Building Code of Australia 2022 and DDA Premises Standards Review (SSDA)

University of Newcastle City Campus Student Accommodation

Prepared for: Architectus

Our Ref: 23000493 | Issue date: 10-July-2024

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Report Revision

Rev.	Comment / Reason for Issue	Issue Date	Prepared by
6	Design Review – SSDA Update SEARs	10-July-24	Jhoana Colorado  Senior Access Consultant ACAA Associate Member No. 713

Drawings assessed are as follows:

DA-0000	COVER SHEET WITH DRAWING LIST	07/06/2024	architectus
DA-0004	SITE PLAN	07/06/2024	architectus
DA-1000	FLOOR PLAN - GROUND LEVEL	07/06/2024	architectus
DA-1001	FLOOR PLAN - LEVEL 1	07/06/2024	architectus
DA-1002	FLOOR PLAN - TYPICAL A (LEVEL 2, 4, 6, 8)	07/06/2024	architectus
DA-1003	FLOOR PLAN - TYPICAL B (LEVEL 3, 5, 7)	07/06/2024	architectus
DA-1009	FLOOR PLAN - PLANT LEVEL	07/06/2024	architectus
DA-1010	ROOF PLAN	07/06/2024	architectus
DA-2000	ELEVATION - NORTH	07/06/2024	architectus
DA-2001	ELEVATION - EAST	07/06/2024	architectus
DA-2002	ELEVATION - SOUTH	07/06/2024	architectus
DA-2003	ELEVATION - WEST	07/06/2024	architectus
DA-2501	SECTION A-A	07/06/2024	architectus
DA-2502	SECTION B-B	07/06/2024	architectus

Revision History

Rev.	Comment / Reason for Issue	Issue Date	Prepared by
1	Design Review – DRAFT	6-Feb-24	Jhoana Colorado
2	Design Review – DRAFT (incorporating updated design)	29-Feb-24	Jhoana Colorado
3	Design Review – Draft SSDA	15-Mar-24	Jhoana Colorado
4	Design Review – SSDA	5-June-24	Jhoana Colorado
5	Design Review – SSDA (Final)	13-June-24	Jhoana Colorado
6	Design Review – SSDA Update SEARs	10-July-24	Jhoana Colorado

Commercial in Confidence

Report Limitations

This report is based upon, and limited to, the information depicted in the documentation provided for assessment and does not make any assumptions regarding design intention or the like.

This assessment does not contain comments regarding detailed design issues such as (but not limited to): luminance contrast, slip resistance, handrail design, door schedules and door hardware specifications, hearing augmentation systems, location of fittings within sanitary compartments and lift specifications. This assessment will be done at Construction Certificate stage.

This report does not include, or imply compliance with:

- Work Healthy & Safety Act 2011 and Regulations;
- Work Cover Authority requirements;
- Structural and Services Design Documentation;
- Although it cannot be guaranteed that a complaint under the Disability Discrimination Act (DDA) will not be made, compliance with the requirements of the Disability (Access to Premises – Buildings) Standards 2010, as detailed in the BCA accessibility provisions in this report, ensures that those responsible for the building are protected from a successful complaint.
- Refer to the separate BCA Report for BCA 2022 sections B, C, G, H, I, J, and parts D1 and D2.
- Any parts of the BCA or any standards other than those directly referenced in this report.
- Regulatory authorities involved may include, but are not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, WorkCover, Roads and Maritime Services (RMS), and the Department of Planning.
- Drawings that are not in the report revision above.
- Fittings and fixtures that have not been provided in the documentation provided by the architect or designer will be excluded from this review.
- Crossfalls and floor levels that are not included into the documentations will be excluded from this review.

1 Executive Summary

MBC have assessed the documentation for the University of Newcastle City Campus Student Accommodation *State significant development application* (SSDA) prepared by Architectus. The proposed project is situated at 20 Civic Lane, Newcastle NSW. Our evaluation focused on access to and throughout the site, referencing the National Construction Building Code of Australia (NCC BCA), the Disability Discrimination Act (Access to Premises - Buildings) Standards 2010, relevant Australian Standards (AS1428 series), in terms of premises access. This review aligns with both the specific requirements and the broader objectives of the Disability Discrimination Act 1992 (Cth) (DDA).

The recommendations in this report should evolve alongside the design development and must be thoroughly reviewed and confirmed before reaching the construction certificate phase. As the design advances, additional examination of the documentation will be conducted to guarantee adherence to the accessibility requirements of the Building Code of Australia (BCA) and applicable standards.

1.1 Performance Solutions – Accessibility

The assessment of the design documentation has revealed that the following areas or items are departures from the NCC BCA 2022 and are required to be assessed against the relevant Performance Requirements of the NCC BCA 2022. These are as following:

DTS Cl.	Description of Non-Compliance	Performance Requirement
D4	(1)The ground floor services corridor and internal corridors from levels L1 to L7 in the student accommodation cluster provide over 2 meters of corridor width, excluding an area of 1540mm x 2070mm. This deviates from the AS1428.1 standard and will be addressed through a Performance-Based Solution. These adjustments will be considered and detailed at a later stage in the development process.	D1P1
D4	(2)The ground floor End of Trip Facilities (EoTF) lack internal access, which deviates from the AS1428.1 standard and the NCC BCA requirement for access to all commonly used areas by building occupants. This issue will be addressed through a Performance-Based Solution. These adjustments will be considered and detailed at a later stage in the development process.	D1P1
D2D4	(3)The proposal outlines 445 Student Occupancy Units (SOU), requiring 18 accessible rooms as per standards. Currently, the plan includes only 10 accessible rooms, not meeting the requirements set by the Building Code of Australia (BCA) Table D4.2b and the Disability Discrimination Act (DDA) Premises Standards Table D3 Part D3. To address this, a Performance-Based Solution is proposed, focusing on creating accessible	D1P1

SOUs tailored to specific types of disabilities rather than a generic approach.
The strategy proposes:

- Type A: 10 SOUs tailored for individuals with mobility issues, multiple impairments, and ambulant disabilities.
- Type B: 4 SOUs designed for those with speech/hearing impairments and ambulant disabilities, including special fixtures and fittings like ambulant showers.
- Type C: 4 SOUs for individuals with vision impairments and ambulant disabilities, also equipped with suitable fixtures and fittings, such as ambulant showers.

These adjustments will be considered and detailed at a later stage in the development process.

1.2 Exemption Area(s)/Room(s) Under NCC BCA (D4.D5)

The assessment of the documentation has revealed that the following area(s) or room(s) require further documentation to demonstrate that these areas are inappropriate due to their specific use and present a health risk to people with disabilities. Therefore, they do not comply with the prescriptive provisions of the BCA.

DTS Clause	Description of Non-Compliance	Performance Requirement
D4D5	Ground Floor • Security • Store adjacent to pump.	D4

This generally applies to rooms are not suitable for people with disabilities due to hazardous equipment or substances, such as heavy equipment storage, furniture, and manipulation labs (Hazardous substances manipulation). These areas require physical agility and the ability to perform physically demanding tasks.

2 Consultant Declaration

PROJECT NAME	
Application number	SSD-61618229
Address of subject land	20 Civic Lane, Newcastle, NSW, 2300
Lot / DP	Lot 2 DP 1247375 & Lot 5 DP 1247375
APPLICANT DETAILS	
Applicant name	University of Newcastle
Applicant address	University Drive, Callaghan, NSW 2308
REPORT DETAILS	
Name of report this declaration relates	DDA/Accessibility Design Compliance Report
Report reference no.	23000493 Rev 4
Report date	05 Jun 2024
Company name (inc. ABN / ACN)	54 165 354 218
Author name	Jhoana Colorado
Author qualifications	Accessibility Consultant
Author address	1 Tudor Street Newcastle West, NSW 2302
DECLARATION BY CONSULTANT	
Name	Jhoana Colorado
Registration no.	Associate Member No.713 (ACA) Former (ACAA) Associate Member No. 205445 (RAIA)
Organisation registered with	The Access Consultants Association (ACA) Former ACAA Royal Australian Institute of Architects (RAIA)

Declaration	The undersigned declares that Accessibility Design Compliance Report: • contains all available information relevant to the NCC BCA Accessibility provisions, DDA Premises Standards and AS1428 to which the Design Compliance Report relates; • does not contain information that is false or misleading; • identifies and addresses the relevant Planning Secretary's environmental assessment requirements (SEARs) for the project; • contains a consolidated summary of the proposed or necessary mitigation measures.
Signature	
Date	13 Jun 2024

3 Introduction

This Accessibility Assessment has been prepared by MBC-Group on behalf of University of Newcastle (University) to accompany a State Significant Development Application that seeks approval for Stage 1B of the University's City Campus, including a nine-storey building for the purpose of campus student accommodation and ground floor retail.

3.1 Purpose

The purpose of this report is to assess the *state significant development application* (SSDA) documentation with respect to the accessibility provisions of the National Construction Code – Building Code of Australia Volume 1, Edition 2022, as are principally contained within Parts D4, F4 and E3 and DDA (Access to premises- Buildings) 2010 Standards and the Australian Standards suite (AS) as this prescribes the minimum requirement for access to a building. The report is therefore to assess the current design proposal against the above provisions and to outline those areas, if any, where:

- Compliance is not achieved,
- Areas may warrant redesign to achieve compliance.

3.2 Assessment Methodology and NCC BCA 2022

The methodology applied in undertaking this assessment has included the following statutory requirements:

- A review of architectural plans, as listed in listed above, in the report revision section.
- NCC BCA 2022 Detailed assessment of Parts D4, E3 and F4.

3.3 Regulatory Framework

National Legislation

- Disability Discrimination Act, 1992, Government of Australia, https://www.legislation.gov.au/Details/C2022C00367
- Disability (Access to Premises – Buildings) Standards 2010 (DAPBS), https://www.legislation.gov.au/Details/F2010L00668
- Disability (Access to Premises – Buildings) Amendment Standards 2020 Government of Australia, https://www.legislation.gov.au/Details/F2020L01245
- Disability Standards for Accessible Public Transport 2002 (DSAPT 2002)
- Disability Standards for Accessible Public Transport Guidelines 2004 (No 3)

Applicable Building Code of Australia (BCA)

The proposed development will be subject to compliance with the relevant requirements of the BCA as in force at the time that the application for the Construction Certificate is made.
In this regard it is assumed that the Construction Certificate application will be made prior to the 1st March 2025, as such this report is based upon the Deemed-to-Satisfy provisions of BCA 2022.

Should the application for Construction Certificate be made after 1st March 2025, this report will be required to be updated to reflect any changes made and now required by the BCA.
Should an out of cycle change occur to the Building Code of Australia, then this report is required to be updated to reflect any applicable changes made and now required by the BCA.

Australian Standards series for Access, Mobility Specific and Guidelines

- AS1428.1:2009 - General Requirements for Access – New Building Work
- AS1428.4.1:2009 - Means to Assist the Orientation of People with Vision Impairment
- AS1428.2:1992 - Design for Access and Mobility- Enhanced and additional requirements – Buildings and Facilities
- AS1735.12:1999 - Lift Facilities for People with Disabilities

NCC BCA – Building Australian Code - 2022 Specific

- Part D4 - Access for People with Disability
- Part E3 - Lift Installations
- Part F4 - Sanitary and other Facilities

Reference and Guidelines

- City of Newcastle Local Council DCP.
- Guide to the BCA, Current Version, Australian Building Codes Board, www.abcb.gov.au
- Guideline on the Application of The Premises Standards, 2013, Australian Human
  Rights Commission, https://humanrights.gov.au/our-work/disability-rights/guidelines-application-premises-standards
- Guide to the BCA, Current Version, Australian Building Codes Board, www.abcb.gov.au
- Guideline on the Application of The Premises Standards, 2013, Australian Human Rights Commission,

https://humanrights.gov.au/our-work/disability-rights/guidelines-application-premises-standards

- AS1428.2:1992 Enhanced and Additional requirements

  https://www.saiglobal.com/PDFTemp/Previews/OSH/as/as1000/1400/14282.pdf

- AS1428.4.1 Draft Way-finding Standard

  https://store.standards.org.au/reader/as-1428-4-2-2018?preview=1

- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture, https://humanrights.gov.au/our-work/disability-rights/publications/advisory-note-streetscape-public-outdoor-areas-fixtures
- Advisory Note on the streetscape, public outdoor areas, fixtures, fittings, and furniture (2013).
- BCA Part I2.
- AS1428.4.1 Draft Way-finding Standard;
- AS3745:2010 – Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance).

Universal Design Principals (x7)

These principals are recommended to be taken in consideration from the outset of the project and are as follows:

<table>
<tr><td colspan="3">1. PERCEPTIBLE INFORMATION - The design is efficient in communicating the necessary information successfully to the user. Example: Broadcasting meetings/classes closed captions for user (students) with hearing loss.</td></tr>
<tr><td>2. SIMPLE AND INTUITIVE USE – Use of the design is easy to understand by the users, regardless of the user's experience, knowledge, language skills, or current concentration level. No manuals or protocols are required to achieve this principal. Example: Control buttons on specific equipment for common use (staff and students) are labelled with text and symbols that are simple and intuitive to understand.</td><td>3. FLEXIBILITY IN USE - The design accommodates a wide range of users, preferences and abilities, regardless of the user's physical abilities, age, experience, knowledge, language skills, etc.
Example: A facility that allows a students to choose to read or listen to a description of the contents of a display case employs this principle.</td><td>4. EQUITABLE USE - The design is useful and caters to people with diverse abilities.
Example: Online content that is designed so that it is accessible to everyone, including students who are low vision or blind and using text-to-speech software.</td></tr>
<tr><td>5. SIZE AND SPACE FOR APPROACH AND USE – The design provides a clear line of sight to important elements for all users. The design is to be reachable, with all of its components able to be reached comfortably for any seated or standing user. Furthermore, the design requires accommodating a variation for hand and grip size and suitable space/areas for use of assistive devices or personal assistance.
Example: Adjustable workbenches for students and adjustable desks for staff.</td><td>6. LOW PHYSICAL EFFORT - The design can be used effortlessly.
Example: Automated doors, windows, lighting, air-conditioning, etc. Sensor doors and basin and sink taps/water mixers.</td><td>7. TOLERANCE FOR ERROR - The design is useful and can cater to people with diverse abilities, regardless of the user's physical abilities, age, experience, knowledge, language skills, etc.
Example: Online content that is designed to be accessible to everyone, including students/teachers who are blind or partially blind or students/teachers using text-to-speech software.</td></tr>
</table>

3.4 Current National Legislation

The applicable legislation governing the design of buildings in NSW is the Environmental Planning and Assessment Act 1979.

Applicable Building Code of Australia (BCA)

The proposed development will be subject to compliance with the relevant requirements of the BCA 2022 as in force at the time that the Development Application is made.

Disability Discrimination Act 1992 (Cth) (DDA)

The accessibility assessment process covers all aspects of the infrastructure (premises), to the extent required to meet the objectives of the Disability Discrimination Act 1992 (Cth), including, however not limited to, Section 23 which relates to access to premises and facilities which the public may enter or use.

The act is enforced primarily through a complaints mechanism, which allows individuals who have directly or indirectly experienced unlawful discrimination to seek a conciliated outcome through the Australian Human Rights Commission and in the instance of unsuccessful conciliation, to bring an action in the Federal Magistrates Court or the Federal Court of Australia.

The Disability Discrimination Act (DDA) ensures consistent protection against unjust and unfavorable treatment for individuals with disabilities in Australia. It also makes it illegal to discriminate against an "associate" of a disabled person, such as a friend, carer, or family member.

The DDA's broad definition of disability encompasses various conditions, including physical, intellectual, psychiatric, neurological, cognitive, sensory (such as low vision, deafness, or hearing reduction), learning difficulties, physical disfigurement, and the presence of disease-causing organisms in the body. This inclusive definition ensures that all individuals with disabilities are safeguarded by the Act, promoting the principle of equal fundamental rights for people with disabilities, just like any other member of the community.

The Act applies to a wide range of life activities, spanning access to premises, education, provision of goods and services, employment, and administration of Commonwealth laws and programs.

Whenever a person with a disability wishes to utilize premises, including buildings, outdoor spaces, car parking areas, pathways, and facilities, it is essential to provide equitable and dignified access. The DDA mandates appropriate adjustments to be made to ensure accessibility. If adequate access is not provided, a complaint can be filed under the DDA.

Notably, the DDA takes precedence over State legislation, Standards, and Guidelines concerning disability access matters, reinforcing its pivotal role in upholding accessibility rights for people with disabilities across Australia.

Disability (Access to Premises- Buildings) Standards 2010 – General

The Disability (Access to Premises – Buildings) Standards 2010 were implemented in conjunction with a revised version of the Building Code of Australia (BCA) on May 1st, 2011. As of now, these standards have become legally binding, setting the baseline access criteria for new constructions and major upgrades of buildings throughout Australia.

Part 1, Clause 1.3 Objects

a. "to ensure that dignified, equitable, cost effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided with a disability; and
b. to give certainty to building certifiers, building developers and building managers that, if access to buildings is provided in accordance with these standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the Act."

In contrast to building regulations, the DDA is not prescriptive. The implementation of the Premises Standards in 2010, and corresponding changes to the BCA, is a significant step towards achieving equal access to premises and is crucial to justice and social inclusion for people with disabilities.

It is noted that the Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA. It is acknowledged that the Premises Standards could address a broader range of accessibility issues including considerations to accessibility of parkland, playgrounds, transport vehicles, interior fit-out of buildings, and fixtures and fittings. As such, there are features which fall beyond the scope of the standards which may be subject to the general complaint's provisions of the DDA.

According to the Guidelines on the Application of the Premises Standards (produced by the Australian Human Rights Commission, 2011), the Premises Standards serve two primary purposes:

1. To ensure equitable and dignified access for new buildings and areas of existing buildings that undergo renovation or upgrade requiring building approval.

2. To provide clarity to those involved in the design, construction, certification, and management of buildings, outlining the required level of access for buildings falling under the scope of the Premises Standards.

The Premises Standards, outlined in the Access Code within Schedule 1, establish a set of nationally applicable Performance Requirements to enable non-discriminatory access and use of the buildings and areas they cover. They also provide technical Deemed-to-Satisfy Provisions to meet these Performance Requirements.

While the Premises Standards largely align with the BCA and reference various Australian Standards related to access and other relevant matters, they aim to offer certainty to the building industry in fulfilling access requirements for new and upgraded buildings, specifically concerning elements covered by the Premises Standards. However, it's important to note that not all elements and components within buildings and premises fall within the scope of the Premises Standards. The DDA has a broader scope, encompassing more aspects related to accessibility beyond what is covered by the Premises Standards or the BCA.

3.5 SEARS

Section 4 of SEARS has been reviewed as part of this assessment. This review focused on compliance with BCA access provisions and all relevant Australian Standards.

Condition No.	Condition Requirement	Section Relevant
4	**Built Form and Urban Design** Assess how the development complies with the relevant accessibility requirements. - Performance Requirements of the NCC BCA 2022 - Mandatory Requirements Accessibility Assessment & Recommendations for Access for People with a Disability	Access requirements have been addressed in the following items: - Refer to item 1.1 - Refer to item 5.1 to 5.8

4 Development Description & Assessment Information

4.1 Site Description

The University of Newcastle City Campus is located within the City of Newcastle Local Government Area (LGA) at 20 Civic Lane, Newcastle. It is located on the lands of the Awabakal and Worimi peoples.

Specifically, Site B (Stage 1B in the approved concept masterplan) is located at the south western corner of the University's City Campus. Site B has an overall area of 3,341m2 and is legally described as Lot 2 in DP 1247375. Landscaping and public domain works will be undertaken in a portion of Wright Lane and is legally described as Lot 5 in DP 1247375. Both Lot 2 and 5 in DP 1247375 are owned by the University of Newcastle.
Located within the wider Newcastle City Campus, the site is strategically positioned in the geographical heart of the Newcastle CBD. This area is undergoing a process of significant transformation, with a number of major commercial and residential developments having been recently completed.

The campus is also located in proximity to the Newcastle Light Rail, with stops at Honeysuckle and Civic, which has improved transport connectivity to the site and broader area. The University's Q Building is located north of the site, beyond the Hunter River. On the southern end of the site, is the Civic Precinct of Newcastle, and adjacent University NUspace building.

The site location is identified in Figure 1.

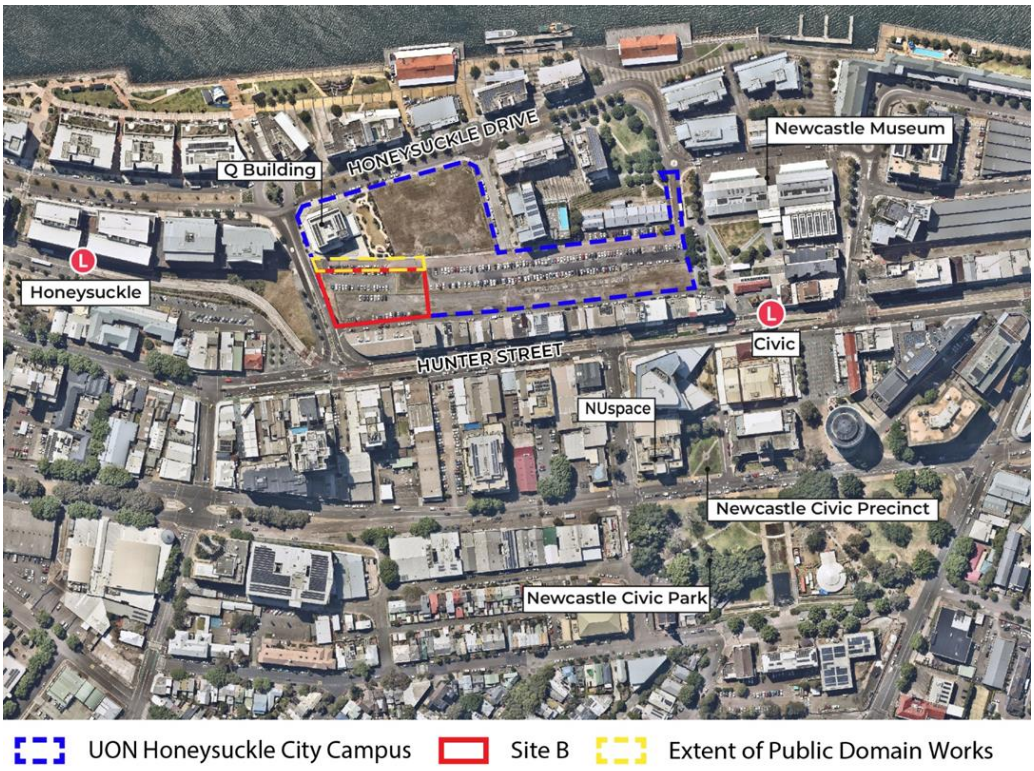

Figure 1 - University of Newcastle City Campus context

4.2 Background

A Concept Plan (SSD-9262) granted approval by the Minister for Planning and Public Spaces on 21 May 2020, applies to the Site. The Concept SSD established the maximum building envelope, gross floor area and preferred land use to facilitate the future redevelopment of the site. Additionally, the Concept Proposal provides a design excellence framework to guide future development within the building envelopes and achieve design excellence. The detailed Building B SSD will be consistent with the Concept Proposal and design excellence strategy.

A request for the issue of Industry Secretary's Environmental Assessment Requirements (SEARs) was sought on the 18 August 2023. Accordingly, the SEARs were issued on 31 August 2023 for SSD-.61618229

4.3 Project Description

The State Significant Development Application (SSDA) seeks approval for Stage 1B of the University's City Campus, including a nine-storey building for the purpose of campus student accommodation and ground floor retail. The key objective of the proposed development is to establish a contemporary and sustainable building to provide student accommodation that offers a high level of residential amenity, cultural safety and provide a convenient location within the University's City Campus.

Stage 1B represents the next step in delivering the vision for the University's City Campus established under the Concept Plan (SSD-9262), which was approved by the Minister for Planning and Public Spaces on 21 May 2020. The Concept Plan establishes seven (7) building envelopes across the campus, to be used for academic and ancillary uses, and student accommodation. The approved maximum building height for Building B under SSD-9262 is RL 33.85. (nine storeys excluding plant)

This SSDA specifically seeks detailed approval for the following works:

- Site grading;
- Construction of a nine (9) storey building (known as Building B), to be used for campus student accommodation and retail;
- Maximum gross floor area (GFA) of 10,765m2, comprising of:
    - Approximately 130m2 of retail floor space at ground level,
    - Approximately 683m2 of communal residential amenity facilities at ground level, and
    - Approximately 9,520m2 of student accommodation including a total of 445 beds
- Maximum building height of Reduced Level 33.85 (nine storeys excluding plant and services);
- Maximum height of RL 40.9 (building including plant and services)
- End of trip facilities, including 82 bicycle spaces and back of house amenities; and
- Associated landscaping and public domain works

For a detailed project description refer to the Environmental Impact Statement prepared by Ethos Urban.

4.4 Use and Building Class – Accessibility

In the context of this report and the BCA the building use can be classified as follows;

Certification	Descriptions	Access Requirements
Class 3	Student accommodation	Access is required -to and within all areas normally used by the occupants.
Class 5	Office	Access is required -to and within all areas normally used by the occupants.
Class 6	Retail	Access is required -to and within all areas normally used by the occupants.
Class 7b	storage	Access is required -to and within all areas normally used by the occupants.

5 Mandatory Requirements Accessibility Assessment & Recommendations for Access for People with a Disability

The following details the accessibility compliance of the proposed development. The assessment is limited to the significant issues ascertainable from the current level of design detail. Further detailed assessment will be required at the Detailed Design Stage/construction Certificate Stage to demonstrate full compliance with the relevant access provisions.

5.1 NCC BCA Part D4D3 –Access to Buildings (Site Connections)

An accessway to the building must be provided with a continuous accessible path of travel (CAPT) compliant with AS1428.1. Specific components are as follows:

- from the main points of a principal pedestrian entry (PPE) to the allotment boundary; and
- from another accessible building (new or existing) connected by a pedestrian link; and
- from any required accessible carparking space (new or existing) on the allotment.

Compliance Comments
Provided documentation has been reviewed: Ensure: o all continuous accessible paths of travel are compliant from the allotment boundary on Wright Lane and Civic Lane to building B. o All new/existing floor finishes will provide transitions 3-5mm maximum. o All new pathways are to ensure 1:40 maximum gradient and cross falls. **Currently, requirements are capable of being achieved.**

5.2 NCC BCA Part D4D3 – Access to Buildings (Entrances)

In a building required to be accessible, an accessway compliant with AS1428.1 must be provided through the principal pedestrian entrance (PPE), and;

- through no less than 50% of all pedestrian entrances including the principal pedestrian entrance; and
- in a building with a total floor area more than 500 m2, a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5 (service maintenance areas former D3.4 Clause).

Where a pedestrian entrance required to be accessible has multiple doorways, these are to be accessible and;

- if the pedestrian entrance consists of no more than 3 doorways — no less than 1 of those doorways must be accessible; and
- if a pedestrian entrance consists of more than 3 doorways — no less than 50% of those doorways must be accessible.

For the purposes of (3); an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—

- all doorways serve the same part or parts of the building must comply with AS1428.1; and
- the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance; and

A doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves.

- Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of no less than 850 mm with standard 920mm door leaf in accordance with AS 1428.1 Figures 31 and 32.
- A single door is to ensure a clear opening width of no less than 850 mm with standard 920mm door leaf in accordance with AS 1428.1 Figures 31 and 32.

A ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in accordance with NCC BCA D4D4.

Where there are level differences between internal and external areas. Threshold ramp is to be provided in accordance with AS1428.1.

Compliance Comments
Provided documentation has been reviewed: Ensure: o Doors latch side clearance of 530mm latch side needed (open towards the user), 510mm latch side needed (open away from the user) or, door is to be automated. o All doors are to be threshold level is provided, or doors threshold ramp in accordance with AS1428.1. o All double doors are to ensure at least one leaf 850mm clear opening width (active leaf) **Currently, requirements are capable of being achieved.**

5.3 Continuous Accessible Path of Travel (CAPT)

A continuous accessible path of travel is defined as an uninterrupted pathway to and from within a premises or building environment which provides linkage to all programs, goods and services within a premises or building. Therefore, the following items are located via this pathway.

- All continuous accessible paths of travel are to ensure compliance with AS1428.1. Clause 7 with 1-metre minimum clear circulation and 2.1-metres above FFL.
- Where a manual doorway on an continuous accessible path of travel (CAPT) has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm with standard 920mm door leaf in accordance with AS 1428.1 Figures 31 and 32.
- Where manual door latch side cannot be achieved, the door is to be automated.
- A single manual door on an continuous accessible path of travel (CAPT) is to ensure a clear opening width of no less than 850 mm with standard 920mm door leaf in accordance with AS 1428.1 Figures 31 and 32.
- Doorway threshold ramp is to have a 1:8 gradient, 35mm max. height and 280mm max. length, compliant with AS1428.1. (Note: No threshold ramps are allowed inside of the building under the BCA unless open to a road, open space or are in a building class 9b)
- The distance between successive doorways in a vestibule serving an area required to be accessible is to be 1450mm (excluding the swing doors)
- 2000mm L x 1800mm W (passing bay) is to be provided where there is no line of sight (2-way corner/ L shape)
- 1500mm x 1500mm (+splay) clear circulation space is to be provided to achieve 90-degree turn.
- 2-metre length or over corridors are to provide 1540mm x 2070mm minimum clear circulation space to achieve 180-degrees.

Compliance Comments
Provided documentation has been reviewed: Ensure: o Doors latch side clearance of 530mm latch side needed (open towards the user), 510mm latch side needed (open away from the user) or, doors are to be automated to meet compliance. o All doors are to be threshold level is provided, or doors threshold ramp in accordance with AS1428.1. **Currently, requirements are capable of being achieved.**

5.4 Stairs (Common Use)

Every ramp and stairway, except for ramps and stairways in areas exempted by D4D5 (service maintenance areas former D3.4 Clause), must comply with—

- For a stairway, except a fire-isolated stairway, Clause 11 of AS 1428.1 ; and
- All stairs and ramps are to be 900mm offset from the allotment boundary in accordance with AS1428.1.
- All stairs are to allow suitable space for handrail extensions to be provided during a later stage. (No protrusion will be allowed at detail design stage).
- All stairs adjacent to doors are to ensure 1450mm front approach level landings.
- All stairways are to ensure a minimum 1200mm overall width and 1-metre minimum clear circulation in accordance with AS1428.1.
- Stair middle landings are to ensure an off-set tread is provided.

Compliance Comments
Provided documentation has been reviewed: **Currently, requirements are capable of being achieved.**

5.5 Accessible Sole Occupancy Units (SOU's)

The Building Code of Australia (BCA) D4D2 Table D4D2b and the DDA Access to the Premises Standards outline specific requirements in Part D3 for creating Sole Occupancy Units (SOUs) that are accessible to individuals with disabilities. These requirements can be encapsulated as follows:

- The development proposed 445 (Bed Counts) SOU's, therefore 18 accessible SOU's are to be provided, as stipulated by the DDA Premises Standards and BCA.
- These units should be designed following the AS1428.1 standards.
- The accessible units must reflect the variety of room types offered.

Sole Occupancy Units (SOUs) accessible to individuals with disabilities. The key requirements include:

- The unit's entrance door provides a clear opening width of 850mm (with a door leaf size of 920mm). To comply with AS1428.1, a latch side clearance of 530mm is required both outside and inside the door.
- The bathroom is designed to be spacious enough to include a shower, WC, and basin, meeting AS1428.1 standards for compliant bathroom dimensions and necessary circulation space. Typically, a dimension of 2750mm x 2300mm will fulfill these circulation area requirements.
- The bedroom layout accommodates 1 meter of space on either side of a queen-size bed, with dimensions of 1550 x 2070mm at the bed's foot, or a similar arrangement to ensure an adequate movement area.

- Doorways throughout are designed to have an 850mm clear opening width right from the start, with latch side clearances that are easily met, in accordance with AS1428.1:2009 standards.
- Ensure an equal distribution of left-hand (LH) and right-hand (RH) transfer WC pans (accessible toilets) throughout the building. The most inclusive strategy involves alternating LH/RH configurations on each subsequent floor.

Compliance Comments
Provided documentation has been reviewed for required SOU number provision: 1. There are only 10 accessible room/SOU's provided in this development, the shortfall is 8 accessible (SOU's). To meet DTS requirements, an additional 8 accessible SOU's need to be provided. Alternatively, a Performance-Based Solution may be pursued with the support of MBC. This strategy would involve providing accessible SOUs tailored to different types of disabilities, moving away from a generic solution. Refer to above item 1.1 above for further details. 2. Ensure accessible rooms pan location provision are in left-hand (LH) and right-hand (RH) transfer on consecutive floor levels. There is enough space for adjustments to meet compliance. Can be resolved at later detail design stages. **Currently, requirements are capable of being achieved.**

5.6 Lifts – BCA Part E3D7 and D3D8 & AS1735.12

New lifts required to be accessible must comply with BCA E3D7 and D3D8 and relevant parts of AS1735.12.

Lift is to have floor minimum dimensions as follows:

- Passenger lifts which travel more than 12m require floor size of 1400mm x 1600mm.
- Lift lobbies are to ensure 2000mm x 1800mm minimum clear circulation space, to achieve passing bay that allows two users to pass each other, E.q Wheelchairs, prams, large goods, etc.

Compliance Comments
Provided documentation has been reviewed: **Currently, requirements are capable of being achieved.**

5.7 Sanitary and other Facilities F4D5

Unisex Accessible Toilets (USAT) and Ambulant Facilities

- Classes 9b: Provide at least 1 unisex accessible toilet, adjacent to every bank of toilets on each storey, compliant with AS1428.1 under NCC BCA and DDA Premises Standards Part F4. If there is more than 1 toilet bank of toilets on each level, an accessible toilet is required at 50% min. of toilet banks on each level.
- An accessible unisex sanitary compartment must contain a closet pan washbasin, shelf or bench top and adequate disposal of sanitary towels.
- A minimum size of a combined unisex accessible toilet (USAT) and shower facility room is to be 2300mm X 2630mm, to accommodate circulation to the pan (1900mm x 2300mm) and the shower facility.
- Circulation spaces, fixtures and fittings of all accessible sanitary facilities must comply with AS1428.1
- Door circulation is to ensure compliance with AS1428.1 Fig.31 or 32 or door is to be automated.
- An accessible unisex facility must be located so that it can be entered without crossing an area reserved for one gender.
- Where male and female facilities are separate, a unisex facility is only required at one location.
- Accessible unisex sanitary compartment or shower need not be provided on a storey that is not required to be provided with a lift or ramp access
- The distance between successive doorways in a vestibule serving an area required to be accessible is to be 1450mm (excluding door swing)
- Accessible facilities must meet the requirements of Section 15 of AS1428.1
- Ensure an equal distribution of left-hand (LH) and right-hand (RH) transfer WC pans (accessible toilets) throughout the building. The most inclusive strategy involves alternating LH/RH configurations on each subsequent floor.
- At each bank of toilets where there is one or more toilets, in addition to an accessible unisex sanitary compartment provided at that bank, a sanitary compartment suitable for a person with an ambulant disability must also be provided for use by males and females.
- The ambulant facilities must comply with the requirements of Clause 16 of AS1428.1:2009. This includes 900mm x 900mm clear circulation spaces in front of the pan, outside of the cubicle and at the entry door (this is to exclude the door swing)

Compliance Comments
Provided documentation has been reviewed: Ensure: o There is right-hand (RH) and left hand (LH) pan transfer balance in accordance with NCC BCA. **Currently, requirements are capable of being achieved.**

5.8 Communal and Exempted Areas – BCA D4D5

Under the DDA Premises Standards and BCA all common use rooms normally used by occupants of the building are to be accessible, except areas exempt under BCA D4D5 (former D3.4) Services /maintenance only use areas, which are areas where access would be inappropriate because of the particular purpose for which the area is used or that would pose a health or safety risk for people with a disability.

- Accessibility is required to common use terraces, open/outdoor spaces within buildings.
- Bins rooms, EOT, SOU's commonly use cl are required to be accessible

Compliance Comments
Provided documentation has been reviewed: There is a lack of internal access to the EOTF and internal corridors clusters. Refer to above item 1.1 above for further details. These issues can be resolved at later detail design stages. **Currently, requirements are capable of being achieved.**

6 DDA (Best Practice) Recommendations

The following table outline supplementary requirements derived from the Disability Discrimination Act 1992 (DDA) and AS1428.2 1992. It's important to note that documenting these particulars isn't mandatory for obtaining the Construction Certificate, which confirms compliance with the Building Code of Australia (and AS1428.1 2009). Deviating from these suggestions will not impact the certification process. However, it is strongly advised to incorporate best practices and adhere to Universal Design principles in all projects. Doing so fosters a comprehensive approach to ensuring access for all members of society.

8.1	**Continues Accessible Path of Travel**
It is recommended to maintain a maximum incline surface gradient of 1:21 as a best practice for accessibility and inclusion.	
8.2	**Ramps & Walkways**
It is recommended to maintain a maximum incline surface gradient of 1:21 as a best practice for accessibility and inclusion.	
8.3	**Stair**
Design the stairs with longer treads of 300mm depth and lower risers of 150mm height to facilitate easier ascending and descending.	
8.4	**Emergency warning systems**
1. Emergency warning systems shall include both audible alarms and visual alarms. This applies to emergency evacuation signals, traffic signals and audible alarms for safety. 2. Audible emergency alarms shall produce audible signals in accordance with the requirements for output of loudspeakers in AS 2200.2, except that levels shall exceed by 15 dB(A) the noisiest background sound pressure level averaged over a period of 60 s, and the level shall not be less than 75 dB(A). 3. Visual alarms in accordance with AS 2220.1 shall be arranged to flash in conjunction with the audible emergency alarms. The flashing frequency of visual alarms shall be approximately 1 Hz. 4. Auxiliary alarms provided for people with hearing impairments shall be connected to the building emergency system or there shall be a standard electrical socket into which an alarm unit can be connected to be activated by the building alarm system. Instructions for use of the auxiliary alarm or connections shall be provided. 5. Incorporate of accessible emergency evacuation refuges, pathways, and assembly zones, both indoors and outdoors, and include appropriate signage. 6. Install smoke/fire refuges adjacent to elevators and equip them with communication devices. *7.* Inclusive wayfinding signage can also play a crucial role in emergency evacuation situations, ensuring everyone can navigate safely during critical times. (Refer to wayfinding and signage.	
8.5	**Hearing Augmentation (Frequency Modulation) FM & Infrared system (IR)**
1. systems transmit audio signals directly to the users through personal receivers, offering a **higher level of privacy.** Hearing loops, in contrast, transmit signals that can be picked up by anyone with a compatible hearing aid, potentially compromising privacy. 2. Use infrared light to transmit audio, making them less susceptible to interference from electromagnetic sources, which can be a concern in places with a lot of electronic equipment. FM systems also offer a reliable signal without electromagnetic interference. 3. IR and FM systems can be used in various settings, including theaters, conference rooms, and classrooms. They are adaptable to different spaces and offer a wider range of applications than hearing loops. 4. IR and FM systems work with a broader range of hearing aids and cochlear implants, ensuring accessibility for a wider range of users.	
8.6	**Kitchen/Utility Areas**

-Benches are to be along the wall in lieu of island type.
-Vending machines controls to be within the reach range on a seating position.

8.7 **Neurodivergent Design**

The concept of neurodiversity emphasizes that these variations are a natural part of human diversity. Refer to students or staff, visitors, etc - individuals with conditions such as autism, ADHD (attention deficit hyperactivity disorder), dyslexia, and other neurological conditions.

Sensory Considerations:

-Provide quiet spaces or rooms with controlled lighting for individuals sensitive to sensory stimuli.
-Use materials and finishes that minimize glare, noise, and harsh lighting.

Wayfinding and Signage:

-Use clear and consistent signage with simple, easily recognizable symbols and fonts.
Implement color-coding or tactile signage for those who may benefit from it.

Spatial Layout:

-Create flexible and adaptable spaces that can be easily reconfigured to accommodate different sensory needs or preferences.
-Ensure clear sightlines and minimize clutter to reduce sensory overload.

Quiet Spaces/ Acoustics:

-Use acoustic treatments like sound-absorbing materials to reduce noise levels.
-Design spaces to minimize echoes and reverberations.
Offer quiet spaces for individuals who may need a break from social interactions.

Lighting Design:

-Incorporate adjustable lighting options to accommodate individuals who are sensitive to different light levels.
-Use natural lighting where possible but provide shading options to control brightness.

Flexibility in Furniture and Fixtures:

-Use adjustable and adaptable furniture to accommodate different postures and preferences.
-Provide quiet workstations or sensory-friendly seating options.

8.8 **Wayfinding & Signage**

Inclusive wayfinding signage takes into account the needs of people with disabilities and aims to remove barriers that may hinder their ability to move around comfortably and independently. Here are some reasons why wayfinding signage is inclusive.

1. Accessibility: Signage is created with clear fonts, appropriate colours, and proper contrast to make it easily readable for people with visual impairments.
2. Universal Symbols: Wayfinding signage often utilizes internationally recognized symbols that are easily understood by individuals regardless of language or literacy level.
3. Tactile Information: For individuals with visual impairments, signage may include braille or tactile elements to provide essential information through touch.
4. Clear and Concise: The information on signage is kept simple and concise, making it easier for people with cognitive or learning disabilities to comprehend.
5. Placement: Signage is placed at suitable heights and locations to ensure it is visible and accessible to individuals using wheelchairs or other mobility aids.
6. Multi-sensory Design: Some inclusive wayfinding signage may incorporate audio or touch-based cues to cater to individuals with different sensory needs.
7. Directional Clarity: Wayfinding signage provides clear directions and information to guide people efficiently, reducing confusion and stress.
8. Use of technology e.g. **https://bindimaps.com/**
9. Building cues and visual prompts (integrating landscape compositions or interiors).
10. Architectural and perceptible hints (including landscape designs or interiors).
11. Digital displays: Electronic boards displaying real-time information about appointment schedules, wait times, and important announcements.

7 Conclusion

This report has reviewed the *State significant development application* (SSDA) documentation submitted for the University of Newcastle City Campus Student Accommodation at 20 Civic Lane, Newcastle NSW.

The evaluation was conducted in accordance with the applicable provisions for "Access for People with Disabilities". Based on the proposed documentation provided, it has been identified that the design effectively addresses the necessary accessibility requirements. The design demonstrates a high level of feasibility in achieving these accessibility goals.

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