

Access Review

The Pittwater House Schools
70 South Creek Road, Collaroy

Report Issue 2

24/10/19



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Introduction

Background

The new work to implement the Masterplan at Pittwater House Schools is proposed to include:

- (i) Demolition of buildings and external areas
- (ii) Re-located school shop
- (iii) New library and admin building (2 storeys)
- (iv) Renovation of existing M-block
- (v) New external universal access connection on ground floor
- (vi) New lift and stair core (senior school)
- (vii) Remarked existing staff carpark, new staff carpark
- (viii) New entry
- (ix) New multi-use hardscape pick-up space and playground space
- (x) New bus terminal

This review of the design documents for DA submission addresses the requirements for access by staff, students and visitors with a disability or who are older, to the proposed refurbishment to the existing buildings and addition of the new building on the school premises.

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 (BCA) and Australian Standards on Access and Mobility.

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

- (xi) from the main points of a pedestrian entry at the allotment boundary;
- (xii) from another accessible building connected by a pedestrian link;
- (xiii) from accessible visitor parking to principal building entrances; and
- (xiv) 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 buildings.



Introduction

Accessibility Requirements

The Building Code of Australia 2019 (BCA) 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 and Premises Standards table D3.1 Requirements for access for people with a disability, access to the new and refurbished buildings (class 9b) is required to and within all areas normally used by staff, students and visitors.



Introduction

Proposed Work

The proposed new work within the school campus will consist of:

Level 1

- Demolition work
- New car park
- New school entrance
- New library & student services building (entrance level)
- New drop off area
- New lift and stair connection (senior school)

Level 2

- New library & student services building (level 2)
- New lift and stair connection (senior school)
-

Level 3

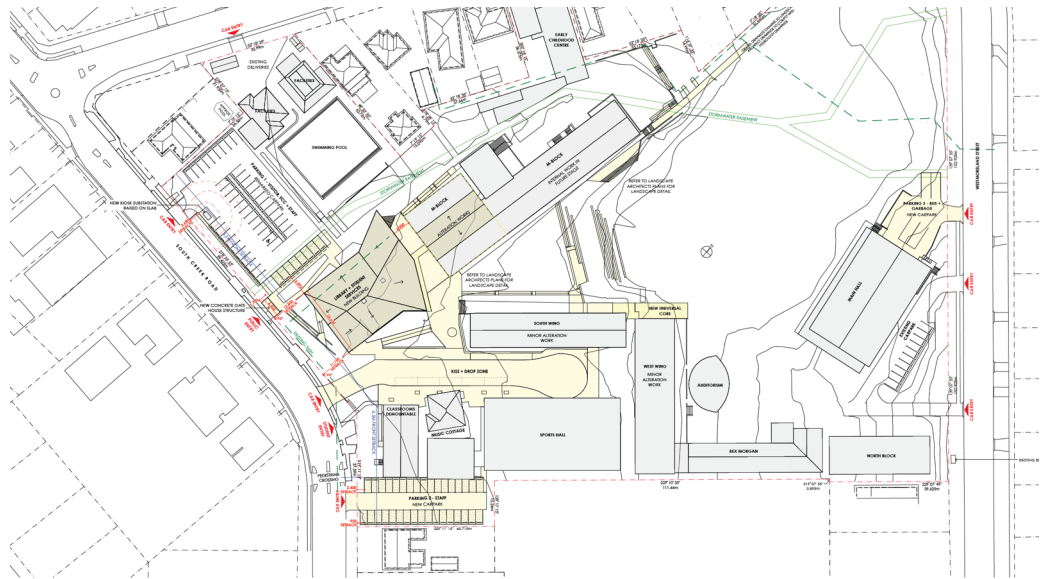
- New lift and stair connection (senior school)



Introduction

Proposed Work

Proposed Site Plan (source: Neeson Murcutt + Neille Architects)

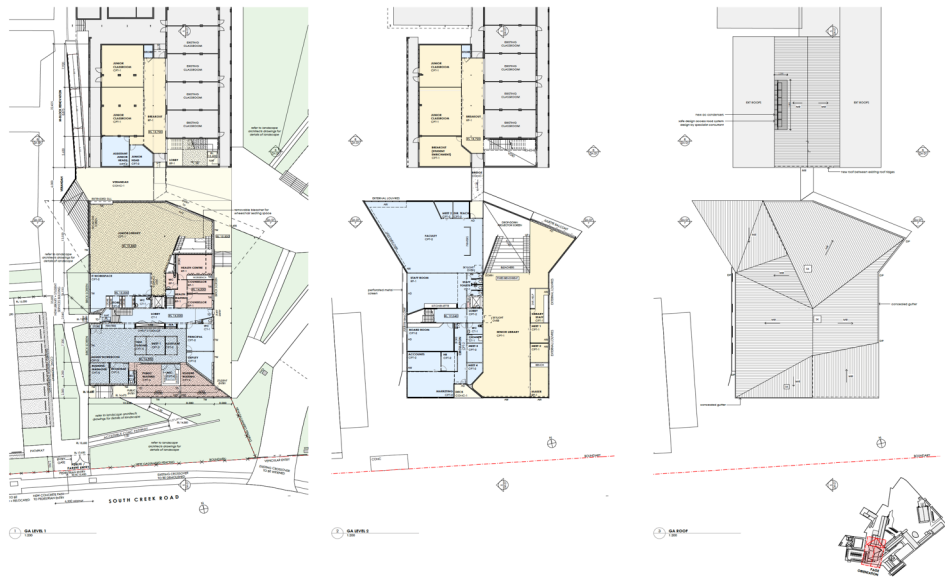




Introduction

Proposed Work

Proposed Junior School and Library Plan (source: Neeson Murcutt + Neille Architects)





Context for Planning & Design

Legislation & Standards

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 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

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) to ensure that access provisions for people with disabilities more fully meet the intent of the DDA. Meeting the Premises Standards ensures fulfilment of obligations under the Disability Discrimination Act in relation to physical access within the buildings. Schedule 1 of the Premises Standards contains the Access Code for Buildings and is equivalent to the BCA provisions for access.

BCA

The Building Code of Australia (BCA)(2019) 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

Documentation

This assessment is based on a site inspection, discussion with the design team and review of the following architectural documentation prepared by Neeson Murcutt + Neille Architects, issued to funktion on 22/10/19:

DA 01 COVER SHEET

DA 02 SITE ANALYSIS

DA 03 SITE ANALYSIS

DA 04 SITE PLAN

DA 05 DEMOLITION PLANS

DA 06 LIBRARY + STUDENT SERVICES PLANS

DA 07 LIBRARY + STUDENT SERVICES ELEVATIONS + SECTIONS

DA 08 SOUTH + WEST WING UNIVERSAL CORE PLANS

DA 09 TRAFFIC

DA 10 SHADOW DIAGRAMS

DA 11 SCHEDULE OF COLOURS AND MATERIALS

DA 12.1 NOTIFICATION PLAN

DA 12.2 NOTIFICATION PLAN

DA 13.1 CONSTRUCTION METHODOLOGY

And the following landscape architecture documentation prepared by Jane Irwin Landscape Architecture:

L-DA-000	COVERSHEET
L-DA-001	LEGEND AND SCHEDULE
L-DA-002	PLANT SCHEDULE
L-DA-003	LANDSCAPE MASTERPLAN
L-DA-011	PRECEDENT 01
L-DA-012	PRECEDENT 02
L-DA-013	PRECEDENT 03
L-DA-101	LANDSCAPE DETAIL PLAN 01
L-DA-102	LANDSCAPE DETAIL PLAN 02
L-DA-103	LANDSCAPE DETAIL PLAN 03
L-DA-104	LANDSCAPE DETAIL PLAN 04
L-DA-105	LANDSCAPE DETAIL PLAN 05
L-DA-106	LANDSCAPE DETAIL PLAN 06
L-DA-107	LANDSCAPE DETAIL PLAN 07
L-DA-108	LANDSCAPE DETAIL PLAN 08
L-DA-109	LANDSCAPE DETAIL PLAN 09
L-DA-110	LANDSCAPE DETAIL PLAN 10
L-DA-500	SECTION PLAN
L-DA-501	LANDSCAPE SECTIONS 01
L-DA-502	LANDSCAPE SECTIONS / ELEVATION 02
L-DA-503	LANDSCAPE SECTIONS / ELEVATION 03
L-DA-504	LANDSCAPE SECTIONS 04
L-DA-505	LANDSCAPE SECTIONS 05
L-DA-506	LANDSCAPE SECTIONS 06
L-DA-507	LANDSCAPE SECTIONS 07



Design Review

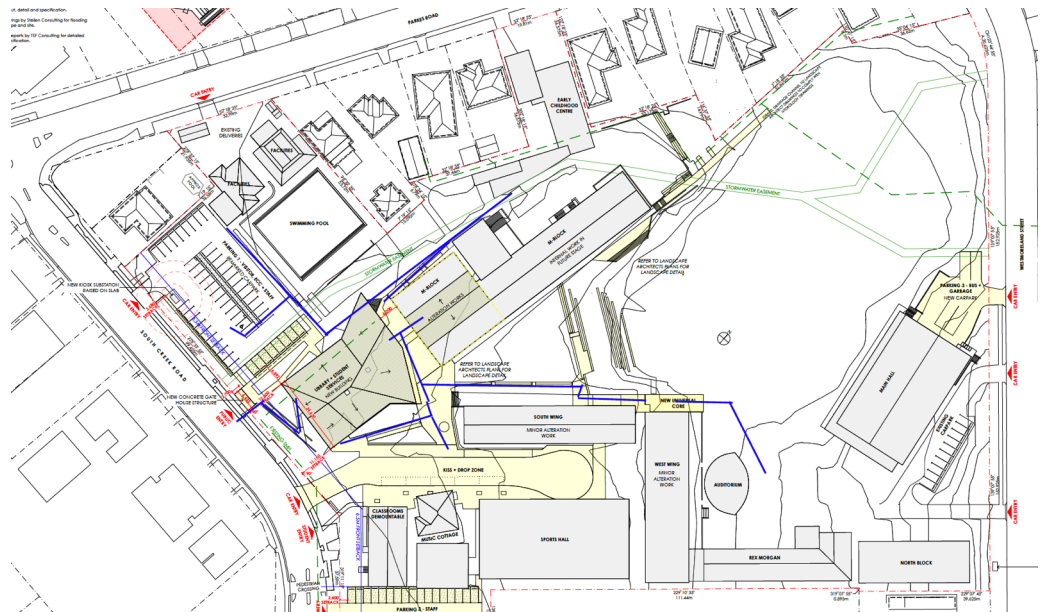
Accessibility Assessment

Accessible Paths of Travel Through the School

The following diagram shows the proposed provision of continuous accessible paths of travel through the school and to lifts linking all facilities and buildings.

A continuous accessible path of travel is an uninterrupted route to and within premises providing access to all features, services and facilities. It is step free and safe. A continuous accessible path of travel should extend to all amenities and areas to which the public (including employees) is entitled or allowed to enter or use.

A continuous accessible path of travel should be the most commonly used and direct path of travel. If for any reason this is not possible, clear signage of the alternative route should be provided.





Design Review

Accessibility Assessment

Accessible Paths of Travel to and Through the School

Overview

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 school and linking to all areas and buildings within the school. The following pathways provide accessible links to and within the school:

- An accessible pedestrian entrance at the South Creek Road allotment boundary linking to the new library & student services building
- Accessible pedestrian pathway link from the new staff carpark to the admin building
- Accessible pedestrian pathway link from the new drop off area to the admin building
- A new vertical core including lift, linking the east and west sides of the campus, as well as all levels of the south and west wings
- Link between junior school and library via a series of 1:15 ramps
- Pathways through the school that have the potential to meet the requirements of AS1428.1 linking all buildings and facilities
- One lift in the new library & student services building, linking all levels
- Accessible link to the relocated school shop

Parking

Parking / drop off is proposed as follows:

- North eastern carpark, including accessible space
- Southern staff carpark, including accessible spaces
- Drop off area

To meet the Premises Standards clause D3.2 and BCA 2019 D3.2, provision has been made for designated accessible car parking for staff and visitors, with layout and features to meet AS2890.6.

Accessible pedestrian paths are indicated to link parking areas with the principal school entrance and other key visitor destinations such as the library, early childhood centre, hall and auditorium.

Internal Accessways

To meet the requirements of the Premises Standards and BCA part D3.1, provision for continuous accessible paths of travel meeting the functional requirements of AS1428.1 (2009) has been made throughout the buildings via the provision of lift access linking all levels of the buildings and circulation space at corridors, lift lobbies and new doors.

A wheelchair seating space is proposed at the bleacher seating in the library.



Design Review

Accessibility Assessment

Vertical Links & Sanitary Facilities

Stairways

New external and internal stairways are proposed. To meet the BCA (2019) 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 and fire isolated stairs are required to comply with AS1428.1 clause 11 (f) and (g). Lift or ramp access in close proximity to the stairs is proposed to be provided as an alternative to stairs – at the new reception entrance, junior school to the library, within the library and at the new vertical core.

A performance solution is proposed for the bleacher seating in the library, which is proposed to have a stairway on either side, with a handrail on the wall side, rather than a second handrail on both stairs which will prevent access to the seating.

Lifts

Two lifts are proposed – a through lift in the Reception / Administration building, and one in the new vertical circulation connecting the lower and upper areas of the school in the senior school area.

The lifts are required to have dimensions 1100mm x 1400mm for lifts travelling less than 12m. In addition, door clearance that complies with BCA D3.3 (b) and E3.6 and features in accordance with AS1735.12.

Sanitary Facilities

To meet the Premises Standards and BCA (2019) part F2.4 the new Library and Student Services building is proposed to include sanitary facilities on every floor, including accessible facilities:

- In the Level 1 public waiting area (ambulant cubicle required)
- Centrally in the Level 1 admin building (accessible sanitary facility)
- Adjacent the health centre (accessible sanitary facility)
- Level 2 staff toilets, including ambulant cubicles
- Level 2 accessible sanitary facility in a common area

Landscaped / Outdoor Areas

Outdoor and landscaped areas are proposed to include:

- New entrance to the school
- New pick up / drop off area which is a playground outside pick up / drop off times
- New accessible pathways linking reception to the main school entrance and the senior school with the junior school
- Landscaped seating areas
- New playgrounds

The pick up / drop off area is proposed to be visually delineated by flush kerbs and contrasting paved surfaces to prioritise pedestrian movement across the space. As this area will be controlled and supervised during pick up and drop off times, a performance solution is proposed whereby tactile ground surface indicators are not included at the flush transition to the shared area.



Design Review

Recommendations

Accessible Paths of Travel to the School

In ongoing design, to comply with the BCA and AS1428.1 2009 clause 7.1 and 10.2, include the following for new walkways:

- i. A minimum 1000mm unobstructed path width and 2m vertical clearance (AS1428.1 clause 6.2 and 6.3)
- 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. A slip resistant surface that is 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 (clause 10.7).
- vi. Step ramps to meet AS1428.1 clause 10.6.1 to include:
 - a maximum rise of 190 mm;
 - a length not greater than 1900 mm; and
 - a gradient not steeper than 1 in 10.
 - edges of step ramp to have a 45° splay where there is pedestrian cross traffic, or protected by a suitable barrier such as a wall or suitable barrier with a minimum height of 450 mm; or where an open balustrade is provided a kerb or kerb rail is to be provided.
- vii. 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.
- viii. Provide adequate circulation space around the shelves in the library - 1200mm between shelves and 1540mm at the ends to turn
- ix. Provision for an accessible tea-point is recommended to meet the intent of the DDA, and is to be further developed in ongoing design.



Design Review

Recommendations

Accessible Parking

- i. Accessible parking should be located in close proximity to school entrance points with a continuous accessible path of travel linking to the principal entrance.
- ii. In ongoing design, the designated accessible parking spaces are to 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.
- iii. In ongoing design the parking space related walking and wheelchair unloading areas are to 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.



Design Review

Recommendations

Accessible Paths of Travel Through the School

- 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. This includes sliding doors on Level 2 library.
- ii. To meet the BCA part D3.12 (2019), unframed glazed doors and walls are to be provided with visual indicators to fully comply with AS1428.1 clause 6.6 (2009) and doorways provided with luminance contrast to meet the requirements of AS1428.1 (2009) clause 13.1.
- iii. 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).
- iv. 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.
- v. 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.
- vi. Ramps to include gradients, handrails, kerbs and tactile ground surface indicators to meet the requirements of AS1428.1 clause 10.3 and figures 13-19:
 - A maximum slope of 1:14
 - A constant gradient between level landings
 - An unobstructed/clear width minimum 1000mm
 - Minimum landing length of 1200mm where there is no change in direction; 1540mm x 2070mm at the change in direction
 - Handrails on both sides that include a 300mm horizontal extension at the top and bottom and set back by a minimum of 300mm so that the handrail does not protrude into the transverse path of travel
- vii. Provide pathways and door thresholds compliant with AS1428.1 linking to each type of outdoor area.



Design Review

Recommendations

Vertical Links

- i. To meet BCA D3.3 and AS1428.1 clause 11, in ongoing design new internal and external stairs are 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.
- ii. To meet BCA D2.17 the stairs in areas that will be used by primary school students to have a second handrail fixed at a height between 665mm and 750mm
- iii. In ongoing design, to comply with BCA D3.3 (b) and E3.6 the new lifts are to be one of the types identified in Table E3.6a, and include 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

- i. In ongoing design, new unisex accessible sanitary facilities are to include a layout, circulation space (door, WC pan, basin) and fittings to meet the requirements of AS1428.1 clause 15.
- ii. An operational strategy will be required for visitors in the waiting room to go through the office to use the accessible toilet on Level 1 if required (eg parent, student)
- iii. Provide an ambulant cubicle in the Level 1 public waiting area.
- iv. Sanitary compartments suitable for a person with an ambulant disability are required to comply with AS1428.1 clause 16.
- v. Provide left and right-handed layout accessible sanitary facilities as evenly as possible.



Design Review

Recommendations

Wayfinding, Emergency Egress, Hearing Augmentation

- i. Development of individual evacuation plans for staff or students with a disability is recommended as part of the school 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 the stairwell.
- iii. In ongoing design, if an inbuilt amplification system is to be installed in the library, BCA (2019) 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 an auditorium, conference room or meeting room in Class 9B Building. If required, an induction loop must be provided to not less than 80% of the floor area of the room.
- iv. Fixed seating in the library bleacher seating is to include one wheelchair seating space in accordance with the Premises Standards and BCA D3.9. The wheelchair seating space is required to have dimensions and manoeuvring space in accordance with AS1428.1 clause 18.



Conclusion

Conclusion

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) sections D3, E3.6 and F2.4; AS1428.1, AS2890.6, AS1735.12 and the Disability (Access to Premises - Buildings) Standards 2010 for accessibility and equity.

With the development and implementation of the recommendations, the provision of access for people with a disability in the proposed refurbished and new school facilities at The Pittwater House Schools 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.

A handwritten signature in black ink, appearing to read 'Jen Barling', with a stylized flourish at the end.

Jen Barling | Access + Inclusion Consultant

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