

# Access Review

Loreto Normanhurst

Boarding House, Carparks and  
Through Site Link

Report Issue 1

08/12/20



## Contents

### Contents

3	Introduction
6	Context for Planning & Design
15	Design Review & Recommendations
20	Recommendations
24	Conclusion

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## Introduction

## Introduction

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### State Significant Development Application Response to Submissions

This report supports a State Significant Development Application (SSDA) response to submissions which includes additional scope to the Stage 1 applications to address DPIE comments.

The additional scope includes:

- New car park P1A
- New car park P4A
- New site through link and landscaping work
- New Pick and Drop off
- Boarding House design change
- P3A carpark extension
- Relocation of existing pick up and drop off facility

This review of the design documents addresses the requirements for access by staff, students and visitors with a disability or who are older, to the proposed new Loreto Normanhurst Boarding House, located at Mount Pleasant Avenue, Normanhurst, new carparks, through site link and associated landscaping.

The review addresses compliance with the Disability (Access to Premises - Buildings) Standards 2010, Parts D3, E3.6 and F2.4 of the Building Code of Australia 2019 Amendment 1 (BCA) and Australian Standards on Access and Mobility.

The key issue in the provision of appropriate access to and within the new work is the provision of a continuous accessible path of travel:

- (i) from the main points of a pedestrian entry at the allotment boundary;
- (ii) from another accessible building connected by a pedestrian link;
- (iii) from accessible visitor parking to principal building entrances; and
- (iv) to and within areas normally used by the occupants.

We have reviewed the drawings listed to assess the level of accessibility and compliance with the relevant codes, standards and legislation. The designs have been assessed to ensure that equitable and dignified access for people with disabilities can be provided.

In carrying out an accessibility assessment, the main objective is to ensure access is provided through the provision of accessible facilities and continuous paths of travel to and within all appropriate areas of the building.



## Introduction

### Accessibility Requirements

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The Building Code of Australia 2019 (BCA) Amendment 1 in conjunction with the Disability (Access to Premises - Buildings) Standards 2010 (Premises Standards) apply to new buildings and existing buildings that undergo refurbishment.

The Premises Standards apply to any new part, and any affected part, of an existing building. A part of a building is a new part of the building if it is an extension to the building or a modified part of the building about which an application for approval for the building work is submitted to the competent authority in the State or Territory where the building is located. The definition of 'affected part' of a building is limited to the path of travel between (and including) the principal pedestrian entrance and the new work.

Under the Premises Standards, access must be provided, to the degree necessary, to enable people to approach the building from the road boundary and from any accessible carparking spaces associated with the building; approach the building from any accessible associated building; access work and public spaces, accommodation and facilities for personal hygiene; and to enable identification of access ways at appropriate locations which are easy to find.

Under the BCA 2019 Amendment 1 and Premises Standards table D3.1 Requirements for access for people with a disability, access to the new boarding house building (class 9b) is required to and within all areas normally used by staff, students and visitors. Access into the carparks (class 7a) is required to and within any level containing accessible carparking spaces.

Access to the landscaped areas is required to meet the intent of the DDA, and to facilitate equitable access from the principal pedestrian entrance of the school to and within all buildings and areas of the school that are required to be accessible.



## Introduction

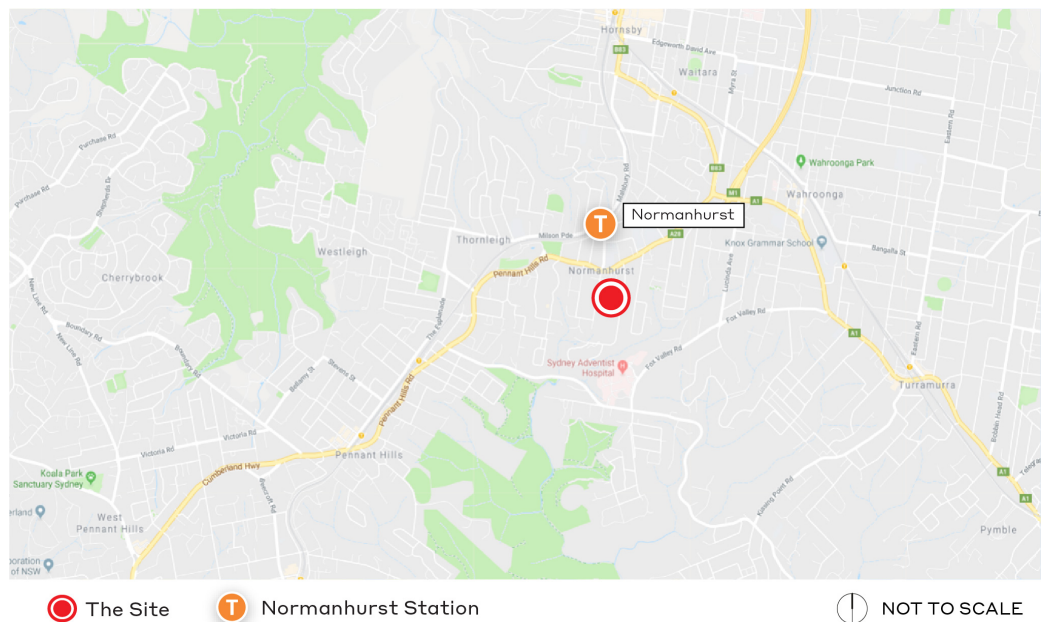
### The Site

Loreto Normanhurst is located within the suburb of Normanhurst on Sydney's Upper North Shore approximately 3km south of Hornsby and 25km north of Sydney CBD. The school is located in the local government area of Hornsby Shire Council, approximately 750m south of the Normanhurst Railway Station. The locational context of the site is illustrated at **Figure 1**.

The site comprises the existing campus grounds of the Loreto Normanhurst school at 91 – 93 Pennant Hills Road, Normanhurst. The northern part of the site accommodates much of the school's existing built form, while the rear extent consists of the school's sporting fields, and a portion of largely undeveloped land covered in remnant vegetation.

The campus itself is bound by Pennant Hills Road (to the north), Osborn Road (to the west) and Mount Pleasant Avenue (to the east). Detached dwellings on individual residential lots about the southern boundary of the site. An aerial photograph of the site is provided at **Figure 2** below.

**Figure 2** provides an aerial map of the site and its immediate surrounds.



**Figure 1 – Loreto Normanhurst Campus Location Context Plan**

Source: *Ethos Urban*



# Introduction

## The Site (continued)

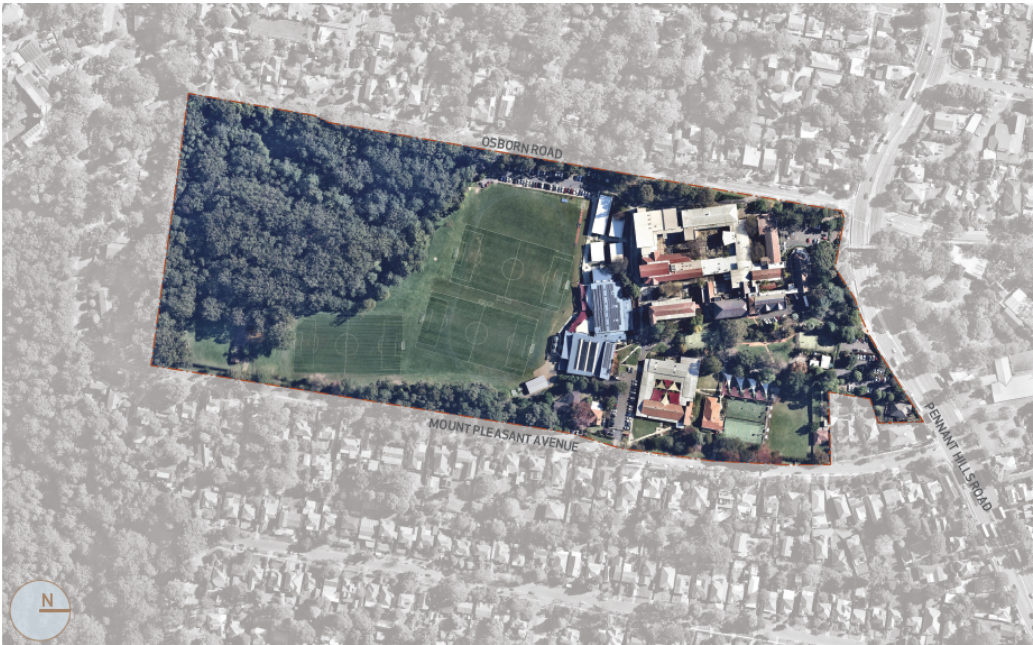


Figure 2 – Aerial Map of the Loreto Normanhurst Campus  
Source: AJ+C Architects

### Legal Description and Ownership

Table 1 Legal Description

Address	Lot	Plan
16 Mount Pleasant Avenue	Lot 5	DP 1218765
	Lot 16	DP 6612
30 – 62 Mount Pleasant Avenue	Lots 20 – 23 and 25 – 36	DP 6612
	Lot 1	DP 34834
91 – 93 Pennant Hills Road	Lot 1	DP 114580
	Lot 3	DP 1217496
	Lot 1 – Lot 3	DP 1218765
	Lot B	DP327538
24 – 28 Mount Pleasant Avenue	Lot 1	DP 809066
4-6 Mount Pleasant Avenue	Lot C	DP 366271
14 Mount Pleasant Avenue	Lot 4	DP1218765
89 Pennant Hills Road	Lot 1	DP136156



## Introduction

## Proposed Work

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The proposed building work that is the subject of this review includes:

### BOARDING HOUSE

#### Basement:

- 32 parking spaces (including two accessible)
- Store / electrical / comms / hydraulic
- Mud room
- Dirty & clean linen
- Laundry pickup
- Laundry
- Lift access
- Access to oval
- Bathroom

#### Level 01:

- Dining
- Store
- Bathrooms
- Luggage
- Kitchen and servery
- Office
- Kitchen staff room
- Catering manager office
- Garbage room
- Hydraulic
- Gap common room
- Gap year 6 beds (3 rooms)
- Multipurpose room
- Unisex accessible bathroom with shower x 2 for staff

#### Level 02:

- Common room
- Student kitchen
- Music rooms
- 46 beds – year 10 (23 rooms); 2 accessible rooms
- Year 10 common room
- Storage
- Staff sleepover
- 2 x banks of toilets & showers in accommodation area, incorporating one accessible bathroom
- Apartment 2

#### Level 03:

- Main entry
- Kitchenette
- Lobby
- Reception
- Lockers with accessible bathroom adjacent



## Introduction

## Proposed Work

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- Wellness area with accessible bathroom
- Apartment
- Years 7-8 - 24 beds (4 rooms)
- Bank of toilets / showers including a unisex accessible bathroom
- Staff sleepover
- Year 8 common area
- Year 9 - 46 beds (23 rooms, including 2 accessible rooms)
- Year 9 common areas
- Bank of toilets / showers including a unisex accessible bathroom
- Year 11 – 8 beds (4 rooms)
- Bank of toilets & showers

### Level 04:

- Year 12 – 50 beds (50 rooms; including one accessible)
- Two banks of toilets and showers – one with an accessible bathroom within
- Year 12 common room
- Year 11 – 42 beds (21 rooms; including one accessible)
- Year 11 common areas
- 2 x banks of toilets and showers - one with an accessible bathroom within
- Staff sleepover

## CAR PARKS

### Carpark P1A

- 42 parking spaces
- Pathway access to upper level

### Carpark P4A

- 64 parking spaces including 2 x accessible
- Lift access to upper level

## LANDSCAPING

- Through site link
- Landscaped pathways
- Integration of new car parks (1A & 4A) with surrounding landscape
- Resurfacing of the main pedestrian pathway from Pennant Hills Road to heritage building.
- Accessible path from the Pennant Hills Road entrance to the senior school campus
- New passive landscape space next to ceremonial entrance.
- Soft landscaping and pathways to maintain access and connections





## Context for Planning & Design

### Legislation & Standards

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The new work is subject to access provisions in the following documents:

- Disability (Access to Premises - Buildings) Standards 2010
- The Building Code of Australia (BCA) 2019 Amendment 1 parts D3, F2.4 and E3.6
- AS1428.1 (2009) (Incorporating Amendment No 1): Design for access and mobility Part 1: General requirements for access – New building work.
- AS1428.2 (1992) Design for access and mobility Part 2: Enhanced and Additional requirements - Buildings and facilities
- AS1428.4 (2009) (Incorporating Amendment No 1): Design for access and mobility Part 4.1: Means to assist the orientation of people with vision impairment -tactile ground surface indicators
- AS1735.12 (1999) Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities AS1428.4 (1992) Design for access and mobility. Part 4: Tactile ground surface indicators for the orientation of people with vision impairment
- AS2890.6 (2009) Parking Facilities - Off-street parking for people with disabilities
- AS3745 (2009) Planning for Emergencies in Facilities (referenced)
- AS1428.5 (2010) Design for access and mobility Part 5: Communications for people who are deaf or hearing impaired (referenced)
- Australian Human Rights Commission Guideline on the Application of the Premises Standards (2013)
- The Disability Discrimination Act 1992 (DDA)
- Disability Standards for Education 2005



## Context for Planning & Design

### Legislation & Standards

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#### DDA

The objectives of the Disability Discrimination Act 1992 (DDA) – section 23, focus on the provision of equitable, independent and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities. The DDA covers existing premises, including heritage buildings, those under construction and future premises. It extends beyond the building itself to include outdoor spaces and within, to address furniture, fittings and practices.

#### Premises Standards

Disability (Access to Premises - Buildings) Standards (Premises Standards) 2010 which commenced on 01 May 2011, has been incorporated into the BCA (2019) Amendment 1 to ensure that access provisions for people with disabilities more fully meet the intent of the DDA.

The Premises Standards apply to any new part, and any affected part, of an existing building. A part of a building is a new part of the building if it is an extension to the building or a modified part of the building about which an application for approval for the building work is submitted, on or after 1 May 2011, to the competent authority in the State or Territory where the building is located.

#### BCA

The Building Code of Australia (BCA)(2019) Amendment 1 applies to new buildings and existing buildings that undergo refurbishment. In this report the description of the level of accessibility throughout the new work is generally measured against the Deemed-to-Satisfy Provisions of the BCA, in particular Parts D3, E3.6 and F2.4.

#### AS1428 – Standards for Access

The Australian Standards design for access and mobility are a suite of standards relating to the inclusion of features in the built environment that improve access and mobility for people with a disability.

AS1428.1 (2009) sets out minimum requirements for design of buildings and facilities, while AS1428.2 includes enhanced and additional requirements that are not covered in AS1428.1, such as street furniture and reach ranges.

AS1428.4.1 (2009) Design for access and mobility Part 4.1: Means to assist the orientation of people with vision impairment primarily details the requirements for the application of tactile ground surface indicators (TGSIs).

#### Disability Standards for Education 2005

The objects of these standards are:

- to eliminate, as far as possible, discrimination against persons on the ground 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; and
- 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.

Reasonable adjustment is an adjustment, measure or action (or a group of measures or actions) taken by an education provider that has the effect of assisting a student with a disability.



## Context for Planning & Design

### Management Strategies

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In the existing facilities and proposed new building work it is important, within the limitations of the existing structures, to provide general paths of travel, circulation spaces and accessible facilities, within areas not exempt by the BCA part D3.4, to meet the intent of the Disability Discrimination Act.

In addition to accessible paths of travel, accessible parking and accessible sanitary facilities, it will be necessary to develop operational management strategies that meet the proposed intention to provide equipment and adapt areas within the school to meet the requirements of specific individuals with a disability.

Operational management strategies are required to meet the specific requirements of visitors, students and staff with a disability whose individual requirements cannot be addressed within the base buildings and existing building facilities. An operational management strategy acknowledges the need to meet full accessibility compliance through the provision of policy strategies. A design that has the potential to be modified as required to suit individuals with a disability is desirable.

Ongoing development of operational management strategies are recommended for the following:

- emergency egress for people with sensory and mobility impairment
- modification of individual work areas to meet individual staff and student requirements and allocation of suitable accessible bedrooms as required
- accessible parking allocation and management of the link into the school, especially during events
- facilitation of use of alternate accessible outdoor areas when use of inaccessible spaces is proposed
- development of a network of accessible pathways throughout the school through existing areas and as the masterplan is developed, through proposed new areas



## Context for Planning & Design

### Documentation

This assessment is based on discussion with the design team and review of the following architectural and landscape documentation.

Architectural documentation prepared by AJ+C Architects:

DA0001 Cover Sheet  
DA1001 Extent of Stage 1 works  
DA1002 Stage 1 Site Plan  
DA103 Site Analysis  
DA1101 Demolition Plan  
DA2000 Basement Plan  
DA2001 Level 1 Plan  
DA2002 Level 2 Plan  
DA2003 Level 3 Plan  
DA2004 Level 4 Plan  
DA2005 Roof Plan  
DA3101 Elevations 1  
DA3102 Elevations 2  
DA3103 Sections  
DA3301 Materials Board  
DA1000 Site Plan P1A  
DA1001 Project Scope P1A  
DA1100 Demolition Plan P1A  
DA2000 Lower Level Plan P1A  
DA2001 Upper Level Plan P1A  
DA3100 Elevations P1A  
DA3101 Elevations P1A  
DA3102 Elevations P1A  
DA3200 Sections P1A  
DA3201 Sections P1A  
DA3300 Materials Board P1A

DA6000 Perspective View 1 P1A

DA6001 Perspective View 1 P1A

DA1000 Site Plan P4A

DA1001 Project Scope P4A

DA1100 Demolition Plan P4A

DA2000 Lower Level Plan P4A

DA2001 Upper Level Plan P4A

DA3100 Elevations P4A

DA3101 Elevations P4A

DA3200 Sections P4A

DA3201 Sections P4A

DA3300 Materials Board P4A

Landscape Architecture Documents prepared by Oculus:

L200 Ground Floor Site Plan

L201 Ground floor Landscape Plan

L202 Ground floor Landscape Plan

L203 Ground floor Landscape Plan

L204 Ground floor Landscape Plan

L-000 STAGE 1 EXISTING SITE  
CONTEXT & DRAWING REGISTER

L-001 EXISTING SITE IMAGES

L-002 EXISTING SITE MASTERPLAN

L-003 PROPOSED LANDSCAPE  
MASTERPLAN

L-004 PROPOSED VEHICULAR &  
PEDESTRIAN MOVEMENT  
MASTERPLAN



## Context for Planning & Design

### Documentation

L-005 STAGE 1 PROPOSED CONCEPT  
MASTERPLAN

L-006 STAGE 1 KEY PLAN

L-100 BOARDING SCHOOL TREE  
RETENTION & REMOVAL PLAN

L-101 MARY WARD TREE RETENTION  
& REMOVAL PLAN

L-102 BOARDING SCHOOL  
LANDSCAPE ZONING PLAN (GROUND  
FLOOR)

L-103 BOARDING SCHOOL  
LANDSCAPE ZONING PLAN (ROOF  
LEVEL)

L-104 LANDSCAPE ZONING - DESIGN  
INTENT

L-105 LANDSCAPE PLAN - BOARDING  
HOUSE

L-106 LANDSCAPE PLAN - MARY  
WARD

L-200 BOARDING SCHOOL GROUND  
FLOOR LANDSCAPE KEY PLAN

L-201 MARY WARD LANDSCAPE KEY  
PLAN

L-202 BOARDING SCHOOL LOWER  
GROUND LANDSCAPE PLAN (1 OF 6)

L-203 BOARDING SCHOOL UPPER  
GROUND LANDSCAPE PLAN (2 OF 6)

L-204 BOARDING SCHOOL UPPER  
GROUND LANDSCAPE PLAN (3 OF 6)

L-205 BOARDING SCHOOL UPPER  
GROUND LANDSCAPE PLAN (4 OF 6)

L-206 GARDEN PLAZA LANDSCAPE  
PLAN (5 OF 6)

L-207 MARY WARD LANDSCAPE PLAN  
(6 OF 5)

L-300 BOARDING SCHOOL  
LANDSCAPE SECTIONS

L-301 BOARDING SCHOOL  
LANDSCAPE SECTIONS

L-302 BOARDING SCHOOL SECTION  
THROUGH EXISTING TREE

L-303 MARY WARD LANDSCAPE  
SECTION

L-400 BOARDING SCHOOL FENCE  
ARRANGEMENT PLAN

L-401 MARY WARD FENCE  
ARRANGEMENT PLAN

L-500 INDICATIVE MATERIAL PALETTE

L-501 PLANTING PALETTE &  
INDICATIVE PLANT SCHEDULE

L-502 PLANTING PALETTE &  
INDICATIVE PLANT SCHEDULE

L-503 BOARDING SCHOOL DEEP SOIL  
PLAN

L-504 MARY WARD DEEP SOIL PLAN

L-505 BOARDING SCHOOL TREE  
PLANTING PLAN

L-506 MARY WARD TREE PLANTING  
PLAN

L-507 TECHNICAL MAINTENANCE



## Design Review

### Accessibility Assessment

## Accessible Paths of Travel – Boarding House

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### Overview

The boarding house building provides student accommodation (one, twin and six-bed rooms), as well as common areas and shared bathrooms. Each level that includes student accommodation also includes a staff sleepover room. The dining hall is proposed to also be used separately to the rest of the building for events, and the accommodation could be used by external groups.

Two apartments are located within the building, for boarding house staff. It is our understanding these staff apartments are not subject to the deemed to satisfy access requirements in the Premises Standards due to the proposed job descriptions and responsibilities of boarding house staff.

To meet the Access to Premises Standards Part 2.1 and BCA D3.2, accessible paths of travel are proposed to be provided from the allotment boundary to the principal pedestrian entrance of the building and linking to all areas of the building. The following pathways provide accessible links to and through the building:

- The existing accessible pedestrian entrance at the Mount Pleasant Avenue allotment boundary via the existing footpath
- Two lifts; the southern lift links all levels; the northern lift links Level 1- Level 4
- The lifts provide a pedestrian link to the adjacent external areas including the oval, from the main school campus and landscaped spaces on other levels

### Parking

Parking is proposed for 32 cars in the basement. Visitor parking is provided externally and on-street parking on Mount Pleasant Avenue.

To meet the Premises Standards clause D3.5 and BCA 2019 Amendment 1 D3.5, there are two designated accessible car parking spaces indicated in the carpark.

To meet the Premises Standards D3.5, accessible car parking spaces are proposed to have a layout and dimensions to meet AS2890.6.

Accessible pedestrian paths are indicated to link the accessible car parking spaces with the principal entrance – via the lifts.

### Accessways Throughout the Building

To meet the requirements of the Premises Standards and BCA part D3.1, continuous accessible paths of travel meeting the functional requirements of AS1428.1 (2009) are proposed to and throughout the new building via the provision of lift access linking all levels of the building and circulation space at corridors, lift lobbies and doors. The corridors in the accommodation areas are indicated to be 1.8m wide.

### Accessways Linking to Adjacent Buildings

Level access to / from the adjacent school campus is proposed to be provided via the existing carpark adjacent the principal entrance on Level 3.



## Design Review

### Accessibility Assessment

## Vertical Links and Landscaping

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### Stairway

Required fire stairs are proposed as follows:

- Southern side, linking basement to Level 4
- Centrally (south), linking basement to Level 4
- Northern side, linking Level 3 to Level 4

General use stairs are proposed as follows:

- Centrally, linking Level 2 with Level 4
- Externally (north) linking Level 3 and Level 4

### Lifts

Two lifts are proposed to link all levels of the building. The southern lift links all levels; the northern lift links Level 1- Level 4.

The lifts are proposed to have dimensions and door clearance that complies with BCA D3.3 (b) and E3.6.

### Landscaping

Landscaped areas in Stage 1 include landscaping around the boarding house, garden plaza and the Mary Ward courtyard. The Boarding House landscaped areas comprise the Front Gardens, Parking and Entrance, BBQ Terrace, Sunken Garden and Oval Dining Terrace. Also included is:

- Through site link
- Soft landscaping and pathways to maintain access and connections
- Integration of new car parks (1A & 4A) with surrounding landscape
- Resurfacing of the main pedestrian pathway from Pennant Hills Road to heritage building.
- Accessible path from the Pennant Hills Road entrance to the senior school campus
- New passive landscape space next to ceremonial entrance.

To meet the intent of the DDA, accessible paths of travel with features complying with AS1428.1 are proposed to be provided to and within these areas.

Due to the steep topography around the new boarding house, the landscaped areas on different levels and the oval are proposed to be accessible via the lifts in the boarding house building.

To provide pedestrian access from the site entrance to the entrance level of the school, an accessible path of travel is required to meet BCA and Premises Standards requirements.

As the existing main pedestrian entrance from Pennant Hills Road does not currently provide accessible gradients and crossfalls, an alternative, accessible path of travel is proposed to be provided via a new landscaped pathway, including accessible gradients, cross falls and rest seating.

A new pick up / drop off area is proposed, which includes seating and two shelters. The new drop off area is linked to the new accessible pathway.



## Design Review

### Accessibility Assessment

## Student Accommodation

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Student accommodation and sanitary facilities are provided as follows:

Level 01:

- 3 x 2 bed rooms (gap year)
- 1 x bank of toilets & showers
- 1 x unisex accessible sanitary facility with shower

Level 02:

- 23 x twin rooms (Year 10) (including two accessible rooms)
- 2 x bank of toilets & showers
- 1 x unisex accessible sanitary facility with shower within one bank of toilets / showers

Level 03:

- 4 x 6 bed rooms (Year 7/8)
- 23 x twin rooms (Year 9) (including two accessible rooms)
- 4 x twin rooms (Year 11)
- 3 x banks of toilets & showers
- 2 x unisex accessible sanitary facility with shower – one separate, one within one bank of toilets / showers

Level 04:

- 21 x twin rooms (Year 11) (including one accessible room)
- 50 x 1 bed rooms (Year 12) (including one accessible room)
- 4 x banks of toilets & showers
- 2 x unisex accessible sanitary facilities with shower within two of the banks of toilets / showers

### Sole Occupancy Units

The total proposed number of rooms (sole occupancy units) is 125. A total of 6 accessible rooms, representative of the range and location of rooms available, is proposed, to meet the Premises Standards and BCA Table D3.1. The rooms are proposed to include circulation space at the doors and around fixed furniture to meet AS1428.1.





## Design Review

### Accessibility Assessment

## Accessible Facilities

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### Sanitary Facilities for Student Accommodation

To meet The Premises Standards and BCA F2.4, in this class of building (class 3), the minimum number of unisex accessible sanitary compartments is not less than one at each bank of sanitary compartments provided in common areas. Due to the high number of banks of toilets, a performance solution is proposed to meet the BCA performance requirement FP2.1.

FP2.1 states that - suitable sanitary facilities for personal hygiene must be provided in a convenient location within or associated with a building, to the degree necessary, appropriate to—

- (a) the function or use of the building; and
- (b) the number and gender of the occupants; and
- (c) the disability or other particular needs of the occupants.

The proposed performance solution (which will be documented in full during design development) is the provision of at least one unisex accessible sanitary facility with shower per floor, located in close proximity to the accessible sole occupancy unit.

On levels with more than one bank of toilets and showers within the student accommodation areas (Level 2, 3 and 4), one shower and one cubicle suitable for a person with an ambulant disability are proposed to be provided as follows:

Level 02: southern and northern bank of facilities

Level 03: southern bank of facilities

Level 04: Southern and northern banks of facilities

These facilities will supplement the accessible sanitary facilities and provide the potential for ease of use for students who may have a temporary injury or sensory impairment but may not necessarily need a fully wheelchair accessible sanitary facility.

### Other Common Area Sanitary Facilities

To meet the Premises Standards and BCA (2019) Amendment 1 part F2.4, the building is proposed to include the following sanitary facilities in the other common areas:

Basement:

- A unisex accessible sanitary facility

Level 1:

- A bank of toilets with unisex accessible sanitary facility adjacent the dining hall.
- A unisex accessible sanitary facility with shower adjacent the catering manager's office.

Level 3:

- A unisex accessible sanitary facility near the lobby and communal space



## Design Review

### Accessibility Assessment

## Carparks

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### Whole of Campus

A whole of campus strategy is proposed to provide sufficient, conveniently located accessible parking spaces. Accessible parking spaces are provided across a variety of existing and proposed new carparks, conveniently located near different parts of the school. A total of eight accessible parking spaces are provided across the campus carparks listed below, which provide a total of 296 parking spaces (at end of Stage 1 works).

This exceeds the amount of accessible parking spaces required by BCA 2019 Amendment 1 for a 9b building which is one space for every 100 spaces or part thereof.

P1 (existing): 53 spaces

P1A (proposed new carpark): 42 spaces

P2 (existing): 23 spaces including 3 accessible

P3 (existing): 60 including 1 accessible

P4 (existing): 34 spaces

P4A (proposed new): 64 spaces including 2 accessible

Boarding House (new): 32 spaces, including 2 accessible

### Proposed new Car Park P1A

Parking is proposed for 42 cars. Accessible parking is not proposed in this carpark, as the existing topography surrounding the carpark means it is not possible to provide an accessible path of travel to the campus from the carpark.

### Proposed new Car Park P4A

Parking is proposed for 64 cars.

To meet the Premises Standards clause D3.5 and BCA 2019 Amendment 1 D3.5, there are two designated accessible car parking spaces indicated in the carpark.

To meet the Premises Standards D3.5, accessible car parking spaces are proposed to have a layout, dimensions and overhead clearance of minimum 2.5m to meet AS2890.6.

Accessible pedestrian paths are indicated to link the accessible car parking spaces with the principal entrance of the adjacent building – via a lift.



## Design Review

### Recommendations

#### Accessible Paths of Travel

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In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. A minimum 1000mm unobstructed path width and 2m vertical clearance (AS1428.1 clause 6.2 and 6.3) or provision of a suitable barrier (such as under stairs).
- ii. Circulation space for a wheelchair to turn - 90° turn minimum 1500mm width x 1500mm length; 180° turn minimum 1540mm width x 2070mm length (clause 6.5 and figures 4 and 5).
- iii. Slip resistant surfaces on access ways that are traversable by people who use a wheelchair and those with an ambulant or sensory disability.
- iv. The ground surface abutting the sides of the walkway to provide a firm and level surface of a different material to that of the walkway at the same level of the walkway; follow the grade of the walkway and extend horizontally for a minimum of 600mm unless one of the following is provided:
  - a kerb
  - a kerb rail and handrail
  - a wall not less than 450mm high
  - Landings at intervals not exceeding 15m (1:20 gradient); 25m (1:33 gradient)
  - A constant gradient between level landings.
  - A crossfall no steeper than 1:40; bitumen surfaces may include a camber or crossfall no steeper than 1:33.
- v. Kerb ramps to provide a maximum rise of 190mm, length no greater than 1520mm and gradient not steeper than 1:8, with a 1500mm landing at the top where there is a change of direction required.
- vi. Designated accessible parking spaces should have columns located on the outside of the space – not between the space and the shared space. One of the spaces in the boarding house basement will require relocation to meet this requirement.
- vii. In ongoing design, the designated accessible parking spaces include dimensions and a layout to meet the requirements of AS2890.6 (2009) and identification signage. This includes a dedicated (non-shared) space with dimensions 2.4m wide x 5.4m long; a shared area on one side of the dedicated space 2.4m wide x 5.4m long; a shared area at the end of each space 2.4m x 2.4m and a 1200mm high bollard located in the centre and 800mm from the front edge of the shared space.
- viii. Ensure in ongoing design that parking space related walking and wheelchair unloading areas comprise a slip-resistant, firm plane surface with a fall not exceeding 1:40 in any direction or 1:33 if the surface is a bituminous seal.
- ix. As the masterplan is developed, it is recommended that consideration be given to the development of a network of accessible pathways throughout the school.
- x. Provide seating on the new accessible pathway, approximately every 60 metres.



## Design Review

### Recommendations

#### Accessible Paths of Travel

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In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. All doorways for public and staff areas (excluding any exempt areas meeting the BCA part D3.4) are to include a clear opening at the active leaf (minimum 850mm) and circulation spaces to meet the requirements of AS1428.1 (2009) clauses 13.2 and 13.3 and figures 31 - 34.
- ii. The doors to the office and wellness on Level 2 require adjustment to provide latch side space to meet AS1428.1.
- iii. To meet the BCA part D3.12 (2019) Amendment 1, unframed glazed doors and walls are to be provided with visual indicators to fully comply with AS1428.1 clause 6.6 (2009)
- iv. Doorways are required to be provided with luminance contrast to meet the requirements of AS1428.1 (2009) clause 13.1.
- v. The force required to activate door closers, glazed or pivot action doors meet as closely as possible the requirements of AS1428.1 (2009) clause 13.5.2(e).
- vi. All door handles and related hardware shall allow the door to be unlocked and opened with one hand and be such that a hand of a person who cannot grip will not slip from the handle during the operation of the latch as per AS1428.1 (2009) clauses 13.5.1 - 3 and figures 35 – 37.
- vii. To meet the BCA part D3.3 (c), corridors include circulation space for a wheelchair to turn within 2m of the end of a passage way where it is not possible to continue traveling along the accessway (90° minimum 1500mm width x 1500mm length; 180° minimum 1540mm width x 2070mm length) to comply with AS1428.1 (2009) clause 6.5 and figures 4 and 5; in particular the corridor outside the general office in the admin building.
- viii. To meet the intent of the DDA, provide an accessible height section of counter at the reception desk – 850mm AFFL, to meet AS1428.2 clause 24.1.1.
- ix. Carpet pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm.



## Design Review

### Recommendations

#### Vertical Links

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In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. To meet the BCA (2019) Amendment 1 part D3.3 (a) stairways, (except for stairways in exempted areas and fire isolated stairs) are required to comply with AS1428.1 clause 11 and BCA D3 to include handrails, highlighting on step nosing and tactile ground surface indicators.
- ii. To meet BCA D3.3 and AS1428.1 clause 11, ensure in ongoing design the general use stairs include handrails on both sides that include a 300mm horizontal extension at the top and bottom set back by a minimum of 600mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 26(A); nosing profiles which include 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing that includes a minimum luminance contrast of 30% with the tread to comply with AS1428.1 figures 27(a) and (b); tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom tread and opaque risers.
- iii. To meet the BCA (2019) Amendment 1 part D3.3 (a) fire isolated stairs must comply with AS1428.1 clause 11 (f) and (g).
- iv. Fire stair handrails should also meet BCA Clause D2.17(a)(vi). This means the handrail(s) is required to be continuous and comply with Clause 12 of AS1428.1 including an offset riser so that the height of the handrail is consistent throughout the stairway and landing; and handrail endings in accordance with AS1428.1 figure 26(B).
- v. Ensure in ongoing design, to comply with BCA D3.3 (b) and E3.6 the lift is one of the types identified in Table E3.6a, and includes the following features in accordance with AS1735.12:
  - a. A handrail complying with the provisions for a mandatory handrail in AS 1735.12 clause 5.3
  - b. Minimum clear door opening of 900mm as in AS 1735.12 section 2
  - c. Passenger protection system complying with AS 1735.12 clause 4.2
  - d. Lift car and landing control buttons complying with AS 1735.12 section 7 for Braille, tactile and luminance contrast
  - e. Lighting complying with AS 1735.12 section 10
  - f. Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received



## Design Review

### Recommendations

#### Sanitary Facilities

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In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. Ensure in ongoing design that combined accessible shower and sanitary facilities include a layout, circulation space (door, WC pan, basin) and fittings to meet the requirements of AS1428.1 clause 15.
- ii. Provide left and right-handed layout accessible sanitary facilities as evenly as possible.
- iii. Ensure that in ongoing design cubicles for people with ambulant disabilities includes features complying with AS1428.1 clause 13.4 and 16 and figures 34 and 53 (signage, entry airlock and cubicle door circulation, WC pan, grabrails, toilet paper dispenser, clothes hook).
- iv. Provide ambulant cubicles in the male and female toilets adjacent the dining hall
- v. We recommend that the ambulant shower cubicles include a minimum dimension of 900mm x 900mm, a grabrail, hand held shower and fold down bench in the dry area.
- vi. We recommend the unisex accessible sanitary facility on Level 4 is separated from the bank of toilets / showers to provide additional flexibility in the use of this bathroom.



## Design Review

### Recommendations

#### Wayfinding, Emergency Egress, Hearing Augmentation

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In ongoing design, to comply with the BCA and AS1428.1 2009 include the following:

- i. Development of individual evacuation plans for staff or students with a disability is recommended as part of the building operational management strategy.
- ii. To meet AS3745 (2009) Planning for Emergencies in Facilities we recommend in ongoing design that consideration be given to the inclusion of suitable emergency evacuation devices for people to be carried down stairs.
- iii. In ongoing design, if an inbuilt amplification system is to be installed, BCA (2019) Amendment 1 part D3.7 requires a hearing augmentation system to be provided where an inbuilt amplification system, other than one used for emergency warning is installed in a conference room or meeting room in a Class 9B Building. If required, an induction loop must be provided to not less than 80% of the floor area of the room.
- iv. Braille and tactile signage at exits compliant with the BCA Part D3.6.



## Conclusion

## Conclusion

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Having reviewed the listed drawings, it is our opinion that at this stage of the design, the access provisions for people with physical and sensory disabilities in the proposed new work can comply with the functional accessibility requirements of BCA (2019) Amendment 1 sections D3, E3.6 and F2.4; AS1428.1, AS1735.12, AS2890.6 and the Disability (Access to Premises - Buildings) Standards 2010 for accessibility and equity.

With the development and implementation of the recommended operational management strategies, the provision of access for people with a disability in the proposed new Loreto Normanhurst boarding house, parking and landscaped areas can provide continuous accessible paths of travel and the equitable provision of accessible facilities to provide inclusive design to meet the anticipated requirements of staff, students and visitors.

I certify that I am an appropriately qualified and competent person practising in the relevant area of work. I have recognised relevant experience in the area of work being reviewed. My company is holding appropriate current insurance policies.

Jen Barling | Access + Inclusion Consultant

Qualifications: Bachelor of Applied Science (Occupational Therapy) (1999)

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