

## THE GABLES New Primary SCHOOL Fontana Drive, Gables (Lot 301DP1287967)

**Report Prepared for:** NSW Department of Education  
Level 8, 259 George Street  
Sydney NSW 2020

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## DOCUMENT ACCEPTANCE

	Name	Signed	Date
Prepared by	Lucy Alderson <i>Access Consultant</i>		19 November 2024

## REVISION HISTORY

Revision No.	Prepared by	Description	Date
00	Lucy Alderson	Concept Phase Report	04 September 2024
01	Marnie Rudd	Schematic Design Report	23 September 2024
02	Lucy Alderson	Schematic Design Report	26 September 2024
03	Lucy Alderson	Schematic Design Report	19 November 2024

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 BCA and additional issues which have been deemed an impediment to access provision and may increase Client risk of attracting a complaint under the 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 Accessibility.

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 Schematic Design Report has been prepared by Philip Chun Accessibility on behalf of The NSW Department of Education (the Applicant) to assess the potential environmental impacts that could arise from the development of The Gables New Primary School at Lot 301 DP 1287967 on Fontana Drive, Gables (the **site**).

This report has been prepared to review the proposed project schematic design documentation against applicable Australian disability standards, codes and legislation to the extent necessary to gain project building permit certification.

Access requirements considered in this report are found in a range of legislation, planning instruments and standards pertaining to access for people with a disability. These include but are not limited to:

- the National Construction Code (BCA 2022),
- Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards),
- relevant Australian Standards,
- the Disability Discrimination Act 1992 (*Cth*) (DDA).

This report accompanies a Review of Environment Factors that seeks approval for the construction and operation of a new primary school at the site, which involves the following works:

- Construction of school buildings, including learning hubs, a school hall and an administration and library building.
- Construction and operation of a public preschool.
- Delivery of a sports court and fields.
- Construction of car parking, waste storage and loading area.
- Associated site landscaping and open space improvements.
- Associated off-site infrastructure works to support the school, including (but not limited to) services, driveways and pedestrian crossings.

For a detailed project description, refer to the Review of Environmental Factors prepared by Ethos Urban.

The Gables New Primary School project is seeking approval for a development without consent application 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), which requires a Review of Environmental Factors (REF). This document guides the consultant team in preparing their documentation to accompany a REF for the development of the Gables Primary School.

### 1.2 Site Description

The site is located on Cataract Road, Gables, within The Hills Local Government Area (LGA), approximately 50km northwest of the Sydney CBD and 10km north of the Rouse Hill Town Centre. It comprises one lot, legally described as Lot 301 DP 1287967, that measures approximately 2.2ha in area. The site is bound by Pennant Way to the north, Cataract Road to the east, Fontana Drive to the west and a vacant lot to the south. An aerial image of the site is shown below in Figure 1.



**Figure 1 Site Aerial**

Source: Nearmap, edits by Ethos Urban

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

### 1.3 Exclusions

Matters that fall outside the scope of this report include, Safety in Design considerations, construction or installation approaches and assessment against Occupational Health and Safety legislation requirements.

In addition, the following aspects of the project are outside the scope of this assessment:

- a) Rooms or areas which are excluded from requiring access for people with disabilities, under the provisions of BCA Part D4D5. These include areas where access would be inappropriate because of the particular purpose for which the area is used and /or due to occupational health and safety reasons (such as maintenance only and service areas).

### 1.4 Statement of Significance

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed development from an accessibility DDA perspective, is low and it is determined that:

- Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community.

### 1.5 Reviewed Documentation

This report is based upon the following design documents produced by Architectus.

Document No	Title	Revision
AR-SD2000	OVERALL GROUND LEVEL PLAN	6/9/2024
AR-SD2001	OVERALL LEVEL 1 PLAN	6/9/2024



AR-SD2002	OVERALL LEVEL 2 PLAN	6/9/2024
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## 1.6 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 all.

Accessibility is paramount in providing an inclusive environment for all users. Philip Chun Accessibility looks beyond basic compliance issues to ensure that all users are offered the opportunity to participate in society. We incorporate the principles of Universal Design into all of our work, taking a holistic approach in the provision of access for people with disabilities.

## 1.7 Reporting Measures

Item	REF Requirement	Relevant Section of Report
15	<i>Accessibility Assessment</i>	<i>Section 3</i>

# 2. LEGISLATION

## 2.1 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 NCC 2022 Consolidated Performance Requirements.

- **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.
- **Livable Housing Design Standard** is the ABCB Standard referenced in the Deemed-to-Satisfy Provisions of Part G7 of NCC Volume One and Part H8 of NCC Volume Two.
- **Housing Provisions Standard** contains Deemed-to-Satisfy Provisions that are considered to be acceptable forms of construction that meet the requirements for complying with Parts H1 to H8 of NCC Volume Two.
- **Consolidated Performance Requirements** provides a compilation of all NCC Performance Requirements and explains important concepts on how the NCC must be interpreted and applied..

The accessibility requirements outlined in this report have been assessed based on the new works having a primary BCA classification of Class 5, and 9b, as advised by the Relevant Building Surveyor / building certifier.

## 2.2 Part D4 – General Building Access Requirements

Part D4 of the BCA 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 D4D2. Buildings and parts of buildings must be accessible as required by this clause, unless exempted by D4D5.

The following table outlines the general building access requirements for this project:

### Class 5, 6, 7b and 9a Buildings

**D4D2(6) For Class 5, 6, 7b, 8 and 9a buildings**, access must be provided to and within all areas normally used by the occupants.



## Class 9b Buildings

### D4D2(8) For a Class 9b building, access requirements are as follows:

- (a) Schools and early childhood centres — to and within all areas normally used by the occupants.
- (b) An assembly building, not being a school or early childhood centre—to and within—
  - (i) wheelchair seating spaces provided in accordance with D4D10; and
  - (ii) all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.

Class of building	Access requirements
<b>Class 5</b> <b>D4D2(6)</b>	To and within all areas normally used by the occupants
<b>Class 9b</b> <b>D4D2(8)(a)</b> <i>Schools and early childhood centres</i>	To and within all areas normally used by the occupants.

## 2.3 Disability Discrimination Act 1992 (Cth) (DDA)

The Disability Discrimination Act 1992 (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 DDA makes it unlawful to discriminate against a person with a disability on the basis of their disability, including the areas of:

- Work
- Accommodation
- The provision of goods and services
- Access to buildings or premises

The DDA 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. The DDA also contains the mechanism to create specific Disability Standards.

The following Disability Standards have been created under the DDA to provide more detail and certainty in the provision of meeting the DDA in relation to the provision of goods, services and premises:

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

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.

## 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. Each line item provides a summary description of the Deemed-to-Satisfy (DtS) provision and comments on the status of compliance. A summary of key issues is included on drawings in Appendix A.

No	BCA Requirements	Status of Compliance	Discussion
<b>Access and Facilities for People with Disabilities – Sections D, E and F</b>			
1.	<p><b>General building access requirements – Introduction</b></p> <p>Section D4 requires suitable access for people with disability be provided to and within all areas of the building normally used by the occupants.</p> <p>Note accessibility requirements within the BCA that apply to this building include:</p> <ul style="list-style-type: none"> <li>• D4 for general access for people with a disability.</li> <li>• E3D7 and E3D8 for accessibility design to passenger lifts.</li> <li>• F4D5 for accessibility design to sanitary facilities.</li> </ul> <p><i>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.</i></p>	Additional information required to confirm compliance	
<b>D4D3 Access to Buildings</b>			
2.	<p><b>Access from the Allotment Boundary</b></p> <p>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.</p>	Additional information required to confirm compliance	<p>The existing approach from the allotment boundary does not appear to be sufficient. i.e., to the primary school main entrance or to the preschool entrance</p> <p>Detail of formed footpath design with areas conducive to an accessible path of travel to be provided from the allotment boundary.</p> <p>This can be coordinated to comply during subsequent detailed design development stages.</p>
3.	<p><b>Access Between Buildings on Site</b></p> <p>The BCA requires a continuous accessible path of travel be provided between associated accessible buildings.</p> <p>Design of accessways between buildings required to be accessible comply with requirements of AS 1428.1.</p> <p>This should include but be not limited to:</p> <ul style="list-style-type: none"> <li>• site levels/gradients/crossfalls</li> <li>• path widths</li> <li>• materials including slip resistance properties</li> </ul>	Additional information required to confirm compliance	<p>Generally, the linkages between the buildings do not appear to be sufficient to provide a continuous accessible path of travel i.e. appears to be stair only access between the main entrance and the canteen.</p> <p>Additional information on path gradients and crossfalls is required to confirm compliance.</p>



No	BCA Requirements	Status of Compliance	Discussion
	<ul style="list-style-type: none"> <li>location of drainage points along accessways</li> <li>threshold ramps at pedestrian entrances, kerb ramps, ramps, handrails etc as applicable.</li> </ul>		
4.	<p><b>Building Entrances</b></p> <p>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.</p> <p><i>Note: where the total floor area of the building exceeds 500m<sup>2</sup>, the distance of travel between accessible and inaccessible entrances must not exceed 50m.</i></p>	Additional information required to confirm compliance	<p>Generally, the main entrances do not appear to meet the requirements of AS1428.1 i.e., Entrance doors have not been provided with a flat landing i.e. at the main entry to staff area and the student and at the main hall.</p> <p>Additional information on gradients and crossfalls, door thresholds and door controls and the other building entrances is required to confirm compliance.</p> <p>Refer to Appendix A – marked plans – for specific locations.</p>
<b>D4D4 Parts of Buildings to be Accessible &amp; AS 1428.1 Design for Accessibility</b>			
5.	<p><b>Doors – Circulation Spaces</b></p> <p>All doors required to be accessible must fully comply with Section 13 of AS 1428.1.</p> <p>Doorways must be provided with circulation spaces in accordance with Clause 13.3 and relevant approach in Figures 31 and 32.</p> <p><i>Note: circulation spaces at doorways must have a gradient and crossfall not steeper than 1 in 40.</i></p>	Additional information required to confirm compliance	<p>There are several doors which do not provide adequate door circulation dimensions to satisfy the requirements of this Clause.</p> <p>Refer to Appendix A – marked plans – for specific locations.</p>
6.	<p><b>Door Clear Opening Width</b></p> <p>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.</p> <p>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.</p> <p><i>Note: some smoke and acoustic seals can impact on the clear opening width of a door. 870mm and 920mm doorsets may not achieve the 850mm clear opening width.</i></p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>Detail door/gate specifications</li> </ul> <p>This can be coordinated to comply during subsequent detailed design development stages.</p>
7.	<p><b>Door Controls</b></p> <p>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.</p> <p>Door controls must be capable of being unlocked/opened by one hand and prevent</p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>Detail door specifications and door control locations</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
	<p>the hand of a person who cannot grip from slipping whilst operating the latch.</p> <p>Door handle design should take into consideration the following requirements, including, but not limited to:</p> <ul style="list-style-type: none"> <li>• clearance of 35mm to 45mm between handle and back plate.</li> <li>• height between 900mm – 1100mm.</li> <li>• touch controls (security) located 500mm from internal corners</li> </ul> <p><i>Note: the locations of controls of doors, gates and the like are not required to meet AS 1428 for early childhood centres, swimming pool barriers or similar situations where the action of these controls is prescribed by the relevant statutory authority.</i></p>		
8.	<p><b>Door Operating Forces</b></p> <p>All doors required to be accessible must be able to be operated without exceeding the following:</p> <ul style="list-style-type: none"> <li>• force to initially open the door must not exceed 20N</li> <li>• force to swing or slide the door must not exceed 20N</li> <li>• force to hold the door open between 60 ° and 90 ° must not exceed 20N</li> </ul> <p><i>Note: does not apply to fire doors or smoke doors where a door closer is fitted.</i></p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>• Information regarding operational forces to be achieved for any proposed door closers.</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
9.	<p><b>Luminance Contrast for Doors</b></p> <p>Clause 13.1 of AS 1428.1 requires all accessible doorways to have a minimum luminance contrast of 30% equivalent to a 50mm band between the door and the door frame or adjacent walls.</p> <p>Refer to Clause 13.1 of AS1428.1 for further clarification where luminance contrast is required.</p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>• Colour selections of doors / walls.</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
10.	<p><b>BCA D3D16 Door Thresholds</b></p> <p>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</p>	Additional information required to confirm compliance	<p>There is insufficient information to confirm door threshold compliance.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
11.	<p><b>Internal Paths of Travel</b></p> <p>Accessways complying with AS 1428.1 (2009) must be provided to and throughout areas of buildings required to be made accessible, including:</p> <ul style="list-style-type: none"> <li>• minimum corridor widths of not less than 1000mm</li> <li>• 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</li> <li>• 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</li> <li>• Increased landings are required at changes of direction, including 1500mm X 1500mm turning spaces to facilitate a 60-90 degree turn</li> </ul> <p><i>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.</i></p>	Additional information required to confirm compliance	<p>The building has generally been provided with adequate corridor widths, passing spaces and turning spaces except for a number of locations.</p> <p>Refer to Appendix A – marked plans – for specific locations.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
12.	<p><b>Floor Finishes</b></p> <p>The following applies to interior finished and surface materials:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• AS1428.1 (2009) 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.</li> <li>• AS1428.1 (2009) 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</li> </ul>	Additional information required to confirm compliance	<p>There is insufficient information to confirm compliance of floor finishes.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
13.	<p><b>D3D15 – Slip Resistance of Floor Finishes</b></p> <p>Slip resistance surfaces are required to be provided to stairs, ramps and their landings in accordance with BCA Table D3D15, that is:</p> <ul style="list-style-type: none"> <li>for <b>dry</b> conditions: <ul style="list-style-type: none"> <li>for ramps steeper than 1:14 – not less than P4 or R11</li> <li>for ramps between 1:14 and 1:20 grade – not less than P3 or R10</li> <li>for treads or landings – not less than P3 or R10</li> <li>for nosings or landings edge strips – not less than P3</li> </ul> </li> <li>for <b>wet</b> conditions: <ul style="list-style-type: none"> <li>for ramps steeper than 1:14 – not less than P5 or R12</li> <li>for ramps between 1:14 and 1:20 grade – not less than P4 or R11</li> <li>for treads or landings – not less than P4 or R11</li> <li>for nosings or landings edge strips – not less than P4</li> </ul> </li> </ul>	Additional information required to confirm compliance	<p>There is insufficient information to confirm compliance of floor finishes/slip resistance.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
14.	<p><b>Switches and General Purpose Outlets - General</b></p> <p>Clause 14 of AS1428.1 requires all switches and controls on an accessible path of travel, excluding general purpose outlets to be located:</p> <ul style="list-style-type: none"> <li>between 900mm and 1100mm above the plane of the finished floor</li> <li>not less than 500mm from internal corners except where installed on the latch side architrave</li> </ul> <p>It is recommended the specific location of switches be nominated on design documentation.</p>	Additional information required to confirm compliance	<p>There is insufficient information to confirm compliance of switches and GPO's on the accessible paths of travel throughout.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
15.	<p><b>Switches and General Purpose Outlets in Accessible sanitary facilities</b></p> <p>Clause 14.2 of AS1428.1 requires general purpose outlets to be located:</p> <ul style="list-style-type: none"> <li>between 600mm and 1100mm above the plane of the finished floor; and</li> <li>not less than 500mm from internal corners.</li> </ul> <p>Light and GPO switches require larger format controls with:</p> <ul style="list-style-type: none"> <li>Rocker action and toggle switches of min 30mm x 30mm dimensions; and</li> <li>Push-pad switches of min 25mm diameter.</li> </ul>	Additional information required to confirm compliance	<p>There is insufficient information to confirm compliance of switches and GPO's within accessible sanitary facilities throughout.</p> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
	It is recommended the specific location of switches be nominated on design documentation.		
16.	<p><b>Stairs - Non Fire Isolated Stairs</b></p> <p>All stairways, excluding fire-isolated stairs, must be designed and constructed in accordance with AS 1428.1. In particular:</p> <ul style="list-style-type: none"> <li>• clause 11.1(b) – Setback requirements at intersections at internal corridors.</li> <li>• clause 11.1(c) – Risers of opaque construction</li> <li>• clauses 11.1(d) to (g) – Design of stair nosings including profile and identification strip</li> <li>• clause 11.1 (h) – Tactile ground surface indicators (also AS1428.4.1)</li> <li>• clause 11.2(b) – Handrails to both sides of stair</li> <li>• clause 11.2(c) – Handrail to have no vertical sections</li> <li>• clauses 11.2(d) to (f) - Extension of handrails at top and bottom of flight.</li> <li>• clause 12 – Design and construction of handrails</li> </ul>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>• Stair details identifying tactile indicators specifications.</li> <li>• New complying handrail detail as required</li> <li>• Stair details identifying stair nosing</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
17.	<p><b>D3D22 – Handrails</b></p> <p>As per BCA D3D22(1)(f) handrails within the fire isolated stairways are required to comply with Clause 12 of AS 1428.1, except that Clause 12(d) does not apply to a second, lower-height handrail in a Class 9b primary school required by D3D22(1)(c)(ii).</p> <p>The height of handrails is to be between 865-1000mm and be consistent along the length of the stair (does not apply to lower handrail in primary school stair).</p> <p>Incorporate the design of a staggered stair to avoid handrail extensions intruding into stairway landings, particularly in the down flight.</p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance:</p> <ul style="list-style-type: none"> <li>• New complying handrail detail as required</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
18.	<b>Ramps</b>  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.	Additional information required to confirm compliance	<p>Currently a number of walkways at 1:20 grade have been described as ramps in the documentation. It is not clear if these will be walkways or ramps. Further information is required to confirm compliance.</p> <p>Note - ramps require handrails with extensions (not protruding into the transverse path of travel), TGSI at the top and bottom.</p> <p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"><li>• Confirmation of ramp gradients and crossfall</li><li>• Landing locations</li><li>• Ramp details identifying tactile indicators specifications.</li><li>• Handrail details</li></ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
19.	<b>AS1428.1 – Abutment of Surfaces</b>  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: <ul style="list-style-type: none"><li>• 0 ±3mm for vertical edges</li><li>• 0 ±5mm for edges with a bevelled or rounded to reduce the likelihood of tripping</li></ul>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"><li>• Walkway surface details</li><li>• Floor set down plans</li><li>• Door threshold details</li></ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
<b>D4D5 Exemptions</b>			
20.	<p>The following areas are not required to be accessible:</p> <ul style="list-style-type: none"> <li>a) An area where access would be inappropriate because of the particular purpose for which the area is used.</li> <li>b) An area that would pose a health or safety risk for people with a disability.</li> <li>c) Any path of travel providing access only to an area exempted by (a) or (b).</li> </ul>	Complies in Principle – additional information required to confirm compliance	<p>It is intended that the following areas will be deemed exempt areas due to the Position/Description of the occupants:</p> <ul style="list-style-type: none"> <li>• Cleaner Rooms</li> <li>• COMMS</li> <li>• Plant Rooms</li> <li>• Services</li> <li>• Laundries</li> <li>• Storage rooms in preschool</li> <li>• Canteen/Kitchenette</li> <li>• Pump room</li> <li>• Main switch room</li> <li>• Bulk Store</li> <li>• Garden Store</li> <li>• Substation</li> </ul> <p>Confirmation is required if the canteen and BCR rooms are to be exempt and/or if there are other areas that are considered exempt.</p>
<b>D4D6 Accessible Carparking</b>			
21.	<p>Accessible car parking is required to be provided in accordance with BCA Clause D4D6 (e) Class 9b buildings:</p> <ul style="list-style-type: none"> <li>(i) For a school — 1 accessible space for every 100 carparking spaces or part thereof.</li> <li>(ii) For other assembly buildings— <ul style="list-style-type: none"> <li>(A) with up to 1000 carparking spaces — 1 accessible space for every 50 carparking spaces or part thereof; and</li> <li>(B) for each additional 100 carparking spaces or part thereof in excess of 1000 carparking spaces — 1 accessible space.</li> </ul> </li> </ul>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"> <li>• Details of any accessible carparking to the main carpark.</li> <li>• Details of any accessible carparking to the pre-school carpark.</li> </ul>



No	BCA Requirements	Status of Compliance	Discussion
<b>D4D7 Signage</b>			
22.	<p>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:</p> <ul style="list-style-type: none"> <li>• each sanitary facility</li> <li>• any space with a hearing augmentation system</li> <li>• accessible unisex facilities and indicate whether the facility is suitable for left or right-handed use</li> <li>• ambulant accessible sanitary facilities on the door of the cubicle</li> <li>• where an entrance is not accessible, directional signage to identify nearest accessible entrance</li> <li>• where a bank of sanitary facilities is not provided with an accessible sanitary facility, directional signage to identify nearest accessible sanitary facility.</li> <li>• 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.</li> </ul>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"> <li>• Drawings detailing signage specifically designed for people with disabilities. Note: Signage package should include a typical elevation indicating the location of installation</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
<b>D4D8 Hearing Augmentation</b>			
23.	<p>Where an inbuilt amplification system is installed (other than one for emergency purposes only) a hearing augmentation system must be provided:</p> <ul style="list-style-type: none"> <li>• in a room in a Class 9b building, or</li> <li>• in an auditorium, conference room, meeting room or room for judicatory purposes, or</li> <li>• at a ticket office, tellers booth, reception area or the like, where the public is screened from the service provider.</li> </ul> <p>Induction loop- 80% coverage required. Infrared system or the like - 95% coverage required.</p> <p><i>Note: A room containing hearing augmentation, Clause D4D7 requires signage including the international symbol for deafness to be provided.</i></p> <p><i>Note: Consideration to the design specifications of AS 1428.5 (2010) is recommended, however is not mandatory to meet the BCA or Premises Standards.</i></p>	Additional information required to confirm compliance	<p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"> <li>• Confirm location of where inbuilt amplification system are proposed to be installed.</li> <li>• Confirm if the proposed hearing augmentation system will be installed at the time of construction or by the building owner.</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>



No	BCA Requirements	Status of Compliance	Discussion
<b>D4D9 Tactile Indicators</b>			
24.	<p>Tactile ground surface indicators (TGSIs) are required to warn people who have a vision impairment they are approaching a hazardous location, such as –</p> <ul style="list-style-type: none"> <li>stairways (other than fire isolated stairways)</li> <li>escalator</li> <li>passenger or moving walk</li> <li>ramp other than <ul style="list-style-type: none"> <li>A fire isolated ramp</li> <li>Step ramp</li> <li>Kerb ramp or</li> <li>Swimming pool ramp</li> </ul> </li> </ul> <p>In the absence of a suitable barrier –</p> <ul style="list-style-type: none"> <li>an overhead obstruction less than 2m above the floor level, other than a doorway; and</li> <li>an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point.</li> </ul> <p>Refer to AS1428.4.1 for further clarification of the design for colour, luminance contrast, dimensions and locations of the tactile ground surface indicators.</p> <p><i>Note: tactile ground surface indicators are not required in areas exempted under Clause D4D5.</i></p>	<p>Additional information required to confirm compliance</p>	<p>Stairs and ramps on the accessible path on travel requires TGSIs</p> <p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"> <li>Drawings indicating the location of tactile indicators</li> <li>Documentation providing information on the type, luminance contrast and slip resistance of proposed tactile indicators.</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
<b>D4D12 Ramps</b>			
25.	<p>On and accessway –</p> <p>(a) A series of connected ramps must not have a combined vertical rise of more than 3.6m; and</p> <p>(b) A landing for a step ramp must not overlap a landing for another step ramp or ramp.</p>	<p>Additional information required to confirm compliance</p>	<p>Further information is required to confirm compliance.</p> <ul style="list-style-type: none"> <li>Confirm that connected ramps do not have a combined vertical rise of more than 3.6m</li> <li>Confirm location of any step ramps.</li> </ul>



No	BCA Requirements	Status of Compliance	Discussion
<b>D4D13 Glazing on an Accessway</b>			
26.	<p>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.</p> <p>A <b>solid</b> contrasting line is required.</p> <p>Refer to Clause 6.6 of AS1428.1 for details of:</p> <ul style="list-style-type: none"> <li>• location</li> <li>• height</li> <li>• luminance contrast</li> </ul> <p><i>Note: In many instances, the frosted type material may not achieve the required luminance contrast.</i></p>	Additional information required to confirm compliance	It is understood this requirement to be addressed during subsequent design stages.
<b>E3D7 Passenger Lifts</b>			
27.	<p>E3D7 has specific requirements for type of lift that can be used.</p> <p>Passenger lifts suitable for people with a disability are provided in E3D7 but each type of lift has some limitations for its use.</p> <p>Each type of lift also requires the provision of accessible features listed in E3D8. Note this includes but is not limited to the design of the following:</p> <ul style="list-style-type: none"> <li>• handrails</li> <li>• lift car size</li> <li>• door opening width</li> <li>• control buttons</li> </ul> <p><i>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).</i></p>	Additional information required to confirm compliance	<p>The school is proposed with 2 no. passenger lifts.</p> <p>We request the following additional information to confirm compliance as follows:</p> <ul style="list-style-type: none"> <li>• Confirm the proposed internal dimensions of all lifts will be not less than 1400mm (w) X 1600mm (d)</li> <li>• Confirm the door opening is a minimum 900mm as per AS1735.12 Clause 1.3</li> <li>• When available lift shop drawings to be provided to Philip Chun Accessibility for review and approval</li> </ul> <p>It is understood this requirement to be addressed during subsequent design stages.</p>
<b>F4D5 Sanitary and Other Facilities</b>			
28.	<p>For this <b>Class 9</b> building the following accessible facilities are required (<i>except to a ward area of a Class 9a health-care building</i>):</p> <ul style="list-style-type: none"> <li>• 1 x accessible unisex sanitary compartment on every storey containing sanitary compartments</li> <li>• 1 x accessible unisex sanitary compartment at not less than 50% of the banks of toilets in the building</li> <li>• 1 x ambulant sanitary compartment for use by males and females at every</li> </ul>	Additional information required to confirm	<p>The number of accessible sanitary facilities to be confirmed by building certifier and if the number provided satisfies the requirements of this Clause.</p> <p>Certifier to advise what sanitary facilities are required for Staff in the Preschool. Currently 1 x Staff Unisex accessible WC and 1x unisex ambulant facility has been proposed for the Preschool.</p>



No	BCA Requirements	Status of Compliance	Discussion
	bank of toilets, where an accessible unisex facility is provided at that bank		It is understood this requirement to be addressed during subsequent design stages.
29.	<b>AS1428.1 – Design of Unisex Accessible Sanitary Facilities</b>  All unisex accessible sanitary facilities to fully comply with AS 1428.1 (2009) Clause 15 and 16, including but not limited to: <ul style="list-style-type: none"> <li>• location of sanitary fixtures and fittings</li> <li>• location, profile and dimension of grab rails</li> <li>• clear width of the door opening</li> <li>• circulation spaces to doorways, fixtures and fittings</li> <li>• requirement for a shelf</li> <li>• lever taps</li> <li>• toilet seat with 30% luminance contrast</li> <li>• WC back rest details</li> <li>• door lock, in-use indicator and bolt or catch, with Any snib catch handle to have minimum length of 45mm</li> </ul>	Additional information required to confirm compliance	We request the following additional information to confirm compliance as follows: <ul style="list-style-type: none"> <li>• Provide layout of all accessible WC's</li> <li>• Provide location set out of fixtures and fittings.</li> <li>• Fixtures and fittings specifications</li> </ul> It is understood this requirement to be addressed during subsequent design stages.
30.	<b>AS1428.1 – Ambulant Accessible Sanitary Facilities</b>  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: <ul style="list-style-type: none"> <li>• location of WC</li> <li>• location, profile and dimension of grab rails</li> <li>• ambulant circulation spaces to doorway and WC</li> <li>• clear width of the door opening</li> <li>• door lock/In use indicator and bolt or catch</li> </ul>	Additional information required to confirm compliance	We request the following additional information to confirm compliance as follows: <ul style="list-style-type: none"> <li>• Provide location set out of fixtures and fittings.</li> <li>• Fixtures and fittings specifications</li> </ul> It is understood this requirement to be addressed during subsequent design stages.

## 4. CONCLUSION

We have reviewed the concept and draft schematic documentation and sketch design available to date and have reviewed the proposed building works with respect to the Building Code of Australia 2022 and Premises Standards. The design is at a point where the inherent BCA philosophies have been checked and with further design development compliance can be achieved. The finer details with respect to BCA 2022 compliance can be finalised during subsequent design stages as noted in the above table.

## 5. MITIGATION MEASURES

Project Stage <i>Design (D)</i> <i>Construction (C)</i> <i>Operation (O)</i>	Mitigation Measures	Relevant Section of Report



D	Philip Chun has reviewed the available project documentation and confirms the project can comply with the legislation following further design development to ensure the design complies the BCA VOLUME 1 2022 Part D4 E3 and F2, prior to issue of design compliance statement. Evidence of design compliance is to be submitted for review i.e. door schedules lift, stair and ramp shop drawings prior to beginning of construction.	Section 3
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## **APPENDIX A – Marked Plans**

A continuous accessible path of travel is to be provided to any building required to be accessible from:

- The main points of pedestrian entry at the allotment boundary; and
- From another accessible building connected by a pedestrian link; and
- From any required accessible car parking space on the allotment.

(BCA Clause D4D2)

Sanitary compartment suitable for person with ambulant disability required to each gender sanitary facility, per BCA Clause F2.4(c) and AS 1428.1 (2009), including:

- Cubicle width of 900-920mm;
- Clear space of 900mm X 900mm between WC pan and door swing;
- Clear space of 900mm X 900mm external to the cubicle, clear of the door swing;

Provide a 1540mm(W) x 2070mm(L) turning space in this location. Note that where it is not possible to continue travelling along an accessway, a space with minimum dimensions of 1540mm (W) X 2070mm (L) must be provided within 2m of the end of the accessway.

D4DC Exemption - Clarification  
Access to these spaces may be  
Exemption under the provisions

- Confirm operational use of this security store area and if access is required

Please confirm gradient and cross fall of all external paths of travel, including existing (public) footpaths. Note maximum gradient of 1:40 is permitted, or 1:33 if bituminous seal (AS1428.1 (2009), Clause 10.1(d)).

- Provide drawing showing cross falls and gradients

Locate door to this DP

Confirm the operational use of this LD room

1500mm X 1500mm turning space required in this location to enable a 90 degree turn in a wheelchair.

Please confirm if accessible car parking spaces are required.

One sanitary compartment suitable for person with ambulant disability required to each gender sanitary facility, per BCA Clause F4D5 and AS 1428.1 (2009).

- Provide ambulant WC.
- Provide separate male and female WC

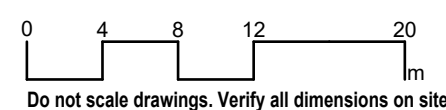
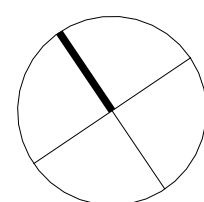
All doors to have a minimum clear opening width of 850mm (i.e. 920mm door leaf). Where double doors are used, 850mm clear opening shall apply to the active leaf.

**Circulation spaces at doorways - AS 1428.1 (2009), Clause 13.3**  
Some doors do not appear to have adequate circulation space either hinge-side side, latch-side or both

**Circulation space encroachment identification:**

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Nominated Architect  
Ray Brown, NSWARB 6359

[illegible]

## FUTURE RECREATION RESERVE

PENNANT WAY

CARPARK LAYOUT  
UNDER REVIEW

CATARACT ROAD

## CATARACT CREEK

# PRELIMINARY

project

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# SINSW Gables New Primary School

Lot 301 - Fontana Drive, The Gables (Box Hill North)

drawing

OVERALL GROUND LEVEL PLAN

drawing no. revision

**AR-SD2000**

9/08/2024 4:15:54 PM

Access Consulting

Ref: AN022-015471 SINSW\_BoxHill The Gables PS\_SD  
Reviewed by: Lucy Alderson  
Date: 28/08/2024

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approved	scale	1:400 @A1
prepared	project no	210463.01







## **APPENDIX B – Mandatory NCC / BCA Access Compliance Requirements**



## **B1 ACCESSIBLE CARPARKING**

Accessible carparking is 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 are to be a minimum of 5400mm long.

Provide a bollard to the shared circulation space as illustrated in AS/NZS2890.6 (2009), Figure 2.2.

The maximum allowable crossfall of an accessible carparking area and shared zones is to be 1:40, (or 1:33 for bituminous seal and the parking space is outdoor). This crossfall applies both parallel and perpendicular to the angle of parking.

For covered or underground carparking, the clear height of the accessible carparking space and adjacent shared area to be 2500mm as illustrated in AS/NZS2890.6 Figure 2.7 and the path of vehicular travel from the carpark entrance to all accessible parking spaces is to have a minimum headroom of 2200mm.

Designated accessible carparking is to be identified using the International Symbol for Access (ISA) and line marked as specified in AS/NZS2890.6.

## **B2 EXTERNAL PATHWAYS AND WALKWAYS**

The minimum unobstructed width of all pathways and walkways is to be 1000mm (AS1428.1 (2009), Clause 6.3).

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 as per Figure 6 of AS1428.1 (2009).

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

The ground abutting the sides of walkways must be of a different material and provide a firm and level surface at the same level of the walkway, follow the grade of the pathway and extend horizontally for 600mm. This is not required where there is a kerb, a kerb rail and handrail, or a low wall of not less than 450mm in height provided to the side of the pathway in compliance with AS1428.1 (2009) Clause 10.2.

The maximum allowable gradient of walkways is 1:20. Maximum length between landings is to be 15m for 1:20 gradient, and 25m for 1:33 gradient. For other gradients, landings are to be at intervals obtained by linear interpolation. Landings are to be a minimum 1200mm in length (where there is no change in direction). For changes in direction not exceeding 90°, landings are to be min 1500mm x 1500mm, and for a 180° turn, landings are to be 1540mm in width in compliance with AS1428.1 (2009) Clause 10.8.

## **B3 KERB RAMPS**

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

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

Kerb ramps are to have a non-slip surface as required by AS1428.1 and BCA Table D3D15.

## **B4 STEP RAMPS**

The configuration of the step ramps is 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.

The edges of a step ramp are to have a 45° splay where there is pedestrian-cross traffic. Otherwise, step ramps to be enclosed on both sides (minimum height 450mm for a wall or suitable barrier) or a kerb and open balustrade needs to be installed. Where a kerb is to be installed, the height of kerb rails is to be 65-75mm or not less 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).

A landing for a step ramp must not overlap a landing for another step ramp or ramp, and a series of connected ramps must not have a vertical rise of more than 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 (g)). 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 65mm-75mm high or not less 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 in compliance with BCA Part D4D9 and AS/NZS1428.4.1 (2009). Tactile indicators are to be detectable, durable, non-slip and have a minimum luminance contrast to the background surface of: 30% integrated; 45% discrete; 60% composite discrete. Tactile indicators at the top and bottom of the ramps are typically to be 600-800mm deep across the width of the ramp and set back 300mm +/- 10mm from the edge of the ramp in compliance with AS/NZS1428.4.1 (2009) Clause 2.4.

Tactile indicators are required at a mid-landing where the ramp is not continuous and where handrails are not continuous around landings. Where the handrail is continuous along both sides of the mid-landing and the landing is less than 3m long, 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 BUILDING ENTRANCES**

Entrances are to comply with AS1428.1 (2009), Clause 13 as part of the accessible path of travel.



Doors are to have a minimum clear opening width of 850mm to comply AS1428.1 (2009), Clause 13.2.

Door thresholds are to be level to provide seamless entry to the building. The maximum allowable construction tolerance is 3mm for compliance with AS1428.1 (2009), 5mm where bevelled edges are provided between surfaces – refer to Figure 6.

Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1 (2009), Clause 13.5)

For glass doors, provide decals to assist persons with a vision impairment. Decals to be solid, have a minimum 30% luminance contrast to the background within 2m of both sides of the glazing, be not less than 75mm high and located with the lower edge within the height range of 900-1000mm above the finished floor level. Decals are to be solid to AS1428.1 (2009) Clause 6.6.

## **B8 TACTILE INDICATORS AT THE BUILDING ENTRANCE**

BCA D4D9(1)(e) states that for a building that is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching – in the absence of a suitable barrier – an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building if there is no kerb or kerb ramp at that point, except for areas exempted by D4D5.

Tactile indicators are to be detectable, durable, non-slip and have a minimum luminance contrast to the background surface of: 30% integrated; 45% discrete; 60% composite discrete.

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

## **B9 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 920 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.

## **B10 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 luminance contrast to the background surface of: 30% integrated; 45% discrete; 60% composite discrete.

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

## **B11 VISUAL INDICATION TO GLAZING**

Provide decals to assist persons with a vision impairment. Decals to be solid, have a minimum 30% luminance contrast to the background within 2m of both sides of the glazing, be not less than 75mm high and located with the lower edge within the height range of 900-1000mm above the finished floor level. Decals are to be solid to AS1428.1 (2009) Clause 6.6.

## **B12 SIGNAGE**



BCA D4D7 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 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.
- In a building that is subject F4D12 and is required to be accessible, directional signage to direct a person to the location of the nearest accessible adult change facility at each bank of sanitary facilities and at each accessible sanitary facility (other than one that incorporates an accessible adult change facility).

### **B13 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:

- in a room in a Class 9b building; or
- in 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.

### **B14 PASSENGER LIFTS**

Every passenger lift in an accessible building must be suitable for use by people with a disability and offer compliance with BCA D4D4(b) and E3D8 inter alia AS1725.12 (1999). Typically, the following is required to be provided:

#### **Lift dimensions**

- Lift floor dimensions of not less than 1100mm X 1400mm for lifts which travel not more than 12m.
- Lift floor dimensions of not less than 1400mm 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 AS1735.12.
- Lighting in accordance with AS1735.12 for enclosed lifts.
- 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.

## **B15 STAIRS**

Stair construction is to comply with AS1428.1 (2009) Clause 11.

Stairs are to have closed, 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 26B to allow adequate space for handrail extensions and tactile indicators.

Provide handrails, with extensions and terminations, 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 nosings 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 a maximum 15mm from the edge of the riser.

Stair nosings shall not project beyond the face of the riser. The permitted profile is as per AS1428.1 (2009) Figure 27.

Provide tactile indicators at the top and bottom of the stair, and intermediate landings if required, in compliance with BCA D4D9 and AS/NZS1428.4.1 (2009).

Tactile indicators are to be detectable, durable, non-slip and have a minimum luminance contrast to the background surface of: 30% integrated; 45% discrete; 60% composite discrete.

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. Tactile indicators may also be required at intermediate landings as per AS/NZS1428.4.1 (2009).

## **B16 UNISEX ACCESSIBLE SANITARY FACILITIES**

Set-out of fixtures and fittings within the accessible sanitary facilities to offer compliance with AS1428.1 (2009) Clause 15.

Crucial dimensions for the toilet are 450-460mm from centreline of pan to side wall, 800mm +/- 10mm from front of pan to rear wall and a seat height of 460-480mm.

A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture as per AS1428.1 Figure 43.

For the basin, a minimum clearance of 425mm is required from the centreline of the basin taps to the side wall and the height of the basin to be between 800 and 830mm.

Grabrails are to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800-810mm.

Taps are to have lever handles, sensor plates or similar controls. For lever taps a minimum of 50mm clearance to be provided to adjacent surfaces.

Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They must be load rated to 150kg, have a minimum 30% luminance contrast to the background (e.g. pan, wall or floor)



Provide a backrest to accessible toilets to comply with AS1428.1 Clause 15.2.4.

Accessible toilet to be identified using the International Symbol for Access. Pictograms / lettering to have a minimum 30% luminance contrast to the background colour. Signage is to comply with AS1428.1, Clause 8 and include information in tactile and Braille formats (as required by the BCA).

Doorways are to have a minimum clear opening width of 850mm to comply AS1428.1 (2009) Clause 13.2 as part of the accessible path of travel. Adequate circulation space is required to the doorway to allow independent access to the facility in compliance with AS1428.1 Clause 13.

Door hardware is to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis. Door controls, including manual controls to power-operated doors, snibs and in-use indicators, must be in compliance with AS1428.1 (2009) Clause 13.5.

Controls within the accessible toilet facilities, such as light switches, are to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1 (2009), Clause 14. GPOs are to be within the range 600-1100mm AFFL. Controls must be located not less than 500mm to a corner.

#### **B17 UNISEX ACCESSIBLE SHOWERS**

Showers are to comply with AS1428.1 Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

The minimum dimensions of an accessible shower are to be 1160 x 1100mm. A folding seat, at a height of 470-480mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

Circulation space in front of the shower is to be provided as illustrated in AS1428.1 Figure 47.

#### **B18 PEOPLE WITH AMBULANT DISABILITIES CUBICLES (PAD)**

PAD cubicles within male and female toilets to be in compliance with AS1428.1 Clause 16.

Width of PAD cubicles is to be 900-920mm.

Provide grabrails to PAD cubicles to comply with AS1428.1 Clause 17 and Figure 53A.

Doors are to have a minimum opening width of 700mm and comply with AS1428.1 Figure 53B.

Provide signage to the PAD cubicles to comply with BCA D4D7 and Specification 15.

Provide 900x900 circulation space in front of pan and each side of doors on path to the toilet, clear of the door swing.