lindsay
perry
access

a. po box 453
new lambton 2305
p. 0418 909 180
e. lindsayperryaccess@gmail.com

23 October 2018

State Significant Development Application Submission

DISABILITY ACCESS REPORT

Kent Road Public School
Herring Road
MARSFIELD NSW

For:
Gardner Wetherill Associates

Our ref:
18047

Executive Summary

Schematic Design documentation for Kent Road Public School has been reviewed against the requirements of the Building Code of Australia 2016 and The Disability Discrimination Act 1992 with regard to access for persons with a disability. The requirements of the Disability Standards for Access to Premises (Buildings) and the Access Code for Buildings have also been addressed.

We consider that the drawings presented for assessment generally comply with The Building Code of Australia 2016 and the intent of the Disability Discrimination Act 1992, subject to the recommendations made in this report being implemented during the construction process.

The following table summarises compliance status.

Item No.	Description	Compliance Status
Access and Approach		
3.1	Approach from Street Boundary	Compliant
3.2	Approach from Carparking	Compliant
3.3	Approach between Buildings	Compliant
3.4	Pathways	Capable of compliance
3.5	Accessible Carparking	Capable of compliance
3.6	Accessible Ramps	Capable of compliance
3.7	Stairs	Capable of compliance
3.8	Entrances	Capable of compliance
Interior		
4.1	Extent of Access Generally	Compliant
4.2	Circulation Areas	Compliant
4.3	Doorways	Capable of compliance
4.4	Hearing Augmentation	To be addressed during construction
4.5	Exempt Areas	Compliant
4.6	Floor Finishes	To be addressed during construction
4.7	Carpet	To be addressed during construction
4.8	Controls	To be addressed during construction
4.9	Visual Indication to Glazing	To be addressed during construction
4.10	Signage	To be addressed during construction
4.11	Thresholds	To be addressed during construction
4.12	Slip Resistance	To be addressed during construction
Sanitary Facilities		
5.1	Distribution	Compliant
5.2	Accessible Toilets	Capable of compliance
5.3	Accessible Shower	Capable of compliance
5.4	Ambulant Toilet Cubicles	Capable of compliance
Vertical Circulation		
6.1	Passenger Lift	Capable of compliance
6.2	Stairs	Capable of compliance
6.3	Accessible ramp	Capable of compliance

Construction is to be in accordance with the recommendations made in this access report to ensure compliance. Where construction differs from the drawings, further assessment will be required to ascertain compliance.

This report is limited to items within drawings listed in this report only. Future alterations and additions to the building will render the recommendations in this report null and void as we cannot guarantee continued compliance where changes to the building fabric are made. A high level of maintenance is recommended to ensure continued compliance with access legislation.

All dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered in the preparation of the construction certificate documentation to account for wall linings and the like.

Best practice options, as noted in the report, are not mandatory but will minimise the risk of a complaint made under the DDA.

The recommendations throughout this report reflect the professional opinion and interpretation of Lindsay Perry. This may differ from that of other consultants. We aim to provide practical, performance-based advice based on project specifics that will maximize access for persons with a disability to the built environment.

Lindsay Perry is a qualified Access Advisor, being an accredited member of The Association of Consultants in Access, Australia – membership number 136. Lindsay Perry carries public liability insurance, professional indemnity insurance and income protection.

LINDSAY PERRY
B.Arch, M.Dis.Stud.
Accredited Access Consultant No. 136 | Registered Architect NSW 7021
Livable Housing Assessor 20047 | Changing Places Assessor CP005

Revision Summary

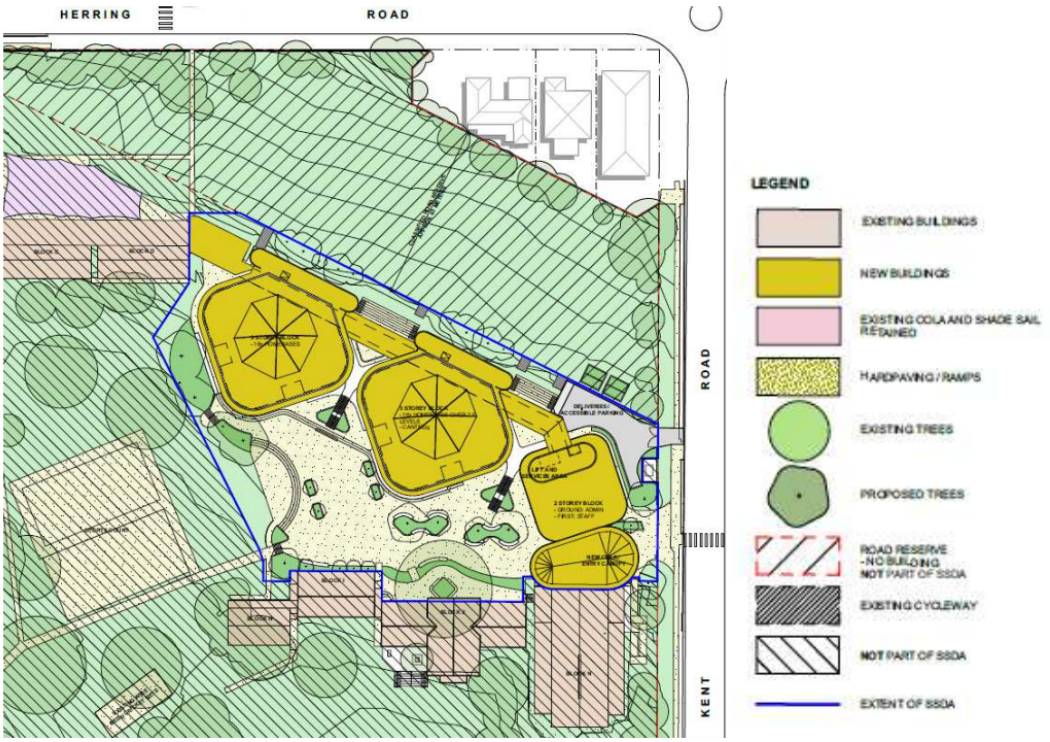
Date	Description	Revision
20 July 2018	Disability Access Report Schematic Design	1
13 September 2018	SSDA Submission	2
25 September 2018	SSDA Submission	3
23 October 2018	SSDA Submission	4

1. Project Background

This Access Report considers the schematic design for Kent Road Public School against the requirements of the Building Code of Australia 2016 (BCA), Disability (Access to Premises) Standards 2010 and The Disability Discrimination Act 1992 (DDA), with regard to access for persons with a disability.

This Development application seeks approval for the redevelopment of Kent Road Public School, including:

- Site preparation;
- Construction of three (3) new two (2) to three (3) storey buildings to allow for increased student population from 750 to 1,000, containing;
  - Δ 34 Homebase spaces;
  - Δ Canteen;
  - Δ Administration facilities;
  - Δ Staff facilities;
  - Δ Special program/counselling rooms;
- Construction of a new entry canopy;
- Reconfiguration of car drop off / pick up arrangements on Kent Road;
- Landscaping and fencing; and
- Tree removal.



Scope of Proposed Site and SSD Works

Architectural Documentation prepared by Gardner Wetherill Associates has been reviewed as listed below:

Layout No:	Layout Name	
SSDA-0000	Cover Page and Drawing Register	B
SSDA-0200	Existing Site Plan	B
SSDA-0201	Site Analysis Plan	B
SSDA-0202	Concept Diagram	B
SSDA-0400	Proposed Site Plan	E
SSDA-1200	Ground Floor Plan	C
SSDA-1201	Level 1 Plan	C
SSDA-1202	Level 2 Plan	C
SSDA-1300	Lower Roof / Clerestorey Plan	C
SSDA-1301	Roof Plan	C
SSDA-1501	Site Elevations	B
SSDA-1601	Sections	B
SSDA-1602	Detailed Section	B
SSDA-1801	Typical GF Homebase, Canteen & Admin FF&E Plan	B
SSDA-1802	Typical L1 & L2 Homebase FF&E Plan	B
SSDA-1900	Aerial Perspective of Existing School (South)	B
SSDA-1901	Aerial Perspective of Proposed School (South)	B
SSDA-1902	Street / Entry Perspective From Kent Road	B
SSDA-1903	Playground Perspective Looking North	B
SSDA-1904	Road Reserve Perspective Looking South West	B
SSDA-1910	Materials and Finishes 01	B
SSDA-1911	Materials and Finishes 02	B
SSDA-1920	Shadow Analysis - June	B
SSDA-1921	Shadow Analysis - Equinox	B
SSDA-1922	Shadow Analysis - December	B

It is estimated that one in five people in Australia have a long-term disability (Australian Bureau of Statistics – 2003). This includes physical disability, intellectual disability, and sensory impairments such as vision and hearing. It does not include those with a short-term (temporary) disability or the continuing aging population.

Lindsay Perry Access have adopted a best practice, performance-based approach to access. Assessment is based on project specifics and takes into account various factors such as site topography, heritage and existing site conditions.

2. Legislation

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- Disability (Access to Premises (Buildings)) Standards 2010
- Access Code for Buildings 2010
- The Building Code of Australia 2016 (BCA) Section D3 – Access for People with Disabilities
- The Building Code of Australia 2016 (BCA) Section D2 (in part) – thresholds and slip resistant
- The Building Code of Australia 2016 (BCA) Section E3.6 – Lifts
- Australian Standards AS1428.1(2009) Amendment 1, AS1428.2(1992), AS1428.4(2009) – Design for Access and Mobility
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability

The accessibility of the proposed development has been considered in regard to the relevant access legislation. A summary of the requirements of relevant legislation follows.

- The **DDA** requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability. The DDA is a complaint-based law.

- The **DDA Premises Standards** include an **Access Code** written in the same style as the Building Code of Australia. That is, the Access Code has a number of Performance Requirements that are expressed in broad terms and references to a number of technical Deemed-to-Satisfy Provisions.

- The **BCA 2016** for Class 9b buildings - Schools and Early Childhood Centres – requires access for people with disabilities to and within all areas usually used by the occupants.

- **AS1428 – Design for Access and Mobility** includes requirements for doorways, stairs, toilets, etc. and is referenced by the BCA.

  Part 1 (2009) of this standard contains access requirements that are mandatory for the provision of access for persons with a disability and is referred by the BCA.

  Part 2 (1992) provides enhanced and best practice requirements. While AS1428.2 is not mandatory, the inclusion of its requirements such as accessible reception counters reduce the risk of a complaint made under the DDA. AS1428.2 is referenced by the Human Rights and Equal Opportunities Commission Advisory Notes for Access to Premises that accompanies the DDA.

  Requirements for tactile indicators are included in Part 4.1 (2009) of this standard.

  Part 5 (2010) provides requirements for Communication for people who are deaf or hearing impaired but is not referenced by the BCA.

- **AS1735.12** contains requirements for passenger lifts for persons with a disability.

3. Access and Approach

The approach to the building needs to be considered when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability.

An accessible path of travel is required to the building entrance from the allotment boundary at the main points of pedestrian entry, from accessible carparking areas and from any adjacent and associated accessible building.

3.1 Approach from Street Boundary

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. As a part of the proposed construction works this will be required to the Creative and Performing Arts Building.

Compliance Summary:
Compliant – accessible ramps are provided.

3.2 Approach from Accessible Carparking

The BCA requires that a continuous accessible path of travel be provided from the accessible carparking areas to the main entrance.

Compliance Summary:

Compliant

3.3 Approach between Buildings

The BCA requires that a continuous accessible path of travel be provided between associated accessible buildings.

For the purposes of this project, the critical links will be between the new building, and other associated buildings.

Compliance Summary:

Compliant – accessible ramps are provided.

3.4 Pathways Generally

The accessible path of travel refers to a pathway which is grade restricted and provides wheelchair access as per the requirements of AS1428.

Compliance Summary:

Capable of compliance

Recommendations:

For compliance with AS1428.1, the following access requirements apply and should be addressed during detailed design stages to ensure compliance. We confirm that the pedestrian areas appear to be conducive to the provision of access for persons with a disability.

a. The minimum unobstructed width of all pathways is to be 1000mm (AS1428.1, Clause 6.3). A width of 1200mm is preferred for compliance with AS1428.2.
b. All pathways are to be constructed with no lip or step at joints between abutting surfaces (a construction tolerance of 3mm is allowable, or 5mm for bevelling edges).

c. The maximum allowable crossfall of pathways is to be 1:40.

d. The ground abutting the sides of the pathways should follow the grade of the pathway and extend horizontally for 600mm. We note that this is not required where there is a kerb or handrail provided to the side of the pathway.

e. Pathways to have passing bays complying with AS1428.1 at maximum 20m intervals where a direct line of site is not available. They are required within 2m of the end of the pathway where it is not possible to continue travelling along the pathway.

   A passing space shall have a minimum width of 1800 for a minimum length of 2000mm. Refer to AS1428.1, Clause 6.4.

3.5 Accessible Carparking

An accessible carparking space is provided to the northwest of the administration access. Level access from the carpark to the building entrance is provided. The configuration of the accessible carparking space is in keeping with AS2890.6 requirements.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the accessible carparking are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

a. 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.

b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.

c. The maximum allowable crossfall of accessible carparking area to be, 1:33 (for outdoor spaces). This crossfall applies both parallel and perpendicular to the angle of parking.

d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7.

e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) –ground and vertical signage is required. Signage is to comply with AS1428.1.

3.6 Accessible Ramps

Accessible ramps form part of the approach to the buildings from the site entrance and also as a link between buildings on the site. The overall configuration of the ramps is in keeping with AS1428.1 requirements.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the accessible ramp are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

a. Ramp to comply with AS1428.1, 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).

b. Accessible ramp is to have a maximum rise of 3.6m (BCA Clause 3.11).

c. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails 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.

d. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. 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.

e. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D3.8 and AS1428.4. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

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, Figure A1).

Tactile indicators will be required at the mid landing where the stair intersects as the handrail is not continuous at this point. Where handrail is continuous along both sides of the landing, tactile indicators are not required.

3.7 Stairs

Stairs are provided within external areas of the development. AS1428.1 has access requirements for all public access stairs and is applicable in this instance.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for stairs are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

a. Stairs to comply with AS1428.1(2009), Clause 11.2.

b. Stairs 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 riser.

c. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2 & 12). Handrails 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 stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available. In this instance, the use of a double handrail is encouraged so that two users can travel in opposite directions and maintain their grip on the handrail.

d. 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 15mm from the edge of the riser.

e. Stair nosings shall not project beyond the face of the riser.

f. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

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.

3.8 Entrances

All entrances should be accessible to people with disabilities to enable easy access. Multiple entrances are provided to the building a including single swinging doorways, double swinging doorways and automatic sliding doors.

Compliance Summary:

Capable of compliance

Recommendations:

The following access requirements apply to the entrances and should be addressed during future design stages to ensure compliance.

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

b. Doors 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.

c. Door thresholds to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces – refer to Figure 6.

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

e. For glass doors, 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. AS1428.1, Clause 6.6.

f. Where double door sets are provided, one door leaf is to be capable of being held in the closed position to provide door opening widths and circulation to comply with AS 1428.1.

g. For a best practice approach to access, and to assist people with a vision impairment locate the entrance, consider providing features with a minimum 30% luminance contrast to the background surface such as an entry mat or awning.

4. Interior

There are five (5) buildings within the proposed building works. Existing Block J and the Existing Hall are over a single level; the new Administration Building is over two (2) levels and the new Homebases Buildings (2 off) are over three (3) levels.

A lift is provided within the administration building that facilitates access to upper levels. New covered walkways are provided as a connection between upper levels and to existing areas of the school at the ground floor level.

4.1 Extent of Access Generally – BCA

An accessible path of travel, within the meaning of AS1428.1 (2009), will be required to all areas usually used by the occupants. We note that a lift has been provided to facilitate access between levels.

Compliance Summary:

Compliant

4.2 Circulation Areas

BCA (Clause D3.3) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 90° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Compliance Summary:

Compliant

4.3 Doorways Generally

AS1428 has requirements for doorways within the accessible path of travel to enable independent access for people using a wheelchair.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for doorways within the accessible path of travel are as follows and should be addressed during subsequent design stages to ensure compliance.

a. Doorways within the accessible path of travel 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.

   For double doors, the operable leaf must achieve this clear opening width.

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

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

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

e. Doorways to have operational forces per AS1428.1 (2009), Clause 13.5.2. A maximum allowable force of 20N is required to operate the door.

4.4 Hearing Augmentation

For buildings that are required to be accessible, the BCA (Clause D3.7) requires hearing augmentation systems within auditoriums, meeting rooms and the like **where an inbuilt amplification system, other than the one used for emergency warning is installed**. An induction loop to at least 80% of the floor area is required.

Requirements for hearing augmentation are now contained in AS1428.5: Communication for People who are deaf or Hearing impaired. This standard will not be referenced by BCA. However, we recommend that the requirements of AS1428.5 be adopted in the provision of hearing augmentation within the building.

Compliance Summary:

To be addressed during detailed design.

Recommendations:

a. Provide hearing augmentation as required by BCA.
We note that within schools, a performance-based approach is often adopted to class room areas in the provision of hearing augmentation based on the controlled user group / environment.

b. The hearing augmentation system is to be identified using the International Symbol for Deafness.

4.5 Exempt Areas

BCA Clause D3.4 does not require access for people with disabilities to areas that would be inappropriate due to the particular use of the area or would pose a health and safety risk. This includes the path of travel to these areas. Exempt areas are typically service and plant areas, comms rooms, cleaner's rooms and the like.

4.6 Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details. This should be implemented during construction to ensure compliance.

Compliance Summary:

To be addressed during detailed design.

4.7 Carpet

AS1428.1 has access requirements for carpet. Where **new** carpet is used as the floor surface, pile height should not exceed 4mm. Exposed edges will be fastened to the floor surface. Carpet trims shall have a vertical face not more than 3mm high.

Compliance Summary:

To be addressed during detailed design.

4.8 Controls

New controls such as light switches, GPOs, alarm keypads, card swipes, intercoms, etc are to be located within the accessible height range of 900-1100mm above the floor level to comply with AS1428.1(2009), Clause 14. This should be implemented during construction to ensure compliance.

Compliance Summary:

To be addressed during detailed design.

4.9 Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway 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. AS1428.1, Clause 6.6.

Compliance Summary:

To be addressed during detailed design.

4.10 Signage

Signage to identify sanitary facilities, hearing augmentation and required exits are to be provided in accordance with BCA Clause D3.6. This includes provision of the International Symbol for Access or International Symbol for Deafness as appropriate. Signage to comply with AS1428.1 (2009), Clause 8.

Compliance Summary:

To be addressed during detailed design.

Recommendations:

Signage to include information in Braille and tactile signage formats as outlined within BCA Specification D3.6.

a. Braille and tactile components of the sign to be located not less than 1200mm and not higher than 1600mm affl.

b. Signage identifying rooms with accessible features or facilities nominated in Clause D3.6 to be located at the latch side of the doorway with the leading edge of the sign 50-300mm from the architrave. Where this is not possible, the sign can be located on the door. This is to allow use of the Braille without obstructing pedestrian traffic through the doorway.

c. For signage identifying an exit, “exit” and the level must be stated on the sign. It must be located at the latch side of the doorway with the leading edge of the sign 50-300mm from the architrave. Where this is not possible, the sign can be located on the door.

4.11 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 in a building required to be accessible by Part D3, the doorway opens to a road or open space; and is provided with a threshold ramp or step ramp in accordance with AS 1428.1.

Compliance Summary:

To be addressed during detailed design.

4.12 Slip Resistance

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Compliance Summary:

To be addressed during detailed design.

5 Sanitary Facilities

The BCA / Access Code for Buildings (Clause F2.4) require the provision of sanitary facilities catering for persons with a disability.

5.1 Distribution of Accessible Sanitary Facilities

The following is required to satisfy BCA requirements:

- A unisex accessible toilet at each level. Where more than one bank of toilets is provided at any level, at least 50% of those banks will have an accessible toilet facility.

- A unisex accessible shower is required where showers are required by F2.3. In this regard, BCA only requires accessible showers within hospitals, early childhood centres, theatres and sporting venues. Showers are not r*equired* within commercial, retail or industrial premises. If ***required by Clause F2.3****,* where one or more showers are provided, 1 accessible shower for every 10 or part thereof must be provided.

  To minimize the risk of a complaint made under the DDA, we recommend that where showers are provided for general use, an accessible shower should be provided.

- At each bank of toilets where there is one or more toilets in additional to an unisex accessible sanitary compartment at the bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females.

Compliance Summary:

Compliant
New toilets are provided at both levels of the administration building and we note the provision of a unisex accessible and ambulant toilets at each level. An accessible shower is also provided at Level 1.

For the new Homebases, toilets are provided along the northern side of the proposed buildings at each level. We note the provision of a unisex accessible and ambulant toilets at each level.

5.2 Unisex Accessible Toilets

Unisex accessible toilet facilities are provided at each level of the new buildings as described above. They are located in close proximity to male and female toilets. The overall size and arrangement of fixtures suggests that compliant circulation spaces are achievable.

Compliance Summary:

Capable of compliance

Recommendations:
Access requirements for the accessible toilet facilities are as follows and should be addressed to ensure compliance. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin. These are **CLEAR** dimensions. Provision for wall linings needs to be considered.

a. Accessible toilet facilities to be unisex facilities for compliance with the BCA.

b. Unisex accessible facilities to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.

   Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.
   A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).

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

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

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

d. 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 should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.

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

f. Unisex accessible toilets 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).

g. Doorways 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 area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.

h. Door hardware 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.

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

j. Where more than one unisex accessible toilet is provided within the building, they should be in a mirrored configuration to allow for both left and right-handed use.

5.3 Unisex Accessible Shower Facility

An accessible shower is provided within the unisex accessible toilet compartment at the first-floor level of the administration building and overall configuration offers compliance with the BCA.

Compliance Summary:

Capable of compliance

Recommendations:

a. Shower to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.

b. Floor waste to be positioned 550mm and 580mm from enclosing shower walls as illustrated in AS1428.1 (2009), Figure 47a.

c. The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.

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

5.4 Cubicles for People with an Ambulant Disability

Ambulant cubicles are indicated within male and female toilets at each bank of toilets. The overall room size facilitates circulation requirements and we note the provision of adequate circulation areas.

Compliance Summary:

Capable of compliance

Recommendations:

Options for the configuration of the ambulant cubicles are illustrated in AS1428.1, Figure 53.

a. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.

b. Minimum width of ambulant cubicles to be 900-920mm.

c. Provide grabrails to ambulant cubicles to comply with AS1428.1, Clause 17 and Figure 53A.

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

e. Provide signage to the ambulant cubicles to comply with AS1428.1, Clause 16.4.

6 Vertical Circulation

To facilitate access for people with disabilities throughout the new buildings, a lift has been provided within the administration building. Stairs offer an alternative means of access between levels of the new building and are of a public nature so will need to offer compliance with the design requirements of AS1428.1 (2009). An accessible ramp forms a link to the lift at Levels 1 & 2.

6.1 Lift

The following access requirements apply to the lift. These requirements are for disabled access only and do not include requirements for stretchers. We note that the space allocated for the lift offers adequate dimensions for compliance.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the lift are as follows and should be addressed prior to construction to ensure compliance.

a. Lift is to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.

b. Minimum internal dimensions of the lift car to be 1100mm wide x 1400mm deep BCA, Clause E3.6 – for a lift that travels less than 12m.
OR
Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep BCA, Clause E3.6 – for a lift that travels over 12m.

c. Clear opening of the lift door to be minimum 900mm.

d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.

e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.

f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.

g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.

h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

6.2 Stairs

Stairs are provided within the new buildings to facilitate access between levels. AS1428.1 has access requirements for all public access stairs and is applicable in this instance.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for public access stairs are as follows and should be addressed prior to construction to ensure compliance.

a. Stair construction to comply with AS1428.1, Clause 11.1.

b. Stairs 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.

c. Where the stair intersects with an internal corridor, the stair shall be set back in accordance with AS2418.1 Figure 26C/D to allow adequate space for handrail extensions and tactile indicators.

d. Provide handrails, with extensions, to both sides of the stair (AS1428.1, Clause 11.2). Handrails 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.

e. 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 15mm from the edge of the riser.

f. Stair nosings shall not project beyond the face of the riser.

g. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.1.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour. For discrete tactile indicators, 45% luminance contrast is required (60% where two-tone indicators are used).

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.

6.3 Accessible Ramp

An accessible ramp offers access to lift at Levels 1 and 2. The overall configuration of the ramp appears to offer compliance with AS1428.1.

Compliance Summary:

Capable of compliance

Recommendations:

Access requirements for the ramps are as follows and should be addressed during preparation of the construction certificate documentation to ensure compliance.

a. Ramp to comply with AS1428.1, Clause 10.3.

b. 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).

c. Where the ramp intersects with an internal corridor, the ramp shall be set back in accordance with AS1428.1 Figure 16 to allow adequate space for handrail extensions and tactile indicators.

c. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails 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.

d. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. 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.

e. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D3.8 and AS1428.4.1. Tactile indicators 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 AS1428.4.1, Figure A1).

Tactile indicators will be required at the mid-landing as the outer handrail is not continuous.

6.4 Fire Egress for Persons with a Disability

The Access Code for Buildings states that in the event of an emergency, provision must be made for people with vision impairment to locate the exit path (Clause H2.14).

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.