

ABN 33 077 900 497

PO Box 402, Dee Why • NSW • 2099 Mobile: 0417 247 447 E: graham@grsreports.com.au W: www.grsreports.com.au



Newport Bowling Club Kiosk

BCA Report for DA

Prepared for: Alanna Smit / Structural interiors Project No: P430/Rev 1a 12 October 2020

INDEX

Page No.

Exec	utive Summary	1
1.	Introduction	2
1.1	Background	2
1.2	Aim	2
1.3	Documentation	2
1.4	Reporting Team	2
1.5	BCA Terms and Definitions	3
1.6	Limitations and Exclusions	3
2.	Building Description	4
2.1	Building	4
2.2	Classification	4
2.3	Rise in Storeys	4
2.4	Type of Construction	4
2.5	Effective Height	4
2.6	Floor Area / Volume	4
2.7	Fire Source Feature	4
3.	BCA Assessment	5
3.1	Clause 93 &/or 94 of Planning & Assessment Regulation 2000	5
3.2	BCA Fire Audit Strategy, Acoustic Review & Recommendations	6
ANNE	EXURE A	11
ANNE	EXURE B	35

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Graham Scheffers GRS Building Reports Pty Ltd Registered Certifier Grade A1 - No. 0364 (BPB) Date: 12 October 2020

Executive Summary

The building, the subject of this Report, is an existing single storey storage building located at 2-6 Palm Rd, Newport, known as Newport Bowling Club.

The existing building is understood to be approved for use as a storage building with a portion altered and proposed for a change of use as a Kiosk. A new pergola measuring approximately $6.5m \times 5.3m$ is proposed to be attached to this building. This roofed pergola is proposed over a paved area with seating / tables for 15-18 patrons. The Kiosk designated sitting area will be only under the proposed pergola.

An assessment of the existing building has been undertaken in accordance with the relevant provisions of BCA Parts B, C, D (Parts D1 & D2), E and F of the Building Code of Australia 2019 (BCA) as detailed in Annexure A. Recommendations to address Clause 93 &/or 94 of the Environmental Planning and Assessment Regulation 2000 (EP & A Reg) for consideration with the DA is detailed in Sections 3.1 and 3.2 of this Report.

Clause 93 and 94 of the EP & A Reg, are as follows;

93 Fire safety and other considerations

- (1) This clause applies to a development application for a change of building use for an existing building where the applicant does not seek the rebuilding, alteration, enlargement or extension of a building.
- (2) In determining the development application, the consent authority is to take into consideration whether the fire protection and structural capacity of the building will be appropriate to the building's proposed use.
- (3) Consent to the change of building use sought by a development application to which this clause applies must not be granted unless the consent authority is satisfied that the building complies (or will, when completed, comply) with such of the Category 1 fire safety provisions as are applicable to the building's proposed use.
- (4) Subclause (3) does not apply to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4).

94 Consent authority may require buildings to be upgraded

- (1) This clause applies to a development application for development involving the rebuilding, alteration, enlargement or extension of an existing building where—
 - (*a*) the proposed building work, together with any other building work completed or authorised within the previous 3 years, represents more than half the total volume of the building, as it was before any such work was commenced, measured over its roof and external walls, or
 - (b) the measures contained in the building are inadequate—
 - (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.
 - (c) (Repealed)
- (2) In determining a development application to which this clause applies, a consent authority is to take into consideration whether it would be appropriate to require the existing building to be brought into total or partial conformity with the Building Code of Australia.

Sections 3.1 and 3.2 provide details and comments of the BCA Assessment to address Clause 93 &/or 94 of the Environmental Planning and Assessment Regulation 2000 with recommendations for consideration with the Development Application.

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 Fire Safety Schedule detailing proposed Essential Fire Safety Measures applicable to the subject building. [Note: Council to confirm existing Measures].

1. Introduction

1.1 Background

The building, the subject of this Report, is an existing single storey storage building located at 2-6 Palm Rd, Newport, known as Newport Bowling Club. The existing building is understood to be approved for use as a storage building with a portion altered and proposed for a change of use as a Kiosk.

GRS Building Reports Pty Ltd has been engaged by Alanna Smit / Structural interiors to undertake a BCA Assessment Report for the subject building.

1.2 Aim

The aim of this Report is to:

- 1. Undertake an inspection of the existing building.
- Undertake an assessment of the existing building in accordance with the relevant provisions of the Building Code of Australia 2019, (BCA), i.e. Undertake a BCA Review of Parts B, C, D1, D2, E and F as detailed in Annexure A, with recommendations for review at DA Stage in Sections 3.1 and 3.2 of this Report. This is to have regard to the provisions of Clause 93 &/or 94 of the Environmental Planning and Assessment Regulation 2000 for an existing building.
- 3. Undertake a review of the number of sanitary facilities for compliance with the BCA.
- 4. Address significant non-compliances with the BCA to ensure that the building is provided with an adequate level of fire and life safety commensurate with the community's expectations having regard to the Objectives and Performance Requirements of the BCA and Section 121B Order No. 6 of the Environmental Planning and Assessment Act 1979 which relates to the:
 - Prevention of fire
 - Suppression of fire
 - Prevention of the spread of fire
 - Safety of persons in the event of fire
- 5. Recommend fire and life safety upgrading works to address the non-compliances with the BCA.
- 6. Identify existing and proposed Essential Fire Safety Measures applicable to the subject building as detailed in Annexure A.

1.3 Documentation

The following documentation was relied upon when preparing this Report:

- Building Code of Australia 2019, (BCA).
- Plans prepared by Alanna Smit / Structural interiors, Drawing Nos. A0002, A0003, A004, A005, A006, Revision A, dated 14 September 2020.
- Current Annual Fire Safety Statement with assessment dated [Not Received. Council to confirm Items provided and Standards of Performance].

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 BPB) and Building Code Consultant following an inspection carried out on 30 September 2020.

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:

- Review of assessment of the main Bowling Club Building is beyond the scope of this Report. The assessment is limited to providing a Building Code of Australia (BCA) Report for submission to the Northern Beaches Council in relation to the proposed Development Application for the change of use to the existing storage building.
- The Building Certifier is to determine that the relevant documentation for proposed works satisfies the BCA for the purposes of issuing a Construction Certificate. This BCA Assessment Report is an assessment of the existing building only. The Report 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 for the Construction Certificate Stage.
- 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 Report does not address issues in relation to the following:

- 1. The structural adequacy of the building including the fire resistance levels of any building elements (unless specifically referred to).
- 2. The design, maintenance or operation of any electrical, mechanical, hydraulic or fire protection services.
- 3. Fit out or construction requirements in relation to Food Premises Standards.
- 4. 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.
- 5. Development Consent conditions of approval issued by the Local Authority.
- 6. Environmental Planning and Assessment Act and Regulations, Local Government Act and Regulations unless where nominated.
- 7. Work Health and Safety Act and Regulations. WorkCover Authority requirements.
- 8. Water, drainage, gas, telecommunications and electricity supply authority requirements.
- 9. The provisions of BCA Part D3, the Disability Discrimination Act, National Premises Standards as this is beyond the scope.
- 10. Council Policy relating to Access for People with Disabilities.
- 11. 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 Report, is an existing single storey storage building located at 2-6 Palm Rd, Newport, known as Newport Bowling Club.

The existing building is understood to be approved for use as a storage building with a portion altered and proposed for a change of use as a Kiosk. A new pergola measuring approximately $6.5m \times 5.3m$ is proposed to be attached to this building. This roofed pergola is proposed over a paved area with seating / tables for 15-18 patrons. The Kiosk designated sitting area will be only under the proposed pergola.

The existing building is generally constructed from concrete slab floor, timber frame walls, timber clad external walls and timber frame tiled roof.

2.2 Classification

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

Class 6 Kiosk

Class 7 Storage

2.3 Rise in Storeys

The existing building has a rise in storeys of one (1).

2.4 Type of Construction

The building is required to be Type C Construction due to the Change in Use.

2.5 Effective Height

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

2.6 Floor Area / Volume

Classification		Туре С
6, 7 or 8	Max floor area	2,000m²
	Max volume	12,000m ³

2.7 Fire Source Feature

The distances to the nearest Fire Source Feature for the existing building are estimated to be:

- Northern > 6.0 metres to far side of The Boulevarde.
- Southern < 3.0 metres, i.e. approx. 400mm setback to adjacent building.
- Eastern < 3.0 metres, i.e. approx. 750mm setback to adjacent building.
- Western > 6.0 metres to far side of Pittwater Road.

3. BCA Assessment

An assessment of the existing building has been undertaken in accordance with the provisions of the Building Code of Australia 2019, (BCA).

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 considered that this is a reasonable strategy in relation to Clause 93 &/or 94. It is noted that new works will need to be assessment by the Accredited Certifier when the Construction Certificate is reviewed.

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 as been reviewed and further comments are 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: -

- <u>EP 1.3 (Fire Hydrant System)</u> These BCA provisions necessitate a fire hydrant system for buildings more than 500m². The building including pergola and adjacent buildings have a floor area of approximately 99.5m², therefore a fire hydrant system and EP1.3 is not applicable.
- <u>EP1.4 (Sprinkler System)</u> 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.
- <u>EP 1.6 (Fire Control Centre)</u> 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.
- <u>EP 2.1 (Automatic Warning for Sleeping Occupants)</u> These BCA provisions necessitate detection systems for residential use buildings. This does not apply to the subject building, therefore EP2.1 is not applicable.
- <u>EP 2.2 (Safe Evacuation Routes)</u> These BCA provisions necessitate evacuation routes must be maintained for the period of time occupants take to evacuate the part of the building. See Recommendation 4 below.
- <u>EP 3.2 (Emergency Lifts)</u> These BCA provisions relate to buildings required to be provided with emergency lifts. Due to the building containing 1 storey only, emergency lifts are not required, therefore the provisions of EP3.2 are not applicable.

In accordance with Clause 94 (1) (b); Recommendation No. 3 is 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 Audit Strategy, Review & Recommendations

BCA Clause	Description	Strategy and Recommendations
B1.2 &	Determination of individual actions	Existing Circumstances
B1.4	The magnitude of individual actions must be determined in accordance with various action,	The works to install timber frame work and storage mezzanine is complete.
	 e.g. Permanent actions, including design of 	Comments
	 Permanent actions, including design of building, unit weight of the construction, AS/NZS1170.1-2002; and 	Verification of the adequacy of the timber framework is required from a structural engineer and
	 Imposed actions, including known imposed loads, construction activity actions, AS/NZS1170.1-2002. 	confirmation on termite risk management is to be provided with the Construction Certificate documentation.
	Determination of Structural Resistance of	Recommendations:
	Materials and Forms of Construction	1. That certification be provided from a suitably qualified structural engineer on the
	• Masonry: AS3700-2011,	qualified structural engineer on the adequacy of the existing timber framework
	 Concrete Construction: AS3600-2018 Timber construction – design of structures: AS1720.1-2010, Timber structures: AS1684 Parts 2, 3 or 4-2010. 	for the kiosk including 'as built' mezzanine and new internal wall, in accordance with AS1720.1-2010, Timber structures: AS1684 Parts 2, 3 or 4-2010.
	 Glazing Assemblies – AS2047–2014 or AS1288-2006. 	2. That certification that the Primary Building Elements are provided with a Termite
	Termite risk management – AS3660.1- 2014	Management System in accordance with Table 3.1.4.1, AS3660.1-2014, or a system
	 Roof construction – Plastic sheeting: AS/NZS1562.3-1996, AS/NZS4256 Parts 	passing the tests required by Section 5 of AS3660.3-2014.
	1, 2, 3-1994 & 5-1996; Roofing tiles AS2049-2002, AS2050-2018; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3-1996; Metal Roofing: AS1562.1-2018.	Alternatively provide certification that compliance with AS3660.1-2014 is achieved by the use preservative-treated timbers in accordance with AS (AS/NZS) 1604 (series) and specified for the appropriate hazard level in accordance with Appendix D (e.g. H2 for Interior above ground or H3 for exterior above ground).
		Details to be provided with Construction Certificate documentation.

BCA Description Clause		Strategy and Recommendations
Spec. Fire Resisting Cons	struction:-	Existing Circumstances
C1.1 and Clause C3.2 The building is requi accordance with Tab Construction) of the	ole 5 (Type C	The existing external walls of the subject building are non-fire rated that are within 3.0m of the adjacent buildings, such as: -
 Construction) of the Protection of openi Openings in externa have an FRL are to I exposed to a fire sou accordance with Cla Wall is less than boundary; Less than 6m fraction from the source of the sour	BCA ngs in external walls:- I walls that are required to be protected if they are urce feature in use C3.4 if: a 3m from a side or rear om the far boundary of a ted in a storey at or near om another building on ent	

BCA Clause	Description	Strategy and Recommendations
D1.6	Dimensions of exits:-	Existing Circumstances
	Unobstructed height of an exit not less than 2m (1980mm for doorways);	The paths of travel within the Kiosk has a width less than 1.0m (i.e. approximately 680mm) in places.
	• 1m minimum width of a single exit.	Comments
	 door width to be a minimum of 800mm clear unobstructed area (in accordance with AS 1428.1) 	It is proposed that the reduced paths of travel within the kiosk need not be upgraded on the basis of the following: -
	• width of exit must not diminish in direction of travel to an exit.	• The enclosed part of the kiosk has a small floor area of approximately 8.5m ² , and
		 The area is likely to be occupied by 1 or 2 persons only that are familiar with their surroundings, and
		• The final exit door from the kiosk is more than the minimum dimension of 750mm, i.e. approximately 815mm, and
		• The reduced width for the paths of travel are isolated areas where 1 person only would occupy and are unlikely to impact egress.
		It is proposed that this need not be upgraded on the basis that the width is close to the minimum width of a doorway, occupants are familiar with the configuration of the space and there is a relatively small number of staff only, therefore the reduced width is unlikely to impact egress
		Recommendation:
		4. That Council accept the reduced width of the internal paths of travel for the kiosk.
E1.6	Portable Extinguishers:-	Existing Circumstances
	To be installed to AS2444	There are no existing portable fire extinguishers provided to the building.
		Comments
		Details of portable fire extinguishers to be provided to the building are to be detailed in the Construction Certificate documentation.
		Recommendation:
		5. That the portable fire extinguisher/s be provided, in conjunction with proposed works in accordance with BCA Clause E1.6 & AS2444-2001 to be provided. Details required with Construction Certificate documentation.

BCA Clause	Description	Strategy and Recommendations
F1.7	Waterproofing of wet areas in buildings:-	Existing Circumstances
The floor surface or substrate to proposed bathrooms, shower areas and toilets must be provided with a waterproofing membrane in		The waterproofing to the kiosk bench / associated sink area has been completed.
	accordance with BCA Table F1.7 AS 3740- 2010. In addition the junction between the floor surface and the walls are required to be impervious to water.	Verification of the waterproofing work carried out to the kiosk bench and associated sink are to be provided with the Construction Certificate documentation.
		Recommendation:
		6. That certification be provided the waterproofing to the Kiosk bench / sink area has been carried out in accordance with BCA Table F1.7 and AS3740-2020. Details to be provided with Construction Certificate documentation.
F1.9	Damp-proofing:-	Existing Circumstances
	The building must be provided with a damp proof course that prevents moisture from the	The provision of a damp proof course to the lowest timbers to the Kiosk area could not be confirmed.
	ground from reaching the internal elements of the building.	Comments
To be installed in accordance with AS/NZ 2904 - 1995 or AS3660.1 - 2014. Some concessions apply to class 7 and 8 and		Verification of the presence or treatment of the lowest timbers to the kiosk area are to be provided with the Construction Certificate documentation.
	buildings.	Recommendation:
		7. That verification be provided to confirm a damp-proof course is provided beneath the lowest floor timbers of the kiosk in accordance with AS/NZS 2904 - 1995 or AS3660.1 - 2014. Details to be provided with Construction Certificate documentation.
F1.10	Damp-proofing of floors on the ground:-	Existing Circumstances
	Vapour barrier to be in accordance with AS 2870-2011.	The provision of a vapour barrier beneath the existing concrete slab to the Kiosk area could not be confirmed.
		Comments
		Verification of the presence of a vapour barrier to the concrete slab of the Kiosk area is to be provided with the Construction Certificate documentation.
		Recommendation:
		8. That verification be provided to confirm a vapour barrier or other suitable membrane is provided to the concrete slab of the kiosk area in accordance with AS 2870 - 2011. Details to be provided with Construction Certificate documentation.

BCA Clause	Description	Strategy and Recommendations
F2.3	 Facilities in Class 3 to 9 Buildings, Table F2.3:- Table F2.3 permits that for a café or the like, sanitary facilities need not be provided for patrons if the total number of persons accommodated in the building is not more than 20. 	 Existing Circumstances There are existing sanitary facilities provided in the adjacent buildings on site. This includes a single male and single female sanitary facility in the adjacent building to the south bounding the bowling green. Facilities are also in the Main Clubhouse. Comments The proposal includes a roofed pergola is over a paved area with seating / tables for 15-18 patrons. It is understood, the Kiosks designated sitting area will be only under the proposed pergola. It is also understood that the Kiosk is to be generally staffed by 2 persons or 3 on limited occasions. On the basis of the number of occupants set out above being not more than 20, except for 1 staff person on occasions, it is considered that the existing number sanitary facilities may cater for the proposed kiosk for the purposes of BCA Table F2.3. Recommendation:
		 That on the basis of the number of occupants as outlined above, the existing number sanitary facilities may cater for the proposed kiosk.
F3.1	Height of rooms:-	Existing Circumstances
	 2.4m high generally for habitable rooms and 2.1m high for non-habitable rooms, corridors, kitchen. Note: In rooms with a sloping ceiling, reduced heights apply. Commercial kitchens minimum 2.4m 	Portion of kiosk area beneath the storage mezzanine platform has a resultant ceiling height of less than 2.4m, i.e. approx. 2.35m as shown in Figure 1. Comments It is proposed that the reduced ceiling height of
	high. Extent of Mez with 2.35m ceiling height	 2.35m for a part of the floor within the kiosk need not be upgraded on the basis of the following: - The portion of the floor area with a reduced ceiling height is mainly used by cupboards,
	Accessible floor area with 2.35m ceiling height	 benches and the like, with the exception of small accessible area as shown in Figure 1 above. The main area used at the servery area of the Kiosk has a raked ceiling with a ceiling height at the apex of over 3.0m (i.e. more than 600mm above the minimum required height). This is considered to compensate for the area with the portion of floor having a ceiling height that is 50mm less than the required height of 2.4m. It is considered that the reduced ceiling height satisfies BCA Performance Requirement FP4.1 that states; "A habitable room or space must have sufficient height that does not unduly interfere with its intended function level". Recommendation: 10. That Council accept the reduced ceiling
	Figure 1 – Floor Plan	height of 2.35m for a portion of the kiosk.

Table 3.1 – BCA Audit Strategy and Recommendations

ANNEXURE A

Building Code of Australia 2019

Deemed-To-Satisfy Assessment (Clause by Clause)

(Class 2-9 Buildings)

Classification of Building or Part:	6,7
Rise in Storeys:	One (1)
Type of Construction:	Туре С
Effective height	< 25m

Key:

- Complies The existing building generally complies with this Clause or there are no significant deficiencies.
- DNC The existing 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 existing building or 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 existing building works proposed or to this assessment.
- Noted The contents of this Clause is noted for reference.
- AS. Alternative Solution using Performance Requirements is relevant in relation to the works proposed.

Section A	General Provisions	
Part A3.2	CLASSIFICATION	6, 7

Section B	Structure	Comment
Part B1	STRUCTURAL PROVISIONS	
B1.1	Resistance to actions Resistance must be greater than the most critical action resulting from different combinations of actions, where	CR subject to Structural Engineering certification of the works. Refer to B1.2 & B1.4.
	 The most critical action effect on a building is in accordance with B1.2 and general design procedures of AS/NZS1170.0-2002; and 	Details to be provided with the Construction Certificate.
	The resistance of a building is determined in accordance with B1.4.	

Section B	Structure	Comment
B1.2	Determination of individual actions	CR subject to Structural
	The magnitude of individual actions must be determined in accordance with various action, e.g.	Engineering certification of the works. Refer to B1.1 & B1.4.
	 Permanent actions, including design of building, unit weight of the construction, AS/NZS1170.1-2002; and 	Details to be provided with the Construction Certificate.
	 Imposed actions, including known imposed loads, construction activity actions, AS/NZS1170.1-2002; and 	
	• Wind, snow and earthquake actions, including applicable annual probability of design event determined by Tables B1.2a & B1.2b, AS/NZS1170.2-2011, AS1170.3-2003, AS1170.4-2007 as appropriate; and	
	Other actions detailed	
B1.3	Clause deleted.	50000000000000000000000000000000000000
B1.4	Determination of Structural Resistance of Materials and Forms of Construction	CR. New timber frame work walls and mezzanine to be confirmed as
	• Masonry: AS3700-2011,	being Structurally adequate and Structural Engineering drawings,
	Concrete Construction: AS3600-2018	specification and certification of the
	 Steel construction – Steel structures: AS4100-1998, Cold formed structures: AS/NZS4600-2018, Residential & low-rise steel: NASH Standard. 	works. This includes confirmation the existing building is capable of withstanding the loads of the new
	Composite steel structures: AS2327.1-2017	works. Details to be provided with the Construction Certificate.
	 Aluminium construction: AS/NZS1664.1-1997 or AS/NZS1664.2-1997 	
	• Timber construction – design of structures: AS1720.1- 2010, Timber structures: AS1684 Parts 2, 3 or 4-2010.	
	• Piling: AS2159-2009	
	Glazing Assemblies – AS2047–2014 or AS1288-2006.	
	Termite risk management – AS3660.1-2014	
	 Roof construction – Plastic sheeting: AS/NZS1562.3- 1996, AS/NZS4256 Parts 1, 2, 3-1994 & 5-1996; Roofing tiles AS2049-2002, AS2050-2018; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3-1996; Metal Roofing: AS1562.1-2018. 	
	Particleboard structural flooring: AS1860.2 -2006.	
	 Garage doors & other large access doors in openings not > 3m in height determined as being in wind region C or D in accordance with AS/NZS 1170.2-2011, AS/NZS4505-2012. 	
	• Lift Shafts (where FRL not required): must be enclosed with non-perforated materials, and be of non-brittle material and glazing must comply with Table B1.4 or not fail the deflection criteria required by Cl 6 (c) (iii) of Specification C1.8.	
B1.5	Structural Software	Noted
	Must comply with ABCB protocols.	
	Only applies to structural software used to design steel or timber trussed roof and floor systems and framed building systems for buildings within certain geometric limits.	
	Does not apply to design software for individual frame members such as electronic tables similar to those provided in AS1684 or NASH Residential and Low-Rise Steel Framing Part 2.	

B1.6	Construction of buildings in Flood Hazard Areas	Noted
	Class 2, 3, 9a (health-care), 9c (aged care) or Class 4 part of a building in a flood hazard area must comply with ABCB Standard for Construction of Buildings in Flood Hazard Areas.	

Section C	Fire Resistance	Comment
Part C1	FIRE RESITANCE AND STABILITY	
C1.1	Type of Construction	Туре С.
C1.2	Calculation of Rise In Storeys:-	One (1)
	Greatest number of storeys at any part of the external walls of the building above the finished ground at that part	
C1.3	Buildings of Multiple Classification:-	Noted. Entire building to be Type C
	Type of construction required is determined by the classification of the top storey applies to all storeys	Construction.
C1.4	Mixed Types of Construction:-	Noted. Entire building to be Type C
	Separation of the building by a fire wall (complying with clause C2.7) may permit mixed type of construction for a building.	Construction.
C1.5	Two Storey Class 2, 3 or 9c buildings:-	NA
	A building with a rise in storeys of 2 may be Type C construction where:	
	• 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 3,000m ² FA	
C1.6	Class 4 Parts of Buildings:-	NA
	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.	
C1.7	Open Spectator Stands & Indoor Sports Stadiums:-	NA
	May be of Type C Construction if:	
	Only 1 tier of seating;	
	Non-combustible material; and	
	Only sanitary facilities/change rooms below the tiers.	
C1.8	Lightweight Construction:-	NA
	May be used for fire rating of elements if it is in accordance with Specification C1.8.	

Section C	Fire Resistance	Comment
C1.9	 Non-combustible Building Elements:- In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (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. A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustible construction in— (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— a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. 	NA. Due to building being required to be Type C Construction.
C1.10	Early Fire Hazard Properties:- Materials and assemblies used in the building must comply with the requirements of Specification C1.10.	Complies. Kiosk has Plasterboard or tiled finishes. NA. Finishes within remainder of existing building not assessed as this would have minimal impact on the tenability of egress and is difficult to monitor. Also as this is a food shop, the space needs to be separated with construction that would achieve smoke separation.
C1.11	Performance of External Walls :- Concrete external walls that could collapse as complete panels in building of 2 storeys or less must comply with Specification C1.11.	NA. External walls are concrete block or masonry.
C1.12	 Non-Combustible Material – the following materials may be used where non-combustible materials are required: Plasterboard; Perforated gypsum; Fibrous plaster sheeting; Fire reinforced cement sheeting; Pre-finished metal sheeting; Bonded laminate materials 	Noted

Section C	Fire Resistance	Comment
C1.13	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;	Noted
	• 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.	
C1.14	Ancillary Elements –	NA. Due to building being required
	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:	to be Type C Construction.
	(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-	
	(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—	
	 (i) meets the relevant requirements of Table 4 of Specification C1.10 as for an internal element; and 	
	(ii) serves a storey—	
	(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.	
	(j) Part of a security, intercom or announcement system.	
	(k) Wiring.	
	(I) A paint, lacquer or a similar finish.	
	(m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).	
Part C2	FIRE RESISTANCE	
C2.2	General Floor Area Limitations:	Complies. Subject building is approximately 21m ² with pergola approximately 35.5m ² .

Section C	Fire Resistance	Comment
C2.3	Large Isolated Buildings:-	NA
	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.	
	Buildings are permitted to exceeds maximum floor area setout in C2.2 subject to;	
	• Floor area must not exceed 18,000m ² , and	
	Building being Class 7 or 8 only, and	
	Contain not more than 2 storeys, and	
	Is provided with open space compliant with BCA Clause C2.4 (a).	
C2.4	Requirements for open space:-	NA
	Open space and vehicular access capable of supporting emergency vehicles, area 6m wide and not more than 18m from the building.	
C2.5	Class 9a and class 9c buildings:-	NA
	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	
C2.6	Vertical separation of openings in external walls:-	NA
	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.	
C2.7	Separation by fire walls:-	NA
	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 Cl 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.	
C2.8	Separation of classifications in the same storey:-	NA. Same FRL's applies
	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.	throughout.

Section C	Fire Resistance	Comment
C2.9	Separation of classifications in different storeys:-	NA.
	The separating floors must have an FRL;	
	 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 a) Resistance to the incipient spread of fire to the space above itself of not less than 60 minutes, or 	
	b) Construction having an FRL of 30/30/30, or	
	 Ceiling with fire protective covering (eg 13mm fire grade plasterboard). 	
C2.10	Separation of lift shafts:-	NA
	Lift to be enclosed in a fire rated shaft when connecting more than 2 storeys (or more than 3 storeys in a sprinklered building).	
C2.11	Stairways and lifts in one shaft:-	NA
	Not to be in the same shaft if either is to be fire isolated.	
C2.12	Separation of equipment:-	NA. Nil existing services as listed
	Lift motors, emergency generators, smoke control exhaust fans, boilers or batteries are to be enclosed by construction achieving an FRL of 120/120/120.	evident in portion of building reviewed.
C2.13	Electricity supply system:-	NA. Nil existing services as listed evident in portion of building reviewed.
	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.	
	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.	
C2.14	Public corridors in Class 2 & 3 buildings:-	NA
	Public corridor >40m long to be divided into intervals of <40m by smoke proof walls complying with C2.5 (d).	
PART C3	PROTECTION OF OPENINGS	
C3.2	Protection of openings in external walls:-	DNC. Windows and doors in external wall of building that are within 3.0m of adjacent buildings.
	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:	
	• 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	
C3.3	Separation of openings in different fire compartments:-	NA
	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.	

Section C	Fire Resistance	Comment
C3.4	Acceptable methods of protection:-	DNC. Existing unprotected windows
	Fixed fire rated glass; self-closing or automatic closing windows with drenchers; automatic fire shutters; automatic closing fire rated windows.	and doors in external wall of building that are within 3.0m of adjacent buildings.
	Doors to be self-closing or automatic closing.	
C3.5	Doorways in fire walls:-	NA.
	Doorways in a fire wall (that is not part of an horizontal exit) must not exceed $\frac{1}{2}$ the length of the fire wall, and	
	Have the FRL required for the fire wall, and	
	Be self-closing or automatic closing upon activation of a smoke/fire detector	
C3.6	Sliding fire doors in fire walls:-	NA.
	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	
C3. 7	Protection of doorways in horizontal exits:-	NA
	To be self-closing or automatic closing fire doors	
C3.8	Openings in fire isolated exits:-	NA
	To be -/60/30 self-closing fire doors	
	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.	
C3.9	Service penetrations in fire Isolated exits:-	NA
	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.	
C3.10	Openings in fire isolated lift shafts:-	NA.
	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 35,000mm ²	
C3.11	Bounding construction Class 2, 3 and 4 buildings:-	NA
	Doors from sole occupancy units, and doors from rooms not within a SOU that open to an enclosed public corridor are to be:	
	-/60/30 for Type A construction;	
	 tight fitting self-closing solid core doors not less than 35mm thick for Type B and C construction 	
C3.12	Openings in floors for services:-	NA.
	To be enclosed in fire rated shaft with FRL in accordance with Specification C1.1	
C3.13	Openings in shafts:-	NA.
	Openings to shafts must be protected with a self-closing - /60/30 fire door or hopper.	
C3.15	Openings for service installations:-	NA
	Electrical, plumbing, mechanical ventilation shafts not to impair the FRL of fire rated building elements	

Section C	Fire Resistance	Comment
C3.16	Construction Joints:-	NA
	Fire retardant materials to be provided to construction joints to be identical with prototype tested in accordance with AS1530.4 to achieve the required FRL	
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 5 (Type C Construction) of the BCA	DNC. Non-fire rated external wall of building that is within 3.0m of adjacent buildings.

Section D	Access and Egress	Comment
PART D1	PROVISION FOR ESCAPE	
D1.1	Application of part:-	Noted.
	DTS provisions do not apply to internal parts of a SOU in Class 2, 3 or 4	
D1.2	Number of exits required:-	Complies.
	Every building must have a least one exit from each storey, and a minimum of 2 exits are required in particular circumstances.	
	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.	
D1.3	When Fire isolated exits are required:-	NA
	Generally, every required exit must be fire isolated if it connects, passes by or passes through:	
	 more than 3 storeys of a class 2; 	
	• more than 2 storeys of a classes 3 to 9.	
	And one additional storey may be included if it is solely for motor vehicles or other ancillary purposes.	
D1.4	Exit Travel Distances:-	Complies.
	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.	
	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.	
	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.	
D1.5	Distances between alternative exits:-	Complies.
	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.	

Section D	Access and Egress	Comment
D1.6	 Dimensions of exits:- Unobstructed height of an exit not less than 2m (1980mm for doorways); 	DNC. Paths of travel within Kiosk has a width less than 1.0m (i.e. approximately 680mm).
	 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 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	
D1.7	Travel via fire isolated exits:-	NA
	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.	
	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.	
	If > 2 doors open into exit – pressurisation; or smoke lobbies to be provided.	
D1.8	External stairways or ramps in lieu of a fire isolated exit:-	NA
	External stairs may be used instead of a fire isolated exit in buildings under 25m in effective height.	
D1.9	Travel by non fire isolated stairways or ramps:-	NA
	 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.	
D1.10	Discharge from exits:-	Complies
	 Not to be blocked at the point of discharge to open space with path of travel to road being not < 1.0m wide. 	
	• 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).	
D1.11	Horizontal exits:-	NA
	Not counted as required exits between SOUs or in a class 9b primary/secondary school, early child hood centre.	

Section D	Access and Egress	Comment
D1.12	Non-Required stairways ramps and escalators:-	Noted
	Generally, unsprinklered buildings can connect 3 stories in a class 2 building and 2 storeys in a class 3-9 building.	
D1.13	Number of persons accommodated:-	Noted
	In accordance with Table D1.13, unless confirmation from building owner is more accurate.	
D1.14	Measurement of distances:-	Noted
	Identifies the nearest part of the exit to measure travel distance	
D1.15	Method of measurement:-	Noted
	Specifies the method of measuring the distance of travel to an exit	
D1.16	Plant rooms, lift machine rooms and electrical network substations: Concession:-	NA.
D1.17	Access to lift pits:-	NA.
PART D2	CONSTRUCTION OF EXITS	
D2.1	Application of Part:-	Noted
	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)	
D2.2	Fire-Isolated stairways & ramps:-	NA.
	Must be within fire resisting shaft and be constructed of non-combustible materials	
D2.3	Non-Fire-Isolated stairways and ramps:-	NA
	Rise in Storeys > 2, to be constructed from either:	
	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% 	
D2.4	Separation of rising and descending stair flights:-	NA.
	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.	
D2.5	Open access ramps and balconies:-	NA
	Where an open access balcony is provided for smoke hazard management it must:	
	have ventilation openings to the outside air;	
	not be enclosed on its open sides above 1m except by eg. Grills that are >75% fee air space	
D2.6	Smoke lobbies:-	NA
	Where a smoke lobby is required by Clause D1.7 it must:	
	 have floor area 6m2 minimum; 	
	• be concreted by wells impremients to second	
	be separated by walls impervious to smoke;be fitted with smoke doors;	

Section D	Access and Egress	Comment
D2.7	Installations in exits and paths of travel:-	NA to scope
	 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	
D2.8	Enclosure of space under stairs and ramps:-	NA
	• 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.	
D2.9	Width of stairways:-	Noted
	A stairway that exceeds 2m in width is counted as having a width of only 2m unless divided by handrail.	
D2.10	Pedestrian ramps:-	NA
	Ramp serving as a required exit must:	
	Be maximum 1:14 gradient if required for disabled access (in accordance with AS 1428.1);	
	Maximum 1:8 gradient in other cases;	
	Floor surfaces to have non-slip finish	
D2.11	Fire Isolated passageways:-	NA.
	To achieve the same FRL as required for a fire isolated stair (or otherwise a minimum FRL of 60/60/60)	
D2.12	Roof as open space:-	NA.
	If an exit discharges to a roof of a building, the roof must:	
	Have an FRL of 120/120/120, &	
	Not have rooflights or other openings within 3m of the path of travel	
D2.13	Treads and risers:-	NA to scope
	 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 	
	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 all residence classification in	
	Treads to have slip resistance classification in accordance with Table D2.14 and AS4586-2013;	
	No winders in lieu of a quarter landing	

Section D	Access and Egress	Comment		
D2.14	Landings:-	Complies		
	In a stairway – maximum gradient of 1:50 and minimum of 750mm long.			
	Landings to have slip resistance classification in accordance with Table D2.14 and AS4586-2013;			
	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			
D2.15	Thresholds:-	Complies		
	No step or ramp at any point closer to the doorway than the width of the door leaf, unless:			
	 Door opens to road or open space (and door sill not more than 190mm high); 			
	Health care and aged care buildings have concessions			
D2.16	Barriers to prevent falls (Balustrades):-	NA to scope		
	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).			
D2.17	Handrails:-	NA to scope		
	 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 (second handrail at 750mm for class 9b primary school buildings);			
	continuous between stair flight landings.			
D2.18	Fixed platforms, walkways stairways and ladders:	NA		
	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			
D2.19	Doorways and doors:-	Complies.		
	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.			
	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.			

Section D	Access and Egress	Comment		
D2.20	Swinging doors:-	Complies		
	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.			
	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 200m ² and the door is fitted with a hold open device.			
D2.21	Operation of latch:-	Complies. Area is less than 200m ² .		
	 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: 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. 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.			
D2.22	Re-entry from fire isolated exits:-	NA		
	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			
D2.23	Signs on doors:-	NA.		
	Signage is required to fire/smoke doors to alert persons that the operation of some doors must not be impaired.			
D2.24	Protection of openable windows:-	NA to scope		
	(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 Class 9b early childhood centre or in a bedroom of a Class 2, 3 or 4 part.			
	(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.			
	(c) A barrier with a height not less than 865mm above the floor is required to an openable window:-			
	 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. (d) A barrier required by (c), except for (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. 			
	(e) A barrier required by (c) to an openable window in:-			
	 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; 			
	Must not permit a 300mm sphere to pass through it.			

Section D	Access and Egress	Comment		
D2.25	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/m ³ at a moisture content of 12%, subject to:-	Noted		
	• 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 or fire protective covering) is provided to the underside of stair flights and landings located immediately above a landing i. which is at or near the level of egress, or 			
	ii. provides direct egress to a carpark.			
NSW	Doors in path of travel in an entertainment venue	NA		
D2.101	In a Class 9B entertainment venue a doorway in a path of travel must comply with NSW Clause D2.19 (B) (V)			
PART D3	ACCESS FOR PEOPLE WITH DISABILITIES			
D3.1	General building access requirements:-	Existing building, therefore NA to		
	Buildings are required to be accessible in accordance with AS 1428.1-2009:	scope of BCA assessment.		
D3.2	Access to buildings	Existing building, therefore NA to		
	Access is required from:	scope of BCA assessment.		
	• the main points of pedestrian entry at the allotment boundary. If building is > 500m ² 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.			
	In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance.			
D3.3	Parts to be accessible:-	Existing building, therefore NA to		
	Ramps and stairways, except where exempt are to satisfy the relevant provisions of AS1428.1-2009.	scope of BCA assessment.		
	Lift access must comply with clause E3.6.			
	Accessways must have passing spaces, turning spaces as required.			
	Carpet pile height to be in accordance with AS1428.1-2009, except as modified by CI D3.3 (g) and (h).			
	Ramp of passenger lift need not be provided to a storey above Ground Level in a building of Class 5, 6, 7b or 8 (containing not more than 3 storeys) if the floor area of that storey is not $> 200m^2$.			
D3.4	Exemptions:-	Noted.		
	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.			
D3.5	Car Parking:-	NA to scope of this assessment.		
	Spaces to be provided in accordance with AS/NZS 2890.6- 2009 at the rate specified in Table D3.5.			

Section D	Access and Egress	Comment		
D 3.6	Signage :- Clear and legible Braille and tactile signage complying with Spec D3.6 is required to identify each accessible sanitary facility, each accessible space with a hearing augmentation system and each door required by E4.5 having an exit sign.	Existing building, therefore NA to scope of BCA assessment.		
	Signage / symbols in accordance with AS1428.1-2009.			
D 3.7	 Hearing augmentation:- 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: 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	 Tactile indicators:- TGSI required: when "public" are approaching a 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 	Existing building, therefore NA to scope of BCA assessment.		
D3.9	Wheelchair seating spaces in a Class 9b assembly buildings:- 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.	NA		
D3.10	Swimming pools: - 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.	NA		
D3.11	Ramps: - 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.	Existing building, therefore NA to scope of BCA assessment.		
D3.12	Glazing on an accessway : - 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	NA to scope of this assessment.		

Section E	Services and Equipment	Comment
PART E1	FIRE FIGHTING EQUIPMENT	

Section E	Services and Equipment	Comment
E1.3	Fire Hydrants:-	NA. Building is less than 500m ² .
	Hydrant system required to serve a building with a floor area $>500m^2$ and where the fire brigade is available to attend the fire. System must satisfy AS2419.1 – 2005.	
E1.4	Hose Reels:-	NA
	Fire hose reel system to be provided (in accordance with AS 2441 – 2005) to:	
	 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:	
	(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	
	(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	
E1.5	Sprinklers:-	NA
	Sprinkler system complying with AS 2118 to be provided in accordance with BCA Specification E1.5 to:	
	 Buildings >25m effective height; 	
	 Carparks accommodating > 40 vehicles; 	
	Class 6 buildings with large fire compartments;	
	Class 9c aged care buildings;	
	Some large isolated buildings;	
	Occupancies of excessive hazard	
E1.6	Portable Extinguishers:-	CR. Portable fire extinguisher/s to
-	To be installed to AS2444	be provided. To be reviewed in conjunction with proposed works and updated certification confirming compliance with BCA Clause E1.6 & AS2444-2001 to be provided. Details required with Construction Certificate documentation.
E1.7	Deliberately left blank	Noted
E1.8	Fire Control Centres:-	NA
	Required in a building > 25m effective height or in a class 6, 7, 8 or 9 building that exceeds 18,000m ² in floor area	
E1.9	Fire precautions during construction:-	CR. To be assessed for
	 Fire extinguisher at each exit (temporary) form each storey; 	Construction Certificate.
	 Booster connections, hydrants and FHR to be operational when building >12m effective height 	

Section E	Services and Equipment	Comment		
E1.10	Provision for special hazards	NA		
PART E2	SMOKE HAZARD MANAGEMENT			
E2.1	Application of Part:-	Noted		
	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 $30m^2$			
E2.2	General requirements for smoke hazard management (including Tables E2.2a & E2.2b).	NA		
	Class 2 Building – Must be provided with a smoke detection and alarm system in accordance with BCA Specification E2.2a			
E2.3	Provision for special hazard:-	NA		
	Additional measures to be provided due to the ;			
	special characteristics of the building,			
	special function or use of the building;			
	 special type or quantity of materials stored, displayed or used in the building; or 			
	• special mix of classifications within a building or fire compartment.			
PART E3	LIFT INSTALLATIONS			
E3.1	Repealed	Noted		
E3.2	Stretcher facility in lifts are required in:-	NA.		
	• Buildings with an effective height > 12m;			
	In at least one "emergency lift"			
	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			
E3.3	Warning against use of lifts in fire:-	NA.		
	Signs to be provided at each lift landing located near every call button complying with figure E3.3			
E3.4	Emergency lifts:-	NA		
	Required in some class 9a buildings and also buildings with effective height >25m			
E3.5	Landings:-	NA.		
	Access and egress to and from liftwell landings must comply with BCA Part D			
E3.6	Facilities for people with disabilities:-	NA.		
	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.			
E3.7	Fire Service Controls:-	NA.		
	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.			

Section E	Services and Equipment	Comment	
E3.8	Aged Care Buildings:- Where residents are on levels which do not have access to the road or open space the building must have either: • Stretcher facility lift; or	NA	
	Ramp complying with AS 1428.1		
E3.9	Fire Service Recall Operation Switch	NA.	
	Where required, switch. Labelling, key and operation procedures for a fire service recall control switch are to be provided.		
E3.10	Lift Car Fire Service Drive Control Switch	NA.	
	Where required switch initiation, labelling and operation for the fire service drive control switch is to be provided.		
PART E4	EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS		
E4.1	Repealed	Noted	
E4.2 E4.3	 Emergency Lighting:- Required (in accordance with AS 2293.1) in: 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 Measurement of distances:- Using the shortest path of travel.	NA	
E4.4	Design and operation of emergency lighting:- To comply with AS 2293.1	NA	
E4.5	 Exit signs:- Clearly visible to persons approaching an exit, above doors: 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. 	NA	
E4.6	Direction signs:- Where an exit is not apparent exit signs with directional arrows are required	NA	

Section E	Services and Equipment	Comment
E4.7	 Class 2 and 3 Buildings and Class 4 parts exemptions:- Illuminated exit signs not applicable to: doors of SOUs of class 2, 3 or 4; class 2 building where "EXIT" is clearly labelled on the 	Noted
E4.8	side remote from the exit/balcony Design and operation of exit signs:-	NA
L4.0	To comply with AS 2293.1 or photoluminescent exit sign in accordance with BCA Specification E4.8.	
E4.9	Sound systems and intercom systems for emergency purposes:-	NA.
	To be installed to comply with AS 1670.4 in: • 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 	

Section F	Health and Amenity	Comment
PART F1	DAMP & WEATHER PROOFING	
FP1.4	 External Walls:- A roof or external wall must prevent the penetration of water that could cause- (a) unhealthy or dangerous conditions, or loss of amenity to occupants, and (b) undue dampness or deterioration of building elements. 	Noted. No change to existing proposed.
F1.1	Stormwater drainage:- Collection of stormwater drainage is to comply with the consent authority's requirements and also AS/NZS3500.3- 2015	Noted. No change to existing proposed. CR. New pergola. Details to be provided with Construction Certificate documentation.
F1.5	Roof coverings:- Plastic sheeting: AS/NZS1562.3-1996, AS/NZS4256 Parts 1, 2, 3-1994 & 5-1996; Roofing tiles AS2049-2002, AS2050-2002; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3- 1996; Metal Roofing: AS1562.1-1992 and Asphalt shingles: ASTM D3018-90, Class A	Noted. No change to existing proposed. CR. New pergola. Details to be provided with Construction Certificate documentation.
F1.6	Sarking:- Where used for weatherproofing for roofs and walls must comply with AS/NZS 4200 parts 1 & 2 - 1994	NA
F1.7	Waterproofing of wet areas in buildings:- The floor surface or substrate to proposed bathrooms, shower areas and toilets must be provided with a waterproofing membrane in accordance with BCA Table F1.7 and AS 3740-2010. In addition the junction between the floor surface and the walls are required to be impervious to water.	?. Certification of waterproofing to sink area and adjacent walling required. Details to be provided with Construction Certificate documentation.

Section F	Health and Amenity					Comment			
F1.8	Deliberately left blank					Noted			
F1.9	that prevent internal eler To be instal	g must be p ts moisture ments of the led in accor 2014. Some	rovided with a d from the ground building. dance with AS/I concessions ap	? Lowest timbers to Kiosk area be confirmed a damp-proof course is provided. Details to be provided with Construction Certificate documentation.					
F1.10		-	ors on the grou accordance with		2011.	? Existing concrete slab on ground. Provision of existing waterproof membrane is unknown.			
F1.11	Provision of floor wastes:- Class 2, 3 or 4 part to have floor wastes in bathrooms, laundries located at any level above an SOU / public space.					NA			
F1.12	Sub-floor v	entilation:-				NA			
	SUB-FLOO Climate zone (see	Minimu	TION AND CLI Im sub-floor (mm ² /m of wall)	EARANCE Minimum h ground sur	neight from face (mm)				
	Figure F1.12)	No membrane	Ground sealed with impervious membrane	Termite inspection not required	Termite inspection required (see note)				
	3	6000	3000	150	400				
F1.13	Glazed Assemblies:- Windows, sliding doors, adjustable louvres, shopfronts; window walls must comply with AS2047 -2014 if located in an external wall for resistance to water penetration. Some concessions apply to class 7 & 8.					Noted. No change to existing proposed.			
PART F2	SANITARY	& OTHER	FACILITIES						
F2.1	Facilities in residential buildings:- Minimum facilities for class 2, 3 and 9c and class 4 parts must be provided in accordance with Table F2.1					NA			
F2.2	Calculation of number of occupants and fixtures:- Sanitary facilities to be determined by Clause D1.13 of the BCA unless the building owner can provide explicit occupant numbers.					Noted			
F2.3	Facilities in Class 3 to 9 Buildings, Table F2.3:-					Noted. Existing facilities provided on site. Table F2.3 permits that for a café or the like, sanitary facilities need not be provided for patrons if the total number of persons accommodated in the building is not more than 20.			

Section F	Health and Amenity	Comment		
F2.4	Facilities for people with disabilities:-	Noted. Existing facilities provided on		
	Accessible sanitary facilities to be provided in accessible parts of the building as indicated in table F2.4 (a) in accordance with AS1428.1 – 2009, and:	site. Assessment of these is therefore outside the scope of this Report. Refer to limitations of this Report at Section 1.6.		
	Accessible showers in accordance with table F2.4 (b),			
	At each bank of toilets where there is 1 or more toilets in addition to an accessible unisex sanitary compartment at that bank, an ambulant facility suitable for males and females.			
	Accessible unisex sanitary facility must contain a closet pan, washbasin, shelf or bench top and means of disposing sanitary towels.			
	Accessible unisex sanitary facility must be entered without crossing an area reserved for one sex only.			
	If 2 or more accessible unisex sanitary facilities provided, the number of left and right hand mirror image facilities must be as even as possible.			
	If male and female toilets are at different locations, accessible unisex sanitary facilities are required at one of those locations only.			
	Accessible unisex sanitary compartment or shower need not be provided on a storey not required to have a lift or ramp in accordance with BCA CI D3.3 (small floor area)			
F2.5	Construction of sanitary compartments:-	NA to scope.		
	Doors to fully enclosed sanitary compartments must be constructed at least 1.2m from the pan, or be outward opening, or removal from the outside.			
F2.6	Interpretation : urinals and wash basins:	Noted		
F2.7	deleted	NA.		
F2.8	Waste Management:-	NA		
	Slop-hoppers to be provided in class 9a and class 9c buildings			
PART F3	ROOM SIZES			
F3.1	 Height of rooms:- 2.4m high generally for habitable rooms and 2.1m high for non-habitable rooms, corridors, kitchen. Note: In rooms with a sloping ceiling, reduced heights apply. Class 9b Classrooms or other parts that accommodate 	DNC. Portion of kiosk area has had a storage mezzanine platform installed with the resultant ceiling height of less than 2.4m, i.e. approx 2.35m.		
	not more than 100 persons – 2.4m and parts that accommodate more than 100 persons – 2.7m.			
	Commercial kitchens minimum 2.4m high.			
PART F4				
F4.1	Provision of Natural light:-	NA		
	Class 2 and 4 – all habitable rooms;			
	 Class 3 – all bedrooms and dormitories; Class 9a/9a – all rooms used for clooping; 			
	 Class 9a/9c – all rooms used for sleeping; Class 9b – classrooms for schools; playrooms for childhood centres 			

Section F	Health and Amenity	Comment	
F4.2	 Methods and extent of natural lighting:- Provided by windows with light transmission and are open to sky or face a courtyard; Setbacks to obstructions/boundary generally 1m – exceptions apply to class 2, 3, 4, 9a and 9c 	Complies. Existing natural lighting provided via windows that are not less than 10% of the floor area of the room.	
F4.3	Natural light borrowed from adjoining room:- Applies in some instances in class 2, 3 and class 4 parts	NA	
F4.4	Artificial lighting:- Artificial lighting must be provided to the building to all rooms that are frequently occupied and all corridors, lobbies, internal stairways and circulation spaces and paths of egress. The lighting system must comply with AS/NZS 1680 – 2009.	NA	
F4.5	 Ventilation of rooms:- A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupies by a person for any purpose must have either natural or mechanical ventilation. Mechanical Ventilation for occupants of the building is required to comply with AS 1668.2 – 2012 and AS/NZS 3666.1 – 2011 	Complies. Existing natural ventilation provided via windows and doors that are not less than 5% of the floor area of the room.	
F4.6	Natural ventilation:- Relates to methods of providing natural ventilation through openings in the building, ie openings 5% of floor area of room.	Complies. Existing natural ventilation provided via windows and doors that are not less than 5% of the floor area of the room.	
F4.7	Ventilation borrowed from adjoining rooms:- Ventilation can be borrowed if both rooms are within the same SOU or an enclosed veranda is common property	Noted	
F4.8	Restriction on position of water closets and urinals:- A room containing a closet pan/urinal must not open directly into a kitchen; pantry; restaurant; public dining room; dormitory in a class 3; public assembly room; workplace used by more than 1 person	NA to scope	
F4.9	Airlocks : Airlocks, mechanical ventilation and screens can be utilised where WCs open into rooms as indicated in clause F4.8.	NA to scope	
F4.10	Repealed		
F4.11	Carparks :- Every storey of a carpark, except an open deck carpark, must be provided with either mechanical ventilation complying with AS1668.2 of permanent natural ventilation.	NA	

Section F	Health and Amenity	Comment	
F4.12	Kitchen local exhaust ventilation:-	NA. Assumed no cooking equipment proposed.	
	Commercial kitchen to be provided with kitchen exhaust hood complying with AS/NZS1668.1 and AS1668.2 where:-		
	 Any cooking apparatus has a total max. electrical power input > 8kW or a total gas power input exceeding 29MJ/h; or 		
	 The total max. power input to >1 apparatus exceeds 0.5kW electrical power or 1.8MJ gas per m² of floor area of the room or enclosure. 		
PART F5	SOUND TRANSMISSION AND INSULATION		
F5.1	Application of Part:	NA to scope	
	The DTS provisions of this part apply to class 2, 3 and 9c buildings		
F5.2	Determination of airborne sound insulation ratings:-	Noted	
F5.3	Determination of impact sound insulation ratings: Noted		
F5.4	Sound Insulation of floors:-	NA	
F5.5	Sound insulation rating of walls:-	NA	
F5.6	Sound insulating rating of services:-	NA	
F5.7	Sound isolation of Pumps:- Flexible coupling must be used at the point of connection between service pipes in a building and any pump.	NA	

ANNEXURE B

Schedule of Essential Fire Safety Measures (Existing and Proposed)

The building is currently provided with the following existing essential fire safety measures and it 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 EXISTING SCHEDULE (to	o be confirmed)
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Measure	Design/ Installation Standard	Existing Installation
Portable Fire Extinguishers	AS2441-?	?
Fire Blanket	AS2441-?	?
Emergency Lights	AS/NZS2293.1-?	?
Exit Signs	AS/NZS2293.1-?	?

PROPOSED SCHEDULE (Kiosk Building)

Measure	Design/ Installation Standard	Proposed Installation
Paths of Travel	EP&A Reg 2000 Clause 186	✓
Portable Fire Extinguishers	BCA Clause E1.6 & AS2444 – 2001	~

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