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Disability Access

Compliance

Report:

For

School Classrooms, Staff &

Student Accommodation:

No. 369 Jacks Corner Road

KANGAROO VALLEY NSW 2577



Date: 7 November 2024 (V2 FINAL)

Prepared for: Baxter and Jacobson

Job Reference: BAX-KV-0424-DAA

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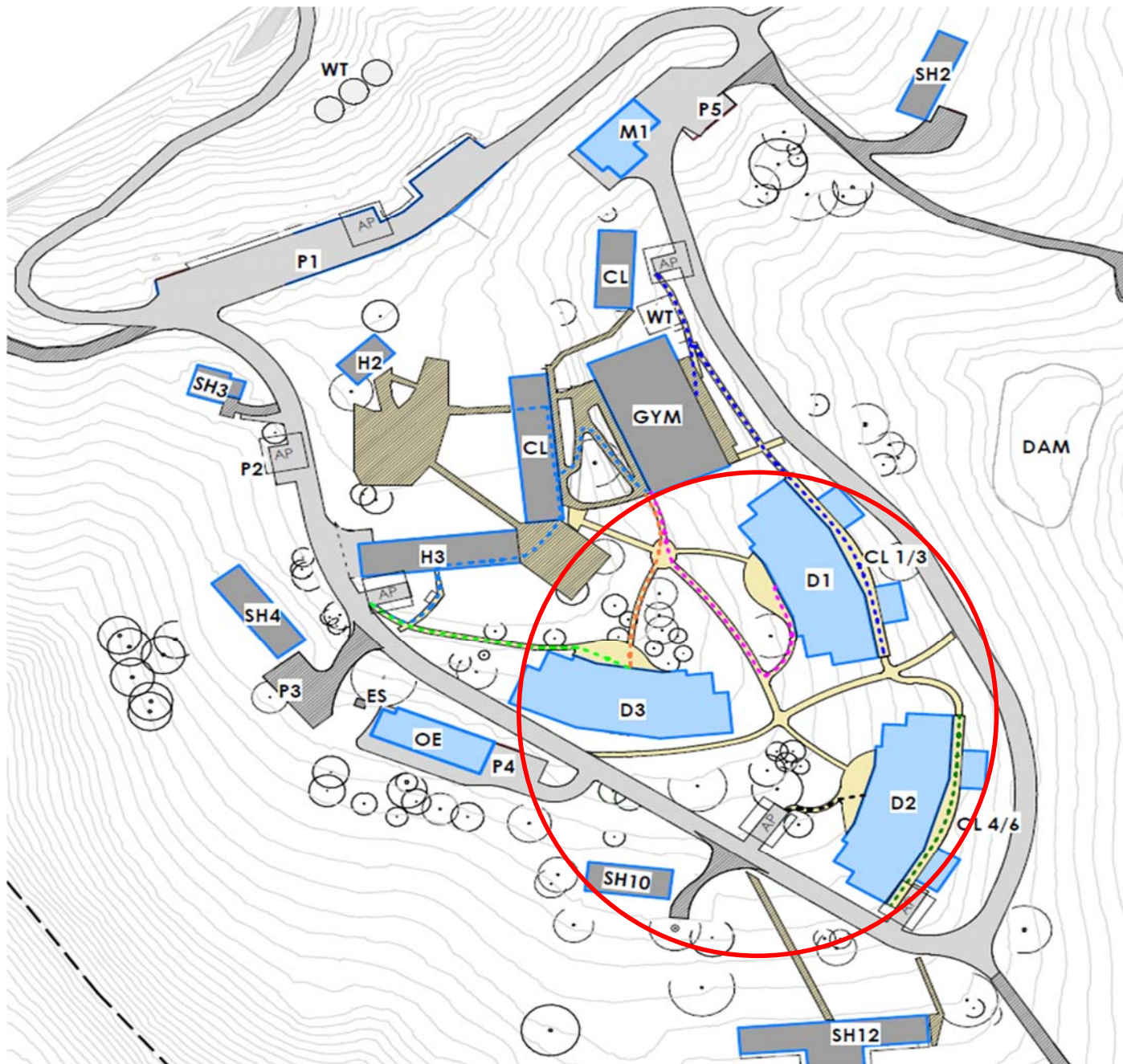
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1 STRUCTURE DETAILS

Report Type: Disability Access Compliance Report
For Proposed: Development Application (DA)
Site Address: No. 369 Jacks Corner Road KANGAROO VALLEY NSW 2577
Structure Details: School Classrooms & Staff Accommodation
Authority: Shoalhaven City Council

Plate 1: Site Plan: Proposed new dormitories and classrooms (circled in red). See Appendix B for an explanation of the different coloured lines)



2 REPORT INTRODUCTION AND SCOPE

Essential Access has been engaged by *Baxter and Jacobson Architects* to prepare a Disability Access Compliance Report suitable for a Development Application (DA). This will be based on a desktop review of architectural plans provided to Essential Access on the 14th October 2024 by *Baxter and Jacobson Architects*.

The DA involves the construction of 3 new buildings: 1 will be 2 storey (D3) and 2 will be 3 storeys (D1 & D2). See Appendix A for floor plans of each building.

The 2 & 3 storey buildings will contain the following levels:

- Level 1: 4 student classrooms plus, staff room & a bank of sanitary facilities including an accessible sanitary facility
- Level 2: Student dormitories and Common Rooms
- Level 3: Staff Accommodation consisting two bedrooms and a living room/kitchen

There are no passenger lifts provided between any of the levels. The access between the Classrooms and Dormitories appears to be via external pathways. The only access to the Staff Accommodation is via an internal stairwell from level 2.

The 2-storey building (D3) will not contain any classrooms. It will consist only of the student dormitories and Staff accommodation.

By addressing the requirements outlined in this report, development will satisfy the requirements of the *Disability (Access to Premises – Buildings) Standards 2010* & the Access provisions of the *National Construction Code (NCC 2022 Vol 1)* and *AS 1428.1-2009*.

NCC Building Classifications:

Class 9b: Classrooms: “an assembly building, including a trade workshop, laboratory or the like, in a primary or secondary school, but excluding any other parts of the building that are of another class”.

Class 3: Dormitories and Staff Accommodation: “a residential building, other than a Class 1 or 2 building, which is a common place of long term or transient living for a number of unrelated persons. Example: a boarding house, hostel, backpackers accommodation or residential part of a hotel, motel, school or detention centre.”

Regulatory Documents Referenced:

- AS 1428.1-2009: General Requirements for access – New Building Work
- AS-NZS_2890.6-2009: Off Street Parking for People with Disabilities
- AS-NZS_1428.4.1-2009: Tactile Ground Surface Indicators
- AS 1428.4.2-2018
- National Construction Code (NCC 2022 Vol 1)
- Disability (Access to Premises – Buildings) Standards 2010 (APS)
- Council’s DCP relating to Access for People with a Disability

3 EXECUTIVE SUMMARY

Based on a desktop review of the architectural plans, it is of Essential Access's opinion that the proposed development is capable of complying with the National Construction Code (NCC 2022 Vol 1) and AS1428.1-2009 *General Requirements for access – New Building Work*.

The following items were identified as requiring clarification on the Construction Certificate (CC) plans. They will need to be either shown or noted on the plans as complying with the NCC 2022 and relevant Australian Standards (See Part 5 for further detail):

- **Door Circulation spaces:**
 - Principal Pedestrian Entrances (PPE) to all classrooms and common rooms
 - Internal doorways in classrooms, Common Rooms and the accessible SOUs
 - Doors into the common accessible sanitary facilities
 - Entrance to the stairwell leading to the Staff Accommodation
- **Signage** to show location of fire exits, accessible sanitary facilities and at any non-accessible entrances directing visitors to the accessible entrances
- Specifications required for the **Designated Accessible Parking Bays (DAPB)**
- Detail of all specifications for the **Unisex Accessible Sanitary Facilities** to AS 1428.1-2009
- Detail of all internal and external **stairwells**: TGSIs, handrails and nosings
- **Access to and between buildings:** There must be a Continuous Accessible Path Travel (CAPT) from both the Designated Accessible Parking Bays (DAPB), the allotment boundary and between each building. This must include a flat transition at the Principal Pedestrian Entrance (PPE) and a clearance of 850mm minimum for doors. There are some buildings and levels that will not have a CAPT. A Performance Solution has therefore been prepared to address this (It is proposed that DAPBs be provided near the affected buildings where accessible paths will be provided to access each building. An on-site accessible vehicle will be made available for this purpose (refer to Appendix C prepared by Essential Access dated 8.11.24).

Due to the fact that level 2 of D1 and D3 are accessible, these will be prioritised for children with disabilities. There are 2 accessible dorm rooms in each of these buildings (with each room containing 4 beds). This equates to a total of 16 beds that are accessible.

The following table summarises the proposed access to each level of each building and between each building. Detailed diagrams are shown in Appendix B.

| Building | | Storeys | Level | Access | Not Accessible from... | Notes |
|----------|----------|---------|-----------------------|--------------------------------------|--|---|
| D1 | New | 3 | L1 & L2 L3 | Accessible Not Accessible | D2 + Gym (Lower level) D2 | L1 is accessible from the Gym at lower level by path plus vehicle access (past the Gym) |
| D2 | New | 3 | L1 L2 L3 | Vehicle Vehicle Not Accessible | D1 (L1) D1 + D3 (L1 & L2) D3 (L1 & L2) | L1 & L2 is accessible from the Designated Accessible Parking Bay |
| D3 | New | 2 | L2 L3 | Accessible Not Accessible | D2 (L1) | |
| Gym | Existing | 2 | Ground Upper Level | Vehicle Accessible | D2 D3 (L3) | Accessible to/from D1/L1 Upper level Gym is accessible via pathways from D1,D2,D3/L2 |

- **Contrast:**
 - Luminance contrast strip on all **glazed** doors and sidelights
 - All **doorways** shall have a minimum luminance contrast of 30% provided between:
 - Door leaf and door jamb
 - Door leaf and adjacent wall
 - Architrave and wall
 - Door leaf and architrave and
 - Door jamb and adjacent wall
- **Doorways:**
 - Handles: type ('D' Style) and height
 - Door clearances (850mm)
 - Door circulation areas
- **Floor surfaces** along all accessways in regards to transitions, slip levels & gradients
- **Wayfinding:** The use of luminance and colour contrast is very helpful in assisting people with low vision to locate important aspects of the environment such as poles, bollards, furniture, doors and doorways (particularly glass doors), signs, handrails and other objects of interest. Contrast can also be used to highlight potential hazards such as the edges of steps, a roadway or poles in streetscapes and play areas.

References:

- Architectural plans of proposed development by *Baxter & Jacobson Architects*:

(See Appendix A for plans)

| Sheet/Drawing # | Description | Issue Date | Issue/Status |
|---|----------------------------------|------------|--------------|
| Project No.: 433-06 Drawing Numbers: D101, D110-D113, D120, D121, D130-D132, D140, D201, D210-D213, D220, D221, D230, D232, D240, D301, D310, D311, D312, D320, D321, D330, D331, D340, WD01-WD05 (35 pages) | Floor plans, site and elevations | 10/10/2024 | 1 |

Abbreviations Table:

| Abbreviation | Definition |
|--------------|--|
| NCC | National Construction Code |
| BCA | Building Code of Australia |
| CDC | Complying Development Certificate |
| DAPS | Disability Access to Premises Standard |
| DDA | Disability Discrimination Act |
| CAPT | Continuous Accessible Path of Travel |
| CC | Construction Certificate |
| DAPB | Designated Accessible Parking Bay |
| PPE | Principal Pedestrian Entrance |
| AS | Australian Standard |
| DA | Development Application |
| SOU | Sole Occupancy Unit |
| EA | Essential Access |

Assessed by *Bruce Carr*
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**Report Revision History:**

| Date | Issue | Prepared by | Reviewed By |
|------------|-------------------|-------------|--------------|
| 13/05/2024 | Draft 1 Version 1 | Bruce Carr | Barry Cotton |
| 31/10/2024 | Version 1 Final | Bruce Carr | Barry Cotton |
| 8/11/2024 | Version 2 Final | Bruce Carr | Barry Cotton |

Report Exemptions and Limitations:

- This report has been issued for the purpose of a Development Application (DA) and is not suitable for a Construction Certificate (CC) or Occupation Certificate (OC).
- Essential Access is not responsible to ensure compliance is met and achieved during any building modifications.
- This report does not identify or include checks for the slip resistance of surfaces.
- This report is the copyright of *Essential Access* and has been prepared for the exclusive use and benefit of the client. It must only be used for the purpose that it was originally intended and must only be altered or updated by *Essential Access*.
- *Essential Access* is not responsible for any errors or omissions in the content of the report, or for the outcomes obtained from the use of the report.
- This report does not assess the development for compliance with:
 - The Disability Discrimination Act (1992)
 - Occupational Health and Safety Act
 - Structural Design and Engineering
 - Parts of the NCC and AS other than those Parts referenced in this report

4 GLOSSARY OF GENERAL ACCESS TERMS

Building Occupant - The term "occupants" refers to any person using the building including all visitors, employees, employers and owners and the like. The extent of access required depends on the classification of the building.

Principal Pedestrian Entrance (PPE) - The Principal Pedestrian Entrance (PPE) is the main point of pedestrian entry to a premise. It is therefore required to be accessible in all cases. This is particularly important in public buildings where the principal entrance is often used as a focus. Accessways are to be provided to accessible buildings from the main points of a pedestrian entry at the allotment boundary and from any accessible car parking space or accessible associated buildings connected by a pedestrian link.

Continuous Accessible Path of Travel (CAPT) – This is defined as an uninterrupted path of travel to, into or within a building providing access to all accessible facilities.

Accessway - An "accessway" is defined by the NCC 2022 (NCC) as "a continuous accessible path of travel as defined in AS 1428.1 2009 to, into or within a building". The use of luminance, colour and textural contrasts within the built environment maximises accessibility for people with low vision who may have difficulty interpreting objects, fixtures, fittings, changes in surfaces and clear paths of travel.

Ramp – An inclined surface on a continuous accessible path of travel between two landings with a gradient steeper than 1 in 20 but not steeper than 1 in 14. Ramps may be used as part of an accessway where there is a change in level. The ramp must comply with the requirements specified in AS 1428.1 including a maximum gradient, landings, TGSIs, handrails and kerbing, as appropriate for the type of ramp. A ramp cannot be used on an accessway to connect one level to another if the vertical rise is greater than 3.6 metres. This is to ensure that the ramp does not cause undue fatigue for a user to the point where the ramp becomes unusable. Where a ramp is installed on a path of travel used solely for servicing an area exempted under D4D5 the requirements of AS 1428.1 are not mandatory

Accessible Sanitary Facilities - This clause requires that facilities be constructed in accordance with AS1428.1. It is important to note that AS1428.1 contains provisions for both wheelchair accessible facilities. These provisions include grabrails, circulation space, access door width and swing, height of fixtures, lever handles for taps and space under the front of basins. Section D requires equitable and dignified access to buildings and the services they provide. Section D and Part F4 are also intended to apply inclusively to people with a disability (see F4P1). Not only must people with a disability be able to access a building's sanitary facilities, those facilities must be usable by them.

Tactile Ground Surface Indicators (TGSIs) - Warning Tactile Ground Surface Indicators (TGSIs) are intended to be used for specific hazard identification. This includes at the top and bottom of stairways, escalators and ramps and where there is an overhead obstruction less than 2 m above the floor along the pathway, in the absence of a suitable barrier that would prevent a person from hitting the overhead obstruction.

Designated Accessible Parking Bay (DAPB) - This clause provides details of the number of accessible carparking spaces required in a carpark depending on the classification of the building and based on the ratio of the total number of carparking spaces provided. These should be located as close as possible to the Principal Pedestrian Entrance (PPE) of the building, with a continuous accessible path of travel between the parking area and the PPE.

Luminance Contrast – The light reflected from one surface or component, compared to the light reflected from another surface or component. Effective luminance contrast is required to assist people with low vision to differentiate between installation and background or adjacent surfaces. This assists with navigating throughout the built environment.

5 ORGANISATIONAL RESPONSIBILITIES

Disability Discrimination ACT (DDA):

All organisations have the responsibility under the Disability Discrimination Act (DDA) to provide equitable & dignified access to goods and services and premises.

The DDA provides uniform protection against unfair treatment for persons with a disability. It also states that it is unlawful to discriminate against a person who is an 'associate' (such as a friend, carer or family member).

Disability is broadly defined and includes disabilities which are: physical, intellectual, psychiatric, cognitive or sensory or persons with a learning difficulty or physical disfigurement. This broad definition means that everyone with a disability is protected and that people with a disability have the same fundamental rights as the rest of the community.

The provisions of the DDA apply to employment, access to premises, education, provision of goods and services and the administration of Commonwealth laws and programs.

Therefore, to comply with the DDA, all business should provide equitable and dignified access. If equitable access is not provided, a complaint could be made under the DDA.

Disability (Access to Premises – Buildings) Standards 2010 (DAPS):

The *Disability (Access to Premises – Buildings) Standards 2010* was introduced with an updated Building Code of Australia (BCA) on May 1, 2011. These Standards are now legislated as the minimum requirements for new buildings or to buildings undergoing an upgrade in Australia.

These Standards provide building designers with information regarding the required access provisions for new or altered buildings.

The DAPS generally aligns with the NCC and reference a range of Australian Standards relating to access and other associated matters. The DAPS aim to provide certainty for the building industry in relation to meeting requirements for access in new and upgraded buildings.

National Construction Code 2022 (NCC):

The NCC in addition with the DDA applies to new buildings and buildings undergoing an alteration. The NCC outlines the access requirements for different building Classes.

Sections of the NCC require compliance with a range of access provisions.

6 COMPLIANCE ASSESSMENT WITH BCA/NCC & AS1428.1-2009

This Part assesses the compliance levels of the proposed development against the 'Access' provisions of the NCC 2022 and the relevant Australian Standards.

The compliance assessment level with each Clause in the NCC 2022 will be categorized into the following:

| Category | Explanation |
|-----------------------|--|
| Not Applicable | The Clause is not relevant to the building design |
| Complies | The building design meets the provisions of the relevant Clause |
| Capable of Compliance | The building has been designed that can reasonably meet the requirements of the relevant clauses but further detail is to be provided on the design documentation at CC stage to confirm compliance. |
| Does not Comply | The building design does not meet the requirements in the relevant clauses |

BCA/NCC Part D4 Access for People with a Disability

Part D4D2: General Building Access Requirements

Requirement:

Class 3:

(i) From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.

(ii) To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.

The requirement for between 11 to 40 Sole Occupancy Rooms (SOU's) is at least 2 rooms are required to be accessible.

Class 9b:

For a Class 9b building, access requirements are as follows:

For a school, to and within all areas normally used by the occupants.

Compliance:

Capable of compliance

Comments:

Assuming there are a total of 30 SOUs (10 in each of the three buildings), then at least 2 SOUs are required to be accessible. The architectural plans have nominated 2 accessible rooms in each building.

The term “*occupants*” refers to any person using the building including visitors, employees, employers and owners.

Details and requirements of accessibility and the level of compliance of this premise are outlined in the following Parts of the NCC and relevant Australian Standards.

A Continuous Accessible Path of Travel (CAPT) must not include a step, stairway or other Impediment.

All common accessway widths (internal and external) must be a minimum of 1000mm wide measured from skirting to skirting and clear 2-metre-high ceilings (see further detail below).

BCA/NCC Part D4D3: Access to Buildings

Requirement:

- (1) An accessway must be provided to a building required to be accessible—
 - (a) from the main points of a pedestrian entry at the allotment boundary; and*
 - (b) from another accessible building connected by a pedestrian link; and*
 - (c) from any required accessible carparking space on the allotment.**
- (2) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—
 - (a) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and*
 - (b) in a building with a total floor area more than 500 m², a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5.**
- (3) Where a pedestrian entrance required to be accessible has multiple doorways—
 - (a) if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be accessible; and*
 - (b) if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be accessible.**
- (4) For the purposes of (3)—
 - (a) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where—
 - (i) all doorways serve the same part or parts of the building; and*
 - (ii) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D4D3); and**
 - (b) a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D4D3).**
- (5) Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.*

AS1428.1 2009 Requirements:

- A continuous accessible path of travel shall not include a step, stairway or other impediment.
- The minimum unobstructed width of a continuous path of travel shall be 1000mm and there should be no intrusions such as openable windows, fire extinguishers, switchboards etc
- An accessible path of travel to the entry to have a gradient no steeper than 1 in 20. For 1 in 20 grade walkways, landings are required every 15m.
- A continuous path of travel and any circulation spaces shall have a slip resistant surface. The texture shall be traversable by people who use a wheelchair and those with an ambulant or sensory disability.
- The abutment of floor surfaces shall have a smooth transition of 0+-3mm vertically or 0+-5mm provided the edges have a beveled or rounded edge to reduce the likelihood of tripping.
- Where carpets or soft flexible materials are used on the ground, the exposed edges of the floor covering shall be fastened to the floor surface
- Grates shall not have slotted openings greater than 13mm wide and be orientated so that the long dimension is transverse to the dominant direction of travel
- The floor or ground surface abutting the walkway shall provide a firm and level surface of different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600mm unless one of the following is provide: a kerb or a kerb rail or a wall not less than 450mm in height.
- All common use doorways within the accessible path of travel (excl. sanitary facilities) to have a clear opening of at least 850mm with the appropriate circulation spaces as per AS1428.1
- Door thresholds are to be level or contain a threshold ramp with a maximum grade of 1 in 8 for a maximum rise of 35mm and length of 280mm.
- The gradient of curved walkways and ramps shall comply with Clause 10.4 Figure 20
- All curved walkways are to have a minimum clear width of 1500mm
- Circulation spaces shall be provided at every doorway, gate, or similar entry way, on a continuous accessible path of travel and have a gradient and crossfall not steeper than 1 in 40. (Refer to Diagram 1 below for doorway circulation spaces)
- Door controls that need to be grasped or turned shall not less than 900mm and not more than 1100mm above the plane of the finished floor.
- Door handles should be of the type that allows the door to be unlocked and opened with one hand and shall be such that the hand of a person who cannot grip will not slip from the handle during operation of the latch
- Luminance contrast at doorways to comply with AS1428.1 2009

Compliance:

Capable of compliance

Comments:

The Site Plan shows Designated Accessible Parking Bays (DAPB) and drop-off for each of the four buildings. There is also a Designated Accessible Parking Bay (DAPB) in the main carpark. From each of these DAPBs, there is an accessway shown.

See Part 3 ('Executive Summary') of this report for a summary of what buildings and levels are accessible. Not all levels and buildings will be accessible. A Performance Solution is therefore required to address this non-compliance.

The NCC states:

- that there must be access from the PPE to at least 1 floor containing sole occupancy units and to the entrance doorway of each sole occupancy unit located on that level.
- To and within not less than 1 of each type of room or space for use in common by the occupants
- To and within any accessible sole occupancy units

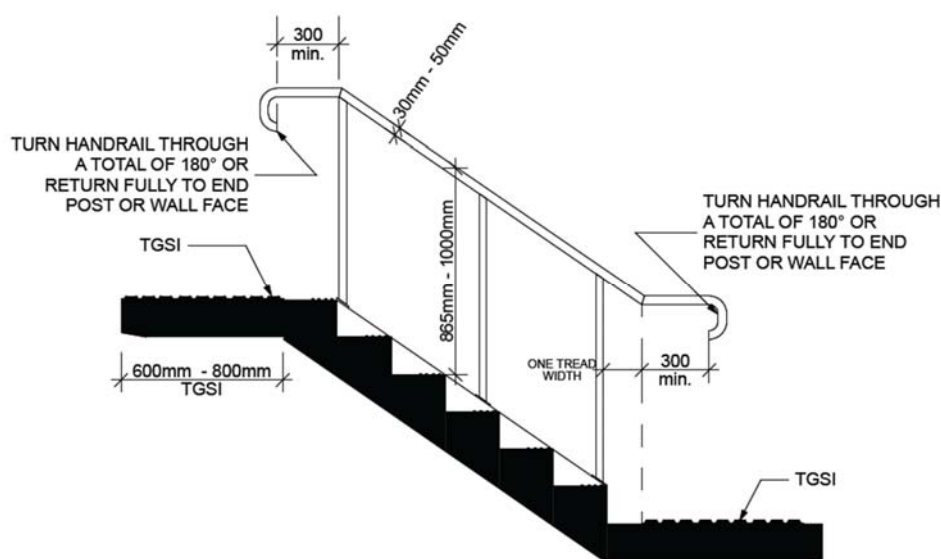
As there are two levels containing Class 3 SOUs, only one level is required to be accessible.

There should also be a level and firm transition at the Principal Pedestrian Entrance (PPE) to each level and for each building and classroom. Any abutment of surfaces to be no greater than 3mm (or 5mm if a bevelled edge). Slip levels to comply with NCC (Table D3D15).

All accessways should be no steeper than 1 in 20 with a firm and level surface at least 1000mm wide (except for curved walkways which are to be 1500mm) and compliant grates and circulation areas at the entrance doors of each building (see required circulation diagrams below: Diagram 1). Any glazed entrance doors should also contain a luminance contrasting strip and a 'D' style handle between 900-1100mm above the finished floor level.

There are also stairs connecting some of the external accessways. Compliance of these should satisfy the AS1428.1-2009 in regards to nosings, Tactile Ground Surface Indicators (TGSIs) and handrails. Each rise should contain opaque risers (see diagram 1 below for specifications).

Diagram 1: Stair and handrail detail



BCA/NCC Part D4D4: Parts of Buildings to be Accessible

Requirement:

In a building required to be accessible—

(a) every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with—

- (i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and
- (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and
- (iii) for a fire isolated stairway, clause 11.1 (f) and (g) of AS1428.1, and

(b) every passenger lift must comply with E3D7 and E3D8; and

(c) accessways must have—

(i) passing spaces complying with AS 1428.1 at maximum 20m intervals on those parts of an accessway where a direct line of sight is not available; and

(ii) turning spaces complying with AS 1428.1—

(A) within 2m of the end of accessways where it is not possible to continue travelling along the accessway; and

(B) at maximum 20m intervals along the accessway; and

(d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and

(e) a passing space may serve as a turning space

(f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—

(i) containing not more than 3 storeys; and

(ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m².

AS1428.1-2009 Requirements:

RAMPS:

- Every ramp with a grade steeper than 1 in 20 and less than (or equal to) 1 in 14 (excluding a fire isolated ramp) is to comply with Clause 10.3 of the AS1428.1.
- The maximum gradient of a ramp exceeding 1900mm shall be 1 in 14
- Landings shall be provided every 9m for a 1 in 14 ramp and every 15m for a ramp steeper than 1 in 20
- Landings shall be a minimum of 1200mm in length where there is no change in direction
- Ramps shall have handrails on both sides of the ramp complying with Clause 12 of the AS1428.1
- A landing that finishes at a door is required to have the appropriate circulation space as per AS1428.1 Clause 13.3
- The slip resistance is to comply with Table D3D15 of the NCC 2022 Vol. 1.
- All common use doorways to have a clear opening of at least 850mm and contain the appropriate circulation spaces as per AS1428.1.
- Landings with a change in direction not exceeding 90° shall have a minimum landing of 1500mm, with the internal corner truncated a minimum of 500mm in both directions.
- Curved ramps to have a minimum width of 1500mm
- Handrails shall extend a minimum of 300mm horizontally past the top and bottom of the ramp (except at intermediate landings along the ramp)
- Ramps shall have kerbs or kerb rails on both sides with a minimum height above the floor of 65mm and with a height NOT within the range of 75mm to 150mm above the floor.
- 1000mm clearance required between handrails

- Where the intersection of a ramp is at the property boundary, the ramp shall be set back a minimum of 900mm so the handrails do not protrude onto public walkways

STEP RAMPS:

- Step ramps shall have a maximum rise of 190mm; a length not greater than 1900mm and a gradient not steeper than 1 in 10 (refer to Clause 10.6 of the AS1428.1)
- Step ramps shall have edges splayed at a 45° angle where there is a pedestrian cross-traffic, otherwise it should be protected by a suitable barrier with a minimum height of 450mm; or where an open balustrade is provided, a kerb or kerb rail shall be provided.
- The slip resistance is to comply with Table D3D15 of the NCC 2022 Vol. 1.
- A landing that finishes at a door is required to have the appropriate circulation space as per AS1428.1 Clause 10.8.2

THRESHOLD RAMPS:

- Threshold ramps at doorways on a continuous path of travel shall have a maximum rise of 35mm; a length not greater than 280mm and a gradient not steeper than 1 in 8 (refer to Clause 10.5 of the AS1428.1)
- The edges shall be tapered or splayed at a minimum of 45° where the ramp does not abut a wall

STAIRWAYS:

- Where the intersection of the stairs are at the property boundary, the stairs shall be set back a minimum of 900mm so the handrails and TGSIs do not protrude onto public walkways
- Stairs shall have opaque risers
- TGSIs to be installed as per AS1428.4.1
- Nosings not to project beyond the face of the riser and be rounded up to 5mm radius. Each tread shall have a strip between 50mm to 75mm deep across the full width of the path of travel and may be set back a maximum of 15mm from the front of the nosing. They shall have a minimum luminance contrast of 30% to the background. The slip resistance is to comply with Table D3D15 of the NCC 2022 Vol. 1.
- Where the luminance strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10mm.

HANDRAILS:

- Handrails should not encroach into any required circulation spaces
- Diameter of the handrails to be between 30mm to 50mm for not less than 270° around the uppermost surface
- The edges shall have a radius not less than 5mm and be between 865mm and 1000mm above the nosing of the stairway or ramp floor.
- The ends of the handrails shall be turned through a total of 180° or to the ground; or returned fully to the end post/wall
- Clearance from wall to handrail shall not be less than 50mm

DOORS:

- The distance between doorways shall not be less than 1450mm. If the doorway encroaches into this space, the distance shall be not less than 1450mm plus the door leaf width.

- *Minimum clear opening of doorways on a continuous path of travel shall be 850mm*
- *'D' shaped door handles shall be used and be located between 900mm and 1100mm above the finished floor.*
- *The clearance between the handle and back plate (or door face at the centre grip section of the handle) shall be between 35mm to 45mm and contain a minimum of a 20mm turn at the end of the handle*
- *For doors other than fire or smoke doors where a door closer is fitted, the force required at the door handle to operate the door shall not exceed 20N.*
- *All doorways shall have a minimum luminance contrast of 30% provided between:*
 - *Door leaf and door jamb*
 - *Door leaf and adjacent wall*
 - *Architrave and wall*
 - *Door leaf and architrave or*
 - *Door jamb and adjacent wall*
- *The minimum width of the area of the luminance contrast shall be 50mm*
- *Door thresholds to be level. The abutment of surfaces shall have a smooth transition and be constructed with a +/-3mm vertical or +/-5mm if the edges have a bevelled or rounded edge to reduce the likelihood of tripping*

OTHER:

- *If carpet is used in areas required to be accessible, the pile height or pile thickness shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm bringing the total thickness to a maximum of 15mm.*
- *All switches and controls on an accessible path of travel (other than general purpose outlets), shall be located between 900mm to 1100mm above finished floor level*
- *A continuous accessible path of travel and any circulation spaces shall have a slip-resistant surface and the texture of the surface shall be traversable by people who use a wheelchair and those with ambulant or sensory disability.*

Compliance:

Capable of Compliance

Comments:

The following are required to satisfy the requirement of the NCC 2022 and the AS1428.1-2009 and should be verified at CC stage with appropriate measurements. These requirements apply to all common accessways (such as the corridors) and to the Common Rooms. They also apply to the accessible dormitories:

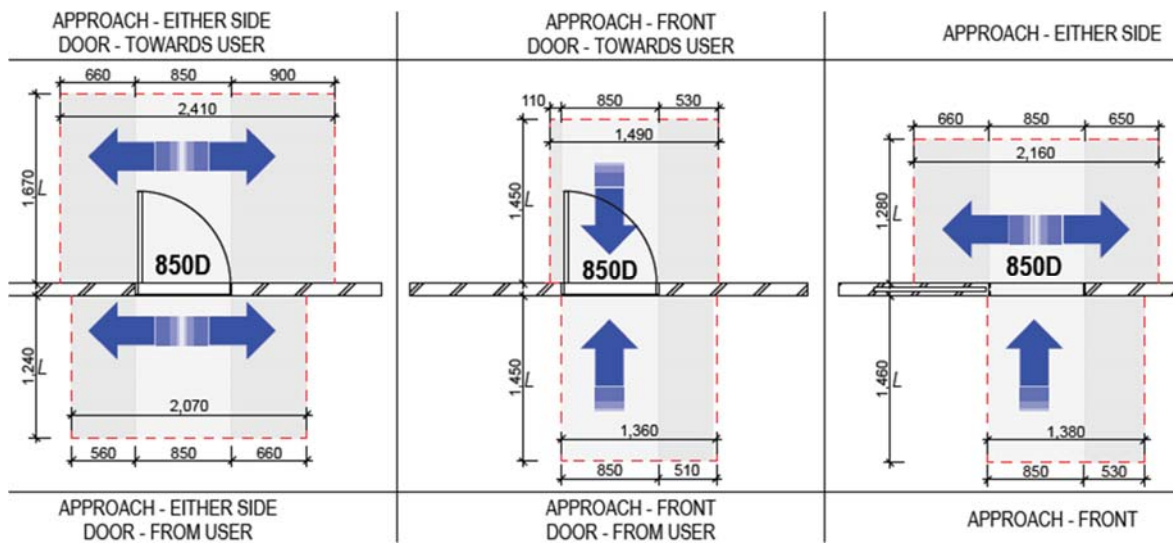
- All accessways to have minimum width of 1000mm (measured from the inside of all restrictions eg handrails, fire extinguishers etc)
- All doors are to have a minimum clear width of 850mm. All doorways are to be level and should have a 30% minimum luminance contrast between the architrave and wall and door leaf and wall.

- If carpet is used in common accessways for the floor covering, it is to be provided with a pile height or thickness no greater than 11mm and carpet backing not more than 4mm (being a total maximum of 15mm).
- Wheelchair Turning Space:
 - The space required for a wheelchair to make a 90 – 180° turn shall be not less than 2070mm in the direction of travel and not less than 1540mm wide.
 - For a turn of 60° to 90°, the space required shall not be less than 1500mm x 1500mm in the direction of travel.
- Door handles must be of a 'D' style and be located between 900-1100mm from the finished floor level (see requirements below). This was not indicated on the plans
- Door controls that need to be touched should be between 900-1250mm high and not less than 500mm from an internal corner.
- All switches and controls along all accessways are to be a height of 900-1100mm and not less than 500mm from an internal corner.
- All accessways should have a firm and slip resistant surface with a texture that is traversable by a wheelchair.
- The circulation areas at each doorway should satisfy the requirements of the AS1428.1-2009) (see Diagram 2 below for required specifications). The following rooms would be exempt under D4D5 of the NCC 2022 due to the nature of their use to comply: Storage rooms, Electrical and pump rooms etc.)

Staff Accommodation: Access from level 2 to level 3 (Staff Accommodation) is reached only via a set of stairs.

There does not appear to be sufficient circulation at the base of the stairs at the entrance door. Details also required for the stairwell leading up to Level 3 (nosings, handrails and TGSIs). There should be a minimum clearance of 1000mm between the handrails.

Diagram 2: Door Circulation Areas



BCA/NCC Part D4D5: Exemptions

Requirement:

The following areas are not required to be accessible:

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

Compliance:

Capable of Compliance

Comments:

Any storage rooms, plant rooms, electrical rooms (or the like) would be exempt from compliance with the Access provisions of the NCC as this would pose a health and safety risk for persons with a disability.

BCA/NCC Part D4D6: Accessible Carparking

Requirement:

Class 9b buildings:

For a school, 1 accessible space for every 100 carparking spaces or part thereof.

Class 3: To be calculated by multiplying the total number of carparking spaces by the percentage of:

- Accessible SOUs to the total number of SOUs; or
- Accessible bedrooms to the total number of bedrooms & the calculated number is to be taken to the next whole figure.

Compliance:

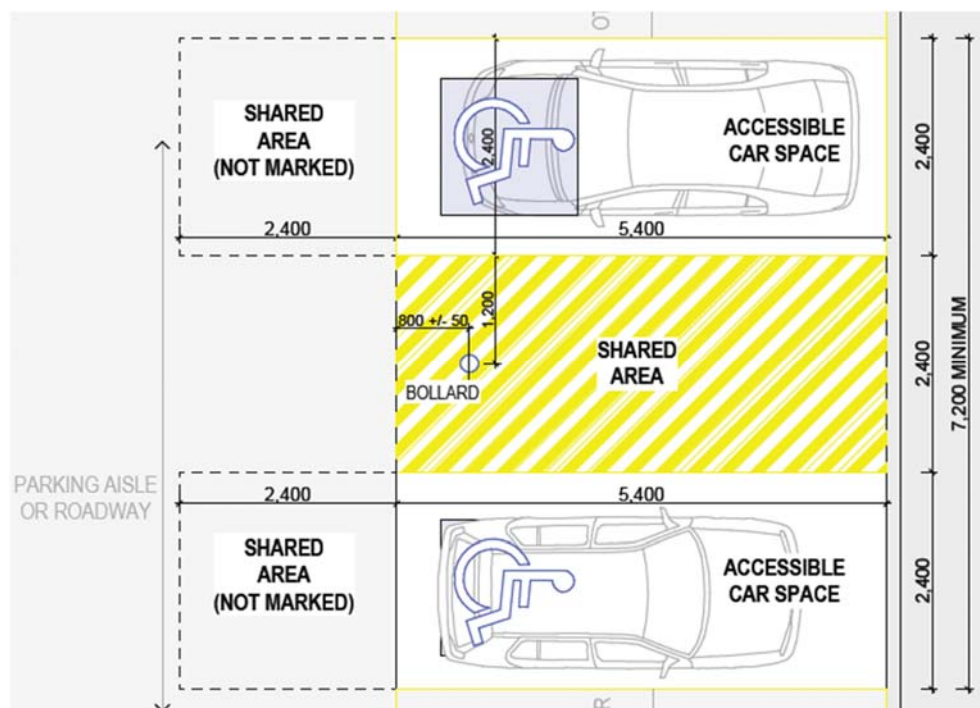
Capable of Compliance

Comments:

To be confirmed by client the required designated car parking spaces required by the Council or Traffic Report. Specifications have been provided in Diagram 3 below of a Designated Accessible Parking Bay (DAPB).

There are also DAPBs proposed to access certain buildings (refer to plans). These should contain a shared zone and have a slope no greater than 1 in 40. See Diagram 3 below for the required specifications.

Diagram 3: Accessible Parking Bay specifications



BCA/NCC Part D4D7: Signage

Requirement:

D3.6 Signage

In a building required to be accessible—

(a) braille and tactile signage complying with Specification D3.6 must—

(i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—

(A) sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a sole occupancy unit in a Class 3 or Class 9c building; and

(B) space with a hearing augmentation system; and

(ii) identify each door required by E4D5 to be provided with an exit sign and state—

(A) “Exit”; and

(B) “Level”; and either

(aa) the floor level number; or

(bb) a floor level descriptor; or

(cc) a combination of (aa) and (bb); and

(b) signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—

(i) the type of hearing augmentation; and

(ii) the area covered within the room; and

(iii) if receivers are being used and where the receivers can be obtained; and

(c) signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right-handed use; and

(d) signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility; and

(e) where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; and

(f) where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility; and

(g) in a building subject to F2.9, directional signage complying with Specification D3.6 must be provided at the location of each—

(i) bank of sanitary facilities; and

(ii) accessible unisex sanitary facility, other than one that incorporates an accessible adult change facility, to direct a person to the location of the nearest accessible adult change facility within that building

Compliance:

Capable of compliance

Comments:

To be noted or verified on the CC plans:

- Braille and tactile signage required to identify any fire exits
- Signage any common bank of sanitary facilities directing patrons to the unisex accessible sanitary facilities
- Tactile signage at all unisex accessible sanitary facilities (see specification diagram below). This should indicate if the facility is right-handed or left-handed.

- Signage at any non-accessible entrances or accessways directing persons to the accessible accessways/entrances.

No hearing augmentation system has been indicated on the plans.

BCA/NCC Part D4D8: Hearing augmentation

Requirement:

(a) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—

- (i) in a room in a Class 9b building; or
- (ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or
- (iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.

(b) If a hearing augmentation system required by (a) is—

- (i) an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or
- (ii) a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than—
 - (A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and
 - (B) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and
 - (C) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and
 - (D) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons.

(c) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D1.13.

(d) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing

Compliance:

Capable of compliance

Comments:

Hearing augmentation is required in a Class 9b where there is an inbuilt amplification system (other than one used only for emergency warnings). Client to confirm whether an inbuilt amplification system is to be used.

BCA/NCC Part D4D9: Tactile Indicators (TGSIs)

Requirement:

(a) For a building 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—

(i) a stairway, other than a fire-isolated stairway; and

(ii) an escalator; and

(iii) a passenger conveyor or moving walk; and

(iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and

(v) in the absence of a suitable barrier—

(A) an overhead obstruction less than 2 m above floor level, other than a doorway; and

(B) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point, except for areas exempted by D4D5.

(b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.

Compliance:

Capable of Compliance.

Comments:

The plans show stairs connecting various external accessways. CC plans to show location of TGSIs at the top and base of all (internal and external) stairwells and any ramps.

BCA/NCC Part D4D12: Limitations on Ramps

Requirement:

On an accessway—

(a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and

(b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.

Compliance:

N/A

Comments:

The site proposed for the new buildings is steep and is proposed to be connected by paths not steeper than 1 in 20. No external ramps are shown on the site plan.

BCA/NCC Part D4D13: Glazing on an Accessway

Requirement:

On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.

AS1428.1-2009 Requirement (Part 6.6): Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, side lights (including any glazing capable of being mistaken for a doorway or opening) shall be clearly marked for the full width with a solid non-transparent contrasting line not less than 75mm wide and extend across the full width of the glazed panel. The lower edge of the strip shall be between 900mm and 1000mm above the finished floor level. The strip shall be a minimum of 30% luminance contrast when viewed against the floor surface.

Compliance:

Capable of compliance

Comments:

All new glazed doors and side lights at entrances to classrooms or common rooms or within each building should contain luminance contrasting strips (see above for minimum specifications).

BCA/NCC Part F Accessible Sanitary Facilities

Part F4D5: Accessible Sanitary Facilities

Requirement:

Accessible unisex sanitary compartments must be provided in accessible parts of a building in accordance with F4D6. In a building required to be accessible, where there is one or more toilets in addition to the accessible unisex sanitary compartment, not less than one sanitary compartment suitable for a person with an ambulant disability for use by males and not less than one ambulant facility for females.

For Class 3 buildings, one in every accessible SOU where a sanitary compartment is provided.

For Class 9 where F4D4 requires closet pans, 1 on every storey containing sanitary compartments and where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.

The circulation spaces, fixtures and fittings of all sanitary facilities provided in accordance with F4D6 and F4D7 must comply with the requirements of AS1428.1.

An accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only.

Where F4D4 requires 1 or more showers, not less than 1 for every 10 showers or part thereof.

Compliance:

Capable of compliance

Comments:

There is a sanitary compartment provided in each SOU. Therefore, the sanitary facilities in each accessible SOU is to comply with the provisions of Part 15 of the AS1428.1-2009.

As there are sanitary facilities provided in the on level 1 of Buildings D1 and D2, an accessible sanitary facility is required. An accessible facility is shown on the plans adjacent to the bank of toilets.

At the CC stage, detailed drawings are required for each unisex sanitary facility to ensure compliance with the AS1428.1-2009.

The following are the requirements for an Accessible sanitary facility to be included in the CC plans:

Taps:

- Taps shall have lever handles, sensor plates or other similar controls
- The floor is to be slip resistant
- Lever handles shall not have less than 50mm clearance from adjacent surfaces
- Where hot water is provided, the water shall be delivered through a mixing spout
- WC pan clearances shall be as follows:

Toilet Seat: A toilet seat shall be provided on accessible toilets. The toilet seat shall:

- Be of the full-round type and with minimal contours to the top surface
- Be securely fixed in position when in use
- Have seat fixings that create lateral stability for the seat when in use
- Be load rated to 150kg
- The top of the toilet seat shall be 460mm to 480mm above the FFL
- Have a minimum luminance contrast of 30% with the background (eg. pan, wall or floor against which it is viewed)

Backrest: A backrest shall be provided on accessible toilets. The backrest shall:

- Be capable of withstanding a force in any direction of 1100 N
- Have a height, at the lower edge of the backrest to the top of the WC seat, of 120mm to 150mm
- Have a vertical height of 150mm-200mm and a width of 350-400mm
- The front edge of the centre of the backrest be positioned to achieve an angle of between 95° to 100° back from the seat hinge

Flushing Control:

A flushing control shall be user activated either by hand or automatic. If hand operated, the control should be proud of the surface and be located between 600-1100mm above the FFL.

Dispensers:

- Toilet paper dispensers shall be located to a maximum height of 700mm from FFL and a maximum of 300mm from the end of the pan

- Soap and towel dispensers shall be operable by one hand and to be located not less than 900mm to a maximum of 1100mm above the FFL and no closer than 500mm from an internal corner

Grabrails:

- A continuous grabrail shall be provided across the rear and side wall (nearest the WC pan) where a concealed or high-level cistern or flush valve is used. Where a low level non-concealed cistern is used, the grabrail should be terminated at each side of the cistern (see diagram below).
- The grabrails are to be 30-40mm in diameter and be installed with a clearance of 50-60mm clear from the wall and with no obstructions. The horizontal rail should be between 800 to 810mm from the FFL
- An arc shall be provided of either 30 to 45 degrees or 90 degrees (see diagram below).
- There should be a back grab rail of a minimum length of 300mm and a maximum of 50mm from the cistern and a minimum outside distance of 450mm from the edge of the pan.

Circulation Space:

- the circulation space around each pan shall be a minimum of 1900mm by 2300mm. Toilet dispensers, grabrails, wash basins (to 100mm), hand dryers, soap dispensers and shelves can intrude into the circulation space.
- The pan is to be located between 450mm to 460mm from the side wall

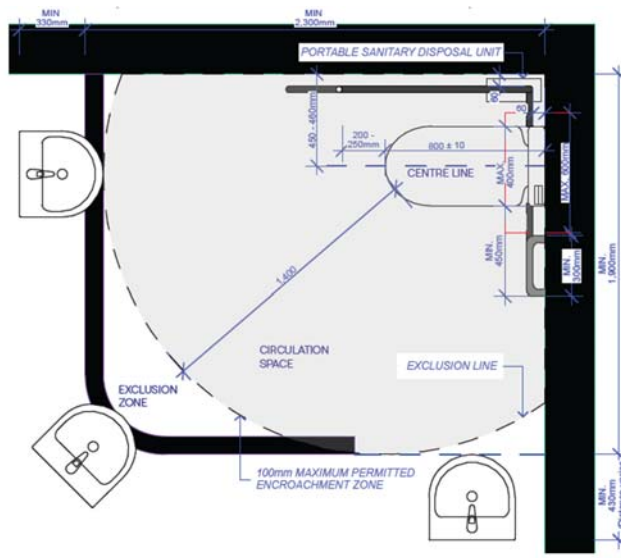
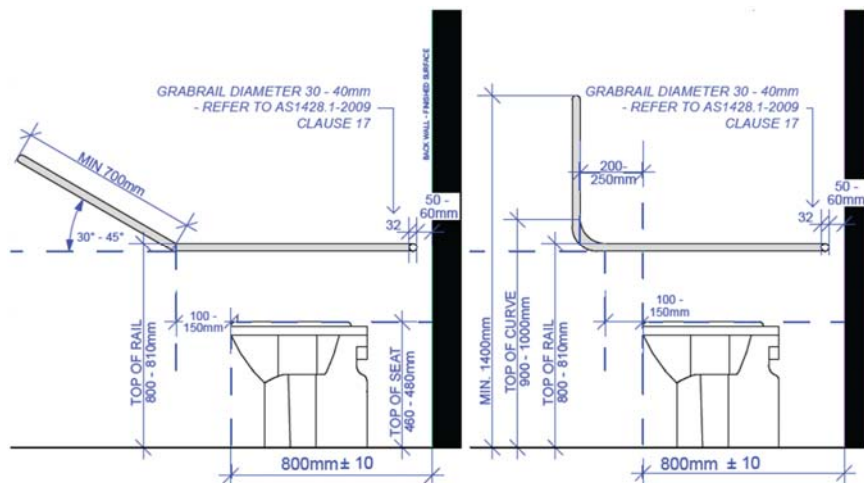
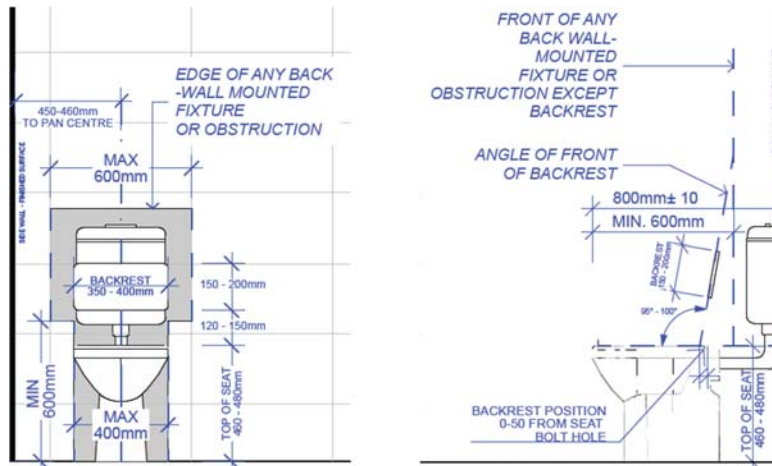
Washbasins:

- The wash basin must be outside the pan circulation space
- Exposed hot water pipes shall be insulated or located to reduce injury
- The circulation space for a washbasin shall be as per Figures 44A & 44B of Part 15 of AS1428.1-2009.

Mirrors:

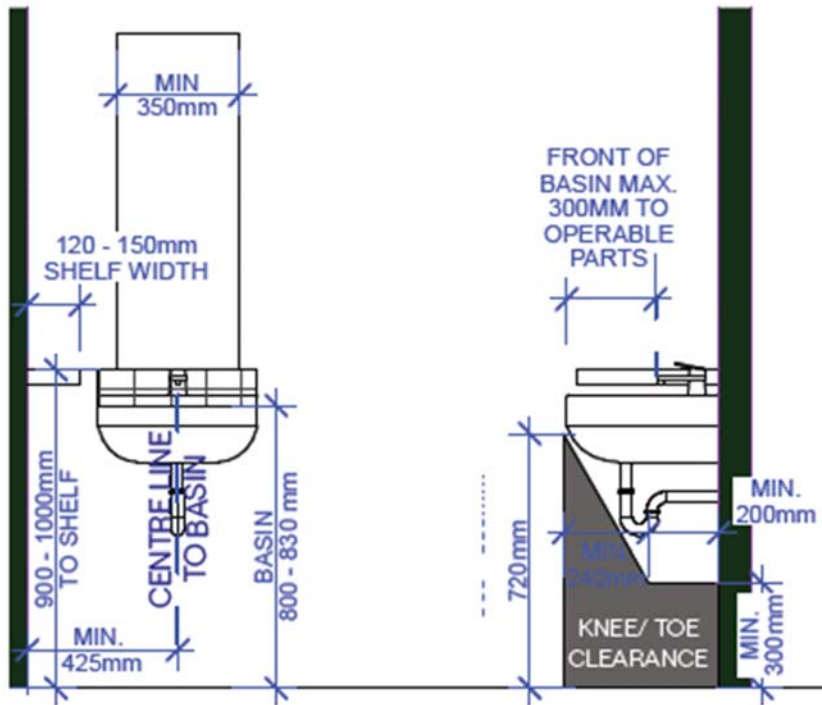
The mirrors shall be located either above or adjacent to the washbasin. The mirror shall be not less than 350mm wide and extend from a height of not more than 900mm above the FFL to a minimum of 1850mm above the FFL

Toilet Pan Requirements



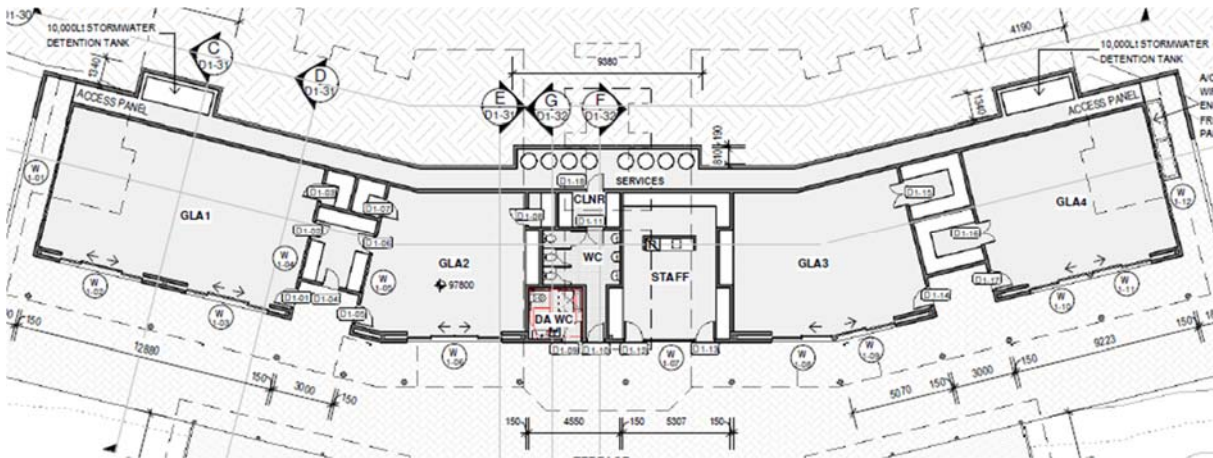
Circulation areas

Wash Basix Specifications

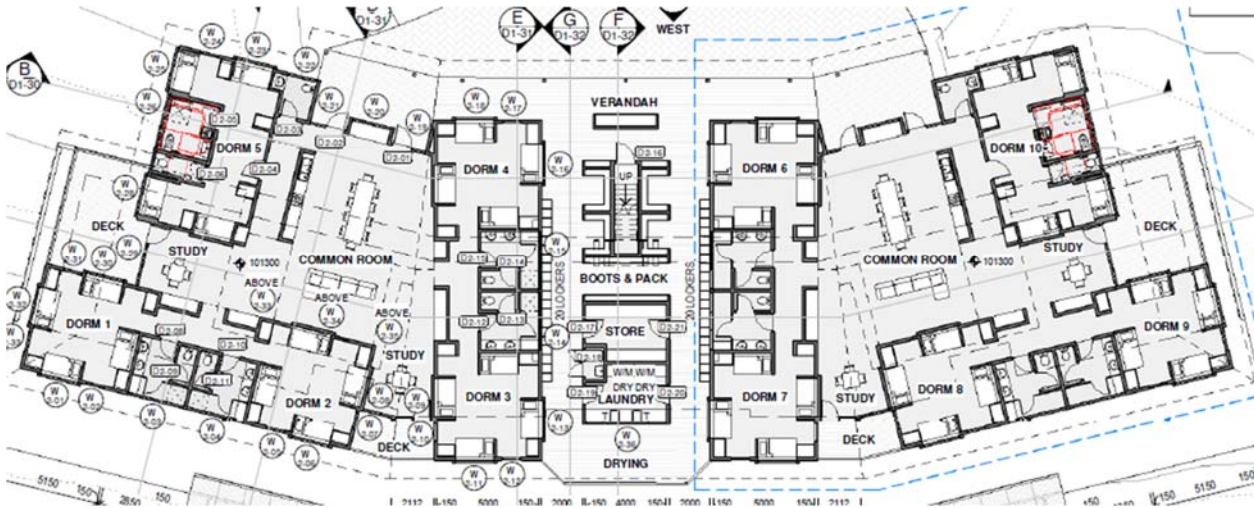


Appendix A (Floor Plans)

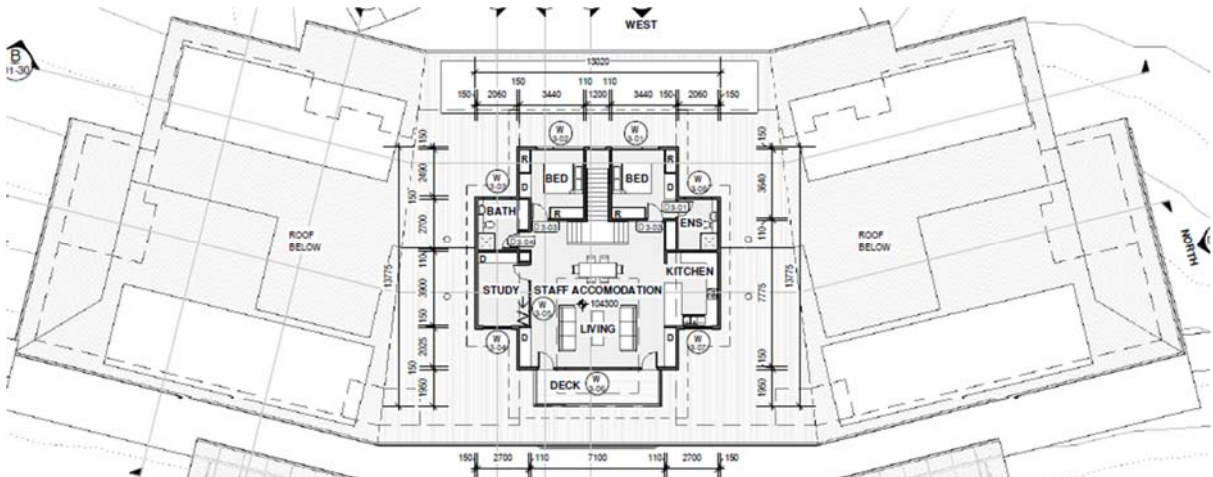
D1 Level 1:



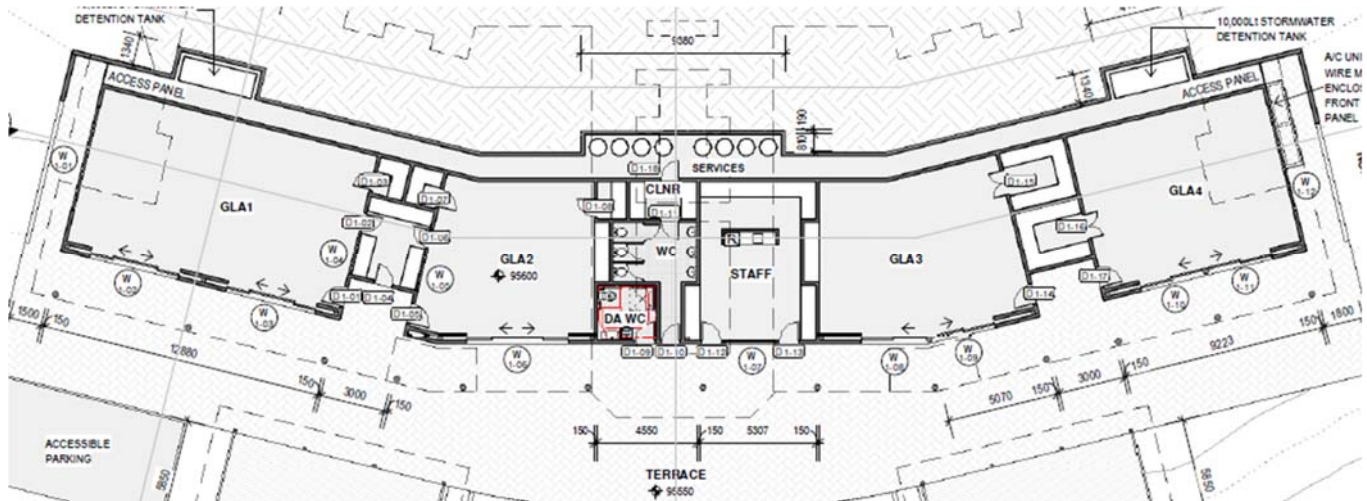
D1 Level 2:



D1 Level 3:



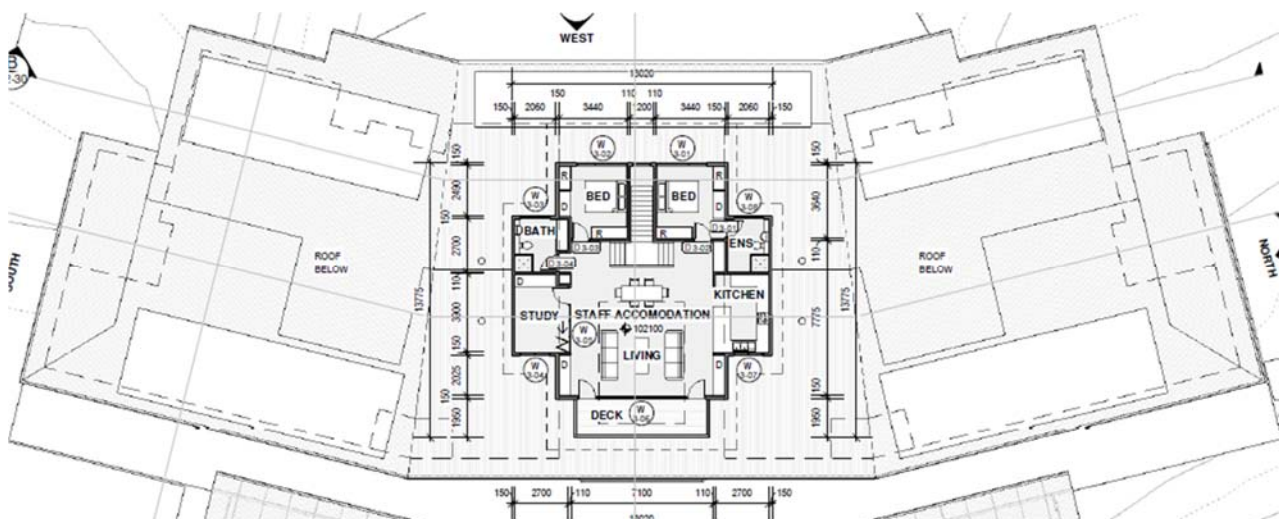
D2 Level 1:



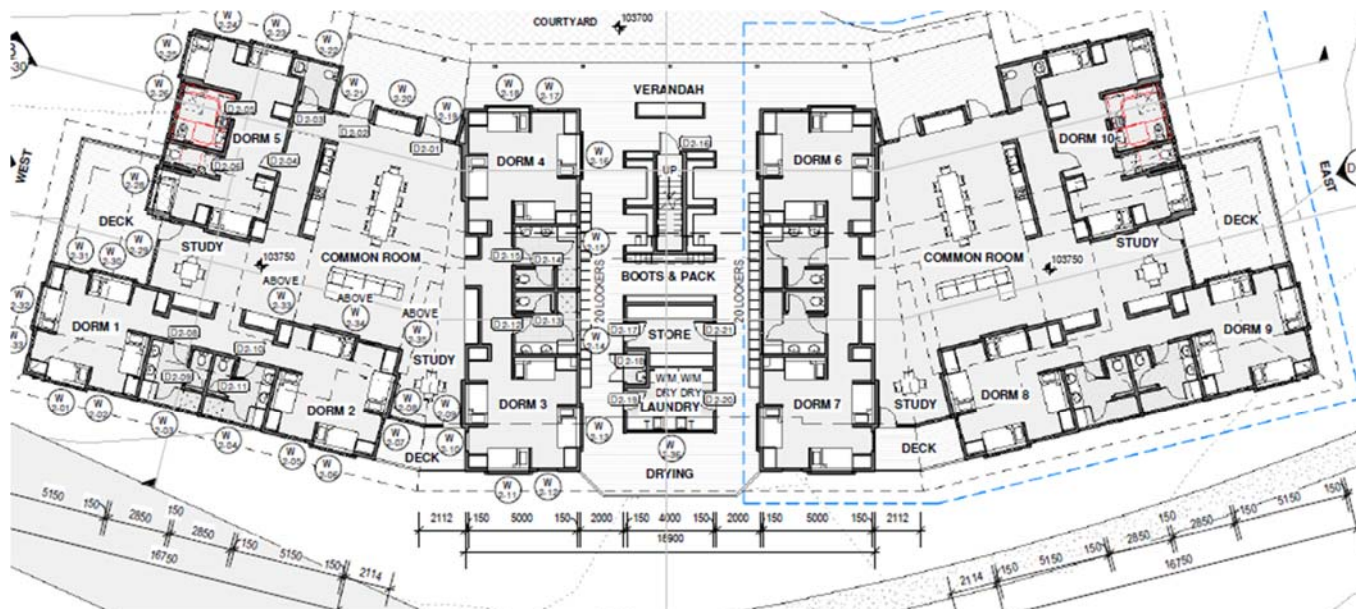
D2 Level 2:



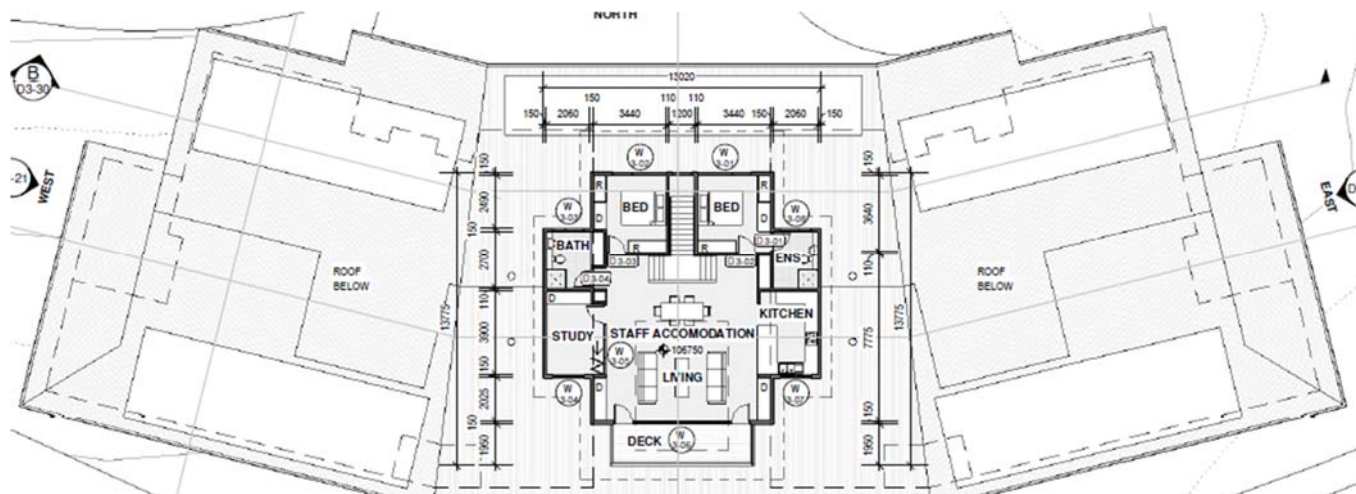
D2 Level 3:



D3 Level 2 (No L1 Classrooms):

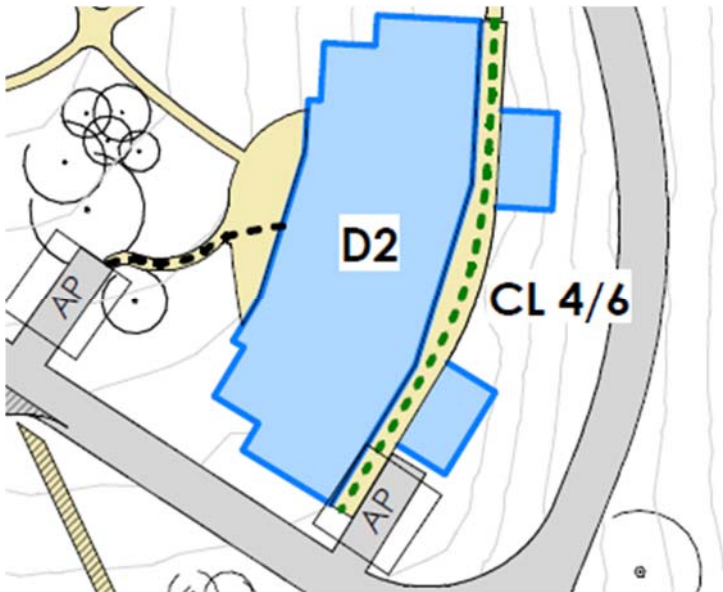


D3 Level 3:

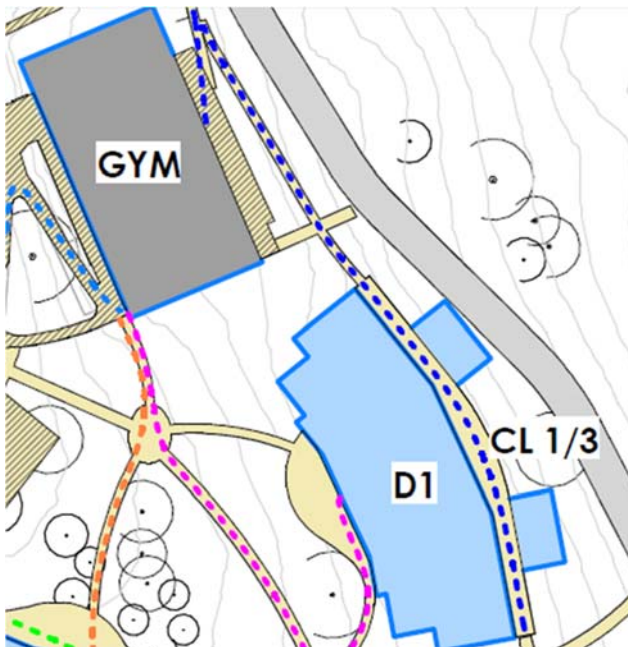


Appendix B (Access Between Buildings)

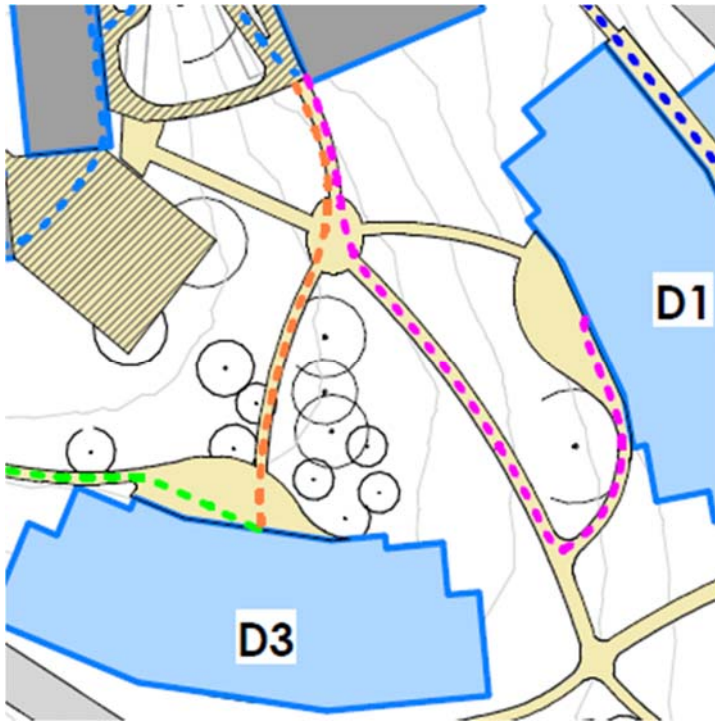
The green line is an accessible path from the Designated Accessible Parking Bay to Classrooms 4-6:



The blue line is an accessible path provided from the Designated Accessible Parking Bay to Classrooms 1-3 (and the gym lower level):



Pink, orange & blue is the accessible path from the Dormitory levels up to the following existing buildings: Classrooms, Gym mezzanine, Kitchen/Dining & Clinic



Appendix C (Performance Solution)

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E: info@essentialaccess.com.au

W: www.essentialaccess.com.au



Date: 8 November 2024 (V1 FINAL)
Prepared for: Baxter & Jacobson
Job Reference: BAX-KV-0424-DAA

Performance Solution Assessment Report

*Access “To and Between”
Student Classrooms and Gym
No. 369 Jacks Corner Road
KANGAROO VALLEY NSW*

0420 312 721 
info@essentialaccess.com.au 
www.essentialaccess.com.au 
PO Box 791 Spit Junction NSW 2088 

1 BUILDING DETAILS

Report Type: Performance Solution (PS) Assessment Report – Alternative Access Plan to and Between new Classrooms

Job Address: No. 369 Jacks Corner Road KANGAROO VALLEY NSW 2577

Consent Authority: SHOALHAVEN CITY COUNCIL

Construction stage: Development Application (DA)

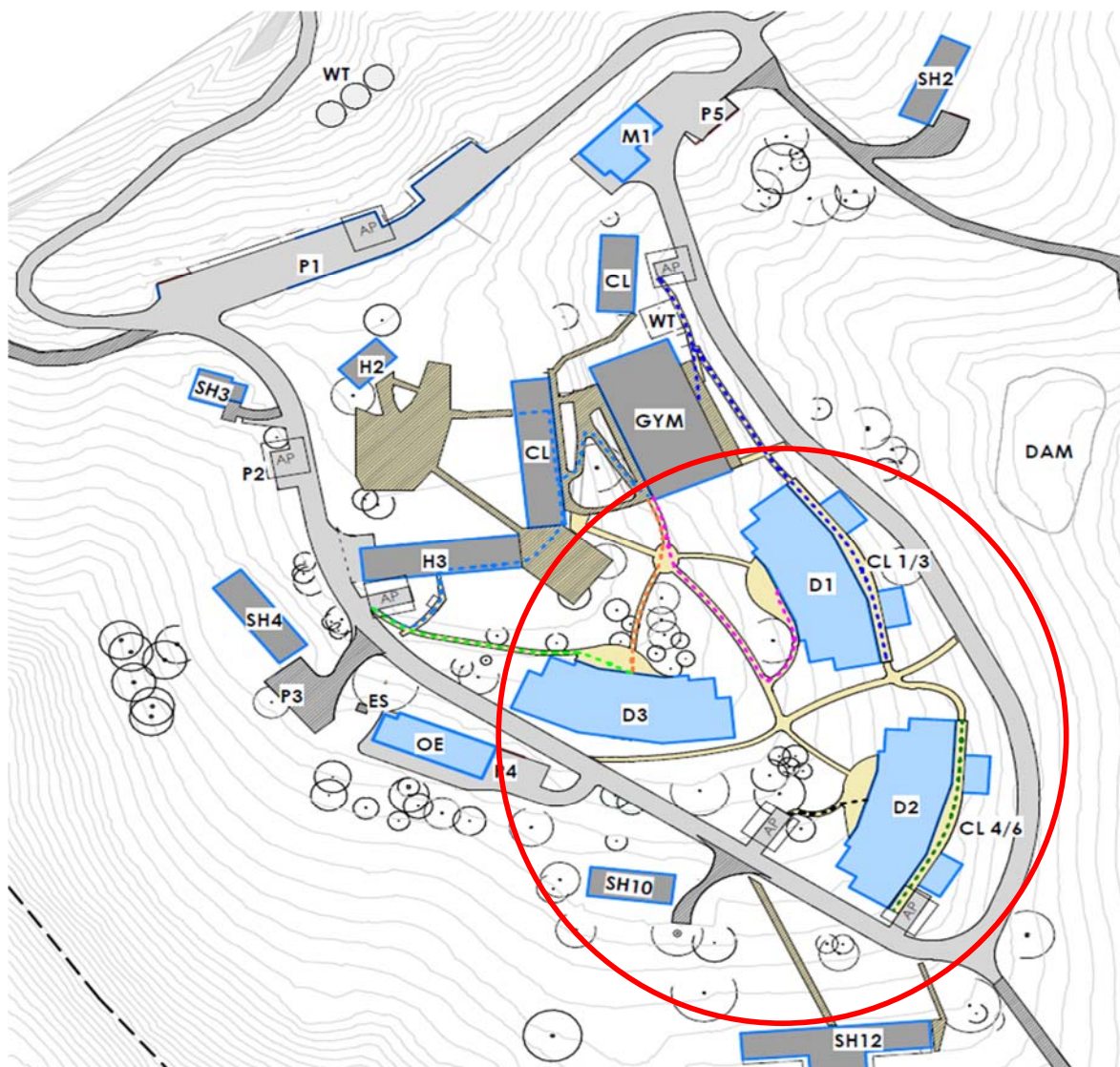


Plate 1: Plate 1: Site Plan: Proposed new dormitories and classrooms (circled in red).
See Page 12 for a graphic representation and key for the Access plan between buildings

Report Revision History:

| Date | Issue | Status | Prepared By | Reviewed by |
|-----------------|-------------------|------------------|-------------|--------------|
| 16 Aug 2024 | Draft 1 Version 1 | Issued to client | Bruce Carr | Barry Cotton |
| 8 November 2024 | Version 1 Final | Issued to client | Bruce Carr | Barry Cotton |

2 INTRODUCTION AND SCOPE

Essential Access has been engaged by the architects – *Baxter and Jacobson Architects* – to prepare a Performance Solution (PS) to address the fact that there is no Continuous Accessible Path of Travel (CAPT) between some of the buildings and levels.

There are three new buildings proposed (see next page for ‘*Building Description*’). These buildings will be part of the Scots College campus and used by Year 9 students and staff to intermittently live on site for approximately 6-9 months each year. It is mandatory for all students to attend (irrespective of their physical or mental capability). Due to the slope of the site, access to and between each of these buildings is restricted. As a result, an alternative solution is required to ensure there is fair and equitable access for ALL students and staff to and between each building.

The NCC 2022 states:

Part D4D2: *An accessway must be provided to a building required to be accessible—*

*For a **Class 3** building, access requirements are as follows:*

(a) Common areas:

- (i) From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.*
- (ii) To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.*
- (iii) Where a ramp complying with AS 1428.1 or a passenger lift is installed—*
 - (A) to the entrance doorway of each sole-occupancy unit; and*
 - (B) to and within rooms or spaces for use in common by the residents.*
- (iv) The requirements of (iii) only apply where the space referred to in (A) and (B) are located on the levels served by the lift or ramp.*

(b) To and within sole-occupancy units — in accordance with Table D4D2b.

*For a **Class 9b** building, access requirements for schools and early childhood centres — to and within all areas normally used by the occupants.*

Part D4D3 of the NCC 2022 also states that an accessway must be provided to a building required to be accessible—

- (a) from the main points of a pedestrian entry at the allotment boundary; and*
- (b) from another accessible building connected by a pedestrian link; and*
- (c) from any required accessible carparking space on the allotment*

The following is a summary of where the proposed aspects of the development will not comply with the above NCC 2022 requirements:

| Building | | Storeys | Level | Access | Not Accessible from... | Notes |
|------------|----------|---------|-----------------------|--------------------------------------|--|---|
| D1 | New | 3 | L1 & L2 L3 | Accessible Not Accessible | D2 + Gym (Lower level) D2 | L1 is accessible from the Gym at lower level by path plus vehicle access (past the Gym) |
| D2 | New | 3 | L1 L2 L3 | Vehicle Vehicle Not Accessible | D1 (L1) D1 + D3 (L1 & L2) D3 (L1 & L2) | L1 & L2 is accessible from the Designated Accessible Parking Bay |
| D3 | New | 2 | L2 L3 | Accessible Not Accessible | D2 (L1) | |
| Gym | Existing | 2 | Ground Upper Level | Vehicle Accessible | D2 D3 (L3) | Accessible to/from D1/L1 Upper level Gym is accessible via pathways from D1,D2,D3/L2 |

Consequently, a Performance Solution is required to ensure that the Performance Requirements of the NCC 2022 are met, so that fair and equitable access is still provided for persons with a disability.

No other aspects of the new building works and affected parts will form part of this report in regards to compliance with the National Construction Code (NCC/BCA) Vol 1 or the Australian Standards (AS).

A Performance Solution is therefore required to ensure that the alternative solution meets the relevant performance requirements of the NCC 2022 Volume 1.

NCC 2022 Building Classifications:

Class 9b: Classrooms: “an assembly building, including a trade workshop, laboratory or the like, in a primary or secondary school, but excluding any other parts of the building that are of another class”.

Class 3: Dormitories and Staff Accommodation: “a residential building, other than a Class 1 or 2 building, which is a common place of long term or transient living for a number of unrelated persons. Example: a boarding house, hostel, backpackers accommodation or residential part of a hotel, motel, school or detention centre.”

Building Description:

The DA involves the construction of 3 new buildings: One will be two storey (D3) and two will be three storeys (D1 & D2). This development is part of The Scots College and will be used for Year 9 students from the school to live on-site for a period of 6-9 months each year and to undertake various outdoor activities and in-class learnings. In addition to the student accommodation and

classrooms, there will also be accommodation for the school staff (See Appendix A for floor plans of a typical 3 storey building). There is an existing 2 storey gym on the site as well.

The new buildings will contain the following space on each level:

- Level 1 (D1 & D2): 4 student classrooms plus, staff room & a bank of sanitary facilities including an accessible sanitary facility
- Level 2 (D1, D2 & D3): Student dormitories and Common Rooms
- Level 3 (D1, D2 & D3): Staff Accommodation consisting two bedrooms and a living room/kitchen

There are no passenger lifts provided between any of the levels. The access between the Classrooms and Dormitories appears to be via external pathways. The only access to the Staff Accommodation is via an internal stairwell from level 2.

As outlined in the Disabled Access Compliance Report (Dated 7th Nov 2024 V2) prepared by *Essential Access for this development*, Access is only required to one level of a Class 3. As Access is to be provided to level 2 dorms of each of the buildings, access is therefore not required to be provided to level 3 containing the teacher accommodation.

The 2-storey building (D3) will not contain any classrooms. They will consist only of the student dormitories and Staff accommodation.

Note: Even though the site plan shows additional new buildings (H1, H2, H3, H4 & H5), these will be part of a separate DA in the future and therefore do not form part of the scope of this report.

This performance solution assessment addresses the following matters and the related NCC Performance Requirements:

| Description of Non-Compliance | Applicable DTS Clauses - NCC | *Performance Requirement - NCC |
|---|------------------------------|--------------------------------|
| No CAPT to and between some buildings &/or levels | D4D2 & D4D3 | D1P1, D1P2 & D1P4 |

NB: * See definitions of Performance Requirements in Part 4 of this report.

Documents Referenced:

- NCC 2022 Vol.1 – (Applicable Access Provisions)
- Disability (Access to Premises – Buildings) Standard 2010
- AS 1428.1-2009 – General requirements for access – new building work

NB. The relevant Sections and Parts of each of each of these documents will be referenced in the main report below.

Drawings Referenced (Refer to Appendix A for plans):

- Architectural plans of proposed development by *Baxter & Jacobson Architects*:

(See Appendix A for plans)

| Sheet/Drawing # | Description | Issue Date | Issue/Status |
|---|----------------------------------|------------|--------------|
| Project No.: 433-06 Drawing Numbers: D101, D110-D113, D120, D121, D130-D132, D140, D201, D210-D213, D220, D221, D230, D232, D240, D301, D310, D311, D312, D320, D321, D330, D331, D340, WD01-WD05 (35 pages) | Floor plans, site and elevations | 10/10/2024 | 1 |

Abbreviations Table:

| Abbreviation | Definition |
|--------------|--|
| NCC | National Construction Code |
| BCA | Building Code of Australia |
| DAPS | Disability Access to Premises Standard |
| DDA | Disability Discrimination Act |
| CAPT | Continuous Accessible Path of Travel |
| DAPB | Designated Accessible Parking Bay |
| PPE | Principal Pedestrian Entrance |
| DTS | Deemed to Satisfy |
| DA | Development Application |
| CC | Construction Certificate |
| OC | Occupation Certificate |

Report Exemptions and Limitations:

- This report has been issued for a Development Application (DA) and is not suitable for an Occupation Certificate (OC).
- Essential Access is not responsible to ensure compliance is met and achieved during any building modifications.
- This report does not identify or include checks for the slip resistance of surfaces.
- This report is the copyright of *Essential Access* and has been prepared for the exclusive use and benefit of the client. It must only be used for the purpose that it was originally intended and must only be altered or updated by *Essential Access*.
- *Essential Access* is not responsible for any errors or omissions in the content of the report, or for the outcomes obtained from the use of the report.
- This report does not assess the development for compliance with:
 - The Disability Discrimination Act (1992)
 - Occupational Health and Safety Act
 - Structural Design and Engineering
 - Parts of the NCC and AS other than those Parts referenced in this report

3 ORGANISATIONAL RESPONSIBILITIES

Disability Discrimination ACT (DDA):

All organisations have the responsibility under the Disability Discrimination Act (DDA) to provide equitable & dignified access to goods and services and premises.

The DDA provides uniform protection against unfair treatment for persons with a disability. It also states that it is unlawful to discriminate against a person who is an 'associate' (such as a friend, carer or family member).

Disability is broadly defined and includes disabilities which are: physical, intellectual, psychiatric, cognitive or sensory or persons with a learning difficulty or physical disfigurement. This broad definition means that everyone with a disability is protected and that people with a disability have the same fundamental rights as the rest of the community.

The provisions of the DDA apply to employment, access to premises, education, provision of goods and services and the administration of Commonwealth laws and programs.

Therefore, to comply with the DDA, all business should provide equitable and dignified access. If equitable access is not provided, a complaint could be made under the DDA.

Disability (Access to Premises – Buildings) Standards 2010 (DAPS):

The *Disability (Access to Premises – Buildings) Standards 2010* was introduced with an updated Building Code of Australia (BCA) on May 1, 2011. These Standards are now legislated as the minimum requirements for new buildings or to buildings undergoing an upgrade in Australia.

These Standards provide building designers with information regarding the required access provisions for new or altered buildings.

The DAPS generally aligns with the NCC and reference a range of Australian Standards relating to access and other associated matters. The DAPS aim to provide certainty for the building industry in relation to meeting requirements for access in new and upgraded buildings.

National Construction Code 2022 (NCC):

The NCC in addition with the DDA applies to new buildings and buildings undergoing an alteration.

The NCC outlines the access requirements for different building Classes.

Sections of the NCC require compliance with a range of access provisions.

4 NCC ASSESSMENT METHOD AND DEFINITIONS

The National Construction Code (NCC) 2022 Vol. 1 details the options below (or a combination of them) as acceptable assessment methods to determine a Building Solution that complies with the Performance Requirements.

A Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of the following Assessment Methods:

- (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, form of construction or design that meets the relevant Performance Requirements.
- (b) Verification Method including the following-
 - (i) The Verification Methods in the NCC; or
 - (ii) Other Verification Methods, accepted by the appropriate authority that shows compliance with the Performance Requirements
- (c) Expert Judgement
- (d) Comparison with the Deemed-to-Satisfy Provisions

We have used the '**Expert Judgement**' assessment method for this Performance Solution.

5.1 Relevant Performance Requirements:

D1P1 Access for people with a disability

Access must be provided, to the degree necessary, to enable—

- (a) people to—
 - (i) approach the building from the road boundary and from any accessible carparking spaces associated with the building; and
 - (ii) approach the building from any accessible associated building; and
 - (iii) access work and public spaces, accommodation and facilities for personal hygiene; and
- (b) identification of accessways at appropriate locations which are easy to find.

D1P2 Safe movement to and within a building

So that people can move safely to and within a building, it must have—

- (a) walking surfaces with safe gradients; and
- (b) any doors installed to avoid the risk of occupants—
 - (i) having their egress impeded; or
 - (ii) being trapped in the building; and
- (c) any stairways and ramps with—
 - (i) slip-resistant walking surfaces on—
 - (A) ramps; and
 - (B) stairway treads or near the edge of the nosing; and
 - (ii) suitable handrails where necessary to assist and provide stability to people using the stairway or ramp; and
 - (iii) suitable landings to avoid undue fatigue; and
 - (iv) landings where a door opens from or onto the stairway or ramp so that the door does not create an obstruction; and
 - (v) in the case of a stairway, suitable safe passage in relation to the nature, volume and frequency of likely usage.

D1P4 Exits

Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to—

- (a) the travel distance; and
- (b) the number, mobility and other characteristics of occupants; and
- (c) the function or use of the building; and
- (d) the height of the building; and
- (e) whether the exit is from above or below ground level

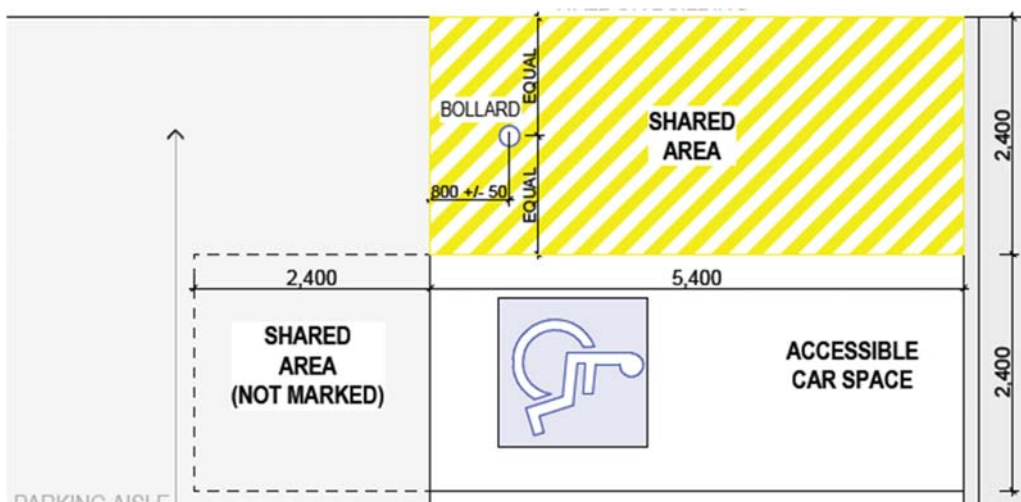
5.2 Proposed Performance Solution:

The proposed performance solution is to provide a Continuous Accessible Path of Travel (CAPT) to and between buildings D1, D2, D3 and the gym.

The objectives of this performance solution are to meet the following Performance Requirements and to provide access that is both dignified and equitable: **D1P1, D1P2 & D1P4**.

The following are the key factors that support the case that the relevant Performance Requirements of the NCC will be met (see a map of the proposed accessibility plan in Diagram 1 below):

- *Ensure the dedicated accessible parking bays be provided (in the locations indicated in Diagram 1 below) which meet the below specifications as per AS-NZS-2890.6-2009.*

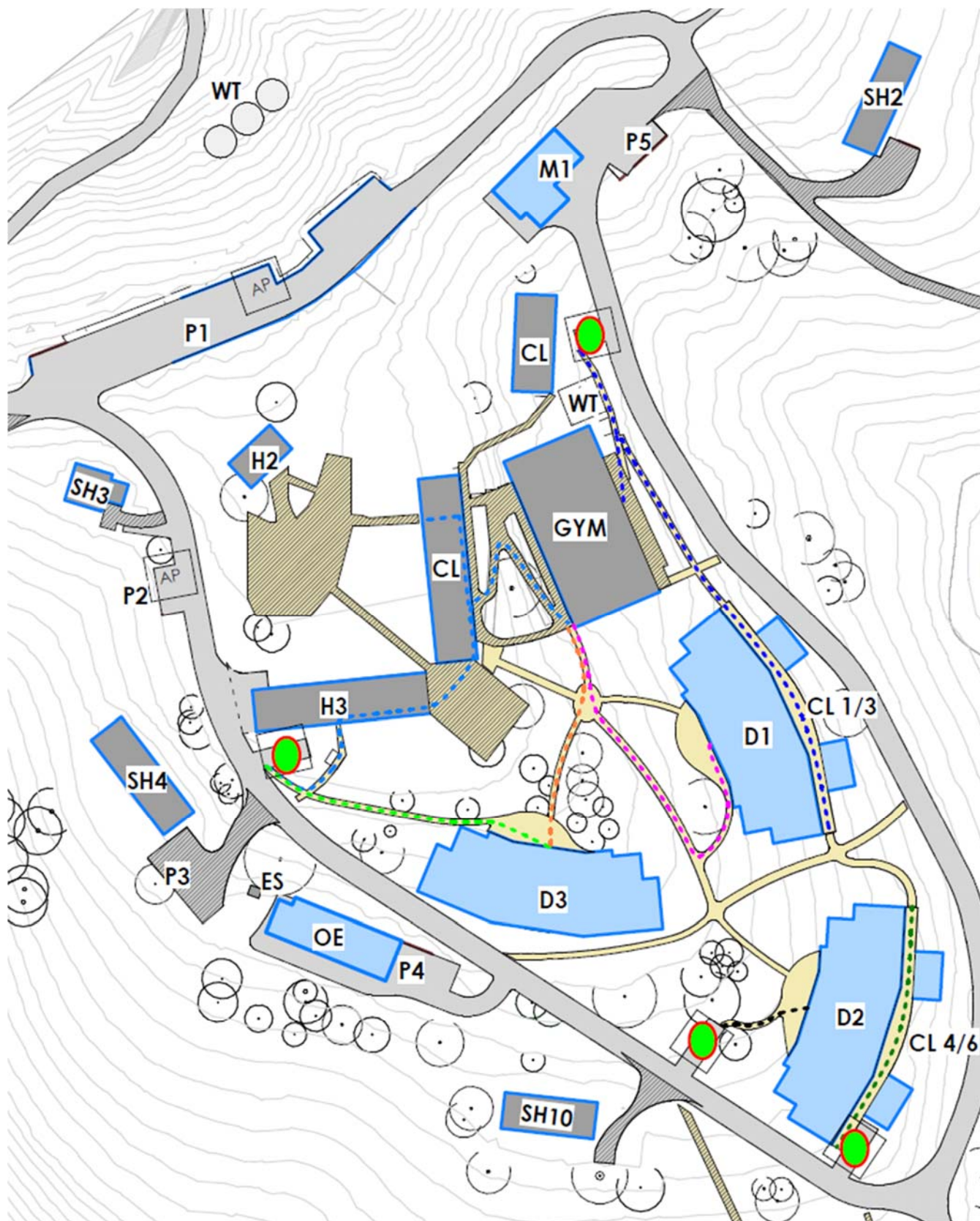


- *Ensure there is a CAPT from each of the designated accessible vehicle drop-off points to the Principal Pedestrian Entrances (PPE) of each building that meets the requirements of Part 6 of the AS1428.1-2009. This includes a flat and continuous path of travel on a slope no greater than 1 in 20 and not less than 1000mm wide.*
- *Due to the fact that level 2 of D1 and D3 are accessible, these will be prioritised for children with disabilities (over D2). There are 2 accessible dorm rooms in each of these buildings (with each room containing 4 beds). This equates to a total of 16 beds that are accessible.*
- *Ensure signage is installed at each of the accessible vehicle drop-off points (indicated on the map in Diagram 1 below) indicating that the bay is dedicated as an accessible dropout point and that permanent parking by other vehicles is not permitted.*
- *That a vehicle and driver be provided and available whenever students and/or teachers are staying at the site that is capable of the following. The vehicle must be capable of accessing all buildings and roads on the premise:*
 - *Accessibility: the vehicle is equipped with features such as a ramp or lift for entry and exit that accommodates a person in a wheelchair allowing them to board the vehicle without leaving their wheelchair.*
 - *The interior is designed to provide ample space to accommodate a wheelchair, ensuring that the wheelchair can be securely positioned within the vehicle*


- *The vehicle contains a specialised restraint system to ensure the occupant in a wheelchair is secured during transit*
 - *The vehicle needs to have the capability to traverse all parts of the site and consequently, may need to be 4WD.*
- *All staff and contractors shall be trained about the above process for transporting and accommodating student or teachers with a disability.*


Note: a (combined) statement has been prepared by Benjamin Williams - *Academic Coordinator* and the Deputy Principle – *Education, Planning and Review* of The Scots College stating both their commitment and strategy to providing fair and equitable access for all employees and children attending the site (see Appendix B at the end of this report).


Accessibility Plan (coloured lines indicate an Accessible path):




Key:


 Accessible parking Dorm 3 (AP) to Gym Mezz

 Accessible parking Dorm 3 (AP) to Dorm 3 (D3)

 Dorm 3 (D3) to Gym Mezz

 Dorm 1 (D1) to Gym Mezz

 Accessible parking Gym to Gym and Class 1/3 (CL1/3)

 Accessible parking Dorm 2 (AP) to Dorm 2 (D2)

 Accessible parking Dorm 2 (AP) to Class 4/6 (CL 4/6)



6m Wide Vehicle Access Roads



Designated Accessible Vehicle Drop-off Bays

6 CONDITIONS

1. All parties that have responsibility for the management of the building are aware of the existence and conditions of this Performance Solution. This would typically include (but not be limited to) parties including:
 - Persons responsible for development of the evacuation plan, the evacuation coordination procedures and the like;
 - Property and/or facilities management;
 - Construction and maintenance contractors;
 - Staff and teachers
2. Any staff employed will be inducted and trained in this Performance Solution.
3. This Performance Solution may no longer be valid if there is a change of circumstances and compliance with the relevant legislation will be required.
4. This Performance Solution is expected to be referenced on the Construction Certificate (CC) issued by the relevant building certifier and it acknowledges that all assumptions, recommendations and conditions of this report are adhered to as part of the occupation of the subject building.

7 CONCLUSION

In consideration of the related Performance Requirements (D1P1, D1P2 & D1P4) of the NCC 2022, the alternative solution is appropriate in consideration of:

- Flexible Class scheduling
- Appropriate on-site transport to and between each building: the school should provide details of this at DA stage.
- Dedicated accessible drop-off bays for persons with a disability to access the compliant pathways to each building

This Performance Solution has been reviewed and discussed with Access Matters. Barry Cotton is the Principle of Access Matters and concurs that the above performance solution suitably meets the relevant Performance Requirements of the NCC 2022 in regards to Access.

The following is a summary of Barry Cottons' qualifications and experience:

Barry Cotton:

- Member of the Association of Consultants in Access Australia (ACAA) - #721
- Diploma Access Consulting (Access Institute)
- Bachelor of Applied Science Building
- Graduate Diploma Town Planning
- LHA (Livable Housing Australia) - Access Institute
- Attainment in Building Surveying
- Over 20 years' experience in Building, Access & Town Planning

8 STATEMENT OF QUALIFICATIONS, EXPERIENCE AND CAPABILITY

Essential Access provides professional consulting services to clients in the field of disability access. With a comprehensive background in accessibility standards, national regulations and inclusive design principles.

Essential Access, led by Bruce Carr, provide tailored recommendations and strategies to improve accessibility and ensure compliance with relevant regulations and standards. Our expertise encompasses a wide range of areas, including architectural design review, facility access audits and inspections, disability compliance reports and performance solutions.

Bruce's commitment to accessibility extends beyond mere compliance, as he seeks innovative approaches to promote inclusivity and equal access for individuals with disabilities. His collaborative approach, attention to detail, and passion for creating barrier-free environments have earned him a reputation as a trusted advisor in the field.

Bruce is dedicated to advancing accessibility and advocating for universal design principles. His vast knowledge, practical experience, and unwavering commitment make him a valuable asset to any project or organization seeking to enhance disability access and create more inclusive environments.

Bruce's expertise and qualifications are:

- Associate member of the Association of Consultants in Access Australia (ACAA-722)
- Diploma Access Consulting (Access Institute)
- Bachelor of Commerce (Uni of Newcastle)
- LHA (Livable Housing Australia) - Access Institute
- Over 12 years' experience in the field of sustainable building design and access.



Prepared by *Bruce Carr*
Bruce Carr (Dip. Access)

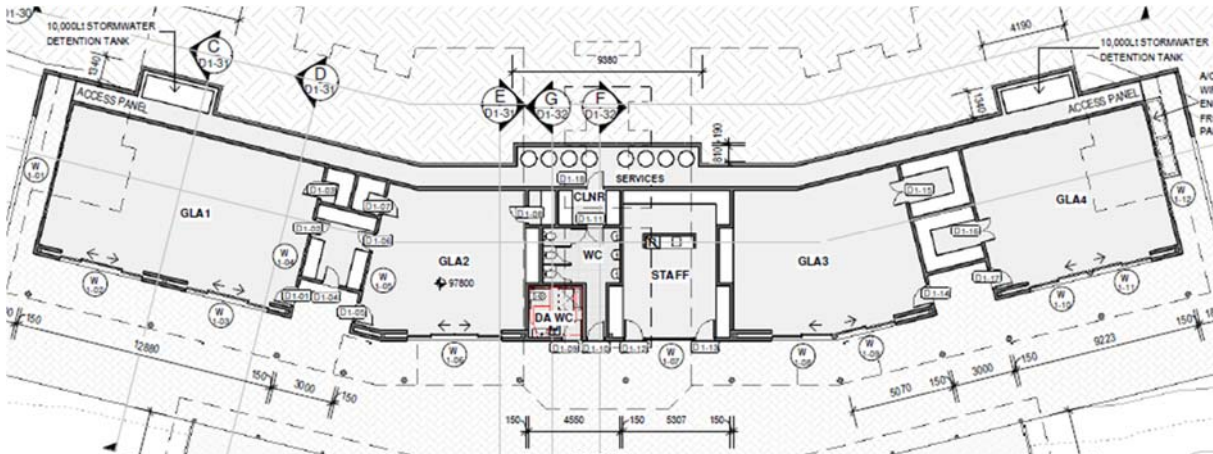
ACA Associate Access Consultant (Member # 722)



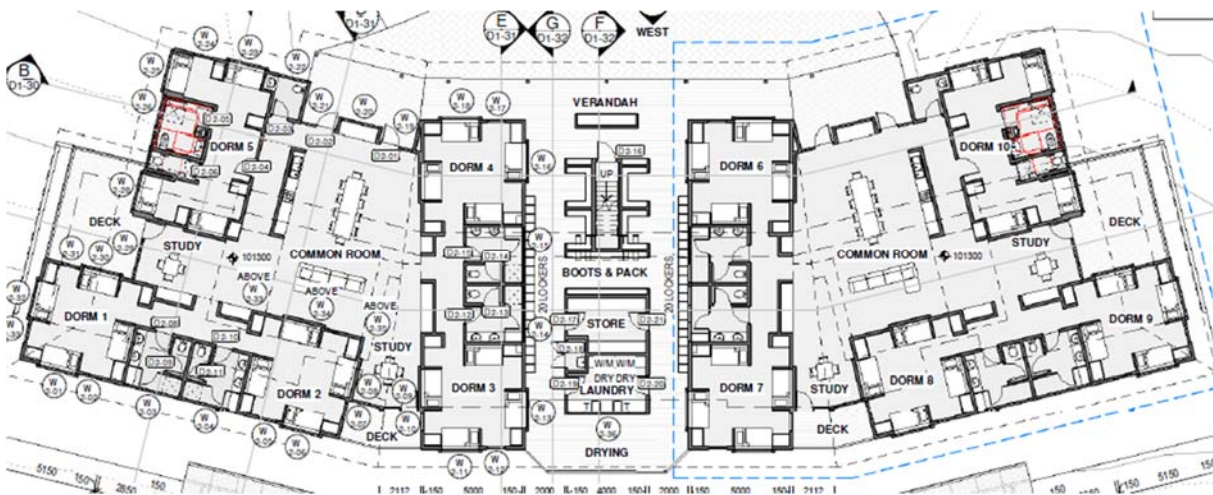
Reviewed by *B Cotten*
Barry Cotten (Dip Access):
ACA Associate Member (#711)
Bach Applied Science – Building

APPENDIX A: Floor Plans

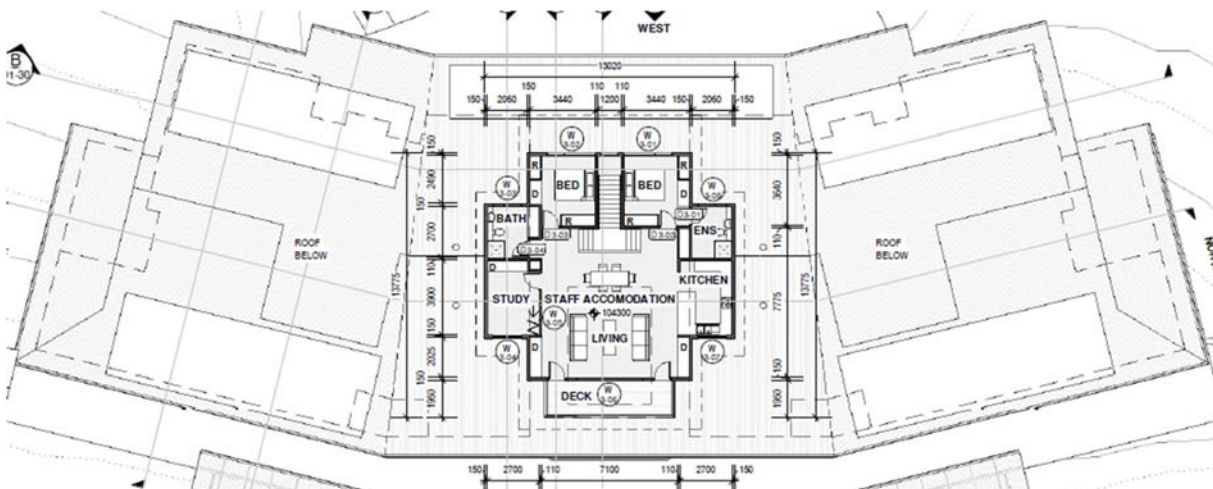
D1 Level 1:



D1 Level 2:



D1 Level 3:



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This detailed floor plan shows a residential building with the following layout:

- Entrance and Central Corridor:** A central corridor labeled "20 LOCKERS" runs vertically. To its left is a "VERANDAH" and a "STAIRS" area. To its right is a "STAIRS" area and a "DRYING" area.
- Dormitories:** There are 10 dorms labeled DORM 1 through DORM 10, arranged around the central corridor.
- Common Areas:** A "COMMON ROOM" is located on the left side, and a "STUDY" is located on the right side.
- Utility and Storage:** A "STORE" and "BOOTS & PACK" area are located near the central corridor. A "WIM WIM DRY DRY LAUNDRY" area is located at the bottom center.
- Other Features:** A "DECK" is located on the far left, and a "DRYING" area is located at the bottom center.
- Orientation:** A "WEST" arrow points towards the top left, and a "NORTH" arrow points towards the top right.

This architectural floor plan shows a house with a central living area and two bedrooms. The layout includes a living room with a fireplace, a kitchen, a bathroom, and two bedrooms. The plan also shows a deck, a study, and a staff accommodation. Dimensions are provided for various rooms and overall sections. The plan is oriented with West at the top and North at the right.

Rooms and Dimensions:

- Living Room:** 102'100"
- Bedroom 1:** 11'0"
- Bedroom 2:** 11'0"
- Bathroom:** 5'0"
- Kitchen:** 11'0"
- Study:** 11'0"
- Staff Accommodation:** 11'0"
- Deck:** 11'0"
- Roof Below:** 11'0"

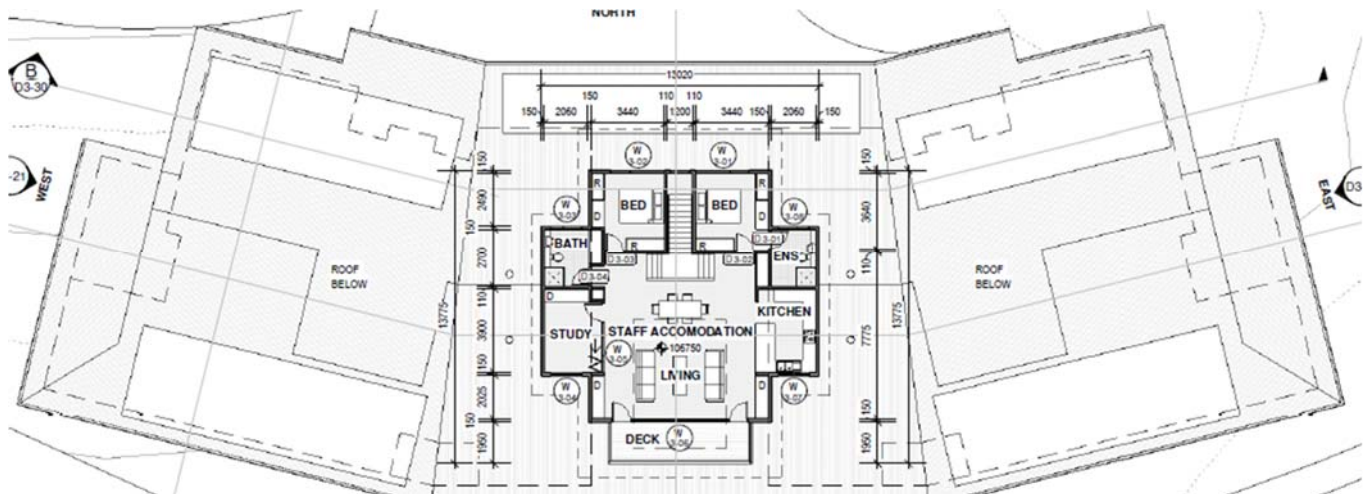
Overall Dimensions:

- Width:** 150', 2060', 150', 110', 110', 2700', 150'
- Depth:** 150', 2060', 150', 110', 110', 2700', 150'

D3 Level 2 (No L1 Classrooms):



D3 Level 3:



APPENDIX B: Statement from School



The Scots College Glengarry
369 Jacks Corner Road Kangaroo Valley
Design for Access re: New Staged Development

BJA are proposing a site access strategy as noted below and as per drawings.

In principle: path access to and between Dining, Kitchen, Common room, Dorms D1 & D3 plus the top level of the Gym.

Disabled access to the Dorm D2 and classrooms below D2 will be via vehicle drop off. Paths and steps are proposed for general access where gradients are too steep for 1 in 20 or 1 in 14 paths. Also, access will be via vehicle drop off to the lower level of the Gym. Lower level classrooms under D1 will not be universally accessible, only accessed by stairs or steeper paths.

Proposed:

- Vehicular access to arrival point at Kitchen & Dining level and then path access to the mid level of 2 of the 3 student Dorms
- Steps access only between Gym and D1 and between D1 + D2
- The classrooms under D2 will be accessible via vehicle/ UTV from the road and accessible drop off point
- Classrooms under D1 will not be accessible by ramps/ paths, only steps
- Classrooms are identical under D1 +D2 therefore the program can support flexible scheduling for students with mobility or other needs with classes held in D2, not D1. TSC Deputy Principal Peter Moulds confirms this is possible.
- The Gym at the lower level will be accessible by vehicle. No accessible path link is proposed to link the Gym and D1 lower level classroom. TSC P Moulds Deputy Principal advises that timetabling of classes can support this.

06/08/24



Peter Moulds

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Nominated Architect
D Jacobson # 4259
M Baxter # 4831

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I endorse comments made already by Peter and other staff. Under the Discrimination Act (1992) and the Disability Standards for Education (2005) we have a responsibility to offer educational opportunities to all students (regardless of disability) on the same basis. As Glengarry is a non-optional aspect of their education, this means our program will need to be accessible for all students moving forward. While what our adjustments look like will vary depending on the individual student and their level of ability, our program can and will cater for all students. Some examples in the past: higher staff to student ratios, timetabling changes to accessible classrooms and dorms, time set aside in the timetable for neurodivergent students, small group instruction, etc.

We will need to update our vehicles to suit, but I'd imagine this will come along with the update to buildings. I think Electric UTVs would be perfect - and fine for transporting students who need wheelchair access.

<https://mobilityquad.com/>

Ramps/accessible entries and exits for the dorm that is set up according to UD principles makes perfect sense. We will be able to control where the students with disabilities are (dorms and classes).

Access to natural/outdoor sites can be done by vehicle, but also can be adjusted according to need.

Our staff and OE staff can be used to assist movement around campus and can undertake extra training as part of our on-going professional development and commitment to a fully inclusive school.

07/08/24

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The Scots College
Sydney Australia

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End of Report



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