



SCEGGS Darlinghurst Limited

Access Design Assessment Report

SCEGGS Darlinghurst – Masterplan 2040
215 Forbes Street
Darlinghurst NSW 2010



BUILDING REGULATIONS | ACCESSIBILITY | FIRE SAFETY ENGINEERING | ESD ENGINEERING | ACOUSTICS

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Revision History –

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	Report issued to design team for review.	
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1.0 INTRODUCTION

1.1 General

This Access Design Assessment Report has been prepared at the request of SCEGGS Darlinghurst Limited and relates to the proposed masterplan and redevelopment of the Sydney Church of England Girls' Grammar School, Darlinghurst (SCEGGS) located at 215 Forbes Street, Darlinghurst NSW 2010.

The redevelopment of SCEGGS Darlinghurst is proposed to support the Strategic Plan 'Our Path Ahead' as prepared by the school, outlining the philosophies and direction for the school over the next 20 years in order to continue being a leader in girls' quality primary and secondary education.

The purpose of the Masterplan is to provide a framework for the upgrade works necessary in order to provide contemporary learning spaces and allow for flexibility for upgrade of facilities at a future date.

In regards the building occupants, the school is able to enrol a maximum of 942 students from Kindergarten to Year 12, as well as 130 full time and 55 part time staff (being 157.5 full time equivalent staff). The number of students is not proposed to increase as a result of the redevelopment works.

The Masterplan includes:

- Conservation and refurbishment of the existing buildings;
- Demolition of the Barham Building additions, Chapel Building additions, Old Gymnasium, Wilkinson House and the Science and Library Buildings;
- Restoration of the Barham Building;
- Connections from the New Multi-purpose building to Barham and Chapel Buildings;
- New Wilkinson House Building.

Delivery of the project will be undertaken in sequential phases to maintain an operational school on the SCEGGS Campus and will involve enabling works separate to this application followed by three main construction phases for the new building and external works.

The redevelopment works will be staged and Stage 1 will comprise the replacement of the existing Wilkinson House with a new building.

Refer to **Figure 1** below for the proposed site plan, being the new Wilkinson House Building in **blue**, the New Administration Building in **yellow** and the New Multi-purpose Building in **dark green**. The restored Barham and Chapel buildings are shown in **orange**.



Figure 1 - Proposed site plan

1.2 Purpose of Report

The purpose of this report is to identify the extent to which the architectural design documentation complies with the accessibility provisions of the Building Code of Australia 2016 (hereinafter referred to as the BCA), as are principally contained within Part D3, E3.6 & F2.4.

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.

1.3 Documentation Provided for Assessment

This assessment is based upon the architectural documentation prepared by TKD Architects and listed within **Appendix 1**.

1.4 Report Exclusions

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken—

- (i) Work Health & Safety Act and Regulations; and
- (ii) WorkCover Authority requirements; and
- (iii) Structural and Services Design Documentation; and
- (iv) The Disability Discrimination Act (DDA) 1992; and
- (v) Any parts of the BCA or any standards other than those directly referenced in this report.

2.0 DEVELOPMENT DESCRIPTION

2.1 General

The SSD DA seeks development consent for –

1. Concept approval of the 2040 Masterplan for the SCEGGS Darlinghurst campus, including –
 - Conceptual approval for the demolition of the following buildings:
 - Wilkinson House fronting Forbes Street
 - Library and science building fronting Bourke Street
 - The old gym building at the northern end of Thomson Street
 - Part of the additions to the Barham Building fronting Forbes Street
 - Building envelopes and land use for the following new buildings:
 - Four-storey school building at the corner of Forbes Street and St Peters Street for general school purposes
 - Maximum seven storey multi-purpose building fronting Bourke Street for general school purposes and a potential centre based child care facility
 - On-site vehicular drop-off with associated car parking from Bourke Street within the multi-purpose building
 - Maximum three-storey administration building fronting Forbes Street for general school purposes
 - Conservation works to the existing Barham Building within the school premises to remove non-original building fabric and use for general school purposes
2. Detailed consent for the demolition of Wilkinson House, basement excavation, and construction of a new four storey building (new Wilkinson House) comprising approximately 1,507sqm of gross floor area (GFA) and a maximum height of 15m for the purposes of new teaching and education spaces.

2.2 Building Description

In the context of this report and the BCA the building use can be described as follows—

Building Classification –

Wilkinson House Redevelopment	Class 9b
New Administration Building	Class 9b
New Multipurpose Building	Class 9b

The new Wilkinson House building is proposed to accommodate large flexible learning spaces, which will be connected to the Joan Freeman Science and Technology Centre and the Centenary Sports Hall.

The New Administration building will accommodate the Main Reception and staff offices.

The proposed use of the New Multi-Purpose Building shall be confirmed as design progresses. Some of the potential uses include: basement car park, school library, swimming pool, and early learning centre.

2.3 BCA Assessment – Interpretation Notes

To provide the reader with additional context the following information regarding assessment methodology used in this assessment is provided below—

- (i) The following rooms / areas and associated accessways have been afforded the concession under D3.4 and access for people with disabilities need not be provided to these areas—
 - Plant and equipment rooms;
 - Storage rooms;
 - Cleaners room, and
 - Service rooms.
- (ii) Moveable furniture, such as tables and chairs, are the ongoing responsibility of staff and students, who should maintain appropriate circulation spaces between and around furnishings.

3.0 EXECUTIVE SUMMARY

This BCA Design Assessment report has been prepared by Design Confidence at the request of TKD Architects and relates to the proposed masterplan and redevelopment of SCEGGS Darlinghurst. With respect to the assessment undertaken the following areas in particular need further review as the project develops –

NO.	ITEM FOR FURTHER CONSIDERATION	BCA CLAIUSE	RESPONSIBILITY
1	As design progresses, provide detailed external drawings for assessment in order to determine the provision of accessways to the buildings from the main points of pedestrian entry.	D3.2	TKD
2	Consideration shall be given to the non-accessible connection to the Centenary Sports Hall on Basement Level at the new Wilkinson House.	D3.2	TKD
3	As design progresses, provided detailed floor plan for assessment in order to determine the suitability of internal circulation provisions.	D3.3	TKD
4	Set back required at Stair 5 upper landing to ensure the handrails do not protrude into the Ground Floor Lobby at the new Wilkinson House.	D3.3	TKD
5	A passenger lift shall be provided at the new Administration building.	E3.6	TKD
6	As design progresses, the location and number of amenities including accessible and ambulant toilets shall be provided for assessment.	F2.4	TKD

4.0 BCA ACCESS DESIGN ASSESSMENT SUMMARY

4.1 General

The following table summarises the compliance status of the architectural design in terms of each applicable prescriptive provision of the BCA and indicates a capability for compliance with the BCA.

It should be recognised that instances exist where Does not Comply occurs, or Design Detail is required, such instances should not necessarily be considered BCA deficiencies, but rather matters which need to be considered by the design team and any assessment authority at relevant stages of design and/or assessment.

For those instances of either Does not Comply or Design Detail, a detailed analysis and commentary is provided within Section 4.0 of this report.

4.2 Access for People with Disabilities

BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
D3.1 General building access requirements			✓
D3.2 Access to buildings			✓
D3.3 Parts of buildings to be accessible			✓
D3.5 Accessible carparking			✓
D3.6 Signage			✓
D3.7 Hearing augmentation			✓
D3.8 Tactile indicators			✓
D3.9 Wheelchair seating spaces in Class 9b assembly buildings			✓
D3.10 Swimming pools			✓
D3.11 Ramps			✓
D3.12 Glazing on an accessway			✓

4.3 Part E3 – Lift Installations

BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
E3.6 Passenger lifts			✓

4.4 Part F2 – Sanitary and Other Facilities

BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
F2.4 Accessible sanitary facilities			✓

5.0 BCA DETAILED ASSESSMENT

5.1 General

With reference to the *Assessment Summary* contained within **Section 3.0** of this report the following detailed analysis and commentary is provided.

This commentary is formulated to enable the design documentation to be further progressed and for the purpose of evidencing the attainment of compliance with the relevant *accessibility provisions* of the BCA.

Access is required to and throughout the building to the extent nominated within the BCA and as identified below.

5.2 Part D3 – Access for People with Disabilities

D3.1

GENERAL ACCESS REQUIREMENTS

Access within Class 5 buildings/parts is required to be provided to and within all areas normally used by occupants (excluding those areas identified within Section 2.3 above).

Access within class 9b buildings is required to and within all areas normally used by the occupants (excluding those areas identified within Section 2.3 above).

D3.2

ACCESS TO BUILDINGS

The existing layout of the school buildings include a number of entries, being most entries with access restrictions and kept locked.

The main points of entry into the site are the Bourke St Gate and Jacaranda Gate on Forbes Street for the primary and secondary school, respectively. These entries are maintained open for a limited time before and after school. At all other times, access to school grounds is via the Green Gate on Forbes Street.



Figure 2 - Entry points

Having regard the redevelopment works, the proposed New Administration building works include the revitalisation of the school entry and enhanced accessibility, wayfinding and security.

Access to the school buildings will be provided from the accessways within the site. Consideration shall be given to the level changes throughout the site and the provision of access from the main point of pedestrian entry, being the proposed revitalised school entry.

A connection between the new Wilkinson House and the Centenary Sports Hall is provided at Basement Level via a stairway.

Level access between the new Wilkinson House and the Joan Freeman Science and Technology building is provided on Levels 1 and 2.

Accessways complying with AS1428.1-2009 will be required from the main points of pedestrian entry at the allotment boundary and from any required accessible parking and from another accessible building connected by a pedestrian link.

Accessways complying with AS1428.1-2009 will be required from another accessible building connected by a pedestrian link.

Accessways complying with AS1428.1-2009 will be required from any required accessible car parking space on the allotment.

Principal pedestrian entrances are to be accessible as per AS1428.1-2009. Where there is more than 1 entrance, ensure that no less than 50% of entrances are accessible.

Where buildings have a total floor area of more than 500m², the pedestrian entrance which is not accessible may not be located more than 50m from an accessible entry.

Where pedestrian entrances have multiple doorways, if less than three (3) are provided, not less than one (1) is to be accessible, if more than three (3) are provided not less than 50% are to be accessible.

Where a doorways have multiple leaves (except where automated) one of the leaves must have a clear opening width in accordance with AS1428.1-2009.

TECHNICAL REQUIREMENTS

ENTRANCE WALKWAYS

With a maximum gradient of 1:20 shall have landings at maximum 15m intervals;

With a maximum gradient of 1:33 shall have landings at maximum 25 m intervals; and

If no wall of minimum 450mm height, kerb or handrail and kerbrail is provided, the floor or ground surface abutting the sides of a walkway shall have a minimum 600mm wide firm and level surface of a different material to that of the walkway and at the same level of the walkway.

ENTRANCE RAMPS

Shall have a maximum gradient of 1:14, the gradient shall be constant throughout its length and shall have a maximum allowable tolerance of 3% (provided no section of the ramp is steeper than 1:14);

Shall provide top, bottom and mid-landings, suitable for wheelchair turning in accordance with clause 10.8 of AS1428.1-2009;

The ramp shall be provided with a handrail on each side complying with clause 12 of AS1428.1-2009;

Handrails shall extend a minimum of 300mm horizontally past the transition point at the top and bottom of the ramp; and

Ramps and intermediate landings shall have kerbs or kerb rails on both sides of the ramp, complying with clause 10.3 of AS1428.1-2009—

- Kerb to be between 65-75mm height above FFL; or
- At least 150mm height above FFL.

ENTRANCE THRESHOLD RAMPS

Threshold ramps at doorways shall—

Have a maximum rise of 35mm;

Have a maximum length of 280mm;

Have a maximum gradient of 1:8; and

Be located within 20mm of the door leaf.

ENTRANCE STEP RAMPS

Step ramps shall—

Have a maximum rise of 190mm;

Have a maximum length of 1900mm;

A maximum gradient of 1:10; and

The edges of the ramp shall have a 45° splay where there is pedestrian cross-traffic, otherwise it shall have a suitable barrier of minimum 450mm height or a kerb/kerb rail where there is an open balustrade.

ENTRANCE KERB RAMPS

Kerb ramps shall have—

A maximum rise of 190 mm;

A length not greater than 1520 mm; and

A gradient not steeper than 1 in 8, located within or attached to a kerb.

ENTRANCE STAIRWAY/S

Any stair located at the site boundary is to be recessed 900mm from the site boundary to allow handrail extensions and TGSIs not to protrude into the transverse path of travel;

Any riser contained within a stairway must be opaque;

Riser to have a maximum vertical splay of 25mm from the nosing;

Stair nosing profiles shall

- be chamfered up to 5 mm × 5 mm; or
- have a sharp intersection; or
- be rounded up to 5 mm radius.

At the nosing, each tread shall have a strip not less than 50 mm and not more than 75mm deep across the full width of the path of travel with 30% luminance contrast to the background;

The contrast strip may be set back a maximum of 15mm from the front of the nosing; and

Stairway/s, other than fire-isolated stairways, must comply with clause 11 and 12 of AS1428.1-2009.

ENTRANCE DOORWAYS, DOORS AND GATES

All doors and gates on the continuous accessible path to have a minimum 850mm clear width and appropriate hinge and latch side clearance compliant with AS1428.1-2009; (See **Figure 3** below)—

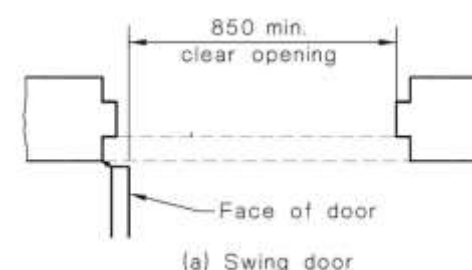


Figure 3 - Door clear opening width

Doors to be located on level landing areas with maximum 1:40 grade fall over a 1450mm depth clearance;

Doors to have minimum 1450mm clearances between open door swings within airlocks/vestibules and other similarly enclosed spaces;

Door operational force to be lightweight in design to satisfy the operational requirements of AS1428.1-2009. Where this cannot be achieved, automatic or power-operated doors are required;

All doorways shall have a minimum luminance contrast of 30% between—

- door leaf and door jamb;
- door leaf and adjacent wall;
- architrave and wall;
- door leaf and architrave; or
- door jamb and adjacent wall.

The minimum width of the area of luminance contrast shall be 50mm; and

ENTRANCE DOOR HARDWARE AND CONTROLS

Clearance between the handle and back plate or door face to be **35-45mm**;

'D' type handles to be provided on sliding doors;

Where snibs are installed, they shall have a lever handle length of a minimum **45mm** from the centre of the spindle

The force required to operate the door shall not be more than **20N**;

Where an outward opening door is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of the side-hung door;

Except in early childhood centres, swimming pool barriers or instances where locking controls are prescribed by a statutory authority, door controls are to be located as follows—

- Controls to be grasped or turned, **900-1100mm** above FFL;
- Controls to be pushed **900-1200mm** above FFL;
- Controls to be touched (including intercom) **900-1250mm** above FFL, no closer than **500mm** from and internal corner and **1000-2000mm** from the hinged door leaf and **1000-2000mm** from the hinged door leaf (in any position) or surface-mounted sliding door (in open position);

Power-operated door controls to have a minimum dimension of 25mm diameter and be proud of the surface and shall activate the door before the button becomes level with the surrounding surface.

ENTRANCE FLOOR OR GROUND SURFACES

A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use a wheelchair and those with ambulant or sensory disability;

Abutment of surfaces shall have a smooth transition. Design transition shall be 0mm, however, construction tolerances are as follows—

- 0 ±3mm vertical change in level; and

- 0 ±5mm change in level provided the edges have a bevelled or rounded edge to reduce the likelihood of tripping.

Matting recessed within an accessible path of travel—

- Where of metal and bristle type construction or similar, its surface shall be no more than 3mm if vertical or 5mm if rounded or bevelled, above or below the surrounding surface; and
- Where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or bevelled.

Grates within an accessible path of travel—

- Circular openings shall be not greater than 13 mm in diameter;
- Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel; and
- Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.

D3.3

PARTS OF BUILDING TO BE ACCESSIBLE

All doorways serving areas required to be accessible are required to comply with AS1428.1-2009.

Ramps, except a fire-isolated ramps are required to comply with AS1428.1-2009.

Stairways, except fire-isolated stairways are required to comply with AS1428.1-2009.

Fire-isolated stairways are required to comply with Clause 11.1(f) and (g) of AS1428.1-2009.

Passenger Lifts are required to be specified in accordance with E3.6 (refer to **Section 5.3**).

Passing spaces (1800 x 2000mm) are required to be provided at maximum 20m intervals if a direct line of sight is not available.

Turning spaces (1540 x 2070mm) are required to be provided within 2m of the end of an accessway where it is not possible to continue and at maximum 20m intervals along an accessway.

TECHNICAL REQUIREMENTS

PATHS OF TRAVEL

The minimum width of the continuous accessible path to be 1000mm, with a minimum unobstructed height of 2000mm, or 1980mm at doorways;

Turning spaces for wheelchair 180° turns require 1540mm wide by 2070mm (in the direction of travel) within 2m of the ends of accessways and at maximum 20m intervals;

90° turns on the continuous accessible path of travel to have minimum circulation space of 1500 x 1500mm (inside corner can be splayed); and

Where the width of the continuous accessible path is less than 1200mm, 30° - 60° turns to have a splay of 500 x 500mm on the internal corner of the turn.

FLOOR OR GROUND SURFACES

A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface. The texture of the surface shall be traversable by people who use a wheelchair and those with ambulant or sensory disability;

Abutment of surfaces shall have a smooth transition. Design transition shall be 0mm, however, construction tolerances are as follows—

- 0 ±3mm vertical change in level; and
- 0 ±5mm change in level provided the edges have a bevelled or rounded edge to reduce the likelihood of tripping.

Where carpets or any soft flexible materials are used on the ground or floor surface—

- The pile height or pile thickness, shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm;
- Exposed edges of floor covering shall be fastened to the floor surface and shall have a trim along the entire length of any exposed edge; and
- At the leading edges, carpet trims and any soft flexible materials shall have a vertical face no higher than 3mm or a rounded bevelled edge no higher than 5mm or above that height a gradient of 1:8 up to a total maximum height of 10mm.

Matting recessed within an accessible path of travel—

- Where of metal and bristle type construction or similar, its surface shall be no more than 3mm if vertical or 5mm if rounded or bevelled, above or below the surrounding surface; and
- Where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3mm if vertical or 5mm if rounded or bevelled.

Grates within an accessible path of travel—

- Circular openings shall be not greater than 13 mm in diameter;
- Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel; and
- Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.

INTERNAL DOORWAYS, DOORS AND GATES

All doors and gates on the continuous accessible path to have a minimum 850mm clear width and appropriate hinge and latch side clearance compliant with AS1428.1-2009; (See **Figure 3** below)—

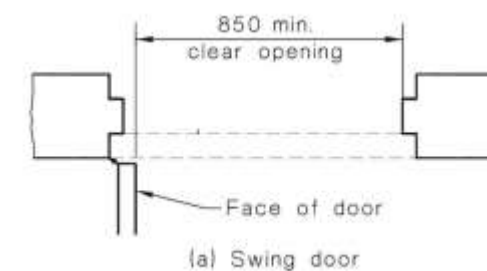


Figure 4 - Door clear opening width

Doors to be located on level landing areas with maximum 1:40 grade fall over a 1450mm depth clearance;

Doors to have minimum 1450mm clearances between open door swings within airlocks/vestibules and other similarly enclosed spaces;

Door operational force to be lightweight in design to satisfy the operational requirements of AS1428.1-2009. Where this cannot be achieved, automatic or power-operated doors are required;

All doorways shall have a minimum luminance contrast of 30% between—

- door leaf and door jamb;

- door leaf and adjacent wall;
- architrave and wall;
- door leaf and architrave; or
- door jamb and adjacent wall.

The minimum width of the area of luminance contrast shall be 50mm; and

INTERNAL DOOR HARDWARE AND CONTROLS

Clearance between the handle and back plate or door face to be **35-45mm**;

'D' type handles to be provided on sliding doors;

Where snibs are installed, they shall have a lever handle length of a minimum **45mm** from the centre of the spindle

The force required to operate the door shall not be more than **20N**;

Where an outward opening door is not self-closing, a horizontal handrail or pull bar shall be fixed on the closing face of the side-hung door;

Except in early childhood centres, swimming pool barriers or instances where locking controls are prescribes by a statutory authority, door controls are to be located as follows—

- Controls to be grasped or turned, **900-1100mm** above FFL;
- Controls to be pushed **900-1200mm** above FFL;
- Controls to be touched (including intercom) **900-1250mm** above FFL, no closer than **500mm** from and internal corner and 1000-2000mm from the hinged door leaf and **1000-2000mm** from the hinged door leaf (in any position) or surface-mounted sliding door (in open position);

Power-operated door controls to have a minimum dimension of 25mm diameter and be proud of the surface and shall activate the door before the button becomes level with the surrounding surface.

WALKWAYS

With a maximum gradient of 1:20 shall have landings at maximum 15m intervals;

With a maximum gradient of 1:33 shall have landings at maximum 25 m intervals; and

If no wall of minimum 450mm height, kerb or handrail and kerbrail is provided, the floor or ground surface abutting the sides of a walkway shall have a minimum 600mm wide firm and level surface of a different material to that of the walkway and at the same level of the walkway.

RAMPS

Shall have a maximum gradient of 1:14, the gradient shall be constant throughout its length and shall have a maximum allowable tolerance of 3% (provided no section of the ramp is steeper than 1:14);

Shall provide top, bottom and mid-landings, suitable for wheelchair turning in accordance with clause 10.8 of AS1428.1-2009;

The ramp shall be provided with a handrail on each side complying with clause 12 of AS1428.1-2009;

Handrails shall extend a minimum of 300mm horizontally past the transition point at the top and bottom of the ramp; and

Ramps and intermediate landings shall have kerbs or kerb rails on both sides of the ramp, complying with clause 10.3 of AS1428.1-2009—

- Kerb to be between 65-75mm height above FFL; or
- At least 150mm height above FFL.

THRESHOLD RAMPS

Threshold ramps at doorways shall—

Have a maximum rise of 35mm;

Have a maximum length of 280mm;

Have a maximum gradient of 1:8; and

Be located within 20mm of the door leaf.

STEP RAMPS

Step ramps shall—

Have a maximum rise of 190mm;

Have a maximum length of 1900mm;

A maximum gradient of 1:10; and

The edges of the ramp shall have a 45° splay where there is pedestrian cross-traffic, otherwise it shall have a suitable barrier of minimum 450mm height or a kerb/kerb rail where there is an open balustrade.

KERB RAMPS

Kerb ramps shall have—

A maximum rise of 190 mm;

A length not greater than 1520 mm; and

A gradient not steeper than 1 in 8, located within or attached to a kerb.

STAIRWAY/S

Stair located within internal corridors to be recessed one (1) tread-width and handrail extension with downturn to avoid protrusion into transverse path of travel

Any riser contained within a stairway must be opaque;

Riser to have a maximum vertical splay of 25mm from the nosing;

Stair nosing profiles shall

- be chamfered up to 5 mm × 5 mm; or
- have a sharp intersection; or
- be rounded up to 5 mm radius.

At the nosing, each tread shall have a strip not less than 50 mm and not more than 75mm deep across the full width of the path of travel with 30% luminance contrast to the background;

The contrast strip may be set back a maximum of 15mm from the front of the nosing;

Stairway/s, except a fire-isolated stairway, must comply with clause 11 and 12 of AS1428.1-2009 This may require an offset tread (see **Figure 05** below);

A fire-isolated stairway must comply with clauses 11.1 (f) and (g) and clause 12 of AS1428.1-2009. This may require an offset tread (see **Figure 05** below);

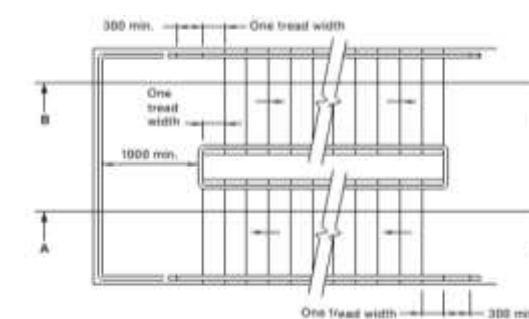


Figure 5 - Offset tread within stairs

CONTROLS, SWITCHES AND GPOs

Intercoms and door release devices to be located between 900-1250mm from FFL and no less than 500mm from an internal corner, compliant with AS1428.1-2009;

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- Colour of figure to be white on blue background, blue B21, ultramarine, in accordance with AS2700-2011; and
- Signs indicating the direction of a facility, an arrow to be used in combination with the International Symbol for Access.

International symbol for deafness to incorporate—

- A stylized ear and diagonal slash on a plain square background (proportional layout to be in accordance with AS1428.1-2009 Figure 12); and
- Colour of figure to be white on blue background, blue B21, ultramarine, in accordance with AS2700-2011.

Luminance Contrast to be as follows—

- Background, negative space, fill or border with a minimum width of 5mm to have a luminance contrast of not less than 30% to the surface on which it is mounted; and
- Tactile characters, icons and symbols must have a minimum luminance contrast of 30% to which the characters are mounted; and
- Lighting must be provided to ensure luminance contrast is met.

BRAILLE AND TACTILE REQUIREMENTS

Braille is to be as follows—

- Grade 1, uncontracted Unified English Braille, in accordance with the Australian Braille Authority;
- Raised and domed;
- Located 8mm below the bottom line of text;
- Left justified;
- If an arrow is used, a solid arrow must be provided for Braille users;
- Braille numbers shall be preceded by a Braille numerical sign.
- Braille indicator is to be semicircular, located at the left margin, horizontally aligned with the first line of Braille text and is only to be used where there are multiple lines of text.

Braille and tactile sign specification to be as follows—

- Tactile characters to be raised or embossed to a height of not less than 1mm and not more than 1.5mm;
- Sentence case to be used for all tactile characters;
- Upper case tactile characters to have a height of 15-55mm, except exit signage required by E4.5, which is required to have a height of **20-55mm**;
- Lower case tactile characters to have a height of **50%** of the related upper characters;
- Minimum letter spacing to be **2mm**;
- Minimum word spacing to be **10mm**;
- Thickness of letter strokes to be **2-7mm**;
- Tactile text to be left justified, single words may be centre justified;
- Tactile text must be Arial typeface;
- Tactile characters and symbols to have rounded edges;
- The sign and frame must have rounded edges; and
- Sign characters, symbols, logos and background, must have a matte or low sheen finish.

LOCATION OF BRAILLE AND TACTILE SIGNAGE

Facilities shall be identified by the use of raised text, Braille and symbols if required. Identification shall be between **1200-1600mm** above FFL

Signs with single lines of characters must have the line of tactile characters **1200-1600** above FFL.

Signs identifying rooms containing facilities listed in BCA Clause D3.6 and exit signage required by E4.5 are to be located—

- On the wall of the latch side of the door with the leading edge if the sign located **50-300mm** from the architrave; or
- Where the above is not possible, on the door itself; and
- For exit signage on the side that faces the person seeking egress.

SIGNAGE REQUIRED AT SANITARY FACILITIES

Sanitary facilities shall be identified with the following—

- raised and visual versions of the international symbol of access;
- raised and visual versions of the male and female symbols;
- raised text in title case (e.g. Male Toilet);
- Braille that fully describes visual information

Signage for unisex accessible facilities shall indicate if transfer is left-hand (LH) or right hand (RH), in a minimum font size of **20mm** sans serif.

Entry doors to airlocks serving areas containing sanitary facilities shall be identified with raised text and Braille, with raised and visual symbols identifying each sanitary facility within. Where facilities for male and female are separate, a dividing line should be placed between each symbol

Refer to AS1428.1-2009 Figure 9 for examples of signage.

D3.7 HEARING AUGMENTATION
Hearing augmentation systems are required where in built amplification system, other than one used for emergency warning is installed within— • A 9b building; • An auditorium, conference room, meeting room or room for judicatory purposes; or • At any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.
If any room is provided with an inbuilt amplification system then it is to be provided with a hearing augmentation system complying with one of the following, in accordance with BCA Provision D3.7— (i) An induction loop provided to not less than 80% of the floor area of the room/space served by the inbuilt amplification system; or (ii) A system requiring the use of receivers or the like available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system. The number of receivers provided shall be calculated based upon the number of persons accommodated within the area (refer to BCA Clause D3.7(b)(ii)); and (iii) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.

D3.8 TACTILE INDICATORS
TGSIs shall be provided at all stairways (except fire-isolated required exits) and ramps serving areas required to be accessible, in accordance with AS1428.1-2009 and AS/NZS1428.4.1:2002
Tactile ground surface indicators complying with sections 1 and 2 of AS1428.4.1-2009 must be provided to warn people

who are blind or have a vision impairment that they are approaching— • A stairway (other than a fire isolated stairway); • A ramp (other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool; ramp); • An overhead obstruction (other than a doorway) less than 2m above floor level in the absence of a suitable barrier; and • An accessway meeting a vehicular way adjacent to any pedestrian entrance to a building (excluding a pedestrian entrance serving an area excluded under D3.4).
TECHNICAL REQUIREMENTS

GENERAL
Tactile ground surface indicators shall be designed in accordance with AS1428.4.1:2009 and AS/NZS 1428.4.1:2009. Warning indicators should be installed as follows— • For the full width of the path of travel; • Perpendicular to the direction of travel when approaching the hazard; • Set back 300 ±10mm from the edge of the hazard (except at railways and wharves); • Integrated warning TGSIs which are required to be detected by a person approaching at an angle to the continuous path of travel should be arranged over a minimum depth of 600-800mm from the direction of approach (and in accordance with AS1428.4.1:2009 Figure 2.1); • Discrete warning TGSIs used over a depth of 300-400mm require a minimum of 6 truncated cones, provided in the direction of travel (and in accordance with AS1428.4.1:2009 Figure 2.1); and • Where discrete warning TGSIs need to be detected by a person approaching at an angle to the continuous accessible path, a minimum of 12 truncated cones are required in the direction of travel (and in accordance with AS1428.4.1:2009 Figure 2.1).

TGSIs AT STAIRWAYS AND RAMPS
At stairways and ramps, escalators and moving walks]— • Where a landing is 3000mm or more to the nosing edge the warning indicators should be over a distance of 600-800mm;

• Where a landing is less than 3000mm to the nearest nosing edge, indicators shall be over a distance of 300-400mm; • Where handrails are continuous on both sides of the landing and the landing is less than 3000mm to the nearest nosing edge TGSIs are not required.

D3.9 WHEELCHAIR SEATING SPACES IN CLASS 9B ASSEMBLY BUILDINGS
Where fixed seating is provided within Class 9b buildings, wheelchair seating spaces compliant with AS1428.1-2009 must be provided
Number and grouping of seating shall be provided within future design progression for compliance assessment and comment by this office

D3.10 SWIMMING POOLS
One of the potential uses of the New Multi-purpose Building includes a swimming pool, which has approximate dimensions 15m width x 25m length, hence 80m perimeter.
Access shall be provided to and into swimming pools with a total perimeter greater than 40 m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is required to be accessible.
No less than one (1) means of accessible water entry and exit must be provided for each swimming pool required to be accessible in accordance with Table D3.1 of the BCA.

All enclosed lift cars must have lighting in accordance with Section 10 of AS1735.12-1999 (i.e. compliant with AS/NZS1680.0-2009).

All lifts serving more than two (2) levels must have automatic audible information within the lift car to identify level each time the car stops and audible and visual indication at each lift landing to indicate the arrival of the lift car.

Where there are three (3) or more lifts in a bank, both visible and audible indications of the approach and direction of travel of the lift car shall be provided at each landing.

Passenger lifts to be an approved type in accordance with BCA—Clause E3.6a and have accessible features in accordance with E3.6b.

Passenger lifts must not rely on a constant pressure device for its operation if the lift car is fully enclosed

An accessible entry must be provided by a means of:

- A fixed or movable ramp and an aquatic wheelchair; or
- A zero-depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or
- A platform swimming pool lift and an aquatic wheelchair; or
- A sling-style swimming pool lift (where the perimeter of the swimming pool is not greater than 70m).

The accessible means of entry into a swimming pool which is required to be accessible shall be in accordance with BCA Specification D3.10.

Latching devices on gates or doors which form part of the swimming pool safety barrier are not required to comply with AS1428.1-2009 requirements in regards door controls.

D3.12

GLAZING ON AN ACCESSWAY

Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid contrasting line, in accordance with Clause 6.6 of AS1428.1-2009.

TECHNICAL REQUIREMENTS

The contrasting line shall be not less than **75mm** wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between **900mm-1000mm** above FFL.

Any contrasting line on the glazing shall provide a minimum of **30%** luminance contrast when viewed against the floor surface or surfaces within **2m** of the glazing on the opposite side.

5.3 Part E3 – Lift Installations

E3.6

LIFT INSTALLATIONS

Two (2) passenger lifts are proposed, being one at the new Wilkinson House building and one at the new Multi-purpose building.

A passenger lift will be required at the New Administration building in order to provide level access to all floors.

Passenger lifts to be an approved type in accordance with BCA Clause E3.6a and have accessible features in accordance with E3.6b and AS1735.12-1999.

TECHNICAL REQUIREMENTS

All lifts, except a stairway platform lift and low-rise platform lift must be provided with a handrail complying with Clause 5.3 AS1735.12-1999 (i.e. with a length of not less than **600mm**, located not more than **500mm** from any button or operating device and between **850-950mm** above FFL)

A passenger lift travelling **greater than 12m** requires minimum internal dimensions of **1400mm x 1600mm**.

Passenger lifts travelling **less than 12m** requires minimum internal dimensions of **1100mm x 1400mm**.

All lifts, except a stairway platform lift, must have a minimum clear width of car door opening of 900mm, in accordance with Section 2 of AS1735.12-1999, lift landing doors at the upper landing and emergency hands-free communication, including a button to alert a call centre of a problem and a light to signal that the call has been received.

All lifts with a power-operated door must have a passenger protection system in accordance with Clause 4.2 of AS1735.12-1999.

All lifts, except stairway platform lifts and low-rise platform lifts, must have lift call buttons at landings in accordance with Section 7 of AS1735.12-1999 (i.e. located between 900mm and 1200mm above the floor and not less than 500mm from any corner or obstruction) and internal lift car control buttons in accordance with Section 7 of AS1735.12-1999 (i.e. located between 700mm and 1250mm above the floor. Where doors are responding to a landing button they shall remain fully open for a minimum of 6s in accordance with Section 4.3 of AS1735.12-1999.

5.4 Part F2 – Accessible sanitary and other facilities

F2.4
ACCESSIBLE SANITARY FACILITIES
ACCESSIBLE UNISEX SANITARY FACILITIES Where BCA Table F2.3 requires closet pans then an accessible unisex sanitary compartment is required to be provided— • An accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal for sanitary towels; • An accessible sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; • Where there are two (2) or more accessible unisex sanitary facilities provided, ensure a balance of left and right handed facilities • Provide one (1) accessible unisex sanitary compartment at each bank of male / female toilets on each storey; • Where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of these locations.
AMBULANT SANITARY FACILITIES At each bank of toilets where there is one (1) or more toilets in addition to an accessible unisex sanitary compartment, a WC suitable for a person with an ambulant disability in accordance with AS1428.1-2009 must be provided for use by males and females.
ACCESSIBLE UNISEX SHOWERS Accessible unisex showers must be provided in accordance with BCA Table F2.4(b)— • Class 9b theatres and sporting venues must be provided with one (1) shower for each 10 participants or part thereof.

TECHNICAL REQUIREMENTS
ACCESSIBLE UNISEX SANITARY FACILITIES The internal dimensions and locations of fixtures and fittings shall comply with Clause 15 of AS1428.1-2009— • Circulation space to comply with AS1428.1-2009 - Minimum WC circulation space of 1900mm width x 2300mm length to be provided; • WC doors to be either hinged or sliding and to comply with door requirements of AS1428.1-2009. Doors shall be provided with an in-use indicator and a bolt or catch. Where a snib handle shall have a minimum length of 45mm from the centre of the spindle. In an emergency, the latch mechanism shall be openable from the outside; • WC seat to be of the full, round type, be securely fixed in position when in use, have seat fixings that create lateral stability for the seat when in use, be load-rated to 150kg and have a minimum luminance contrast of 30% with the background (e.g. pan wall or floor); • The front edge of the centre of the backrest is to be positioned to achieve an angle of between 94 – 100 degrees back from the seat hinge. Backrest to be capable of withstanding a force in any direction of 1100N; • Grabrails to be specified and installed in accordance with AS1428.1-2009 Clause 15.2.7; • Water taps to have lever handles, sensor plates or other similar controls, where separate taps are provided for hot and cold water the hot is to be located to the left of the hot water in horizontal configurations, or above the cold water tap in vertical configurations. Where hot water is provided, the water shall be delivered through a mixing sprout; • Hand-operated flushing controls are to be located 600mm min 1000mm max from the floor and within 500mm from the centre-line of the WC pan when located on the back wall, or 600mm min 1000mm max from the floor and 300mm max in both directions from the front of the WC pan when located on the side wall. The flushing control is to be proud of the surface and shall activate the flush before becoming level with the surrounding surface; and • Toilet roll dispensers are to be located 700mm max from the floor and 300mm max from the front of the WC pan. The dispenser should not encroach upon grabrail clearances

AMBULANT SANITARY FACILITIES

The internal dimensions and locations of fixtures and fittings shall comply with Clause 16 of AS1428.1-2009—

- Circulation space shall be provided in accordance with AS1428.1-2009, cubicle width to be **900-920mm**, **900 x 900mm** circulation space is required within the cubicle and outside the cubicle door;
- Doors to ambulant sanitary facilities shall have openings with a minimum clear opening width of **700mm**;
- Grabrails should be installed in accordance with Clause 17 of AS1428.1-2009;
- Doors shall be provided with an in-use indicator and a bolt or catch. Where a snib handle shall have a minimum length of **45mm** from the centre of the spindle. In an emergency, the latch mechanism shall be openable from the outside; and
- A coat hook shall be provided within the sanitary compartment at a height between **1350-1500mm** from FFL.

ACCESSIBLE UNISEX SHOWERS

The internal dimensions and locations of fixtures and fittings shall comply with Clause 15 of AS1428.1-2009—

- Shower circulation space to be provided in accordance with AS1428.1-2009;
- Waste outlet is to be designed in accordance with the requirements of AS1428.1-2009; and
- Grabrails, shower head, soap holder, folding seat and clothes hanging devices to be provided in accordance with AS1428.1-2009.

Report By



Fatima Mendes Raposo

Graduate

For Design Confidence (Sydney) Pty Ltd

Verified By



Luke Sheehy

Principal

For Design Confidence (Sydney) Pty Ltd

APPENDIX 1 – DOCUMENTATION PROVIDED FOR ASSESSMENT

This accessibility assessment was based upon the architectural documentation prepared by TKD Architects, namely—

DESCRIPTION	DRAWING NUMBER	REVISION	DATE
Cover Sheet & Drawing Schedule	AR.MP.0000	P4	28.09.2018
Existing Site Plan	AR.MP.1101	P4	28.09.2018
Proposed Site Plan	AR.MP.1102	P4	28.09.2018
GFA Tables	AR.MP.1103	P4	28.09.2018
Existing & Demolished GFA Plan	AR.MP.1104	P4	28.09.2018
Existing Site Plan Level 1	AR.MP.2001	P4	28.09.2018
Existing Site Plan Level 2	AR.MP.2002	P4	28.09.2018
Existing Site Plan Level 3	AR.MP.2003	P4	28.09.2018
Existing Site Plan Level 4	AR.MP.2004	P4	28.09.2018
Existing Site Plan Level 5	AR.MP.2005	P4	28.09.2018
Existing Site Plan Level 6	AR.MP.2006	P4	28.09.2018
Existing Site Plan Level 7	AR.MP.2007	P4	28.09.2018
Existing Roof Plan	AR.MP.2008	P4	28.09.2018
Proposed Masterplan Envelope Level 1	AR.MP.2101	P4	28.09.2018
Proposed Masterplan Envelope Level 2	AR.MP.2102	P4	28.09.2018
Proposed Masterplan Envelope Level 3	AR.MP.2103	P4	28.09.2018
Proposed Masterplan Envelope Level 4	AR.MP.2104	P4	28.09.2018
Proposed Masterplan Envelope Level 5	AR.MP.2105	P4	28.09.2018
Proposed Masterplan Envelope Level 6	AR.MP.2106	P4	28.09.2018
Proposed Masterplan Envelope Level 7	AR.MP.2107	P4	28.09.2018
Proposed Masterplan Envelope Roof Level	AR.MP.2108	P4	28.09.2018
Demolition Plan Level 1	AR.MP.2201	P4	28.09.2018
Demolition Plan Level 2	AR.MP.2202	P4	28.09.2018
Demolition Plan Level 3	AR.MP.2203	P4	28.09.2018
Demolition Plan Level 4	AR.MP.2204	P4	28.09.2018
Demolition Plan Level 5	AR.MP.2205	P4	28.09.2018
Demolition Plan Level 6	AR.MP.2206	P4	28.09.2018
Demolition Plan Level 7	AR.MP.2207	P4	28.09.2018
Existing Elevations	AR.MP.3001	P4	28.09.2018
Proposed Masterplan Envelope Elevations	AR.MP.3002	P4	28.09.2018
Proposed Masterplan Envelope Sections 1	AR.MP.4001	P4	28.09.2018
Proposed Masterplan Envelope Sections 2	AR.MP.4002	P4	28.09.2018

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