

# Barangaroo South

## Draft Design Guidelines 2015

27 February 2015



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## Contents

<b>1.0 INTRODUCTION</b>	<b>5</b>
1.1 Name of this document .....	5
1.2 Purpose of the design guidelines .....	5
1.3 Land to which the design guidelines apply .....	5
1.4 Structure of the design guidelines .....	5
1.5 Application of the design guidelines .....	6
1.6 Relationship to other planning documents .....	6
1.7 Terms and Acronyms .....	6
1.8 Figures.....	7
<b>2.0 VISION AND PRINCIPLES</b>	<b>9</b>
<b>3.0 KEY ELEMENTS AND URBAN STRUCTURE</b>	<b>11</b>
<b>4.0 OPEN SPACE GUIDELINES</b>	<b>16</b>
4.1 General .....	16
4.2 Open Space Network .....	16
4.3 Street Network .....	18
<b>5.0 BUILT FORM GUIDELINES</b>	<b>22</b>
5.1.1 Building envelopes .....	22
5.1.2 Residential Amenity.....	22
5.1.3 Car Parking & Servicing .....	23
5.1.4 View Sharing .....	24
5.1.5 Overshadowing .....	25
5.1.6 Building mass and location .....	25
5.1.7 Tower setbacks .....	28
5.1.8 Street walls .....	29
5.1.9 Building Articulation .....	30
5.1.10 Building Legibility.....	31
5.1.11 Ground Floor Permeability and Accessibility of Public Realm .....	32
5.1.12 Ensuring Quality of Rooftops.....	33
5.1.13 Articulated Facades .....	34
5.1.14 Active Frontages.....	35
5.1.15 Ground Plane and Pedestrian Comfort .....	37
5.1.16 Signage.....	37
<b>FIGURES</b>	
<b>1</b> Figure 1: Land to which the design guidelines apply	5
<b>2</b> Figure 2: Urban structure	13
<b>3</b> Figure 3: Development blocks and indicative building envelopes	14
<b>4</b> Figure 4: Open space network	17
<b>5</b> Figure 5: Street network	20
<b>6</b> Figure 6: Pedestrian and cyclist network	21
<b>7</b> Figure 7: Active frontages	36
<b>TABLES</b>	
<b>8</b> Table 1: Key elements	11
<b>9</b> Table 2: Open space network characteristics	17
<b>10</b> Table 3: Street characteristics	19

# **Part 1: Introduction**

## 1.0 Introduction

### 1.1 Name of this document

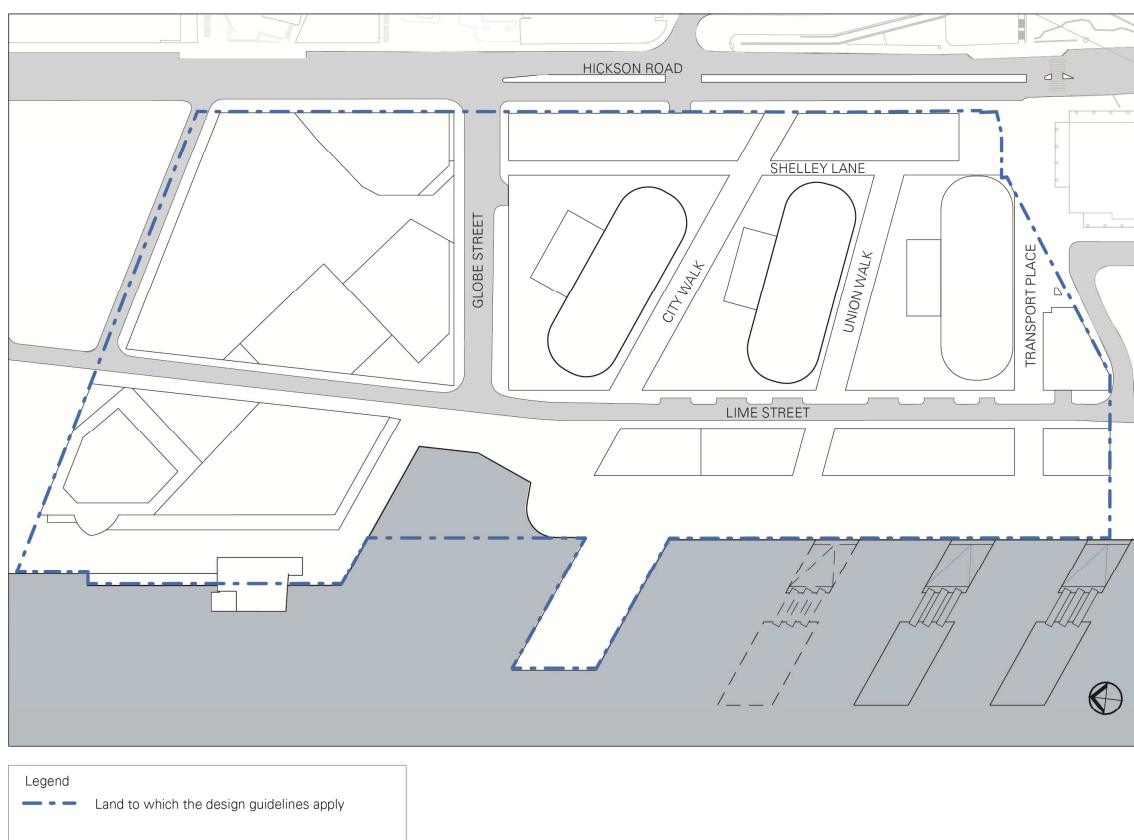
This document is called the Barangaroo South Design Guidelines (the design guidelines).

### 1.2 Purpose of the design guidelines

The purpose of the design guidelines is to provide a framework to guide development of land at Barangaroo South, within the context of the Barangaroo Concept Plan.

### 1.3 Land to which the design guidelines apply

The design guidelines apply to development on land known as Barangaroo South at Barangaroo (the site) as shown at **Figure 1 – Land to which the design guidelines apply**.



**Figure 1:** Land to which the design guidelines apply

### 1.4 Structure of the design guidelines

The design guidelines comprise five parts:

- Part 1 – Introduction, which outlines the intent and application of the design guidelines
- Part 2 – Vision and Principles, which identify the overall outcomes for the site
- Part 3 – Key Elements and Urban Structure, which provide the preferred layout of development on the site
- Part 4 – Open Space and Public Domain Guidelines, which provide performance criteria and design solutions for open space and public domain areas
- Part 5 – Built Form Guidelines, which provide performance criteria and design solutions for built form.

## 1.5 Application of the design guidelines

The design guidelines support the Barangaroo Concept Plan in establishing a framework for development on the Barangaroo South site. They are based on detailed planning undertaken for the site, including the Rogers Stirk Harbour + Partners Masterplan, Barangaroo Concept Plan Consolidated Instrument and Statement of Commitments.

The design guidelines provide an integrated performance framework in which to consider each development application on its merits. A key feature of this framework is to facilitate innovation and creativity through enabling alternative design solutions that can demonstrate achievement of the relevant performance criteria or vision and principles.

### Vision and principles

The vision and principles represent the overall outcomes for the site.

### Key elements and urban structure

The key elements provide an increased level of detail on the vision and principles, and the urban structure represents a spatial expression of the vision and principles. Variations to the urban structure are permitted where alternative layouts can demonstrate they address the vision and principles.

### Performance criteria and Design Solutions

Performance criteria are consistent with and provide further detail on the vision and principles. They address matters that are considered important to achieving quality development outcomes on the site. The Design Solutions represent the preferred way of demonstrating achievement of the performance criteria. Should development adopt a Design Solution, it will be taken that it has achieved the relevant performance criteria.

### Alternative design solutions

Should development not adopt a Design Solution, it may propose an alternative design solution. This alternative solution will be assessed against the relevant performance criteria. Should the relevant performance criteria not be satisfied, the applicant is to demonstrate that the proposal considers the vision and principles. Facilitating innovation and creativity through alternative design solutions is a fundamental aim of this planning framework. Consequently, when assessing a development application, the consent authority is to apply a flexible approach that allows consideration of reasonable alternative design solutions.

## 1.6 Relationship to other planning documents

The Design Guidelines provide guidance for development on the site. They are to be read in conjunction with other relevant documents including the Major Development SEPP and the Concept Plan approval. The guidelines are derived from the Rogers Stirk Harbour + Partners Master Plan (*note: the Master Plan does not play a role in the assessment of proposed development and is for illustrative purposes only*).

## 1.7 Terms and Acronyms

The names of all places, streets and laneways used in the design guidelines are for placeholder purposes only. Actual names will be determined in the future with the involvement of the NSW Government.

The following terms are used throughout these design guidelines.

<b>Active uses</b>	include cafe kiosks, retail kiosks, pavilions, ferry ticket office, public convenience (toilet facilities) and small equipment storage spaces and the like.
<b>Commercial uses</b>	include business premises, office premises, amusement centre and the like
<b>Community uses</b>	include child care centres, community facilities, educational establishments, entertainment facilities (other than cinemas and amusement centres), information and education facilities, landside ferry facilities, places of public worship, public administration buildings, public halls, recreation areas, recreation facilities (major, outdoor and indoor) and health services facility
<b>Key worker housing</b>	a use of premises for the provision of housing that is affordable, based on consideration of average income and costs associated with purchasing or renting housing, to any nurse, teacher, child-care worker, ambulance officer, member of the police force, member of the fire brigade or retirees with an income of approximately 50% of median household income for the Sydney (Statistical Division) (as that



	division is defined for the purposes of the Australian Bureau of Statistics)
<b>Residential uses</b>	include residential accommodation, multi unit housing, residential flat buildings, seniors housing, shop top housing and boarding houses
<b>Retail uses</b>	include food and drink premises, retail premises, markets and pubs and the like
<b>Tourist uses</b>	Tourist uses include backpacker's accommodation, bed and breakfast accommodation, hotel accommodation and serviced apartments, and gaming facility. Serviced apartments are only permitted to be included in the 'tourist uses' GFA if they are in single ownership and are not strata titled (refer to Condition B6(1) of the Barangaroo Concept Plan Determination)

The following acronyms are used throughout these design guidelines.

<b>CPTED</b>	Crime prevention through environmental design
<b>GFA</b>	Gross floor area
<b>LEP</b>	Local Environmental Plan
<b>SEPP</b>	State Environmental Planning Policy
<b>TMAP</b>	Transport Management and Access Plan

## 1.8 Figures

All figures in these guidelines are indicative only and are not to scale.

## **Part 2: Vision and Principles**



## 2.0 Vision and Principles

1. **City's New Western Façade:** create an integrated new western frontage to the city centre. The slender ends of buildings above podium level are oriented to the waterfront to minimise perception of bulk from the harbour. Residential apartments and the Block Y podium facing the waterfront will mediate the scale between tower forms and the public promenade on the waterfront.
2. **Hickson Road as a Boulevard:** promote the scale of Hickson Road as a grand boulevard. Buildings provide a consistent street wall definition to Hickson Road but with varied massing heights along the street frontage. The northern park connects with Globe Street.
3. **Buildings to Define Streets:** building facades are to define street alignments considering the differing character, scale and activation of the streets.
4. **North South Pedestrian Connections:** provide for pedestrian permeability through the blocks. The primary focus for north south pedestrian connections between blocks 2 to 4 includes the waterfront promenade, Lime Street and Shelley Lane. It is equally as important to provide east-west links through the main pedestrian walkways including Margaret Street, Union Walk, City Walk and Globe Street.
5. **Marking the City Frame:** to continue a built form dialogue with the adjoining city, building heights across the site are in keeping with the rest of the city, with the highest form at the north of the precinct to complete the city frame and define the city's north western edge.
6. **Open Space within Blocks:** create laneways, courtyards, walkways and parklands around the edges of building blocks. Create a fine grain structure of laneways and streets permeating the blocks, as well as open space at podium level between the tower forms.
7. **View Sharing:** promote the equitable access to views towards the harbour, the built form is to be arranged to define street corridors and to allow view corridors from the existing private buildings to the east. Provide sky view corridors between residential towers from Napoleon Street, Bond Square and the Harbour Bridge.
8. **Orientation of Buildings:** create a new city skyline silhouette formed by the gaps between the slender towers. The orientation of the tower buildings are to relate to the fanning principle, while the long facades are to be facing to the north. Buildings facing Hickson Road and the waterfront promenade are to be generally orientated to the east and west to define the linear nature of the road.

## **Part 3: Key Elements and Urban Structure**

### 3.0 Key elements and urban structure

The key elements are to be provided as part of development of the site are identified in **Table 1 – Key elements**.

The vision and principles for Barangaroo South as identified in section 2.0 of these Guidelines are spatially expressed in the urban structure for the precinct as shown in **Figure 2 – Urban structure** and **Figure 3 – Development blocks and indicative building envelopes**.

Performance criteria		Design solution	
<b>PC</b>	To ensure that development provides key elements whilst providing flexibility in the location and arrangement of these elements	<b>DS1</b>	Development provides the key elements in <b>Table 1 – Key elements</b> and is generally consistent with the structure at <b>Figure 2 – Urban structure</b> and <b>Figure 3 – Development blocks and indicative building envelopes</b> . Where variations are proposed, development is to demonstrate how the vision and development principles have been considered
		<b>DS2</b>	Development is to create a series of development blocks and building forms generally in accordance with <b>Figure 3 – Development blocks and indicative building envelopes</b>

**Table 1:** Key elements

Key element	Characteristics
<b>Land use</b>	<ul style="list-style-type: none"> <li>Mixed use precinct including high density residential, significant new commercial, retail, tourist, community and open space uses.</li> <li>Predominantly residential uses, along with active ground levels comprising non-residential uses, are principally located along the harbour-front and adjoining the northern parkland and commercial office buildings are predominantly located in other parts of the site.</li> </ul>
<b>Built form</b>	<ul style="list-style-type: none"> <li>A general height pattern comprising lower-rise buildings adjoining the harbour and taller buildings located internal to the site is established.</li> <li>This general built form pattern is punctuated by an iconic, landmark building located next to the harbour.</li> <li>Taller buildings are generally provided in a podium and tower form, with the podium extending to all street boundaries to define the public domain.</li> <li>Human scale streetscapes are created at ground level.</li> <li>A diverse yet cohesive series of buildings is created.</li> <li>Different building heights and forms creates a modulated, visually interesting skyline.</li> </ul>
<b>Open space</b>	<ul style="list-style-type: none"> <li>Continuous publicly accessible foreshore open space is provided that integrates with adjoining open space north and south of Barangaroo South.</li> <li>A large new park is created at the site's northern end.</li> <li>A compact, intimate plaza is created at the site's southern end that is the primary entry point to the site from Wynyard Walk and the city.</li> <li>A plaza space is created adjacent to Building C5 to create a strong and</li> </ul>

civic southern entry to the site.

- Globe Harbour is established as an active waterfront space and a focus for the city extension at Barangaroo.
- Foreshore levels at Globe Harbour are designed to provide opportunities for people to physically touch water.
- Open spaces are illuminated after dark with context appropriate lighting to create safe, inviting and dynamic places.

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## **Movement**

- The city's existing north-west oriented grid is extended into the site to reinforce already established east-west linkages.
- Streets have a radial, fanned arrangement that provides increased daylight and sunlight to the ground level and ensures that vistas expand towards the water.
- Pedestrian and cyclist movement is prioritised over vehicular movement.
- A integrated and varied network of streets are provided.
- Strong pedestrian connections are established between the site and adjoining areas.
- Development on the site helps to establish Hickson Road as a grand boulevard through the provision of a continuous pedestrian colonnade.

*Note: Hickson Road is not within the direct control of the design guidelines*

- 'Lime Street' is established as the site's main retail and commercial street.
- Globe Street connects Hickson Road with Globe Harbour.
- 'City Walk' and 'Union Walk' provide pedestrian connections between Hickson Road and the harbourfront.
- 'Transport Place' provides a strong connection between CBD and the waterfront, including new ferry terminals.
- 'Shelley Lane' is established as an intimate laneway that provides an pedestrian connection north-south through the site.
- A series of through site links are provided through the commercial towers.

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## **Community**

- Provide opportunity for Community Uses to be incorporated within all residential and commercial buildings on the site.
- Provide the potential for a community facility on a new public pier adjoining Globe Harbour.
- Key worker housing is provided within a residential or commercial building adjacent to Hickson Road.

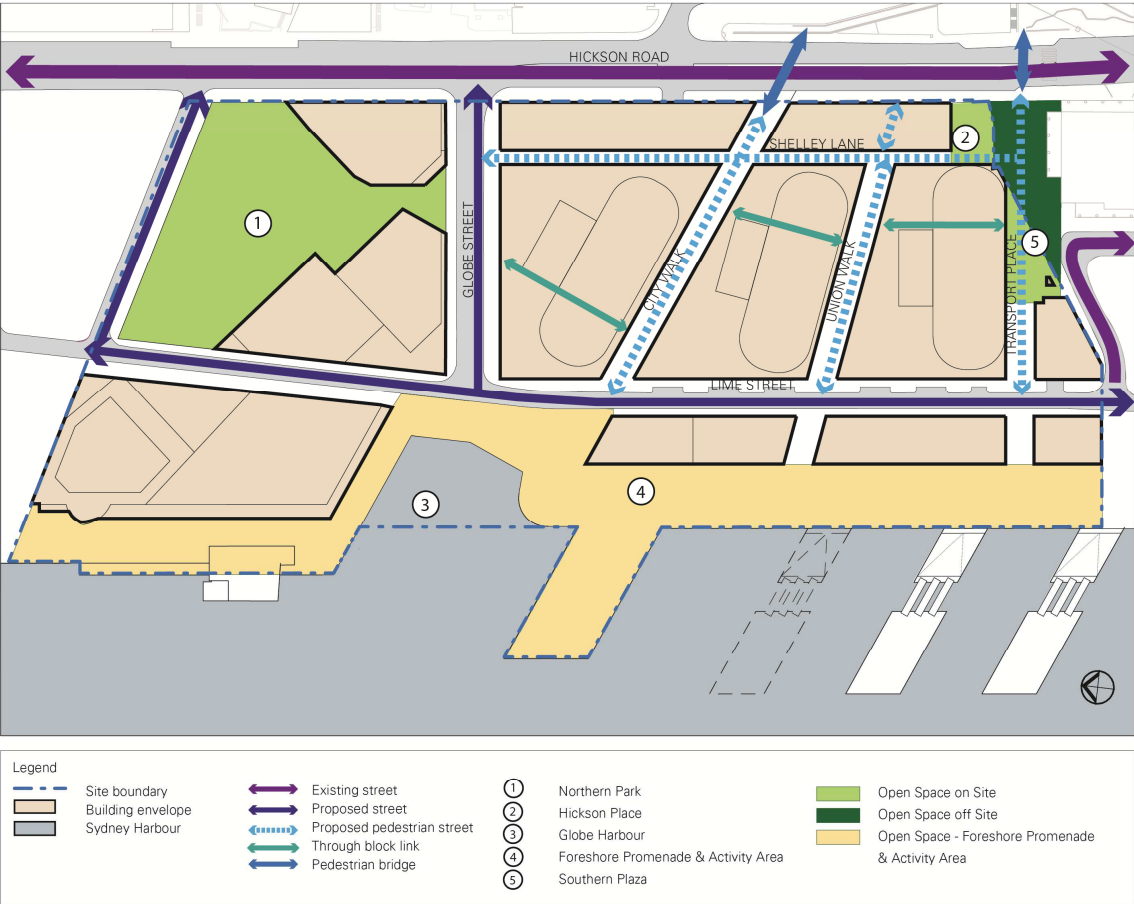


Figure 2: Urban structure

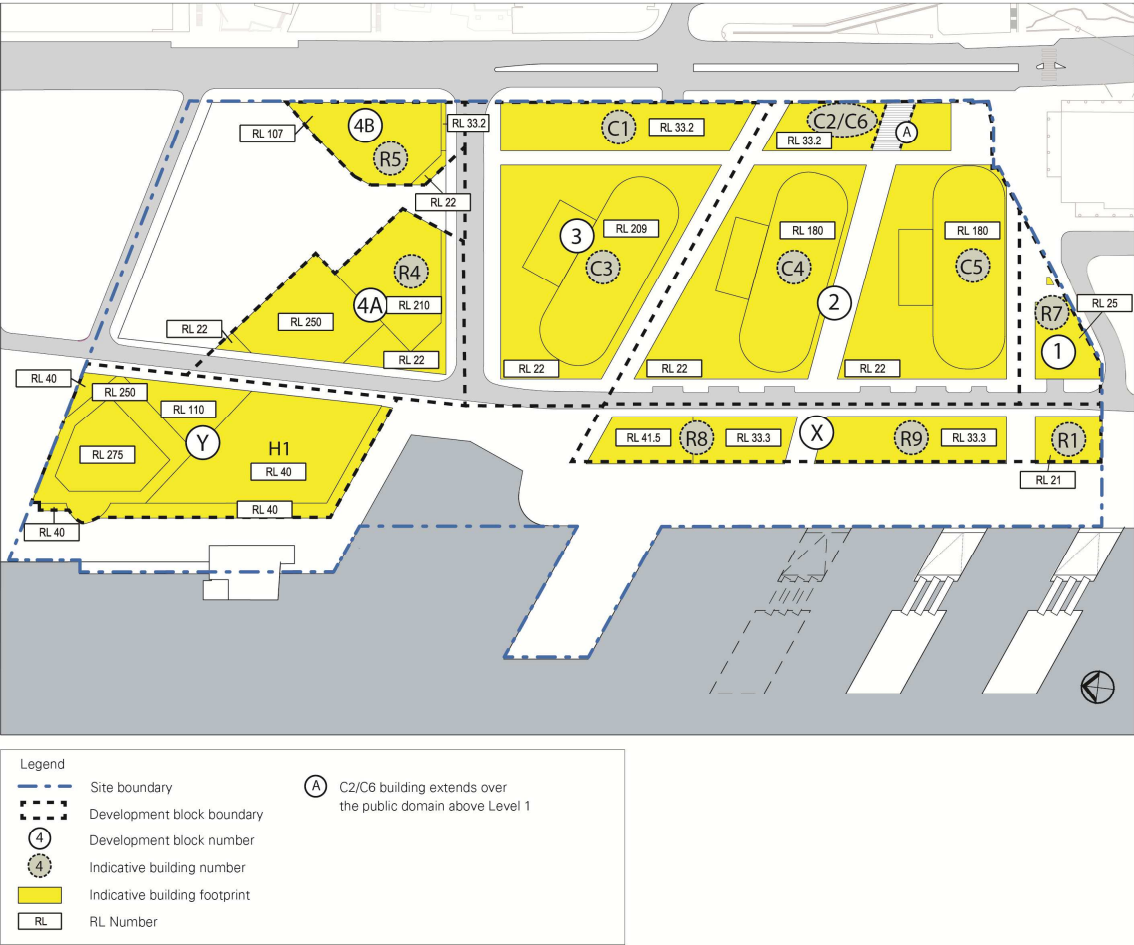


Figure 3: Development blocks and indicative building envelopes

## **Part 4: Design Guidelines**



## 4.0 Open Space Guidelines

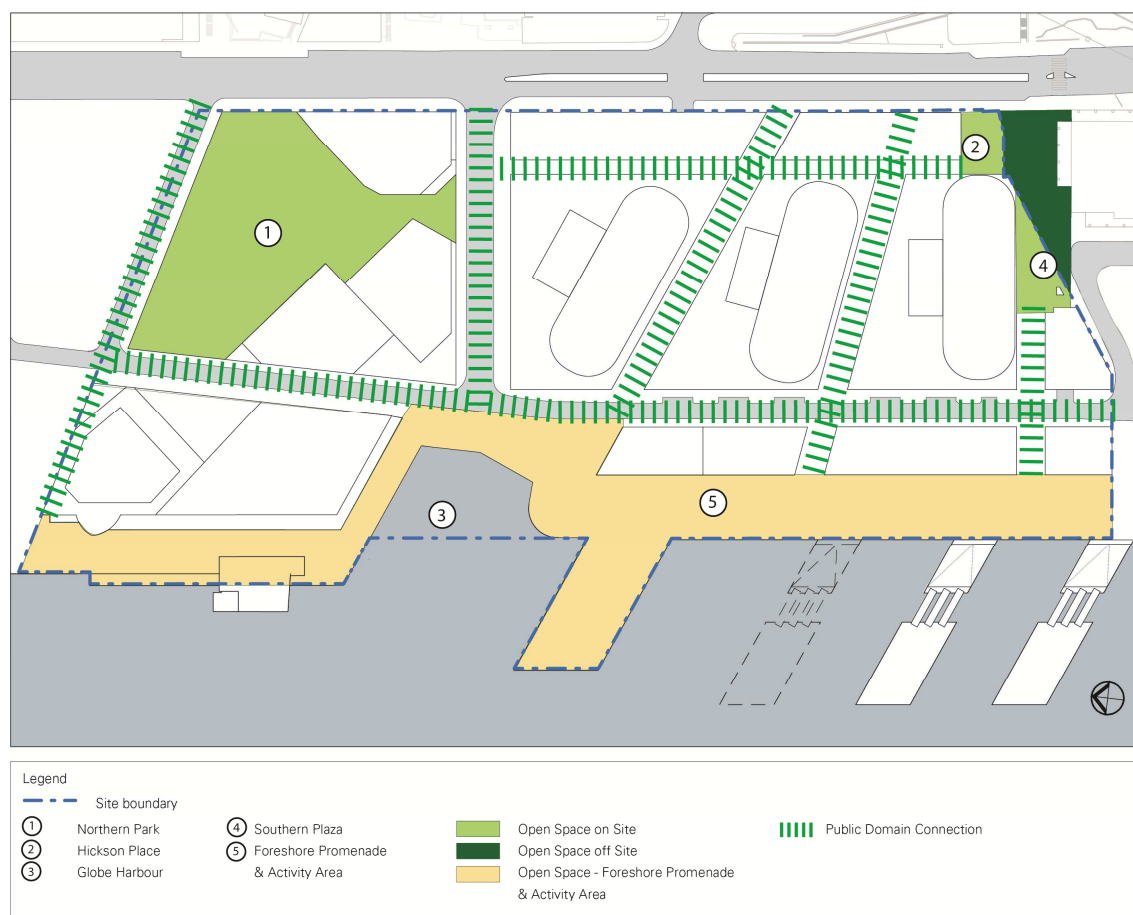
### 4.1 General

Performance criteria	Design solution
<p><b>PC</b> To provide an integrated public open space and public domain network that includes:</p> <ul style="list-style-type: none"> <li>a. a continuous pedestrian oriented foreshore promenade</li> <li>b. an internal street system that               <ul style="list-style-type: none"> <li>i. defines development blocks</li> <li>ii. provides easy flow of people and vehicles</li> <li>iii. acts as a comfortable stage for activity and human interaction</li> <li>iv. creates a distinctive address for each building</li> </ul> </li> </ul>	<p><b>DS1</b> Development occurs generally in accordance with <b>Figure 2 – Urban structure</b></p>
<p><b>PC</b> To create an attractive, safe and comfortable public domain that:</p> <ul style="list-style-type: none"> <li>a. creates a unique and cohesive identity for Barangaroo South</li> <li>b. is consistent with the role of Barangaroo South as a key part of the CBD</li> </ul>	<p><b>DS2</b> Applications for public domain works demonstrate the achievement of this performance criteria</p>

### 4.2 Open Space Network

Performance criteria	Design solution
<p><b>PC</b> To create a network of high quality, publicly accessible open spaces that:</p> <ul style="list-style-type: none"> <li>a. caters for a variety of activities, including active recreation, passive recreation, informal gathering and social interaction, relaxing and organised events</li> <li>b. provides continuous, publicly accessible open space along the site's harbour foreshore that connects with adjoining open space in Barangaroo Central and King Street Wharf</li> <li>c. incorporates high quality landscaping</li> <li>d. enhances the vibrancy of the precinct, including during the night-time, and consolidates its role as a major CBD destination through the provision of spaces that may cater for a range of different types and sizes of events</li> <li>e. is legible and enables people to readily</li> </ul>	<p><b>DS1</b> Open space is provided generally in accordance with <b>Figure 4 – Open space network</b> and <b>Table 2 – Open space network characteristics</b></p>

perceive and understand the character of each space, its intended use and its relationship to other spaces within the network



**Figure 4:** Open space network

**Table 2:** Open space network characteristics

Open space	Characteristics
<b>Hickson Place</b>	<ul style="list-style-type: none"> <li>– A civic entry to the Barangaroo precinct from the south.</li> <li>– Is a vibrant, small scale plaza adjacent to the major pedestrian gateway to the site from the CBD.</li> <li>– Has a flexible design that enables it to be used for a variety of casual and organised activities, including outdoor food and drink establishments and other retail premises.</li> <li>– Incorporates a roofed structure that protects the plaza from wind effects.</li> </ul>
<b>Southern Plaza</b>	<ul style="list-style-type: none"> <li>– A major address space located adjacent to the C5 lobby.</li> <li>– Provides a strong and civic setting for nearby buildings, both on the Barangaroo site and for those existing in adjacent locations.</li> <li>– Provides an opportunity for gathering, interaction and movement.</li> </ul>
<b>Northern Park</b>	<ul style="list-style-type: none"> <li>– The site's major park and a focal point for the community.</li> <li>– Connects the Barangaroo Central parkland to Hickson Road.</li> <li>– Provides a large, informal grassed area and extensive tree planting for amenity and sustainability outcomes.</li> </ul>

	<ul style="list-style-type: none"> <li>- Due to its location, size and shape, has access to sunlight and daylight.</li> <li>- Provides amenity for adjoining residential premises.</li> <li>- Permeability, accessibility and casual surveillance is maximised by having frontage to three streets and engaging with the ground floor of the adjoining residential towers.</li> <li>- Provides an 'extension' of the plaza to the east of Hickson Road to assist in better integrating both sides of Hickson Road.</li> <li>- Is activated by active frontages on the ground floor of the residential buildings.</li> </ul>
<b>Foreshore promenade and activity area</b>	<ul style="list-style-type: none"> <li>- A key part of the broader, publicly accessible Sydney Harbour foreshore.</li> <li>- Continues the character of the Headland Park and Barangaroo Central foreshore but is more urban as it relates to the urban precinct of Barangaroo South.</li> <li>- A focal point for activity, incorporating outdoor food and drink establishments, entertainment, recreation and walking.</li> <li>- Has a high level of amenity, with visual, and where appropriate, physical access to the harbour, and access to sunlight throughout the late morning and afternoon.</li> </ul>
<b>Globe Harbour</b>	<ul style="list-style-type: none"> <li>- An intimate incursion into the site from Darling Harbour that complements and enhances the foreshore promenade.</li> <li>- Provides a high amenity space that is a focal point for a range of activities, including informal relaxation and organised events.</li> <li>- Aligns with Globe Street to terminate a vista from Hickson Road and draw daylight into the site.</li> </ul> <p><i>Note: the water edge configuration in this space may deviate from the more continuous 'wharf edge' condition of the promenade to provide access to the water.</i></p>

## 4.3 Street Network

Performance criteria		Design solution	
<b>PC</b>	<p>To create a an integrated network of publicly accessible streets that:</p> <ol style="list-style-type: none"> <li>has a range of vibrant and active multi-use spaces that cater for people movement, gathering and interaction</li> <li>prioritises pedestrian movement over vehicular access</li> <li>provides a strong pedestrian connection to the CBD and to Headland Park and Barangaroo Central</li> <li>ensures pedestrian movement throughout the precinct is clear and simple</li> <li>ensures pedestrians can move north-south within commercial buildings</li> <li>has a limited number of vehicle access streets</li> <li>caters for cyclist movement</li> </ol>	<b>DS1</b>	Streets are provided generally in accordance with <b>Table 3 – Street characteristics</b> , <b>Figure 5 – Street network</b> and <b>Figure 6 – Pedestrian and cyclist network</b>
		<b>DS2</b>	Apart from Globe Street and the Northern Boundary Street, all other east-west streets are not open to vehicles
		<b>DS3</b>	Major pedestrian routes connect seamlessly with Lime Street and Shelley Street to the south and Barangaroo Central to the north
		<b>DS4</b>	A continuous public walkway traverses the entire waterfront edge of the site
		<b>DS5</b>	The major points of pedestrian access to the precinct from the CBD are from the two bridges that connect from the east edge of Hickson Road to City Walk and Transport Place

<b>DS6</b>	All spaces in the public domain are designed to provide adequate and clear paths of travel
<b>DS7</b>	Each commercial tower building incorporates a north-south public through-site link
<b>DS8</b>	Shelley Lane has a minimum width of approximately 6m with a defined eastern edge parallel to Hickson Road at ground level.

**Table 3:** Street characteristics

Street	Characteristics
<b>Hickson Road</b>  <i>Note: Hickson Road is not within the direct control of the design guidelines</i>	<ul style="list-style-type: none"> <li>– The precinct's eastern Gateway</li> <li>– A major public transport spine that will cater for buses and potential future light rail</li> <li>– Where possible, minimises traffic within the site by providing passenger drop-off zones</li> <li>– Includes layout and design measures to facilitate safe and efficient through movement of vehicles</li> <li>– Provides a comfortable pedestrian environment that includes protection from sun and rain</li> </ul>
<b>Shelley Lane</b>	<ul style="list-style-type: none"> <li>– An intimate pedestrian laneway with a clear north/south view across Barangaroo South</li> <li>– The laneway is lined with ground floor active uses that have allocated spill-out spaces, allowing the activity of the buildings to engage with the laneway</li> <li>– Provides a transition from busy, vehicle-oriented Hickson Road to the pedestrian-oriented public realm in Barangaroo South</li> <li>– The public domain treatment provides for active and passive uses to enliven the streetscape</li> </ul>
<b>City Walk and Union Walk</b>	<ul style="list-style-type: none"> <li>– Intimate, human scale and activated pedestrian walkways that connect the city in an east-west direction to the waterfront</li> <li>– Integrates the public and private domains by including a co-ordinated palette of paving treatments between outdoor spaces and building lobbies</li> <li>– The walks are simple urban spaces with lively building edges where activity can spill out into the street</li> <li>– The public domain treatment is simple and uncluttered in order to contribute to a "civic" quality</li> </ul>
<b>Lime Street</b>	<ul style="list-style-type: none"> <li>– The main north-south street through the site and the primary retail and commercial activity street</li> <li>– Connects with and continues the existing street to the south of the site and provides a connection with Barangaroo Central to the north</li> <li>– Layout and design is pedestrian-focused with a comfortable pedestrian scale and character</li> <li>– It is a complete street accommodating vehicle movement in a slow-speed environment, on-street parking/drop off, pedestrian paths on both sides of the carriageway, street trees and stormwater filtration</li> </ul>
<b>Globe Street</b>	<ul style="list-style-type: none"> <li>– Key east-west link connecting Hickson Road and Globe Harbour, conceived as the main landscaped boulevard</li> <li>– Whilst being the main vehicular entry to the site from the east, the street provides a high quality, safe and comfortable pedestrian experience</li> <li>– North-south movement across the street between development in the southern part of the site and the northern part of the site is facilitated</li> </ul>

Street	Characteristics
	through design measures
Transport Place	<ul style="list-style-type: none"><li>- A major pedestrian thoroughfare and southern gateway to the precinct</li><li>- Connects the CBD, Wynyard rail station and the ferry terminals</li><li>- Integrates the public and private domains by including a co-ordinated palette of paving treatments between outdoor spaces and building lobbies</li><li>- The public domain treatment is simple and uncluttered in order to contribute to a “civic” quality</li></ul>

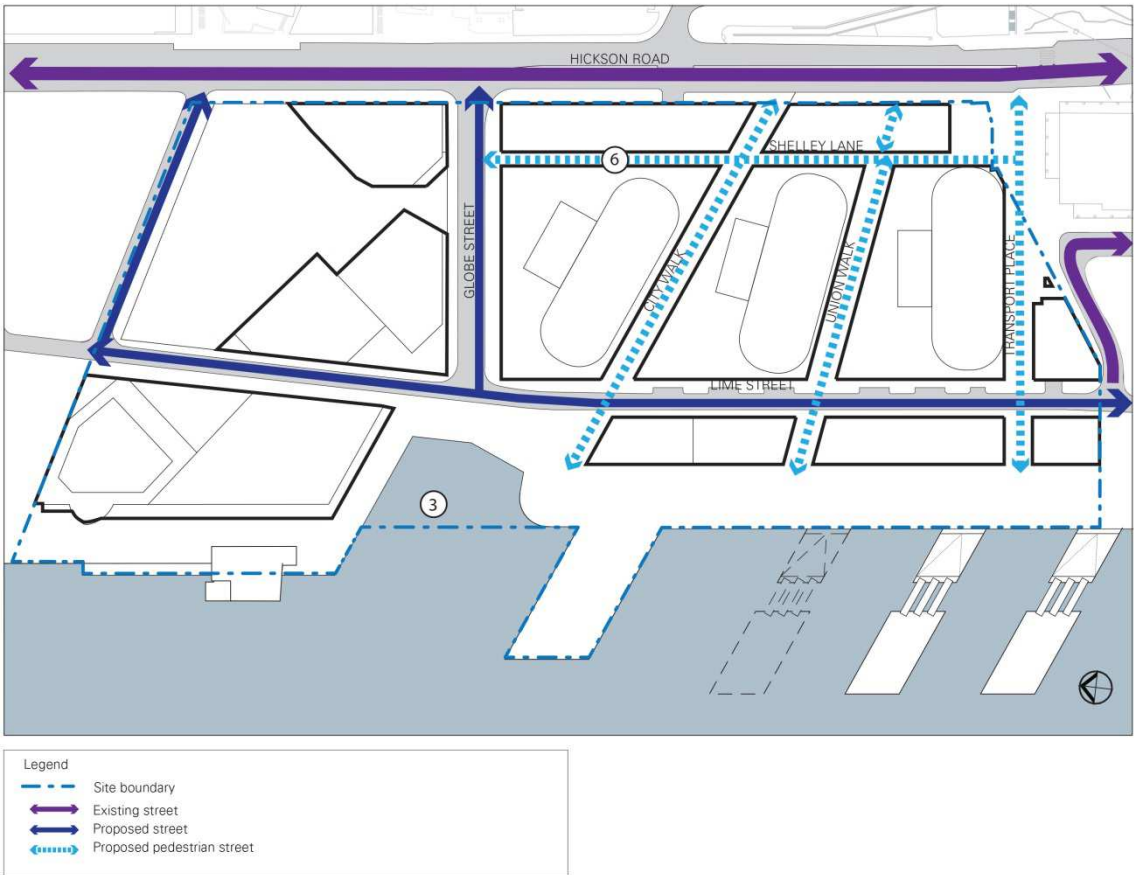


Figure 5: Street network

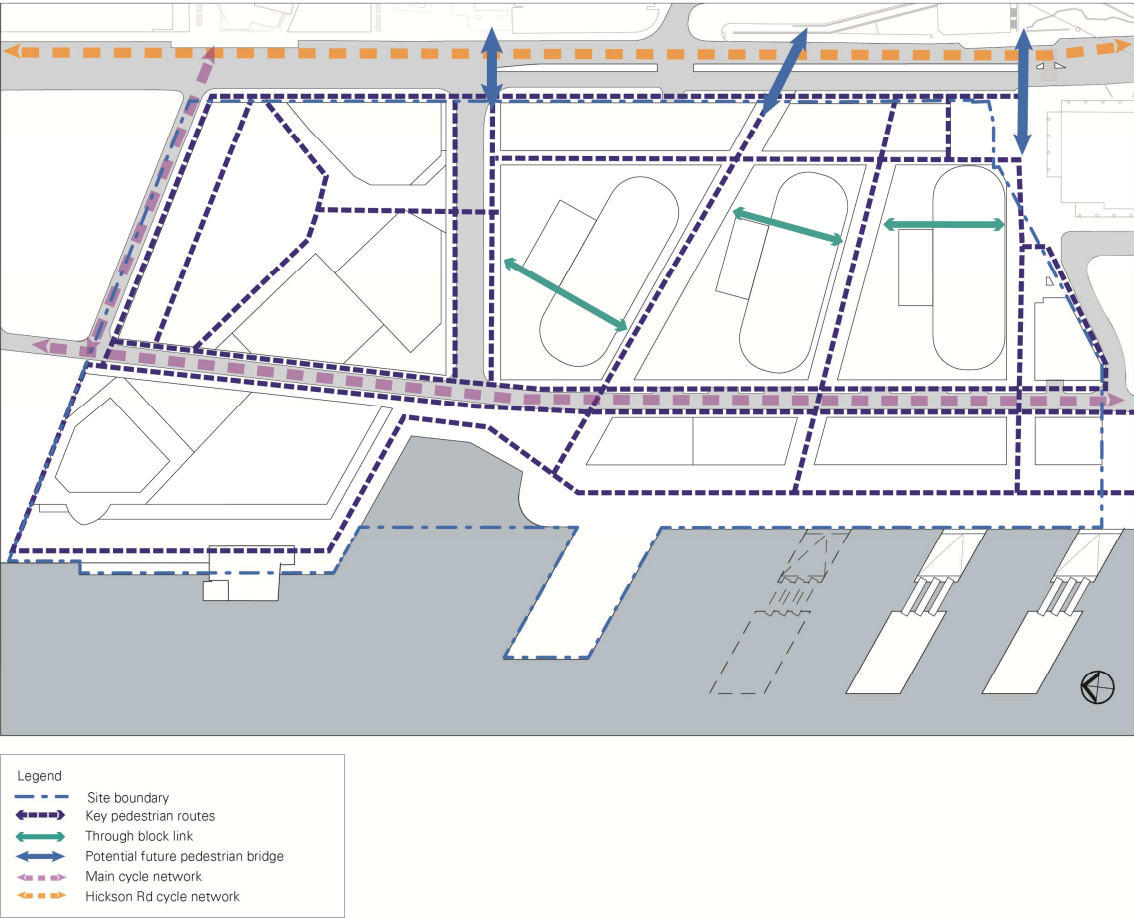


Figure 6: Pedestrian and cyclist network

## 5.0 Built Form Guidelines

These built form guidelines apply to the entire Barangaroo South site. Where appropriate, exceptions or additional, more specific requirements are also provided on a Block basis. For example, for 'building mass and location, the performance criteria and design solutions listed under the 'general' heading will apply to all development and for Blocks 4A and 4B, more specific provisions relating building height also apply.

### 5.1.1 Building envelopes

Performance criteria	Design solution
<p><b>PC</b> Building mass is sited and is of a scale that:</p> <ul style="list-style-type: none"> <li>a. is consistent with the role of the site as a major extension of the Sydney CBD</li> <li>b. creates attractive, comfortable streetscapes</li> <li>c. creates an integrated network of streets and public spaces</li> <li>d. is set back from Sydney Harbour</li> <li>e. provides a high level of amenity, including enabling adequate sunlight, daylight access and natural ventilation to the public domain</li> <li>f. creates an active, vibrant and attractive public domain</li> </ul>	<p><b>DS1</b> Building envelopes are in accordance with the Barangaroo South Building Envelope Plan approved in the Barangaroo Concept Plan</p> <p><i>Note: Environmental mitigation measures, such as solar shading devices and other façade articulation may extend outside the development envelopes by a maximum of 600mm</i></p>

### 5.1.2 Residential Amenity

Performance criteria	Design solution
<p><b>PC</b> Residential development achieves a high level of internal amenity and minimises impact upon the amenity of other existing and proposed residential development, including allowing for adequate solar access, natural ventilation, private open space and acoustic and visual privacy</p>	<p><b>DS1</b> The design of Residential Apartment Buildings is to have regard to the 'Rules of Thumb' in the Residential Flat Design Code</p> <p><b>DS2</b> Landscape spaces for future residents are generally provided in the in the form of balconies, wintergardens and roof terraces</p> <p><b>DS3</b> Living rooms and private open spaces for at least 70% of apartments across the site should receive a minimum of 2 hours direct sunlight between 9 a.m. and 3 p.m. in mid-winter(excluding south-facing units)</p> <p><b>DS4</b> The maximum number of single aspect apartments with a southerly aspect (SW-SE) is 10% of all apartments proposed</p> <p><i>Note: where this cannot be achieved, development must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed</i></p>



Performance criteria		Design solution	
<b>PC</b>	Development encourages housing choice and affordability	<b>DS1</b>	A minimum of 2.3% of all approved residential GFA is provided as key worker housing
		<b>DS2</b>	Housing across the site should provide a variety of types, sizes and configurations
		<b>DS3</b>	Wintergardens are encouraged in high-rise buildings where wind impacts do not support the provision of balconies. In such circumstances, wintergardens may not be considered GFA

### 5.1.3 Car Parking & Servicing

Performance criteria		Design solution	
<b>PC</b>	Car parking and servicing: a. balances on-site carparking to accommodate reasonable provision with encouraging alternative modes of transport to the private motor vehicle b. is safe, functional and convenient c. ensures buildings can be adequately serviced by service and delivery vehicles d. is located and designed to not visually dominate the public realm	<b>DS1</b>	Carparking is provided in accordance with the Barangaroo Concept Plan
		<b>DS2</b>	On-site parking areas comply with AS2890.1:2004
		<b>DS3</b>	For commercial buildings, a minimum of 1 shower for every 10 bicycle spaces is provided
		<b>DS4</b>	Building servicing and loading facilities are designed to adequately cater for forecast building demand
		<b>DS5</b>	Service/delivery areas accord with AS2890.2:2002 subject to driveways complying with City of Sydney Council's requirements

## 5.1.4 View Sharing

### Preamble

Extensive investigations into views have already been undertaken and documented as part of planning for the site. These investigations have proven that on balance, the impact on existing views is generally acceptable. Consequently, provided that development does not significantly depart from the Building Envelopes and key parts of these design guidelines, further assessment of the impact of development on views, including those obtained from individual dwellings, will not be required.

Performance criteria		Design solution	
<b>PC</b>	<p>Development is located and designed to:</p> <ul style="list-style-type: none"> <li>a. provide a balance between enabling significant development on the site and protecting valued, key existing views from the public domain</li> <li>b. protect existing views corridors obtained from the public domain to iconic, landmark places that contribute to the sense of place and character of the CBD and its immediate surrounds</li> <li>c. protect the key attributes of existing public domain view corridors from Millers Point to maintain its amenity, character and sense of place, in particular its connection to the harbour</li> <li>d. enable views and outlooks from private premises to existing and proposed new attractive elements in the urban landscape, including Sydney Harbour, the open sky, parkland and streetscapes</li> <li>e. create an attractive new part of the CBD that contributes to the image and character of Sydney, in particular when viewed from the west</li> </ul>	<b>DS1</b>	Public domain and built form are located along a radial fan arrangement as shown in <b>Figure 2 – Urban structure</b> and <b>Figure 3 - Development blocks and indicative building envelopes</b>
		<b>DS2</b>	<p>Adequate view corridors over and between new built form are created to maintain the following key attributes of public domain views from Millers Point:</p> <ul style="list-style-type: none"> <li>a. views to significant tracts of the water</li> <li>b. the junction of Darling Harbour and the Harbour proper</li> <li>c. the opposite foreshores</li> <li>d. panoramic qualities of existing views</li> <li>e. the most distinctive views to landmark structures</li> </ul>
		<b>DS3</b>	The northern park is located and has a sufficient area and dimensions, in particular an east-west depth relative to Kent Street, to contribute to a perception of open space for existing residential premises on Kent Street that currently have views across the site to Sydney Harbour
		<b>DS4</b>	Built form frames views of Sydney Harbour and the sky when viewed from both the public and private realms
		<b>DS5</b>	Tower elements are separated to provide multiple view corridors to Sydney Harbour from existing development east of Hickson Road
		<b>DS6</b>	View corridors are vertical in form, and where possible, each view corridor enables appreciation of the interface between the land edge of Barangaroo and Sydney Harbour
		<b>DS7</b>	Residential towers can be distinguished as separate building forms

## 5.1.5 Overshadowing

### Preamble

Extensive investigations into overshadowing have already been undertaken and documented as part of planning for the site. These investigations have proven that on balance, the impact of additional shadows is generally acceptable. Consequently, provided that development does not significantly depart from the Building Envelopes and key parts of these design guidelines, further assessment of overshadowing, including the preparation of additional overshadowing studies, will not be required.

Performance criteria		Design solution	
<b>PC</b>	Development is located and designed to:	<b>DS1</b>	Public domain and built form are located and designed in accordance with <b>Figure 2 – Urban structure</b> and <b>Figure 3 – Development blocks and indicative building envelopes</b>
	a. provide a balance between enabling significant development on the site and creating a comfortable, high amenity public domain	<b>DS2</b>	Development bulk and form is generally in accordance with Part 6 – Built Form Guidelines of these Design Guidelines
	b. provide direct sunlight access to the foreshore promenade and activity area and northern park and facilitate daylight access to other parts of the public domain	<b>DS3</b>	At least 50% of the foreshore promenade receives direct sunlight for a minimum of 2 hours between 9am and 3pm on 21 June
	c. achieve an appropriate level of solar access for other new areas of public open space considering its orientation, scale or dimensions and desired future character		
	<i>Note: for example, significant shadowing of Shelley Lane is acceptable due to its north-south alignment, narrow width and desired future character as an intimate, pedestrian scale place</i>		

## 5.1.6 Building mass and location

Performance criteria		Design solution	
General			
PC	To ensure building mass :	DS1	Building mass is located in accordance with <b>Figure 3</b> - <i>Development blocks and indicative building forms</i>
	a. is appropriate within the envelope		
	b. responds to adjacent buildings		
	c. incorporates vertical massing as an integral part of the composition of towers where in tower form		
	d. creates interesting building shapes		
		For Block 1	
		DS2	Building mass is located to enable clear views of the C5 podium from the south
		DS3	Building height takes advantage of views west to the harbour over lower rise buildings

Performance criteria	Design solution
	<p><b>DS4</b> Building form creates a street wall that responds to the height of the C5 podium</p> <p><b>For Block 2</b></p> <p><b>DS5</b> Maximum horizontal floor plate length of the north and south elevation of each tower is 87m measured from glass line to glass line</p> <p><b>DS6</b> Maximum primary floor plate depth of each tower is 32m measured from glass line to glass line <i>Note: Expressed structure, shading devices and secondary floor plate is allowable outside this dimension</i></p> <p><b>DS6</b> Predominant podium height is a minimum of 3 storeys and a maximum of RL22</p> <p><b>DS7</b> The height and/or floor area above RL 160 in one of the towers is reduced</p> <p><b>For Blocks 2 and 3</b></p> <p><b>DS8</b> Towers are located west of Shelley Lane</p> <p><b>DS9</b> Hickson Road buildings are comparatively lower in height compared to the tower forms</p> <p><b>DS10</b> Hickson Road buildings are visually interesting through the use of articulation, including through lighter and smaller roof top forms such as canopies</p> <p><b>For Block 3</b></p> <p><b>DS11</b> Maximum horizontal floor plate length of the north and south elevation of each tower form is 87m measured from glass line to glass line</p> <p><b>DS12</b> Maximum primary floor plate depth of each tower form is 32m measured from glass line to glass line <i>Note: Expressed structure, shading devices and secondary floor plate is allowable outside this dimension</i></p> <p><b>DS13</b> Podium height is a minimum predominant height of 3 storeys and a maximum of RL22</p> <p><b>DS14</b> The north-east part of the podium maintains a cohesive relationship with the tower and the Hickson Road buildings</p> <p><b>For Block 4A and 4B</b></p> <p><b>DS15</b> The height of the towers within the block is varied and ascends in height from east to</p>

Performance criteria	Design solution
	west
	<b>DS16</b> Vertical massing is expressed in the design and facades of towers in block 4A
	<b>DS17</b> Towers proposed in Block 4A are separated to emphasise their verticality
	<b>DS18</b> Podiums are built to the edge of the envelope on Globe Street
	<b>DS19</b> Towers may be built to the edge of the envelope
	<b>For Block X</b>
	<b>DS20</b> Over 70% of buildings have a consistent height
	<b>DS21</b> The predominant height of the building mass fronting the foreshore promenade is 6 or 7 storeys above ground level
	<b>DS22</b> Building height generally increases from south to north
	<b>DS23</b> Any elements taller than the prevailing building height such as pop-ups do not result in buildings exceeding 9 storeys in height
	<b>DS24</b> The southernmost building should achieve a lesser height than other buildings in the development block.
	<b>DS25</b> On the easterly oriented facades, a minimum of 1m setback from the building envelope is required on the ground floor
	<b>DS26</b> Above Ground floor level the westerly oriented facades to have a minimum 3m setback <i>Note: Open and enclosed balconies are allowed to protrude into the setback zones</i>
	<b>For Block Y</b>
	<b>DS27</b> The height of building mass increases northwards
	<b>DS28</b> Tower building mass tapers to the top of the building
	<b>DS29</b> The building has a distinct podium and tower form
	<b>DS30</b> The bulk of the podium massing is a maximum of RL40
	<b>DS31</b> The tower form is permitted to come to ground on the western frontage and may penetrate the general western building envelope line by up to 9m

### 5.1.7 Tower setbacks

Performance criteria		Design solution	
General			
PC	To set back taller building elements from streetwalls to reduce their impact on the public domain, define public spaces and create a distinct podium and tower form	DS1	Setbacks are generally in accordance with the <b>Building Envelope Plan</b> in the <b>Concept Plan</b>
		For Blocks 4A and 4B	
		DS2	Predominant tower mass is set back from Globe Street by a minimum of 2m
		For Block Y	
		DS3	<p>The primary western building façade is set back at least 25m from the existing harbour edge. Within the minimum average 25m setback:</p> <ul style="list-style-type: none"><li>at ground level, building activation in the form of restaurants, cafes, terraces, open balconies and the like may extend to within 16m of the existing harbour edge (ie within a zone of up to 9m)</li><li>at podium levels, terraces, open balconies and the like may extend to within 19m of the existing harbour edge (ie within a zone of up to 6 metres)</li><li>The tower form is permitted to come to ground on the western frontage and may extend to within 20m from the existing harbour edge at ground level and to within 16m of the existing harbour edge above ground level</li></ul>
		DS4	The primary southern building facade is to be setback an average of at least 17m from the proposed Globe Harbour edge. Within the minimum average 17m setback, building activation and articulation in the form of restaurants, cafes, terraces, open balconies and the like may extend to within 12m of the proposed Globe Harbour edge (ie within a zone of up to 5m)

## 5.1.8 Street walls

Performance criteria		Design solution	
General			
PC	To create cohesive, active and human scaled streetwalls that:  a. define and enclose the public domain and create a highly urban character  b. mitigate the visual impact of taller building elements on the public domain and increase the level of sunlight and daylight access to the public domain  c. contribute to the creation of a vibrant and active public domain  d. establish spaces that articulate and define facades	DS1	Street walls incorporate active uses such as commercial, retail or residential uses and are designed to provide casual surveillance opportunities to the public domain through the use of measures such as large, transparent windows, balconies and other openings
		DS2	Street walls are physically permeable and activate the adjoining public domain
		DS3	Podium height is compatible with the streetscape form in the surrounding area, creates a co-ordinated streetscape and appropriately engages and frames the public domain
		For Block 2	
		DS4	The streetwall height on Hickson Road is of a scale that complements development on the eastern side of Hickson Road
		DS5	A colonnade is established along Hickson Road that has a consistent width and height appropriate to encourage its use and is integrated into the proportions of adjoining buildings
		DS6	The Hickson Road building’s southern face considers the character of Hickson Place
		For Block 3	
		DS7	A colonnade is established along Hickson Road that has a width and height that is appropriate to encourage its use and is integrated into the proportions of adjoining buildings
		For Block 4A and 4B	
		DS8	Podium streetwalls define Globe Street, Lime Street and Hickson Road
		DS9	Building form creates a street wall with a one storey minimum height for most of the public accessible ground floor facade.
		DS10	A colonnade is established along Hickson Road that has a consistent width and height appropriate to encourage its use and is integrated into the proportions of adjoining buildings
		DS11	Globe Street retail, commercial and podiums respond appropriately to the termination of



Performance criteria	Design solution
	Shelley Street

### 5.1.9 Building Articulation

Performance criteria	Design solution
<b>General</b>	
<b>PC</b> To establish an articulated, well-proportioned building mass that: <ul style="list-style-type: none"> <li>a. responds to its context</li> <li>b. clearly articulates consistent elements of the building</li> <li>c. includes vertical and horizontal breaks</li> <li>d. encourages interesting forms with their own distinct character</li> <li>e. reduce the appearance of the Hickson Road building mass and bulk by articulating its form and clearly delineating top floor elements</li> <li>f. provides activation at the ground floor level of the the Block Y podium to the Northern Park and Sydney Harbour</li> </ul>	<b>DS1</b> Vertical and horizontal articulation is provided to minimise perception of building mass
	<b>DS2</b> Where along Transport Place, City Walk and Union Walk, podium facades are simple and uncluttered in order to contribute to a "civic" quality
	<b>DS3</b> Where along Transport Place, City Walk and Union Walk, vertical tower elements are continued to the ground through facade expression at podium level  <i>Note: application of this provision means that continuous awnings are not required along the walks</i>
	<b>DS4</b> The incorporation of sustainability measures is encouraged
	<b>DS5</b> Buildings incorporate measures that enhance access to natural light, cross ventilation and solar shading
	<b>DS6</b> Internal access to natural light is encouraged through design responses such as transparent windows
	<b>DS7</b> Tower forms optimise access to natural light
	<b>DS8</b> Devices designed to articulate the building façade are encouraged. Building elements that moderate environmental conditions may extend beyond the building envelope by up to 600mm
	<b>For Block 1</b>
	<b>DS9</b> Building mass articulation responds to adjoining buildings, including the C5 podium and R1 as shown in <b>Figure 3 - Development blocks and indicative building forms</b>
	<b>DS10</b> Building mass is a 'pavilion' typology and encourages permeability at the ground floor
	<b>DS11</b> The building does not have a dominant facade or orientation
	<b>For Blocks 2 and 3</b>

Performance criteria	Design solution
	<b>DS12</b> Building envelope and floor plates are articulated and modulated, using a range of architectural components such as prows, corner redents, vertical villages, expressed lift cores, bay windows and other structural expression
	<b>For Block 4A and 4B</b>
	<b>DS13</b> A visually permeable frontage to Northern Park is provided
	<b>DS14</b> Towers come to the ground where facing the northern park and are dominant through lower levels of the building
	<b>DS15</b> A complementary relationship is established between the towers in Blocks 4A and 4B
	<b>DS16</b> In order to mitigate wind impacts on balcony spaces, wintergardens are encouraged. In such circumstances, wintergardens may not be considered GFA
	<b>For Block X</b>
	<b>DS17</b> The articulation of R1 should have no dominant façade or orientation
	<b>DS18</b> The articulation of R1 responds to the proportions of its neighbours particularly R7 to its east.
	<b>For Block Y</b>
	<b>DS19</b> The buildings incorporates elements that articulate and enliven facades
	<b>DS20</b> In order to mitigate wind impacts on balcony spaces, wintergardens are encouraged. In such circumstances, wintergardens may not be considered GFA

### 5.1.10 Building Legibility

Performance criteria	Design solution
<b>General</b>	
<b>PC</b> To articulate constituent elements of buildings and in particular ensure elements of the building and structure are legible at the base of the building and that towers have their own unique identify however are also complementary and appear as a cohesive composition	<b>DS1</b> Separate, structural tower elements are clearly expressed in the facade
	<b>DS2</b> Facade elements are expressed through the use of measures such as shading and wind amelioration devices
	<b>For Blocks 2 and 3</b>

Performance criteria	Design solution
	<b>DS3</b> Visible parts of the tower's primary structure are to extend to the ground plane and be expressed as a separate element from the podium
	<b>For Block 4A and 4B</b>
	<b>DS4</b> Building form relates to the public realm at lower levels <i>Note: this may be achieved through tower and podium form or similar configuration</i>
	<b>DS5</b> The separate primary components of the building are expressed and include additional elements such as balconies or winter gardens
	<b>DS6</b> Visual permeability is provided to the tower lobbies at the ground floor from the northern park
	<b>DS7</b> Consider a common architectural expression for towers in Block 4A and 4B
	<b>For Block X</b>
	<b>DS8</b> Building form includes a cohesive modulation of elements such as open and enclosed balconies
	<b>DS9</b> The separate primary components of the building are expressed and include additional elements such as the open and enclosed balconies
	<b>For Block Y</b>
	<b>DS10</b> Building composition clearly defines a base, a middle and a top with well-balanced vertical and horizontal proportions
	<b>DS11</b> The tower form may extend through to connect with the ground plane on the western frontage
	<b>DS12</b> Building entries are clear and able to be readily distinguished
	<b>DS13</b> Building function may be expressed in massing and articulation

### 5.1.11 Ground Floor Permeability and Accessibility of Public Realm

Performance criteria	Design solution
<b>General</b>	
<b>PC</b> To provide permeability and accessibility through Barangaroo South	<b>DS1</b> Ground floor permeability is in accordance with Figure 5 – <i>Street network</i> and Figure 6

Performance criteria	Design solution
	<p>– <i>Pedestrian and cyclist network</i></p> <p><b>DS2</b> Public access around the block is to be maintained on all edges</p> <p><b>DS3</b> Building entries are clearly articulated and visible from the public domain</p> <p><b>DS4</b> Shelley Lane is not less than 50% open to the sky</p> <p><b>DS5</b> Safety of the public realm is maximised through lighting, minimisation of concealed areas, active frontages and other design measures</p> <p><b>DS6</b> For security purposes, through site links may be closed at certain times</p> <p><b>DS7</b> Public accessibility is maintained through and on the east, west and southern edges of Hickson Place</p>
	<b>For Blocks 4A and 4B</b>
	<p><b>DS8</b> Ground floor retail and residential lobbies engage with the northern parkland, including providing opportunities for informal casual surveillance and active edges</p> <p><b>DS9</b> Lobby entry canopies are located to address streets and parks</p> <p><b>DS10</b> Consider lobby street presence on Lime Street, Globe Street and Hickson Road.</p>
	<b>For Block Y</b>
	<p><b>DS11</b> The ground place encourages openness and accessibility of buildings</p> <p><b>DS12</b> Building entries establish a public sense of arrival and engagement</p> <p><b>DS13</b> Secondary links open to public access providing additional routes between Lime Street, Globe Harbour and the Waterfront</p>

### 5.1.12 Ensuring Quality of Rooftops

Performance criteria	Design solution
<b>General</b>	
<p><b>PC</b> To ensure rooftops are designed to provide:</p> <ul style="list-style-type: none"> <li>a. an articulated built volume</li> <li>b. legibility</li> <li>c. architectural quality</li> <li>d. where appropriate, opportunities for</li> </ul>	<p><b>DS1</b> Roof forms incorporate architectural elements</p> <p><b>DS2</b> Architectural treatment is provided to lift shafts and overrun control rooms</p> <p><b>DS3</b> Exposed mechanical equipment is avoided</p>

Performance criteria	Design solution
private open space or public enjoyment and appreciation of the city	<b>DS4</b> Good quality materials that are durable, hardwearing and sustainable are to be used
e. sustainability features where appropriate	<b>DS5</b> Where appropriate, roof design is to integrate sustainability features
	<b>DS6</b> The architectural treatment of the roof and its form is to be designed and coordinated to be coherent with its adjacent context
	<b>For Block 1</b>
	<b>DS7</b> Public access and activation of the roof responds to views of the harbour to the west
	<b>DS8</b> Variation in roof articulation between separate towers in development block 4A is encouraged
	<b>For Block X</b>
	<b>DS9</b> Roofs incorporate a maximum of 60% accessible terraces
	<b>For Block Y</b>
	<b>DS10</b> Public access to roofs and terraces for entertainment, recreation or viewing activities is encouraged where appropriate

### 5.1.13 Articulated Facades

Performance criteria	Design solution
<b>General</b>	
<b>PC</b> To ensure that building façades are articulated, designed and detailed to:	<b>DS1</b> Building functions and massing are articulated with appropriate cladding design and detailing
a. define building functions and massing	<b>DS2</b> High quality materials such as steel, glass, concrete, timber and aluminium are used as primary façade materials.
b. ensure the architectural quality of facades	<b>DS3</b> Facades are expressed to be compatible with those its neighbouring buildings
c. To contribute to the carbon neutral aims for Barangaroo South	<b>DS4</b> External shading devices are applied to provide light and shade and visual interest and may extend beyond the building envelope by a maximum of 600mm
d. flexible, durable and able to achieve longevity	<b>DS5</b> Relief and protrusions provide depth and layering of facades
e. activate Hickson Place as a space for civic gathering and social interaction that accommodates significant movement corridors at its edges	<b>DS6</b> Mirrored and heavily tinted facades are to be avoided

Performance criteria	Design solution
	<b>DS7</b> Depth and layering of facades is achieved through relief and protrusions
	<b>DS8</b> Environmentally sustainable design on facades is encouraged
	<b>DS9</b> Facades longer than 60m are modulated above podium level by a distinctive and significant architectural elements
	<b>For Block 2</b>
	<b>DS10</b> Façade design and materials along Hickson Road are cohesive
	<b>DS11</b> A digital facade may be integrated in the southern facade of C2/C6 building to activate Hickson Place for civic gathering and interaction

### 5.1.14 Active Frontages

Performance criteria	Design solution
<b>General</b>	
<b>PC</b> To provide active frontages to create a vibrant and active public domain and promote the establishment and success of key streets	<b>DS1</b> Active frontages are generally in accordance with <b>Figure 7 – Active frontages</b> <i>Note: active frontages can include stairs, entrances and lobbies, however exclude parking entrances and fire escape doors</i>
	<b>DS2</b> Active frontages include active retail uses such as shops, restaurants or cafes and other uses where internal activity can be viewed from the public domain and that engage with the public domain
	<b>DS3</b> Active frontages maximise engagement with the public domain through orienting activity to the street and incorporating measures such as large, transparent windows, indoor / outdoor seating areas, large entries, attractive display areas and high quality finishes
	<b>DS4</b> The location and design of building service areas, parking areas & loading docks minimises adverse impacts on the streetscape, including safe and direct pedestrian movement and visual appearance
	<b>DS5</b> Driveways do not visually dominate the street. Where possible (within engineering constraints) driveway width is to be minimised
	<b>DS6</b> Carparking entrances are set back from the street alignment

Performance criteria	Design solution
	<b>DS7</b> Loading docks are not located on Hickson Road or Lime Street
	<b>DS8</b> Hickson Place is activated with retail uses, including a small scale retail pavilion
	<b>For Block Y</b>
	<b>DS9</b> Building service areas and loading docks are located in the basements and no loading or deliveries are provided at ground level

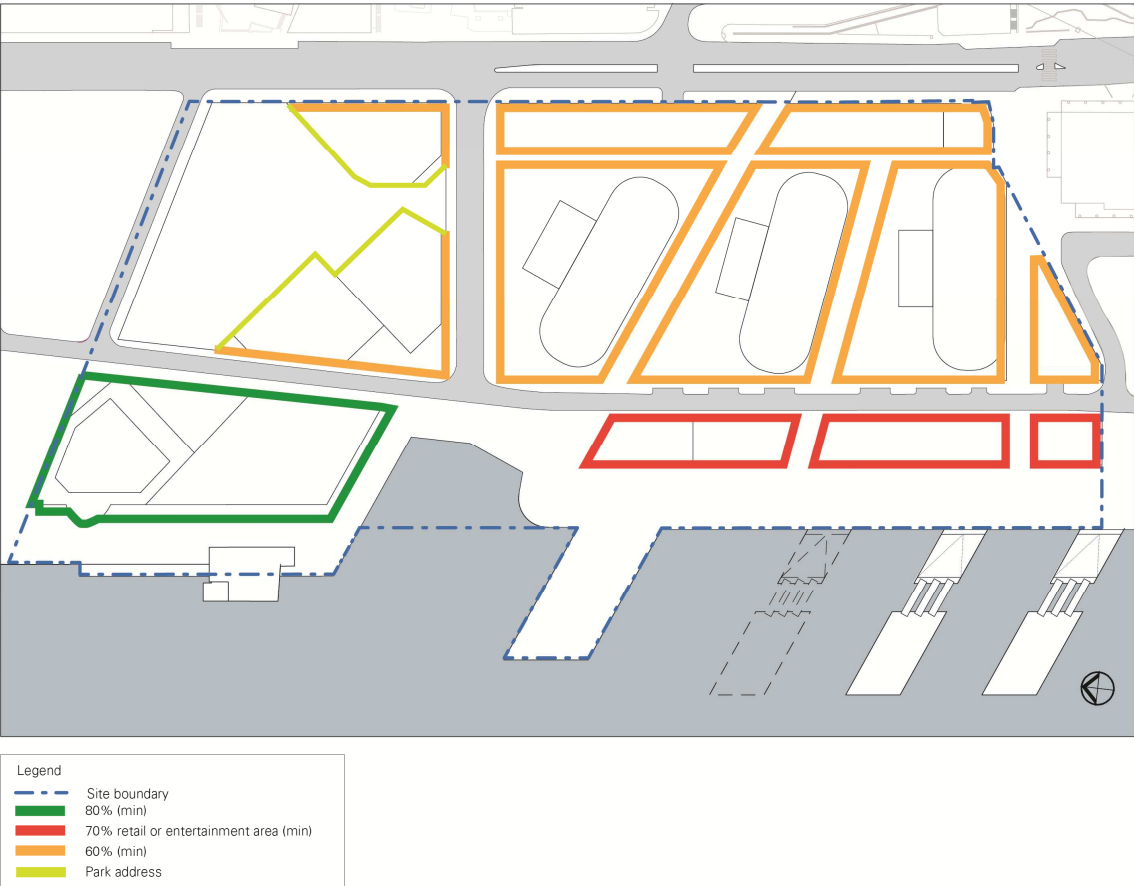


Figure 7: Active frontages



### 5.1.15 Ground Plane and Pedestrian Comfort

Performance criteria		Design solution	
General			
PC	Awnings do not detract from the “civic” quality of the ‘walks’	DS1	Awnings are not required (although not excluded) in City Walk, Union Walk or Transport Place and do not detract from the legibility of vertical tower elements coming to the ground through the podium
For Block Y only			
PC	Buildings are located in a co-ordinated way that respond well to each other at the ground plane	DS2	Buildings are sited generally in accordance with <b>Figure 2 – Urban structure</b>
PC	To ensure buildings increase the comfort of the public domain by: a. maximising sunlight to external public spaces b. where appropriate, providing shelter from direct sunlight and rain	DS3	Buildings incorporate devices that provide shelter from direct sunlight and rain for pedestrians at the ground level <i>Note: where used, canopies and their support structures may protrude beyond the block boundary</i>
PC	To emphasise accessibility of the public realm in and around the buildings	DS4	Functions at the lower levels of the building are to be open and inviting to the general public
PC	To maintain a strong visual connection to Sydney Harbour	DS5	Canopies and awnings do not dominate or unreasonably impact views or vistas towards the Sydney Harbour or past the building along public footpaths or the promenade

### 5.1.16 Signage

Performance criteria		Design solution	
Signage			
PC	To ensure that the location, size, appearance and quality of building signage is appropriate and is integrated into the overall design of the building	DS1	Each building application is to include details of appropriate primary signage zones for building identification or tenant branding
		DS2	Retail and other tenant signage outside of primary signage zones is to be addressed by a signage strategy / approval
		DS3	The size and location of signage is to be proportional and located appropriately to the architecture of the building
		DS4	Signage is appropriate at podium and tower levels (and mid-rise in respect of the hotel building)
		DS5	Signage to be considered as part of the overall design of the building

Performance criteria	Design solution
	<b>DS6</b> Signage is to contribute to a diverse streetscape