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Ref: AN13-202618 SOPA Ferry Wharf Wentworth Point - Access and Mobility Report - 20140512\_YW\_MB

12 May 2014

**Ionic Management PTY LTD**  
**Level 37, Chifley Tower, 2 Chifley Square**  
**Sydney NSW 2000**

**Attention: Louis Goulimis**

**Dear Louis,**

**Re: Access and Mobility Report**  
**Project: New residential and retail development**  
**Address: SOPA, The Wharf Site, Wentworth Point**  
**1 Burroway Road, Sydney Olympic Park, NSW 2127**

Philip Chun Accessibility provides the following professional opinion in regards to access for people with disabilities to and throughout the proposed new residential and retail development of the Wharf Site, Wentworth Point, Burroway Road, Sydney Olympic Park Wharf site.

## **1.0 INTRODUCTION**

This access report has been prepared for Ionic Management Pty Ltd and represents a review of all aspects of access to and within the site with respect to Auburn City Council DCP, the Building Code of Australia 2013 (BCA), Disability (Access to Premises - Buildings) Standards 2010 (Premises Standards), Disability Discrimination Act 1992 (*Cth*) (DDA), and relevant Australian Standards as applicable to this project. This report confirms accessibility has been appropriately addressed in the associated planning documentation and confirms the Client's commitment to the development of an equitable and accessible environment for all.

Philip Chun Accessibility permits submission of this report to the Sydney Olympic Park Authority / Auburn City Council to satisfy planning requirements which stipulate the submission of a suitable Accessibility Report as part of the Development Application process. Consideration has been given to the Access and Mobility requirements of Auburn city council's DCP and AS4299 when considering the Adaptable Units which form part of the proposal.

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The following documentation prepared by Rice Daubney was reviewed as part of our assessment (Rice Daubney Job Reference 12005):

Plan No	Title	Revision
DA - 1001	Basement Level 3	
DA - 1002	Basement Level 2	
DA - 1003	Basement Level 1	
DA - 1201	Level 1	
DA - 1301	Level 2	
DA - 1302	Level 3	
DA - 1303	Level 4	
DA - 1304	Level 5	
DA - 1305	Level 6	
DA - 1306	Level 7	
DA - 1307	Level 8	
DA - 1308	Level 9	
DA - 3101	Apartment – Type _D Accessible	C
DA - 3102	Apartment – Type _B Accessible	A

## 2.0 DISABILITY DISCRIMINATION ACT 1992 (*Cth*) (DDA)

The Disability Discrimination Act 1992 (*Cth*) (DDA) states it is unlawful to discriminate on the basis of disability, protecting persons with disability and their associates. Section 23 of the DDA relates to access to premises and facilities which the public may enter or use, and states it is unlawful to:

- Refuse access to, or the use of, any premises, or the facilities within them.
- Impose terms or conditions specific to persons with disability and their associates on the access and use of any premises or facilities;
- Exclude access based on the provision of an appropriate means of access;
- Request persons with disability or their associates to leave premises or cease use of facilities.

The DDA also addresses discrimination in other areas, including:

- In employment (Sections 15 to 21);
- Education (Section 22);
- Provision of goods, services and facilities (Section 24);
- Accommodation (Section 25);
- Land (Section 26);
- Clubs and associations (Section 27);
- Sport and recreation (Section 28);
- Administration of Commonwealth laws and programs (Section 29);
- Requests for information (Section 30).

In contrast to building regulations, the DDA is not prescriptive and at this stage there are no comprehensive DDA standards which can be adhered to, in order to ensure premises owners and facility providers meet the spirit and intent of the Act and eliminate their risk of attracting a complaint.

There is a misconception that compliance with the BCA or Premises Standards equals compliance with the DDA; however there is a lack of uniformity between these legislative documents. The BCA stipulates minimum provisions for access and are by no means ideal. In order to provide guidance on this issue, the Human Rights and Equal Opportunities Commission (HREOC) have produced

'Advisory Notes on Access to Premises'<sup>1</sup> to assist designers, builders, owners, managers, operators, regulators and users in their understanding of the application of Section 23 of the DDA.

In 2011 there were considerable changes to the BCA, to correlate with a new National Standard for access to premises, called the Disability (Access to Premises - Buildings) Standards 2010 (Premises Standards). One of the key objectives of the Premises Standards is to provide greater consistency between the Acts, clarifying the objectives of the DDA through the modification of the deemed to satisfy provisions of the BCA. Therefore meeting the requirements of the 2013 Building Code and Premises Standards will now provide a higher degree protection against any claim for discrimination, although it is important to note that this protection only relates to those items covered by the Standards themselves.

Whilst the DDA does not have a significant impact on the residential element of this development scheme such as this, the principles remain valid. The application of adaptable housing standards to the proposal will require careful scrutiny both of public access but also the means residents access and use of the facilities available.

This scheme has been assessed against both the BCA2013 and Premises Standards.

### 3.0 PROJECT DESCRIPTION

The SOPA project site is located on 1 Burroway Road, Sydney Olympic Park, runs between Monza Drive and Footbridge Boulevard, known as The Wharf site, Wentworth Point.

The project incorporates the following:

- Two hundred and fifty six (256) residential (Class 2) sole-occupancy units.
- Retail part of the development to the ground floor
- Six hundred and thirty two (632) undercover car parking spaces.

Two hundred and fifty six (256) Class 2 residential sole-occupancy units are proposed over levels 1- 9. As required under the Sydney Olympic Park Authority and Auburn Council DCP (Multi Dwelling Housing), 10% of the residential units shall be designed for adaptability against the principles of AS4299. This equates to twenty-six (26) units.

The proposed development incorporates multiple retail outlets to the ground floor with residential units to level 1-9 as well as 3 levels of basement parking.

The design of the basement parking providing scope for residents to be able to access and use their allotted parking bay against the principles of accessibility as identified in AS4299, being designed to meet both BCA and AS2890.6 (2009) requirements. A minimum of 26 car parking bays will be required to support each of the adaptable units which has been included, as identified in 4.2, below.

Vertical circulation will be provided between basement parking, ground floor retail outlets and upper levels of residential units via six passenger lifts. Access to the apartments will be available to all residents, both from the 3 levels of basement parking, as well as the ground level and upper levels of residential zone. Access will also be available for the basement parking allocated for the retail element at ground floor, for common use. All lifts will meet the guidance in AS1735.12 and E3.6 of the BCA.

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<sup>1</sup> Human Rights and Equal Opportunity Commission (HREOC), 'Advisory Notes of Access to Premises', 1996

The existing topography of the site has some degree of fall from South to North. The pedestrian access will be predominantly from the North East of Foreshore Drive, but the design of the external site elements will provide for compliant pedestrian access to all the retail elements at ground floor level. The upper levels of the residential zone will be accessed by occupants only which can be accessed via pedestrian access points across the site, all of which will provide compliant accessible paths of travel from the site allotment boundary.

The project has emerged from a competition entry and has been scrutinised to ensure the scheme is capable of providing for inclusive design, with not just adaptability, but also flexibility for residents, visitors, employees and customer who will live, work and shop there.

As will be discussed below, these details have been scrutinised by Philip Chun Access and are considered to provide scope for compliant access for all users both in respect of the statutory requirements of the BCA / premises Standards, but also against the principles of the accessibility requirements of the Auburn City Council DCP along with the spirit and intent of the DDA.

## **4.0 ACCESS PROVISION**

The following areas of the development will be accessible by the public visitors and residents, excluding maintenance, garbage room and storage facilities, enabling safe, equitable and independent travel.

Consideration has been given to the Sydney Olympic Park Authority and Auburn City Council's accessibility requirements in their DCP.

### **4.1 Elements of Development**

The development consists of three levels of basement car parking, ground level plaza and retail and upper levels of residential accommodation.

The requirements of the BCA / Premises Standards would seek full accessibility to the common retail car parking and ground floor retail / child care and common areas.

The upper floor common areas / facilities serving the residential element would also require accessibility, although in respect of the specific residential elements, access is generally limited to the lifts and corridors, up to the entrance door of each apartment.

However, where adaptable apartments are provided, access from the allotment boundary through entrance lobbies and onward via lifts and upper floors and into the unit themselves becomes critical, which is discussed in 4.3 to 4.7, below. Access is also required from the designated car parking for adaptable units through to the units themselves.

These aspects of the development have been reviewed to ensure accessibility are capable of being achieved and is considered acceptable. This is discussed in more detail below.

### **4.2 Parking Provisions**

Three basement levels of parking are proposed with provision for stair and lift access to the ground and upper levels from all car parking levels (which includes residential, retail and commercial use). Travelators are also provided for vertical circulation between the retail car park and ground floor retail units (and child care facility). Drop off facilities will also be incorporated at ground level.

A total of 632 car park spaces are proposed.

Included in this figure are a minimum of 26 designated bays for the respective adaptable units at basement levels 2 and 3 along with 2 accessible visitor bays, all meeting the requirements of AS2890.6, as discussed below.

The retail element of car parking at basement level 1 has 104 car parking spaces, including two designated accessible bays meeting the provisions identified in D3.5 of the BCA. This meets the minimum requirements of the BCA / Premises Standards.

In total, car parking provision for people with disabilities will be at a minimum level of 28 bays.

All accessible car parking bays will be designed in accordance with the guidance in the Parking and Loading requirements of the Auburn DCP, meeting AS2890.6 (2009) guidelines identified, with a bay width of 2.4m and an unobstructed shared side zone of 2.4m.

Appropriate head height clearances to the accessible car parking areas at basement level will be achieved in accordance with AS 2890.6:2009, including not less than 2200mm between car park entry / exit and accessible car parking bays. The height to the designated accessible car parking bay itself and any overhead obstruction / ceiling will be not less than 2500mm (the height may be reduced to no less than 2200mm for a distance of no less than 1000mm from the front of the space, where the height must be no less than 2200mm), as identified in Figure 2.7 of AS2890.6 (2009).

Accessible car parking areas will be located to provide a continuous accessible route of travel to the lifts at basement level and key entry points into the residential and retail elements at ground floor level.

Signage will also be incorporated into the proposal, to identify the location of designated bays in the areas not specifically used by residents.

#### **4.3 External Access to Entrances and Circulation**

The proposed development is capable to allow people with disability to access the complex via a 1:20 grade walkway from the Foreshore Drive on Northeast, which is also the principle entry point into the development for the residents and people using the commercial retail outlets on ground floor. There is also scope for commercial customers arriving by car and taxi via the retail entry and exit approach to the Southeast side of the development, providing flexibility for people with disabilities. Vertical access can then be achieved to other parts of the complex by compliant lifts.

Ongoing access to the foreshore and ferry terminal will then be available, presenting potential access to public transport for residents and visitors.

Access to the residential foyers can all be achieved by compliant external paths of travel, with ongoing vertical circulation by lift through the principle pedestrian access via Foreshore Drive, providing flexibility for residents and visitors.

The retail elements will all be accessible off the main plaza area running from the South to the North of the site.

It is understood that local public transport facilities are within 100m (both bus and ferry), which also likely to be able to provide scope for accessibility via suitably compliant pedestrian routes to the allotment boundary. This will ensure that the site remains sustainable and will attract residents and visitors due to it being universally accessible for all.

Where level changes are required within the pedestrian circulation, these will be provided with compliant stepped and ramped access, complying with the requirements of AS1428.1 (2009); with ramped access being kept as shallow as possible; but with kerb ramps being specifically designed at 1:8 (AS1428.4 - 2009), to assist people with vision impairment. Generally all ramped approaches have been designed at 1:20 or shallower, thereby being recognised as "walkways" as opposed to "ramps" enhancing access and circulation and minimizing the need for additional detailing of handrails and tactile indication. However some level changes have also been supplemented with stepped access points adjoining graded walkways.

Tactile ground surface indicators will be provided in accordance with AS1428.4 (2009), to identify key hazards, including steps, ramps and where pedestrian routes cross vehicular routes of travel. Tactile indicators will not be provided to graded approaches less than 1:20, as these are considered "walkways" under AS1428.1 (2009), as noted above.

Widths of not less than 1500mm will be maintained to paths of travel and crossfall will not exceed 1:40. External paths will be designed and constructed in accordance with AS 1428.1 (2009) guidelines relating to surface finish, path delineation and suitable passing and turning spaces.

All surface finishes will be designed to be slip resistant in accordance with AS4586 and CSIRO guidance HB197:1999.

#### **4.4 Lighting**

Lighting will be provided to external and internal routes, meeting the guidelines in AS1428.2 and AS1680, providing a safe and functional environment for all users, particularly those with a vision impairment. External lighting on the approach to the development along the accessible route will meet AS1158.3.1. Lighting design will correlate with the wayfinding and signage strategy to assist those unfamiliar with the site, as discussed in 4.5, below.

#### **4.5 Way-finding Strategy and Facility Signage**

When development of the designs progress, a review of the proposed way-finding strategy and signage package to ensure predictability and consistency of information which facilitates safe, independent and dignified travel by all, particularly on approach to the building externally as well as to common facilities and to all elements in the hotel.

The way-finding strategy will be developed with consideration to existing landmarks and visual features of the development, including the use of varied finished surfaces to differentiate areas of the development. The effective use of surface finishes and tonal contrast will be utilized to assist all users of the site to identify their location and combined with visual cues and signage will enable clarity for ongoing access and circulation.

In particular, guidance and signage will be provided to assist visitors to the site to identify:

- The location and entry points into key residential entrance lobbies
- Access to retail units on ground floor
- Location of accessible car parking and drop off facilities
- Clear directional signage to publicly accessible sanitary accommodation

Tactile and Braille signage will be provided to meet the compliance requirements of the BCA and provisions outlined in AS 1428.1 (2009) including additional signage where deemed appropriate. Signage will provide a 30% luminance contrast to the background environment and to the signage itself.

Tactile ground surface indicators will be provided in accordance with AS1428.1 and 4 in respect of the vehicle crossing points, stepped and ramped access routes, along with luminance contrasting handrails to assist with clarity of these features.

#### **4.6 Doorways and Doors**

Automated doors are proposed to all key entrances points for the residential and retail elements.

Where manual doors are provided (e.g. smaller retail units) to each entrance, they will provide a clear opening width of not less than 850mm with an opening force not exceeding 20N. Approach to all entrances will be at no greater than 1:40 grade with sufficient area on either side of the door to enable independent access by wheelchair users, persons with ambulant disabilities and parents with prams, in accordance with AS 1428.1 (2009).

Where waterproofing is a concern, thresholds will not exceed 35mm in height, with localised ramping installed at the door with a gradient of 1:8 (maximum length 280mm).

All internal doors (including entry doors to units but not those within residential apartments) will enable independent access by all users, including clear opening widths of not less than 850mm to the operable leaf (minimum 920mm door leaf width) and appropriate circulation space for operation, per AS 1428.1 (2009). Section 4.10 addresses the doors to adaptable units.

Door hardware and any security measures, including controls and intercoms, will be selected and installed to comply with the requirements of AS 1428.1 (2009).

#### **4.7 Internal Circulation**

Internal paths of travel will be designed to enable safe and dignified travel by all. Continuous accessible paths of travel will be provided from the car parking area and building entrances to and within each public and common facility / area and to the entry doorway of each residence at all floor levels to ensure visit-ability by people of all abilities and thereby meeting BCA2013 requirements.

In the car parking areas, all designated accessible car parking spaces will provide a level accessible path of travel to compliant lifts, allowing vertical circulation to the retail and residential elements on all levels.

All common areas of the development are also accessible by means of a suitable lift and complying corridors as shown on plans. Internal corridors will all exceed the minimum 1540mm width, which will allow for a wheelchair to turn 180 degrees.

Finished surfaces, including wall, floor and door finishes will be selected to ensure adequate definition for people with varying degrees of vision impairment, such as minimum 30% luminance contrast between door and door frame, or door frame and adjacent wall. Appropriate visual indication which meets the compliance criteria of AS 1428.1 (2009) will be installed to all frameless or fully glazed doors and sidelights, and any glazing which may be mistaken for a doorway or opening.

Access to common facilities and open space will be provided with compliant access routes meeting the guidelines in AS1428.1 (2009).

Tenants / occupiers will be advised of their obligation to meet the objectives of the Disability Discrimination Act 1992 (*Cth*) (DDA) and to ensure principles for internal paths of travel for the development, as outlined in this report are maintained, including selection of internal finishes, path widths and circulation and access to and use of common facilities.



### Stairs:

The primary means of circulation within the buildings will be by lift, which provides access to all floors from the main ground floor foyer and basement car parking (as discussed below).

The main internal stairs will be used for emergency egress only and as such are considered “fire isolated” and will follow the guidance identified in Clause D3.3(a)(iii), which will include the provision of highlighted nosings to all step edges and suitable handrail design.

Stairs used for general circulation (in addition to lifts), will meet the full requirements of AS1428.1 (2009) and Premises Standards in respect of accessibility, including two handrails, closed risers, highlighted nosings and suitable tactile indication.

### Ramps:

Where required, any ramp will be designed to meet the full requirements of Clause 10 of AS1428.1 (2009), with a gradient of ramp not exceeding 1:14. All other horizontal circulation will meet the requirements for walkways and have adequate circulation meeting Clause 6 of AS1428.1 (2009) for access and circulation. However in practice, the design is aiming to eliminate the need for ramps by the effective use of compliant horizontal accessible routes combined with vertical circulation via lifts, which is welcomed as ensuring a universally accessible environment.

External pedestrian routes are addressed in paragraph 4.3, above.

All residential apartments will have no level changes within the units (as will be the case for the retail elements).

### Lifts:

Passenger lifts are proposed to serve all floor levels of the development, being the principle compliant means of vertical circulation. The lifts will meet the guidance in E3.6 of the BCA and the Performance Requirements of EP3.4 of the BCA2013. The lifts will be designed and installed to meet AS1735.12, as identified in the BCA2013.

The lifts will provide compliant access to all accommodation required to be accessible on all levels.

## **4.8 Accessible Sanitary Accommodation**

Sanitary accommodation will be provided to public areas to meet BCA / Premises Standards requirements. All amenity blocks will be designed against the requirements of F2.4 of the BCA which will include a wheelchair accessible toilet at every other bank of toilets on the ground floor level of the retail block as well as ambulant accessible facilities in each of the gender specific facilities. The design of the toilets will meet Clauses 15 and 16 of AS1428.1 (2009).

## **4.9 Facilities and Specific Accommodation**

As now required by the BCA2013, all common facilities will be provided with accessible routes enabling access for all resident, occupiers and customers. Street furniture, litter bins, and similar fixtures and fittings will meet either the specific requirements of AS1428.1 (2009) or the additional guidance provided in AS1428.2 (1992).

Community facilities will be considered for those who will use them and incorporate fixtures and fittings to assist people with disabilities. AS1428.2 (1992) will be utilised to meet best practice guidelines.



Finished surfaces, including communal facilities, and the background to which each is viewed will be selected to ensure adequate definition for people with varying degrees of vision impairment, such as minimum 30% luminance contrast between counter top and counter face.

Common areas / facilities will be reviewed to ensure compliance with the BCA2013. Common facilities, such as upper floor garbage and recycling facilities will be designed to enable access for residents. External fixtures and furniture will be designed against the principles in AS1428.1 (2009) and AS1428.2 (1992).

As noted in 4.5 above, public and common facilities will be provided with suitable signage (including directional signage) to enable those not familiar with the building to identify the facilities and their location.

#### **4.10 Sole-Occupancy Units (Residential)**

This development includes 256 residential units over upper floor levels, with 26 units designed for adaptability under the Sydney Olympic Park Authority and Auburn City Council guidelines and the technical guidance in AS4299 – Adaptable Housing. Philip Chun Access have assessed the potential of adapting 26 units (split proportionately between the one and two bedroom unit types) and are satisfied that the units identified on the plan for adaptability are capable of being suitably adapted against the provisions of AS4299, subject to a detailed review as part of design development, which may require modifications to internal apartment layouts.

Philip Chun Access recommends apartments are designed to enable ease of adaptability by residents in the future, which is likely to enhance demand for the apartments. Adaptability should be assessed to ensure appropriate circulation exists internally to facilitate access to and within at least the main bathroom facility, in addition to, sufficient access to and throughout the master bedroom and kitchen. All fixtures to be located with consideration to ease of modification in the future, including the location of plumbing and provision of modular joinery units. Detailed guidance is available in AS4299.

At a minimum (and to meet BCA2013) all residential units will be designed to enable access to and through the main entrance with clear opening widths to entrances of not less than 850mm (refer also to Building Entrances and Internal Doors, above).

The information below is intended to demonstrate that the proposal meets the key principles identified in AS 4299:

#### **Adaptable Apartments**

##### Introduction

It is noted that Class 2 residential developments do not require the provision of accessible units to meet the BCA. However Philip Chun Access recommends apartments which have been designed to enable ease of adaptability by residents in the future. Adaptable units permit more flexible kitchen design, do not require the installation of grabrails within bathrooms initially (but facilitate the future installation of grabrails by the provision of structural support within bathroom walls), and allow for the installation of additional, removable storage within circulation areas (such as a vanity unit within the bathroom).

### Building Design

The proposal provides for 26 residential units to be adaptable, equally spread over the upper levels of the building. The design has been assessed against the provisions of AS4299, Class C and the arrangements are considered capable of compliance with the guidance laid out in this Standard, as will be elaborated on below.

A review of the units has been undertaken to optimise the layouts for both pre and potential post adaption purposes, with the positive objective of making the pre adapted units appealing but with consideration to the principles set out in Section 2 of AS4299 for post adaption, which identifies the Objectives and Performance Requirements and in the latter case, the following is identified:

- a) **Visitability** – all units will be provided with scope to be "visitable" from the outset, allowing access to the entrance door to all units within the development
- b) **Avoidance of level Change** - All units have level floorplates which will ensure adaptability will be easy to accommodate.
- c) **Manoeuvrability** - the scheme provides for suitable space pre-adaption, but will accommodate wheelchair access and circulation against the principles of AS4299 on post adaption, particularly the bathroom and accessible bedroom.
- d) **Ease of adaption** - particular care has been taken to optimise space to the core adapted units, but also scope to carry out post adaption works relatively easily. Service locations will be carefully considered and any wall relocation will be designed so it will not affect electrical or plumbing services and will not be a "wet" wall in any of the sanitary accommodation. This will be reviewed as part of the design development phase of the scheme.
- e) **Ease of reach** - scope is included to ensure key services and controls will be located so they are within the reach range of a wheelchair user
- f) **Laundry facilities** - These have been carefully reviewed to ensure they are available pre-adaption and are accessible against the provisions of AS4299 on post-adaption.

As all the 26 designated adaptable residential units will be further detailed and be capable of adaptation, they will be capable of meeting the mandatory requirement of the adaptable units being representative of the unit types.

### Parking

Section 4.2 above provides detailed feedback on the design of the car parking, which accommodates for all units along with scope to meet the requirements for access and circulation for a person using a wheelchair.

Each adaptable residential unit will be provided with a designated car parking bay meeting AS2890.6 requirements.

Access is available to BCA compliant passenger lifts, ensuring suitable horizontal and vertical circulation is readily available to serve all the residential units from the car parking areas.

Visitor parking is also addressed in Section 4.2, above, but two visitor bays will be included for people with disabilities for the residential part of the development.

### Access to Common Use Areas

This is predominantly addressed in Sections 4.7 and 4.9 above, with common facilities and common access routes required for access by those living in the adaptable units being compliant with AS1428.1 (2009) requirements.

### Circulation - Lifts

As identified in 4.7, provision for passenger lifts have been included in the project to enable vertical circulation between all the residential units, the podium and basement parking levels and onwards to the designated accessible car parking bays for each unit. The lifts will be designed and installed to meet AS1735.12 and the performance requirements of the BCA2013.

### Entrance and Access to Adaptable Units

All adaptable units will be designed to enable access to and through the main entrance with clear opening widths to entrances of not less than 850mm and the potential appropriate circulation space per AS 1428.1 (2009) Clause 13.3 (refer also to 4.5 above), should this need to be included in any post-adapted arrangement.

In regards to internal doors, each will possess appropriate clear opening width with a minimum clear width of 820mm, with the door to the accessible bathroom meeting AS1428.1 (2009) requirements with a minimum clear width of 850mm.

A minimum unobstructed width of internal pathways will be 1000mm.

### Bedroom

The main bedroom within the adaptable units will possess sufficient circulation space (post adaption) to permit movement by a wheelchair user, being not less than 1540mm x 2070mm clear circulation to at least one side and/or base of a queen size bed on post adaption.

Window sills within the bedroom and living areas will be a maximum of 600mm and 730mm above finished floor level respectively, to enable viewing by persons in the seated position and persons who may be confined to bed (AS 4299:1995 Clauses 4.6.2 / 4.7.2).

### Bathroom

Particular attention will be given to the pre and potential post adapted bathroom facilities as part of the design.

Typically, the dimensions provide scope for a post adapted bathroom that will provide sufficient circulation space per AS 1428.1 (2009). The location of sacrificial service points will also be considered to enable scope to relocate sanitary fixtures, should a resident require this to be undertaken. This will be detailed as part of developing the design.

Structural support (such as structural ply sheeting) will be provided at toilet and shower grab rail zones, as appropriate, to allow for ease of installation of any future fixings. Whilst a vanity unit is proposed, this could be removed and non load-bearing walls relocated to enhance circulation as required. Generally, unit bathrooms will be reviewed with the potential for the pan and shower in the appropriate location for compliant circulation space, or the location of drain outlet / falls located to accommodate easy adaptation.

As suggested, secluded serviced will be provided, but covered in the pre-adapted arrangement with suitable tiled paneling. However this would provide scope to remove the paneling to allow the realignment of the fixtures where shown.

All service locations have been considered in respect to the potential post adaption layouts, thereby allowing fixtures to easily be relocated where shown.

### Laundry

Laundry facilities and joinery will be designed to allow for easy removable or relocation to cater for accessibility in the future; the post adaption location will provide for a clear 1500mm approach to the facility.

### Kitchen

The kitchen facilities have been located and designed to allow simple modification (minor modification of moveable workbench) and will achieve a minimum circulation of 1540mm between opposing walls, cabinets and appliances to facilitate completion of a 180 degree turn by a wheelchair user, when post adapted.

Where a proposed workbench will be relocated, consideration has been given to the location of services to ensure they can be reconnected without any difficulties.

In addition the design of the kitchen will accommodate for the potential adaption to include:

- An 800mm length of worktop that can be adjusted in height, with a removable base unit under
- The location of the fridge adjoining a suitable work surface
- Potential to adjust sink height, with a sink bowl depth of 150mm - lever type taps to be provided to the side of the sink
- Cooktops with side controls
- Isolation switches for appliances to be accessible / reachable (e.g. oven and fridge / freezer)
- Suitable oven height and worktop adjoining

### Balcony

The width of the balconies to adaptable units is 1540mm or greater which will permit access to these spaces and facilitate completion of a 180 degree turn by wheelchair user. Internal and external surfaces will be designed and constructed at grade (the maximum change in level between abutting surfaces to be 3mm, or 5mm where edges are rounded or bevelled) to enable access by all.

Where waterproofing is a concern a maximum threshold of 35mm will be provided, with a 1:8 graded ramp abutting the door (with a maximum length of 280mm). Alternatively, consideration will be given to a raised, permeable balcony surface, such as decking which will not impede drainage. Balcony balustrades will be not less than 1200mm in height to the adaptable units. The door accessing the balcony will possess appropriate clear opening width and circulation space to permit independent operation by a person with a disability and either provided with door furniture complying with AS1428.1 (2009) or capable of being added or modified.

### Visitability

The Building Code of Australia now seeks access to common areas and common facilities. AS4299 also has similar objectives to ensure that residential units on accessible levels are visitable.

The Building Code does not seek access into and circulation within the residential unit, however the design and layout of the adaptable units will provide for visitability under the principles of meeting access and circulation requirements under the BCA, allowing all units to be approached by people with a mobility difficulty via compliant list and accessway.

#### Power and Lighting Switches and Telephone / Television Outlets

AS4299 has guidance on the location of key services and switches to assist residents with a disability. As part of the detailing of the apartments this will be considered, including:

- Power outlets located at strategic points, 600mm - 1000mm off floor level, including
  - points 300mm from the edge of kitchen worktops
  - adjoining the bedhead
  - in living room (four outlets)
  - laundry areas (double outlet)
- Light switches, 900mm - 1100mm of floor level at convenient locations including:
  - adjoining potential bedhead
- Telephone points in the bedroom and living room (both adjoining a power outlet)
- Television outlets in the bedroom (opposite potential bedhead) and two points in living / dining areas

## 5.0 CONCLUSION

This access report has been prepared at the request of the applicant and does not absolve the applicant and owner of the requirements pursuant of the Disability Discrimination Act 1992 (Cth).

Philip Chun Access has endeavored to ensure all key aspects of access provision have been addressed and all reasonable attempts have been made to identify the main matters pursuant to the DDA. This professional opinion is subject to further assessment of detailed design documentation; to ensure the design principles are adhered to throughout subsequent stages of design and construction.

However this report provides feedback that in Philip Chun's opinion the proposal is capable of meeting the Sydney Olympic Park Authority and Auburn City Council's requirements for accessibility, as well as the Building Code of Australia and Disability (Access to Premises - Buildings) Standards 2010. It is also intended that the proposal meets all best practice guidelines to meet the intent of the DDA, providing a development that provides a universally accessible design for all users. With respect to this Philip Chun supports the proposal and advocates that it will provide a development that will enhance accessibility across the ACT.

If you have any queries in regard to the above, please do not hesitate to contact the undersigned.

Yours sincerely,



Martin Burgess  
Senior Access Consultant  
**PHILIP CHUN ACCESS**