



# Sketch Design Disability Access Review

## The Ribbon Grocon Darling Harbor Development

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Becky Llewellyn

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Disability Consultancy Services

# Sketch Design Disability Access Review: The Ribbon Grocon Darling Harbor Development

Disability Consultancy Services Pty Ltd (DCS) has been requested to review the Sketch Design for the Darling Harbor Grocon building designed by Hassell Studio for compliance with the Disability Discrimination Act (DDA) and its Access to Premises Standard. The building, provisionally called 'The Ribbon', is located in the south section of Darling Harbour on Harbour St between the Cockle Bay Darling Park developments to the north east, Darling Quarter to the south and Convention Centre to the west. It is nestled between important Sydney roadways and emphasises newly activated pedestrian spaces adjacent to and within the building.

The Sketch Design for this building at 31 Wheat Road, Sydney shows a 20 storey building including mixed retail shops, an IMAX theatre, large office footplates, function centre and other potential uses. The innovative building has a concave face to the Harbor, with premium views of the precinct in the higher levels. Its innovative roof has a twisting organic form with curves and opaque roof panels that will create a landmark building like no other in Sydney.

## Design Challenges around Disability

Creation of this unique shaped building depends on substantial columns supporting the mass above. Large inclined columns at ground level and within the building pose some degree of challenge for people with vision-loss who may not be able to detect these as hazards. The AS1428.4.1 requirement for a 2m vertical clearance around overhead hazards such as the inclined columns will be an important element of the design refinement.

Another challenge for this multi-storey building is the selection of lifts. Many new offices prefer to use the destination control lifts to maximise efficiency. This is the proposed lift system for The Ribbon. This type of lift system uses a control panel in the lift lobby or approaches to the lift lobby. Instead of using an up or down call button to hail a lift, a person inputs a destination floor on a touch screen which then visually displays which lift car to board. An audio cue of varying pitch and length is given at the lift entry door to indicate an arriving car and travel direction.

Some panels offer a "disabled" button with functions such as slower door times and audio announcements at the selection touch screen. There are no control buttons within the lift car and only optional audio announcements of which floor the doors have opened at and a visual indication of which floors the lift will be stopping at.

There is disquiet in the disability and access consulting arenas that these lifts seem to breach the DDA as they do not provide independent access for blind or vision-impaired people. This has been addressed by providing staff assistance at some lift lobbies where destination control lifts are installed, but this is an expensive solution. DCS flags this as a potential issue for the building.

The other major change in lifts in Australia for buildings being planned in 2013 is that the Building Code of Australia will now allow newly engineered lifts to be used to evacuate mobility impaired people from upper levels. DCS applauds this change as it gives people a safer working environment and a more equitable chance of surviving emergencies if working on upper office levels.

The location of the building set inside an elevated road traffic corridor means that work on acoustics will be needed so that regular building occupants are shielded from an incessant level of noise while

they are at work. Any other strategies for baffling sound will be appreciated by pedestrians in the activated external spaces.

The opaque roofing material selected will need to perform several functions. Diffusing bright direct light which creates glare and keep heating and cooling regulated is a high priority in making the building comfortable and safe for people with physical, sensory or neurological disabilities.

### **DDA and the Premises Standard**

The Disability Discrimination Act 1992 (DDA) makes disability discrimination unlawful and aims to promote equal rights, opportunity and access for people with disabilities. As Commonwealth legislation, in a hierarchy of legislative power, it overrides State and local government guidance on access.

Since May 2011, all new buildings must meet the standards set out in the DDA's Access to Premises Standard. The Standard is integrated with the annual Building Code of Australia to reflect and reinforce each other. The Premises Standard is a performance code with deemed-to-satisfy provisions and also accepts alternative building solutions similar to the BCA. The purpose of the Premises Standard is to give developers, including designers and builders, certifiers and managers, certainty that if they comply with its requirements, they have met the DDA.

The Ribbon, as a multi-use development, falls under several of the Building Classifications from the Premises Standard Part A4, including Class 5 – offices, Class 6- eating areas, Class 7a – carpark, Class 9b – assembly building – the cinema, Class 10a – the toilet facilities adjacent the Ribbon building.

Individual complaints may still be brought by people with disability if they feel they have been discriminated against, either directly or indirectly but demonstrated compliance with the Standard will render a complaint made under the DDA ineffective.

### **Review Methodology**

Given this legislative context, the methodology to review the Ribbon's Sketch Design is to test the Sketch Design against requirements of the DDA's Premises Standard. This is the highest level of compliance and to meet these federal Standards implies meeting others. When a suggestion comes from the realm of best practice, this will be noted.

The Sketch Design phase is the foundation stage for integrating access into the fabric of any building. It demonstrates for development approval that the design team was worked to comply with the Premises Standard and AS1428 provisions in the plan. The Design Development stage then works out the detail of these decisions to ensure that the building meets compliance standards.

This DDA review chronicles elements that provide access and are compliant. Recommendations for further work to comply with the Premises Standard are formatted in **bold font**.

## DDA Premises Standard Part D - Access and egress

### DP1 Performance Requirement

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.

### Ground Floor General Arrangement Plan ARC-HSL-DA-1100

ELEMENT	PREMISES STANDARD	POTENTIAL DDA ISSUE	RECOMMENDATION
Southeast corner pedestrian walkway by the Substation	D3.8 (1)(e) (ii)	Walkway with 1:20 gradient provides a clear north/south path to the east Function and Office entries. The paved footpath crosses the parking station entry with a large angled wall from upper levels at the driveway.	The accessway meeting the vehicular way adjacent the building for pedestrian safety needs to be denoted by tactile ground surface indicators (TGSIs) spanning the width of the accessway on both sides of the driveway as there is no standard kerb or kerb ramp. <b>For TGSi configuration at carpark entry, use AS1428.4.1:2009 Figure C12.</b>
Eastern external inclined columns in accessway	D3.8 (1)(e) (i)	Pedestrians with vision impairment or who are blind on the accessway east of the office entry must be warned about the two large inclined structural columns.	Consider options for shielding the inclined columns in the open public space with no clearly defined continuous accessible path of travel, such as creating raised garden beds around each column. The Premises Standard suggests that in absence of such a suitable barrier, TGSi are employed. <b>Use AS1428.4.1:2009 Figure 2.6 (B).</b>
Shared space for vehicles and pedestrians on Wheat Road	D3.8 (1)(e) (ii)	As a shared space, bollards will delineate the vehicle and pedestrian areas along a flat kerb. Some white cane users may miss this signal. It would appropriate to provide more ground-based textural and contrast safety information even in this low-speed environment.	There is some debate as to whether TGSi are mandatory for the length of the drop-off road on the east of the building. It is a shared space parallel with the pedestrian accessway, not crossing it. Currently bollards are the only wayfinding device. <b>Use a 600mm deep TGSi band as in AS1428.4.1 Figure 2.5(A) to define the pedestrian way from a carriageway at the same grade for maximum protection of pedestrians.</b> <b>If TGSi are not used, a similar width band of 30% contrasting colour with highly textured pavers is highly recommended in addition to the bollards.</b>

Office Entry	D3.2 (2)(a)	Office entry is via two revolving doors and a single two-swing entry and exit door. Revolving doors are not suitable for wheelchair users.	A single door is necessary for people whose mobility aid is too large for the revolving doors. <b>Preference is for an automated door. Adjacent glass and door itself will require glazing strips as in AS1428.1 Clause 6.6 and frame contrast as in Clause 13.1.</b>
Office internal choices	D3.8 (a) and (b)	The office lobby hosts a wide staircase, escalators and co-located lift to access upper levels.	Compliant features all well located. <b>Ensure staircase has central handrail and both staircase and escalators have appropriate warning TGSIs.</b>
Function Lobby	D3.2 (2)(a)	The Function Lobby has two double doors opening outwards with compliant clear widths with stairs and lifts co-located.	Compliant. See comments above on glazing and framing requirements.
Function lobby internal choices	D3.8 (b)	The Function Lobby has two escalators and co-two lifts set further back to access the Function Centre.	Wayfinding signage will be needed near the escalator to inform people of the lift location further west. <b>Ensure escalators have appropriate warning TGSIs.</b>
Bike Park on south face of building	Best practice	282 Bike Parks are shown. Presently no allocation is shown for access bike parks, which include three wheeler and extra-wide bikes used by people with ambulant disabilities	<b>For best practice, consider allocation of a 1% allocation of normal bike parks to create 3 access bike bays marked with international symbol of disability on the western end so people could park their modified bike and get up to the accessible change facility via the valet lift.</b>
Southwest corner separate buildings with amenities and tenancies	CPTED principles	The Sketch Design is undeveloped for the separate buildings but this is an important accessible area for the public. Potential for entrapment exists if Parent Room entry is near support column.	In Design Development, consider more direct access to all toilet and parent room facilities on the exterior faces to ensure safety and visibility in activated spaces, away from internal column supports. <b>Ensure premium access levels to these toilet and first aid facilities at the south end of Darling Harbor. Wayfinding by the public will be enhanced with this design.</b>
Western entry and emergency exit doors to IMAX foyer	D3.2 (2)(a)	Entry is via three sets of double doors all opening outwards with four double doors as emergency exits and departure doors. All door leafs meet minimum requirements to provide an 850mm clear width per leaf.	<b>In terms of best practice, consider automating one or more of these IMAX entry doors to improve access or changing them to become automatic sliding door openings.</b>
IMAX entry	D3.3	IMAX entry to Level 01 and exit from Level 01 is	<b>Ensure stairway meets AS1428.1 Clause 11 and stairs and escalators have compliant</b>

		via lift, escalators and stairs all co-located to provide equity for ambulant and non-ambulant customers.	<b>warning TGSi.</b>
Retail tenancy door openings	AS1428.1-2009	Banks of outward opening single doors are shown as the openings for each retail tenancy. Outward opening doors can create problems of detection and of hazard for blind and vision-impaired people. Opening the walls portals with stacking doors may be a safer option than a series of distinct single doors.	Review door opening design in Design Development in terms of visibility and safety. <b>Ensure all doors comply with AS1428.1 with glazing strips as in Clause 6.6 and 30% luminance contrast of door frames as in Clause 13.1.</b>
Tenancies 02, 04, 05, 06	D3.8 (1)(e) (i)	Several tenancies have the inclined column going up through its floor plate. Issues of vertical clearance to 2m need resolving.	<b>Where other fitout solutions are not employed, use TGSi to denote the 2m vertical hazard shown in AS1428.4.1:2009 Figure 2.6 (B).</b>
Tenancies 01, 04, 06	DP1 (a) (iii)	Current plans show stairs only access to upper mezzanines of retail tenancies. This does not meet Premises Standard requirements to provide access to work and public spaces in new buildings.	<b>Provide a lift to each separate tenancy with a mezzanine storey.</b>
Retail/food tenancies to west and north	Best practice	Retail facade to be flexible to offer maximum views and openness for operators. Currently some delineation or blades are proposed on the building facade.	A solid building line is more appropriate for white cane users than one broken with blades or fins jutting out, assisting them to shoreline safely around the perimeter. <b>Consider re-designing edge facade.</b> Be aware of City of Sydney by-laws for placement of tables and chairs away from building edge to provide clearance for white cane users to detect the edge for shore-lining.

#### DP4 Performance requirement

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.

<b>Ground Floor General Arrangement Plan ARC-HSL-DA-1100</b>			
<b>ELEMENT</b>	<b>PREMISES STANDARD</b>	<b>POTENTIAL DDA ISSUE</b>	<b>RECOMMENDATION</b>
Ground floor exit doors	DP4	All doors on the ground floor of The Ribbon swing outward or have two-way in/out swing	Exit door swings are compliant.
East fire stair exits	DP4	Location of the east fire door is directly onto the carpark exit and pedestrian accessway. In an emergency, this would be a busy and dangerous location.	<b>Design new fire exit door location on the ground floor level that takes pedestrians away from the carpark exit to a better circulation space.</b>
Fire hose reel placement	DP4	Current upper floor plans shows a clash between fire hose reel door and exit egress path.	<b>Re-format fire hose reel swing or move to new location to avoid the clash between pedestrians and fire hose reel door.</b>
Office, Function Centre, retail tenancies & IMAX lifts	BCA 2013	Each of the discreet lifts to upper floor functions can now under BCA 2013 regulations be used for evacuation of people with mobility impairments.	<b>Investigate BCA 2013 criteria for designing lift shafts and cars capable of evacuating people with mobility impairments and provide in Office, Function Centre, retail tenancy and IMAX lifts.</b>
IMAX exit stairs	DPC4	Currently the IMAX preferred design (Option 04) shows stairs near the concession area and escalator on the wall.	<b>Flip the escalator and stair locations to preference escalator use by ambulant people going up to the IMAX entry and providing a safer stair direct egress position in exit mode directly out of the double door emergency exits.</b>
<b>Upper Floor Office Plans ARC-HSL-DA-1105-1112</b>			
Office floor plans	Best practice	With expected maximum occupancy of 300 people per office floor, there is a need for smoke-isolated fire egress space on any upper floor in case of emergencies. As an iconic building, the chances of random acts possibly increase, either by crime, terror or accident from nearby motorways. The office floor plates are very open.	The design team has added extra width to the exit stair landings on upper levels to create potential safe haven spaces on the upper floors. <b>Mark a space 800 x 1300mm with international symbol of access as a refuge space in exit landings and on emergency plans as potential smoke isolated safe haven zones in upper floors for people who use mobility aids or who have ambulant disabilities and cannot use stairs. Provide a 600mm long grabrail for support and a place to put aids for people with ambulant disability.</b>

**DP6 Performance requirement**

So that occupants can safely evacuate the building, accessways to exits must have dimensions appropriate to:

- (a) the number, mobility and other characteristics of occupants; and
- (b) the function or use of the building.

<b>Upper Floor Office Plans</b>			
<b>ELEMENT</b>	<b>PREMISES STANDARD</b>	<b>POTENTIAL DDA ISSUE</b>	<b>RECOMMENDATION</b>
Office floor plan exits	BCA 2013	Selection of destination control lifts would make these lifts unsuitable for people who are blind or vision impaired.	<b>Review options with fire safety planners for lift selection and new criteria of the BCA 2013 to select lifts that appropriately manage egress risks for people with disabilities on upper floors, including both physical and sensory impairments.</b>

**DP8 Performance Requirement**

Carparking spaces for use by people with a disability must be:

- (a) provided, to the degree necessary, to give equitable access for carparking; and
- (b) designated and easy to find.

Limitation Clause DP8 does not apply to a building where:

- (a) a parking service is provided; and
- (b) direct access to any carparking spaces by the general public or occupants is not available.

<b>Ground Floor General Arrangement Plan ARC-HSL-DA-1100</b>			
<b>ELEMENT</b>	<b>PREMISES STANDARD</b>	<b>POTENTIAL DDA ISSUE</b>	<b>RECOMMENDATION</b>
Accessible carparking	D3.5 (a)	Although Clause D3.5(a) states that accessible carparking is not required where there is a parking service, it is important to have at least one on-site accessible park for building occupants who have disability.	Utilise the two ground level bays on Grid-point 6D off the loading zone for the carpark as an accessible park and adjacent transfer space to conform with accessible parking specifications in AS2890.6. <b>Document the single accessible carpark at this ground floor location on future design drafts.</b>

**DP9 Performance requirement**

An inbuilt communication system for entry, information, entertainment, or for the provision of a service, must be suitable for occupants who are deaf or hearing impaired.

Limitation Clause DP9 does not apply to an inbuilt communication system used only for emergency warning purposes.



Ground Floor General Arrangement Plan ARC-HSL-DA-1100			
ELEMENT	PREMISES STANDARD	POTENTIAL DDA ISSUE	RECOMMENDATION
Augmented hearing provisions	D3.7 (1) – (4)	During the Design Development stage, consideration of hearing augmentation systems is to be documented at appropriate locations throughout the complex.	This is a specialist technical area. The project would be well advised to seek advice from specialist contractors. <b>Use AS1428.5 – 2010 as the basis for planning hearing and communication systems for the many various functions of the building.</b>

### Premises Standard - Part D3 Access for People with Disability

Part D3 of the Premises Standard specifies requirements for access for people with a disability to buildings by classification. The review will now assess the plans against the classification requirements with recommendations in **bold font**. 'The Ribbon' has functions that relate to several classes:

Class of Building	Access Requirements
<b>Class 5</b>	To and within all areas normally used by the occupants
<b>Class 6</b>	To and within all areas normally used by the occupants
<b>Class 7a</b>	To and within any level containing accessible carparking spaces
<b>Class 9b</b>	
An assembly building not being a school or an early childhood centre	To wheelchair seating spaces provided in accordance with clause D3.9. To and within all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces
<b>Class 10a</b>	
Non-habitable building located in an accessible area intended for use by the public and containing a sanitary facility, change room facility or shelter	To and within: <ul style="list-style-type: none"> <li>(a) an accessible sanitary facility; and</li> <li>(b) a change room facility; and</li> <li>(c) a public shelter or the like</li> </ul>

CLASS 5 - Levels 01 – 14 Office Floor Plans and Level 01, 03, 04 Podium Floors		
Lift banks	The west and east wings each have a bank of 6 lifts spanning the office and podium areas. Destination control lifts may leave the building open to a DDA complaint from blind or vision-impaired staff in upper levels as they are difficult for independent operation.	<b>Discuss options with lift providers and ensure some form of equitable use is possible. Whatever type is selected, ensure the lift internal and external controls (if any) comply with AS1735.12 and Table E3.6(b) of the Premises Standard, which specifies the requirement for audible information within all lift cars and other criteria.</b>
Inclined columns	For any spaces that have the structural inclined columns, some form of warning will be required	<b>Plan for protection up to a vertical clearance height of 2m for inclined columns in upper storeys, including the application of</b>

	to a vertical height of 2m.	<b>contrasting TGSi. Discreet TGSi must contrast by 45% to the floor material selected.</b>
Structural column contrast	The open office floor plates with columns in regular grids, largely hidden by walls meets the requirement for access in any configuration of voids.	<b>All columns that remain visible must have 30% luminance contrast to floor surface material.</b>
Function Balcony	Issues of water barriers at the external balcony to the internal floor can make access barriers with lips and vertical gaps.	<b>Ensure a tested design solution is used on any outdoor transitions to internal surfaces that avoid lips of over 5mm.</b>
Podium Level 01	No shower shown in accessible toilet on Level 01 – cyclist shower.	<b>Document accessible shower and associated elements in Level 01 unisex toilet and check whether lockers are best placed in this room.</b>
Podium Level 04 amenities	If this tenancy is fitted out as a gym, it will need a shower in the accessible toilet.	<b>Provide a unisex accessible a toilet/shower for the gym on Podium Level 04.</b>
Accessible toilets in upper storeys	The unisex accessible toilets shown in the east wing office and Podium levels are all right hand transfer.	<b>Mirror the toilet design for right and left alternation to access toilets to create facilities with both right and left-handedness.</b>
Ambulant cubicles	Each of the toilet bank designs provides for a cubicle to suit people with ambulant disabilities.	Provision complies with the Premises Standard. Note grabrail length can be shorter than shown – they do not need to be full length. <b>See AS1428.1 Figures 53(A) and (B).</b>
West Wing accessible toilets Office Levels 01-09	Table F2.4(a) minimum requirements for Class 5,6,7 and 9 buildings calls for 1 accessible toilet on each storey where there are other toilet banks and where a storey has more than 1 bank of male and female toilets, another toilet on not less than 50% of those banks.	<b>Provide a unisex accessible toilet in the west toilet bank of every floor to ensure equity if tenancies are divided or for employees working in the western wing and make the building easier to construct with a consistent plan on each level. Ensure that the toilet complements the handedness of the other access toilet on that storey.</b>
East Wing Level L15 toilets	Current the office floor plate on Level 15 does not show a set of toilets.	<b>Design a bank of male/female toilets with ambulant cubicles and a unisex accessible toilet for Level 15.</b>

<b>CLASS 6- Ground and Podium Levels under Level 03</b>		
Kitchens, Bars and Serving Areas	Each function needs to consider access within as well as into spaces at the next stage of design and appropriate fittings.	<b>In Design Development, ensure fittings meet AS1428.2.</b>
Glazing on an accessway	Where there are frameless or fully glazed windows or glazing capable of being mistaken for a doorway, it is important to have compliant glazing strips to warn of a hazard for people with vision impairment.	<b>In Design Development, take care to create compliant glazing as in AS1428.1 Clause 6.6 designed to meet access requirements and highlight The Ribbon's unique brand.</b>

CLASS 7a- Ground Level		
Accessible Carparking	A ground-level accessible carparking bay with adjacent transfer space has been allocated.	Compliant for specification for at least 1 accessible space per 100 carparking spaces for office occupants. <b>Meet AS2890.6 in design.</b>

CLASS 9b- Ground and Level 01		
IMAX entry and exit lifts	The Sketch Design shows two lifts at the IMAX cinema, one for entry and one for exit following the one-way normal circulation of IMAX cinema management. This is an excellent part of the design and will increase audiences of people with disability, friends and family.	<b>Ensure that the lifts for the IMAX complex meet Premises Standard Table E3.6 (b) for passenger lifts which reference AS1735.12 features.</b>
IMAX cinema accessible seating space numbers	Table D3.9 of the Premises Standard gives a formula for calculating the number of wheelchair seating spaces in Class 9b buildings. For a cinema of 450 seats, it calls for 3 seats up to 151 customers, then 1 space for each additional 50 seats.	This requirement translates to a total of 9 accessible seating spaces for the IMAX. The Sketch Design plan is compliant with this requirement. Seats are at the preferred viewing location and none are in the first row which is prohibited under the Premises Standard.
IMAX accessible seating distribution	The grouping of the wheelchair seating spaces is to be not less than 1 single space and not less than 1 group of 2 spaces and not more than 5 spaces in any other group.	The IMAX design aims to give wheelchair users a premium experience by locating spaces at the optimal viewing distance from the large screen on the cross-over level and ensuring that the majority of seats (7 of the 9) are located centrally. The other two are still considered in an excellent viewing position. This distribution complies with the Premises Standard.
IMAX accessible seating location	D3.9 (b) (iii) states that the location of wheelchair seating is to be representative of the range of seating provided.  Attention to equitable access and egress with lifts at north and south ends makes this is a very desirable entertainment experience for people with disability.	The cantilevered design of the Darling Harbor IMAX does not allow any lift access to the top tiers for an alternative location. Similarly the front row is not deemed to be a desirable location in an IMAX size screen. The design solution to keep all wheelchair spaces on one level has been made within the limitations of the site but aims to provide a gold level experience with 9 wheelchair seating spaces and companion seating in the best viewing spot.
IMAX accessible toilets	The Sketch Design shows a unisex accessible toilet adjacent the male/female toilet banks on both levels.	<b>Ensure that the two accessible toilets in the IMAX complex have alternated handing.</b> <b>For a premium experience, consider providing automatic sliding door controls and locks.</b>

Parent Facilities at IMAX toilets on both levels	Premises Standard requires a unisex accessible toilet on every storey containing sanitary compartments. This is shown. There is no provision for parent facilities in the plan at Sketch Design.	Consider adding a horizontal pull-down baby change table in both unisex accessible toilets in the IMAX complex if another suitable space is not available. <b>Meet AS1428.1-2009 Clause 15.2.8.2 for baby change tables if installed.</b>
IMAX concession and bar counters	A vital access element at the movies is the concession counter to buy tickets, food and beverage. Level 1 (Option 4) also shows a bar.	<b>Design all customer service counters at an accessible height of 870mm maximum as in AS1428.2 Clause 24.</b>
Function Space and Balcony – IMAX Level 1 plus Foyer and retail area on Ground Floor	Inclined columns are prominent in the Function Space and Balcony as well as the Foyer and large retail area on the ground floor. In particular the double doors into the Balcony lead directly to an inclined column.	<b>Review the door placement into the Function Balcony and attempt to move the public flow to the right and not directly into the inclined column. For all other columns, use a combination of TGSi and luminance contrasting to increase safety.</b>

<b>CLASS 10a - Ground Floor External Building</b>		
Toilet facilities in building separate to The Ribbon	Although not planned yet, it is important to design robust and equitable facilities with direct access to unisex accessible toilet and ambulant cubicles in male/female as in the office layout.	<b>For a premium experience, consider providing automatic sliding door controls and locks inside and outside the toilet for security and assistance to people with hand mobility or strength issues.</b>
Parent facilities	In design of the parent facilities, consider bench heights, change table, microwave placement and other features that can be used by a parent in a wheelchair.	<b>See AS1428.1 Clause 15.2.8.2 for baby change specifications for access.</b>
First aid facilities	Design as much circulation space as possible in this room.	<b>Consider provision of height adjustable bed to assist children, elderly people and people who may need to transfer from wheelchairs onto the bed.</b>

<b>CLASS 10b - Level 04</b>		
Potential pool	If the plan for the gym is to include a pool with a total perimeter of greater than 40m, it is required to be accessible.	<b>See Part D5, Accessible water entry/exit for swimming pools in the Premises Standard for options if any pool is proposed greater than 40m in perimeter.</b>

At Sketch Design Phase, the Ribbon substantially meets DDA Premises Standard requirements. Attention to the above recommendations will improve its accessibility and equity as it moves into the next design stage.

Becky Llewellyn ACAA  
Director, Disability Consultancy Services Pty Ltd