

ROBERTSON + MARKS

STAGE 1 SHEPHERDS BAY RESIDENTIAL

S75W ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL v3

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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 recommendations that have arisen from the access review include:

- (i) Provide an accessible path of travel from the pedestrian street on the Foreshore Link to Hamilton Crescent in accordance with AS1428.1.
- (ii) Ensure the 1:14 ramps on the New Foreshore Link are compliant with AS1428.1. Ramps will need to be setback from the edge to allow for appropriate handrail extensions.
- (iii) Ensure a suitable accessible path of travel to the Hamilton Crescent entry located within 50m of the inaccessible entry stair in accordance with the DDA Premises Standards.
- (iv) Ensure corridor doors to lift lobby areas of lifts 3, 4 and 5 have suitable 850mm clear widths and latch side clearances compliant with AS1428.1.
- (v) Provide a suitable accessible path of travel from lobbies 3, 4 and 5 to the courtyard compliant with the DDA Premises Standards. Review of ramp is required.
- (vi) Ensure handrails on both sides (minimum 1000mm clearance between handrails) and TGSIs at the stairs compliant with AS1428.1 and the DDA Premises Standards.
- (vii) Ensure the passenger lift car has minimum internal dimensions of 1400mm x 1700mm compliant with Ryde DCP and the DDA Premises Standards.
- (viii) Relocate adaptable unit car bays to comply with AS4299.

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 residential development has a total of 246 apartments over 12 residential floors. There is also basement parking below.

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. 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.

2.3. 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. Site

The proposed development is bound by Rothesay Ave to the south, Hamilton Crescent to the North and Belmore Street to the east. There is a new foreshore link on the western boundary of the development. From the pedestrian footpaths, accessible linkages to the development are achievable.

There currently does not appear to be a suitable accessible path of travel from the New Foreshore Link to Hamilton Crescent. Currently, access appears to be via stairs only.

Recommendations:

- (i) Provide an accessible path of travel from the pedestrian street on the New Foreshore Link to Hamilton Crescent in accordance with AS1428.1.
- (ii) Ensure the 1:14 ramps on the New Foreshore Link are compliant with AS1428.1. Ramps will need to be setback from the edge to allow for appropriate handrail extensions.

3.2. New Foreshore Link Entrances

From the pedestrian footpath near the New Foreshore Link, there are 2x entries into the development – one on upper basement (Lobby 1) and a second entry on lower ground floor (Lobby 2).

From the upper basement level, there is a 1:20 walkway leading to Lobby 1 suitable for a person with a disability in accordance with the DDA Premises Standards. There is a suitable 1530mm level landing in front of the hinged entry door compliant with AS1428.1. The door has appropriate door clearances and circulation compliant with AS1428.1.

Entry into Lobby 2 is via the pedestrian pathway near the Pocket Park. There is a suitable accessible path of travel from the pedestrian footpath to the lobby via a 1:20 walkway compliant with AS1428.1. There is a 1200mm depth clearance between the top of the walkway and the entry to the foyer. There are suitable clearances to allow for a compliant doorway with suitable door clearances and circulation compliant with AS1428.1.

From the foyer areas, there is a suitable accessible path of travel to the lift lobby area. 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.

Recommendations:

- (i) Ensure a minimum 1450mm clear depth at the lobby entry doors compliant with AS1428.1.
- (ii) Ensure entry doors have appropriate 850mm clear widths and door circulation compliant with AS1428.1.

3.3. Hamilton Crescent Entrance

The ground floor Hamilton Crescent lobby is accessible via the pedestrian footpath accessible via 2x entry stairs and a series of 1:14 ramps. The entry ramp is located

approximately 54.5m from the inaccessible entry stairs which is non-compliant with the DDA Premises Standards.

The stairs are currently located outside of the site boundary however they are suitably setback from traverse pedestrian paths to allow for appropriate handrail extensions and TGSIs compliant with AS1428.1.

There are a series of 1:14 ramps with appropriate landings leading to the entry door. The ramp will need to be setback from the pedestrian path to allow for appropriate handrail extensions and TGSIs.

From the top of the entry stairs and ramps, there is a suitable accessible path of travel to the entry area via a 1:14 ramp. There are dual-hinged entry doors at the top of the 1:14 ramp with appropriate door clearances and circulation compliant with AS1428.1.

Recommendations:

- (i) Ensure a suitable accessible path of travel to the entry located within 50m of the inaccessible entry in accordance with the DDA Premises Standards.
- (ii) Ensure the entry ramp is setback approximately 900mm from the site boundary to allow for appropriate handrail extensions and TGSIs compliant with AS1428.1.
- (iii) Provide parallel handrails on both sides of ramps and stairs with TGSIs compliant with AS1428.1.

3.4. Belmore Street Entrances

There are 2x entries from Belmore Street, the lower ground entry (Lobby 5) and the upper basement entry (Lobby 6). From the pedestrian footpath near Belmore Street, there appears to be a level accessible path of travel compliant with AS1428.1 and the DDA Premises Standards. 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.

Lobby entry doors are via hinged doors which have appropriate clear widths in accordance with AS1428.1. The dual-hinged entry doors at Lobby 5 have suitable door clearances and circulation compliant with AS1428.1. Modification of Lobby 6 latch side clearance is required – currently 405mm.

From the foyer entry, access to the lift lobby appears to be via stairs only. A suitable accessible path of travel is required to comply with AS1428.1 and the DDA Premises Standards.

Recommendations:

- (i) Confirmation is required to ensure a level accessible path of travel to the entry doors compliant with AS1428.1.
- (ii) Ensure Lobby 6 entry doors have appropriate 850mm clear widths and suitable circulation compliant with AS1428.1.
- (iii) Ensure a suitable accessible path of travel from the foyer entry to the passenger lift lobby compliant with AS1428.1 and the DDA Premises Standards.

3.5. 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 minimum 850mm clear width in accordance with AS1428.1.

The main entry is regarded as the most appropriate means of accessible egress in the event of an emergency situation.

4. PATHS OF TRAVEL

4.1. Paths of Travel

Once inside the building there are 7 passenger lifts within 6 lobbies that provide a continuous accessible path of travel to each apartment from basement to level 9, in accordance with AS1428.1.

There are suitable paths of travel to all residential units via passenger lifts compliant with the DDA Premises Standards. Entry into the lift lobby areas of lift 3, 4 and 5 is via hinged entry door which will require review to ensure suitable accessible paths of travel compliant with AS1428.1.

In general, the corridors have suitable clear widths suitable for wheelchair users to perform 180° turns within 2m of the ends of corridors, compliant with the DDA Premises Standards.

In accordance with DDA Premises Standards, areas of 1500mm x 1500mm have been provided at the 90° corridor turns.

Recommendation:

- (i) Ensure corridor doors to lift lobby areas of lifts 3, 4 and 5 have suitable 850mm clear widths and latch side clearances compliant with AS1428.1.

4.2. Lifts

There are 7 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 in accordance with the DDA Premises Standards.

Passenger lift cores have internal dimensions of 1950mm x 2300mm which will allow for passenger lift cars compliant with AS1735.12, the DDA Premises Standards and Ryde Council DCP.

Recommendations:

- (i) Ensure the passenger lift car has minimum internal dimensions of 1400mm x 1700mm compliant with Ryde DCP and the DDA Premises Standards.
- (ii) Lift car components (grabrail, control buttons, lighting) to comply with AS1735.12.

4.3. Internal Stairs

There are internal stairs on the basement (car park and lobby) and upper basement floors of the development.

A review of the stairs is required to ensure suitable clearances between handrails, handrail extensions and TGSIs.

Recommendation:

- (i) Ensure handrails on both sides (minimum 1000mm clearance between handrails) and TGSIs at the stairs compliant with AS1428.1 and the DDA Premises Standards.

4.4. Courtyard

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

There is a gated entryway from Rothesay Avenue. The stairs have suitable clearances to allow for compliance with AS1428.1. The accessible path of travel is via the passenger lifts within the residential lobbies suitable under the DDA Premises Standards.

There is access from lobbies 1 and 7 to the upper basement level courtyard and access to the lower ground level courtyard from lobbies 2 and 6. The courtyard doors have appropriate clear widths, however modification is required to ensure appropriate latch side clearances compliant with AS1428.1. Access from lobbies 3, 4 and 5 is via stairs from ground floor. Access to the courtyard is via lower ground floor. There is a ramp leading to the courtyard. The architect has confirmed the ramp has a gradient of 1:14. Review of the ramp and entry is required to comply with AS1428.1.

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

Recommendations:

- (i) Ensure the 1:14 entry ramp to courtyard from lower ground floor has a minimum 1500mm x 1500mm clearance at the base of the ramp suitable for wheelchair 90° turns compliant with AS1428.1.
- (ii) Provide handrails on both sides of the 1:14 ramp with TGSIs at the top and bottom in accordance with AS1428.1.
- (iii) Ensure a minimum 1240mm depth clearance at the door to the courtyard suitable for wheelchair side approach compliant with AS1428.1.
- (iv) Door requires 1670mm door depth suitable for wheelchair side approach on the external leaf compliant with AS1428.1.
- (v) Ensure all stairs leading to the courtyard have handrails on both sides and TGSIs at the stairs compliant with AS1428.1 and the DDA Premises Standards.
- (vi) Courtyard entry doors to have minimum 530mm latch side clearances whilst maintaining 850mm clear widths (920mm door leaf) compliant with AS1428.1.
- (vii) Confirmation is required to ensure that similar amenities are offered on both levels of the courtyard.

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 26 adaptable units have been selected compliant with Ryde Council Access DCP.

5.2. Adaptable Unit Design 1

The following comments relate to units UB-04, LG-04, GF-04 and 1-04.

The entry door has an appropriate clear width and suitable latch side clearance compliant with AS4299 and AS1428.1.

The laundry is located adjacent to the entry door with an appropriate 1550mm diameter turning area in front of the appliances in accordance with AS4299 once the doors are removed.

There is a 1200mm path of travel to the living area, suitable in accordance with AS1428.1 and AS4299. The living area has appropriate clearances to allow a 2250mm diameter turning area after the furniture has been placed, compliant with AS4299.

There is a 1200mm clearance between the island benches within the kitchen. The kitchen has suitable clearances to allow for the island bench to be relocated at post-adaptation to ensure an appropriate 1550mm diameter turning area compliant with AS4299. There are appropriate 800mm clearances adjacent to the cooktop and sink achievable, with a smaller space adjacent to the refrigerator compliant with AS4299. Appropriate tiling extending under the bench is provided in accordance with AS4299.

Entry into the accessible bedroom is via the hinged entry door which has suitable door clearances for wheelchair users to perform 180° turns compliant with AS4299. The bedroom has appropriate internal dimensions to allow for 1000mm clearances on either side of the bed with an appropriate 1540mm x 2070mm circulation area at the base of the bed in accordance with AS4299.

There is a 1240mm clear width path of travel to the accessible en-suite. The accessible en-suite has internal dimensions of 2090mm x 3350mm. There are appropriate clearances to allow a suitable 1900mm x 2300mm circulation area around the pan compliant with AS4299. The shower has suitable clearances with an appropriate circulation area outside of the shower recess and the basin outside of this area.

Recommendation:

- (i) Provide appropriate capped off services for electrical and plumbing within the accessible en-suite at pre-adaptation stage. This is to be reviewed at design development stage.

5.3. Adaptable Unit Design 2

The following comments relate to units UB-05, LG-05, GF-05, 1-05, 2-05, 3-05 and 4-05.

The adaptable unit entry door has appropriate clear width with appropriate 530mm latch side clearance once the storage area is removed compliant with AS1428.1 and AS4299.

The laundry is located adjacent to the entry door with appropriate 1550mm diameter clearances and circulation compliant with AS4299.

There is a suitable accessible path of travel to the living area which has suitable clearances to allow wheelchair manoeuvrability when the furniture has been placed.

There is a 1200mm clearance between kitchen benches at pre-adaptation stage. The kitchen bench is proposed to be relocated at post-adaptation to ensure a suitable 1550mm diameter turning area compliant with AS4299. Tiling has been provided to extend under the bench to allow post-adaptation modification of the island bench compliant with AS4299.

The accessible bedroom has appropriate door clearances and circulation compliant with AS1428.1. The room has appropriate clearances around the queen size bed with the robe outside of this area, compliant with AS4299.

The accessible bathroom has appropriate door clearances once the partition for the study is removed at post-adaptation. The accessible bathroom has appropriate internal dimensions to allow for appropriate clearances and circulation around the pan, basin and shower, compliant with AS1428.1. Capped off services are required to ensure ease of adaptation.

Recommendation:

- (i) Provide appropriate capped off services for electrical and plumbing within the accessible en-suite at pre-adaptation stage. This is to be reviewed at design development stage.

5.4. Adaptable Unit Design 3

The following comments relate to unit LG-20, GF-31, 1-33 and 2-31.

The entry door has an appropriate clear width compliant with AS1428.1 and AS4299 with suitable 530mm latch side clearance at post-adaptation stage.

There is a laundry located adjacent the entry door with appropriate 1550mm diameter clearance in front of the appliances in accordance with AS4299.

The kitchen has suitable clearances to ensure reconfiguration at post-adaptation to allow for an appropriate 1550mm diameter clearance compliant with AS4299. Appropriate 800mm workspaces adjacent to the sink and cooktop are achievable in accordance with AS4299 and a smaller workspace adjacent to the refrigerator. Tiling is provided within the kitchen to allow for bench relocation.

The living area has an appropriate 2250mm diameter clearance compliant with AS4299.

The bedroom has appropriate turning areas at the base of the bed compliant with AS4299. The robe has been removed from the bedroom.

The accessible bathroom is located opposite the bedroom. There are appropriate clearances to the hinged entry door with suitable clearances to allow side approach. The bathroom has internal dimensions to allow for appropriate clearances and circulation around the pan, basin and shower. All three fixtures within the bathroom is to be relocated at post-adaptation.

Recommendation:

- (i) Provide appropriate capped off services for electrical and plumbing within the accessible en-suite at pre-adaptation stage. This is to be reviewed at design development stage.

5.5. Adaptable Unit Design 4

The following comments relate to units GF-13, 1-13, 2-13, 3-11, 4-11, 5-05, 6-05, 7-03 and 8-03.

The entry doors have an appropriate clear width compliant with AS1428.1 and AS4299. The removal of the storage area allows for appropriate latch side clearance compliant with AS1428.1 and AS4299.

The kitchen has suitable clearances to allow for relocation of island bench in accordance with AS4299. There are appropriate workspaces provided compliant with AS4299. Tiling is provided under the bench to ensure ease of adaptation 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 all other areas within the apartment.

The corridor width in front of the bedroom door has appropriate clearances with a minimum 1550mm diameter clearance in front of the laundry appliances. The hinged entry door has an 870mm clear width with a 580mm clear width. The bedroom has suitable circulation around the bed with the robe outside of this area, compliant with AS4299.

The accessible bathroom has an 870mm clear width door with appropriate latch side clearances in accordance with AS4299. The bathroom has internal dimensions suitable for wheelchair circulation around the pan, shower and basin.

Recommendation:

- (i) Provide appropriate capped off services for electrical and plumbing within the accessible en-suite at pre-adaptation stage. This is to be reviewed at design development stage.

5.6. Adaptable Unit Design 5

The following comments relate to units GF-21, 1-23 and 2-23.

There are suitable clearances at the entry door to allow for appropriate 850mm clear width and latch side clearance compliant with AS1428.1 and AS4299.

The kitchen has suitable clearances to allow for relocation of island bench in accordance with AS4299. There are appropriate workspaces provided compliant with AS4299. Tiling is provided to allow for ease of adaptation 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 all other areas within the apartment.

An appropriate 1550mm diameter clearance in front of the laundry appliances is provided compliant with AS4299.

There is a 1240mm minimum clearance leading to the bathroom and bedroom suitable for side approaches with an appropriate turning area compliant with AS4299. The accessible bedroom has appropriate clearances and circulation compliant with AS4299. The

bathroom has appropriate internal dimensions to allow for compliance with AS1428.1 and AS4299.

Recommendation:

- (i) Provide appropriate capped off services for electrical and plumbing within the accessible en-suite at pre-adaptation stage. This is to be reviewed at design development stage.

6. COMMON USE FACILITIES

6.1. Car Parking

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

There are 13 adaptable unit car bays on basement level, and 11 adaptable unit car bays on upper basement. A total of 24 adaptable unit parking bays provided with a width of 2.4 metres with 2.4 metres, in accordance with AS2890.6. Adaptable unit car bays will need to be relocated to ensure a suitable accessible path of travel to adaptable units in accordance with AS4299.

Recommendations:

- (i) Ensure adaptable unit car bays are located within close proximity to the passenger lift which provides an accessible path of travel to the adaptable units above:

Lobby 1	10
Lobby 2	0
Lobby 3/4	9
Lobby 5	3
Lobby 6	0
Lobby 7	4

- (ii) Each adaptable unit car park requires a height clearance of 2.5 metres.
- (iii) The approach to each adaptable car parking bay should not have vertical clearance of less than 2200mm.
- (iv) Ensure lobby entry doors have appropriate 510mm latch side clearances whilst maintaining 850mm clear width (920mm door leaf) such as within Lift 3-4 lower ground area.

6.2. Garbage Area

There appears to be a garbage holding room located in the basement floor near Lobby 6.

Entry into the garbage room is via a 1:18 ramp which is suitable under AS1428.1. The ramp has suitable widths to allow for compliance with AS1428.1. There is a suitable level landing to the entry door. Modification to the entry is required.

Recommendations:

- (i) Ensure the entry ramp has appropriate handrails and TGSIs compliant with AS1428.1.
- (ii) Garbage holding room doors are to have a clear width of 850mm (920mm door leaf) appropriate for wheelchair users.

6.3. Letterbox Area

Recommendation:

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