

# Aver

Moriah College, Redevelopment - Queens Park Road, Queens Park

Access Review – Final v1

04 October 2019



REPORT REVISIONS				
Date	Version	Drawing No / Revision		
20.08.19	Draft	Schematic Design set – Issued for Review (dated 8.08.19)		
		Project reference: MCMSC		
24.09.19	Final	Preliminary DA Set – Issued for Review (emailed 24.09.19)		
		Project reference: MCMSC		
04.10.19	Final v1	Preliminary DA Set – Issued for Review (emailed 30.09.19)		
		Project reference: MCMSC		
		Prepared by Fjmt		

This report is prepared by:

Jhoana Colorado Access Consultant

Morris Goding Access Consulting



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# Executive Summary

The Access Review Report is a key element in the design development of the redevelopment of Moriah College located at Queens Park and an appropriate response to the AS1428 series, Building Code of Australia (BCA), DDA Access to Premises Standards (including DDA Access Code) and ultimately the Commonwealth Disability Discrimination Act (DDA).

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

The review will ensure that ingress and egress, paths of travel, circulation areas, and sanitary facilities comply with relevant statutory guidelines, and in addition, compliance with a higher level of accessibility and inclusiveness benchmarks set by the project.



# 2. Introduction

## 2.1 Background

Aver has engaged Morris Goding Access Consulting, to provide a design review of schematic design set of drawings, located at Queens Road. The development consists of redevelopment of the college.

- Re-orienting of the college campus to face Baronga Avenue.
- New Stem building, learning technology classrooms and applied science (TAS) rooms.
- Increasing the school student population from 1600 to 1840.
- Increase the ELC student population from 80 to 130
- Creation of rooms for relevant parties including the school principal, Moriah Board and other relevant stakeholders.

The proposed development falls under a number of BCA classifications:

- Class 7a (Carpark)
- Class 9b (College)

The requirements of the investigation are to:

- Review supplied drawings of the proposed development;
- Provide a report that will analyse 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), relevant Australian Standards, and enhanced benchmark requirements set by the project.

## 2.2 Objectives

The Report seeks to ensure compliance with statutory requirements and enhanced benchmark requirements set by the project. The Report considers user groups, that includes students, staff, and members of the public. The Report attempts to deliver equality, independence and functionality to people with a disability inclusive of:

- People with a mobility impairment (ambulant and wheelchair);
- People with a sensory impairment (hearing and vision); and
- People with a dexterity impairment

The Report seeks to provide compliance the Disability Discrimination Act 1992. 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, TGSIs, handrail design, signage etc. that will be included in construction documentation.

## 2.4 Accessibility of Design

The proposed design will utilise the Federal Disability Discrimination Act (DDA), Disability (Access to Premises – Buildings) Standards 2010, BCA/DDA Access Code, Universal Design principles, the AS 1428 Series, and other design guidelines, to develop appropriate design documentation, to provide reasonable access provisions for people with disabilities.

The design will be developed to ensure the principles of the DDA are upheld. Under the DDA, it is unlawful to discriminate against people with disabilities in the provision of appropriate access, where the approach or access to and within a premise, makes it impossible or unreasonably difficult for people with disabilities to make use of a particular service or amenity.

## 2.5 Statutory Requirements

The statutory and regulatory guidelines to be encompassed in the developed design to ensure effective, appropriate and safe use by all people including those with disabilities will be in accordance with:

- Federal Disability Discrimination Act (DDA);
- Disability (Access to Premises Buildings) Standards 2010;
- Building Code of Australia (BCA) Part D3, F2, E3;
- AS 1428.1:2009 (General Requirement for Access);
- AS 1428.4.1:2009 (Tactile Ground Surface Indicators);
- AS 2890.6:2009 (Parking for People with Disabilities);
- AS 1735.12:1999 (Lift Facilities for Persons with Disabilities);
- Waverley Local Council DCP

Please note that there are also additional advisory standards (not currently referenced by BCA or DDA Premises Standards) as well as other relevant guidelines that will be considered, as relevant to promote equity and dignity in line with over-arching DDA principles and aspirational objectives. These include:

- Universal Design Principles;
- Human Rights Commission (HEREOC)
- Advisory Note February 2013 on streetscape, public, outdoor areas, fixtures, fittings and furniture:



- AS1428.2:1992 Enhanced and Additional requirements;
- AS1428.4.1 Draft Way-finding Standard;
- AS3745:2010 Planning for Emergencies in Facilities (to assist with design strategies for provision for escape for people with disability that may require assistance).



# 3. General Access Planning Considerations

The Disability Discrimination Act 1992 (DDA) is a legislative law that protects the rights of all people. The Act makes disability discrimination unlawful and promotes equal rights, equal opportunity and equal access for people with disabilities. The Australian Human Right Commission is the governing body who control and enforce DDA compliance.

Nevertheless, building elements that provide insufficient accessible provisions for people with disabilities remain subject to the DDA. The improvement of non-compliant building elements and areas to meet current access requirements will mitigate the risk of a DDA complaint be made against the building owner.

Since the 1st May 2011, the Commonwealth's Disability (Access to Premises – Buildings) Standards 2010 (DDA Premises Standards) apply to all new building works and to affected parts of existing buildings.

The DDA Premises Standards' requirements (DDA Access Code) are mirrored in the access provisions of the BCA. New building work and affected parts must comply with the DDA Premises Standards and AS1428.1-2009 in the same manner as they would comply with the BCA by meeting deemed-to-satisfy provisions or by adopting an alternative solution that achieves the relevant performance requirements.

By utilizing AS 1428 suite of Standards, the overall aim is to provide continuous accessible paths of travel to connect the proposed development to and through public domain areas and between associated accessible buildings in accordance with the DDA Access Code.

MGAC supports the use and consideration of universal design (UD) principles into the design to maximize access for all people. We will assist the design team to incorporate UD principles where possible within the project, while still meeting mandatory compliance requirements.

Universal design principles consider the needs of a broad range of people including older people, families with children and pushing prams, people from other cultures and language groups, visitors in transit and people with disability. By considering the diversity of users, the design will embed access into and within it, so that benefits can be maximized, without adding on specialized 'accessible' features that can be costly, visually unappealing and may perpetuate exclusion and potential stigma.

The seven key Universal design principles to consider in the on-going design include:

- Principle 1: Equitable Use

- Principle 2: Flexibility in Use

- Principle 3: Simple and Intuitive Use

Principle 4: Perceptible Information

Principle 5: Tolerance for Error

Principle 6: Low Physical Effort

Principle 7: Size and Space for Approach and use



# 4. Ingress & Egress

## 4.1 External Linkages

The BCA and DDA Premises Standards contain requirements for site approaches for the use of persons with disabilities. These requirements can be summarised as follows:

- An accessible path of travel from the main pedestrian entry points at the site allotment boundary to all building entrances compliant with AS1428.1:2009.
- An accessible path of travel between buildings (or parts of buildings) that are connected by a pedestrian linkage, within the site allotment boundary, compliant with AS1428.1:2009 is also required.
- An accessible path of travel to building entrances (required to be accessible) from associated accessible car-parking bays, compliant with AS1428.1:2009 is required.

#### Assessment

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

### 4.2 Entrances

The BCA and DDA Premises Standards contain requirements for building entry for the use of persons with disabilities. These requirements can be summarised as follows:

- Access through at least 50% of entrances, including the principal pedestrian entrance/s to all buildings or parts of buildings (ie. when they have a separate function and/or use eg. external retail tenancy). Note it is preferred that all entrances are accessible.
- A non-accessible entry located no more than 50m distance from an accessible entry (for buildings greater than 500m2).
- All accessible doors with 850mm min. clear width opening and suitable door circulation area, compliant with AS1428.1:2009.
- An accessible path of travel eg. ramp or lift provided adjacent (or in reasonable proximity) to any stair access. Note: providing choice of access route directly adjacent so that people can start and finish in the same location/travel similar route promotes inclusion and UD principles.

### Assessment

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 4.3 Emergency Egress

BCA 2016 Part D2.17 has requirements for all fire-isolated egress stairs from areas required to be accessible (not communication stairs) to include at least one continuous handrail



designed to be compliant with AS1428.1 Clause 12. Provision of an off-set tread at the base of stair flights or an extended mid-landing that will allow a 300mm extension clear of egress route is considered appropriate for achieving a consistent height handrail (without vertical or raked sections). Such an off-set tread configuration has been shown at the majority of stairs and would appear to be possible elsewhere, subject to further detail design.

Where fire-isolated egress stairs will also be used for communication stair purposes between levels, they should be designed to meet AS1428.1:2009. Confirmation is required on the likely use of certain stairs for this purpose.

There is currently no mandatory requirement within BCA or DDA Premises Standards for provision of independent accessible egress for people with a disability in accordance AS1428.1 and this remains an important DDA issue. Consideration of an accessible egress strategy with emergency evacuation plan will be needed as a minimum starting point.

Consideration of management systems and fire wardens for emergency egress for people with disabilities.

### Assessment

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.



# Paths of Travel

### 5.1 Circulation Areas

The BCA and DDA Premises Standards contain requirements of circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair passing bays (1800mm width x 2000 length) when a direct line of sight is not available and are to be provided at 20m max. intervals along access-ways.
- Turning spaces (at least 1540mm W x 2070mm L) within 2m of every corridor end and at 20m.max intervals along all access-ways. This is needed for wheelchairs to make a 180 degree turn, compliant with AS1428.1:2009.
- All common-use doors (ie. not excluded under Part D3.4) with 850mm min. clear width opening (each active door leaf) and suitable door circulation area, compliant with AS1428.1:2009.
- All common-use corridors and accessible paths of travel with at least 1000mm min.
   width when travelling in linear direction Note: Increased clear width paths of travel required for doorway circulation, turning areas etc.

#### Assessment

Ensure sliding doors have suitable latch side clearance. (Refer to markup).

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

## 5.2 Passenger Lifts

The BCA and DDA Premises Standards contain requirements for passenger lifts and circulation areas for the use of persons with disabilities. These requirements can be summarised as follows:

- Passenger lifts with minimum internal size at floor of 1400mm width x 1600mm depth in compliant with BCA/DDA Access Code Part E3.6 and AS1735.12.
- All lift lobbies and main corridors on each level with 1800mm min. clear width to allow two wheelchairs ability to space pass each other.

### Assessment

The lifts provide a continues accessible path of travel to and from all areas on all floors are compliant with BCA and DDA Premises Standards.

MGAC has reviewed the drawings and documentation in relation to the above mentioned requirements. On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.



# 5.3 Stairs & Ramps

The BCA and DDA Premises Standards contain requirements for stairs and ramps for the use of persons with disabilities. These requirements can be summarised as follows:

- Ramps to have maximum 1:14 gradient with landings at no more than 9 metre intervals
- Ramps with handrails on both sides with minimum 1 metre clearance in accordance with AS1428.1
- Landings to be 1200mm length with 1500mm length at 90 degree turns
- Stairs handrails on both sides in accordance with AS1428.1
- Stairs and ramps with offset to ensure no encroachment of handrail extensions into from transverse path of travel at top and bottom of stair/ramp

### Assessment

All common stairs are to comply with AS1428.1 Clause 11. Allow enough space in all common use stairs for compliant TGSI and handrails extensions.

Ensure ramp on Upper Ground Floor Plan is no higher than 3.6m and comply with AS1428.1 Clause 10.3.

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.



# 9. Facilities & Amenities

## 9.1 Sanitary Facilities

The BCA and DDA Premises Standards contain requirements for sanitary facilities suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- For Class 7a, 9b: At least 1 unisex accessible toilet, adjacent to every bank of toilets (where provided) on each storey, compliant with AS1428.1 under BCA/DDA Access Code part F2.4. If more than 1 toilet bank provided on each level, accessible toilet is required at 50% min. of toilet banks at each level.
- For Class 9b: If common-use change facilities provided (ie. both toilets and showers) a separate combined accessible WC/shower adjacent to male and female change rooms is required, compliant with AS1428.1 under BCA/DDA Access Code Part F2.4.
- An even number of left hand (LH) and right hand (RH) transfer WC pans (accessible toilets) within the building. Alternating LH/RH layouts on each subsequent level is the most appropriate and inclusive approach.
- Accessible WC with 2300mm x 1900mm around the pan with the basin to sit outside this area in accordance with AS1428.1.
- An ambulant cubicle within every standard toilet bank adjacent to an accessible toilet under DDA Access Code Part F2.4 compliant with AS1428.1:2009.

### Assessment

Ensure toilets airlocks comply according with AS1428.1 Clause 13.4 Fig 34. (refer to markup).

On the basis of the current level of details all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

### 9.2 Common Areas

The BCA and DDA Premises Standards contain requirements for common use areas suitable for the use of persons with disabilities. These requirements can be summarised as follows:

- Wheelchair access is required to any external or outdoor terrace areas including roof terraces compliant with AS1428.1.

### Assessment

Ensure all entries to terraces have a level transition.

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.

### 9.3 Car Parking



The BCA and DDA Premises Standards contain requirements for parking which are applicable to this project. These requirements can be summarised as follows:

- 9b (School) 1 accessible car bay for every 100 car bays or part thereof, compliant with AS2890.6.
- Accessible car bays 2.4 metre with 2.4 metre shared area.
- All accessible car bays located near relevant lifts and/or associated building entry points to minimise distance to relevant lift and ensure accessible path of travel between these areas.
- 2.5m min. height clearance, compliant with AS2890.6 fig 2.7 over accessible car bays with 2.2 m min. vertical clearance leading to the accessible and adaptable unit car bays (Note: consideration for 2.3 or 2.4m min. height preferred for higher vans/adapted vehicles is recommended as good practice).

#### Assessment

It is recommended on Upper Ground Floor Plan accessible carparking is closer to ramp (refer to markup)

Ensure path of travel from accessible car parking bay to the entrance doors and linkage circulation network is compliant with AS1428.1.

On the basis of the current level of details, all access requirements appear capable of achieving compliance. Further work will be required during design development stage to ensure appropriate outcomes are achieved.



# 10. Conclusion

MGAC has assessed the proposed schematic design drawings for Moriah College at Queens Road, Queens Park NSW.

The proposed drawings indicate that accessibility requirements, pertaining to external site linkages, building access, common area access, sanitary facilities and parking can be readily achieved. It is advised that MGAC will work with the project team as the scheme progresses to ensure appropriate outcomes are achieved in building design and external domain design.











