



CONRAD GARGETT ANCHER MORTLOCK WOOLLEY

SMALLS ROAD, RYDE PUBLIC SCHOOL

ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL

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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in the design development of the proposed Smalls Road, Ryde Public School and an appropriate response to the AS1428 series, Building Code of Australia (BCA), and ultimately the Commonwealth Disability Discrimination Act (DDA).

Morris-Goding Accessibility Consulting has prepared the Access Report to provide advice and strategies to maximise reasonable provisions of access for people with disabilities.

The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas and toilets comply with relevant statutory guidelines.

In general, within the building there are accessible paths of travel that are continuous throughout. In line with the report's recommendations the proposed development has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access and accessible sanitary facilities, can be readily achieved.

The recommendations in this report are associated with schematic design. These recommendations should be addressed in the further development of the proposal.

2. INTRODUCTION

2.1. General

Conrad Gargett Ancher Mortlock Woolley has engaged Morris-Goding Accessibility Consulting, to provide a design review of the proposed new Public School located at Smalls Road, Ryde.

We understand that the current development proposal includes construction of a new building to accommodate students and staff of the school as well as members of the public visiting the school. Site linkages providing connections from the new development to the Smalls Road site boundary and the existing car park on the school grounds have also been indicated. Playing fields and retention of existing hard stand surfacing are shown on the current site plan. A series of external pathways and walkways provide linkages to these areas.

From the current plans, it appears the school will consist of separate building modules, each designed for a specific functional area (including administration, library, etc), which are located on three levels of self-contained, doughnut shaped open air platforms. Each building is orientated to face the open corridor around the inner circle of the platform structure, with various stairways and two passenger lifts providing vertical circulation. The corridors serve as pedestrian links connecting all individual building modules and spaces located on these open platforms.

The requirements of the investigation are to:

- Review supplied design drawings of the proposed development,
- Provide guidance for the provisions of disability design of the development, and
- Recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS 1428 series.

2.2. Objectives

The report considers user groups such as staff, students and visitors. The Report attempts to deliver equality, independence and functionality to people with disabilities inclusive of:

- ✘ People with sensory impairment (hearing and vision)
- ✘ People with mobility impairments (ambulant and wheelchair)
- ✘ People with dexterity impairments

The Report seeks to provide compliance with the DDA. In doing so, the Report attempts to eliminate, as far as possible, discrimination against persons on the ground of disability.

2.3. Limitations

This report is limited to the accessibility provisions of the building in general. It does not provide comment on detailed design issues, such as: internals of accessible/ambulant toilet, fit-out, lift specification, slip resistant floor finishes, door schedules, hardware and controls, glazing, luminance contrast, stair nosing, TGSI's, handrail design, signage, hearing augmentation etc. that will be included in construction documentation.

2.4. Statutory Requirements

The following standards are to be used to implement the Report:

- Federal Disability Discrimination Act (DDA)
- DDA Access to Premises Standards 2010
- BCA – Building Code of Australia 2016 (Part D3, E3, F2)
- AS 1428.1:2009 (General Requirements for Access-New Building Work)
- AS 1428.2:1992 (Enhanced and Additional Requirements – Buildings and Facilities)
- AS 1428.4.1:2009 (Tactile Indicators)
- AS 2890.6:2009 (Parking Facilities)
- AS 1735.12:1999 (Lifts, Escalators, & Moving Walks)
- City of Ryde Council DCP 2014
- Educational Facilities Standards and Guidelines (NSW Government – Department of Education) – DG19 Access for People with Disabilities

3. INGRESS & EGRESS

With the proposal to develop a new public school, DDA Premises Standards requires that accessways be provided from the school's main pedestrian entry points along the site boundary, as well as from the accessible car parking space/s to be provided on the school grounds as well as between accessible buildings on the allotment that are connected by pedestrian links. Within the new development, access will be required to and within all areas normally used by the occupants, which includes staff, students and visitors, in accordance with the DDA Access to Premises Standards 2010.

3.1. Site Linkages

External paths have been indicated on the current plans which provide connections from the Smalls Road site boundary to various arrival spaces at the school at Ground Level. These arrival spaces include the area between Staff and Admin modules, the area between the Hall and the Library module, and the area between the Library and Admin module (the most visible and prominent entry). These three spaces are also in turn connected by walkways.

At present there is limited information describing levels, gradients, and widths of these various connections, although on the basis of the current layouts compliance with AS1428.1 and AS1428.2 would appear achievable.

An additional pedestrian site entrance from Lavarack Street via Henri Dunant Park has been introduced to the scheme. Clarification is required on the condition of the existing surfaces associated with this entrance and relied on for path of travel. It would appear that the existing hardstand inside the school is mostly retained with an existing driveway linking with new walkways which follow the curvature of the building on the northern side. It is not clear if this entrance is to be managed to only be active before and after school hours (i.e. closed throughout the day for security reasons).

At present there is limited information describing levels, gradients, and widths of both the new and existing pathways. Compliance with AS1428.1 and AS1428.2 would appear achievable however clarification is required, particularly on the issue of gradients.

Recommendations:

- (i) Ensure level and continuous access compliant with AS1428.1 is provided between the new building (both public and school access entry lobby) and the Smalls Road school gate/s and an onsite accessible car parking space within the existing car park.
- (ii) Ensure level and continuous access compliant with AS1428.1 is provided between the new building (both public and school access entry lobby) and the alternative site entrance from Lavarack Street (this will involve review of suitability of existing surfaces retained).
- (iii) Update the plans with additional details showing the transition between the building entrances and the external pathways which are connected to the school gates and the car park. Also provide RLs and gradients of the external pathways connected to the building entrances.

3.2. Main Entrances

Currently there are two main entrances to the building at Ground Level: the main school entry lobby (located between Administration and Library) and the public access entry (located between Library and Hall). The circulation space available in both areas is generous to facilitate accessible entrances as required by the DDA Premises Standards and AS1428.1.

There is an alternate entry from the existing car park, between staff and the administration buildings. A curved walkway provides access from this location to the school main entrance however it is understood that the stair in this location will be complemented by the nearby passenger lift through an update in the configuration for a through-type car.

The open corridors are assumed to be level and all pedestrian entrances into each individual building module can achieve access provided AS1428.1-2009 doorway sizes and doorway circulation spaces are planned into the development.

Recommendations:

- (i) Ensure accessways compliant with AS1428.1 are provided to and through the principal pedestrian entrances to the school (including the public access entrance point to the school gate on Smalls Road) and to each separate building module and a minimum 50% of all pedestrian entrances. Where there is a pedestrian entry which is not accessible for a person using a wheelchair, ensure that another accessible entry will be provided within 50m from the non-accessible entrance.
- (ii) Refer to 4.2 for recommendations regarding doors to individual building modules.

3.3. Emergency Egress

It is understood that a fire engineering solution will be provided to enable non-fire isolated stairways to be provided in lieu of the fire isolated stairways for a class 9b building with a rise in storeys of 3. As these are non-fire isolated stairways, they are required to be designed in full compliance with AS1428.1 including provision for handrails to both sides, stair nosing strips, closed risers and tactile ground surface indicators (TGSIs). See Section 4.4 Stairs.

Unassisted emergency evacuation will only be available from the ground floor.

Recommendations:

- (i) Update drawings to clearly indicate design details for each stairway intended to serve as means of egress including all access features in compliance with AS1428.1, including handrails, stair nosing, TGSIs etc. See Section 4.4 Stairs.
- (ii) Consideration should be given to ensuring any emergency system installed within the school will also include audible and visual warnings to assist people with sensory disabilities (advisory).

4. PATHS OF TRAVEL

4.1. General

From the pedestrian entrances of the new school, suitable access pathways and clearances to all other areas within the development via the passenger lifts and corridor spaces, appropriate for wheelchair manoeuvrability compliant with AS1428.1, AS1428.2, AS1735.12 and the DDA Premises Standards are achievable.

The lift lobbies on all levels of the development appear to have sufficient circulation space to allow two wheelchair users to pass each other (at least 1800mm) compliant with AS1428.1 and AS1428.2 and the DDA Premises Standards.

The ends of the corridors on all floors have suitable width (at least 1550mm) to allow wheelchair users to perform 180° turns. There are appropriate passing bays suitable for wheelchair users to pass one another.

The internal layouts for the homebase areas and the administration and staff rooms indicate that circulation spaces and doorway design generally address AS1428.1 provisions.

Any level changes within the individual building modules will need to be designed to comply with AS1428.1. In particular, provide design details for ramps and walkways to provide a continuous accessible path of travel to and within all areas in the hall, including onto the stage.

4.2. Doors

Generally the doorways shown on the layouts comply with the clear opening width and circulation requirements of AS1428.1. Some double leaf doors do not currently offer the required minimum clear opening width at the active leaf and minor rebalancing, or widening is required. Some bifold doors proposed in the staff area require design review to ensure that they comply with AS1428.1. This may be achieved by providing a single hinged door in addition to the bifold doors to each area.

Recommendations:

- (i) All doorways to areas required to be accessible, to have at least 850mm min. clear width opening with door circulation in compliance with AS1428.1 requirements.
- (ii) Care is required in designing joinery and services installations around doorways to ensure minimum 530mm latchside clearance will be provided clear of any obstruction.
- (iii) Ensure all bifold doors proposed in both staff and class room areas are provided with a single swing out door designed in full compliance with AS1428.1.

4.3. Lifts

The development proposes two separate passenger lifts to serve all levels of the building. The provision of these lifts and their location in the layout is viewed as sufficient to provide equitable access to and within all areas of a development of this size.

The lifts provide an appropriate continuous accessible path of travel from the ground floor entry level to all floors above.

Recommendations:

- (i) As total vertical travel is less than 12m ensure the passenger lifts have minimum internal dimension of not less than 1100mm W x 1400mm D.
- (ii) Provide lift design details in full compliance with AS1735.12:1999. Include all relevant dimensions and fitout specifications at CC Stage.

4.4. Stairs

The building is served by four principal external stairways which connect all levels of the building for communications purposes and which also serve the building egress requirements in lieu of fire isolated stairways.

In addition to these main stairs there are also other stairs throughout the development including the Library internal stair, stairs associated with outdoor assembly / learning areas, the stair accessing the Hall stage, the stair which provides a link only between Ground Level and Level 1 only on the southern end of the building, and the stairs associated with external walkways on the northern side of the building.

Further design review will be required to reflect the requirements of the fire engineering solution required to enable the use of non-fire isolated stairways in this development and this will be addressed by the BCA consultant and Fire Engineer. Aside from this, at a minimum the stairs are required to be designed and constructed in accordance with AS1428.1 (and AS1428.2 under EFSG). This is considered achievable with further design development.

Recommendations:

- (i) Review of the stair configuration is required to ensure consistent height handrails can be maintained throughout stairways (flights and landings), compliant with AS1428.1 Figure 28. This can be achieved by off-setting the tread at the base of each stair flight and/or extending length of the landing, so that the handrail can extend without reducing required egress path. Provide details at CC Stage.
- (ii) In accordance with the DDA Premises Standards all stairs will be required to be designed in full accordance with relevant parts of AS1428.1 (and AS1428.2 under EFSG) which will include handrails to both sides, TGSIs, and suitable nosing strips and closed riser faces. Note BCA Clause D2.17 requirement that in a class 9b building used as a primary school, one handrail is to be fixed at a height of not less than 865mm and the second handrail at a height between 665mm and 750mm, measured above the nosing of stair treads). Provide details at CC Stage.

4.5. Ramps

The only ramp known to exist in the scheme is to be found in the Hall accessing the stage. All other pathways which negotiate level change throughout the scheme are understood to be via walkways at maximum 1:20 grade, compliant with AS1428.1. This should be confirmed.

Although all of the required features of the ramp such as handrails both sides and TGSIs are not yet shown at this stage, compliance is considered achievable and will be detailed at CC Stage.

Recommendations:

- (i) Provide details of compliance of the Hall stage ramp with the requirements of AS1428.1. Provide details at CC Stage.

4.6. Walkways

Apart from the stairs and the passenger lifts all vertical level change throughout the development is proposed to be via 1:20 maximum grade walkways.

Generally these are shown in compliance with AS1428.1 however amendments are required to introduce additional mid-landings of 1200mm minimum length as walkway flight length is limited to 15m, and this has been exceeded in some areas. Amendments are also required to the walkway which links the car parking area with the building entrance. This must be widened to be 1800mm minimum clear to permit wheelchair passing.

Generally further information is required to confirm levels of landings and walkway flight length.

Recommendations:

- (i) Provide details of compliance of the walkways throughout the scheme with the requirements of AS1428.1, including amendments where required. Provide details at CC Stage.

5. SANITARY FACILITIES

5.1. Accessible Toilets

There is a continuous accessible path of travel to the accessible WCs located on each floor of the school building via the passenger lifts.

Clarification is required regarding whether separate sanitary facilities will be provided within the hall given the intent to separate the general public from the school population.

The DDA Premises Standards requires that unisex accessible WCs be provided in accessible parts of the building in accordance with Part F2.4. Considering the overall size of the school contained within the open plan platforms and the variety of functions, it is recommended that accessible unisex facilities be provided to cater for different occupant groups, such as students, staff and volunteers as well as visitors to the school.

It appears the accessible WCs shown on the current plans have suitable internal dimensions for a layout in compliance with AS1428.1.

The balance of left hand and right hand transfer WCs must be evenly distributed throughout the development. This has been achieved.

Recommendations:

- (i) Consideration should be given to the different building functions and user groups to ensure convenient access to the unisex accessible WC from each part of the school.
- (ii) Provide detailed plans and elevations for each typical accessible unisex toilet provided in the building demonstrating circulation space and fitout requirements of AS1428.1-2009. Provide details at CC Stage.
- (iii) Clarify whether sanitary facilities are proposed within the Hall area. If provided, an accessible facility will also need be provided.

5.2. Ambulant Cubicles

Under the DDA Premises Standard there is a requirement for facilities suitable for the use of a person with ambulant disabilities at each bank of toilets that is located adjacent to an accessible toilet facility to satisfy Part F2.4. The layouts show that suitable provision has been made to satisfy the requirements with indicative ambulant compartments shown as required. There are also additional ambulant compartments shown in addition to the minimum requirements.

Recommendations:

- (i) Provide drawings including detailed plans and elevations for each ambulant toilet demonstrating circulation space and fitout requirements of AS1428.1-2009. Provide details at CC Stage.

6. AMENITIES AND COMMON FACILITIES

6.1. Car Parking

The drawings describe the reuse and reconfiguration of the existing car parking area to the site on the north-west corner. This existing car park is also extended in a southerly direction to occupy the partial footprint of an existing building to be demolished. There is existing hardstand area at the southern end of the site, presently used for parking and largely retained in the scheme. There is not expected to be any car parking provision in the area included with the new development as the vehicular access roads to this area are effectively severed by the footprint of the new building.

The layout of the car park provides for 47 total car parking spaces, including 2 accessible car parking spaces in compliance with AS2890.6. This is compliance with the BCA and DDA Premises Standards which requires that 1 accessible car parking space be provided for every 100 car parking spaces or part thereof provided for a school building.

The accessible car parking spaces are located close to the building main entrance.

Recommendations:

- (i) Accessible car spaces are to be 2.4m width x 5.4m in length with shared area of the same dimensions (bollard protected) as required by AS2890.6

6.2. Hearing Augmentation

Recommendations:

- (i) As a Class 9b school building, hearing augmentation is required in the following areas if an inbuilt amplification system is to be installed (except one used only for emergency warning systems only):
 - Hall
 - Assembly area
 - All new learning areas in the new building
 - Any service counters screened to the public (e.g. reception)

6.3. Wheelchair Seating Spaces

Wheelchair seating spaces complying with AS1428.1 will be required in the Hall if fixed seating is to be provided in accordance with the DDA Premises Standard. It is assumed that in a school assembly building fixed seating is unlikely to be provided. However provisions to accommodate spaces for wheelchair users such as a generic seating plan which incorporates a minimum number of wheelchair spaces based on Table D3.9 of the Access Code is desirable based on best practice considerations. This is also applicable to the covered assembly area proposed at Ground Level.

Recommendations:

- (i) Clarify whether fixed seating is proposed for any part of the Hall.

- (ii) Consider providing a generic plan for the Hall which incorporates allocated spaces for wheelchairs in line with the DDA Premises Standard provisions as a guideline (advisory).

6.4. Outdoor Common-use Facilities and Open Areas

Existing hard stand area to the south-east corner of the site is proposed to be repurposed as a games court. A public playing field, understood to be routinely used by the school, is located east of the site. The remaining parts of the grounds are shown as a partially cleared grassed area. At present a series of new and existing pathways provide linkages to these areas. As described in an earlier section of this report it will be necessary to confirm the gradients and widths throughout for compliance with AS1428.1. as well as the surface condition of existing pathways retained.

Recommendations:

- (i) External paths providing connection from the school building to the various common-use facilities located in the school grounds will need to be provided to address the DDA Premises Standards (access required to and within all areas) and to support DDA and best practice principles. Note: soft landscaped surfaces are not considered traversable for a person using a wheelchair or with ambulant disability.

6.5. Lighting

Recommendations:

- (i) In general the maintenance illumination levels should be 150 lux for paths of travel, corridors and stairs. Ensure all lighting levels comply with AS1680.

6.6. Signage

Recommendations:

- (i) Signage to comply with the DDA Premises Standards and BCA part D3.6.