in accordance with C1.2.

1.6 Limitations and Exclusions

The limitations of this report are as follows:

- The Report is based on the proposed strata subdivision and change of use to café for Tenancy 1 (Storage / garage area) only as detailed herein and is issued for the purpose of reviewing the Development Application Architectural Design Drawings.
- The Report is based on a visual walk-through inspection of the accessible areas within the building. Concealed spaces such as voids, shafts, and the like were not inspected. Systems were not tested and building fabric was not removed to determine the method of construction.
- The Certifying Authority is to determine that the relevant documentation satisfies the BCA for the purposes of issuing a Construction Certificate. This BCA Report is an assessment of the Development Application Architectural Design Drawings only, therefore is not intended to provide verification that the entire design documents satisfy the BCA as this is beyond the scope of GRS Building Report Pty Ltd and must be undertaken by the Certifying Authority.
- The assessment in relation to compliance has been limited to the fire and life safety provisions of Parts C, D (Part D1 and D2) & E of the Building Code of Australia.

The Report does not address issues in relation to the following:

1. Assessment of documentation other than the Development Application Architectural Design Drawings.
2. Review of proposed construction materials, finishes, linings and coverings. All such materials must be provided with the Construction Certificate documentation for review by the Accredited Certifier.
3. The structural adequacy of the existing and proposed building including the fire resistance levels of any building elements (unless specifically referred to).
4. The design, maintenance or operation of any electrical, mechanical, hydraulic or fire protection services.
5. Works outside the boundaries /lease area, building elements or services that extend outside the boundaries and works associated with external ancillary services, structures or civil works required by relevant authorities.
6. Development Consent conditions of approval issued by the Local Authority or Land & Environment Court.
7. Environmental Planning and Assessment Act and Regulations, Local Government Act and Regulations unless where nominated.
8. Work Health and Safety Act and Regulations.
9. WorkCover Authority requirements.
10. Water, drainage, gas, telecommunications and electricity supply authority requirements.
11. The provisions of BCA Part D3, the Disability Discrimination Act, National Premises Standards, Council Policy relating to Access for People with Disabilities as this is beyond the scope of the BCA.
12. GRS Building Reports Pty Ltd cannot guarantee acceptance of this Report by the Statutory Authorities such as Local Council, Fire & Rescue NSW or other approval authorities.

2. Building Description

2.1 Building

The building, the subject of this Building Code of Australia, (BCA) Fire and Life Safety Report, is an existing 2 storey mixed commercial / residential building located at 577-579 Sydney Road, Seaforth.

The proposal is for lodgement of a Development Application for the Strata Subdivision of the entire building and the internal fitout of Tenancy 1 (Storage / garage area) for use as a cafe.

The development comprises a number of commercial tenancies and a single Residential Sole Occupancy Unit (SOU) in a 2 storey building. There is 1 internal enclosed stairway connecting both storeys of the building.

The site is a triangular shape with the street frontage to Sydney Road to the west, an adjacent residential property to the southern boundary and an adjacent commercial / residential property to the eastern boundary.

There is a detached building to the rear of the site that comprises 4 individual sanitary facilities. This building is predominantly masonry walls with metal clad roof.

The main building includes the following: -

Ground Floor -

Four (4) Commercial tenancies Nos. 1 to 4, each accessed from the street front. Tenancy No. 4 also had a doorway opening to the common stairway. The common internal stairway also provides access to the rear courtyard. The Commercial tenancies are as follows;

- Tenancy No. 1 – Existing storage / garage area proposed to undergo a change of use as a café. Works include removal of timber intermediate floor, access stair and infilling wall opening to adjacent Tenancy No. 2. New facades are proposed to the front and rear of the tenancy.
- Tenancy No. 2 – Existing beauty salon tenancy.
- Tenancy No. 3 – Existing beauty salon tenancy.
- Tenancy No. 4 – Existing travel agency tenancy.

1st Floor Level

One Commercial tenancy and One (1) Residential SOU's accessed from the common internal stairway.

The main building is constructed from masonry walls, concrete floors separating each level and timber frame roof with metal and asbestos sheeting.

2.2 Classification

For the purposes of the BCA, the proposed building is classified as follows:

- Class 4 (Residential SOU)
- Class 6 (Café, Beauty Salon, Travel Agency)
- Class 9b (Education facility)

2.3 Rise in Storeys

The building has a rise in storeys of two (2).

2.4 Type of Construction

The building is required to be of Type B Construction.

2.5 Effective Height

The building has an effective height of less than 25m.

2.6 Floor Area / Volume

Maximum size of fire compartment.

Classification		Type B
6	Max floor area	3,500m ²
	Max volume	21,000m ³
9b	Max floor area	5,500m ²
	Max volume	33,000m ³

2.7 Fire Source Feature

The distances to the nearest Fire Source Feature is estimated to be:

- Northern - < 3.0 metres.
- Eastern - < 3.0 metres.
- Southern - < 3.0 metres.
- Western - > 6.0 metres to far side of Sydney Road.

3. BCA Assessment

An assessment of the proposed Strata Subdivision of the entire building and the internal fitout of Tenancy 1 (Storage / garage area) for use as a cafe has been undertaken in accordance with the provisions of the Building Code of Australia 2019, (BCA) as detailed in Annexure A.

To satisfy the requirements of Clause 93 &/or 94 of the Environmental Planning & Assessment Regulation 2000 Section 3.1 below details a summary of the BCA Fire Audit with a Recommended Strategy for consideration with the DA and to incorporate in the CC in relation to works proposed. Subject to the items in Section 3.1 being addressed, it is considered that this is a reasonable strategy in relation to Clause 93 &/or 94. It is noted that new works will need to be assessed by the Accredited Certifier when the Construction Certificate is reviewed.

Where compliance with the BCA DTS provisions is not readily achieved, these issues may be investigated for inclusion in an Alternative Solution Report for consideration at the Construction Certificate Stage.

3.1 Clause 93 &/or 94 of Planning & Assessment Regulation 2000

In accordance with Clause 93 (2) of the Environmental Planning and Assessment Regulation, consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use has been reviewed and further comment is made with respect to BCA as detailed in the Recommendations contained in Table 3.1 of this Report.

In accordance with Clause 93 (3) The Category 1 Fire Provisions are as outlined in the Environmental Planning and Assessment Regulation and assessed as follows: -

- EP 1.3 (Fire Hydrant System) – These BCA provisions necessitate a fire hydrant system for buildings more than 500m². The building has a floor area of approximately 300m², therefore a fire hydrant system and EP1.3 is not applicable.
- EP1.4 (Sprinkler System) – These BCA provisions necessitate a sprinkler system is required to certain buildings as outlined in BCA Table E1.5. This does not apply to the subject building, therefore EP1.4 is not applicable.
- EP 1.6 (Fire Control Centre) – These BCA provisions necessitate a fire control centre for buildings more than 18,000m² or having an effective height of more than 25m. This does not apply to the subject building, therefore EP1.6 is not applicable.
- EP 2.1 (Automatic Warning for Sleeping Occupants) – These BCA provisions necessitate detection systems for residential use buildings. The subject building has an existing smoke alarm to the First Floor Residential SOU, that requires review and the common egress stairway requires a smoke alarm system based on the First Floor use as Residential SOU, therefore EP2.1 is applicable. See Recommendations 18 & 19 below.
- EP 2.2 (Safe Evacuation Routes) – These BCA provisions necessitate evacuation routes must be maintained for the period of time occupants take to evacuate the part of the building. See Recommendations 4, 8, 9 & 19 below.
- EP 3.2 (Emergency Lifts) – These BCA provisions relate to buildings required to be provided with emergency lifts. Due to the building containing 2 storeys only, emergency lifts are not required, therefore the provisions of EP3.2 are not applicable.

In accordance with Clause 94 (1) (b), Recommendation Nos. 1 to 15, 17 to 21 are proposed to address the measures in in the building: -

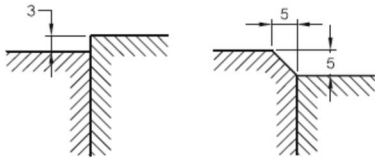
- (i) to protect persons using the building, and to facilitate their egress from the building, in the event of fire, or
- (ii) to restrict the spread of fire from the building to other buildings nearby.

3.2 BCA Fire & Life Safety Audit Strategy and Review & Recommendations

BCA Clause	Description	Strategy and Recommendations
C3.2	<p>Protection of openings in external walls:-</p> <p>Openings in external walls that are required to have an FRL are to be protected if they are exposed to a fire source feature in accordance with Clause C3.4 if:</p> <ul style="list-style-type: none"> • Wall is less than 3m from a side or rear boundary; • Less than 6m from the far boundary of a road, if not located in a storey at or near ground level; or • Less than 6m from another building on the same allotment <p>BCA Cl C3.4 requires protection as follows:</p> <ul style="list-style-type: none"> ➤ Fire windows with an FRL of -/60/- that are automatic closing or permanently shut (eg fire rated glass blocks), or ➤ Automatic closing fire shutters with an FRL of -/60/-, or ➤ External wall wetting drenchers on fixed / automatic closing windows. ➤ Self-closing or automatic closing fire doors with an FRL of -/60/30, or ➤ External wall wetting drenchers on self-closing or automatic closing doors. 	<p>Consideration: -</p> <p>Existing and proposed openings in external walls are less than 3.0m from the adjacent side / rear boundaries and are not protected, i.e.</p> <ul style="list-style-type: none"> • Ground Floor – main entry door of Tenancy No. 4 (travel Agency). • Ground Floor – rear window and infilled doorway of Tenancy No. 4 (travel Agency). • Ground Floor – rear windows to proposed café where above the existing boundary blade wall. • First Floor – rear windows (2 x) of Residential SOU. • First Floor – rear windows (2 x) of Education Tenancy. <p>Recommendation:</p> <p>1) Openings within 3.0m of the side / rear boundaries are to be protected in accordance with BCA Clause C3.4, or Obtain Alternative Building Solution from Registered Fire Engineer to enable use of fixed radiation attenuation screens with / without drenchers, subject to assessment. Screens would enable windows to be openable for ventilation.</p>
C3.11 (d)	<p>Bounding construction Class 2, 3 and 4 buildings:-</p> <p>Doors from sole occupancy units, and doors from rooms not within a SOU that open to an enclosed public corridor are to be:</p> <ul style="list-style-type: none"> • -/60/30 for Type A construction; • tight fitting self-closing solid core doors not less than 35mm thick for Type B and C construction 	<p>Consideration: -</p> <p>Doorways opening to main stair to be provided with self-closing solid core doors, i.e.</p> <ul style="list-style-type: none"> • Doorway from Ground Floor tenancy No. 4 (travel agency) to common stairway. • Doorway from First Floor (education tenancy) to common stairway. • Doorway from First Floor (residential SOU) to common stairway. <p>Recommendation:</p> <p>2) That the existing doorways (3x) opening to the main internal egress stair be upgraded with 35mm thick tight fitting self-closing solid core doors.</p>
C3.15	<p>Openings for service installations:-</p> <p>Electrical, plumbing, mechanical ventilation shafts not to impair the FRL of fire rated building elements</p>	<p>Consideration: -</p> <p>Services in First Floor appear to be passing through rear external wall in lieu of floor. Review required to confirm if any services pass through floor and upgrade if necessary to confirm they are fire sealed with fire collars or the like.</p> <p>Recommendation:</p> <p>3) That any UPVC pipes penetrating the floor above the Ground Floor be reviewed and provided with fire collars if not already installed. Fire collars are to be certified to satisfy the requirements of BCA Clause C3.15, Specification C3.15, AS1530.4 – 2014 and AS4072.1 2005.</p>

BCA Clause	Description	Strategy and Recommendations
Specification C1.1	<p>Fire Resisting Construction:-</p> <p>The building is required to be designed in accordance with Table 4 (Type B Construction) of the BCA.</p>	<p>Consideration: -</p> <ul style="list-style-type: none"> • Fire separation of Class 4 residential use is considered suitable based on masonry wall separating residential SOU from common stair is taken to underside of ceiling and the masonry wall separating the educational tenancy from the common stair appears to be taken to the underside of the roof. The later wall requires several openings in the wall to be infilled with materials to achieve an FRL of -/60/60. • Existing FRL's for the Ground Floor tenancy No. 1 the subject of the change of use to a café to be reviewed to confirm the external wall and internal loadbearing wall is suitable for the Class 6 use. • Existing floor slab separating proposed café is assumed to achieve equivalence to a fire protective covering. <p>Recommendations:</p> <ol style="list-style-type: none"> 4) That the masonry wall separating the First Floor education tenancy from the common stair be upgraded so that openings in the wall above the ceiling to be infilled with materials to achieve an FRL of -/60/60. 5) That the existing external masonry walls to the Ground Floor Tenancy No. 1 proposed as a café be verified from a structural engineer at CC Stage and upgraded where necessary to confirm an FRL of 180/180/180 is achieved. 6) That the internal wall to the Ground Floor Tenancy No. 1 proposed as a café be verified from a structural engineer at CC Stage and upgraded where necessary to confirm an FRL of 180/-/- is achieved.
D1.6	<p>Dimensions of exits:-</p> <ul style="list-style-type: none"> • Unobstructed height of an exit not less than 2m (1980mm for doorways); • 1m minimum width of a single exit. • door width to be a minimum of 800mm clear unobstructed area (in accordance with AS 1428.1) • width of exit must not diminish in direction of travel to an exit • required width of a stairway or ramp is to be measured clear of all obstructions and extend a minimum 2m above line of nosings or ramp 	<p>Consideration: -</p> <p>Width of common stair and First Floor corridor to Residential SOU is less than 1.0m, i.e. approximately 865mm and 950mm respectively. This reduced width is not considered to require rectification based on the width being at least 750mm which is the minimum clear width for a doorway and the relatively small number of occupants likely to use the stair and other upgrade works, i.e. provision of emergency lighting, exit signage, contrast stair nosings and handrails to assist users.</p> <p>Recommendation:</p> <ol style="list-style-type: none"> 7) That Council accept the reduced width of the internal stairway.

BCA Clause	Description	Strategy and Recommendations
D2.7	<p>Installations in exits and paths of travel:-</p> <ul style="list-style-type: none"> • Access to service shafts must not be from fire exit (unless for fire fighting services); • No openings to ducts conveying hot products of combustion; • Gas or fuel services not permitted within exit • Electrical or service equipment not permitted within fire exit – however can be in a path of travel to an exit if provided with fire protective covering and smoke seals 	<p><u>Consideration: -</u></p> <p>The main switch is located in the Ground Floor common stairway and is not enclosed in a cabinet with non-combustible internal linings with smoke seals fitted to the access doorways. This requires upgrading.</p> <p><u>Recommendation:</u></p> <p>8) That the main switch in the common internal stairway at Ground Floor be upgraded with a cabinet having non-combustible internal linings, including with smoke seals fitted to the access doors.</p>
D2.8	<p>Enclosure of space under stairs and ramps:-</p> <ul style="list-style-type: none"> • No enclosures/cupboards permitted in a fire stair; • Space below a non-fire isolated stair to remain unenclosed, unless construction with FRL of 60/60/60 with -/60/30 fire door. 	<p><u>Consideration: -</u></p> <p>There is a cupboard located in the Ground Floor beneath the common stairway and is not enclosed in fire rated construction. This requires upgrading.</p> <p><u>Recommendation:</u></p> <p>9) That the cupboard beneath the common stairway located at Ground Floor be upgraded with walls having an FRL of -/60/60 with -/60/30 fire doors in accordance with AS1905.1-2015.</p>

BCA Clause	Description	Strategy and Recommendations								
D2.13	<p>Goings and risers:-</p> <ul style="list-style-type: none"> Minimum 2 risers and maximum of 18 risers in any flight; Riser 115mm minimum, 190mm maximum dimensions – treads 250mm going to 355 maximum going. 2R+G 550mm min and 700 maximum. Goings and risers to be constant throughout. Constant means within each flight that variations between; adjacent risers, or between adjacent goings is no more than 5mm, and the largest and smallest riser, or largest and smallest going does not exceed 10mm. Risers not to permit a 125mm sphere to pass through; Treads to have slip resistance classification in accordance with Table D2.14 and AS4586-2013; No winders in lieu of a quarter landing  <p>Figure 2 – Acceptable Tolerance for Abutment of Surfaces</p> <table border="1" data-bbox="338 1220 813 1370"> <thead> <tr> <th rowspan="2">Application</th> <th colspan="2">Surface Conditions</th> </tr> <tr> <th>Dry</th> <th>Wet</th> </tr> </thead> <tbody> <tr> <td>Nosing</td> <td>P3</td> <td>P4</td> </tr> </tbody> </table> <p>Figure 3 – Extract BCA Table D2.14</p>	Application	Surface Conditions		Dry	Wet	Nosing	P3	P4	<p>Consideration: -</p> <p>Random inspection of internal and external egress stairs revealed sizes outside the range of permissible dimensions, i.e.:</p> <p><u>Internal Common Stair</u></p> <ul style="list-style-type: none"> Flights have risers varying by more than 5mm to consecutive risers / goings and variation by more than 10mm in flight, i.e. approx. variation of up to 30mm. Going is less than the minimum dimension of 250mm (i.e. 240mm to lower flight). Slip Resistance of tread surface material is unknown. <p><u>External Front & Rear Stair</u></p> <ul style="list-style-type: none"> Flight has risers varying by more than 5mm to consecutive risers / goings and variation by more than 10mm in flight, i.e. approx. variation of up to 60mm. Slip Resistance of tread surface material is unknown. <p>Rectification of the above would be difficult without reconstruction of the stairs. Occupants would generally be familiar with the stairway configuration or would benefit with installation of contrasting stair nosings in a contrasting colour that would assist to minimise slips and falls.</p> <p>Recommendation:</p> <p>10) That existing internal main stairway and rear external stairs be accepted subject to:-</p> <ol style="list-style-type: none"> Installation of stair nosings strips at least 50mm deep, across the full width of the stair with the strip having a minimum luminance contrast of 30% to the background (e.g. yellow nosing strip on existing concrete tread) to identify the nosings, and Nosings strips are to be fitted so that the abutment of surfaces has a smooth transition with the following construction tolerances: 1) +/- 3mm vertically, or 2) +/- 5mm provided the edges have a bevelled or round edge to reduce the likelihood of tripping as detailed in Figure 2 of this Report, and Nosings to have slip resistance classification consistent with Table D2.14 and AS4586-2013 as shown in Figure 3 of this Report, and Where suitable, e.g. concrete stairs, a durable painted or similar nosing may be used.
Application	Surface Conditions									
	Dry	Wet								
Nosing	P3	P4								

BCA Clause	Description	Strategy and Recommendations
D2.15	<p>Thresholds:-</p> <p>No step or ramp at any point closer to the doorway than the width of the door leaf, unless:</p> <ul style="list-style-type: none"> • Door opens to road or open space (and door sill not more than 190mm high); • Health care and aged care buildings have concessions 	<p>Consideration: -</p> <p>Various non-compliances exist, i.e.;</p> <ul style="list-style-type: none"> • Tenancy Nos 2 & 3 has 2 steps at the external doorways with a total height exceeding 190mm, i.e. approx. 245mm). • First Floor Tenancy & Residential SOU has 1 step at the entry doorway with a height of approx. 150mm & 100mm respectively). <p>It is proposed that this need not be upgraded subject to installation of a contrast nosing having a minimum luminance contrast of 30% to the background that will assist users identify the step to minimise slips and falls in an emergency.</p> <p>Recommendation:</p> <p>11) That the step/s at the Ground Floor Tenancy Nos 2 & 3 front external doorways and to each First Floor Tenancy / SOU from the common stairway, need not be rectified subject to the installation of 50mm nosing strips being provided with a contrasting colour having a minimum luminance contrast of 30% to the background and slip resistance classification in accordance with Table D2.14 and AS4586-2013 as shown in Figure 3 of this Report.</p>
D2.16	<p>Barriers to prevent falls (Balustrades):-</p> <p>A continuous barrier/balustrade to be provided along the side of any roof to with public access is provided, any stairway or ramp, any floor, corridor, hallway, balcony, veranda, mezzanine, access bridge or the like and along the side of any access path to a building if it is not bounded by a wall and the surface beneath is more than 4m for an openable window and 1m in any other case. Balustrade height to be at least 1.0m above level surfaces, 865mm above stair nosings and gaps to be not greater than 125mm (i.e. 125mm sphere must not pass through it).</p> <p>Where the floor is more than 4m above the surface beneath any horizontal elements between 150mm and 760mm must not facilitate climbing.</p>	<p>Consideration: -</p> <p>Main internal stair has a balustrade that is less than 1.0m (i.e. approx. 880mm) at the top floor, less than 865mm (i.e. approx. 740mm) above stair nosings and has gaps more than 125mm (i.e. approx. 410mm) nosings. This requires upgrading.</p> <p>Recommendation:</p> <p>12) That the balustrades to the internal egress stairway be upgraded so that the balustrade to the landing on the top floor be increased to be not less than 1.0m high above the landing, balustrade to the internal stair flights be increased to be not less than 865mm above nosings and gaps to balustrades are reduced to being not greater than 125mm, i.e. does not permit a 125mm sphere to pass through it.</p>
D2.17	<p>Handrails:-</p> <ul style="list-style-type: none"> • Located on at least one side of ramp or stairs at a height of at least 865mm; • Located on two sides of stairs when in excess of 2m in width (and where required by Clause D3.3 and AS1428.1); • 865mm above the stair nosings; • continuous between stair flight landings. 	<p>Consideration: -</p> <p>There is no handrail provided to the Ground Floor lower flight of the internal stair at the front entry.</p> <p>Recommendation:</p> <p>13) That the lower flight of the Ground Floor internal stair at the front entry be provided with a handrail at a height of at least 865mm.</p>

BCA Clause	Description	Strategy and Recommendations
D2.20	<p>Swinging doors:-</p> <p>Must not encroach more than 500mm into the required width of the stair, or when fully open not more than 100mm into the width of the exit.</p> <p>Door in exit to swing in the direction of egress unless the door serves a part of the building having an area not more than 200m² and the door is fitted with a hold open device.</p>	<p>Consideration: -</p> <p>Doors from individual tenancies swing inwards and the door from main internal stairway swings inwards. This requires upgrade.</p> <p>Recommendation:</p> <p>14) That the direction of door swing for the exit door from each individual tenancy be accepted subject an automatic hold open device (i.e. parrot beak type device) being installed to each door.</p>
D2.21	<p>Operation of latch:-</p> <p>Exit doors and doors in the path of travel to an exit to be provided with lever latch handle device located between 900mm and 1100mm above the floor and openable with a single handed downward action without recourse to a key and if serving an area required to be accessible by Part D3 of the BCA and:</p> <ul style="list-style-type: none"> • be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and • have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not < 35mm and not > 45mm. <p>Concessions apply to a Class 5, 6, 7 or 8 building or part with a floor area not more than 200m² or other areas subject to certain other conditions being met.</p>	<p>Consideration: -</p> <p>First Floor Educational Tenancy and doors from the main internal stairway is not a single-handed lever latch. This requires upgrade.</p> <p>Recommendation:</p> <p>15) That the First Floor Educational Tenancy and doors from the main internal stairway be provided with a single handed lever latch on the side facing a person seeking egress.</p>
D2.24	<p>Protection of openable windows:-</p> <p>(a) A window opening must be provided with protection if the floor below the window is 2m or more above the surface beneath in a bedroom of a Class 2, 3 or 4 part.</p> <p>(b) Where the lower level of the window opening is less than 1.7m above the floor, a window must be protected with a device to restrict the window opening or a screen with secure fittings.</p> <p>(c) A barrier with a height not less than 865mm above the floor is required to an openable window:-</p> <ul style="list-style-type: none"> • In addition to window protection when a child resistant screen release mechanism is required, & • For openable windows 4m or more above the surface of the window if not included in (a) above. <p>(d) A barrier required by (c) above must not permit a 125mm sphere to pass through and must have no horizontal or near elements between 150mm and 760mm above the floor that facilitates climbing.</p>	<p>Consideration: -</p> <p>The windows to the First Floor bedroom of the Residential SOU require upgrade to be provided with a suitable lock / device.</p> <p>Recommendation:</p> <p>16) That the First Floor bedroom windows be verified that the window opens no more than 125mm or other device so as not to permit a 125mm sphere to pass through and resist an outward horizontal action of 250N.</p>

BCA Clause	Description	Strategy and Recommendations
E1.6	<p>Portable Extinguishers:- To be installed to AS2444</p>	<p>Consideration: - There are no existing portable fire extinguishers. This requires upgrade.</p> <p>Recommendation: 17) That portable fire extinguishers be provided and certification confirming compliance with BCA Clause E1.6 & AS2444-2001.</p>
E2.2	<p>General requirements for smoke hazard management (including Tables E2.2a & E2.2b).</p> <ul style="list-style-type: none"> • Class 4 Building – Must be provided with a smoke detection and alarm system in accordance with BCA Specification E2.2a 	<p>Consideration: -</p> <ul style="list-style-type: none"> • Smoke alarm provided in Residential SOU requires review due to age and confirmation smoke alarm is hard wired. This requires review. • No smoke alarm system provided to common internal stairway. This requires upgrade. <p>Recommendations:</p> <p>18) That the Smoke alarms within the First Floor SOU be verified confirming it is hard wired, connected to the consumer mains in accordance with AS3786-2014 and Clause 3 of BCA Specification E2.2a.</p> <p>19) That the common stair be provided with a smoke alarm system at each level in accordance with Clause 3 of BCA Specification E2.2a, together with a building occupant warning system in accordance with Clause 3.22 of AS1670.1, except as modified in Clause 7 of BCA Specification E2.2.</p>
E4.2	<p>Emergency Lighting:- Required (in accordance with AS 2293.1) in:</p> <ul style="list-style-type: none"> • Every fire isolated exit; • every storey >300m² in area • any room or space to which there is public access in every storey in a Class 6 or 9b building if that storey has a floor area >300m², or any point more than 20m from a doorway leading directly to stairway of open space; • every non-fire isolated stairway 	<p>Consideration: - Emergency lighting system is not provided to main internal egress stairway and common corridor in accordance with AS/NZS2293.1-2018. This requires upgrade.</p> <p>Recommendation: 20) That an emergency lighting system be provided to the main internal egress stairway and common corridor in accordance with AS/NZS2293.1-2018.</p>
E4.5 & E4.6	<p>Exit signs and Directional Signs:- Clearly visible to persons approaching an exit, above doors:</p> <ul style="list-style-type: none"> • to enclosed or external stairs, passageways and ramps • to external access balcony, • from an enclosed stair, passageway or ramp at the level of discharge to the road; • acting as horizontal exits; • serving as or forming part of a required exit in a storey with emergency lighting. <p>Exits must be readily apparent with directional exit signage as required.</p>	<p>Consideration: - There are no existing exit signs at final exit door in the common egress stair and at the First Floor. This requires upgrade.</p> <p>Recommendation: 21) That an illuminated exit signage system be provided to the common internal stairway, i.e. exit sign above the Ground Floor egress doors within the stairway and a directional exit sign at the First Floor in accordance with AS/NZS2293.1-2018.</p>

4. Conclusion

An assessment of the existing building having regard to the proposed strata subdivision, change of use and new works has been undertaken in accordance with the provisions of the Building Code of Australia 2019 (BCA).

Annexure A contains an assessment of the proposal. It should be noted the new works are subject to compliance with the BCA to be reviewed and confirmed by the Accredited Certifier prior to issuing the Construction Certificate.

Section 3.1 above outlines a strategy detailing that the proposed strata subdivision, change of use and works to the existing building may be undertaken. Where relevant these elements are detailed in the upgrade strategy in Table 3.1 of this Report for Council acceptance consistent with the provisions of Clause 93 & / or 94 of the Environmental Planning and Assessment Regulation.

It is therefore concluded that the proposal is capable of readily achieving compliance with the intent of the BCA in an upgrade strategy, or compliance with the BCA either by satisfying the BCA Deemed-to-Satisfy Provisions or addressed in an Alternative Solution Report for consideration at the Construction Certificate Stage.

ANNEXURE A (DtS Assessment)

Building Code of Australia 2019, Amendment 1 Deemed-To-Satisfy Assessment (Clause by Clause) (Class 2-9 Buildings)

Classification of Building or Part:	4, 6, 9b
Rise in Storeys:	Two (2)
Type of Construction:	Type B
Effective height	< 25m

Key:

Complies	The building works proposed generally complies with this Clause or there are no significant deficiencies.
DNC	The works proposed does not comply with this Clause or proposed works impacts on the existing building.
?	Further documentation/ investigation required.
CR	Certification or verification required that the building works proposed complies with this Clause prior to BCA Certification being issued. (Note: BCA Certification will require Structural, architectural and services drawings, specification with certification nominating all relevant BCA Clauses and the Australian Standards including the year of the standard).
NA	This Clause is not applicable to the building works proposed or to this assessment.
Noted	The contents of this Clause is noted for reference.
AS.	Alternative (Building) Solution using Performance Requirements is relevant in relation to the works proposed.

Section A	General Provisions
Part A3.2	CLASSIFICATION
	Proposed for Tenancy 1 (Storage / garage area) - Class 6 (Cafe). Existing Shop 2 to 4 (Class 6) Existing First Floor Commercial Educational (Class 9b) Existing First Floor Residential (Class 4)

Section C	Fire Resistance	Comment
Part C1	FIRE RESITANCE AND STABILITY	
C1.1	Type of Construction	Type B
C1.2	Calculation of Rise In Storeys:- Greatest number of storeys at any part of the external walls of the building above the finished ground at that part	Two (2)
C1.3	Buildings of Multiple Classification:- Type of construction required is determined by the classification of the top storey applies to all storeys	Noted.

Section C	Fire Resistance	Comment
C1.4	<p>Mixed Types of Construction:-</p> <p>Separation of the building by a fire wall (complying with clause C2.7) may permit mixed type of construction for a building.</p>	Noted. Assumed entire building to satisfy FRL's required for designated Type of Construction, i.e. Type B.
C1.5	<p>Two Storey Class 2, 3 or 9c buildings:-</p> <p>A building with a rise in storeys of 2 may be Type C construction where:</p> <ul style="list-style-type: none"> • Each SOU of Class 2 or 3 building has access to at least 2 exits; or its own access to road or open space; • Class 9c building not exceeding 3,000m² FA 	NA
C1.6	<p>Class 4 Parts of Buildings:-</p> <p>Class 4 part of a building requires the same FRL and fire separation from the remaining parts as a Class 2 part in similar circumstances.</p>	Noted. Class 4 applies to existing single residential SOU.
C1.7	<p>Open Spectator Stands & Indoor Sports Stadiums:-</p> <p>May be of Type C Construction if:</p> <ul style="list-style-type: none"> • Only 1 tier of seating; • Non-combustible material; and • Only sanitary facilities/change rooms below the tiers. 	NA
C1.8	<p>Lightweight Construction:-</p> <p>May be used for fire rating of elements if it is in accordance with Specification C1.8.</p>	NA
C1.9	<p>Non-combustible Building Elements:-</p> <p>In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:</p> <ol style="list-style-type: none"> (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) Non-loadbearing internal walls where they are required to be fire-resisting. <p>A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in—</p> <ol style="list-style-type: none"> (i) a building required to be of Type A construction; and (ii) a building required to be of Type B construction, subject to C2.10, in— <ul style="list-style-type: none"> • a Class 2, 3 or 9 building; and <p>a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.</p>	Complies. Existing building elements to be retained are brick or concrete.
C1.10	<p>Early Fire Hazard Properties:-</p> <p>Materials and assemblies used in the building must comply with the requirements of Specification C1.10.</p>	<p>CR. New works - Details to be provided with Construction Certificate documentation.</p> <p>NA. Finishes within individual Tenancies and SOU not assessed as this would have minimal impact on the tenability of the common egress stair and is difficult to monitor</p>

Section C	Fire Resistance	Comment
C1.11	<p>Performance of External Walls:-</p> <p>Concrete external walls that could collapse as complete panels in building of 2 storeys or less must comply with Specification C1.11.</p>	NA
C1.12	<p>Non-Combustible Material – the following materials may be used where non-combustible materials are required:</p> <ul style="list-style-type: none"> • Plasterboard; • Perforated gypsum; • Fibrous plaster sheeting; • Fire reinforced cement sheeting; • Pre-finished metal sheeting; • Bonded laminate materials 	Noted
C1.13	<p>Fire Protected Timber: Concession – Fire-protected timber may be used in a Class 2, 3 or 5 building where an element is required to be non-combustible if;</p> <ul style="list-style-type: none"> • The building is a separate building, or a part of a building separated from the remainder by a Fire Wall or similar construction; and • The building has an effective height not more than 25m, and. • The building has a sprinkler system throughout (as per E1.5), and • Any insulation installed in the cavity of the timber element required to have an FRL is non-combustible, and • Cavity barriers are protected in accordance with Spec C1.13. 	Noted
C1.14	<p>Ancillary Elements – Fire-protected timber may be used</p> <p>An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless it is one of the following:</p> <ul style="list-style-type: none"> (a) An ancillary element that is non-combustible. (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. (d) A grate or grille not more than 2 m² in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate, etc. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— <ul style="list-style-type: none"> (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; & (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— <ul style="list-style-type: none"> (i) meets the relevant requirements of Table 4 of Specification C1.10 as for an internal element; and (ii) serves a storey— <ul style="list-style-type: none"> (A) at ground level; or (B) immediately above a storey at ground level; & (iii) does not serve an exit, where it would render the exits unusable in a fire. 	Complies.

Section C	Fire Resistance	Comment
Part C2	FIRE RESISTANCE	
C2.2	General Floor Area Limitations:	Complies
C2.3	Large Isolated Buildings:- Larger fire compartments may be permissible in certain circumstances. Buildings closer than 6m are regarded as one building and must collectively comply with clause C2.3.	NA
C2.4	Requirements for open space:- Open space and vehicular access capable of supporting emergency vehicles, area 6m wide and not more than 18m from the building.	NA
C2.5	Class 9a and class 9c buildings:- Requirements for compartmentation for the control of smoke and fire within health care and aged care building must comply with the requirements of this clause and also specification C2.5	NA
C2.6	Vertical separation of openings in external walls:- Applicable to buildings of Type A construction and not sprinkler protected. Openings in external walls of a building of Type A Construction must be separated from openings in the storey next below either by 900mm high vertical spandrel panels or 1100mm horizontal projections no less than 450mm beyond the relevant openings. Spandrel construction must be fire rated to achieve an FRL of 60/60/60.	NA
C2.7	Separation by fire walls:- A part of a building separated by a fire wall may be considered a separate building for the purposes of Parts C, D and E. A part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with CI C2.7 (a) and Specification C1.1 and extends to the underside of a floor having an FRL required for a fire wall or the roof covering.	NA
C2.8	Separation of classifications in the same storey:- Building parts to be separated in the storey by a fire wall or each building element to adopt the higher FRL as required in Specification C1.1 of the BCA.	NA. FRL's assumed to be suitable for Class 6 use on the basis the remainder of the Ground Floor is an existing Class 6 use.
C2.9	Separation of classifications in different storeys:- The separating floors must have an FRL; <ul style="list-style-type: none">• Type A Construction – not less than that required for the lower storey use.• Type B or C Construction – if one of the adjoin parts of Class 2, 3 or 4<ol style="list-style-type: none">a) Resistance to the incipient spread of fire to the space above itself of not less than 60 minutes, orb) Construction having an FRL of 30/30/30, orc) Ceiling with fire protective covering (eg 13mm fire grade plasterboard).	NA. FRL's assumed to be suitable for Class 6 use on the basis the remainder of the Ground Floor is an existing Class 6 use.

Section C	Fire Resistance	Comment
C2.10	<p>Separation of lift shafts:-</p> <p>Lift to be enclosed in a fire rated shaft when connecting more than 2 storeys (or more than 3 storeys in a sprinklered building).</p>	NA
C2.11	<p>Stairways and lifts in one shaft:-</p> <p>Not to be in the same shaft if either is to be fire isolated.</p>	NA
C2.12	<p>Separation of equipment:-</p> <p>Lift motors, emergency generators, smoke control exhaust fans, boilers or batteries are to be enclosed by construction achieving an FRL of 120/120/120.</p>	NA
C2.13	<p>Electricity supply system:-</p> <p>If the electrical substation is to be located within the building it must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors.</p> <p>The main switchboard that houses the emergency equipment operating in emergency mode must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors.</p>	NA
C2.14	<p>Public corridors in Class 2 & 3 buildings:-</p> <p>Public corridor >40m long to be divided into intervals of <40m by smoke proof walls complying with Clause 2 of Specification C2.5, ie:-</p> <ul style="list-style-type: none"> Smoke walls that are non-combustible and extend to the underside of the floor above, a non-combustible roof or fire rated ceiling, and Any glazed areas is safety glass as defined by AS1288-2006, and Doorways must satisfy BCA Specification C3.4, and Penetrations and junctions suitably smoke sealed. 	NA
PART C3	PROTECTION OF OPENINGS	
C3.2	<p>Protection of openings in external walls:-</p> <p>Openings in external walls that are required to have an FRL are to be protected if they are exposed to a fire source feature in accordance with Clause C3.4 if:</p> <ul style="list-style-type: none"> Wall is less than 3m from a side or rear boundary; Less than 6m from the far boundary of a road, if not located in a storey at or near ground level; or Less than 6m from another building on the same allotment 	<p>DNC. Existing and proposed openings in external walls are less than 3.0m from the adjacent side / rear boundaries and are not protected, i.e.</p> <ul style="list-style-type: none"> Ground Floor – main entry door of Tenancy No. 4 (travel Agency). Ground Floor – rear window and infilled doorway of Tenancy No. 4 (travel Agency). Ground Floor – rear windows to proposed café where above the existing boundary blade wall. First Floor – rear windows (2 x) of Residential SOU. First Floor – rear windows (2 x) of Education Tenancy..

Section C	Fire Resistance	Comment
C3.3	<p>Separation of openings in different fire compartments:-</p> <p>External walls of different fire compartments are to be separated by a fire wall with FRL not less than 60/60/60 and any openings within the prescribed distances to be protected in accordance with Clause C3.4.</p>	NA
C3.4	<p>Acceptable methods of protection:-</p> <p>Fixed fire rated glass; self-closing or automatic closing windows with drenchers; automatic fire shutters; automatic closing fire rated windows.</p> <p>Doors to be self-closing or automatic closing.</p>	DNC. Existing and proposed openings in external walls are less than 3.0m from the adjacent side / rear boundaries and are not protected as listed in C3.2 above.
C3.5	<p>Doorways in fire walls:-</p> <p>Doorways in a fire wall (that is not part of an horizontal exit) must not exceed ½ the length of the fire wall, and</p> <ul style="list-style-type: none"> • Have the FRL required for the fire wall, and • Be self-closing or automatic closing upon activation of a smoke/fire detector 	NA.
C3.6	<p>Sliding fire doors in fire walls:-</p> <p>If open when the building is in use they must fail safe in the closed position and be provided with warning devices and flashing lights</p>	NA.
C3.7	<p>Protection of doorways in horizontal exits:-</p> <p>To be self-closing or automatic closing fire doors</p>	NA.
C3.8	<p>Openings in fire isolated exits:-</p> <p>To be -/60/30 self-closing fire doors</p> <p>Windows in external walls of fire-isolated exits to be protected in accordance with C3.4 if within 6.0m and exposed to another opening in the same building.</p>	NA.
C3.9	<p>Service penetrations in fire Isolated exits:-</p> <p>Fire isolated exits must not be penetrated by services other than electrical wiring permitted by clause D 2.7; mechanical ducting for pressurization systems; and water supply pipes for fire hydrants, etc.</p>	NA
C3.10	<p>Openings in fire isolated lift shafts:-</p> <ul style="list-style-type: none"> • Doors to be -/60/- fire doors in accordance with AS 1735.11; • Lift indicator panels to be constructed with -/60/60 backing if the lift exceeds 35,000mm² 	NA.
C3.11	<p>Bounding construction Class 2, 3 and 4 buildings:-</p> <p>Doors from sole occupancy units, and doors from rooms not within a SOU that open to an enclosed public corridor are to be:</p> <ul style="list-style-type: none"> • -/60/30 for Type A construction; • tight fitting self-closing solid core doors not less than 35mm thick for Type B and C construction <p>The path of travel from a sole occupancy unit must be protected if there is no alternative exit and passes an external wall of another sole occupancy unit or room.</p>	<p>DNC. Doorways opening to main stair to be provided with self-closing solid core doors, i.e.</p> <ul style="list-style-type: none"> • Doorway from Ground Floor tenancy No. 4 (travel agency) to common stairway. • Doorway from First Floor (education tenancy) to common stairway. • Doorway from First Floor (residential SOU) to common stairway.

Section C	Fire Resistance	Comment
C3.12	Openings in floors for services:- To be enclosed in fire rated shaft with FRL in accordance with Specification C1.1	NA.
C3.13	Openings in shafts:- Openings to shafts must be protected with a self-closing - /60/30 fire door or hopper.	NA
C3.15	Openings for service installations:- Electrical, plumbing, mechanical ventilation shafts not to impair the FRL of fire rated building elements	?. Services in First Floor appear to be passing through rear external wall in lieu of floor. Review required to confirm if any services pass through floor, fire seals are adequately installed. Details to be provided with Construction Certificate documentation.
C3.16	Construction Joints:- Fire resisting materials to be provided to construction joints to be identical with prototype tested in accordance with AS1530.4 to achieve the required FRL	Complies. No visible signs of existing non-compliance. CR. New works - Details to be provided with Construction Certificate documentation.
C3.17	Columns protected with lightweight construction to achieve an FRL	NA
Specification C1.1	Fire Resisting Construction:- The building is required to be designed in accordance with Table 4 (Type B Construction) of the BCA.	?. Existing FRL's for tenancy the subject of the change of use to be reviewed to confirm the external wall and internal loadbearing wall is suitable for the Class 6 use. CR. Fire separation of Class 4 residential use is considered suitable based on masonry wall separating residential SOU from common stair is taken to underside of ceiling and the masonry wall separating the educational tenancy from the common stair appears to be taken to the underside of the roof. The later all requires several openings in the wall to be infilled with materials to achieve an FRL of -/60/60. CR. New works - Details required with Construction Certificate documentation.
Specification C3.4	Fire Doors, Smoke Doors, Fire Windows and Shutters A required fire door must comply with AS 1905.1 – 2015 and not fail by radiation through any glazed part during the period specified for integrity in the required FRL.	CR. Details required with Construction Certificate documentation.

Section D	Access and Egress	Comment
PART D1	PROVISION FOR ESCAPE	
D1.1	Application of part:- DTS provisions do not apply to internal parts of a SOU in Class 2, 3 or 4	Noted.

Section D	Access and Egress	Comment
D1.2	<p>Number of exits required:-</p> <p>Every building must have a least one exit from each storey, and a minimum of 2 exits are required in particular circumstances.</p> <p>Without passing through another sole occupancy unit every occupant of a storey or part must have access to either an exit, or at least 2 exits if 2 or more are required.</p>	Complies
D1.3	<p>When Fire isolated exits are required:-</p> <p>Generally, every required exit must be fire isolated if it connects, passes by or passes through:</p> <ul style="list-style-type: none"> • more than 3 storeys of a class 2; • more than 2 storeys of a classes 3 to 9. <p>And one additional storey may be included if it is solely for motor vehicles or other ancillary purposes or entire building is sprinkler protected.</p>	NA.
D1.4	<p>Exit Travel Distances:-</p> <p>Class 2, 3 buildings – Entrance doorway of SOU to be not more than 6m from an exit, or 6m from a point of choice between 2 exits. A single exit serving the storey at the level of egress to a road or open space may be 20m.</p> <p>Class 5 – 9 buildings. No point on a floor must be more than 20m from an exit or a point from which travel in different directions to 2 exits is available, in which case the maximum travel distance to 1 of those exits not to exceed 40m.</p> <p>Class 5/6 building – the distance to a single exit serving the storey at the level of access to a road or open space may be increased to 30m.</p>	Complies.
D1.5	<p>Distances between alternative exits:-</p> <p>Exits required as alternative exits must be distributed as uniformly as possible; not less than 9m apart; not more than 60m apart (45m apart for class 2, 3 and 9a health care); located so alternative paths do not converge to less than 6m.</p>	Complies.
D1.6	<p>Dimensions of exits:-</p> <ul style="list-style-type: none"> • Unobstructed height of an exit not less than 2m (1980mm for doorways); • 1m minimum width of a single exit; and increased where applicable for populations, eg; • if the storey or mezzanine accommodates more than 200 persons the aggregate unobstructed width of the exit must not be less than 1m plus 250mm for every person in excess of 100 • door width to be a minimum of 850mm clear unobstructed area (in accordance with AS 1428.1) • width of exit must not diminish in direction of travel to an exit • required width of a stairway or ramp is to be measured clear of all obstructions and extend a minimum 2m above line of nosings or ramp 	DNC. Width of common stair and First Floor corridor to Residential SOU is less than 1.0m, i.e. approximately 865mm and 950mm respectively.

Section D	Access and Egress	Comment
D1.7	<p>Travel via fire isolated exits:-</p> <p>Door must not discharge directly into fire isolated exit unless it is from public corridor, etc; SOU occupying all of the storey; or a sanitary compartment.</p> <p>Must discharge directly to the road or open space, and not pass within 6m of openings within the wall of the same building, unless that part of the wall has an FRL of 60/60/60 and any doors are protected in accordance with C3.4.</p> <p>If > 2 doors open into exit – pressurisation; or smoke lobbies to be provided.</p>	NA
D1.8	<p>External stairways or ramps in lieu of a fire isolated exit:-</p> <p>External stairs may be used instead of a fire isolated exit in buildings under 25m in effective height.</p>	NA
D1.9	<p>Travel by non fire isolated stairways or ramps:-</p> <ul style="list-style-type: none"> • must provide continuous means of travel by its own flights of stairs to the level at which egress to a road or open space is provided; • Class 2, 3 or 4: distance between SOU and point of egress to road/open space not to exceed 60m, or 30m if Type C construction. • Non fire-isolated stair in a Class 2 building must discharge not more than 15m from an exit door leading to open space. • Class 5-9: stair to discharge at a point no more than 20m from a door providing egress to a road or open space; or 40m from one of 2 exits if travel is in opposite directions. Total distance travelled – 80m maximum. 	Complies
D1.10	<p>Discharge from exits:-</p> <ul style="list-style-type: none"> • Not to be blocked at the point of discharge • Path of travel to the road to be via a stair or by a ramp with gradients no steeper than 1:8 (or 1:14 of ramp required for disabled access). 	Complies
D1.11	<p>Horizontal exits:-</p> <p>Not counted as required exits between SOUs or in a class 9b primary/secondary school, early child hood centre.</p>	NA
D1.12	<p>Non-Required stairways ramps and escalators:-</p> <p>Generally, unsprinklered buildings can connect 3 stories in a class 2 building and 2 storeys in a class 3-9 building.</p>	Noted
D1.13	<p>Number of persons accommodated:-</p> <p>In accordance with Table D1.13, or reference to a seating layout in an assembly building, unless confirmation from building owner is more accurate.</p>	Noted. First Floor Educational Tenancy has 9 students based on advice from the owner.
D1.14	<p>Measurement of distances:-</p> <p>Identifies the nearest part of the exit to measure travel distance</p>	Noted
D1.15	<p>Method of measurement:-</p> <p>Specifies the method of measuring the distance of travel to an exit</p>	Noted

Section D	Access and Egress	Comment
D1.16	<p>Plant rooms, lift machine rooms and electrical network substations: Concession:-</p> <p>A ladder may be used in lieu of a stair for egress from:</p> <ul style="list-style-type: none"> • A plant room with a floor area not more than 100m² 	NA. Nil proposed.
D1.17	<p>Access to lift pits:-</p> <p>Where the pit depth is < 3m access to be through the lowest landing doors.</p>	NA
PART D2	CONSTRUCTION OF EXITS	
D2.1	<p>Application of Part:-</p> <p>Except for clauses D2.13, D2.14(a) and D2.16 do not apply to the internal part of a class 2 and 3 buildings (with the addition of D2.18 for class 2)</p>	Noted
D2.2	<p>Fire-Isolated stairways & ramps:-</p> <p>Must be within fire resisting shaft and be constructed of non-combustible materials</p>	NA.
D2.3	<p>Non-Fire-Isolated stairways and ramps:-</p> <p>Rise in Storeys > 2, to be constructed from either:</p> <ul style="list-style-type: none"> • Reinforced or prestressed concrete • 6mm thick steel • 44mm thick timber & an average density of not less than 800 kg/m³ at a moisture content of 12% 	Complies.
D2.4	<p>Separation of rising and descending stair flights:-</p> <p>A required fire isolated stair must have no direct connection between a flight of stairs rising from below the level of access to the road and a flight of stairs descending from a storey above that level.</p>	NA.
D2.5	<p>Open access ramps and balconies:-</p> <p>Where an open access balcony is provided for smoke hazard management it must:</p> <ul style="list-style-type: none"> • have ventilation openings to the outside air; • not be enclosed on its open sides above 1m except by eg. Grills that are >75% free air space 	NA.
D2.6	<p>Smoke lobbies:-</p> <p>Where a smoke lobby is required by Clause D1.7 it must:</p> <ul style="list-style-type: none"> • have floor area 6m² minimum; • be separated by walls impervious to smoke; • be fitted with smoke doors; • be pressurised if the adjoining exit are so required. 	NA.
D2.7	<p>Installations in exits and paths of travel:-</p> <ul style="list-style-type: none"> • Access to service shafts must not be from fire exit (unless for fire fighting services); • No openings to ducts conveying hot products of combustion; • Gas or fuel services not permitted within exit • Electrical or service equipment not permitted within fire exit – however can be in a path of travel to an exit if provided with fire protective covering and smoke seals 	<p>DNC. Main switch is located in the Ground Floor common stairway and is not enclosed in a cabinet with non-combustible internal linings with smoke seals fitted to the access doorways.</p> <p>CR. New works - Details to be provided with Construction Certificate documentation.</p>

Section D	Access and Egress	Comment
D2.8	<p>Enclosure of space under stairs and ramps:-</p> <ul style="list-style-type: none"> No enclosures/cupboards permitted in a fire stair; Space below a non-fire isolated stair to remain unenclosed, unless construction with FRL of 60/60/60 with -/60/30 fire door. 	<p>DNC. Cupboard is located in the Ground Floor beneath the common stairway and is not enclosed in fire rated construction.</p> <p>CR. New works - Details to be provided with Construction Certificate documentation.</p>
D2.9	<p>Width of stairways:-</p> <p>A stairway that exceeds 2m in width is counted as having a width of only 2m unless divided by handrail.</p>	Noted
D2.10	<p>Pedestrian ramps:-</p> <p>Ramp serving as a required exit must:</p> <p>Be maximum 1:14 gradient if required for disabled access (in accordance with AS 1428.1);</p> <p>Maximum 1:8 gradient in other cases;</p> <p>Floor surfaces to have slip resistance classification in accordance with Table D2.14 and AS4586-2013</p>	NA.
D2.11	<p>Fire Isolated passageways:-</p> <p>To achieve the same FRL as required for a fire isolated stair (or otherwise a minimum FRL of 60/60/60)</p>	NA.
D2.12	<p>Roof as open space:-</p> <p>If an exit discharges to a roof of a building, the roof must:</p> <p>Have an FRL of 120/120/120, &</p> <p>Not have rooflights or other openings within 3m of the path of travel</p>	NA to scope of works
D2.13	<p>Goings and risers:-</p> <ul style="list-style-type: none"> Minimum 2 risers and maximum of 18 risers in any flight; Riser 115mm minimum, 190mm maximum dimensions – treads 250mm going to 355 maximum going. 2R+G 550mm min and 700 maximum. Goings and risers to be constant throughout. Constant means within each flight that variations between <ul style="list-style-type: none"> a) adjacent risers, or between adjacent goings is no more than 5mm, and b) the largest and smallest riser, or largest and smallest going does not exceed 10mm. Risers not to permit a 125mm sphere to pass through; Treads to have slip resistance classification in accordance with Table D2.14 and AS4586-2013; No winders in lieu of a quarter landing 	<p>DNC – Random inspection of internal egress stairs revealed sizes outside the range of permissible dimensions, i.e.:</p> <p><u>Internal Common Stair</u></p> <ul style="list-style-type: none"> Flights have risers varying by more than 5mm to consecutive risers / goings and variation by more than 10mm in flight, i.e. approx. variation of up to 30mm. Going is less than the minimum dimension of 250mm (i.e. 240mm to lower flight). Slip Resistance of tread surface material is unknown. <p><u>External Front & Rear Stair</u></p> <ul style="list-style-type: none"> Flight has risers varying by more than 5mm to consecutive risers / goings and variation by more than 10mm in flight, i.e. approx. variation of up to 60mm. Slip Resistance of tread surface material is unknown.

Section D	Access and Egress	Comment
D2.14	<p>Landings:-</p> <p>In a stairway – maximum gradient of 1:50 and minimum of 750mm long.</p> <p>Landings to have slip resistance classification in accordance with Table D2.14 and AS4586-2013;</p> <p>Class 9a buildings – area of any landing to be sufficient to move a stretcher 2m long and 600mm wide at a gradient of the stairs gradient; or a clear width of not less than 1.6m and clear length of 2.7m</p>	NA.
D2.15	<p>Thresholds:-</p> <p>No step or ramp at any point closer to the doorway than the width of the door leaf, unless:</p> <ul style="list-style-type: none"> • Door opens to road or open space (and door sill not more than 190mm high); • Health care and aged care buildings have concessions 	<p>DNC. Various non-compliances;</p> <ul style="list-style-type: none"> • Tenancy Nos 2 & 3 has 2 steps at the external doorways with a total height exceeding 190mm, i.e. approx. 245mm). • First Floor Tenancy & Residential SOU has 1 step at the entry doorway with a height of approx. 150mm & 100mm respectively). <p>CR. New works Details to be provided with Construction Certificate documentation.</p>
D2.16	<p>Barriers to Prevent Falls (Balustrades):-</p> <p>A continuous barrier/balustrade to be provided along the side of any roof to with public access is provided, any stairway or ramp, any floor, corridor, hallway, balcony, veranda, mezzanine, access bridge or the like and along the side of any access path to a building if it is not bounded by a wall and the surface beneath is more than 4m for an openable window and 1m in any other case. Balustrade height to be at least 1.0m above level surfaces, 865mm above stair nosings and gaps to be not greater than 125mm (ie 125mm sphere must not pass through it).</p> <p>Where the floor is more than 4m above the surface beneath any horizontal elements between 150mm and 760mm must not facilitate climbing.</p> <p>Barriers/balustrades for fire-isolated stairs to be constructed so as not to provide rail at not more 150mm above the stair, landing and mezzanine floor, openings of not more than 300mm for balusters and not more than 460mm openings where rails provided.</p>	<p>DNC – Main internal stair has a balustrade that is less than 1.0m (i.e. approx. 880mm) at the top floor, less than 865mm (i.e. approx. 740mm) above stair nosings and has gaps more than 125mm (i.e. approx. 410mm) nosings.</p> <p>Complies. Window in common stair has sill height of at least 865mm.</p>
D2.17	<p>Handrails:-</p> <ul style="list-style-type: none"> • Located on at least one side of ramp or stairs; • Located on two sides of stairs when in excess of 2m in width (and where required by Clause D3.3 and AS1428.1); • 865mm above the stair nosings (second handrail at 750mm for class 9b primary school buildings); • continuous between stair flight landings. 	<p>DNC. Handrail to internal a stairway less than 865, i.e. approximately 740mm.</p> <p>DNC. No handrail to lower flight of internal stair at front entry.</p>
D2.18	<p>Fixed platforms, walkways stairways and ladders:</p> <p>Treads, risers, handrails and balustrades in plant rooms, lift motor rooms or non-habitable parts of a class 2/4 SOU etc to comply with AS 1657</p>	NA

Section D	Access and Egress	Comment
D2.19	<p>Doorways and doors:-</p> <p>Doors in exits (or in patient care areas of class 9a) must not be fitted with roller door; roller shutter or tilt up door. Can only be fitted with a sliding door if it leads directly to open space and the door is able to be opened manually under a force of not more than 110N.</p> <p>If fitted with a power operated door must be opened manually under a force of not more than 110N and automatic fail safe open device on power failure or on activation of a smoke detector in the fire compartment served by the door.</p>	Complies. Swinging doors.
D2.20	<p>Swinging doors:-</p> <p>Must not encroach more than 500mm into the required width of the stair, or when fully open not more than 100mm into the width of the exit.</p> <p>Door in exit to swing in the direction of egress unless the door serves a part of the building having an area not more than 200m² and the door is fitted with a hold open device.</p>	<p>DNC. Doors from individual tenancies swing inwards.</p> <p>DNC. Door from main internal stairway swings inwards.</p> <p>CR. New works - Details to be provided with Construction Certificate documentation.</p>
D2.21	<p>Operation of latch:-</p> <p>Exit doors and doors in the path of travel to an exit to be provided with lever latch handle device located between 900mm and 1100mm above the floor and openable with a single handed downward action without recourse to a key and if serving an area required to be accessible by Part D3 of the BCA and:</p> <ul style="list-style-type: none"> • be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and • have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not < 35mm and not > 45mm. <p>Concessions apply to a Class 5, 6, 7 or 8 building or part with a floor area not more than 200m² or other areas subject to certain other conditions being met.</p> <p>Doors from Class 9b building that accommodates more than 100 persons to be provided with latch having a single handed pushing action such as a panic bar.</p>	<p>Complies. Ground Floor tenancies. Concession available due to tenancies having a floor area less than 200m².</p> <p>DNC. First Floor Educational Tenancy and door from main internal stairway is not single handed lever latch.</p> <p>CR. New works - Details to be provided with Construction Certificate documentation.</p>
D2.22	<p>Re-entry from fire isolated exits:-</p> <p>Doors in a fire isolated exit within a class 9a health care building, a class 9c aged care building or a building with effective height of > 25m must not be locked from the inside to prevent re-entry</p>	NA.
D2.23	<p>Signs on doors:-</p> <p>Signage is required to fire/smoke doors to alert persons that the operation of some doors must not be impaired.</p>	NA.

Section D	Access and Egress	Comment
D2.24	<p>Protection of openable windows:-</p> <p>(e) A window opening must be provided with protection if the floor below the window is 2m or more above the surface beneath in a Class 9b early childhood centre or in a bedroom of a Class 2, 3 or 4 part.</p> <p>(f) Where the lower level of the window opening is less than 1.7m above the floor, a window must be protected with a device to restrict the window opening or a screen with secure fittings.</p> <p>(g) A barrier with a height not less than 865mm above the floor is required to an openable window:-</p> <ul style="list-style-type: none"> • In addition to window protection when a child resistant screen release mechanism is required, & • For openable windows 4m or more above the surface of the window if not included in (a) above. <p>(h) A barrier required by (c), except for (e) above must not permit a 125mm sphere to pass through and must have no horizontal or near elements between 150mm and 760mm above the floor that facilitates climbing.</p> <p>(i) A barrier required by (c) to an openable window in:-</p> <ul style="list-style-type: none"> • Fire-isolated stairs/ramps and other areas used primarily for emergency purposes, excluding external stairs/ramps, and • Class 7 (other than carparks) and Class 8 buildings and parts containing those classes; <p>Must not permit a 300mm sphere to pass through it.</p>	DNC. Windows to First Floor bedroom to be provided with suitable lock / device.
D2.25	<p>Timber Stairways: Concession – Notwithstanding D2.2, timber treads, landings and supporting framework may be used in a fire-isolated exit if it is at least 44mm thick timber & an average density of not less than 800 kg/m³ at a moisture content of 12%, subject to:-</p> <ul style="list-style-type: none"> • The building has a sprinkler system throughout including in the fire-isolated exit (as per E1.5), and • Fire protection (ie 13mm fire grade plasterboard of fire protective covering) is provided to the underside of stair flights and landings located immediately above a landing <ul style="list-style-type: none"> i. which is at or near the level of egress, or ii. provides direct egress to a carpark. 	Noted
PART D3	ACCESS FOR PEOPLE WITH DISABILITIES	
D3.1	<p>General building access requirements:-</p> <p>Buildings are required to be accessible in accordance with AS 1428.1-2009:</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.
D3.2	<p>Access to buildings</p> <p>Access is required from:</p> <ul style="list-style-type: none"> • the main points of pedestrian entry at the allotment boundary. If building is > 500m² the secondary entrance must be accessible if more than 50m from the accessible entrance. • other accessible buildings connected by a pedestrian link. • any required accessible carparking space. <p>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance.</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.

Section D	Access and Egress	Comment
D3.3	<p>Parts to be accessible:-</p> <p>New works including circulation spaces, stairway handrails, gradients, door latches etc to be in accordance with AS1428.1-2009, including;</p> <ul style="list-style-type: none"> • Ramps and stairways, except where exempt. • Stair nosings to have sharp intersection, be rounded up to 5mm radius; or be chamfered up to 5mm x 5mm. • Each stair tread is to have a strip no < 50mm & not > 75mm across full width with minimum luminance contrast of 30% to background. • Fire isolated stairs are to have suitable contrast stair nosings (Ref: Clause 11.1 (f) & (g) of AS1428.1). • Non-fire isolated stairs. Handrail terminating at bottom of each flight must extend at least one tread depth plus 300mm from the last riser. Handrail to extend 300mm past nosing of top riser. Where continuous, the 300mm extension is not required, ie only one tread depth extension. (Ref: Clause 11.2 of AS1428.1). • Accessways must have passing spaces, turning spaces as required. • Where stair intersection is at an internal corridor, the stair must be setback as shown in Figure 1. • Turning space in corridors at maximum 20m intervals and within 2.0m of the end of corridors where it is not possible to continue along the accessway. • Doorways to have minimum luminance contrast of 30% between; <ul style="list-style-type: none"> a) Door leaf & door jamb; b) Door leaf & adjacent wall; c) Architrave & wall; d) Door lead & architrave; or e) Door jamb & adjacent wall. Minimum width area of contrast must be 50mm. • Lift access where required must comply with clause E3.6. • Carpet pile height to be in accordance with AS1428.1-2009, except as modified by Cl D3.3 (g) and (h). 	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.
D3.4	<p>Exemptions:-</p> <p>Not necessary to provide access to: An area that would pose a health or safety risk; or, any area that is inappropriate due to its use and any path of travel providing access to one of these areas.</p>	Noted.
D3.5	<p>Car Parking:-</p> <p>Spaces to be provided in accordance with AS/NZS 2890.6-2009 at the rate specified in Table D3.5.</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.
D 3.6	<p>Signage:-</p> <p>Clear and legible Braille and tactile signage complying with Spec D3.6 is required to identify each accessible sanitary facility (except within SOU), each accessible space with a hearing augmentation system and each door required by E4.5 having an exit sign.</p> <p>Signage / symbols in accordance with AS1428.1-2009.</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.

Section D	Access and Egress	Comment
D 3.7	<p>Hearing augmentation:-</p> <p>Where an inbuilt amplification system (other than one used for emergency warning) is provided a hearing augmentation system is to be provided in the following locations:</p> <ul style="list-style-type: none"> • an auditorium, conference room, meeting room or room for judicatory purposes, or • in a room in a class 9b building, or • ticket office, tellers booths, reception area or the like where the public screened from the service provider 	NA.
D 3.8	<p>Tactile indicators:-</p> <p>TGSI required:</p> <ul style="list-style-type: none"> • when “public” are approaching a stair (other than a fire isolated stair), escalator, travelator, and ramp (other than step ramp), • overhead obstructions less than 2m high • paths of travel meeting a vehicular way adjacent to the main entrance of the building – if there is no kerb or kerb ramp at that point. • TGSI required to comply with AS/NZS 1428.4.1-2009 	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.
D3.9	<p>Wheelchair seating spaces in a Class 9b assembly buildings:-</p> <p>Where fixed seating is provided in a Class 9b assembly building, wheelchair seating in accordance with AS1428.1-2009 must be provided with the number and grouping in accordance with Table D3.9.</p>	NA.
D3.10	<p>Swimming pools: -</p> <p>Not less than 1 means of accessible water entry/exit in accordance with Spec D3.10 must be provided for each swimming pool required by Table D3.1.</p>	NA
D3.11	<p>Ramps: -</p> <p>An accessway must not have a series of ramps that have a combined vertical rise of more than 3.6m and a landing for a step ramp must not overlap a landing for another step ramp.</p>	NA.
D3.12	<p>Glazing on an accessway: -</p> <p>On an accessway where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway opening must be clearly marked in accordance with AS1428.1-2009</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.

Section E	Services and Equipment	Comment
PART E1	FIRE FIGHTING EQUIPMENT	
E1.3	<p>Fire Hydrants:-</p> <p>Hydrant system required to serve a building with a floor area >500m² and where the fire brigade is available to attend the fire. System must satisfy AS2419.1 – 2005.</p>	NA. Building is considered to have floor area less than 500m ² , i.e. approx. 300m ² .

Section E	Services and Equipment	Comment
E1.4	<p>Hose Reels:-</p> <p>Fire hose reel system to be provided (in accordance with AS 2441 – 2005) to:</p> <ul style="list-style-type: none"> • does not apply to Class 2, 3 building or Class 4 part of a building, • serve the whole building where internal fire hydrant have been installed; • serve any fire compartment >500m² (where internal hydrants are not installed); • Hose reels to be located: <ul style="list-style-type: none"> (a) Externally; or (b) Internally within 4m of an exit; or (c) Internally adjacent to a fire hydrant (other than one in fire isolated exit); or (d) Combination of the above • Achieve system coverage and <ul style="list-style-type: none"> (a) Need not be adjacent to every fire hydrant, (b) Need not be adjacent to every exit, (c) System coverage not achieved by (a) and (b), additional fire hose reels may be located in paths of travel to an exit. • Hose reels not to pass through fire or smoke doors 	NA. Fire hose reels are not required as areas outside Class 4 portion of building is less than 500m ² .
E1.5	<p>Sprinklers:-</p> <p>Sprinkler system complying with AS 2118 to be provided in accordance with BCA Specification E1.5 & / or E1.5a to:</p> <ul style="list-style-type: none"> • Buildings >25m effective height; • Class 2 or 3 buildings RIS of 4 or more & effective height not more than 25m; • Carparks accommodating > 40 vehicles; • Class 6 buildings with large fire compartments; • Class 9c aged care buildings; • Some large isolated buildings; • Occupancies of excessive hazard 	NA.
E1.6	<p>Portable Extinguishers:-</p> <p>To be installed to AS2444 and in a Class 2 or 3 building must be:</p> <ul style="list-style-type: none"> • An ABE type extinguishers minimum 2.5kg size. • Distributed out site a SOU to serve only the storey in which they are located and so that the travel distance of any SOU to the nearest PFE is not > 10.0m. 	DNC. Portable fire extinguishers are not provided in main stairway distributed outside Residential SOU and to remainder of building in accordance with BCA Clause E1.6 and AS2444-2001.
E1.7	Deliberately left blank	Noted
E1.8	<p>Fire Control Centres:-</p> <p>Required in a building > 25m effective height or in a class 6, 7, 8 or 9 building that exceeds 18,000m² in floor area</p>	NA
E1.9	<p>Fire precautions during construction:-</p> <ul style="list-style-type: none"> • Fire extinguisher at each exit (temporary) from each storey; • Booster connections, hydrants and FHR to be operational when building >12m effective height 	CR. Details to be provided with Construction Certificate documentation.
E1.10	Provision for special hazards	NA

Section E	Services and Equipment	Comment
PART E2	SMOKE HAZARD MANAGEMENT	
E2.1	<p>Application of Part:-</p> <p>DTS provisions to not apply to open deck carparks, and the smoke and heat vent provisions do not apply to storerooms and the like of less than 30m²</p>	Noted
E2.2	<p>General requirements for smoke hazard management (including Tables E2.2a & E2.2b).</p>	<p>DNC –Smoke alarm system provided in Residential SOU requires review due to age and confirmation smoke alarms are hard wired and interconnected where 2 per SOU.</p> <p>DNC – No smoke alarm system provided to common internal stairway.</p>
E2.3	<p>Provision for special hazard:-</p> <p>Additional measures to be provided due to the special characteristics, function; use; type of materials stored; or special mix of classifications within a building</p>	NA
PART E3	LIFT INSTALLATIONS	
E3.1	Repealed	Noted
E3.2	<p>Stretcher facility in lifts are required in:-</p> <ul style="list-style-type: none"> • Buildings with an effective height > 12m; • In at least one “emergency lift” <p>One lift is required to provide a clear space of not less than 600mm wide x 2m long x 1400mm high above the lift car floor level</p>	NA.
E3.3	<p>Warning against use of lifts in fire:-</p> <p>Signs to be provided at each lift landing located near every call button complying with figure E3.3</p>	NA.
E3.4	<p>Emergency lifts:-</p> <p>Required in some class 9a buildings and also buildings with effective height >25m</p>	NA
E3.5	<p>Landings:-</p> <p>Access and egress to and from liftwell landings must comply with BCA Part D</p>	NA.
E3.6	<p>Facilities for people with disabilities:-</p> <p>Passenger lifts to comply with the relevant Australian Standard listed in Table E3.6a and have accessible features as listed in Table E3.6b, and must not rely on constant pressure for its operation if the lift car is fully enclosed.</p>	NA to scope of this Report. Refer to separate Access Report. Details to be provided with Construction Certificate documentation.
E3.7	<p>Fire Service Controls:-</p> <p>Passenger lift cars serving any storey above an effective height of 12m, must be provided with fire service control switch in accordance with E3.9 and lift car fire service drive control switch in accordance with E3.10.</p>	NA.

Section E	Services and Equipment	Comment
E3.8	<p>Aged Care Buildings:-</p> <p>Where residents are on levels which do not have access to the road or open space the building must have either:</p> <ul style="list-style-type: none"> • Stretcher facility lift; or • Ramp complying with AS 1428.1 	NA
E3.9	<p>Fire Service Recall Operation Switch</p> <p>Where required, switch. Labelling, key and operation procedures for a fire service recall control switch are to be provided.</p>	NA.
E3.10	<p>Lift Car Fire Service Drive Control Switch</p> <p>Where required switch initiation, labelling and operation for the fire service drive control switch is to be provided.</p>	NA.
PART E4	EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS	
E4.1	Repealed	Noted
E4.2	<p>Emergency Lighting:-</p> <p>Required (in accordance with AS 2293.1) in:</p> <ul style="list-style-type: none"> • Every fire isolated exit; • every storey >300m² in area • path of travel to an exit and in any room with floor area > 100m² that does not open to a corridor/space with emergency lighting and any room having a floor area in excess of 300m²; • any room with floor area >300m²; • any room or space to which there is public access in every storey in a Class 6 or 9b building if that storey has a floor area >300m², or any point more than 20m from a doorway leading directly to stairway of open space; • every non-fire isolated stairway 	<p>DNC. Emergency lighting system not provided to main internal egress stairway and common corridor in accordance with AS/NZS2293.1-2018.</p> <p>CR. New works - Details to be provided with Construction Certificate documentation.</p>
E4.3	<p>Measurement of distances:-</p> <p>Using the shortest path of travel.</p>	Noted
E4.4	<p>Design and operation of emergency lighting:-</p> <p>To comply with AS 2293.1</p>	DNC. Emergency lighting system required in accordance with AS/NZS2293.1-2018.
E4.5	<p>Exit signs:-</p> <p>Clearly visible to persons approaching an exit, above doors:</p> <ul style="list-style-type: none"> • to enclosed or external stairs, passageways and ramps • to external access balcony, • from an enclosed stair, passageway or ramp at the level of discharge to the road; • acting as horizontal exits; • serving as or forming part of a required exit in a storey with emergency lighting. 	DNC. No exit sign at final exit door in egress stair.
E4.6	<p>Direction signs:-</p> <p>Where an exit is not apparent exit signs with directional arrows are required</p>	DNC. Exit lighting system required in accordance with AS/NZS2293.1-2018.

Section E	Services and Equipment	Comment
E4.7	<p>Class 2 and 3 Buildings and Class 4 parts exemptions:-</p> <p>Illuminated exit signs not applicable to:</p> <ul style="list-style-type: none"> • doors of SOUs of Class 2, 3 or 4; • class 2 building where "EXIT" is clearly labelled on the side remote from the exit/balcony 	Noted.
E4.8	<p>Design and operation of exit signs:-</p> <p>To comply with AS 2293.1 or photoluminescent exit sign in accordance with BCA Specification E4.8.</p>	DNC. Exit lighting system required in accordance with AS/NZS2293.1-2018.
E4.9	<p>Emergency Warning and Intercom Systems:-</p> <p>To be installed to comply with AS 1670.4 in:</p> <ul style="list-style-type: none"> • buildings with effective height >25m; • class 3 residential part of a school or aged/ disabled children accommodation with RIS > 2; • class 3 residential aged care; • class 9a with floor area > 1000m² or RIS >2; • class 9b school with RIS 3 • class 9b theatre, public hall, etc with floor area >1000m² or RIS >2 	NA

ANNEXURE B (Fire Safety Schedule)

Schedule of Essential Fire Safety Measures

The building is recommended that the building be provided with the following proposed essential fire safety measures, capable of performing and being maintained to the standard listed in the Schedule below. For the purposes of Clause 168 of the Environmental Planning and Assessment Regulation 2000, these standards will be considered to be the current fire safety schedule for the building.

DRAFT PROPOSED SCHEDULE

Measure	Design/ Installation Standard	Existing Installation	Proposed Installation
Automatic Fire Detection System in common stairway.	BCA 2019 Clause 3 of Spec. E2.2a, AS3786-2014 located in accordance with AS1670.1 – 2018	Nil	✓
Building Occupant Warning System	BCA 2019 Clause 7 of Spec. E2.2a and Clause 3.22 of AS1670.1 – 2018	Nil	✓
Emergency Lighting	BCA 2019 Clause E4.2, E4.4 & AS2293.1 – 2018	Nil	✓
Exit Signs	BCA 2019 Clauses E4.5, E4.6 & E4.8 and AS2293.1 – 2018	Nil	✓
Fire Door (Stair cupboard)	BCA 2019 Clause D2.8 and AS1905.1 - 2015	Nil	✓
Fire Seals	BCA Clause C3.12, C3.15 and AS1530.4 – 2014 & AS4072.1-2014	?	✓
Paths of Travel	EP&A Reg 2000 Clause 186	✓	✓
Portable Fire Extinguishers	BCA 2019 Clause E1.6 & AS2444 – 2001	Nil	✓
Smoke Alarms (within Residential SOU)	BCA 2019 Specification E2.2a Clause 3 and AS3786-2014	?	✓
Solid Core Doors (SOU's); <ul style="list-style-type: none"> • Doorway from Ground Floor tenancy No. 4 (travel agency) to common stairway. • Doorway from First Floor (education tenancy) to common stairway. • Doorway from First Floor (residential SOU) to common stairway. 	BCA 2019 Clause C3.11 (d) (ii)	Nil	✓

The above list may be subject to variation with any Alternative Fire Engineered Solution Report.