Head Office
Certis Access Pty Ltd

1/19 Finchley Street, Milton, QLD 4064
PO Box 1065, Milton BC, QLD 4064

Email: access@certis.com.au

Ph: 1300 702 085 Fax: 07 3144 4699
ACN: 09 1953310 ABN: 77 091953310

ACCESS AND MOBILITY REPORT

Proposal:	Cronulla High School
Location:	31 Bate Bay Drive Cronulla NSW 2230
Prepared for:	Fulton Trotter Architects
Certis Ref. No:	DDA 1456
Revision:	F (Final Schematic Design - updated)
Date:	30th August 2022

DOCUMENT CONTROL

Revision	Title	Prepared	Date
A	Concept Design Report	Nik Dixon	10th June 2021
B	Concept Design Report (minor update)	Nik Dixon	30th June 2021
C	Schematic Design	Nik Dixon	13th June 2022
D	Schematic Design	Nik Dixon	6th July 2022
E	Schematic Design (Final)	Nik Dixon	26th July 2022
F	Schematic Design (Final - updated)	Nik Dixon	30th August 2022

REPORT LIMITATIONS

It is important to note that following the recommendations within this report will not in itself provide exemption from action under the DDA. Certis Access Consultancy cannot accept any responsibility for loss resulting due to any non-compliance with the DDA or associated legislation.

The process of accessibility under the DDA is much broader than just the built environment; it covers management issues, staff approach and training and ongoing maintenance issues. As part of any alterations made as a result of this report there will be a need to ensure they are correctly constructed to appropriate technical guidelines, such as Australian Standard (AS) or other relevant guidance and also managed effectively. All relevant staff should be made aware of their responsibilities under the DDA.

In preparing this report, the Consultant has taken reasonable skill care and diligence in performing her duty professionally. The advice given is based on a professional judgement and an assessment of the information that could be derived at the time of the report.

It is important to note that as with all aspects of the built environment, there is often more than one way of resolving any issue identified. It is for the client to ultimately assess the recommendations put forward and fully evaluate their suitability for the proposal and the likely use(s) that they will be used and how the completed project will operate in practice.

The information contained within this report has been formulated for this project, based on the documentation provided. The advice contained within it should not be transferred to other projects. Permission is not granted for this report to be issued for public comment or be used for any purpose, other than for this commission, without prior permission from Certis Access.

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1.EXECUTIVE SUMMARY

This report presents the results of an Access and Mobility Review undertaken with respect to the proposed new development works and alterations to existing buildings within the existing Cronulla High School site, located at 31 Bate Bay Drive, Cronulla, NSW 2230.

The assessment has been undertaken against the National Construction Code (Building Code of Australia) 2019 Amendment 1 (BCA), the Disability (Access to Premises – Buildings) Standards 2010, relevant Australian Standards, the objects of the Disability Discrimination Act 1992 (Cth) (DDA) and also international advisory standards on access where appropriate. Certis Access has evaluated the application of deemed to satisfy provisions of the BCA against opportunities for alternative solutions for Access for this project. This has been done using the performance requirements of the BCA and liaison with the Building Surveyor. This report should be read in conjunction with any marked-up drawings attached.

1.1 NCC (BCA)/PREMISES STANDARDS

With regards to the NCC and the Disability (Access to Premises – Buildings) Standard 2010 the following items have been highlighted as potential issues that should be considered in more detail as the design development continues. Each item is further discussed within the reports content.

- The maximum steepness of accessways shall be 1:20
- It is considered that the existing Lift in building G services the library and the existing lift adjacent to Building D services Buildings L, D, E and A, which is considered acceptable under the NCC and Premises Standards.
- Existing lifts on a continuous accessible path of travel to any new works, including under the Premises Standards affected part are to include accessible features including a handrail, accessible lift controls at landings and within the lift car and audible information. The existing lift is generally in accordance with the requirements.
- Design details of the access and approach arrangement from the allotment boundary and accessible car parking spaces to the principle pedestrian entrance are required to ensure they comply with AS1428.1 for access and circulation.
- Turning spaces of 1540mm (width) X 2070mm (length) must be provided within 2 metres of the end of an accessway, where it is not possible to continue travelling along the accessway, including where the path of travel terminates at a gate or door (D3.3(d)(ii); AS 1428.1:2009 Clause 6.5.3).
- It is considered within the existing buildings that if building work is being undertaken within a room that the ‘affected part’ applies and therefore the existing doorways into the room should comply. It has been identified that some doorways are less than 850 mm clear opening width which does not comply (for example First Floor Building E and Ground Floor Building C.
- Detailed design information of all proposed ramps including those with a gradient of 1:14, kerb, step and threshold ramps are required and to comply with AS1428.1-2009
- Further details of the proposed ramp to the first floor of Building L is required. The mid-landing is less than 1540 mm between handrails.
- When detailing dimensions for fixtures, fittings and circulation spaces consideration should be given to construction tolerances to ensure items are installed in accordance with the Standards.
- Any stairs provided within the site should be constructed in accordance with Clause 11 of AS1428.1, excluding fire isolated stairs. This would include the provision of handrails to both sides of the staircase with appropriate extensions, luminance contrast to nosings and tactile ground surface indicators to warn of the stair.
- Further information of the proposed unisex accessible toilets and sanitary facilities suitable for people with ambulant disabilities are required as design progresses.. Sanitary compartments suitable for person with ambulant disability required to each gender sanitary facility.

2. INTRODUCTION

The purpose of this document is to provide feedback on elements of the proposed project that do not achieve compliance with the Building Code of Australia (NCC). It will also review the scheme against the related standards, in particular the AS 1428 (2009) series and the Disability (Access to Premises-Buildings) Standards 2010. Following the Disability (Access to Premises-Buildings) Standards 2010 should ensure that obligations under the Disability Discrimination Act 1992 (DDA) are met with regards to matters covered by the standard. However, the report will also provide a commentary in relation to the broader obligations under the DDA which should be considered. The DDA elements are more focused on management policy and procedure, both in theory and practice. Meeting the principles of the DDA may have little impact on the design, however there may be elements that the client should consider further before any works are undertaken and are offered as advice only.

2.1 DETAILS OF SCHEME

The proposed development includes - the provision of a new carpark and 2 new two storey buildings identified as Blocks L & M and alterations to the existing buildings identified as Blocks A, C, D and E within the existing Cronulla High School.

2.2 USE AND CLASS OF BUILDING

The Building Surveyor has identified the following Building Characteristics:

Level	Use	NCC Classification
Ground Buildings L and M	Administration offices and ancillary uses Educational Facility and ancillary uses	Class 5 (principal uses) Class 9b (ancillary uses)
Level 1 Buildings L and M	Educational Facility and ancillary uses Administration offices and ancillary uses	Class 9b (principal uses) Class 5 (ancillary uses)
Existing Buildings (both levels)	Existing 2 storey buildings D, A, C, E and ancillary uses – storerooms, printing rooms and the like	Class 5 (principal uses) Class 9b (principal and ancillary uses)

General Floor Areas (m^2) - New Construction

Building D (existing) – 1,292 m^2

United building D,A,E,F – combined exceed the limits of 5000 m^2 for Type B construction

Note: Floor areas are measure to outside of external walls and includes balcony and covered walkway areas for the purpose of NCC assessment

Level	Area
Level G (Bld. L)	577 m^2
Level 1 (Bld. M)	754 m^2
Level G (Bld. M)	591 m^2
Level 1 (Bld. M)	893 m^2
Total (L) =	1,331 m^2
Total (M) =	1,484 m^2

2.3 OCCUPANTS AND OCCUPATION

The occupants of the new buildings will be staff and students of the existing Cronulla High School and may include a person with disabilities.

3. REVIEW METHODOLOGY

This Access and Mobility Report has been developed based on an assessment of the proposed scheme against legislation and standards relating to access. The documentation used for the review is tabulated in Section 3.1 and Section 3.2 below.

REFERENCED STANDARDS AND LEGISLATION

- Disability Discrimination Act 1992 (DDA)
- National Construction Code Series Building Code of Australia – Volume One (BCA)
- Australian Standard AS1428.1 – 2009 – *Design for access and mobility. Part 1: General requirement for access*
- Disability (Access to Premises – Buildings) Standard 2010 AS 1735.1 - 2003/Amdt 1
- Australian Standard AS1735.12 - 1999 – *Lifts, escalators and moving walks. Part 12: Facilities for persons with disabilities*
- Australian Standard AS2890.6 - 2009 – *Parking facilities – Off-street car parking*
- Australian Standard AS1428.4.1 - 2009 – *Design for access and mobility. Part 4: Tactile Indicators*
- Disability Standards for Education 2005
- Educational Facilities Standards & Guidelines – Section DG19 – Access for People with Disabilities

3.2 SCHEME DRAWINGS AND DOCUMENTS

The following drawings were referenced as part of the assessment process in compiling this report.

SD-0001	TITLE PAGE	06
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SD-1001	EXISTING SITE PLAN	08
SD-1002	DEMOLITION SITE PLAN	08
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SD-1101	STREETSCAPE ELEVATIONS & SCHOOL SIGNAGE	06
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SD-1105	SHADOW DIAGRAMS	04
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SD-1503	CONNECTION WITH COUNTRY ART WORK ZONE	01
SD-1601	TYPICAL WALL DETAILS - EXTERNAL	06
SD-1602	TYPICAL WALL DETAILS - INTERNAL	04
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SD-A-2001	BUILDING A - GROUND FLOOR PLAN & CEILING PLAN	06
SD-A-2002	BUILDING A - FIRST FLOOR PLAN & CEILING PLAN	06
SD-C-2001	BUILDING C - GROUND FLOOR PLAN & CEILING PLAN	06
SD-D-2001	BUILDING D - GROUND FLOOR PLAN & CEILING PLAN	06
SD-D-2002	BUILDING D - FIRST FLOOR PLAN & CEILING PLAN	06
SD-D-2003	BUILDING D - DOOR & WINDOW SCHEDULE	04
SD-E-2001	BUILDING E - GROUND FLOOR PLAN & CEILING PLAN	06
SD-E-2002	BUILDING E - FIRST FLOOR PLAN & CEILING PLAN	06
SD-L-2001	BUILDING L - GROUND FLOOR PLAN	10
SD-L-2002	BUILDING L - FIRST FLOOR PLAN	10
SD-L-2101	BUILDING L - ROOF PLAN	10
SD-L-2201	BUILDING L - GROUND FLOOR CEILING PLAN	07
SD-L-2202	BUILDING L - FIRST FLOOR CEILING PLAN	07
SD-L-2301	BUILDING L - GROUND FLOOR FINISHES PLAN	06
SD-L-2302	BUILDING L - FIRST FLOOR FINISHES PLAN	06
SD-L-3001	BUILDING L - ELEVATION 01	07
SD-L-3002	BUILDING L - ELEVATION 02	07
SD-L-3003	BUILDING L - SECTION 01	07
SD-L-6001	BUILDING L - DOOR SCHEDULE 01	04
SD-L-6002	BUILDING L - DOOR SCHEDULE 02	04
SD-L-6101	BUILDING L - WINDOW SCHEDULE	04
SD-L-9001	BUILDING L - GROUND FLOOR PLAN FF&E	06
SD-L-9002	BUILDING L - FIRST FLOOR PLAN FF&E	06
SD-M-2001	BUILDING M - GROUND FLOOR PLAN	09
SD-M-2002	BUILDING M - FIRST FLOOR PLAN	10
SD-M-2101	BUILDING M - ROOF PLAN	09
SD-M-2201	BUILDING M - GROUND FLOOR CEILING PLAN	07
SD-M-2202	BUILDING M - FIRST FLOOR CEILING PLAN	07
SD-M-2301	BUILDING M - GROUND FLOOR FINISHES PLAN	06
SD-M-2302	BUILDING M - FIRST FLOOR FINISHES PLAN	06
SD-M-3001	BUILDING M - ELEVATION 01	08
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SD-M-6001	BUILDING M - DOOR SCHEDULE 01	04
SD-M-6002	BUILDING M - DOOR SCHEDULE 02	04
SD-M-6003	SITE - GATE SCHEDULE	01
SD-M-6101	BUILDING M - WINDOW SCHEDULE	04
SD-M-9001	BUILDING M - GROUND FLOOR PLAN FF&E	06
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SD-T-5001	ROOM ELEVATIONS 01 - GLS Type 1, GLS Type 2, GLS Type 3	04
SD-T-5002	ROOM ELEVATIONS 02 - Multipurpose, Learning Commons	04
SD-T-5003	ROOM ELEVATIONS 03 - Collaboration Space	04
SD-T-5004	ROOM ELEVATIONS 04 - Canteen, Canteen Office	04
SD-T-5005	ROOM ELEVATIONS 05 - Public & Student Reception, Admin Clerical	04
SD-T-5006	ROOM ELEVATIONS 06 - Staff Study Areas, Office & Interview	04
SD-T-5007	ROOM ELEVATIONS 07 - Building A & C - Staff Areas	04
SD-T-5008	ROOM ELEVATIONS 08 - Clinic, Tea Bench, Student Waiting, Corridor	04
SD-T-5009	ROOM ELEVATIONS 09 - Thoroughfare	04
SD-T-5010	ROOM ELEVATIONS 10 - Staff Amenities Types 1-3, EOT Facilities	04
SD-T-5011	ROOM ELEVATIONS 11 - Student Amenities Types 1-4	04
SD-T-5012	ROOM ELEVATIONS 12 - Student Amenities Types 5 & Cleaners Typ...	04
SD-T-5013	ROOM ELEVATIONS 13 - Building D - Staff Areas	02

Taylor Brammer Landscape Architects Pty Ltd - Landscape Schematic Design Package

Sheet Number	Sheet Name
LA000	COVER PAGE
LA100	DESIGN APPROACH
LA101	SITE CONTEXT
LA200	LANDSCAPE MASTERPLAN
LA201	LANDSCAPE WORKS
LA202	CENTRAL PLAZA
LA203	STAFF COURTYARD
LA301	PLANTING & MATERIAL SCHEDULE
LA401	SECTIONS
LA501	LANDSCAPE DETAILS
LA502	LANDSCAPE DETAILS

4. LEGISLATION

The Disability Standards for Education 2005 are applicable to education providers and have the objective to eliminate, as far as possible, discrimination against persons on the grounds of disability in the area of education and training and to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law in the area of education and training as the rest of the community. It also aims to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community. These standards aim to specify how education and training are made accessible to students with disabilities. They cover the following areas:

- Enrolment
- Participation
- Curriculum development, accreditation and delivery
- Student support services
- Elimination of harassment and victimization.

Part 3 of the Standards requires that reasonable adjustments are made in respect of providing education for people with a disability. For this assessment we are only going to consider adjustments in respect to physical access into buildings and associated 'premises', therefore the applicable standard is the Disability (Access to Premises- Buildings) Standards 2010.

The Disability (Access to Premises- Buildings) Standards 2010 (Premises Standards) came into force on the 1st May 2011. The purpose of these Standards is to provide for equitable and dignified access to new buildings and those areas of existing buildings that undergo renovation or upgrade that require a building approval.

If a building complies with the Premises Standards those responsible for the building cannot be subject to a successful complaint of unlawful discrimination under the Disability Discrimination Act (DDA) in relation to matters covered by the Premises Standards.

Building Certifiers, Building Developers and Building Managers all have obligations under the Standards and must ensure a building complies with the Standards, with each party being responsible for the area they have control over. It is unlawful to fail to comply with the requirements of the Premises Standards.

The Building Code of Australia aligns with the requirements of the Premises Standards and therefore new building work that complies with the NCC (BCA) will also comply with the Premises Standards. However the Premises Standard places additional requirements on existing buildings where building work is being undertaken. The requirements for the new part of an existing building to comply with the Standards is limited to the actual work identified in the building approval and does not extend to other parts of the building which the new part is located. However the Premises Standards recognises that in most circumstances it will be necessary to provide an accessible path of travel to the new or modified part and has therefore introduced the concept of '**affected part'**.

An 'affected part' is the path of travel between and including the principal pedestrian entrance of an existing building to the new or modified part of the building. This path of travel must be a continuous accessible path of travel. It does not extend to the allotment boundary. Toilets alongside the 'affected part' path of travel are not required to be upgraded unless they are part of the building approval.

The Premises Standards do not apply to an existing building until an application for approval of building work is submitted. It also recognises that it is not always possible to upgrade all existing buildings and therefore allows some exceptions and concessions.

The 'affected part' provisions of the Premises Standards applies to all existing buildings under this assessment report.

5.NCC REVIEW – DTS AND PERFORMANCE CONSIDERATIONS

This section reviews the proposed scheme against the National Construction Code 2019 Amendment 1 (NCC). It considers both the deemed-to-satisfy (DTS) provisions and opportunities where Performance Solutions for access may be appropriate to the proposed project.

5.1 GENERAL BUILDING ACCESS REQUIREMENTS

Under the NCC and Premises Standard access is required as follows:

Building Class	Description	Access Requirements
Class 5 & 9b	Offices/Assembly (school)	*To and within all areas normally used by the occupants.*

Exemptions

Clause D3.4 of the NCC allows exemptions for areas that would pose a health and safety risk for people with disabilities or an area which could be considered inappropriate because of the particular purpose for which the area is used. Plant, services and comms rooms and storerooms can be considered to be exempt.

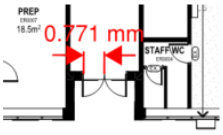
5.2 EXTERNAL ACCESS ROUTES

Requirements:	Key reference: NCC ref D3.2 *An accessway must be provided to the new building from:* *(i) the main points of a pedestrian entry at the allotment boundary; and* *(ii) another accessible building connected by a pedestrian link; and* *(iii) any required accessible car parking space on the allotment.* *Accessways should have a continuous accessible path of travel which has a minimum unobstructed width of 1000mm in accordance with AS 1428.1. Where paths are less than 1800mm wide then passing places (1800w x 2000mm) at no more than 20m intervals are required.* *External stairs are required to be in accordance with Clause 11 of AS1428.1.* *External ramps are required to be in accordance with Clause 10 of AS1428.1.*
Review Issues:	Access to the new building is to be provided from: *(i) the main points of a pedestrian entry at the allotment boundary; and* *(ii) another accessible building connected by a pedestrian link; and* *(iii) any required accessible car parking space on the allotment.* The longitudinal gradients, widths and crossfalls are required of the accessways to the new building from (i)(ii)(iii) as the design progresses. Any new accessways shall comply with AS1428.1-2009. The site appears relatively level and is capable of compliance. Advice from the design team is that all accessways are no steeper than 1:20.
Actions:	Capable of compliance

5.3 CAR PARKING

Requirements:	Key reference: NCC ref D3.5 & AS2890.6 *Class 5/9b – 1 space for every 100 carparking spaces or part thereof*
Review Issues:	A total of 31 carparking spaces are proposed, therefore the allocation of 2 accessible carparking spaces complies. Spaces to be designed in accordance with AS2890.6
Actions:	Design complies

5.4 BUILDING ENTRANCES

Requirements:	Key reference: NCC ref D3.2 - *In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and* *I. through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances.* *II. For a building with a total floor area over 500m^2, a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.* *Except for pedestrian entrances serving only areas exempted by D3.4.* *Where a pedestrian required to be accessible has multiple doorways –* *I. If the pedestrian entrance consists of not more than 3 doorways - not less than 1 of those doorways must be accessible; and* *II. If a pedestrian entrance consists of more than 3 doorways – not less than 50% of those doorways must be accessible.* *In accordance with AS 1428.1 2009 the minimum clear width of the entrances is required to be 850m. Circulation spaces are required at doorways in accordance with clause 13.3 of AS 1428.1.*
Review Issues:	It is understood that the main entrance doorways are capable of compliance, detailed design information will be required as the design progresses, noting: • Where there is a change in level between the internal and external floor finishes a maximum rise of 35mm is permitted with the installation of a threshold ramp per Clause 10.5 of AS 1428.1 (2009). A door schedule has been provided for the entrance doorways of Buildings L & M, which appears to show the clear opening widths are a min 850 mm which is acceptable. Further details of the main entrance doorways into Buildings A, C, D & E will be required under the Premises Standards 'affected part'. For example - Ground floor Building E entrance doorways are approx. 775 mm clear opening width in lieu of 850 mm per active leaf. We require the dimensions of the existing main entrance doorways as design progresses, as per section 7. 
Actions:	Further information required as design progresses.

5.5 INTERNAL ACCESS ROUTES

Requirements:	*Key reference: NCC ref D3.2* *A continuous accessible path of travel with a minimum width of 1000mm wide is required throughout the development (excluding exempted areas under D3.4)* *Passing places for 2 wheelchairs minimum 1800mm wide and 2000mm long must be provided at maximum 20m intervals. Turning spaces are also required within 2m of the end of accessways where it is not possible to continue on. These are as follows: 60°-90°turn 1500mm wide by 1500mm long, 90°-180° turn 1540mm wide by 2070mm in direction of travel*
Review Issues:	Overall, capable of compliance, noting: • Turning spaces of 1540mm (width) X 2070mm (length) must be provided within 2 metres of the end of an accessway, where it is not possible to continue travelling along the accessway, including where the path of travel terminates at a gate or door (D3.3(d)(ii); AS 1428.1:2009 Clause 6.5.3). The design indicates the corridor widths exceed 1540 mm.
Actions:	Design complies

5.6 INTERNAL DOORS

Requirements:	Key reference: NCC ref D3.3 & Clause 13 AS1428.1 *Doors to areas required to be accessible should have a minimum clear opening of 850mm under AS 1428.1. Where multiple leaves are used an unobstructed width of 850mm must be maintained to at least one doorway leaf.* *Circulation spaces are required at doorways in accordance with clause 13.3 of AS 1428.1. All doorways must have a minimum 30% luminance contrast minimum 50mm wide between:* • *Door leaf and jamb* • *Door leaf & adjacent wall* • *Architrave & wall* • *Door leaf & architrave; or Door jamb & adjacent wall* *The distances between doorways in vestibules, airlocks and other similarly enclosed spaces shall not be less than 1450mm. Where the doors encroach into space, the distance shall be not less than 1450mm plus the door leaf width*
Review Issues:	It is considered within the existing buildings that if building work is being undertaken within a room that the 'affected part' applies and therefore access is required from the buildings main entrance doorway to the new work via any doorway on that path of travel. It has been identified that some doorways are less than 850 mm clear opening width which does not comply (for example First Floor Building E and Ground Floor Building C).
Actions:	Does not comply

5.7 DOOR HARDWARE & CONTROLS

Requirements:	*Key reference: NCC ref D3.3 & Clause 13.5 AS1428.1* *Door hardware and any security measures must be selected and installed to comply with the requirements of AS 1428.1 (2009). Door handles and hardware should be designed to allow operation by one hand, such as D type handles.* *Clearances to handles shall be not less than 35mm and not more than 45mm. Any snibs should be a minimum of 45mm long.* *Handles should be positioned between 900-1100mm above finished floor level. Security/ access controls (including to internal automated doors and intercom systems) to be located as per AS1428.1 (2009) with: mounting height between 900-1100mm above FFL; and not closer than 500mm to any internal corner.* *Controls that only need to be touched should be positioned between 900-1250mm above ffl and not less than 500mm from an internal corner. Push buttons should have a min 25mm diameter.* *Door operating forces to manual doors to meet the requirements for operating forces of 20N. This will also include the operable walls.*
Review Issues:	Door hardware is to comply with AS1428.1-2009. Please provide a door hardware schedule as design progresses.
Actions:	Capable of compliance

5.8 RAMPS

Requirements:	*Key reference: NCC ref D3.3* *Every ramp, except a fire-isolated ramp shall comply with clause 10 of AS1428.1*
Review Issues:	Further details of the proposed ramp to the first floor of Building L are required as design progresses. Please provide dimensioned plans and elevations, including the kerb rails and handrails as design progresses.
Actions:	Capable of compliance.

5.9 STAIRS

Requirements:	Key reference: NCC ref D3.3 *All stairs (except fire isolated stairs) should be in accordance with clause 11 of AS 1428.1, including any external stairs.*
Review Issues:	There are numerous flights of stairs which are capable of compliance. Communication stair details are to comply with Clause 11 of AS1428.1 (2009), including: - Minimum 1000mm unobstructed width; - Handrails to both sides with extensions top and bottom of the stairway; - TGSIs to the top and bottom of the stairway (to AS 1428.4.1:2009); - Opaque risers; - No overhanging treads; and - Slip resistant luminance contrasting strips at the stair nosings, Please provide fully dimensioned plans and elevations of the proposed new stairs.
Actions:	Capable of compliance

5.10 LIFTS

Requirements:	Passenger lifts
	Key reference: NCC ref E3.6 - Lifts to be in accordance with AS1735.12 1999 *This would include:* • *Handrail in accordance with clause 5.3* • *Lift floor dimensions min 1100 x 1400mm where the lift travels less than 12m.* • *Minimum clear door opening of 900mm.* • *Have car control buttons complying with clause 7*
Review Issues:	There is a lift indicated on the plans that will provide access within building M, detailed lift shop drawings are to be provided when available. It is considered that the existing Lift in building G services the library and the existing lift adjacent to Building D services Buildings L, D, E and A, which is considered acceptable under the NCC and Premises Standards. Existing lifts on a continuous accessible path of travel to any new works, including under the Premises Standards affected part are to include accessible features including a handrail, accessible lift controls at landings and within the lift car and audible information. The existing lift has been inspected and is generally in accordance with the requirements. Lift signage to be provided at construction stage.
Actions:	Capable of compliance.

5.11 FLOOR FINISHES

Requirements:	*Key reference: NCC ref D3.3 - Finishes must be slip resistant. The pile height of any carpet shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm.* *Any changes in level along the floor or at the entry point must not be more than 3mm vertically or 5mm if rounded or beveled above or below the surrounding surface. Recessed matting must not be more than 3mm vertically or 5mm if rounded or bevelled above or below the surrounding surface.*
Review Issues:	Limited information has been provided. Floor finishes to be selected and installed in accordance with AS1428.1-2009.
Actions:	Further information required as design progresses

5.12 LIGHTING, SWITCHES AND GPOS

Requirements:	*Key reference: AS1428.1* *All switches and controls on an accessible path of travel, other than general purpose outlets, shall be located not less than 90mm nor more than 1100mm above the plane of the finished floor and not less than 500mm from internal corners except where on the architrave on the latch side of a door.*
Review Issues:	Please provide internal elevations as the design progresses.
Actions:	Further information required as design progresses.

5.13 SIGNAGE

Requirements:	*Key reference: NCC ref D3.6* *Signage needs to be provided in accordance with AS1428.1 and include Braille and tactile specifications. In particular signage will be required to identify:* • *Accessible unisex sanitary facility & whether it is for left or right handed use* • *Ambulant accessible sanitary facility* • *Each door required by E4.to be provided with an exit sign, stating 'exit and floor level'* *Where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance.*
Review Issues:	Braille and tactile signage complying with BCA Specification D3.6 is required for the accessible and ambulant sanitary facilities and exit doors that have exit signs provided. Lift signage to be provided at construction stage.
Actions:	Further information required as design progresses.

5.14 HEARING AUGMENTATION

Requirements:	Key reference: NCC ref D3.7 A hearing augmentation system needs to be provided if an inbuilt amplification system (other than one used solely for emergency warning) is installed.
Review Issues:	Confirmation will be required as the design progresses.if an inbuilt amplification system is proposed, typically within teaching spaces, meeting rooms, collaboration room.
Actions:	Further information required as design progresses.

5.15 TACTILE GROUND SURFACE INDICATORS

Requirements:	*Key reference: NCC ref D3.8 & Section 1 and Section 2 of AS1428.4.1 (2009).* *Tactile indicators will be required in the following locations:* • *Stairways (other than fire isolated stairways).* • *Ramps (other than a step or kerb ramp).*
Review Issues:	There are communication stairs & a ramp proposed for the development, tactile ground surface indicators (TGSIs) details are required for further assessment, noting: • TGSIs are to be provided setback 300mm from the top and bottom of the stairway, for a depth of 600-800mm, for the full width of the path of travel. • TGSIs are not required at stairways mid-landings where both handrails are continuous through the mid-landing.
Actions:	Further information required as design progresses.

5.16 GLAZING

Requirements:	*Key reference: NCC ref D3.12.* *Glazing on an access way that is capable of being mistaken for a doorway must be clearly marked with a solid non-transparent contrasting line min 75mm positioned between 900- 1000mm above finished floor level. The line shall provide a minimum of 30% luminance contrast against the floor surface.*
Review Issues:	Frameless or fully glazed doorways and sidelights shall be clearly marked for their full width. The door schedule notes the following per Clause 6.6 of AS 1428.1 (2009): • Decal to be a solid, non-transparent, contrasting line, minimum 75mm wide; • Lower edge to be located between 900mm and 1000mm AFFL; and • Provide 30% luminance contrast when viewed against the floor surface or surfaces within 2m of the glazing on the opposite side.
Actions:	Further information required as design progresses.

5.18 SANITARY FACILITIES

Requirements:	*Key reference: NCC ref F2.4* *Where sanitary compartments are provided in common areas, not less than 1.* *Where showers are provided in common areas, not less than 1.* *The design of unisex accessible sanitary facilities shall be in accordance with Clause 15 of AS1428.1.* *Sanitary compartments suitable for a person with ambulant disabilities must be provided at each bank of toilets where separate male and female facilities are provided.* *The design of ambulant sanitary facilities shall be in accordance with Clause 16 of AS1428.1.*
Review Issues:	Sanitary compartments suitable for person with ambulant disability required to each gender sanitary facility, per BCA Clause F2.4 (c) and AS 1428.1 (2009), including: • Cubicle width of 900-920mm; • Grab rails to both sides; • Clear space of 900mm x 900mm between WC pan and door swing; • Clear space of 900mm x 900mm external to the cubicle, clear of the door swing; • Coat hook to be located between 1350-1500mm AFFL; and • Braille and Tactile signage to the cubicle door. • The distance between successive doors on a path of travel to ambulant toilets must be at least 900mm, per Clause 13.4 of AS 1428.1 (2009). For accessible sanitary facilities: • WC pan requires minimum 1900mm (W) x 2300mm (L) circulation space with a minimum 1400mm unobstructed circulation zone to be provided, if the washbasin is located on the side wall opposite the WC pan • The minimum 1900mm (W) shall be free of any wall-mounted fixtures, such as paper towel dispensing unit. • Any wall-mounted fixtures shall have a minimum 900mm height clearance from FFL, and a maximum projection of 150mm from finished wall surface, so as not to protrude into the minimum 1900mm circulation zone. Detailed plans and elevations of the typical sanitary facilities are required for assessment as design progresses. The typical Student unisex accessible toilet does not achieve 1400 mm clear of the WC pan in front, as the column encroaches it by 55 mm. 
Actions:	Further information required/does not comply.

6 DDA REVIEW

6.1 BACKGROUND

The Disability Discrimination Act 1992 (DDA) states it is unlawful to discriminate on the basis of disability, protecting persons with disability and their associates. Section 23 of the DDA relates to access to premises and facilities which the public may enter or use, and states it is unlawful to:

- Refuse access to, or the use of, any premises, or the facilities within them.
- Impose terms or conditions specific to persons with disability and their associates on the access and use of any premises or facilities;
- Exclude access based on the provision of an appropriate means of access;
- Request persons with disability or their associates to leave premises or cease use of facilities

The DDA also addresses discrimination in other areas, including:

- In employment (Sections 15 to 21);
- Provision of goods, services and facilities (Section 24);
- Accommodation (Section 25);
- Administration of Commonwealth laws and programs (Section 29);
- Requests for information (Section 30)

The DDA is not prescriptive and therefore it does not give any specific details to adhere to. The DDA does however include provision for enacting Standards which give a greater degree of assistance in narrowing down the technical requirements necessary to demonstrate compliance. Currently Disability Standards that are in force relate to transport, education and access to premises. When the disability standards are adhered to the risk of attracting a complaint under the DDA is minimised in respect of items covered by the standard.

Compliance with the NCC and referenced Australian Standards will also provide an environment that is considered accessible under the Building Codes. However, whilst this legislation focuses on the physical aspects of building design and construction, the DDA goes further. The DDA focuses on the people that use the building and the built environment. Therefore there will always be a need for those responsible for buildings and their uses to consider broader issues of access, such as management and staff training as well as matters such as maintenance. The Building Management should consider the implementation of some Access Management Plan to minimise potential litigation under the DDA with constant review built in to its application and use.

The Federal DDA and State Anti Discrimination Act provide protection from discrimination for anyone who is affected by a disability. Discrimination occurs when people with a disability are treated less fairly than people without a disability. Discrimination can also occur when people are treated less favourable because they are friends, carers, co-workers or an associate of a person with a disability. Therefore it is perfectly feasible to achieve a technically compliant building, but still discriminate in the way that activities are carried out in that building once it is in use. The DDA seeks service providers and employers to make reasonable adjustments to ensure that facilities are accessible. This can be via physical changes to buildings, but also important is the approach to management and policies and procedures.

6.2 DEFINITION OF DISABILITY

The term disability is very broad indeed and as such will cover many in the community. It includes:

- Physical disability
- Physical illness or disease that makes, or has made, any part of the body or brain work differently
- Mental or psychiatric disability (including behavioural disorder)
- Intellectual disability
- Learning difficulty
- Disfigurement or different formation of any part of the body
- Any organism in the body that could cause disease or illness (e.g. hepatitis or HIV)

Discrimination can occur by the way a person is treated in the following ways:

- Due to any disability they may have now
- Due to any disability that someone thinks they have
- Any disability that was in the past or someone thinks you had in the past
- Any disability that will occur in the future or someone thinks may occur in the future

Any past present or future disability of an individual that affects a family member, associate or work colleague – that person is also covered by the DDA; this also applies where someone thinks there may have been or will be a disability in the future.

Additional Physical Building design aspects which although not covered in the NCC or Premises Standards which could be considered at this stage (not exhaustive but could form the basis for further consideration) are as follows:

6.3 CAR PARKING

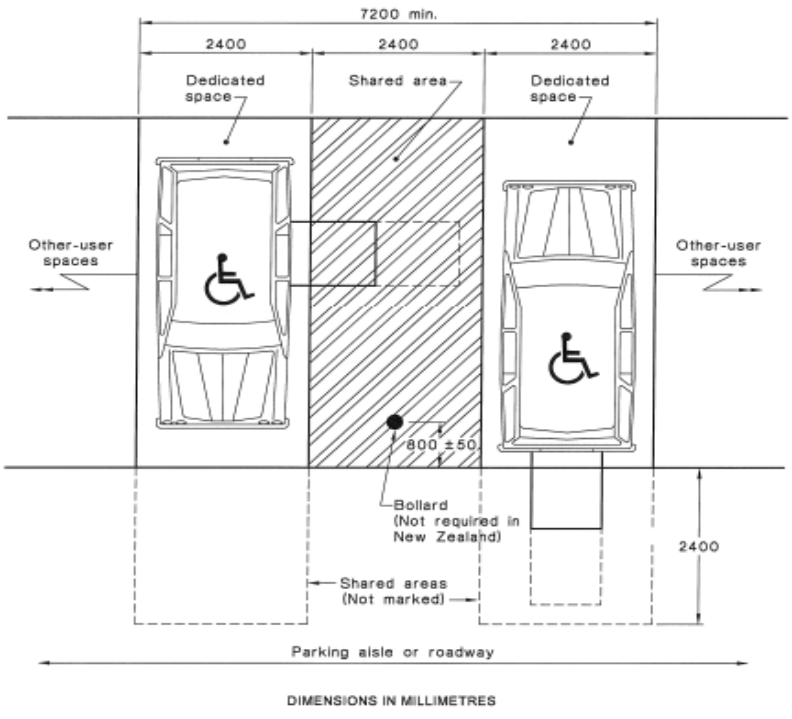


FIGURE 2.3 EXAMPLE OF TWO PARKING SPACES WITH A COMMON SHARED AREA—DIMENSIONS FOR AUSTRALIA ONLY*

6.4 SURFACE FINISHES

Floor, wall, door and ceiling finishes can help or hinder the use of buildings by people with disabilities. E.g. blind or partially sighted people and people who or deaf or hard of hearing might have difficulty finding their way around spaces if they cannot respond to visual cues or find it difficult to distinguish sounds in an acoustically reverberant environment.

When considering surface finishes, the following should be considered:

- Colour, pattern, luminance contrast and texture of the surfaces. Shiny surfaces can cause glare and reflections which can confuse people with vision impairments. Certain patterns of carpets can cause confusion for example strips across the path of travel can be confused as steps by people with vision impairments.
- The definition of features e.g. the treatment of components and finishing elements such as doors, architraves and skirting's can be designed to define elements. Consider providing luminance contrast of floor finishes against wall finishes, hardware against doors, fittings to sanitary accommodation against surrounding walls and floors.
- Consider the acoustic environment e.g. hard surfaces reflect sound and create a noisy environment in which a person with a hearing impairment may have difficulty understanding what is being said.
- Slip resistance properties of floor finishes. Ensure adjacent surfaces have similar slip resistance properties to prevent slipping or tripping.
- Excessive use of glazing. Glazing can often give the illusion that there is unimpeded access even when decals are provided in accordance with the NCC, if large areas of glazing are to be specified consider using greater areas of manifestation.

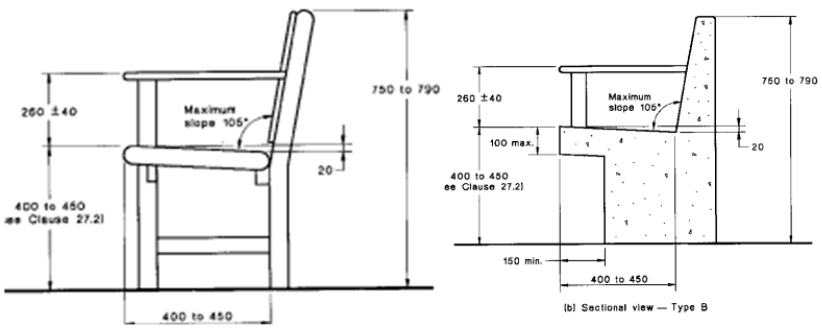
6.5 FURNITURE & FITTINGS

Consideration should be given to the type and specification of street furniture and any equipment provided. AS 1428.2 provides further information. Pathways should be continuous to the area it is leading to. In particular consider the following:

6.5.1 SEATING

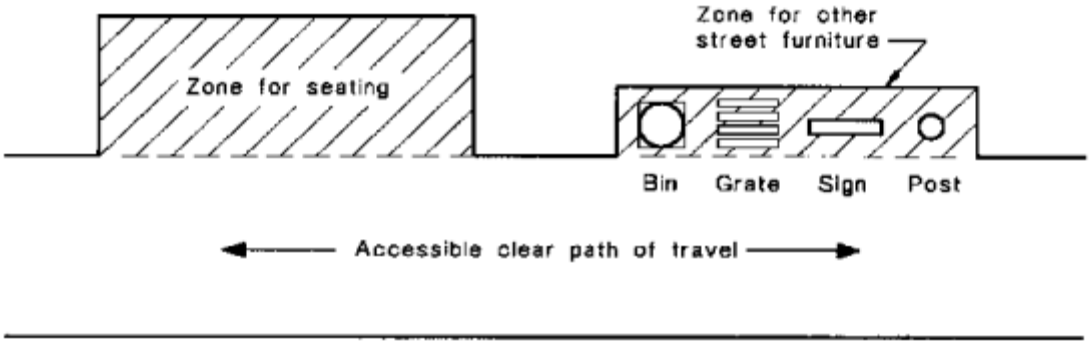
AS 1428.2 provides guidance on suitable ranges of seating depending upon the occupant profile. Consider seat styles and where possible always offer a range of different types of seats. If a seat is too high or too low or if there are no armrests or side supports a person with disabilities can experience considerable discomfort as a result of poor posture. A person may also experience difficulty rising from the seated position if the seat is too low or has no armrests.

Figure 32 of AS1428.2 gives typical seating details to consider.



Consider also the location of seating and manouevring space around the seats. Do not site directly on a path of travel but consider setting back to allow for the seat and peoples feet when sitting down, however ensure that they are is a suitable connecting path of travel to access the seat. AS1428.2 suggests a minimum of 500mm (zone for feet).

Figure 31 indicates the preferred zone.



NOTE: There should be no projections into the accessible path of travel.

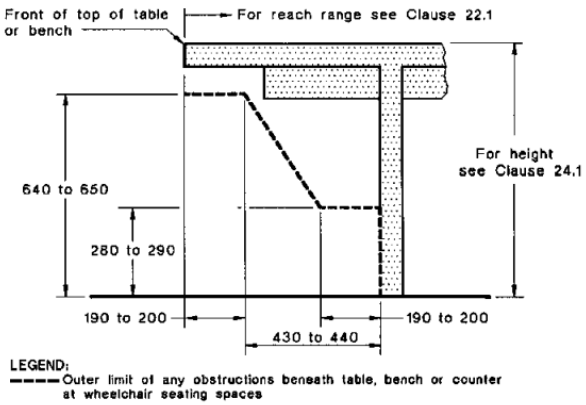
For internal seating the layouts should be designed to allow for passing of people who use mobility aids and ensure there is sufficient turning spaces at the end of rows of seating.

6.5.2 BENCHES/WORKTOPS

Consider the heights of tables, counters, and worktops, in particular at BBQ areas. Where possible incorporate benches at both higher and lower heights. AS1428.2 Clause 24 offers more guidance. Also consider the clear space beneath to enable people who use wheelchairs or other mobility aids to be able to position themselves close enough to be able to use the worktop.

6.5.3 KITCHENETTE/SINK AREAS

As discussed in section 5.6.2 above consider the bench heights and allow for suitable clearances under. Consider position of key facilities such as sink, dishwashers, hobs, microwaves and ensure adequate clear space is provided to access these areas. Consider the reach ranges discussed in section 5.9.



NOTE: For width of seating spaces see Clause 24.1.3.

DIMENSIONS IN MILLIMETRES

GURE 25 KNEE AND FOOT CLEARANCE BENEATH A TABLE, BENCH OR COUNTER

6.5.4 RECEPTION SPACES

As well as considering the heights of counters detailed in section 5.6.2 consideration should be given to ensuring any reception desks are located so they are easily identifiable from the entrance by blind or partially sighted people. There should be an unobstructed route to the desk with sufficient manouevring space in front. Where it is likely that a person may be required to use the counter to write a suitably wide space with knee clearance should be provided. A suitable hearing loop or similar device should be provided and the area should be adequately lit with suitable surface finishes to avoid glare and shadows to allow for lip reading.

6.6 LIGHTING

Consideration should be given to comply with minimum levels of maintenance illumination for various situations shown in the notes to AS1428.2 (1992) Clause 19.1.

The following min. levels of maintenance illumination are recommended:

Entrances	150lx
Passageways and walkways	150lx
Stairs	150lx
Counter tops	250lx
Toilets and locker rooms	200lx

Many people require better artificial lighting than is normally provided, particularly older persons and persons with low vision. For persons with a hearing impairment, a level of illumination of not less than 150lx, without glare, is needed to support lip reading.

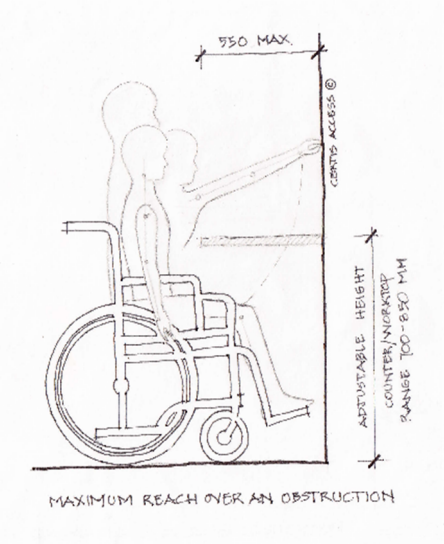
6.7 SIGNAGE

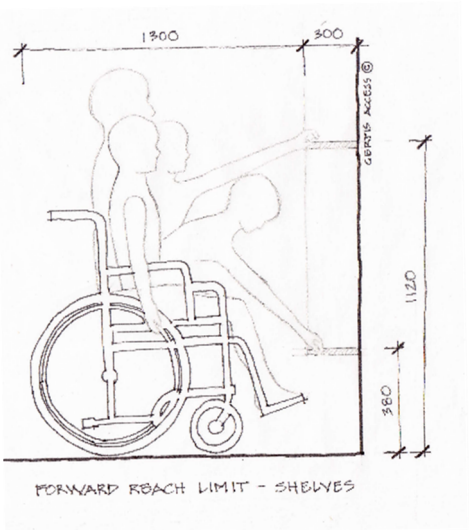
Consideration should be given to the extent and positioning of information signage that will be provided. Where possible consider providing Braille and Tactile information.

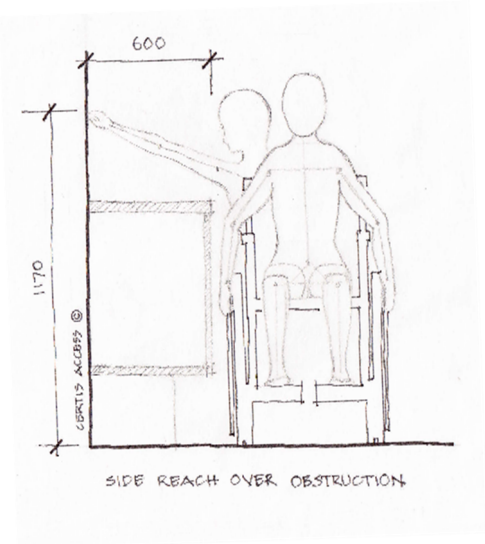
People need clear information about the purpose and layout of spaces if they are to maintain a clear sense of direction and independent use of a building. Signs should form part of an integrated communication scheme that gives clear directions, information and instructions. Information is particularly important at junctions of circulation routes and at key destination points. In this particular information should be provided to locate lifts and common spaces and indicate the direction of apartment numbers. Clear signs are important and are necessary for people with hearing impairments who may not be able to ask or feel comfortable about asking for directions. Signs should include Braille and tactile information wherever possible and use appropriate colour schemes and fonts.

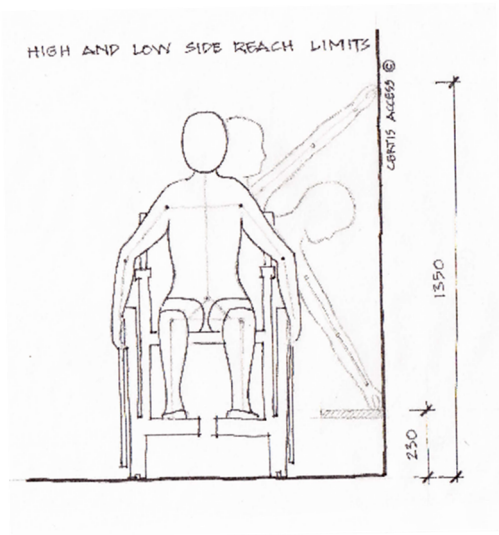
6.8 REACH RANGES

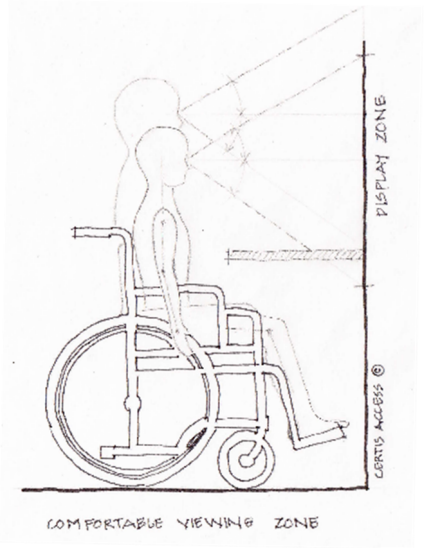
Consider reach ranges in particular when considering letterboxes etc. As1428.2 provides guidance.







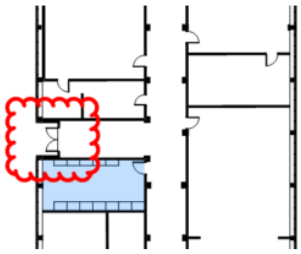




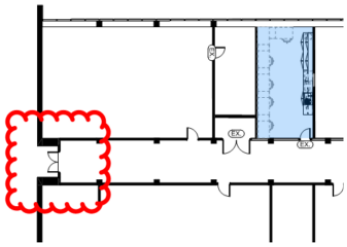
7.0 ADDITIONAL INFORMATION

Existing building entrance doorways

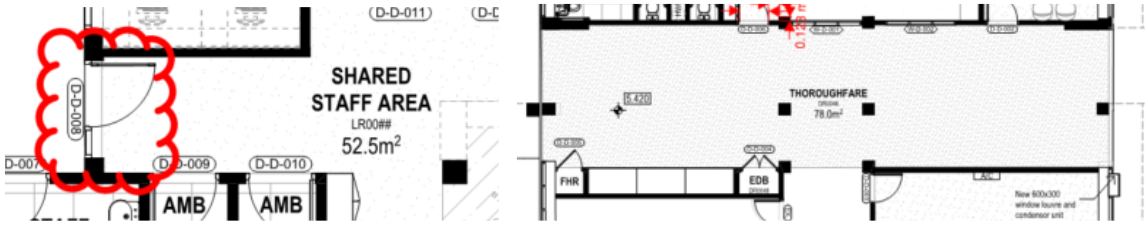
Building A – Ground Floor – existing doorway to be upgraded (if currently non-compliant)



Building C – Ground Floor – existing doorway to be upgraded (if currently non-compliant)



Building D – Ground Floor – The thoroughfare & new staff doorway can be considered the entrance route, therefore design complies.



Building E – Ground Floor – existing doorway to be upgraded (if currently non-compliant)