

Upgrades to Kingswood Public School

Second Ave, Kingswood, NSW

Our Ref: Date:

Report Prepared for: Department of Education (DoE) Report Prepared by: Philip Chun Accessibility - Samuel Dikstein AN024-017139 13th January 2025

95% **Schematic Design Review** Report



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DOCUMENT ACCEPTANCE

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Prepared by	Samuel Dikstein Senior Access Consultant	9lb	13 th January 2025

REVISION HISTORY

Revision No. Prepared by		Description	Date
00	Samuel Dikstein	95% Schematic	13 th January 2025
01	Samuel Dikstein	95% Schematic	17 th February 2025

This report has been prepared based on the available time allocated to conduct the review, and all reasonable attempts have been made to identify key compliance matters pursuant to the Building Code of Australia (BCA) and additional issues which have been deemed an impediment to access provision and may increase Client risk of attracting a complaint under the Disability Discrimination Act 1992 (Cth) (DDA).

The information provided within this report is relevant to this project and the documentation referenced. As such the information provided may not be transferred to other projects. This report must not be issued for public comment or be used for any other purpose without prior permission from Philip Chun Access.

Philip Chun Accessibility accepts no responsibility for any loss suffered as a result of any reliance upon such assessment or report other than providing guidance to alleviate access barriers in the built environment and reduce Client risk of attracting a complaint under the DDA.

1. INTRODUCTION

This report documents a comprehensive review of the proposed project documentation with consideration to all aspects of accessibility to the site and throughout the development and with reference to the Building Code of Australia (BCA), Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards), relevant Australian Standards as they relate to access to premises and the spirit and intent of the Disability Discrimination Act 1992 (Cth) (DDA).

This report has been prepared by Philip Chun Access with the aim of providing reasonable recommendations in regard to access to premises. Philip Chun Access has endeavoured to clearly identify each issue of concern with respect to the building element and with reference to relevant legislation and guidelines.

Matters that fall outside the scope of this report include structure or installation methods and assessment against Occupational Health and Safety legislation.

This 95% Schematic Design Report has been prepared to accompany a Review of Environmental Factors (REF) for the Department of Education (DoE) for upgrades to Kingswood Public School (the activity) under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP TI).

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments (the Guidelines) by the Department of Planning, Housing and Infrastructure.

This report examines and takes into account the relevant environmental factors in the Guidelines and Environmental Planning and Assessment Regulations 2021 under Section 170, Section 171 and Section 171A of the EP&A Regulation.

Proposed Activity Description

The proposed activity for upgrades to Kingswood Public School includes:

- One (1) new single storey classroom building comprising eight (8) general learning spaces (GLS), two (2) learning commons areas, two (2) multi-purpose spaces and a verandah along the eastern side of the building;
- The construction of a covered walkway that will provide a connection between the proposed classroom building and an existing covered outdoor learning area (COLA) to the north east of the proposed building; and

Removal of existing portable classroom buildings containing ten (10) classrooms.

Activity Site

The project site is located at 46-54 Second Avenue, Kingswood and is legally described as Lot 172 in Deposited Plan (DP) 839785. Kingswood Public School is located on the southern side of Second Avenue.

Figure 1 provides an aerial photograph of the site.



Figure 1: Aerial Photograph

1.1 Reviewed Documentation

This report is based upon the following relevant design documents produced by Fulton Trotter Architects for Philip Chun Accessibility review:

Document No	Title	Revision
KIPS-FTA-B00M-GF-DR-A-2101	GROUND FLOOR PLAN	07

1.2 Methodology

Philip Chun Accessibility aims to provide achievable recommendations related to the provision of access to premises based on current legislation and best practice options, enabling independent, equitable and functional access for everyone.

This report should be read in conjunction with the attached marked plans, included as Appendix C. which should be read in conjunction with the subsequent sections of this report.

2. LEGISLATION

2.1 Disability Discrimination Act

The DDA implements Australia's international human rights obligations under the Convention on the Rights of Persons with Disabilities as well as obligations relating to non-discrimination under other treaties, including the International Covenant on Civil and Political Rights.

The Disability Discrimination Act 1992 (Cth) has a section that addresses access requirements for *'buildings'*, under Section 23, which relates to access to premises and facilities which the public may enter or use.

There is also a mechanism within the DDA to create specific Disability Standards. These Standards provided more details and certainty in specific areas.

The following Standards have been made under the DDA:

- Disability Standards for Accessible Public Transport 2002
- Disability Standards for Education 2005
- Disability (Access to Premises Buildings) Standards 2010.

The objects of the Disability Discrimination Act 1992 are:

- a) to eliminate, as far as possible, discrimination against persons on the ground of disability;
- b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and
- c) 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.

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

2.2 Access to Premises Standards - General

In contrast to building regulations, the DDA is not prescriptive. The implementation of the Premises Standards in 2010, and corresponding changes to the BCA, is a significant step towards achieving equal access to premises and is crucial to justice and social inclusion for people with disabilities. It is noted that the Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA. It is acknowledged that the Premises Standards could address a broader range of accessibility issues including considerations to accessibility of parkland, playgrounds, transport vehicles, interior fit-out of buildings, and fixtures and fittings. As such, there are features which fall beyond the scope of the Standards which may be subject to the general complaint's provisions of the DDA.

2.3 Access to Premises Standards – New Work

Where new work that requires building or construction approval is undertaken on an existing building, such as an extension or refurbishment, there is a requirement to ensure the new or modified part of the building complies with the Premises Standards.

2.4 National Construction Code / Building Code of Australia

The National Construction Code (NCC) comprises the Building Code of Australia (BCA) and the Plumbing Code of Australia (PCA). NCC is all encompassing and contains Volumes One, Two and Three; The Guide; and the Consolidated Performance Requirements. Detailed of these are as follows:

• Volume One contains the requirements for Class 2 to 9 (multi-residential, commercial, industrial and public) buildings and structures (BCA).

- Volume Two contains the requirements for Class 1 (residential) and Class 10 (non-habitable) buildings and structures.
- Volume Three contains the requirements for plumbing and drainage for all classes of buildings.
- The Guide is a companion manual to Volume One. The Guide provides clarification, illustration and examples for complex NCC provisions.
- Consolidated Performance Requirements provides a compilation of all NCC Performance Requirements and the supporting General Requirements in a single document.

Philip Chun's advice relates to the National Construction Code Volume 1 (NCC). Where an Australian Standard is referenced, this is a reference to the year of the standard as detailed in the NCC 2022.

BUILDING	BUILDING CLASSIFICATION			
Levels	BCA Class	Proposed Use	Access Requirements	
Ground	Class 9b	School	to and within all areas normally used by the occupants.	

Section D4 of the BCA and Premises Standards prescribes the minimum requirement for access to a building. Access for people with disabilities is required through the principal pedestrian entrance and throughout the building in accordance with Table D4D2. The following table outlines the general building access requirements for this project.

Class of building	Access requirements	
Class 9b	to and within all areas normally used by the occupants.	

2.5 BCA, Part D4D5 Exemptions

Where full access is unachievable due to the functions of the space, there may be an opportunity to assess the area under the permitted exemptions of the D4D5 which states:

The following areas are not required to be accessible:

- a) An area where access would be inappropriate because of the particular purpose for which the area is used.
- b) An area that would pose a health or safety risk for people with a disability.
- c) Any path of travel providing access only to an area exempted by (a) or (b).

In determining application of D4D5 exemption the following main categories of disability should be considered:

- Wheelchair users
- Ambulant
- Vision impaired
- Hearing impaired

An area where it may be determined design for category is not suitable, design for another category may be required, e.g. design may not be suitable for wheelchair users however design for ambulant or vision impaired persons may be required.

2.6 Relevant Building Standards

The following Australian Standards and Australian/New Zealand Standard are relevant to the Disability Standards:

Relevant Building Sta	Relevant Building Standards			
AS 1428.1-2009 (Amendment 1 and 2)	Design for access and mobility – Part 1: General requirements for access – New building work			
AS 1428.2-1992	Design for access and mobility – Part 2: Enhanced and additional requirements – Buildings and facilities			
AS/NZS 1428.4.1-2009 (Amendment 1 and 2)	Design for access and mobility – Part 4.1: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators			
AS/NZS 2890.6-2009	Parking facilities Part 6 – Part 6: Off-street parking for people with disabilities			
AS 1735.12-1999	Lifts, escalators and moving walks - Part 12: Facilities for persons with disabilities			
AS 4586-2013	Slip resistance classification of new pedestrian surface materials			

3. BUILDING CODE OF AUSTRALIA - ACCESSIBILITY

The table below is an assessment of the proposed works against the relevant applicable DtS provisions of the BCA and Premises Standard Access Code. Each line item provides a summary description of the DtS provision and comments on the status of compliance. A summary of key issues is included on drawings in Appendix C. This table must be read in conjunction with BCA and Premises Standard Access Code.

No	BCA Requirements	Status of Compliance	Discussion
Acc	ess and Facilities for People w	ith Disabilities	- Sections D, E and F
1.	General building access requirements – Introduction	Note only	To be noted.
	Section D4 requires suitable access for people with disability be provided to and within all areas of the building normally used by the occupants.		NOTE The Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) need to be considered. These are generally in keeping with BCA requirements unless otherwise stated.
	Note accessibility requirements within the BCA that apply to this building include:		
	 D4 for general access for people with a disability. F4D5 for accessibility design to sanitary facilities. 		
	Note: The Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards) need to be considered. These are generally in keeping with BCA requirements unless otherwise stated.		
D4D	3 Access to Buildings		
2.	Access from the Allotment Boundary	Compliant	
	The BCA requires that a continuous accessible path of travel be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.		

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No	BCA Requirements	Status of Compliance	Discussion
3.	Access from the Accessible Carparking	N/A	No Accessible parking is proposed
	The BCA requires a continuous accessible path of travel be provided from the accessible carparking areas to the main entrance.		
	Design of access to building to comply with requirements of AS 1428.1.		
	This should include but be not limited to:		
	 site levels/gradients/crossfalls path widths materials including slip resistance properties location of drainage points along accessways threshold ramps at pedestrian entrances, kerb ramps, ramps, handrails etc as applicable 		

NL -	DOL De minere de	01-1-1-1	Discussion
No	BCA Requirements	Status of Compliance	Discussion
4.	Access Between Buildings on Site The BCA requires a continuous accessible path of travel be provided between associated accessible buildings. Design of accessways between buildings required to be accessible comply with requirements of AS 1428.1. This should include but be not limited to: • site levels/gradients/crossfalls • path widths • materials including slip resistance properties • location of drainage points along accessways • threshold ramps at pedestrian entrances, kerb ramps, ramps, handrails etc as applicable.	N/A	Access to premise standards 2010 Part 2.1 (5) requires that a continuous accessible path of travel be provided from the entrance to the new part - not between existing buildings
5.	Building Entrances The BCA requires a continuous, accessible path of travel to be provided through the principal pedestrian entrance and not less than 50% of all pedestrian entrances, except for pedestrian entrances serving only areas exempted by D4D5. <i>Note: where the total floor</i> <i>area of the building exceeds</i> 500m ² , the distance of travel between accessible and inaccessible entrances must not exceed 50m.	Compliant	

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NI -		01-1	Discussion
No	BCA Requirements	Status of Compliance	Discussion
D4D	04 & Parts of Buildings to be Ad		1428.1 Design for Accessibility
6.	Doors – Circulation Spaces		
0.	All doors required to be accessible must fully comply with Section 13 of AS 1428.1. Doorways must be provided with circulation spaces in accordance with Clause 13.3 and relevant approach in Figures 31 and 32. Note: circulation spaces at doorways must have a gradient and crossfall not steeper than 1 in 40.	Additional information required to confirm	 Doors are generally provided with adequate door circulation dimensions to satisfy the requirements of this Clause Refer to Appendix C– Marked Plans for further comments. NOTE Ensure all essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards do not encroach into the doorway circulation space. Loose joinery within the building does not affect certification of the building. However, furniture positioned within circulation spaces at doors can hinder access through the door for wheelchair/mobility aid users. To reduce a possible DDA complaint risk, loose joinery should be positioned clear of required circulation spaces.
7.	Door Clear Opening Width Doorways located within a required accessible path of travel for people with a disability must have a clear door opening width of not less than 850mm in accordance with Clause 13.2 of AS 1428.1. Where a door required to be accessible has more than one door leaf, the active leaf must have a clear opening of not less than 850mm. Note: some smoke and acoustic seals can impact on the clear opening width of a door. 870mm and 920mm door sets may not achieve the 850mm clear opening width.	Compliant	

No BCA Requirements	Status of Compliance	Discussion
 8. Door Controls All doors required to be accessible must be provided with controls and related hardware that fully comply with Clause 13.5 of AS 1428.1. Door controls must be capable of being unlocked/opened by one hand and prevent the hand of a person who cannot grip from slipping whilst operating the latch. Door handle design should take into consideration the following requirements, including, but not limited to: clearance of 35mm to 45mm between handle and back plate. height between 900mm – 1100mm. touch controls (security) located 500mm from internal corners 	Additional information required to confirm at DD	<text><text><text><text><list-item></list-item></text></text></text></text>

No	BCA Requirements	Status of Compliance	Discussion
9.	 BCA D3D16 Door Thresholds The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— (a) in patient care areas in a Class 9a health-care building, the door sill is not more than 25 mm above the finished floor level to which the doorway opens; or (b) in a Class 9c aged care building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold. 	Additional information required to confirm at DD	Door thresholds shall have seam-less entries meeting the requirements of the BCA, Part D3D16. Where a smooth transition at the door thresholds is not achieved, the door threshold will need to be designed to comply with AS1428.1, Clause 10.5. Threshold ramps at doorways on a continuous path of travel shall have- a maximum rise of 35mm; a maximum length of 280mm; a maximum gradient of 1 in 8; and be located within 20mm of the door leaf it serves. The edges of the threshold ramp shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall. Door down a serve in the end of the serve in the serve is not abut a wall. As 1428.1 (2009), Figure 21 illustration

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No BCA Requirements	Status of Compliance	Discussion
 10. Internal Paths of Travel Accessways complying with AS 1428.1 (2009) must be provided to and throughout areas of buildings required to be made accessible, including: minimum corridor widths of not less than 1000mm passing spaces with a minimum width of 1800mm and minimum length of 2000mm to be provided in corridors at maximum 20m intervals where a direct line of sight is not available turning spaces of minimum 1540mm width and minimum 2070mm length to be provided within 2m of the end of corridors and at maximum 20m intervals Increased landings are required at changes of direction, including 1500mm X 1500mm turning spaces to facilitate a 60–90-degree turn Note: in the design of the accessible path of travel, reference should be made to Clause 6 and Figure 2 of AS 1428.1 for the minimum width and heights. No obstructions are allowed within the clear required width including but not limited to skirtings, telephones, switchboards, extinguishers, and door handles less than 900mm above finished floor level. 	Compliant	<text><text><text><text></text></text></text></text>

No	BCA Requirements	Status of Compliance	Discussion
11.	 Floor Finishes The following applies to interior finishes and surface materials: D4D4 of the BCA requires where carpet or any soft flexible materials are used as flooring material, the pile height or pile thickness is to be no greater than 11mm and the carpet backing to be not more than 4mm thick clause 7 requires matting recessed within a continuous accessible path of travel to have a surface level difference to surrounding materials not more than 3mm for vertical and 5mm for rounded or bevelled edge. clause 7 specifies grates are to have openings no greater than 13mm in diameter and any slotted openings to be no more than 13mm wide and orientated perpendicular to the dominant direction of travel 	Additional information required to confirm at DD	 To be addressed in subsequent design stages. The floor finished on an accessway/s will need to be designed to meet the requirements of BCA, Part D4D4(g)(h) and of AS1428.1 (2009), Clause 7. During subsequent design stages further information to assess compliance will be required including: Design and detailing of the final floor surfaces; Specification of matting at entrances; Design/detailing and specification of all drainage grates.

No	BCA Requirements	Status of Compliance	Discussion
12.	D3D15 – Slip Resistance of Floor Finishes	N/A	No Stairs or ramps are being proposed
	Slip resistance surfaces are required to be provided to stairs, ramps and their landings in accordance with BCA Table D3D15, that is:		
	 for dry conditions: for ramps steeper than 1:14 – not less than P4 or R11 for ramps between 1:14 and 1:20 grade – not less than P3 or R10 for treads or landings – not less than P3 or R10 for nosing's or landings edge strips – not less than P3 		
	 for wet conditions: for ramps steeper than 1:14 – not less than P5 or R12 for ramps between 1:14 and 1:20 grade – not less than P4 or R11 for treads or landings – not less than P4 or R11 for nosing's or landings edge strips – not less than P4 		

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No	BCA Requirements	Status of Compliance	Discussion
13.	 Switches and General- Purpose Outlets Clause 14 of AS1428.1 requires all switches and controls on an accessible path of travel, excluding general purpose outlets to be located: between 900mm and 1100mm above the plane of the finished floor not less than 500mm from internal corners except where installed on the latch side architrave It is recommended the specific location of switches be nominated on design documentation. 	Additional information required to confirm at DD	During subsequent detail design stages, additional information is required to assess compliance:
14.	 Stairs - Non-Fire Isolated Stairs All stairways, excluding fire-isolated stairs, must be designed and constructed in accordance with AS 1428.1. In particular: clause 11.1(b) – Setback requirements at intersections at internal corridors. clause 11.1(c) – Risers of opaque construction clauses 11.1(d) to (g) – Design of stair nosing's including profile and identification strip clause 11.1 (h) – Tactile ground surface indicators (also AS1428.4.1) clause 11.2(b) – Handrails to both sides of stair clause 11.2(c) – Handrail to have no vertical sections clauses 11.2(d) to (f) - Extension of handrails at top and bottom of flight. clause 12 – Design and construction of handrails 	N/A	Non-fire isolated stairs are not proposed.

No	BCA Requirements	Status of Compliance	Discussion
15.	Stairs - Fire Isolated Stairs		
	Fire-isolated stairs must be designed and constructed in accordance with AS 1428.1.	N/A	Fire stairs are not proposed
	In particular Clause 11 (f) and (g) Design of stair nosing's including profile and identification strip.		
	Notes: is recommended that fire-isolated stairways proposed to be used as a means of general communication between floors fully meet AS 1428/1		
16.	D3D22 – Handrails		
	As per BCA Clause D3D22 (6), handrails within the fire isolated stairways are required to comply with Clause 12 of AS 1428.1.	N/A	No handrails are proposed
	The height of handrails is to be between 865-1000mm and be consistent along the length of the stair.		
	Incorporate the design of a staggered stair to avoid handrail extensions intruding into stairway landings, particularly in the down flight.		
17.	Ramps	N1/A	
	All ramps, excluding fire- isolated ramps used for emergency egress purposes only, must be designed and constructed in accordance with Clause 10.3 of AS 1428.1.	N/A	No ramps are proposed

No	BCA Requirements	Status of Compliance	Discussion
18.	 AS1428.1 – Abutment of Surfaces The abutment of surfaces to have a smooth transition (design transition to be 0mm). Refer to Clause 7.2 and Figure 6 for further clarification. Note construction tolerances are provided for: 0 ±3mm for vertical edges 0 ±5mm for edges with a beveled or rounded to reduce the likelihood of tripping 	Additional information required to confirm to confirm at DD	To be addressed in subsequent design stages. The abutment of surfaces shall be in accordance with AS1428.1 (2009) Clause 7.2, Figure 6 and Figure 7. During subsequent design stages, additional information is required to assess compliance: • Abutting surface details.
D4D	5 Exemptions		
19.	 The following areas are not required to be accessible: a) An area where access would be inappropriate because of the particular purpose for which the area is used. b) An area that would pose a health or safety risk for people with a disability. c) Any path of travel providing access only to an area exempted by (a) or (b). 	Note only.	Refer to Appendix C – Marked Plans for locations of highlighted areas that can be exempt from accessibility under Part D4D5 (e.g. plant/services areas, cleaners' room).

No	BCA Requirements	Status of Compliance	Discussion
D4D	6 Accessible Carparking		
20.	 The accessible carparking space and associated circulation spaces should be dimensioned on the drawings to demonstrate compliance with AS/NZS 2890.6. Accessible carparking spaces to comply with AS/NZS2890.6. This being: Designated parking space with minimum dimensions of 5400mm (I) X 2400mm (W) Shared space with minimum dimensions of 5400mm (I) X 2400mm (W) Bollards to be provided Crossfall to me maximum 1:40 in all directions (1:33 for bitumen surfaces) Note: Accessible carparking need not be provided in a Class 7a building where a parking service is provided and direct access to any of the carparking spaces is not available to the public. For example, valet parking. 	N/A	No Accessible parking is proposed

No	BCA Requirements	Status of Compliance	Discussion
D4D7 Signage			
21.	 Braille and tactile signage are required to be provided throughout any building required to be made accessible in accordance with BCA specification 15 and AS1428.1 (2009) and must identify: each sanitary facility any space with a hearing augmentation system accessible unisex facilities and indicate whether the facility is suitable for left or right-handed use ambulant accessible sanitary facilities on the door of the cubicle where an entrance is not accessible, directional signage to identify nearest accessible entrance where a bank of sanitary facilities is not provided with an accessible sanitary facility. each door required by Part E4D5 to be provided with an exit sign and state "Exit" and "Level" followed by either the floor level number, the floor descriptor or combination of these. 	Additional information required to confirm at DD	To be addressed in subsequent design stages. Symbols and signs are required to be provided meeting the requirements of the BCA, Part D4D7, Specification 15 and AS1428.1 (2009), Clause 8. During subsequent design stages further information to assess compliance will be required including drawings detailing signage specifically designed for people with disabilities. NOTE Signage package should include a typical elevation indicating the location of installation.

No BCA Requirements	Status of Compliance	Discussion
04D8 Hearing Augmentation		
 Where an inbuilt amplification system is installed (other than one for emergency purposes only) a hearing augmentation system must be provided: in a room in a Class 9b building, or in an auditorium, conference room, meeting room or room for judicatory purposes, or at a ticket office, tellers booth, reception area or the like, where the public is screened from the service provider. Induction loop- 80% coverage required. Infrared system or the like - 95% coverage required. Note: A room containing hearing augmentation, Clause D4D7 requires signage including the international symbol for deafness to be provided. Note: Consideration to the design specifications of AS 1428.5 (2010) is recommended, however is not mandatory to meet the BCA or Premises Standards. 	Additional information required to confirm at DD	During subsequent detail design stages, additional information is required to assess compliance: For compliance with this Part, a 'Compliance Certificate' is to be provided by the suitably qualified consultant once the system is installed and tested.

BCA Requirements	Status of Compliance	Discussion
D9 Tactile Indicators		
 D9 Tactile Indicators Tactile ground surface indicators (TGSI's) are required to warn people who have a vision impairment they are approaching a hazardous location, such as – stairways (other than fire isolated stairways) escalator passenger or moving walk ramp other than A fire isolated ramp Step ramp Kerb ramp or Swimming pool ramp In the absence of a suitable barrier – an overhead obstruction less than 2m above the floor level, other than a doorway; and an accessway meeting a vehicular way adjacent to any pedestrian entrance serving and area referred to in D4D5, if there is no kerb or kerb ramp at that point. Refer to AS1428.4.1 for further clarification of the 		Discussion No stairs or Ramps are proposed that would require the use of TGSIs
Note: tactile ground surface indicators are not required into areas exempted under Clause D4D5.		

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No	BCA Requirements	Status of Compliance	Discussion
D4D	12 Ramps		
24.	 On and accessway – (a) A series of connected ramps must not have a combined vertical rise of more than 3.6m; and (b) A landing for a step ramp must not overlap a landing for another step ramp or ramp. 	N/A	Ramps are not proposed.
D4D	13 Glazing on an Accessway		
25.	On an accessway, where there is no chair rail, handrail, or transom, all frameless or fully glazed doors, sidelights and glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS1428.1. A solid contrasting line is required. Refer to Clause 6.6 of AS1428.1 for details of: • location • height • luminance contrast Note: In many instances, the frosted type material may not achieve the required luminance contrast.	Additional information required to confirm at DD	During subsequent detail design stages, additional information is required to assess compliance: If full height glazing is anticipated. Glazing will need to be designed to meet the requirements of AS1428.1 (2009), Clause 6.6.

No	BCA Requirements	Status of Compliance	Discussion
E3D	7 Passenger Lifts		
26.	E3D7 has specific requirements for type of lift that can be used.	N/A	Lifts are not proposed
	Passenger lifts suitable for people with a disability are provided in Part E3D7, but each type of lift has some limitations for its use.		
	Each type of lift also requires the provision of accessible features listed in Part E3D7. Note this includes but is not limited to the design of the following:		
	 handrails lift car size door opening width control buttons 		
	Note: Where a wheelchair user is required to complete a 90 degree turn within a lift car, the lift car must possess internal dimensions of not less than 1500mm x 1500mm, to maintain a continuous accessible path of travel. Refer also to Clause 6.5 of AS 1428.1 (2009).		

No	BCA Requirements	Status of Compliance	Discussion
F4D	5 Sanitary and Other Facilities		
27.	 F4D5 - Accessible sanitary facilities For this Class 5 building the following accessible facilities are required: 1 x accessible unisex sanitary compartment on every storey containing sanitary compartments 1 x accessible unisex sanitary compartment at not less than 50% of the banks of toilets in the building 1 x ambulant sanitary compartment for use by males and females at every bank of toilets, where an accessible unisex facility is provided at that bank 1 x accessible shower for every 10 showers provided in the building Where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right-handed mirror image facilities must be provided as evenly as possible (BCA Clause F4D5(g)). 	N/A	No Bathrooms are proposed

No	BCA Requirements	Status of Compliance	Discussion
28.	AS1428.1 – Design of Unisex Accessible Sanitary Facilities	N/A	UASF Is not proposed
	All unisex accessible sanitary facilities to fully comply with AS 1428.1 (2009) Clause 15 and 16, including but not limited to:		
	 location of sanitary fixtures and fittings location, profile, and dimension of grab rails clear width of the door opening circulation spaces to doorways, fixtures, and fittings requirement for a shelf lever taps toilet seat with 30% luminance contrast WC back rest details door lock, in-use indicator and bolt or catch, with Any snib catch handle to have minimum length of 45mm 		
29.	AS1428.1 – Ambulant Accessible Sanitary Facilities Sanitary facilities suitable for people with an ambulant disability must be designed in accordance with the requirements of Section 16 and associated figures of AS1428.1, including but not limited to:	N/A	Ambulant sanitary facilities are not proposed
	 location of WC location, profile, and dimension of grab rails ambulant circulation spaces to doorway and WC clear width of the door opening door lock/In use indicator and bolt or catch 		

4. ADDITIONAL ACCESSIBILITY CONSIDERATIONS

As detailed above, it is acknowledged that the Premises Standards are limited in scope, covering aspects of building compliance applicable under the BCA only.

Philip Chun Access provides the following as a summary of additional accessibility issues that can be addressed in order to reduce Client risk of attracting a discrimination complaint. Refer to Appendix B for specific requirements.

- Fire Egress for People with Disabilities
- Signage and Wayfinding
- Access controlled entries to carparks
- Luminance Contrast
- Lighting and glare

APPENDIX A

Mandatory Access Compliance Requirements

B1 ACCESSIBLE CARPARKING

Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required. The car space and the shared zone should be a minimum of 5400mm long.

Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2. The maximum allowable crossfall of an accessible carparking area is to be 1:40, (1:33 for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.

For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7 and approach path is to have a minimum of 2200mm.

Designated accessible carparking is to be identified using the International Symbol for Access (ISA) and line marked as specified in AS2890.6.

B2 EXTERNAL PATHWAYS AND WALKWAYS

The minimum unobstructed width of all pathways and walkways is to be 1000mm (AS1428.1 (2009) Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2 (1992).

All pathways and walkways are to be constructed with no lip or step at joints between abutting surfaces. A construction tolerance of 3mm is allowable, 5mm for bevelled edges -refer to Figure 6 of AS1428.1 (2009).

The maximum allowable crossfall of pathways and walkways is to be 1:40. The surfaces of an accessible path of travel are to be slip-resistant.

The ground abutting the sides of the pathways and walkways should follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb or handrail provided to the side of the pathway (refer to AS1428.1 (2009) Clause 10.2).

Maximum allowable gradient of the walkway is 1:20 and maximum length between landings to be 15m (for 1:20 gradient). Landings to be a minimum 1200mm in length (where there is no change in direction). For changes in direction of 180°, landings to be 1540mm in length – refer to AS1428.1 (2009) Clause 10.8.

B3 KERB RAMPS

Kerb ramps to comply with AS1428.1 (2009) Amendment 1 Clause 10.7.

Maximum gradient of the kerb ramps to be 1:8 and maximum length to be 1520mm (providing a maximum height of 190mm).

Kerb ramps to have a non-slip surface as required by AS1428.

A tooled joint should be provided between parts of the kerb ramp to assist persons with a vision impairment with orientation.

B4 STEP RAMPS

The configuration of the step ramps to comply with the requirements of AS1428.1 Clause 10.6. Maximum gradient of the step ramp is to be 1:10 and maximum length to be 1900mm (providing a maximum height of 190mm).

Provide landings at the top and bottom of the step ramp to comply with AS1428.1 Clause 10.8.2.

Step ramp to be enclosed on both sides (minimum height 450mm) or a kerb and handrail needs to be installed. Where a kerb is to be installed, the height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level of the ramp. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.

B5 ACCESSIBLE RAMPS

Ramps are to comply with AS1428.1 (2009) Clause 10.3. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm and maximum length between landings to be 9m (for 1:14 gradient).

Accessible ramps are to have a maximum rise of 3.6m (BCA Part D4D12).

Externally, ramps are required to be set back a minimum 900mm from the property boundary (AS1428.1 (2009) Clause 10.3 (f)). This allows tactile indicators and handrail extensions to occur within the boundary and not protrude into the footpath area.

Internally, ramps are required to be set back a minimum 600mm from an internal corridor (AS1428.1 (2009), Clause 10.3 (f)). This allows tactile indicators and handrail extensions to be provided and not protrude into the corridor area.

Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1 (2009), Clause 12. Handrails are to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right-handed disabilities.

Where a ramp is not enclosed, provide kerb rails in accordance with AS1428.1 (2009). The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.

Provide tactile indicators at the top and bottom of the ramps to comply with BCA Part DD4D9 and AS1428.4.1 (2009). Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4 (2009) Figure A1).

Tactile indicators will be required at a mid-landing where the ramp is not continuous. Where the handrail is continuous along both sides of the mid-landing, tactile indicators are not required.

B6 THRESHOLD RAMPS

Threshold ramps are to comply with AS1428.1 (2009) Clause 10.5.

Threshold ramps are to have a maximum rise of 35mm, maximum length of 280mm and maximum gradient of 1:8.

Threshold ramps to be located within 20mm of the door leaf that it services.

B7 DOORWAYS

Doorways within the accessible path of travel are to have a minimum clear opening width of 850mm (AS1428.1 (2009), Clause 13.2). We recommend the use of a 920mm-leaf door as a minimum to achieve adequate clear width.

All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1 (2009), Figure 31. Circulation areas are to have a maximum crossfall of 1:40.

Doorways to have minimum 30% luminance contrast as described in AS1428.1 (2009), Clause 13.1.

Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1 (2009), Clause 13.5) and allows for single handed operation.

B8 TACTILE INDICATORS

Installation of tactile indicators is to be in accordance with AS1428.4.1 (2009).

Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators are to be 600-800mm deep across the width of the path of travel.

B9 VISUAL INDICATION TO GLAZING

Provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid pattern to AS1428.1 (2009) Clause 6.6.

B10 SIGNAGE

The BCA has requirements for Braille and tactile signage within Specification 15. This provides information for the provision of statutory signage.

Braille and tactile signage is required to be provided throughout any building required to be made accessible in accordance with BCA specification 15 and AS1428.1 (2009) and must identify:

- Each sanitary facility
- Any space with a hearing augmentation system
- Accessible unisex facilities and indicate whether the facility is suitable for left or right handed use
- Ambulant accessible sanitary facilities on the door of the cubicle
- Where an entrance is not accessible, directional signage to identify nearest accessible entrance
- Where a bank of sanitary facilities is not provided with an accessible sanitary facility, directional signage to identify nearest accessible sanitary facility.
- Each door required by Part E4.5 to be provided with an exit sign and state "Exit" and "Level" followed by either the floor level number, the floor descriptor or combination of these.

In addition, AS1428.2 (1992) contains additional information as to the form of signage.

Signage should be easily comprehended by all building users. In this regard, the use of pictograms is highly recommended. The message that the sign conveys should be unambiguous.

Placement of signage should be considered at the following locations:

- Where it is clearly visible to people in both a standing and seated position.
- At changes in direction.
- At locations where directional decisions are made.
- As required to amenities and exits.

B11 HEARING AUGMENTATION

A hearing augmentation system must be provided where an inbuilt amplification system is provided, other than one used for emergency purposes only as required by BCA Part D4D8.

Further, for buildings that are required to be accessible, the BCA (Part D4D8) requires hearing augmentation systems at service counters where the user is screened from the service provider.

While it is not referenced by the BCA, AS1428.5 (2010): Communication for people who are deaf or hearing impaired contains information regarding assisted listening systems and can be used to ensure equitable facilities are provided for this user group.

The standard provides information relating to design solutions and equipment for the following:

- Assisted listening systems.
- Early warning systems
- Visual display systems for intercommunication, public announcements and the like
- Telephone services and telecommunications available to the public.

B12 PASSENGER LIFTS

Every passenger lift in an accessible building must be suitable for use by people with a disability and offer compliance with AS1725.12. Typically, the following is required to be provided:

Lift dimensions

- Lift floor dimensions of not less than 1100 x 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400 x 1600mm for lifts which travel more than 12m.
- Provision for a stretcher facility within at least one emergency lift required by E3D5, or where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12m, in at least one of those lifts to serve every floor served by lifts.

Lift Features

- Handrail complying with the provisions for a mandatory handrail in AS1735.12.
- Minimum clear door opening complying with AS1735.12.
- Passenger protection system complying with AS1735.12.
- Lift landing doors at the upper landing.
- Lift car and landing control buttons complying with AS173.5.12.
- Lighting in accordance with AS1735.12.
- 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.

All passenger lifts serving more than 2 levels must possess:

- Automatic audible information within the lift car to identify the level each time the car stops.
- Audible and visual indications at each lift landing to indicate the arrival of the lift car.
- Audible information and audible indication must be provided in a range between 20-80dB(A) at a maximum frequency of 1500Hz.

B13 STAIRS

Stair construction is to comply with AS1428.1 (2009) Clause 11.1.

Stairs are to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open risers.

Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS1429.1 (2009) Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.

Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009) Clause 11.2). Handrails are to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails should be continuous around the landings where possible. Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available.

Stair nosing's to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.

Stair nosing's shall not project beyond the face of the riser.

Provide tactile indicators at the top and bottom of the stair to comply with BCA Part D4D9 and AS1428.4.1 (2009).

Tactile indicators are to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

B14 FIRE ISOLATED STAIRS

Stair nosing's to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser. Stair nosing's shall not project beyond the face of the riser.

As per BCA Clause D3D22, handrails within the fire isolated stairways are required to comply with Clause 12 of AS 1428.1 (2009).



Best Practice Recommendations



C1 FIRE EGRESS FOR PEOPLE WITH DISABILITIES

HREOC Advisory notes on access to premises, Item 5.21 states that, in an emergency, all users should be provided with a means of egress from a premises to a place of comparative safety. This ensures people with disabilities to be provided with the same level of protection as other premises users or building occupants.

We recommend that signage displaying the International Symbol of Access (ISA) be provided to identify any places of comparative safety provided. Signage should state that the area is safe in the event of an emergency. Evacuation procedures for the building should address the provision of places of comparative safety for people with limited mobility. Signage should comply with BCA D4D7 and BCA Specification 15 and have braille and tactile components.

We also recommend that as a part of the emergency evacuation plan for the building, egress for persons requiring assistance be addressed. The provision of places of comparative safety within fire isolated passages would be advantageous to persons with a disability. This consists of a waiting area large enough to accommodate a wheelchair where persons can wait for assistance from emergency services. The waiting area should be identified with appropriate signage that incorporates the International Symbol for Access.

C2 SIGNAGE AND WAYFINDING

Signs and symbols should be provided to inform all users. Provide a signage system which informs all users (HREOC Advisory notes on access to premises, Item 5.15).

The development of a wayfinding strategy with consideration to landmarks and visual features of the development is recommended. This would include the use of varied finished surfaces to differentiate areas of each building.

Signs including symbols, numbering and lettering shall be located where they are clearly visible to people in both a seated and standing position. That is, they should be placed within a zone at a height not less than 1400 mm and not more than 1600 mm above the plane of the finished floor. Where space in this zone is used up, the zone for placement of signs may be extended downward to not less than 1000 mm from the plane of the finished floor. This height assists people to read from either a seated or a standing position, and also assists people with low vision to read the information on the sign. Letters and symbols in relief assist people with severe visual disabilities.

Where a sign can be temporarily obscured, e.g., in a crowd, the sign should be placed at a height of not less than 2000 mm above the plane of the finished floor.

Signs to assist wayfinding should be provided at changes of direction and at sites where directional decisions are made, to enable the appropriate decisions to be made before a change of direction occurs.

Where the surface of the wall surrounding the sign provides insufficient contrast (e.g. patterned wallpapers), the background area to the sign may need to be increased in size.

The message that the sign carries should be unambiguous.

Tactile floor plans or maps and pre-recorded auditory instructions at the main entrance and at other useful locations can be of assistance to people with visual impairment.

C3 ACCESS CONTROLLED ENTRIES TO CAR PARKS

Where an entry to a car park is access control, the access or intercom pedestal should be position so that it is accessible by a driver who uses a wheelchair. The access /intercom pedestal to be positioned in accordance with AS2890.6:2009 Appendix A4.

C4 LUMINANCE CONTRAST

Luminance contrast is the light reflected from one surface or component, compared to the light reflected from another surface or component. A luminance contrast of 30% between two surfaces is generally

accepted as a minimum when considering it as a navigational / wayfinding tool for people with Vision impairment.

In this regard, we recommend that the provision of a minimum 30% luminance contrast between surfaces be adopted in the following instances to assist people with vision impairment negotiate the built environment:

- Provide luminance contrast between walls and doors.
- Generally, contrasting wall and floor surfaces should be provided. At a minimum, skirting boards
 which provide suitable contrast to the floor surface assist people with low vision in identifying
 perimeters of corridors and accessible spaces.
- For joinery, Counters, or benches to achieve a minimum 30% luminance contrast with the counter / bench face to which it is viewed. Additionally, Counter / bench surfaces to have a matte or low sheen finish.
- For handrails and grabrails, provide a luminance contrast between the rail and the wall colour.
- For signage, provide luminance contrast so that message can be conveyed luminance contrast required between the information in the sign and base sign colour.

Note: Statutory requirements for luminance contrast include tactile indicators, stair nosing strips, toilet seats and door / wall identification.

C5 LIGHTING AND GLARE

Minimum interior lighting levels of maintenance illumination are to be in accordance with AS1680.1 (1990) and with consideration to AS1428.2 (1992) Clause 19. Consistent lighting levels should be provided throughout, without pools of light or dark areas.

Glare and excessively reflective surfaces should be avoided. This includes glare from windows.



Marked Plans



07	100% SCHEMATIC DESIGN	20/01/2025	NK
06	100% SCHEMATIC DESIGN	10/01/2025	NK
05	95% SCHEMATIC DESIGN	19/12/2024	LS
04	FOR COORDINATION	16/12/2024	NK
03	REVISED 80% SCHEMATIC DESIGN	10/12/2024	NK
02	80% SCHEMATIC DESIGN	06/12/2024	AK
01	50% SCHEMATIC DESIGN	15/11/2024	LS
P5	100% CONCEPT DESIGN	04/11/2024	NK
P4	80% CONCEPT DESIGN	18/10/2024	NK
P3	MASTERPLAN VALIDATION	09/10/2024	NK
P2	FOR INFORMATION	27/09/2024	LS
P1	FOR INFORMATION	20/09/2024	LS
REV.	DESCRIPTION	DATE	INIT.