

LEND LEASE

BARANGAROO SOUTH PUBLIC DOMAIN

ACCESS REVIEW

Morris-Goding Accessibility Consulting

FINAL v9

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Prepared by:


Eden Fong
Access Consultant
Morris Goding Accessibility Consulting

Reviewed by:


David Goding
Director
Morris Goding Accessibility Consulting

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1. EXECUTIVE SUMMARY

The Access Review Report is a key element in design development of Barangaroo South Public Domain, and an appropriate response to the AS1428 series, the 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 paths of travel and circulation areas 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 and common area access, can be readily achieved.

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

2. INTRODUCTION

2.1. General

Morris Goding Accessibility Consulting has been engaged by Lend Lease to provide an accessibility report in relation to the proposed Barangaroo South Public Domain project.

The requirements of the investigation were as follows:

- To review the supplied drawings of the proposed development;
- To provide a report that will analyse the provisions of disability design; and
- To recommend solutions that will ensure the design complies with the Disability Discrimination Act (DDA), Building Code of Australia (BCA) and AS 1428 series.

This report supports a State Significant Development Application (SSDA) (SSD6303) submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The SSDA seeks approval for public domain works within Stage 1A at Barangaroo South as described in the Overview of Proposed Development section of this report.

2.2. Overview of Proposed Development

The Public Domain SSDA seeks approval for the all public domain works within 'Stage 1A' of the Barangaroo South Site. These works include typical public domain features such as street paving, street furniture, lighting and planting.

Additional items such as shade/weather protection structures, water features and bicycle facilities are also included in the design of the public domain. Various services and infrastructure such as power and water are proposed.

2.3. Site Location

Barangaroo is located on the north western edge of the Sydney Central Business District, bounded by Sydney Harbour to the west and north, the historic precinct of Millers Point (for the northern half), The Rocks and the Sydney Harbour Bridge approach to the east; and bounded to the south by a range of new development dominated by large CBD commercial tenants.

The Barangaroo site has been divided into three distinct redevelopment areas (from north to south) – the Headland Park, Barangaroo Central and Barangaroo South.

The Public Domain SSDA Site area is located within Stage 1A Barangaroo South as shown in Figure 1. The SSDA Site extends over land generally known and identified in the approved Concept Plan as Blocks 1, 2, 3, and X and the area of the foreshore between Block X and Darling Harbour.

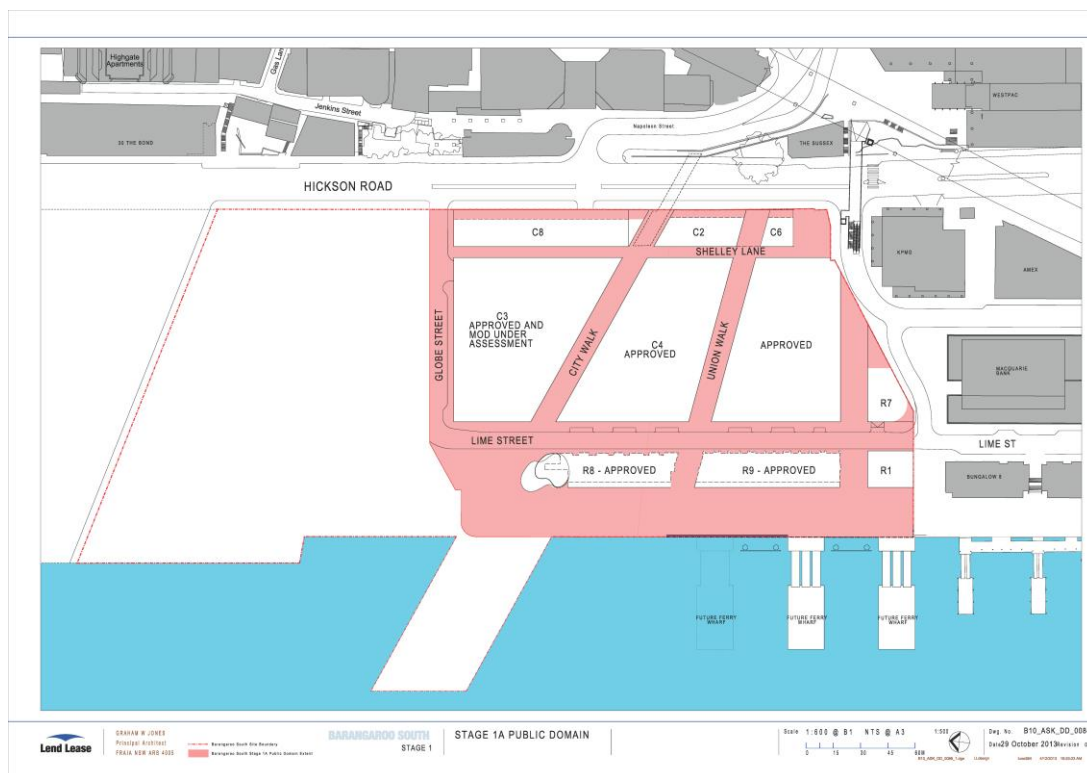


Figure 1: Public Domain Application Site Plan

2.4. Objectives

The Report seeks to deliver equality, independence and functionality to people with a disability inclusive of:

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

The Report seeks to provide compliance with the DDA. In doing so, the Report seeks to ensure the development eliminates, as far as possible, discrimination against persons on the ground of disability.

2.5. Accessibility Codes and Standards

The following standards and regulatory instruments have been applied in the report:

- AS1428.1(2009) – (80% of people with a disability accommodated)
- AS2890.6(2009) – (Off-Street Parking for People with a Disability)
- BCA 2013 – (Building Code of Australia)
- Disability (Access to Premises – Buildings) Standards 2010 ('Premises Standards 2010'), Schedule 1 of which is also known as the DDA Access Code 2010 (current to 1 May 2011)
- Disability Discrimination Act 1992 (Commonwealth)

3. ACCESSIBILITY COMPLIANCE FRAMEWORK

3.1. Disability Regulatory Framework

The Disability Discrimination Act 1992 ('DDA') is Commonwealth legislation that provides that it is unlawful to discriminate on the basis of disability.

The Premises Standards 2010 are a set of disability standards that were made pursuant to the DDA. The Premises Standards 2010 pertains to buildings in particular. It is unlawful to not comply with the Premises Standards 2010.

Schedule 1 to the Premises Standards 2010 is also known as the 'Access Code 2010'. The Access Code 2010 sets out the minimum accessibility design and performance requirements for buildings. The Building Code of Australia ('BCA') was amended to mirror the provisions of the DDA Access Code 2010, effective from 1 May 2011.

Enforcement of the DDA is principally via a complaints mechanism. Under this mechanism, an aggrieved individual has the right to lodge a complaint of disability discrimination with the Australian Human Rights Commission.

3.2. Applicability of the Accessibility Codes

In general, the scope of the Premises Standards 2010 and BCA is limited to buildings and the external areas that are within the allotments of those buildings. In general, neither the Premises Standards 2010 nor the BCA are applicable to external areas that are outside of the allotment of a building.

The Barangaroo South Public Domain development consists of external domain areas. Insofar as these areas are not associated with the commercial, retail, residential, or ferry wharf buildings, the Premises Standards 2010 and the BCA 2013 would have no application.

The DDA itself, however, pertains to disability discrimination in general; the Act's scope is not limited to equitable access to buildings. It follows that it would not be impossible for a built streetscape that provides poor access for a person with a disability to be subject to a DDA complaint.

The designer, developer, certifier and manager of the streetscapes in question are, therefore, advised to give due consideration to accessibility aspects of the external domain of the Barangaroo South Public Domain.

3.3. Use of AS1428.1 in this Report

AS1428.1(2009) is the principal Australian Standard in relation to accessible building design. It pertains to 'design for access and mobility' for new building works.

Compliance with AS1428.1(2009) is mandatory insofar as it is referenced in the Premises Standards 2010 and the BCA 2013. For the external domain, AS1428.1(2009) has been used in this report as a guide.

4. INGRESS INTO AND EGRESS FROM BUILDINGS

4.1. Code Requirements

The Barangaroo South precinct includes the following buildings: commercial buildings C1, C2, C3, C4, C5, and C6; residential buildings R8 and R9; retail buildings R1 and R7; and a retail and community building adjacent to Globe Square. All of the above buildings are buildings that are required to be accessible under BCA 2013 and the Premises Standards 2010.

The internal setouts of all of the above buildings are subject to approvals that are separate to the Barangaroo South Public Domain. Even so, clause 3.2(2) of the DDA Access Code 2010 / BCA 2013 requires the provision of access within the meaning of AS1428.1(2009) to the 'principal pedestrian entry' of all of the above buildings.

The Barangaroo South Public Domain development should, therefore, be capable of providing continuous accessible paths of travel to the respective main entries of the buildings within the development where relevant.

4.2. Ingress and Egress

The provision of access from the public domain to the principal pedestrian entries of buildings C1, C2, C3, C4, C5, C6, R8 and R9, R1 and R7, and the retail and community building is achievable within the present design for the Barangaroo South Public Domain.

It is understood that the form and setout of buildings C1, C2, and C6 have not yet been determined. In the current design, there is a vertical difference in floor level of approximately 1 metre between the Hickson Road public footpath and the ground levels of buildings C1, C2, and C6.

In the current design, there are main entry ramps that run from the Hickson Road footpath to the assumed location of the main entry doorways of buildings C2 and C6. The ramps will be detailed to include handrails, intermediate landings, and a suitable gradient throughout for compliance with AS1428.1(2009) during design development. The provision of an accessible path of travel from the Hickson Road footpath to the main entry doorway of building C1 will also be achievable during design development.

There are also main entry stairways that lead to buildings C1, C2 and C6. The above stairways can readily be detailed to comply with AS1428.1(2009) during design development.

The provision of a more direct accessible path of travel from the Hickson Road footpath to the main entrances of buildings C1, C2, and C6 would be preferred if possible. Currently, whilst the provision of an accessible path of travel into buildings C1, C2, and C6 over the 1000mm vertical rise is not impossible, the site constraints mean that the path of travel is 'side-on' in nature rather than direct. To achieve a more direct path of travel, a more gradual interface between the footpath and the main entry doorways would be needed.

5. PATHS OF TRAVEL

5.1. General

The design includes a number of pedestrian footpaths adjacent to Hickson Road, Globe Street, Lime Street, Shelley Street, and the Darling Harbour foreshore. There are also the following new pedestrian footpaths within the precinct: City Walk, Union Walk, Transport Place and Shelley Lane.

In general, there are suitable paths of travel for wheelchair users along the above paths of travel. The footpaths have sufficient clear width to enable two wheelchair users to pass each other and for a single wheelchair user to execute a 180-degree turn in an independent and equitable manner, as defined under AS1428.1(2009).

It is noted that there are temporary works at Globe Square in the north-west sector of the site at the Darling Harbour foreshore. There will be continuous accessible paths of travel within those temporary works.

There is a pedestrian ramp that runs along Union Walk in between buildings C2 and C6. The ramp has a gradient and clear width throughout in accordance with AS1428.1(2009). The ramp has handrails and an intermediate landing within it for compliance with AS1428.1(2009). The ramp is capable of providing a continuous accessible path of travel within the meaning of AS1428.1(2009).

There are multiple new items of street furniture within the streetscape. There are suitable clearances around those items for wheelchair access.

5.2. Pedestrian Crossings

There are three pedestrian crossings across Lime Street. Of the above crossings, the northern crossing is located near buildings C3 and C4, the central crossing is located near building C4, and the southern crossing is located near building C5.

The southern pedestrian crossing has a suitable clear width and suitable kerb ramps on either side to enable wheelchair access from one side of the roadway to the other under AS1428.1(2009).

The northern and central pedestrian crossing has a suitable clear width under AS1428.1(2009). Whilst the kerb ramps are offset from each other, both of the kerb ramps have overall widths that are sufficient and would allow a given wheelchair user to cross the crossing without requiring the execution of multiple turns to align themselves with the kerb ramps.

There are bollards at all of the above pedestrian crossings. The provision of a suitable clear width to allow for wheelchair access through the bollards is achievable.

5.3. Flush Vehicular Crossings Across Pedestrian Footpaths

There are flush vehicular crossings across pedestrian footpaths into Building C3 on Globe Street North, into Building C1 near the intersection of Hickson Road and Napoleon Street, and into Building R1 near Shelley Street in the south-west sector.

Under AS1428.4.1(2009), the provision of tactile ground surface indicators ('TGSIs') is required at such flush vehicular crossings so as to alert people with a vision impairment of the roadway hazard which would otherwise be indistinguishable. Many

Councils, however, are hesitant to allow provision of TGSIs on footpaths in the absence of a statutory requirement to do so.

In the absence of TGSIs, the provision of other measures to delineate the vehicular path of travel for pedestrians with a vision impairment is recommended. This can be addressed during design development.

5.4. Stairways

There are two separate stairways adjacent to Building R1 in the south-east sector of the Barangaroo South site near the new ferry wharves on the Darling Harbour foreshore as well as the existing King Street Wharf precinct.

As 'external domain', the stairways would not be required to comply with AS1428.1(2009). However, the above stairways could be classified as 'main entry stairways' for building R1. Were this occur, compliance with AS1428.1(2009) would then be mandatory.

The treads of the R1 stairways are tapered. Tapered treads pose a trip hazard for people with a vision impairment in particular because the extent of the treads are not necessarily easy to detect, or 'read'.

There is no bar under code against the use of tapered treads. However, the provision of measures to alert people with vision impairment of the presence and nature of these treads is recommended.

5.5. Linkages to Adjacent Precincts

There is a new pedestrian bridge connection over Hickson Road in the south-east sector of the site – near the intersection of Shelley Street and Hickson Road. The above bridge forms the western end of the Wynyard Walk. There is a separate new pedestrian bridge connection over Hickson Road from the new City Walk within the Barangaroo South precinct to Napoleon Street.

Both of the above bridge connections are subject to approvals that are separate to the Barangaroo South Public Domain. Accordingly, neither of the bridge connections is discussed in detail in the present report.

The Barangaroo South Public Domain project will allow for the provision of continuous accessible paths of travel to each of the above bridge connections for people with a disability in general.

6. PUBLIC FACILITIES

6.1. Taxi Ranks

There is a taxi rank on the southern side of Globe Street North at the northern side of the Barangaroo South precinct. There is a second taxi rank on the east-west vehicular roadway on the southern side of Building C5.

There is no requirement under the DDA Access Code 2010 or the BCA for the provision of an accessible taxi bay at a taxi rank. However, the Barangaroo precinct is likely to be a major gathering point for workers, residents and visitors alike. It is not unlikely that a significant portion of those workers, residents and visitors will have a disability and will require use of accessible taxis.

As a matter of accessibility best practice, the provision of not less than one accessible taxi bay in the precinct is advised. If possible, the provision of one accessible taxi bay at each taxi rank is preferred.

Where provided, the accessible taxi bay should comply with the parallel parking requirements of AS2890.6(2009). That is, the bay requires a minimum length of 7.8 metres, with a width of 3.2 metres preferred. A 1:8 kerb ramp at the rear of the bay is also required. This can be addressed during design development.

6.2. Signage

It is noted that the ambitions for the current Barangaroo public information system concept design include ‘effortless’ orientation and information, and the ‘celebration of design excellence’.

In keeping with these goals, the use of signage in the precinct should aim to enhance the experience of people with a disability in the precinct. The detail of the systems can be addressed during design development stage.

Where applicable, the accessible facilities in the public domain should possess accessible identification signage.

Consideration should also be given to providing directional and informative signage in the precinct that is accessible for wheelchair users and people with sensory impairments – that is, vision and hearing. The signage should direct users to key features and attractions, including public transport linkages.

The provision of a signage system that caters for people with a disability will be addressed during design development.

7. CONCLUSION

The subject development provides a comprehensive system of continuously accessible paths of travel for people with a disability within the meaning of AS1428.1(2009).

The subject development is capable of providing seamless connections for people with a disability to the various buildings within the Barangaroo South precinct for the satisfaction of the relevant provisions of the Disability (Access to Premises – Buildings) Standards 2010 and the Building Code of Australia 2013.

The subject development is capable of providing seamless connections for people with a disability to key linkages to adjacent precincts. The subject development also has the potential to provide equitable access for people with a disability to the various new public facilities within the public domain of Barangaroo South precinct itself.