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Project	12 Naree Road, Frenchs Forest
Report	NCC/Access Assessment Report
Reference	10451-NCC-r2
Date	19 June 2018
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1 Introduction

1.1 Building Location

The building, the subject of this report, is located at 12 Naree Road, Frenches Forest and is commonly known as Lot 1 DP27562.

The building consists of an existing Class 1a residential dwelling, which is proposed to be reclassified and altered for use as Class 5 commercial office space, supporting a dental practice.

1.2 Objectives

The purpose of this report is to provide a National Construction Code 2016 Amendment 1 (NCC) Assessment Report addressing all Clauses of the NCC Volume 1 to identify where the subject building achieves compliance and non-compliance, and if a Performance Solution is appropriate considering the circumstance. Any Performance Solutions will need to be prepared under a separate cover.

It is presumed the assumptions, content, and limitations of this report are reviewed, noted, and understood by the reader. Credwell Consulting are to be contacted to clarify any queries or assumptions made in relation to the contents of this report and further, Credwell Consulting take no responsibility for misinterpretation of any of the content herein.

1.3 Limitations

This report does not include, nor imply, any audit, assessment, or upgrading of:

1. The structural design and capacity of the building;
2. The capacity or design of any electrical, fire, hydraulic or mechanical services; and
3. The Disability (Access to Premises – Building) Standards 2010 and the Disability Discrimination Act 1992 (Cth)

This report does not include, nor imply, any assessment of, or compliance with:

4. Any Development Consent conditions;
5. The Liquor Licencing Act 1997;
6. The Work Health and Safety Act 2011;
7. The Swimming Pools Act 1992; and
8. Requirements of Authorities including, but not limited to, WorkCover, RMS, Council, Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like.

1.4 Reviewed Documentation

This report has been based on the documentation referenced in Annexure A of this report.

2 Building Description

For the purposes of the NCC, the building is described as follows:

2.1 Classification

Class	Use	Area
5	Dental service	Ground floor and Level 1

2.2 Rise in Storeys

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

2.3 Type of Construction

Given the classifications of the top floor and the rise in storeys, the building is to be of Type C Construction.

2.4 Effective height

The effective height has been calculated to be approximately 3m.

2.5 Fire Compartments

The following fire compartments have been assumed:

1. The building forms a single fire compartment.

2.6 Required Exits

The following have been considered as the exits from the building:

1. The entry door in the southern façade to the porch.

2.7 Climate Zone

The building is located within Climate Zone 5, being within the Northern Beaches local government area.

3 Existing Building & Change of Use

Given the change in classification, a change in use of the building is considered and as such Clauses 94 and 143 of the Environmental Planning and Assessment Regulations 2000 (EP&A Regs) must be considered as follows:

> 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.*
>
> *(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 .*
>
> *(3) The matters prescribed by this clause are prescribed for the purposes of section 4.15 (1) (a) (iv) of the Act.*

With reference to Clause 94 we note the following:

3.1 FSF to the eastern boundary

The external wall of the existing building on the eastern façade is located 2m from the boundary. The existing wall as it stands has three openings for windows. No works is proposed to this external wall area in the provided plans.

It is not unreasonable to apply discretion to permit the external walls and openings to remain as existing for the following reasons:

1. The use of the building is such that it exhibits a lower risk of fire than the existing Class 1a usage, as the building is not occupied overnight, minimal furniture and materials are kept or stored in the building, unlike a Class 1a dwelling that could contain considerable materials kept and stored.
2. The NCC permits a building of Type C Construction to only be fire rated from the external face of the building, such that the external walls in the subject building would not be protected from a fire in the subject building.
3. The buildings on the adjacent allotments are Class 1a dwellings and as such the change in use of the subject building does not increase the risk of a fire in the adjacent properties spreading to the subject building.

3.2 Dimensions of Exits and Paths of Travel – Clauses D1.6 and D2.13

The existing stairway is scaled as having a measurement of 800mm in lieu of the requirement for a minimum clear unobstructed width of 1m and the stairway has winders.

Given the small area of this space and its use for storage and staff meetings it is not unreasonable for discretion to be applied to permit the stairway to remain as existing.

It is noted that a 1m wide stairway caters for up to 100 people, the assumed population load to the first floor is to be minimal. Furthermore, the stairway as existing is deemed to be satisfactory for the purposes of egress and paths of travel.

The stairway is to be provided with a handrail and non-slip nosing strips.

143 Fire protection and structural capacity

(1) A certifying authority must not issue a construction certificate for building work under a development consent that authorises a change of building use unless:

> *(a) the fire protection and structural capacity of the building will be appropriate to its new use, and*
>
> *(b) the building will comply with such of the Category 1 fire safety provisions as are applicable to the new use, assuming that the building work is carried out in accordance with the plans and specifications to which the construction certificate relates and any conditions to which the construction certificate is subject.*

(2) Subclause (1) (b) 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).

(3) In the case of building work that involves the alteration, enlargement or extension of an existing building in circumstances in which no change of building use is proposed, a certifying authority must not issue a construction certificate for the work unless, on completion of the building work, the fire protection and structural capacity of the building will not be reduced, assuming that the building work is carried out in accordance with the plans and specifications to which the construction certificate relates and any conditions to which the construction certificate is subject.

(4) This clause does not apply to building work required by a consent authority as a condition of a development consent that authorises a change of building use.

It is assumed that an engineer or other appropriately qualified person has established that the existing levels of structural adequacy/capacity are appropriate to the new use given the proposed works.

In relation to fire safety, as there is a change in use of the existing building, as per S143 above, the Category 1 fire safety provisions must be considered as are applicable to the building. For this building and development, however, the Category 1 fire safety provisions are not relevant as stated in the following table:

Performance Requirement	System	Applicable	Comment
EP1.3	Hydrants	No	The building has a floor area of less than 500m^2.
EP1.4	Sprinklers	No	N/A
EP1.6	Fire control centre	No	N/A
EP2.1	Smoke detection and alarm	No	N/A
EP2.2	Smoke hazard management	No	N/A
EP3.2	Emergency lifts	No	N/A

3.3 Recommended Upgrading

Based on the above the following upgrading to the existing building is recommended:

1. The provision of a continuous handrail to the one side of the existing stairway. The handrails are to comply with NCC2016 Clause D2.17, except that the handrail need not have extensions at the bottom of the stair flights as required by AS1428.1-2009 Clause 12(j).

2. The stairs the nosing of the treads is to be treated with a non-skid finish which have a 30% luminance contrast to the general finish of the tread.

3.4 Premises Standard

The Disability (Access to Premises – Building) Standards 2010 is applicable to the building in so far as the affected part applies.

The affected part covers the ground only as there is no works proposed to the upper level.

The ground floor has been assessed against the provision of the NCC for accessibility as a new building and therefore the fit out will generally comply with the provisions the Disability (Access to Premises – Building) Standards 2010.

4 Fire Safety Measures

Given the assessment in this report, the following fire safety measures are required to be installed in the building. This list is subject to minor change if Performance Solutions are proposed, or other options are taken during the Construction Certificate (CC) and/or construction stages.

	Fire Safety Measure	Standard of Performance
1.	Emergency lighting	NCC2016 Clauses E4.2 and E4.8 AS2293.1-2005
2.	Exit signs	NCC2016 Clauses E4.5, E4.6 and E4.8 AS2293.1-2005
3.	Portable fire extinguishers	NCC2016 Clause E1.6 AS2444-2001
4.	Warning and operational signs	NCC2016 Clauses D2.23 & E3.3 Environmental Planning and Assessment Regulation 2000 (EP&A Reg) Clause 183
5.	Paths of travel	NCC2016 Parts D1 and D2 EP&A Reg Clause 186

5 Fire Resistance Levels

The following fire resistance levels (FRLs) are required for the various elements of the building. Where the table below refers to a fire source feature (FSF), this is as defined in the NCC as the far boundary of a road, river, lake or the like adjoining the allotment, or a side or rear boundary of the allotment, or an external wall of another building on the allotment which is not a Class 10 building.

External walls in a building of Type C Construction require an FRL from the outside only. We note that the works proposed will not require any fire rating as works are proposed to the external façade where within 3m of the boundary and therefore this information is provided for advice only.

Building Element – Type C Construction	Class 5
External Walls	
- Less than 1.5m from a FSF	90/90/90
- 1.5 - 3m from a FSF	60/60/60
- 3m or more from a FSF	-/-/-
External Columns (not incorporated into an external wall)	
- Less than 1.5m from a FSF	90/-/-
- 1.5 - 3m from a FSF	60/-/-
- 3m or more from a FSF	-/-/-
Roofs	-/-/-

6 Statement of Compliance

The architectural design documentation as referred to in Annexure A of this report has been assessed against the relevant provisions of the NCC and it is considered that the documentation complies or is capable of complying with the NCC as outlined in Annexure B, and subject to the comments below.

The existing building is considered in Part 3 above.

6.1 Specification

The following matters are to be addressed by Design Certifications of a Specification issued by the architect or relevant design consultant at the CC or CDC Stage of the development.

Architectural Design Certification

1. The building elements of the proposed works have been designed to have the FRL relevant in accordance with NCC2016 Clause C1.1 and Specification C1.1 Table 5 for Type C Construction.
2. Materials, floor and wall linings/coverings, surface finishes and air-handling ductwork used in the works will comply with the fire hazard properties in accordance with NCC2016 Clause C1.10 and Specification C1.10.
3. The dimensions of exits and paths of travel to exits will be provided in accordance with NCC2016 Clause D1.6, with the exception of the existing stairway.
4. The discharge points of exits will be in accordance with NCC2016 Clause D1.10.
5. Number of persons accommodated in a storey, room or mezzanine must be determined with the consideration of Table D1.13 and NCC2016 Clause D1.13.
6. The construction of EDB'S will be in accordance with NCC2016 Clause D2.7 with the enclosure bounded by a non-combustible or fire protective covering and smoke seals provided around the perimeter of the doors at each level.
7. New pedestrian ramps will comply with AS1428.1-2009 and NCC2016 Clause D2.10 and Part D3. The floor surface of a ramp must have a slip-resistance classification complying with Table D2.14 when tested in accordance with AS4586-2013.
8. Stair geometry to the new stairways will be in accordance with NCC2016 Clause D2.13. Stair treads are to either have a surface with a slip-resistance classification or a nosing strip with a slip-resistance classification both complying with Table D2.14 when tested in accordance with AS4586-2013.
9. Landings will be provided in accordance with NCC2016 Clause D2.14. Landings are to have either a surface or a strip at the edge of a landing (where the edge leads to a flight below) with a slip-resistance classification complying with Table D2.14 when tested in accordance with AS4586-2013.
10. Door thresholds are to be provided in accordance with NCC2016 Clause D2.15 and NSW Clause D2.15.
11. The handrails and balustrades to stairs and throughout the building will be in accordance with NCC2016 Clause D2.16 and D2.17.
12. The doorways and doors will be in accordance with NCC2016 Clause D2.19 and D2.20.
13. The door latching mechanisms to the proposed exit doors will be in accordance with NCC2016 Clause D2.21.

14. The new works will be accessible in accordance with NCC2016 Part D3 and with AS1428.1-2009, with particular note to door circulation spaces, access way widths, turning spaces and floor coverings.
15. Accessible car parking will be in accordance with NCC2016 Clause D3.5 and Table D3.5.
16. Braille and tactile signage will be in accordance with NCC2016 Clause D3.6 and specification D3.6.
17. Tactile ground surface indicators will be provided in accordance with NCC2016 Clause D3.8 and AS1428.4.1-2009.
18. The ramps associated with the access way will not have a combined vertical rise of more than 3.6m and a landing for a step ramp will not overlap a landing for another step ramp or ramp in accordance with NCC2016 Clause D3.11.
19. On an access way, 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 or opening, will be clearly marked in accordance with AS1428.1-2009 and comply with NCC2016 Clause D3.12.
20. Fire precautions whilst the building is under construction will be in accordance with NCC2016 Clause E1.9.
21. Any sarking proposed including waterproofing of roofs and walls must comply with AS/NZS4200.1-1994 and AS/NZS4200.2-1994 and will be installed in accordance with NCC2016 Clause F1.6.
22. Waterproofing of all wet areas within building will be carried out in accordance with NCC2016 Clause F1.7 and AS3740-2010 and Table 1.7.
23. Damp proofing of the proposed structure will be carried out in accordance with NCC2016 Clauses F1.9 and F1.10.
24. All new glazing to be installed throughout the development will be in accordance with NCC2016 Clause F1.13 and AS1288-2006 and AS2047-2014.
25. Sanitary facilities will be provided in the building in accordance with NCC2016 Clause F2.3 and Table and F2.3.
26. Accessible sanitary facilities will be provided in the building in accordance with NCC2016 Clause F2.4, Table F2.4 (a) and AS1428.1-2009.
27. The construction of the sanitary facilities will be in accordance with NCC2016 Clause F2.5.
28. Ceiling heights to the new areas will be in accordance with NCC2016 Clause F3.1.
29. Natural ventilation will be provided in accordance with NCC2016 Clauses F4.5, F4.6 and F4.7.
30. Water closets and urinals will be located in accordance with NCC2016 Clause F4.8.
31. Essential fire or other safety measures must be maintained and certified on an ongoing basis, in accordance with the provisions of the Environmental Planning and Assessment Regulation, 2000.
32. Glazing will be in accordance with NCC2016 Part J2.
33. The building will be sealed in accordance with NCC2016 Part J3.
34. Energy Monitoring for Facilities will be provided in accordance with NCC2016 Clause J8.3.

Electrical Services Design Certification

35. Emergency lighting will be installed throughout the development in accordance with NCC2016 Clauses E4.2, E4.4 and AS2293.1-2005.

36. Exit signage will be installed in accordance with NCC2016 Clauses E4.5, E4.7, E4.8 and AS2293.1-2005.

37. Artificial lighting will be installed throughout the development in accordance with NCC2016 Clause F4.4 and AS/NZS1680.0-2009.

38. Lighting power and controls will be installed in accordance with NCC2016 Part J6.

Hydraulic Services Design Certification

39. Storm water drainage will be provided in accordance with NCC2016 Clause F1.1 and AS3500.3-2015.

40. Portable fire extinguishers will be installed in accordance with NCC2016 Clause E1.6 and AS2444-2001.

41. The heated water supply systems will be designed and installed to NCC Volume 3 – Plumbing code and NCC2016 Clause J7.2.

Mechanical Services Design Certification

42. Where not naturally ventilated the building will be mechanically ventilated in accordance with NCC2016 Clause F4.5 and AS1668.2-2012 and AS/NZS3666.1-2011.

43. The air conditioning and ventilation systems will be designed and installed in accordance with NCC2016 Part J5.

Structural Engineers Design Certification

44. The material and forms of construction for the proposed works will be in accordance with NCC2016 Clauses B1.2, B1.4 and B1.6 as follows:

    - Dead and live loads – AS1170.1-2002
    - Wind loads – AS1170.2-2011
    - Masonry – AS3700-2011
    - Concrete Construction – AS3600-2009
    - Steel Construction – AS4100-1998
    - Aluminium Construction – AS/NZS1664.1-1987 or AS/NZS1664.2-1987

45. The FRLs of the structural elements for the proposed works have been designed in accordance with NCC2016 Table 5 for a building of Type C Construction of NCC2016 Specification C1.1.

46. The construction joints to the structure will be in accordance with NCC2016 Clause C3.16 to maintain the FRL integrity of the element concerned.

Annexure A – Reviewed Documentation

This report has been based on the documentation listed below:

Architectural Details prepared by Perfect Practice, Project reference E1688		
Drawing Number	Revision	Title
100	B	Existing / Demo Plan
101	B	Proposed Site Plan for DA
102	B	Proposed Floor Plan for DA
103	B	Elevations
104	B	Elevations
105	B	Swept Path Plan
1270DET.dwg		Survey plan

Annexure B – Detailed Assessment

Outlined below is a detailed assessment of the proposal against the DtS provisions of the NCC.

All relevant DtS Clauses applicable to the proposal have been reference, Clauses not are not relevant have been deleted.

The following abbreviations have been used in the tables below:

PS	-	A Performance Solution is proposed to achieve compliance with this Clause.
CRA	-	"Compliance Readily Achievable" – it is considered that whilst there is insufficient information currently provided to determine strict compliance with the DtS provisions of the NCC the proposed design is capable of comply subject to noting the requirements of the Clause. Additional information or documentation is necessary to confirm compliance. This may be in the form of additional drawing, a specification or design certification.
Complies	-	The proposal shows compliance with the DtS Clause.
DNC	-	The design does not comply with the DtS Clause.
FI	-	Further information is required for assessment of the proposal relative to the DtS Clause.
N/A	-	The DtS Clause is not applicable at this stage to this design.
Noted	-	The DtS Clause provides information not requiring specific assessment of the proposed design.

SECTION B - STRUCTURE

Clause		Comments	Assessment
Part B1 – Structural Provisions			
B1.0	DtS Provisions	Information only.	Noted
B1.1	Resistance to actions	Resistance to actions must be in accordance with this Clause. Structural Engineer to certify.	CRA
B1.2	Determination of individual actions	The magnitude of individual actions must be determined in accordance with this Clause.	CRA
B1.4	Determination of structural resistance of materials and forms of construction	The structural resistance of materials and forms of construction must be determined in accordance with this Clause. Structural Engineer to certify.	CRA
B1.5	Structural software	Structural software used in computer aided design of a building or structure must comply with the ABCB Protocol for Structural Software in accordance with this Clause. Structural Engineer to certify.	CRA
B1.6	Construction in buildings in flood hazard areas	A Class 2 or 3 building, Class 9a health-care building, Class 9c building or Class 4 part of a building in a flood hazard area must comply with this Clause.	N/A

SECTION C – FIRE RESISTANCE

Clause		Comments	Assessment
Part C1 – Fire Resistance and Stability			
C1.0	DtS Provisions	Information only.	Noted
C1.1	Type of construction	No change proposed to the existing external walls or structure. It is noted that as a two storey Class 5 building it is only required to be of Type C Construction.	Noted
C1.2	Rise in storeys	The building has a rise in storeys of two (2)	Noted
C1.3	Multiple classifications	The building is required to be of Type C Construction.	Noted
C1.4	Mixed types of construction	The building is required to be of Type C Construction.	Noted
C1.8	Lightweight construction	Any lightweight construction required to achieve an FRL is to comply with this clause and as necessary Specification C1.8.	Noted
C1.9	Non-combustible building elements	Not Applicable	N/A
C1.10	Fire hazard properties	Fire hazard properties of all materials to comply with this Clause and Specification C1.10.	CRA
C1.13	Fire-protected timber: Concession	Concession not available due to the building classification.	N/A
C1.14	Ancillary elements	Ancillary elements are to be non-combustible when fixed, installed or attached to internal parts or external faces of an external wall unless in compliance with this Clause.	N/A
Part C2 – Compartmentation and Separation			
C2.0	DtS Provisions	Information only.	Noted
C2.1	Application of Part	Information only.	Noted
C2.2	Floor area and volume limits	Class 5- Maximum Floor Area: **3,000m²** Maximum Volume: **18,000m³**	Complies
C2.9	Separation of classifications in different storeys	Not applicable, one fire compartment with Class 5 only	N/A
Part C3 – Protection of Openings			
C3.0	DtS Provisions	Information only.	Noted
C3.1	Application of Part	Information only.	Noted
C3.2	Protection of openings in external walls	No change proposed to the existing external walls or structure. No new openings proposed.	Noted
C3.3	Separation of external walls and associated	The building is a single fire compartment therefore, this Clause is not applicable.	Noted

Clause		Comments	Assessment
	openings in different fire compartments		
C3.4	Acceptable methods of protection	Methods of protection noted	Noted
C3.12	Openings in floors and ceilings for services	Not applicable	N/A
C3.15	Openings for service installations	Not applicable	N/A
C3.16	Construction joints	Construction joints in fire rated building elements are to be appropriately treated to maintain the integrity and insulation of the element in which they are located.	CRA
Specification C1.1 – Fire Resisting Construction			
1	Scope	This Specification contains the requirements for fire resisting construction of building elements.	Noted
2	General Requirements	-	-
2.1	Exposure to FSF	The building is exposed to the fire source features formed by the Eastern elevations.	Noted
2.2	Fire protection for support of another part	Where a part of a building required to have a FRL depends on direct vertical or lateral support from another part to maintain its FRL, that supporting part must have a FRL not less than that required by other provisions as set out in this Clause.	CRA
2.3	Lintels	A lintel must have the FRL required for the part for the building in which it is situation unless it does not contribute to the support of a fire door, fire window or fire shutter and it otherwise complies with this Clause. No new openings in fire rated building elements.	Noted
2.4	Attachments not to impair fire-resistance	No attachments currently proposed.	Noted
2.5	General concessions	No concessions under this Clause currently required	Noted
2.6	Mezzanine floors: Concession	Concession not required.	Noted
2.7	Enclosure of Shafts	Not applicable	N/A
5	Type C Construction	--	--
5.1	Fire resistance of building elements	The building elements are to have FRLs as determined by this Clause to meet the requirements of Type C Construction. See Part 4 of the Report. It is noted that FRLs for external walls need only be measured from the external side of the wall.	Noted
5.2	Carparks	Not applicable	N/A
Specification C1.10 – Fire Hazard Properties			
1	Scope	This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in buildings.	Noted
2	Application	Linings, materials and assemblies must comply with the appropriate provisions described in Table 1 of this Clause.	Noted
3	Floor linings and floor coverings	Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.	CRA
4	Wall and ceiling linings	Fire hazard properties of the wall and ceiling linings are to comply with this Clause.	CRA
5	Air-handling ductwork	Fire hazard properties of the air-handling ductwork are to comply with this Clause.	CRA
7	Other materials	Fire hazard properties of other materials not covered in Clauses 3, 4, 5 or 6 above are to comply with this Clause.	CRA

SECTION D – ACCESS AND EGRESS

Clause		Comments	Assessment
Part D1 – Provisions for Escape			
D1.0	DtS Provisions	Information only.	Noted
D1.1	Application of Part	Information only.	Noted
D1.2	Number of exits	The building is provided with sufficient exits as proposed.	Complies
D1.3	When fire-isolated stairways and ramps are required	Not applicable to current proposal.	N/A
D1.4	Exit travel distances	The travel distances measured do not exceed the Clause D1.4 required.	Complies
D1.5	Distance between alternative exits	Not applicable	N/A
D1.6	Dimensions of exits and paths of travel	Dimensions of new works are generally satisfactory.	Complies
D1.7	Travel via fire-isolated exits	No fire-isolated exits proposed.	N/A
D1.9	Travel by non-fire-isolated stairways or ramps	The travel to a road or open space does not exceed 80m	Complies
D1.10	Discharge from exits	The proposed plans comply with this Clause	Complies
D1.12	Non-required stairways, ramps or escalators	Not applicable	N/A
D1.13	Number of persons accommodated	It is proposed that the building will have a population level of not more than 20 people including staff.	Noted
D1.14	Measurement of distances	Information only.	Noted
D1.15	Method of measurement	Information only.	Noted
D1.16	Plant rooms, lift machine rooms, electricity network substations: Concession	Not applicable	N/A
D1.17	Access to lift pits	No lifts proposed.	N/A
Part D2 – Construction of Exits			
D2.0	DtS Provisions	Information only.	Noted
D2.1	Application of Part	Information only.	Noted
D2.2	Fire-isolated stairways and ramps	No fire-isolated stairways and ramps	N/A
D2.3	Non-fire-isolated stairways and ramps	This Clause is only applicable for buildings with a rise in storey of more than 2.	N/A
D2.7	Installations in exits and paths of travel	The electrical meter board is located externally.	Complies
D2.8	Enclosure of space under stairs and ramps	No enclosure of space under stairs proposed.	N/A
D2.9	Width of required stairways and ramps	Stairway satisfactory.	Complies
D2.10	Pedestrian ramps	Pedestrian ramps are to comply with this Clause.	Complies
D2.12	Roof as open space	No discharge to the roof proposed.	N/A
D2.13	Goings and risers	Any new or existing stairs will require nosing strips, complying with AS1428.1-2009 Clauses 11.1(f) and (g) are to be provided to all stairways.	CRA

Clause		Comments	Assessment
		Stairs geometry must be in accordance with this Clause	
D2.14	Landings	Landings are to comply with this Clause.	CRA
D2.15	Thresholds	A threshold of a doorway is permitted to incorporate a ramp in accordance with AS1428.1-2009 and this Clause.	CRA
D2.16	Barriers to prevent falls	Barriers (balustrades) are to comply with this Clause.	CRA
D2.17	Handrails	All handrails are required to be supplied in accordance with D3.3 and AS1428.1-2009 to all ramps and stairs to assist people with a disability.	Complies
D2.18	Fixed platforms, walkways, stairways and ladders	Not applicable to this proposal	N/A
D2.19	Doorways and doors	Doors for required exits are proposed to be swinging doors	Complies
D2.20	Swinging doors	Main exit door swings in the direction of egress	CRA
D2.21	Operation of latch	Latching to required exit doors are to openable with a single handed downward or pushing motion, as are the latches to doors in a path of travel.	CRA
		This requirement is not a requirement to a door that serves a sanitary compartment. However, D3.3 and AS1428.1-2009 calls for the use of accessible hardware in accessible areas.	CRA
D2.22	Re-entry from fire-isolated exits	No fire-isolated exits required.	N/A
D2.23	Signs on doors	No fire doors	N/A
D2.24	Protection of openable windows	Not applicable to this proposal	N/A
D2.25	Timber stairway: Concession	Concession not applicable	N/A
Part D3 – Access for People with a Disability			
D3.0	DtS Provisions	Information only.	Noted
D3.1	General building access requirements	Access is to be required to and within all areas normally used by the occupants. Any new works on level 1 are required to be accessible	CRA
D3.2	Access to buildings	Access must be provided to a building through not less 50% of the pedestrian entrances. It is assumed that access for people with a disability is provided via ground floor entry from the existing porch. The proposed rear entry that allows access via stairs are located within <50m from the accessible entrance.	CRA
D3.3	Part of buildings to be accessible	Generally, the travel paths and accessways are greater than 1m and comply with this Clause.	Complies
D3.4	Exemptions	Exemptions are permitted in areas where it would be inappropriate because of the particular purpose for which the area is used. For instance, access may pose a health or safety risk for people with a disability. The path of travel providing access to these areas is also exempt.	Noted
D3.5	Accessible carparking	The proposed design generally complies with Clause D3.5 and AS/NZS 2890.6 with regards to the layout.	CRA
D3.6	Signage	Braille and tactile signage is to be provided in accordance with this Clause. Where illuminated exit signage is provided to an exit door a braille and tactile sign complying with this Clause is to be provided stating “Exit” and “Ground Floor”.	CRA
D3.8	Tactile indicators	Tactile indicators are to be provided to warn people that they are approaching a stairway, ramp or overhead obstruction. Tactiles are to comply with this Clause and AS/NZS1428.4.1-2009.	CRA
D3.11	Ramps	On an access way, a series of connected ramps are not to have a combined vertical rise of 3.6m or more. A landing for a step ramp may not overlap a landing for another step ramp or ramp.	CRA
D3.12	Glazing on an accessway	On an access way, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of	CRA

Clause		Comments	Assessment
		being mistaken for a doorway or opening, must be clearly marked in accordance with AS/NZS1428.4.1-2009.	
Specification D3.6 – Braille and Tactile Signs			
1	Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as required by Clause D3.6.	Noted
2	Location of braille and tactile signs	Braille and tactile signage are to be located in accordance with this Clause which sets out signage heights, located and details of braille and tactile exit signage.	CRA
3	Braille and tactile sign specification	Braille and tactile signage is to have characters in accordance with this Clause.	CRA
4	Luminance Contrast	The luminance contrast of the signage is to comply with this Clause.	CRA
5	Lighting	Braille and tactile signage must be illuminated to ensure the luminance contrast requirements are met at all times during which the sign is required to be read.	CRA
6	Braille	The braille characters are to comply with Clause.	CRA

SECTION E – SERVICES AND EQUIPMENT

Clause		Comments	Assessment
Part E1 – Fire Fighting Equipment			
E1.0	DtS Provisions	Information only.	Noted
E1.3	Fire hydrants	Buildings with areas greater than 500m^2 are to be provided with a fire hydrant system.	N/A
E1.4	Fire hose reels	Buildings with areas greater than 500m^2 are to be provided with fire hose reels.	N/A
E1.5	Sprinklers	Not applicable	N/A
E1.6	PFE's	The building is to be provided with portable fire extinguishers.	CRA
E1.9	Fire precautions during construction	In a building under construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit.	Noted
Part E2 – Smoke Hazard Management			
E2.0	DtS Provisions	Information only.	Noted
E2.1	Application of Part	Information only.	Noted
E2.2	General requirements	Not applicable to this proposal.	N/A
E2.3	Provision for special hazards	Not applicable to this proposal.	N/A
Part E4 – Emergency Lighting, Exit Signs and Warning Systems			
E4.0	DtS Provisions	Information only.	Noted
E4.2	Emergency lighting requirements	Not applicable for this proposal	N/A
E4.3	Measurement of distance	Information only.	Noted
E4.4	Design and operation of emergency lighting	The emergency lighting system is to comply with AS2293.1-2005.	CRA
E4.5	Exit signs	All areas are to be provided with exit signage in accordance with this Clause.	CRA
E4.6	Direction signs	All areas are to be provided with directional exit signage in accordance with this Clause.	CRA
E4.8	Design and operation of exit signs	The exit lighting system is to comply with AS2293.1-2005.	CRA

SECTION F – HEALTH AND AMENITY

Clause		Comments	Assessment
Part F1 – Damp and Weatherproofing			
F1.0	DtS Provisions	Information only.	Noted
F1.1	Stormwater drainage	Stormwater drainage is to comply with AS/NZS3500.3-2015.	CRA
F1.4	External above ground membranes	Waterproofing membranes for external above ground use, such as balconies and roofs, must comply with AS4654.1-2012 and AS4654.2-2012.	CRA
F1.5	Roof coverings	A roof must be covered with materials set out in this Clause in accordance with the relevant standard also set out in this Clause.	CRA
F1.6	Sarking	Sarking type materials used for weatherproofing of roofs and walls must comply with AS4200.1-1994 and AS4200.2-1994.	CRA
F1.7	Waterproofing of wet areas in buildings	Waterproofing of wet areas in buildings must comply with this Clause, and AS3740-2010.	CRA
F1.9	Damp-proofing	Damp-proofing is to be provided in accordance with this Clause. Where a damp-proof course is provided the material must comply with AS/NZS2904-1995 or impervious termite shields in accordance with AS3660.1-2014.	CRA
F1.10	Damp-proofing of floors on the ground	Damp-proofing of floors on the ground is to be in accordance with this Clause. Where required the vapour barrier is to comply with AS2870-2011.	CRA
F1.11	Provision of floor wastes	In a Class 2, 3 or 4 building, or part, a bathroom or laundry located at any level above a sole-occupancy unit or public space mush have a floor waste and the floor graded to the floor waste to permit the drainage of water.	CRA
F1.12	Sub-floor ventilation	Where provided sub-floor ventilation is to be in accordance with this Clause.	CRA
F1.13	Glazed assemblies	Glazed assemblies in external walls or roofs are to comply with AS2047-2014 or AS1288-2006 as required by this Clause and NCC Clause B1.4.	CRA
Part F2 – Sanitary and Other Facilities			
F2.0	DtS Provisions	Information only.	Noted
F2.2	Calculation of number of occupants and facilities	The proposed ground floor plan provides adequate amenities. It is assumed that there will be less than 10 staff.	CRA
F2.3	Facilities in Class 3 to 9 buildings	If ten (10) or less people are employed, a unisex facility may be provided instead of separate facilities for each sex. If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy	CRA
F2.4	Accessible sanitary facilities	As scaled the proposed plan for the accessible sanitary is adequate. Please allow for construction tolerance and application of tiles additional to these minimum values. Accessible sanitary compartments are to comply with AS1428.1-2009.	CRA
F2.5	Construction of sanitary compartments	Stalls heights and doors of sanitary compartment must comply with this Clause.	CRA
F2.6	Interpretation: Urinals and washbasins	Urinal and washbasins must be installed in accordance with this Clause.	CRA
Part F3 – Room Heights			
F3.0	DtS Provisions	Information only.	Noted
F3.1	Height of rooms and other spaces	Room heights are capable of complying with this Clause.	CRA
Part F4 – Light and Ventilation			
F4.0	DtS Provisions	Information only.	Noted
F4.4	Artificial lighting	Artificial lighting is to be provided in accordance with this Clause.	CRA
F4.5	Ventilation of rooms	Ventilation is to be provided in accordance with this Clause by natural or mechanical means.	CRA
F4.6	Natural ventilation	Natural ventilation is to be provided in accordance with this Clause.	CRA

Clause		Comments	Assessment
F4.7	Ventilation borrowed from adjoining room	Natural ventilation is not proposed to be borrowed in accordance with this Clause.	N/A
F4.8	Restriction on location of sanitary compartments	The location of sanitary compartments is satisfactory and does not require an airlock.	Complies
F4.12	Kitchen local exhaust ventilation	Where a commercial kitchen has a cooking apparatus that has a total maximum electrical power input exceeding 8kW or a total gas power input exceeding 29mJ/h	CRA

SECTION J – ENERGY EFFICIENCY

Clause		Comments	Assessment
Part J0 – Energy Efficiency			
J0.0	DtS Provisions	Information only.	Noted
J0.1	Application Section J	Information only.	Noted
Part J1 – Building Fabric			
J1.0	DtS Provisions	Information only.	Noted
J1.1	Application of Part	Information only.	Noted
J1.2	Thermal construction – general	Where required insulation is to comply with AS4859.1-2002 and is to be installed in accordance with this Clause.	CRA
J1.3	Roof and ceiling construction	Where part of the thermal envelope the roof or ceiling is to achieve an R-value in accordance with this Clause. R-values range between 3.2 and 4.7.	CRA
J1.4	Roof lights	Where a rooflight is provided it is to comply with this Clause.	CRA
J1.5	Walls	Where part of the thermal envelope the walls are to achieve an R-value in accordance with this Clause. R-values range between 1.4 and 3.3.	CRA
J1.6	Floors	Where part of the thermal envelope the floor is to achieve an R-value in accordance with this Clause. R-values range between 0 and 2.75.	CRA
Part J2 – Glazing			
J2.0	DtS Provisions	Information only.	Noted
J2.1	Application of Part	Information only.	Noted
J2.4	Glazing	Glazing located in the thermal envelope of the building is to comply with this Clause.	CRA
J2.5	Shading	Shading as this Clause can affect the glazing assessment.	Noted
Part J3 – Building Sealing			
J3.0	DtS Provisions	Information only.	Noted
J3.1	Application of Part	Information only.	Noted
J3.2	Chimneys and flues	Any chimneys and flues are to be sealed in accordance with this Clause.	CRA
J3.3	Rooflights	Any rooflights are to be sealed in accordance with this Clause.	CRA
J3.4	Windows and doors	Windows and doors are to be sealed in accordance with this Clause.	CRA
J3.5	Exhaust fans	Exhaust fans are to be sealed in accordance with this Clause.	CRA
J3.6	Construction of roofs, walls and floor	The construction of the building is to be sealed in accordance with this Clause.	CRA
J3.7	Evaporative coolers	Any evaporative coolers are to be in accordance with this Clause.	CRA
Part J5 – Air-conditioning and Ventilation Systems			
J5.0	DtS Provisions	Information only.	Noted
J5.1	Application of Part	Information only.	Noted
J5.2	Air-conditioning systems	Air-conditioning systems are to be in accordance with this Clause.	CRA
J5.3	Mechanical ventilation systems	Mechanical ventilation systems are to be in accordance with this Clause.	CRA
J5.4	Miscellaneous exhaust systems	Miscellaneous exhaust systems are to be in accordance with this Clause.	CRA
Part J6 – Artificial Lighting and Power			
J6.0	DtS Provisions	Information only.	Noted
J6.1	Application of Part	Information only.	Noted

Clause		Comments	Assessment
J6.2	Artificial lighting	Artificial lighting is to comply with this Clause, including the maximum illumination power density.	CRA
J6.3	Interior artificial lighting and power control	Lighting controls are to comply with this Clause.	CRA
J6.4	Interior decorative and display lighting	Interior decorative and display lighting must be controlled separately from other lighting, by manual switches and time switches in accordance with this Clause. Window display lighting must be controlled separately from other display lighting.	CRA
J6.5	Artificial lighting around the perimeter of a building	Artificial lighting around the perimeter of a building must comply with this Clause.	CRA
J6.6	Boiling and chilled water storage units	Power supply to a boiling water or chilled water storage unit must be controlled by a time switch in accordance with Specification J6.	CRA
Part J7 – Heated Water Supply and Swimming and Spa Pool Plant			
J7.0	DtS Provisions	Information only.	Noted
J7.2	Heated water supply	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume 3 – Plumbing Code of Australia.	CRA
Part J8 – Facilities for Energy Monitoring			
J8.0	DtS Provisions	Information only.	Noted
J8.1	Application of Part	Building under 500m^2	N/A
Specification J1.2 – Material Properties			
1	Scope	This Specification lists the thermal properties of some common construction materials.	Noted
2	Construction DtS	Information only.	Noted
Specification J1.3 – Roof and Ceiling Construction			
1	Scope	This Specification describes the thermal performance of some common forms of roof and ceiling construction.	Noted
2	Construction DtS	Information only.	Noted
Specification J1.5 – Wall Construction			
1	Scope	This Specification describes the thermal performance of some common forms of external wall construction.	Noted
2	Construction DtS	Information only.	Noted
Specification J1.6 – Floor Construction			
1	Scope	This Specification describes the thermal performance of some common forms of floor construction.	Noted
2	Construction DtS	Information only.	Noted
Specification J5.2a – Fans			
1	Scope	This Specification contains the requirements for fans used as part of an air-conditioning system or mechanical ventilation system.	Noted
2	Application	Fans used for air-conditioning are to comply with this Clause.	CRA
3	Air-conditioning system fans	Fans used for air-conditioning are to comply with this Clause.	CRA
4	Mechanical ventilation system fans	Fans used for air-conditioning are to comply with this Clause.	CRA
Specification J5.2b – Ductwork Insulation and Sealing			
1	Scope	This Specification contains the requirements for the sealing and insulation of supply and return ductwork and fittings used in an air-conditioning system.	Noted
2	Sealing of ductwork	Sealing of ductwork is to comply with this Clause.	CRA
3	Insulation of ductwork	Insulation of ductwork is to comply with this Clause.	CRA
Specification J5.2c – Piping, Vessel, Heat Exchanger and Tank Insulation			
1	Scope	This Specification contains the requirements for the insulating of piping, vessels, heat exchangers and tanks containing heating or cooling fluids used in an air-conditioning system.	Noted

Clause		Comments	Assessment
2	Insulation	Insulation to piping, vessels, heat exchangers and tanks containing heating or cooling fluids used in an air-conditioning system is to comply with this Clause.	CRA
Specification J5.2d – Space Heating			
1	Scope	This Specification contains the requirements for heaters used for air-conditioning or as a part of an air-conditioning system.	Noted
2	Heaters	Heaters used for air-conditioning are to comply with this Clause.	CRA
Specification J5.2e – Energy Efficiency Ratios			
1	Scope	This Specification contains the requirements for the energy efficiency ratios of refrigerant chillers used as a part of an air-conditioning system and packaged air-conditioning equipment.	Noted
2	Energy efficiency ratios	Chillers and package units forming air-conditioning systems are to comply with this Clause.	CRA
Specification J6 – Lighting and Power Control Devices			
1	Scope	This Specification contains the requirements for lighting and power control devices including timers, time switches, motion detectors and daylight control devices.	Noted
2	Lighting timers	Lighting timers must comply with this Clause.	CRA
3	Time switch	Time switches must comply with this Clause.	CRA
4	Motion detectors	Motion detectors must comply with this Clause.	CRA
5	Daylight sensor and dynamic lighting control device	Daylight sensor and dynamic lighting control devices must comply with this Clause.	CRA