



ROBERTSON + MARKS

**STAGE 1 SHEPHERDS BAY
RESIDENTIAL**

ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL v7

6 August 2012

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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in amended design of the Sheppard's Bay Residential Stage 1 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, passenger lifts, car parking, common facilities and adaptable units comply with relevant statutory guidelines.

In general, the development has 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, accessible parking, can be readily achieved.

The recommendations in this report are associated with detailed design. These recommendations should be addressed prior to construction certificate.

The main issue in the report relates the rework in the design of adaptable units in accordance with AS4299 class B, as required under City of Ryde DCP.

2. INTRODUCTION

2.1. General

Robertson + Marks have engaged Morris-Goding Accessibility Consulting, to provide an amended design review of the proposed residential development located at Rothesay Avenue, Meadowbank within the Shepherds Bay Precinct.

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) and AS 1428 series.

2.2. Design Changes

The primary design changes are as follows:

- 4 additional units on the Basement Level fronting Rothesay Avenue.
- The entire bulk of the building has been raised by 1m to address potential flooding issues.
- Internal changes like addition of garbage rooms and internal ramps.

2.3. Objectives

The report considers user groups such as residents and residential 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.

2.4. Statutory Requirements

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

- AS 1428.1 – 2009 (General Requirements of Access)
- AS 1735.12 - (Lifts, Escalators, & Moving Walks)
- BCA - Building Code of Australia 2011
- DDA Premises Standards
- DDA - Disability Discrimination Act
- City of Ryde Access DCP 2010

3. INGRESS & EGRESS

3.1. Rothesay Ave Entrances

There is an accessible path of travel leading to the lower ground floor (lobby 1) entry from Rothesay Ave via a series of 1:14 gradient ramps. The entry has double hinged doors with appropriate clearances and circulation compliant with AS1428.1 and the DDA Premises Standards.

There is appropriate circulation areas in front of the passenger lift appropriate for a person in a wheelchair. The passenger lifts provide access to all residential levels and car parking.

Recommendation:

- (i) The entry to lobby 2 needs to be accessible from Rothesay Ave in accordance with AS1428.1.

3.2. Belmore Street Entrances

The lower ground (lobby 6) and ground floor (lobby 5) Belmore Street entries appear to be accessible via the pedestrian footpath. The wheelchair accessibility of the path of travel from the pedestrian footpath appears to be suitable but will require additional design development work to comply with AS1428.1.

It is noted that Belmore Street has a steeper gradient than what is required under AS1428.1.

Lobbies 5 and 6 from Belmore Street are accessible via double hinged doors that have appropriate clearances and circulation compliant with AS1428.1 and the DDA Premises Standards. There are appropriate circulation areas in front of the passenger lifts appropriate for a person in a wheelchair. The passenger lifts provide access to all residential levels and car parking.

3.3. Hamilton Crescent Entrance

The ground floor Hamilton Crescent lobby is accessible via the pedestrian footpath. The path of travel appears to be on grade compliant with AS1428.1. There is direct access into lobbies 3 and 4 from the entry doors.

The entry doors have an 850mm clear width (900mm door leaf) and appropriate clearances and circulation compliant with AS1428.1 and Ryde Access DCP. There is appropriate circulation areas in front of the passenger lift appropriate for a person in a wheelchair.

3.4. Emergency Egress

There are 6 emergency stair wells leading from the upper residential levels down to street level and others leading out from the lower basement car park levels.

All fire doors appear to have a 1000mm clear width in accordance with AS1428.1. All fire stairs and corridors are wheelchair accessible on all levels.

4. PATHS OF TRAVEL

4.1. Paths of Travel

In general, once inside the building there are 6 passenger lifts at each of the 6 lobbies that provide a continuous accessible path of travel to each apartment from basement to level 11, in accordance with AS1428.1.

The corridors have a width of 1600mm which will allow wheelchair users to perform 180 degree turns in accordance with AS1428.1 and the DDA Premises Standards.

In accordance with DDA Premises Standards, areas of 2000mm x 1800mm have been provided at the 90 degree corridor turn of lobby 3 ground, level 1 and level 2.

4.2. Lifts

There are 6 passenger lifts within the building with suitable wheelchair access to all residential floors and car parking. The lifts provide an appropriate continuous accessible path of travel to and from the ground floor lift lobby to the residential apartments.

Passenger lifts have internal dimensions of 1400mm x 2000mm compliant with AS1735.12, the DDA Premises Standards and Ryde Council DCP.

4.3. Common Amenities

There is a landscaped courtyard that is split into 2 levels (upper basement and lower ground floor) on the ground floor of the residential development. There is stair access between each level with suitable handrails on both sides of courtyard stairs.

There is access from lobbies 2 and 5 to the lower ground level courtyard. The courtyard doors have appropriate circulation areas under AS1428.1. Access to at least 1 type of similar amenity is appropriate under DDA Premises Standards.

There is access from lobbies 1 and 6 to the lower upper basement level courtyard. The courtyard doors have appropriate circulation areas under AS1428.1. Access to at least 1 type of similar amenity is appropriate under DDA Premises Standards.

Both courtyard areas appear to be level and are capable of achieving wheelchair access within each area.

5. ACCOMMODATION

5.1. Residential Units

The development falls under Ryde Council. According to Ryde Council Access DCP 2010, 10% of the total amounts of apartments are to be designed according to AS4299. There are a total of 246 apartments.

A total of 25 adaptable units have been selected compliant with Ryde Council Access DCP. This is suitable under the DCP.

5.2. Adaptable Unit Design: Type 2

The following comments relate to units B-02, UB-03, LG-03, LG-09, LG-16, GF-03, GF-09, GF-26, 1-03, 1-09, 1-28, 2-03, 2-09, 2-26, 3-03, 3-21, 4-03 and 4-22.

The entry doors have an 850mm clear width and appropriate latch side clearance on the internal and external side of the door, compliant with AS1428.1.

There is an accessible path of travel to the living room and kitchen compliant with AS4299. The living area has appropriate circulation space of 2250mm diameter after furniture has been placed in compliance with AS4299. There is an accessible path from the living area to the balcony.

There is a 1550mm clearance between base cabinets of kitchen suitable in accordance with AS4299. There is an appropriate 800mm clearance adjacent to the cooktop and sink. There is a 190mm clearance adjacent the refrigerator. Ensure a suitable smaller workspace with a minimum 400mm clear width suitable in accordance with AS4299.

The laundry has a 1245mm diameter circulation area in front of laundry appliances compliant with AS4299.

The corridor width in front of the bedroom door has suitable circulation for wheelchair side approach. The door currently has a 800mm clear width with a 140mm latch side clearance which will need modifications to ensure wheelchair circulation. The bedroom can achieve internal dimensions of 3600mm x 3600mm, outside the robe area compliant with AS4299.

The accessible ensuite has a 690mm clear width door, suitable circulation is achievable once the robe has been removed at post adaptation. Drawings are to show post-adaptation layouts with capped off services as required in pre-adaptation drawings to achieve the circulation requirements in compliance with AS1428.1. The en-suite will need to be enlarged to have suitable circulation areas compliant with AS1428.1:2009.

Recommendations:

- (i) All internal doors require a minimum 820mm clear width in accordance with AS4299. Doors shall have a 510mm latch side clearance suitable for wheelchair accessibility.
- (ii) The laundry requires a minimum 1550mm diameter turning area in front of the appliances suitable for wheelchair circulation in accordance with AS1428.1:2009.
- (iii) Bathroom (shower, toilet, wash basin) to comply with circulation area requirements of AS1428.1, that is provide an area of 2300mm x 1900mm around the pan. The wash basin should sit outside this area, and if needed only encroach into this area by 100mm (max). In general, the bathroom should be 2750mm x 2300mm (min).

5.3. Adaptable Unit Design: Type 4

The following comments relate to unit UB-04, UB-09, LG-10 and LG-15.

The entry door has an 850mm clear width and appropriate latch side clearance, compliant with AS1428.1:2009.

The laundry has an appropriate 1550mm diameter turning area in accordance with AS4299.

The living area has appropriate circulation space of 2250mm diameter after furniture has been placed in compliance with AS4299. There is an accessible path from the living area to the balcony.

There is suitable clearance in the kitchen area with an appropriate 1550mm diameter turning area at base cabinets. There are suitable workbench areas compliant with AS4299.

The shared bathroom and bedroom wall is to be relocated at post-adaptation which will require retiling and waterproofing. Bathrooms are to have internal dimensions with circulation areas to cater for pan, basin and shower in accordance with AS1428.1:2009 at pre-adaptation stage. Drawings are to show post-adaptation layouts with capped off services as required in pre-adaptation drawings to achieve the circulation requirements in compliance with AS1428.1. The en-suite will need to be enlarged.

The bedroom area can achieve suitable 3600mm x 3600mm outside the robe area compliant with AS4299.

Recommendation:

- (i) Bathroom (shower, toilet, wash basin) to comply with circulation area requirements of AS1428.1, that is provide an area of 2300mm x 1900mm around the pan. The wash basin should sit outside this area, and if needed only encroach into this area by 100mm (max). In general, the bathroom should be 2750mm x 2300mm (min).

5.4. Adaptable Unit Design: Type 13

The following comments relate to units UB-10, LG-22, GF32.

The entry doors have an 850mm clear width and appropriate latch side clearance on the internal and external side of the door, compliant with AS1428.1.

The corridor width in front of the bedroom door appears to be suitable. The hinged entry door has an 800mm clear width with a 460mm clear width. The bedroom has suitable circulation around the bed compliant with AS4299.

The accessible ensuite has a 680mm clear width door with a 345mm latch side clearance in accordance with AS1428.1:2009. The drawings indicate that the door is relocated at post-adaptation stage which will require retiling and waterproofing. The bathroom has internal dimensions of 2205mm x 2680mm which will need to be modified to ensure suitable circulation around the pan, shower and basin. Drawings are to show post-adaptation layouts with capped off services as required in pre-adaptation drawings to achieve the circulation requirements in compliance with AS1428.1:2009.

There is a 1550mm clearance between base cabinets of kitchen. Floor to be tiled pre-adaptation to allow for relocated kitchen bench. There is sufficient work bench space to allow for a compliant kitchen. There is an appropriate 800mm workbench adjacent the cooktop, sink and refrigerator.

The living area has appropriate circulation space of 2250mm diameter after furniture has been placed in compliance with AS4299. There is an accessible path from the living area to the balcony.

The laundry has a 1550mm diameter circulation area in front of laundry appliances compliant with AS4299.

Recommendations:

- (i) All internal doors require a minimum 820mm clear width in accordance with AS4299. Doors shall have a 510mm latch side clearance suitable for wheelchair accessibility.
- (ii) Bathroom (shower, toilet, wash basin) to comply with circulation area requirements of AS1428.1, that is provide an area of 2300mm x 1900mm around the pan. The wash basin should sit outside this area, and if needed only encroach into this area by 100mm (max). The shower seat currently encroaches into this area. In general, the bathroom should be 2750mm x 2300mm (min).

6. MISCELLANEOUS

6.1. Car Parking

There are 3 separate levels of car parks with adaptable parking bays located across all levels.

There are 25 adaptable unit parking bays provided with a width of 2.4 metres with 2.4 metres, in accordance with AS2890.6. There are 13 adaptable unit car bays on basement level, and 12 adaptable unit car bays on upper basement.

In general, the adaptable unit car bays are appropriate distributed across the basement levels for lobby 1 (lift 1), lobby 2 (lift 2), lobby 5 (lift 6) and lobby 6 (lift 7).

Lifts 1 & 7 accesses the basement level, which accommodates 14 adaptable unit car bays. This correlates to the required adaptable units (note – there is an additional adaptable unit car bay).

Lifts 2 & 6 accesses the basement and upper basement levels, which accommodates 12 adaptable unit car bay. This correlates to the required adaptable units.

Recommendations:

- (i) Each adaptable unit car park requires a height clearance of 2.5 metres.
- (ii) The approach to each adaptable car parking bay should not have vertical clearance of less than 2200mm.

6.2. Garbage Area

There are 3 garbage holding rooms located in the basement car parking levels.

Lifts 1 & 7 can access the garbage holding rooms on basement level. However the garbage room adjacent lift 7 has a 1:12 ramp.

Lifts 2 & 6 can access the garbage holding rooms on upper basement level.

Lifts 3 & 4 can access the garbage holding room on lower ground level.

Recommendations:

- (i) Garbage holding room doors are to have a clear width of 850mm appropriate for wheelchair users.
- (ii) The ramp will require 1:14 gradient under A1428.1.

6.3. Letterbox Area

Recommendation:

- (i) Provide a hardstand letterbox area adjacent to lift lobby areas with 1550mm circulation area appropriate for wheelchair users.