

Blackwattle Bay
State Significant Precinct

Attachment 14:

Draft Design Code

June 2021



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1 PRELIMINARY

1.1 Name of Code

This document is the Design Code - Blackwattle Bay.

1.2 Citation

This document may be referred to as the Design Code.

1.3 Commencement

The Design Code commences on the day on which it is endorsed by the Secretary of the Department of Planning, Industry and Environment.

1.4 Land to which this Code applies

This Design Code applies to the land (not water) identified within the red boundary line on Figure 1 Blackwattle Bay Precinct Land Application Plan.

[Insert Land Application Plan]

Figure 1 Blackwattle Bay Precinct Land Application Plan

1.5 How to use this Code

This Design Code provides design guidelines for development within the Blackwattle Bay Precinct. It comprises a hierarchy of objectives and provisions to guide the future development of the precinct both within the public domain and development blocks. Each topic area is structured to provide the user with:

- (1) Objectives that describe the desired design outcomes for the Blackwattle Bay Precinct.
- (2) Provisions that illustrate how the objectives can be achieved through appropriate design responses.

Development is to demonstrate how it meets all relevant objectives. The provisions indicate how the objectives can be achieved. They do not represent the only way the overarching objectives can be achieved. Where alternate solutions are proposed it must be demonstrated that the alternative solution achieves the objective/s and results in an improved outcome.

1.6 Relationship to documents (and Instruments)

This Design Code sets out specific guidelines to inform future development within the Blackwattle Bay Precinct. Development within the Precinct will need to have regard to this Design Code as well as the relevant provisions in the Sydney Local Environmental Plan (SLEP 2012) and Sydney Development Control Plan 2012 (SDCP 2012). In the event of an inconsistency between this Design Code and SDCP 2012, the Design Code prevails to the extent of the inconsistency.

1.7 Consideration of relevant City of Sydney Guidelines, Codes and Technical Provisions

Development must demonstrate consideration of City of Sydney codes where appropriate, including:

- City of Sydney Streets Code and Technical Specifications
- Sydney Lights Public Domain Code
- Legible Sydney Wayfinding Strategy and Design Manual
- City of Sydney Street Tree Masterplan
- City of Sydney Cycle Strategy and Action Plan 2007-2017and
- Other relevant City of Sydney Codes and Draft Codes.

2 PURPOSE

The purpose of this Design Code is to supplement the provisions of SLEP 2012 by providing more detailed provisions to guide development on land within the Blackwattle Bay Precinct as shown in **Figure 1**.

2.1 Desired future character

Blackwattle Bay will transform from industrial and infrastructure to a place attracting businesses and employees, visitors and tourists along the connected waterfront linking the new Sydney Fish Market east to the Western Harbour, Walsh Bay and beyond. Country will be reflected in well-designed public space areas connecting community and history around a new contemporary character. A new Pymont Metro station will provide enhanced access to a new urban quarter and entertainment precinct based around jobs and supporting the cultural and entertainment offerings of the waterfront through a public promenade and event and function uses.

The new Sydney Fish Market will be developed at the head of Blackwattle Bay with the redeveloped site respecting Aboriginal history and responding to open spaces, while incorporating new office and residential development and better movement networks. Significant public domain improvements will link the Harbour Foreshore walk across the Western Harbour to Walsh Bay.

Blackwattle Bay Precinct will focus on public domain and open space improvements, better connections and the right mix of spaces for businesses and customers on the doorstep to a world-class tourist attraction, the new Sydney Fish Market. It will provide a welcoming new harbour side place for all of Sydney. Connected to its past and its surrounding communities, and providing a vibrant and amenable environment for all who visit Blackwattle Bay will be a forward looking place to live, work and play. It will be a place to gather, to innovate and to celebrate.

2.2 Blackwattle Bay Principles

Development within the Blackwattle Bay Precinct must be consistent with the following principles:

- 1 Improve access to Blackwattle Bay, the foreshore and water activities for all users
- 2 Minimise additional shadowing to Wentworth Park and Glebe Foreshore (in mid-winter) and create new places with comfortable conditions for people to enjoy
- 3 Pursue leading edge sustainability outcomes including climate change resilience, improved water quality and restoration of natural ecosystems.
- 4 Prioritise movement by walking, cycling and public transport
- 5 Balance diverse traffic movement and parking needs for all user
- 6 Link Blackwattle Bay to the City, Glebe Island and White Bay and other surrounding communities and attractors
- 7 Mandate Design Excellence in the public and private domain
- 8 Integrate housing, employment and mixed uses to create a vibrant, walkable, mixed use precinct on the city's edge
- 9 Maintain and enhance water uses and activities
- 10 Allow for co-existence and evolution of land uses over time
- 11 A place for everyone that is inviting, unique in character, socially inclusive and affordable

- 12 Expand the range of recreational, community and cultural facilities
- 13 Plan for the future community's education, health, social and cultural needs
- 14 Deliver development that is economically, socially, culturally and environmentally viable
- 15 Embed and interpret the morphology, heritage and culture of the site to create an authentic and site responsive place
- 16 Foster social and cultural understanding, connection to 'country' and respect to heal and grow relationships.

2.3 Structure Plan

Development within Blackwattle Bay will be generally in accordance with the Structure Plan illustrated in Figure 2 Structure Plan.

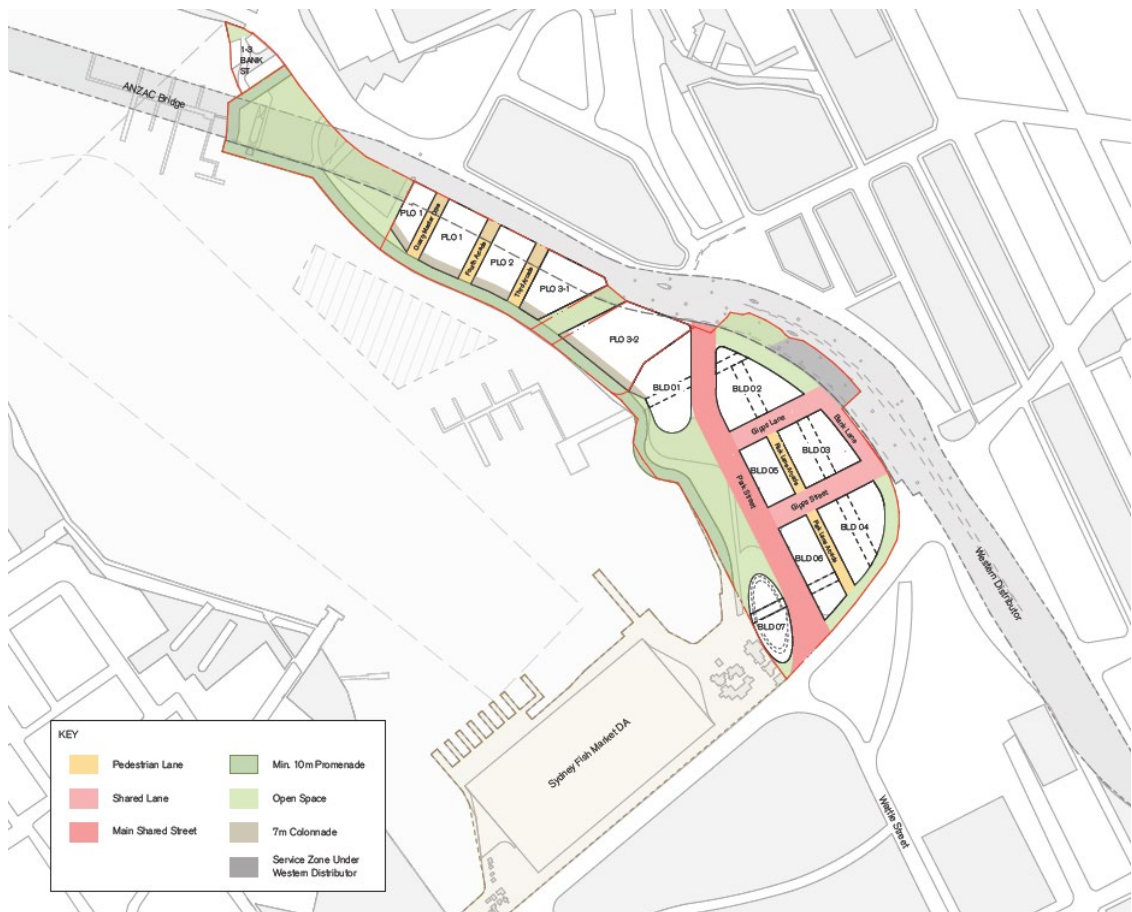


Figure 2 Structure Plan

3 LAND USE, BUILT FORM AND DESIGN

The following objectives and provisions apply to land within Blackwattle Bay as shown on **Figure 1**. The consent authority is not to grant consent to any development within the Precinct unless it has given consideration to the consistency of the proposal with the following guidelines.

3.1 Illustrative Precinct Plan

The Illustrative Precinct Plan in Figure 3 provides guidance on the future intent for Blackwattle Bay. Development within Blackwattle Bay will be generally in accordance with the Illustrative Precinct Plan.

The Illustrative Precinct Plan makes provision for:

- New homes, jobs and services close to the CBD with the potential to accommodate:
 - approximately 5,600 jobs
 - approximately 1,550 dwellings
- A continuous waterfront promenade – the missing link in an otherwise 15km foreshore walk from Woolloomooloo to Rozelle
- New active transport connections to bring the neighbourhood closer to the harbour through new and improved pedestrian and cycling links
- Improved public transport options and minimised vehicle usage strategies including:
 - Minimising car parking with limited on-street parking
 - Potential ferry wharf
 - Opportunity for buses to service through site link
 - Connections to the existing light rail
 - Access to the future Sydney Metro West Station in Pyrmont
- New parks and green space with 30,000 square metres of new open space
- New Sydney Fish Market at the heart of Blackwattle Bay.



Figure 3 Illustrative Precinct Plan

3.2 Design excellence

Objectives

- a Ensure new works including (but not limited to) buildings, parks and open space within the Precinct achieve design excellence.

Provisions

- 1 All buildings within the precinct are to be the subject of a competitive design process in accordance with the applicable guidelines of the Government Architect NSW or the City of Sydney Competitive Design Policy.
- 2 Architectural detailing must provide a higher order of priority to the levels interfacing with the adjacent open space and public domain.
- 3 A design excellence strategy for the public domain must be prepared to inform the preparation of the Public Domain Plan. The design excellence strategy is to be prepared in consultation with the NSW Government Architect.

3.3 Land use

Objectives

- a Provide for a land use mix that is balanced between non-residential and residential whilst retaining flexibility for increased commercial use should the introduction of the Pyrmont Metro and market forces support higher levels of workplace accommodation.
- b Create opportunities for a range of complementary active uses on the ground level - such as food and beverage, outdoor dining and retail - that will enhance the public domain.

- c Provide community facilities and spaces that cater for the needs of the future Blackwattle Bay community and encourage social interaction and cohesion.
- d Locate land uses within buildings to manage site constraints.

Provisions

- 1 Land uses within the Precinct are to be stratified within individual buildings in response to site constraints imposed particularly by the Western Distributor, to harness the opportunities for outlook and amenity in the upper portions of the built form and to maximise activation of the public domain.
- 2 Development is to include floorspace that is suitable for community facilities as follows:
 - approximately 1,200 square metres (GFA) of space for arts and creative uses at 1-3 Bank Street.
 - a community centre space of a minimum of 400 square metres (GFA) in a location that enables its use as a boat house/club house. The facility should accommodate existing dragon boat, kayak and canoe paddlers as well as be available for use as general multipurpose community meeting and activity space.

3.4 Building massing

Objectives

- a Ensure the built form contributes to the evolving character of Pyrmont.
- b Provide a range of building heights, types and architectural styles to create diversity and visual interest whilst protecting solar access to the new waterfront promenade, public domain and open space areas.
- c Minimise overshadowing and overlooking of existing and proposed buildings.
- d Ensure a high level of solar access to new and existing public open space and public domain.
- e Ensure the height of future buildings reflect existing landmarks including the pylons of the Anzac Bridge and provide an appropriate context for the new Sydney Fish Market.
- f Provide maximum street wall heights that reflect the existing morphology of the area and ensure a human scale to the public domain and open space areas.
- g Locate taller buildings setback from the public domain and open space areas to preserve the amenity of the public domain and open space areas.
- h Ensure heights comply with the Obstacle Limitation Survey.
- i Ensure that buildings contribute to the physical definition of the public domain and provide appropriate separation between the public domain and private development.
- j Maximise a sense of openness within the site and adjacent areas.

Provisions

- 1 Built form within Blackwattle Bay must be in accordance with **Figures 4-11** relating to building heights and setbacks.
- 2 Basements must generally not be located under public open space or other public domain areas. Basements may only be located under public open space and other public domain areas where it can be demonstrated that soil volume and depth requirements set out in Section 5.4 can be met and utilities can be accommodated.
- 3 Where the topography of the land or other constraints result in basement car parking projecting above ground, it must be sleeved by commercial, residential or other active uses.
- 4 Buildings must not result in any additional overshadowing of existing public open space between 9am and 3pm on 21 June.

- 5 Consolidated areas of direct sunlight must be achieved each hour between 12 midday and 2pm on 21 June generally consistent with the location and size indicated in **Figure 12**.

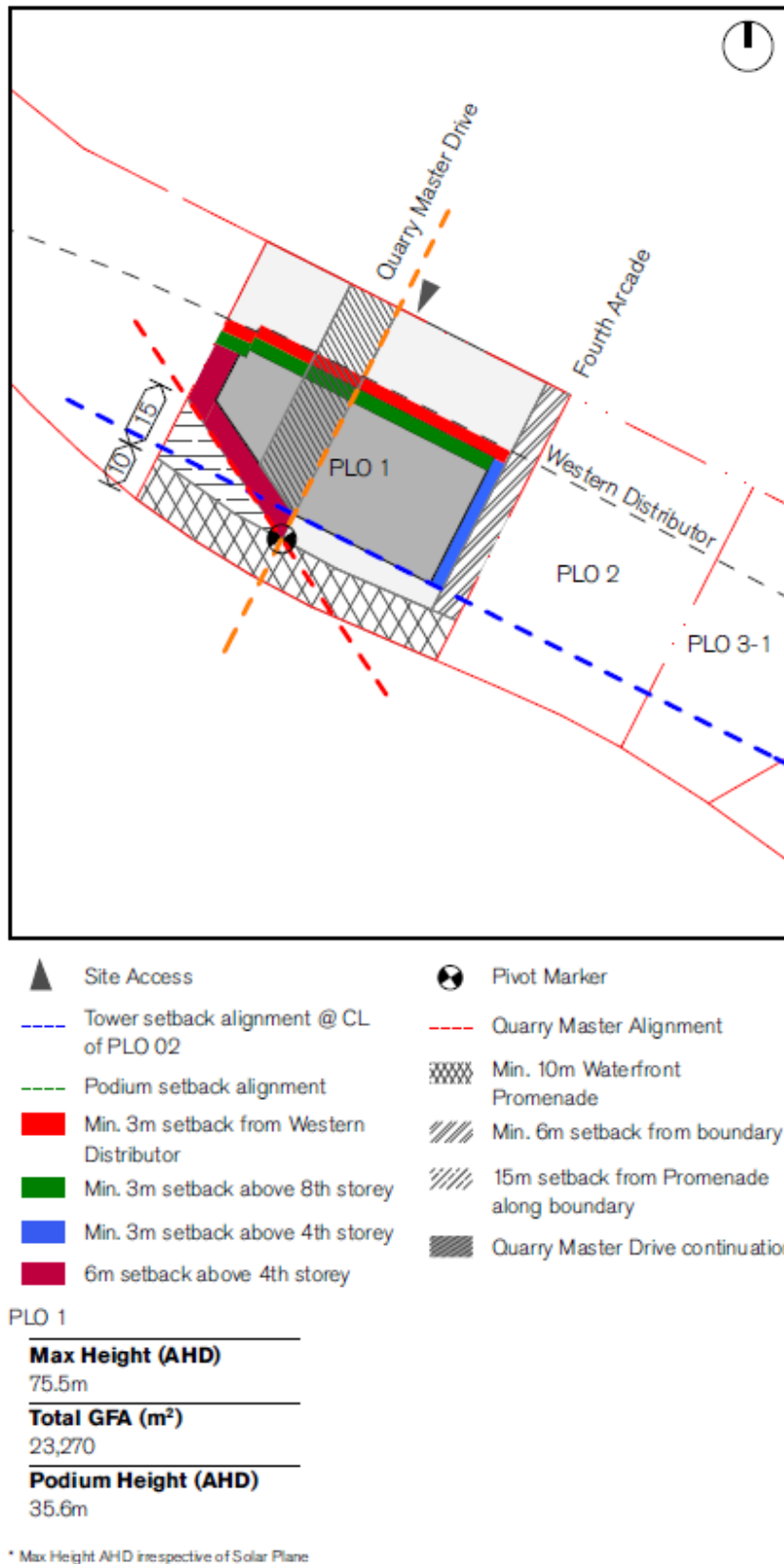
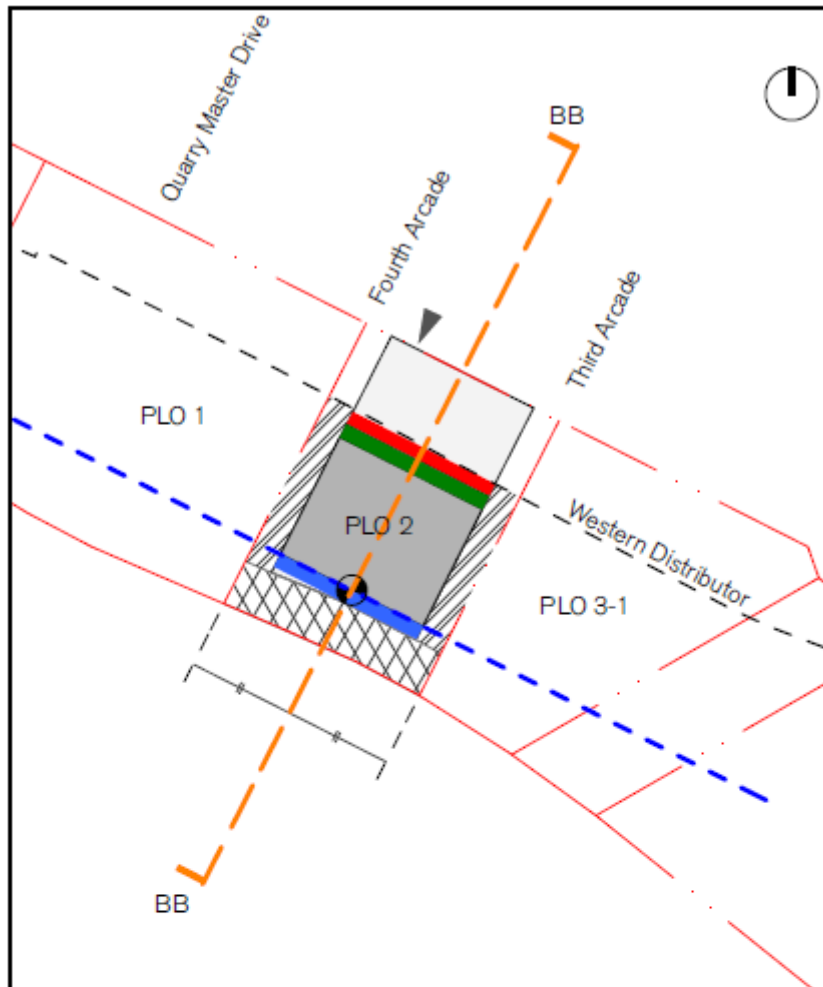


Figure 4 Block PLO1 controls



- ▲ Site Access
- Central Axis Line
- Tower setback alignment @ CL of PLO 02
- Min. 3m setback from Western Distributor
- Min. 3m setback above 8th storey
- Min. 3m setback above 4th storey
- Pivot Marker
- ▨ Min. 10m Waterfront Promenade
- ▨ Min. 6m setback from boundary

PLO 2

Max Height (AHD)

91.5m

Total GFA (m²)

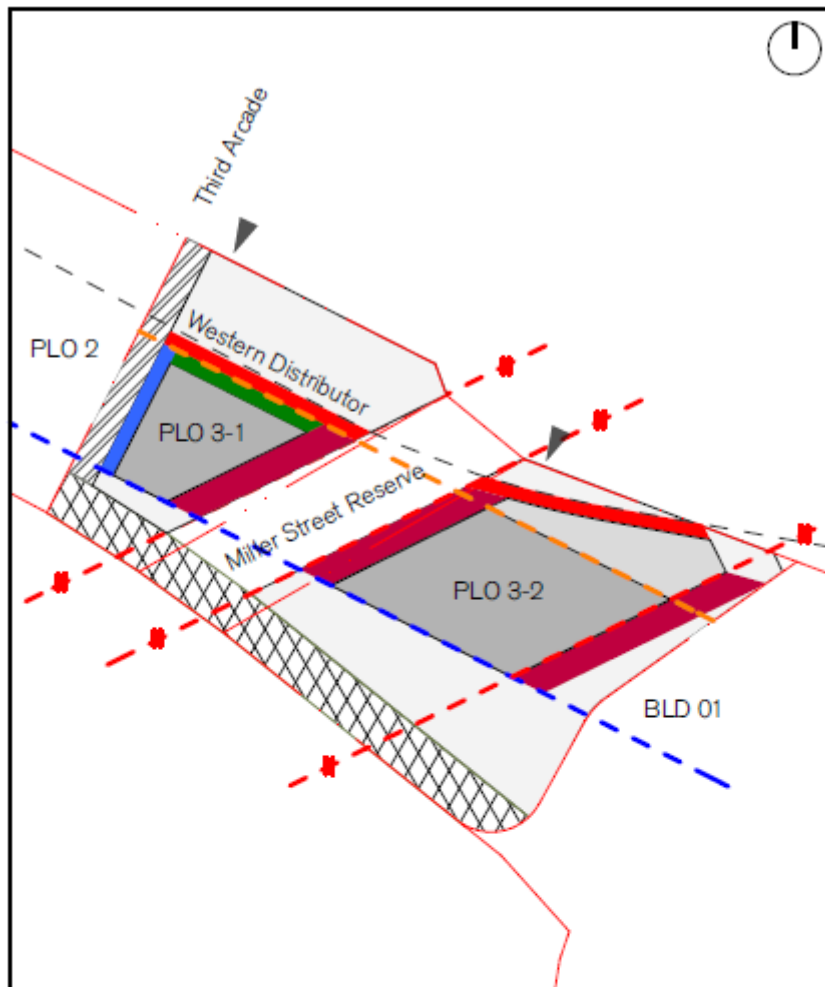
16,273

Podium Height (AHD)

35.6m

* MaxHeight AHD irrespective of Solar Plane

Figure 5 Block PLO2 controls



- | | |
|--|---|
| ▲ Site Access | --- Western Distributor Setback |
| --- Tower setback alignment @ CL of PLO 02 | --- Align to Miller St Front Boundary |
| ■ Min. 3m setback from Western Distributor | ▨ Min. 10m Waterfront Promenade |
| ■ Min. 3m setback above 8th storey | ▨ Min. 6m setback from boundary |
| ■ Min. 3m setback from 4th storey | ▨ 15m setback from Promenade along boundary |
| ■ Min. 6m setback from 4th storey | |

PLO 3-1

Max Height (AHD)

91.5m

Total GFA (m²)

13,297

Podium Height (AHD)

35.6m

PLO 3-2

Max Height (AHD)

72m

Total GFA (m²)

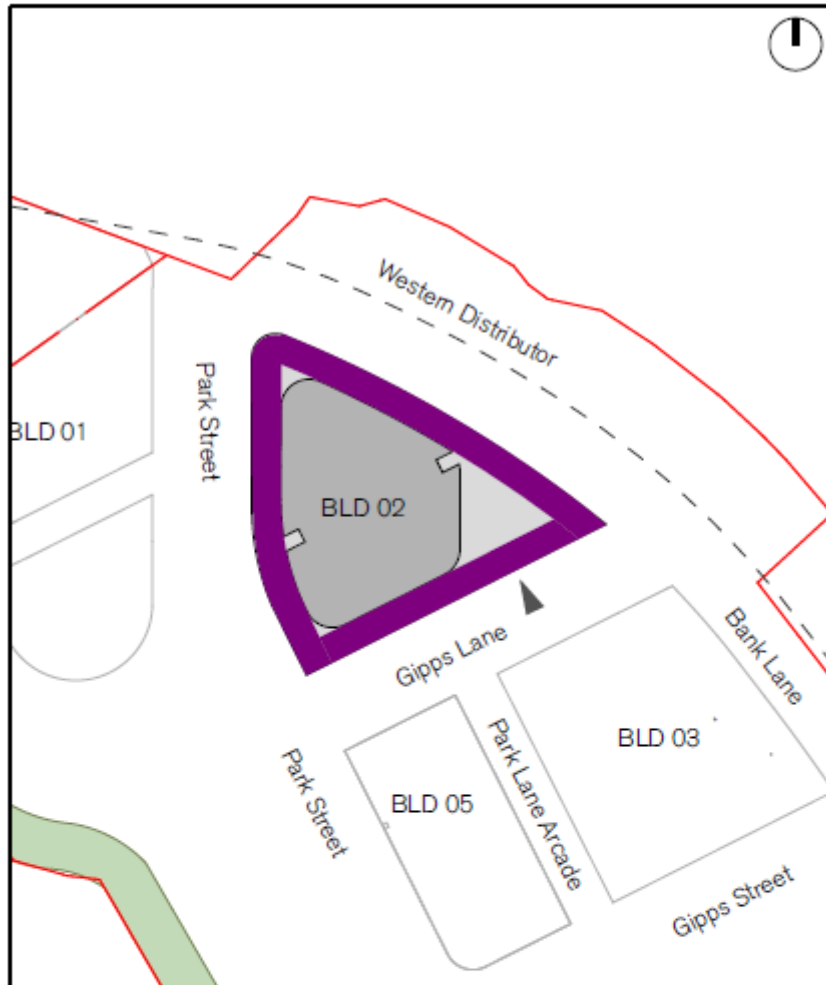
19,164

Podium Height (AHD)

35.6m

* Max Height AHD irrespective of Solar Plane

Figure 6 Block PLO3 controls

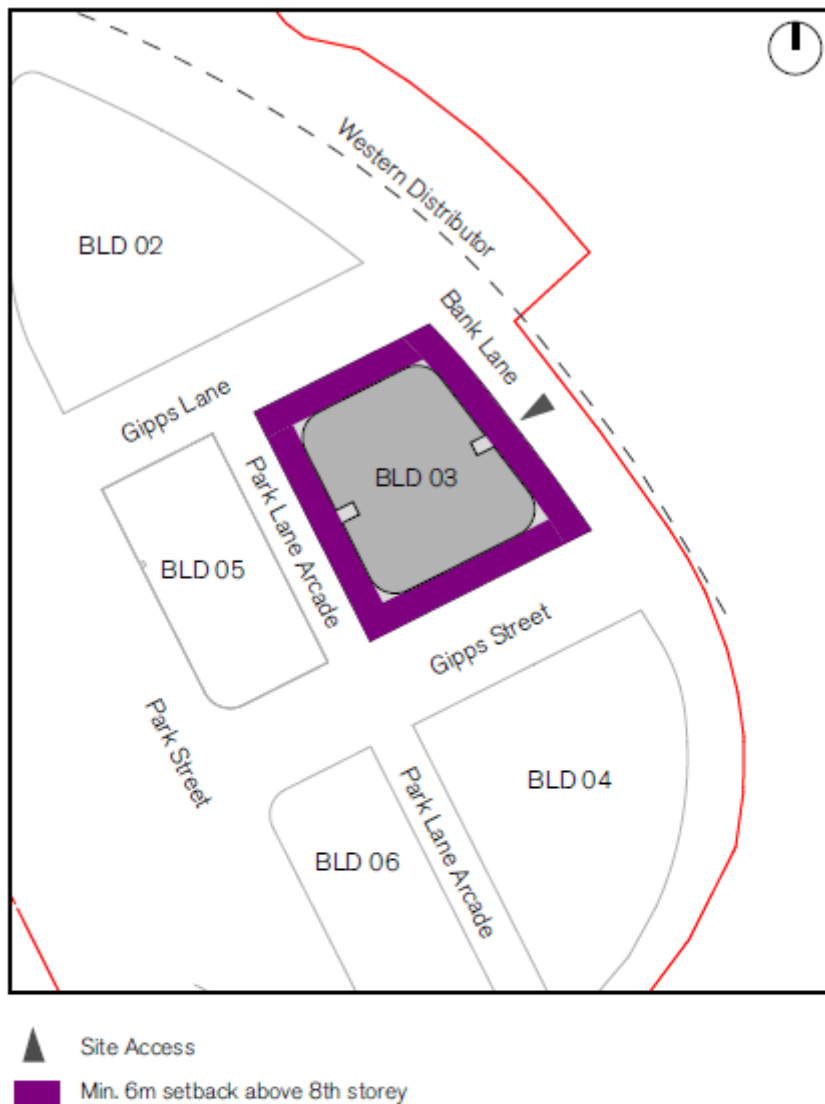


- ▲ Site Access
- Min. 6m setback above 8th storey

| | |
|----------------------------------|--------|
| BLD 02 | |
| Max Height (AHD) | 120m |
| Total GFA (m²) | 38,224 |
| Podium Height (AHD) | 36.7m |

* Max Height AHD irrespective of Solar Plane

Figure 7 Block BLD02 controls



BLD 03

Max Height (AHD)

156m

Total GFA (m²)

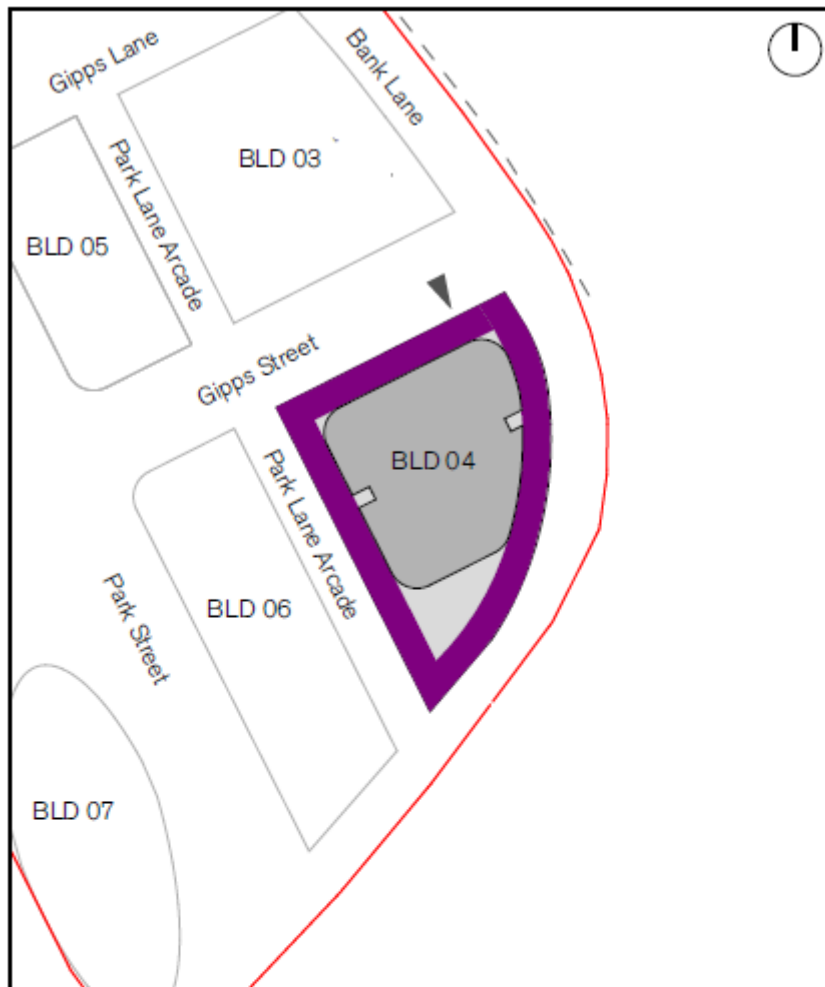
51,427

Podium Height (AHD)

36.7m

* Max Height AHD irrespective of Solar Plane

Figure 8 Block BLD03 controls

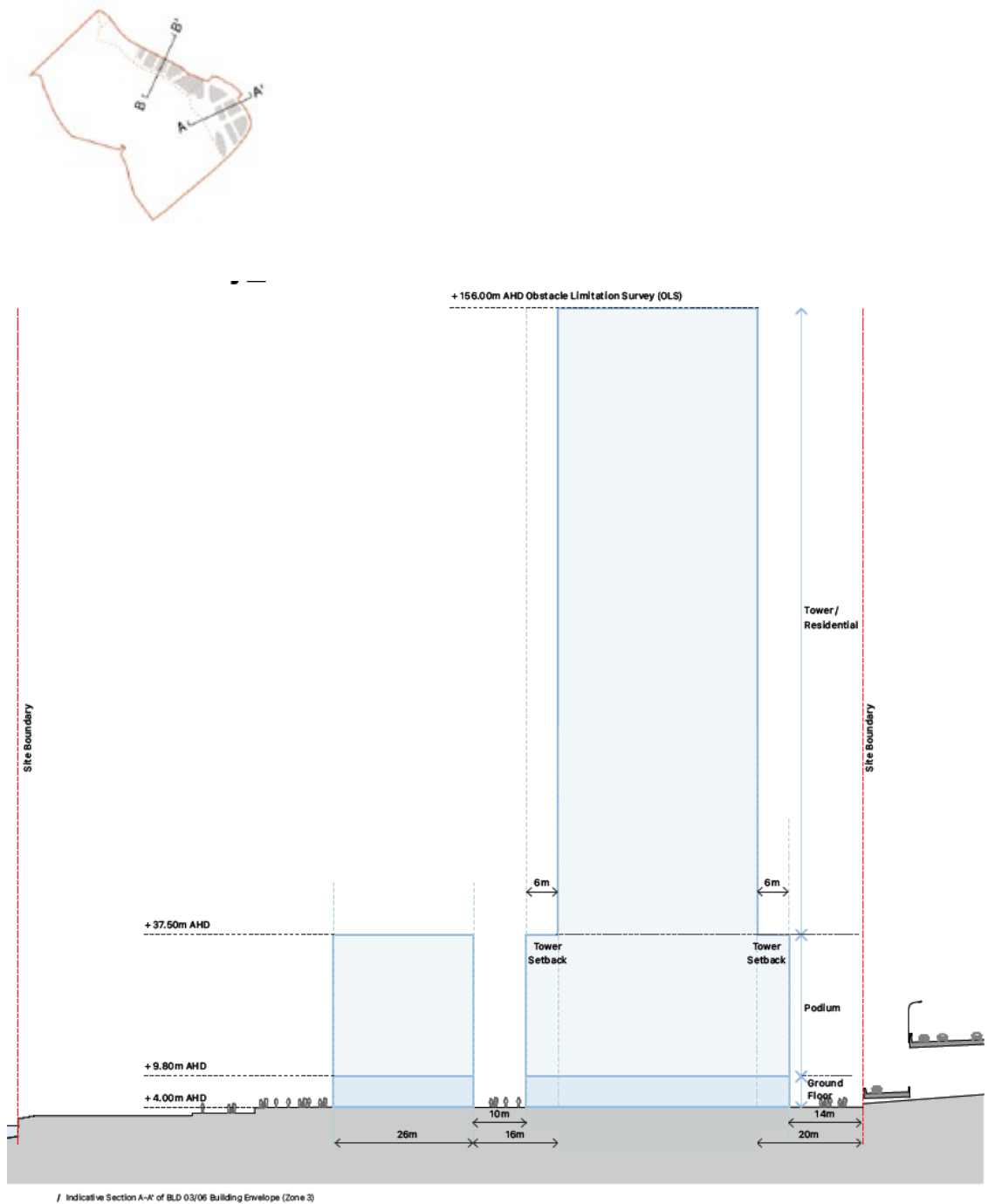


- ▲ Site Access
- Min. 6m setback above 8th storey

| | |
|----------------------------------|--|
| BLD 04 | |
| Max Height (AHD) | |
| 110m | |
| Total GFA (m²) | |
| 39,101 | |
| Podium Height (AHD) | |
| 36.7m | |

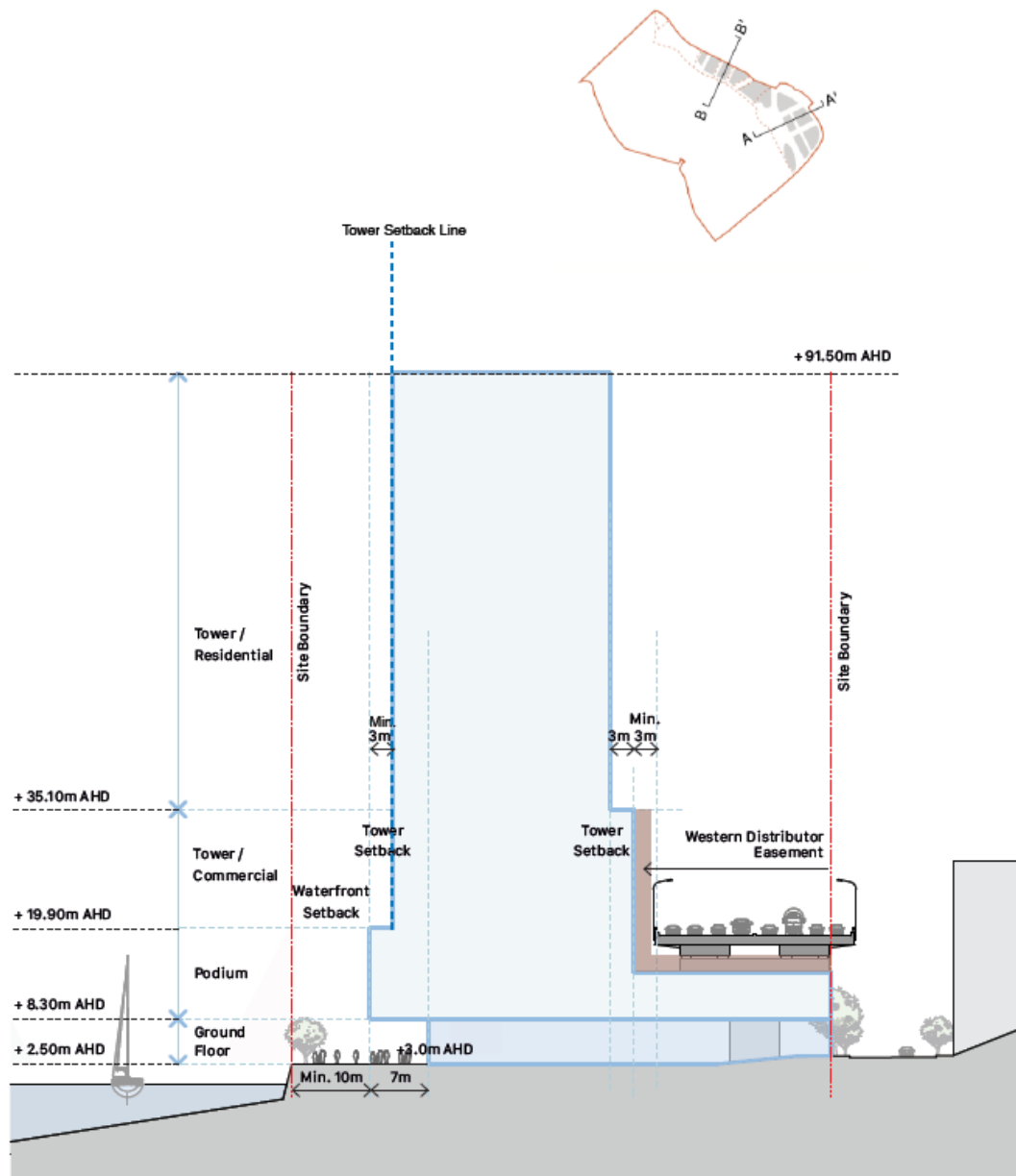
* Max Height AHD irrespective of Solar Plane

Figure 9 Block BLD04 controls



/ Section AA

Figure 10 Section through Block BLD03 and BLD05

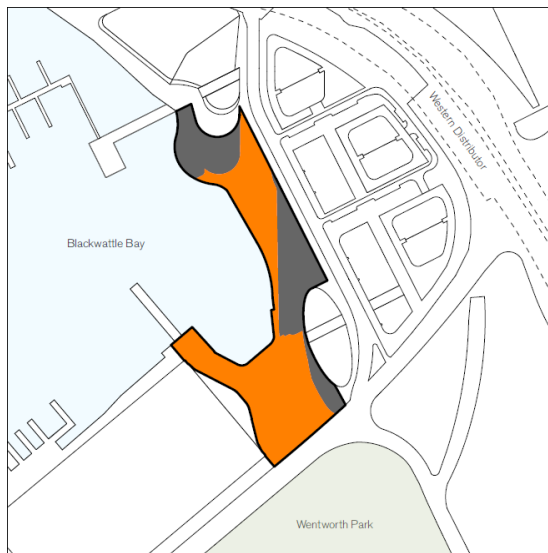


/ Indicative Section B-B' of PLO 02 Building Envelope (Zone 2)

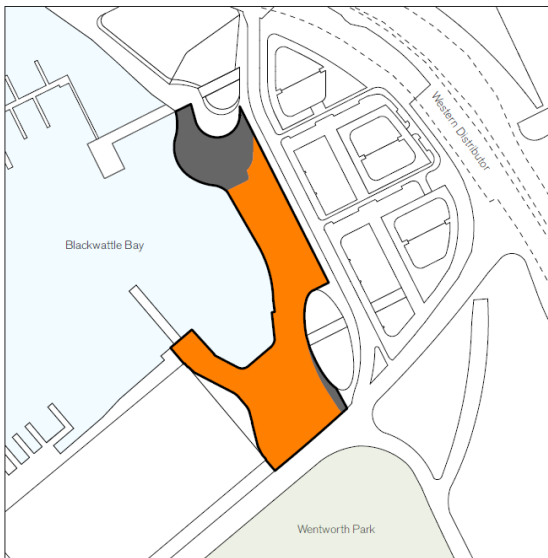
/ Section BB

Figure 11 Section through Block PLO2

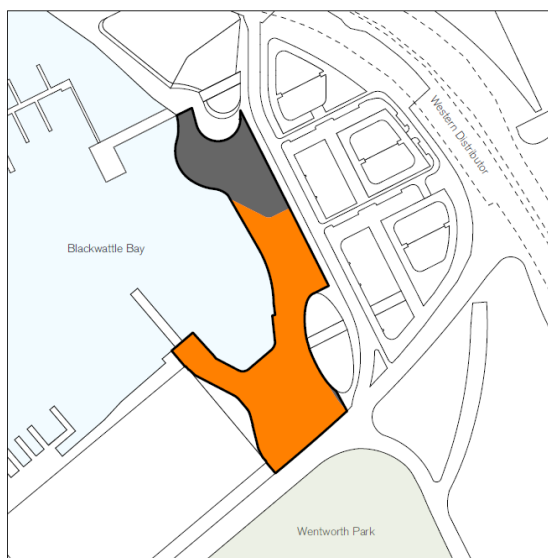
DRAFT



12 midday



1pm



2pm

Figure 12 Direct sunlight to Waterfront/Urban Park

3.5 Visual impact

Objectives

- a Ensure new buildings contribute to the visual quality of the surrounding built environment through well considered design.

Provisions

- 1 Building reflectivity and specialist lighting must be further considered during design development to ensure these elements are minimised as much as possible for the surrounding sensitive receptors.
- 2 Articulation of the public realm design during design development should ensure that landscape elements (such as trees) do not overly obstruct valued sight lines (such as water views).

3.6 Active frontages

Objectives

- a Ensure ground floor frontages are pedestrian oriented, of high design quality to add vitality to streets and public domain and to encourage outdoor dining and activation both day and night.
- b Encourage fine grain tenancy frontages at ground level to street frontages, the waterfront promenade and public open space.
- c Provide continuity of active uses along streets, lanes the waterfront promenade and public open space.
- d Allow for active frontages in other non-identified locations to contribute to the amenity of the streetscape.
- e Encourage frequent building entries that face and open towards the street.

Provisions

- 1 Active frontages are to be provided in accordance with **Figure 13**. For the purposes of this control, an active street frontage is not required for any part of a building to be used for any of the following:
 - entrances and lobbies (including as part of mixed use development),
 - access for fire services,
 - vehicular access.
- 2 Loading access should generally not occur where active frontages are nominated.

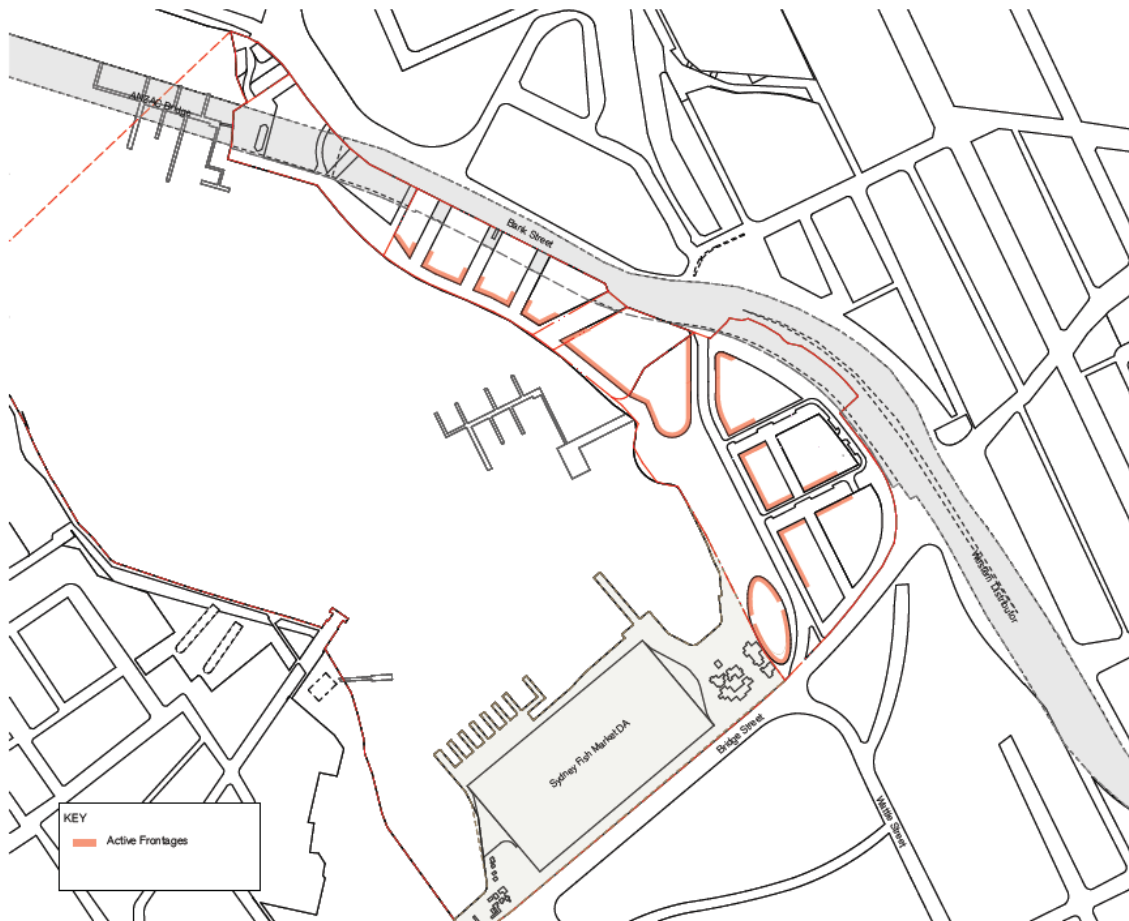


Figure 13 Active frontages

3.7 Dwelling mix

Objectives

- a Facilitate the creation of a diverse, inclusive, healthy and socially connected community through the provision of a mix of dwelling types, tenures, sizes and price points that consider the needs of renters, investors and owner occupiers.
- b Provide for a mix of traditional and innovative dwelling types and sizes, including those that specifically cater to demand for smaller households.

Provisions

- 1 Development of 20 dwellings or more is to provide dwellings within the following proportional ranges:
 - Studio dwellings - 5 to 10% of total dwellings
 - 1-bedroom dwellings - 10 to 30% of total dwellings
 - 2-bedroom dwellings - 40 to 75% of total dwellings
 - 3-bedroom dwellings or larger - 10 to 30% of total dwellings.
- 2 The maximum percentage of 1 bedroom dwellings may be increased above 30% provided the numbers of studio dwellings and 1 bedroom dwellings combined does not exceed 45% of the total dwellings proposed.
- 3 Where residential uses are proposed for the ground flood level, at least 50% of 3 bedroom or larger dwellings are to be provided on the ground floor.
- 4 New development is to include a variety of internal designs that will allow adaptation to different uses over time by:

- providing internal walls that can easily be removed without affecting structural integrity
 - locating services so that they do not impede the future conversion of the unit into a different configuration
 - incorporating the ability to separately occupy parts of individual dwellings.
- 5 Dwellings comprising two or more bedrooms may be configured as two adjacent apartments provided:
- both apartments are accessed from a shared private lobby or have dual-key access
 - where a strata plan exists, both apartments are contained within a single strata unit.
- 6 20 per cent of the total apartments are to incorporate the *Liveable Housing Guideline's* silver level universal design features.

4 AMENITY

4.1 Noise

Objectives

- a Ensure development within the site creates an appropriate amenity for the proposed future use and incorporates appropriate mitigation measures to address the existing inherent noise constraints of the site.
- b Minimise potential land use conflicts between residential and active commercial uses such as restaurants, bars and entertainment venues.

Provisions

- 1 Buildings are to be designed to ensure residential uses are distanced from the Western Distributor (including vertically).
- 2 Careful consideration is to be given to the internal layout and configuration of residential dwellings to ensure that the noise requirements of the Apartment Design Guide can be achieved.
- 3 Other appropriate measures to mitigate noise are to be incorporated into the design of future residential developments where required. These may include (but are not limited to):
 - Increased glazing specifications
 - Locating ventilation intakes (where required) along a non-noise impacted façade
 - Incorporating façade noise mitigation measures to allow for natural ventilation in the form of louvres, balcony soffit absorption, enclosed balconies and the like.
- 4 High noise-generating uses (such as licensed premises) are to be grouped together and away from residential receptors.
- 5 Operational hours of noisy development are to be reduced when located in close proximity to residential development.
- 6 A plan of management must be submitted as part of any development application for noisy venues. The plan of management should be prepared in accordance with the requirements set out in Schedule 3, Section 3.2 of the SDCP 2012.
- 7 Non-residential development should be positioned to shield residential areas from noise wherever practicable.
- 8 A detailed acoustic and vibration assessment is required to be submitted with any development application for a new mixed use, residential or commercial development, or a use which the consent authority considers is likely to be sensitive to or create noise.

4.2 Wind

Objectives

- a Ensure the cumulative impact of development within the Precinct on the wind environment does not result in uncomfortable or unsafe wind conditions on the public domain and open space within and surrounding the area taking account of the intended primary use of the space.
- b Ensure the wind environment within the site is suitable for the intended uses.

Provisions

- 1 A wind effects report is to be submitted with a development application for buildings higher than 45m and for other buildings at the discretion of the consent authority. The report is to be prepared by a suitably qualified engineer and is to:
 - be based on wind tunnel testing, which compares and analyses the current wind conditions and the wind conditions created by the proposed building

- report the impacts of wind on the pedestrian environment at the footpath level within the site and the public domain;
 - provide design solutions to minimise the impact of wind on the public and private domain.
- 2 Any development must not cause a wind speed that exceeds the Wind Safety Standard. For pedestrian safety, the safety limit criterion is 24m/s, based on an annual maximum 0.5 second gust wind speed, which applies to all areas.
 - 3 Development must take all reasonable steps to create a comfortable wind environment that is consistent with the Wind Comfort Standards for Sitting, Standing and Walking.
 - 4 For the purposes of complying with 3 above for pedestrian comfort, the hourly mean wind speed, or Gust-Equivalent Mean (GEM) wind speed (whichever is greater for each wind direction), must not exceed 8m/s for walking, 6m/s for standing, and 4m/s for sitting having regard to the proposed future use. These are based on a 5% probability of exceedance.
 - 5 Taller buildings may incorporate setbacks, stepped facades and chamfered corners at key locations to mitigate potential downwash and ensure pedestrian safety where required.
 - 6 Where there is potential for significant downwash of wind from buildings, developments may incorporate vertical screening and podium cut-outs to reduce the impacts of localised winds side streaming and chamfered corners to reduce the wind accelerating locally around building corners.

4.3 Air quality

Objectives

- a Ensure potential air quality impacts emissions from high volume roads and existing industrial activities within or in close proximity to the Precinct are considered in the assessment of a development.
- b Ensure that land uses within the site, particularly sensitive uses such as residential, child care centres and health facilities, are appropriately sited and designed to mitigate impacts from vehicle emissions.

Provisions

The following provisions apply to development that in the opinion of the consent authority may result in adverse impacts on occupants of the development in terms of the effect of emissions from neighbouring high volume roads and existing industrial activities within or adjacent to the Precinct.

- 1 The consent authority may require the preparation of an Air Quality Impact Assessment where emissions from neighbouring high volume roads and existing industrial activities may impact on the occupants of proposed development.
- 2 The Air Quality Impact Assessment is to:
 - be prepared by a suitably qualified person in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, published by the Department of Environment and Climate Change in 2005
 - identifies the predicted concentration of Nitrous Oxide and particulates at all sensitive receptors.

[Note: A sensitive receptor means a location where people are likely to work or reside and may include a dwelling, school, hospital, office or public recreational area. An air quality impact assessment should also consider the location of known or likely future sensitive receptors]

- 3 Buildings proposed on development sites (with the exception of BLD 02) are to provide for the lower eight floors to be used for commercial/retail purposes only and not residential development.
- 4 No residential development is to be allowed within a 20m radius of the major roads adjacent to the site, as shown in **Figure 14**.

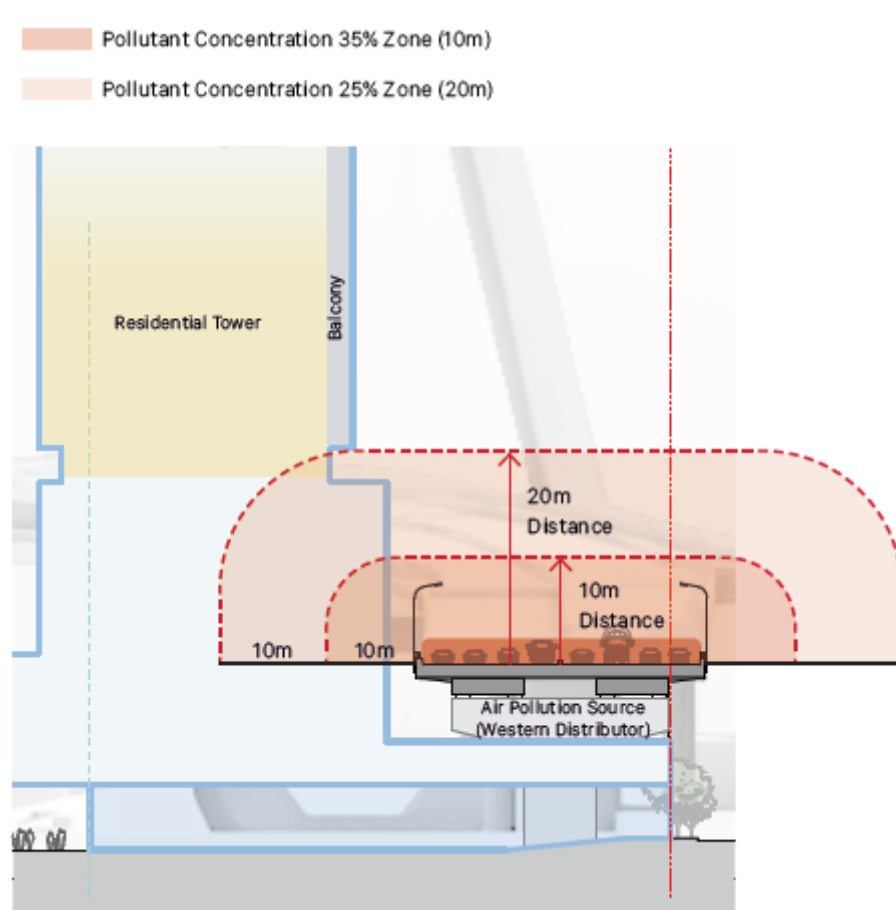


Figure 14 20m radius buffer to residential development

4.4 Light spill

Objectives

- a Encourage appropriate external lighting of buildings that adds to the architectural character of the building.
- b Minimise light spill to the sky.

Provisions

- 1 When designing outdoor lighting, to minimise any adverse effect of the light installation, the following general principles should be used during the detailed lighting design phase (as set out in AS4282-2019 Control of the Obtrusive Effect of Outdoor Lighting):
 - Direct lights downwards as much as possible
 - Use luminaires that are aimed to minimise light (eg full cut luminaires where no light is emitted above the horizontal plane)
 - Do not waste energy and increase light pollution by over-lighting
 - Keep glare to a minimum by keeping the main beam angle less than 70 degrees

- Wherever possible use floodlights with asymmetric beams which permit the front glazing to be kept at or near parallel to the surface being lit
 - Direct precinct lighting away from sensitive receivers
 - Position precinct lighting as far away from precinct boundaries as practicable.
- 2 Quantitative modelling to determine the extent of light spill should be undertaken as more detailed lighting design plans are generated, with mitigation measures to ensure compliance with AS 4282-2019.

5 PUBLIC DOMAIN AND OPEN SPACE

5.1 Public domain plan

Objectives

- a Provide a high quality, integrated, permeable and multifunctional public domain that caters for movement, recreation and social interaction and that:
 - ensures that the waterfront is highly accessible from surrounding streets and public places and that promotes public and active transport and low car ownership
 - is flexible and adaptable for a variety of public and community uses
 - provides opportunity to collaborate with First Nations in both programmed and flexible spaces
 - draws inspiration from the existing landscape and pre-colonial origins and provides opportunities for heritage interpretation.
 - is protected from noise and air pollution
 - connects to the former Glebe Island Bridge in a manner that enables future active transport connections to other precincts within the Bays
 - directly connects to the existing foreshore walks in Glebe and Pyrmont
 - provides for safety adjacent to the water's edge
 - provides opportunities for suitable public and community uses which may include built structures and unenclosed areas for outdoor dining
 - maximises open space that supports a functional and elegant solution to level changes across the site.
- b Ensure that open space and public domain facilitate the effective future integration of the Precinct with the city and the adjacent areas.
- c Ensure that the public domain achieves design excellence

Provisions

- 1 Future development of the public domain is to be in accordance with the Public Domain Plan in **Figure 15**.
- 2 The Public Domain Plan is to be informed by a design excellence strategy for the public domain, prepared in consultation with the NSW Government Architect.
- 3 The future public domain, including open space, is to exhibit design excellence and provide for a co-ordinated palette of hard and soft landscaping. It should incorporate:
 - street trees and other vegetation
 - paving and other hard surfaces
 - lighting, including the use of LED
 - seating, water fountains, rubbish bins and the like
 - signage, including wayfinding signage
 - public art
 - water play.
- 4 The Public Domain Plan is to demonstrate that the pedestrian network is to be highly permeable and prioritise walking and cycling reflecting the street environments as shown in **Figure 15** and that:
 - is aligned with key pedestrian desire lines
 - has generous widths to accommodate the forecast generated pedestrian flows
 - incorporates opportunities for respite and pause
 - is integrated with active frontages.



Figure 15 Public Domain Plan

5.2 Open space

Objectives

- a Provide a connected network of high quality open space areas which provide recreation areas, urban amenity, increased tree canopy coverage and increased access to the waterfront.
- b Ensure the design of open space provides for a variety of both passive and active uses appropriate to the location and can respond to community needs.
- c Provide corridors of locally indigenous vegetation that link major open spaces and water bodies to enhance environmental quality and optimise opportunities for habitat for native flora and fauna species.
- d Ensure that open space is strategically located to assist with water sensitive urban design and stormwater management.

Provisions

- 1 Future development of the open space network is to be in accordance with the Open Space Plan in **Figure 16**.
- 2 The design of the primary open spaces is to be guided by the preliminary designs and character statements in the Blackwattle Bay Urban Design Statement Volume II prepared by FJMT (2021), and as summarised in **Table 1**. The primary open spaces are:
 - Bank Street open space (incorporating 1-3 Bank Street)
 - Waterfront Promenade
 - Miller Street Reserve
 - North Entry Plaza
 - Promontory
 - Waterside Park.
- 3 Landscape design is to be high quality and create interest and character through measures such as indigenous tree species, well integrated public art, pavement design and other appropriate elements to the satisfaction of the consent authority.
- 4 Landscape design is to acknowledge the original foreshore and integrate First Nations perspectives and connection to the landscape in the design.
- 5 Public open space is to be designed in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). In particular, the design should provide for:
 - open sightlines and landscaping that allows high levels of public surveillance
 - a clear distinction between private and public open space
 - lighting in accordance with the City of Sydney's *Lighting Design Code* and designs out any potential 'hiding spots'
 - legible entrances to encourage public use of the open space.



Figure 16 Open space plan

Table 1 Primary open spaces

Bank Street Open Space



Character

- All age friendly, active, sheltered and inviting landscape space. Clear line of site and connection to the water for recreation. Provision of support facilities for watercraft.

Modes

- Public exercise equipment/ gym
- Games including equipment suitable for use by all ages persons
- Off leash dog park
- Adolescent play equipment / skate ramp and equipment to allow scooters and skateboards
- Multi-purpose court
- Suitable seating for users and supervisors
- Informal space suitable for 'bring in' play event

Planting strategy

- Shade tolerant indigenous rainforest and fern species.
- Provision of shade through advanced trees, shade structures.
- Landscape planting embellishment, lawn areas, advanced shade trees and mass planting beds.

Hardscape strategy

- Ramps, handrails, tactiles and balustrades for disabled access
- High quality, durable hard landscape finishes to walls, paving suitable for intensive public use
- Hard paved plaza suitable for large gatherings
- Street furniture – Bench seats, bins, bike racks, drinking fountain, BBQs
- Universal access table setting, tap, bin
- Lighting for safety and security to relevant Australian Standards
- Accessible pedestrian paths to relevant Australian Standards
- Streetscape treatments to extent of public roads including street trees, furniture, paving and landscaping.

Infrastructure/furniture

- Feature lighting / Public Art / Service provision as required to all facilities / Picnic shelter with electric BBQ / Publicly accessible toilets / Structured bicycle parking

Waterfront promenade



Character

- Structured, legible, linear promenade

Modes

- Public seating
- Licensed seating
- Walking, jogging
- Slow cycling

Planting strategy

- Celtis Australis row of trees

Infrastructure/furniture

- Integrated planter boxes, wind screen / trellis infrastructure for outdoor dining

Miller Street Reserve



Character

- Permeable space showcasing WSUD principles, sheltered, shaded, links between Miller Street to the water.

Modes

- Seating for all abilities, users and supervisors
- Lunchtime activity

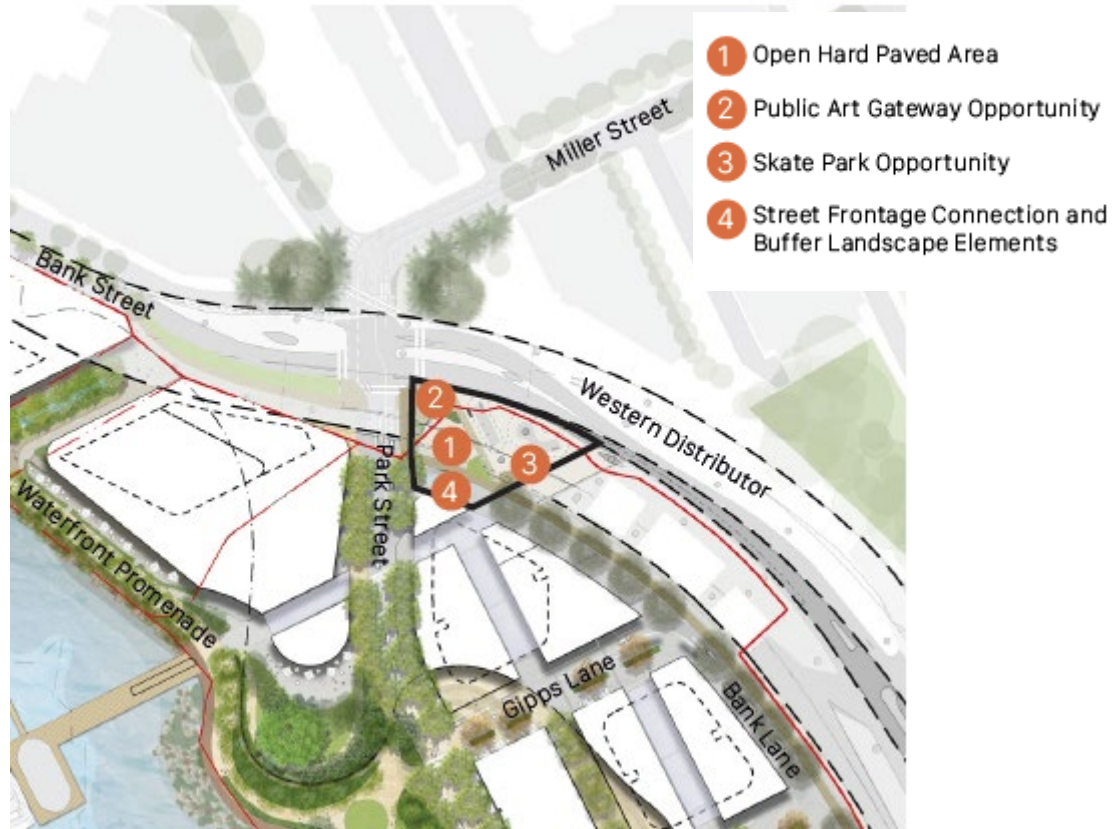
Planting strategy

- WSUD planting including littoral plants and native grasses.

Infrastructure/furniture

- WSUD stormwater devices, lighting.

North Entry Plaza



Character

- Well connected, permeable space

Modes

- Public Art
- Skate park
- Gathering areas
- Events
- Marquee
- Seating

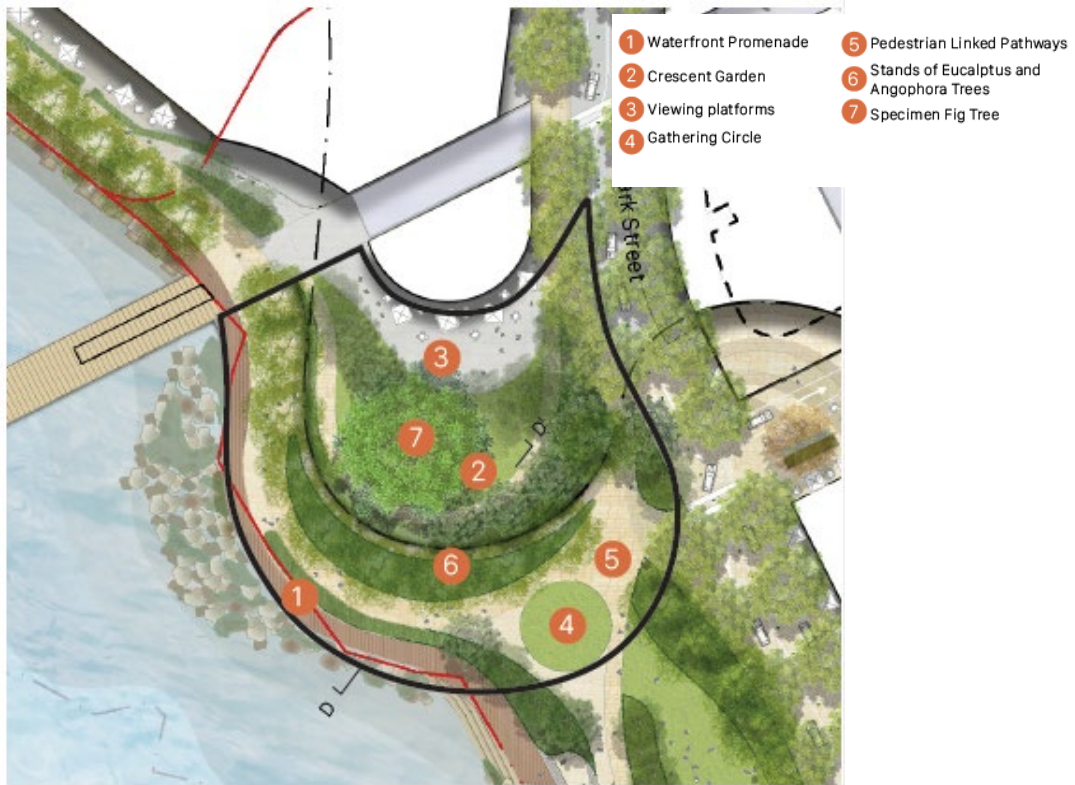
Planting strategy

- Green walls
- Moss walls
- Vertical gardens

Infrastructure/furniture

- Lighting
- Public art
- Marquee infrastructure

Promontory



Character

- Sinuous, stepped terrace landscape.
- Rich local materiality and enhanced Sydney Sandstone character.
- Sheltered areas for gathering.

Modes

- Gathering and yarning
- Outdoor terrace connected to podium building
- Informal space suitable for lunchtime activity
- Table and chairs grass area

Planting strategy

- Shade tolerant indigenous rainforest and fern species
- Large feature fig tree and indigenous gardens

Infrastructure/furniture

- Lighting and audiovisual / audio system,
- General waste
- Seating

Waterside Park



Character

- Connection to water, all ages friendly, inviting, diverse and universally accessible space with clear line of the site. Connection to the water and the new Sydney Fish Market.

Modes

- Large format media screen
- Amphitheatre / performance area
- Open grass area
- Suitable seating for users and supervisors
- Informal space suitable for 'bring in' play event
- Shade trees

Planting strategy

- Large fig trees, native Eucalyptus and Angophora.
- Provision of shade through advanced trees and shade structures.
- Lawn areas, advanced shade trees and mass planting beds.

Hardscape strategy

- High quality, durable hard landscape finishes to walls, paving suitable for intensive public use
- Furniture – bench seats, bins, bike racks, drinking fountain
- Universal access table settings, tap, bin
- Lighting for safety and security to relevant Australian Standards
- Accessible pedestrian paths to relevant Australian Standards
- Streetscape treatments to extent of public roads including street trees, furniture, paving and landscaping.

Infrastructure/furniture

- Wayfinding / feature lighting / public art / service provision as required to all facilities / picnic shelter with electric BBQ / publicly accessible toilets, shade structures.

5.3 Waterfront Promenade

Objectives

- a Ensure the delivery of a high quality waterfront promenade along the water's edge directly connected to the existing foreshore walks in Glebe and Pyrmont.
- b Ensure the design of the promenade:
 - maximises accessibility to and from the surrounding street network and key locations
 - provides a high level of flexibility and adaptability
 - is protected from noise and pollution
 - connects to the former Glebe Island Bridge as a possible future active transport connection to the other precincts within the Bays
 - connects to the existing foreshore walks in Glebe and Pyrmont
 - optimises its use by the surrounding community
 - explores opportunities for the co-location of synergistic uses.


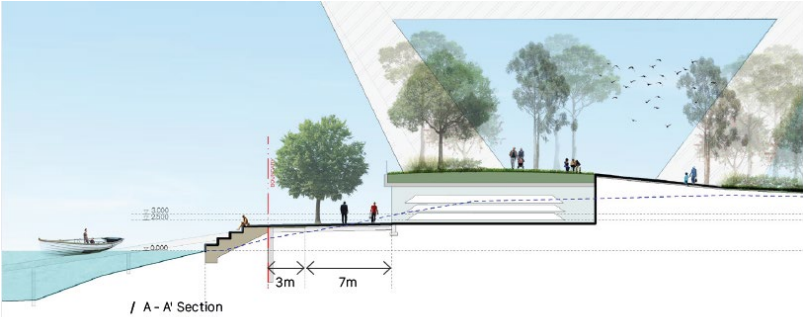

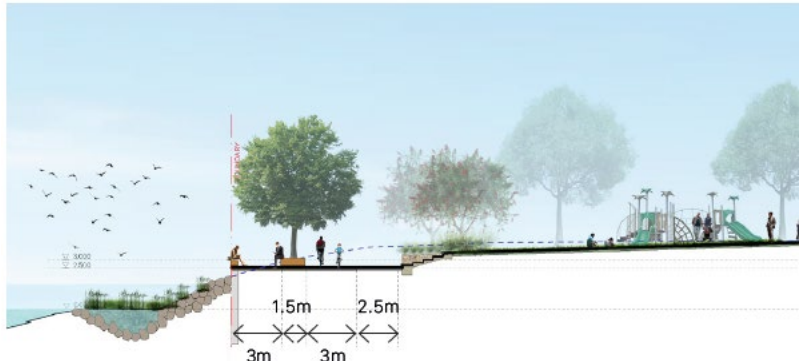
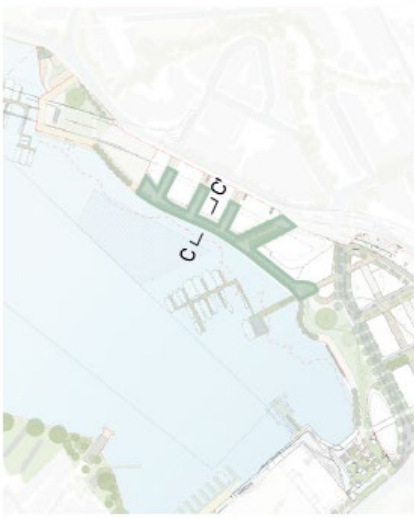
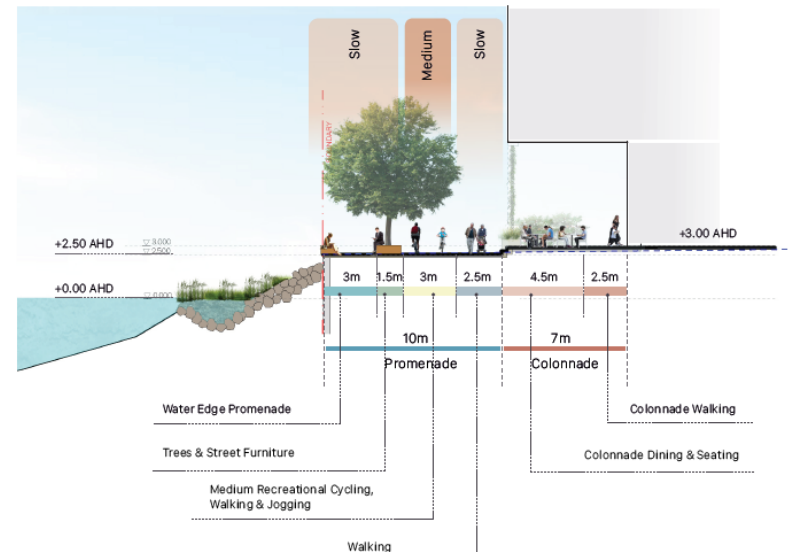
Provisions

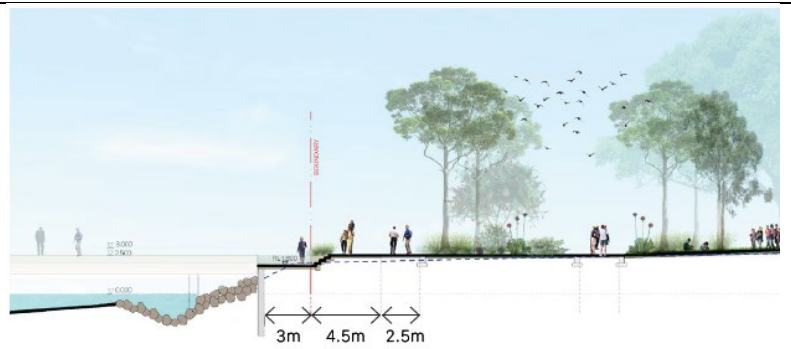
- 1 Provide a high quality waterfront promenade along the water's edge directly connected to the existing foreshore walks in Glebe and Pyrmont as illustrated in **Figure 17**.
- 2 The design of the promenade is to maximise accessibility from surrounding streets and for the full range of users.
- 3 New open space areas are to be provided with direct connection to the promenade with increased tree canopy cover (refer Section 5.4).
- 4 The waterfront promenade is to have a minimum width of 10m, as shown on the Structure Plan in **Figure 2**, and be consistent with the typical cross-sections shown in **Table 2**.
- 5 The character of the waterfront promenade is to be consistent with the character of the locality as identified in **Figure 17** and **Table 1**.
- 6 Development adjoining the waterfront promenade within the Character C area is to provide a colonnade with a minimum width of 7m fronted by active uses.



Figure 17 Proposed waterfront promenade character

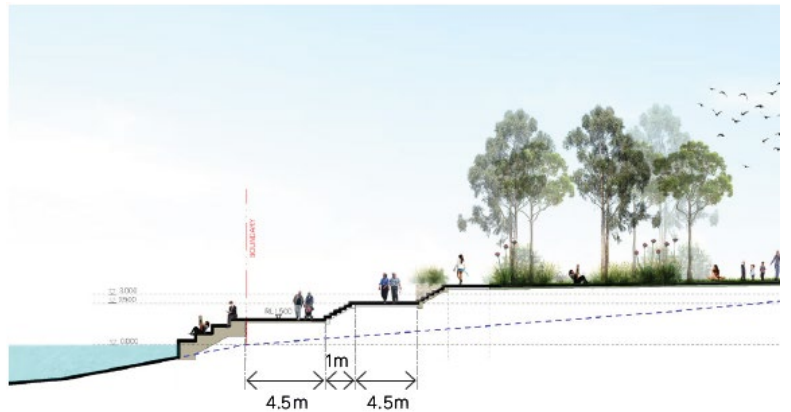
Table 2 Promenade Character Areas and Typical Sections

| | |
|--|---|
| <p>Promenade Character A</p>  <p>A map showing the location of Promenade Character A, highlighted in red, along a waterfront area. The map includes surrounding streets, buildings, and green spaces.</p> |  <p>A cross-section diagram of Promenade Character A. It shows a waterfront area with a boat, a tree, and a promenade. The diagram includes dimensions: 3m for the tree area and 7m for the promenade. The section is labeled 'A - A' Section'.</p> |
| <p>Promenade Character B</p>  <p>A map showing the location of Promenade Character B, highlighted in orange, along a waterfront area. The map includes surrounding streets, buildings, and green spaces.</p> |  <p>A cross-section diagram of Promenade Character B. It shows a waterfront area with a tree, a promenade, and a playground. The diagram includes dimensions: 1.5m for the tree area, 2.5m for the promenade, and 3m for the playground. The section is labeled 'B - B' Section'.</p> |
| <p>Promenade Character C</p>  <p>A map showing the location of Promenade Character C, highlighted in green, along a waterfront area. The map includes surrounding streets, buildings, and green spaces.</p> |  <p>A cross-section diagram of Promenade Character C. It shows a waterfront area with a tree, a promenade, and a colonnade. The diagram includes dimensions: 3m for the tree area, 1.5m for the promenade, 3m for the colonnade, and 2.5m for the colonnade. The section is labeled 'C - C' Section'.</p> |
| <p>Promenade Character D</p> | |



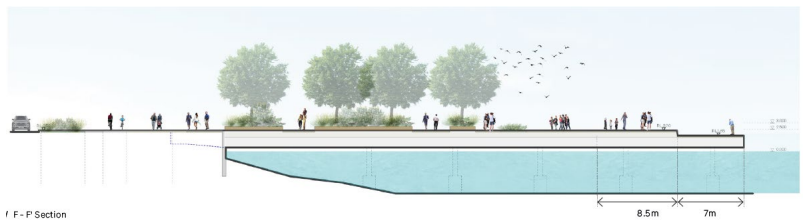
/ D - D' Section

Promenade Character E



/ E - E' Section

Promenade Character F



/ F - F' Section

5.4 Urban tree canopy

Objectives

- a To ensure development of the Precinct is undertaken in a way that:
- increases the urban tree canopy
 - preferences indigenous planting
 - connects to concept of place
 - references the Sydney vegetation community that once occupied the area
 - creates an appropriate microclimate
 - adheres to safety by design principles and
 - integrates with the City of Sydney Street Tree masterplan.

Provisions

- 1 Development is to be undertaken in accordance with the Urban Forest Strategy Plan at **Figure 18**.
- 2 Street tree planting is to be generally in accordance with the species outlined at **Figure 19**.
- 3 Tree height, radial crown spread and number of trees to be planted are to generally in accordance with **Table 3**.
- 4 Soil volumes and depths are to be based on the Apartment Design Guide (2015) of 800mm+ drainage layers for small trees, 1000mm + drainage layers for medium trees and 1200mm+ drainage layers for large trees.
- 5 Street trees sizing, spacing and soil volumes are to comply with **Table 4**.
- 6 Planting pits below pavements are to be linked to form continuous trenches to meet soil volumes set out in **Table 4**.



Figure 18 Urban Forest Strategy Plan

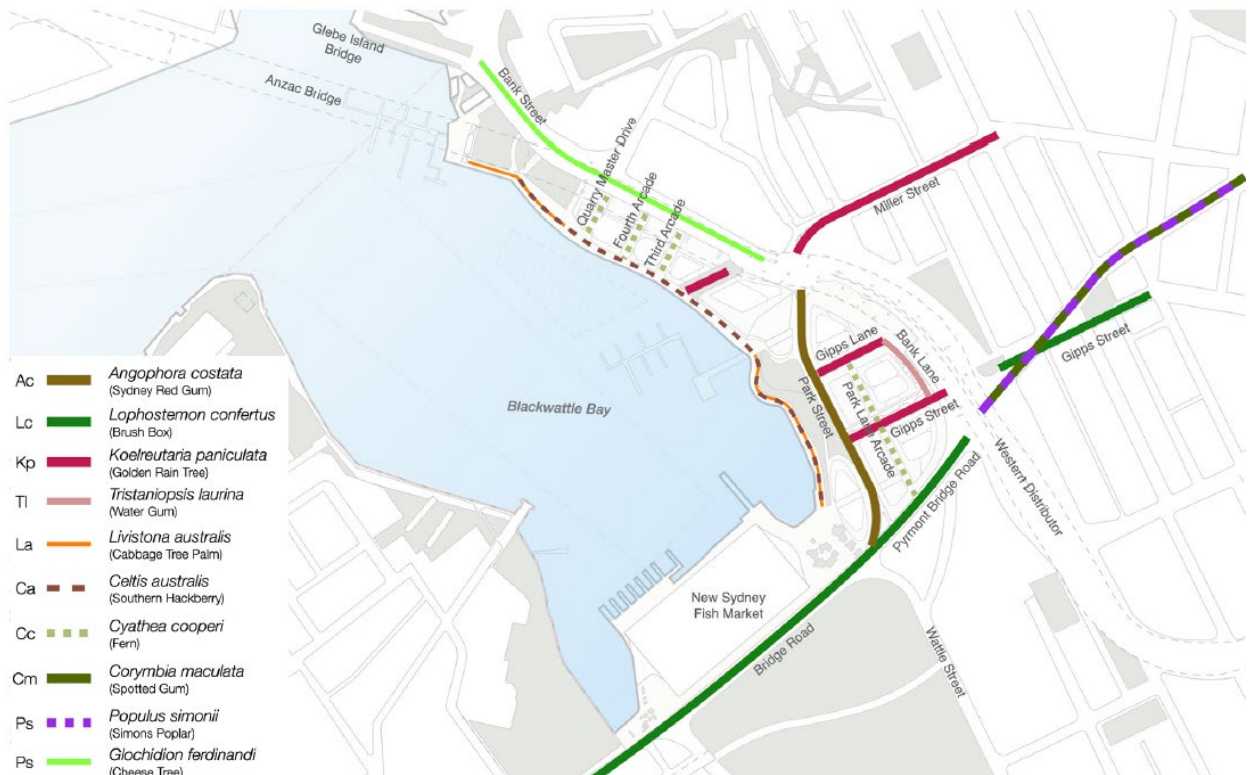


Figure 19 Indicative Street Tree Planting

Table 3: Recommended tree size and distribution

| | Radial crown spread (m) | Height (m) | Distribution % |
|----------------------|-------------------------|------------|----------------|
| 10 years to maturity | | | |
| Small | <4m | 3-5m | 10 |
| Medium | 4-7m | 5-10m | 45 |
| Large | 7-15m | 10-20m | 35 |
| Extra large | 15m+ | 20m+ | 10 |

Table 4 Street tree specifications

| Typology | Tree size | Nominal radial crown width (m) | Spacings | Soil volume |
|--------------|-----------|--------------------------------|----------|--------------------|
| Promenade | Medium | 4.5m | 8.5m | 35m ³ |
| Gipps Lane | Medium | 4m | 8.5m | 35m ³ |
| | Large | 7m | | 80m ³ |
| Gipps Street | Large | 7m | 12.7m | 80m ³ |
| | Medium | 4m | | 35m ³ |
| Bank Lane | Medium | 4m | 8.5m | 35m ³ |
| Park Street | Medium | 4m | 8.5m | 35m ³ |
| | Large | 7m | | 80m ³ + |

5.5 Public art

Objectives

- a Ensure that public art is an integrated and cohesive part of Blackwattle Bay.
- b Facilitate co-ordination between the City of Sydney's Eora Journey Harbour Walk and major public art commissions in the Precinct.
- c Recognise former uses and First Nations culture and experience through interpretive public art.

Provisions

- 1 Any development application for new buildings is to be accompanied by a Public Art Strategy consistent with the City of Sydney's Public Art Strategy, Public Art Policy, Guidelines for Public Art in Private Developments and Guidelines for Acquisitions and Deaccessions.
- 2 A public art strategy is to be submitted with any development application for the public domain.
- 3 Themes to be explored for public art include:
 - Aboriginal occupation and recourse use
 - Occupying the land
 - Establishing transport infrastructure
 - Reclaiming land
 - Establishing industries
 - Transporting and storing goods
 - Establishing utility infrastructure
 - Providing building materials
 - Establishing and maintaining leisure facilities
 - Supplying food
 - Defending Australia.
- 4 Consideration should be given to the incorporation of historic fabric within an interpretive artwork.

6 MOVEMENT NETWORK

The renewal of Blackwattle Bay prioritises the pedestrian and cyclist networks by providing shared ways, shared paths and dedicated cycleways, and limiting vehicle movements within the Precinct. A well-designed fine grain network comprising streets, laneways and arcades, will enhance the accessibility of the waterfront and permeability of the precinct. The alignment and extension of Miller Street, Gipps Street, Wattle Street and Quarry Master Drive connect the precinct to the broader surroundings. Improved connections to the light rail stations and potential linkages to the future ferry stop and Metro station are integrated in the new local street system. The continuous waterfront promenade will connect the Glebe foreshore with the Pymont Peninsula completing the foreshore walkway linking Glebe and Woolloomooloo for pedestrians and cyclists.

6.1 General

Objectives

- a Provide a legible movement network of pedestrian and cycle links and new streets that prioritises public and active transport as a mode of transport over private motor vehicles.
- b Allow maximum permeability through the site integrating a variety of transport modes and ensuring the safety of and accessibility for pedestrians and cyclists maximising connectivity with existing streets, surrounding attractions and the waterfront.
- c Ensure the streets contribute to the network of public space, where people can live healthy, productive lives, meet each other, interact, and go about their daily activities.
- d Ensure the streets are enhanced by transport and have the appropriate space allocation to move people and goods safely and efficiently and connect places together.
- e Provide a high level of public domain amenity through street design that maximises pedestrian space, enables street tree planting and calms traffic.
- f Provide detailed sections and plans for typical conditions in each type of street, demonstrating innovative and best practice design for high density, highly connected, and active transport priority environments.

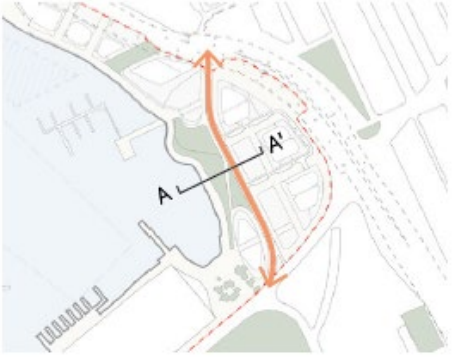
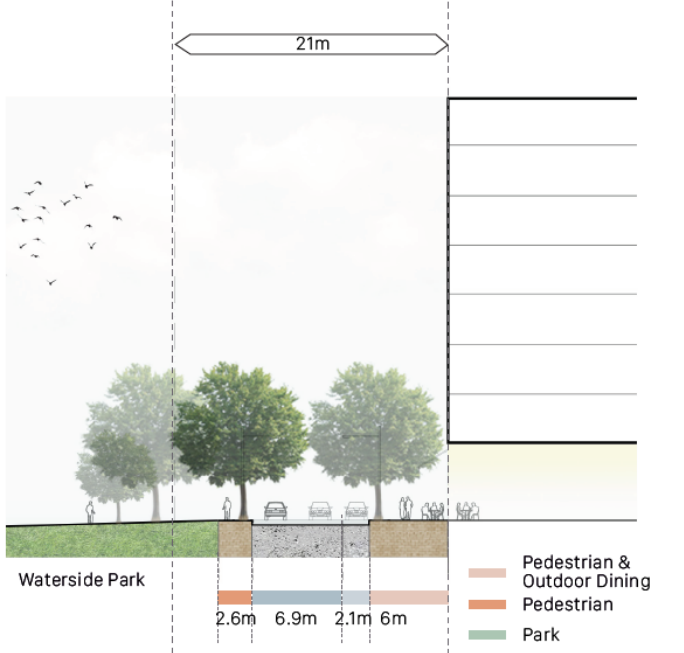
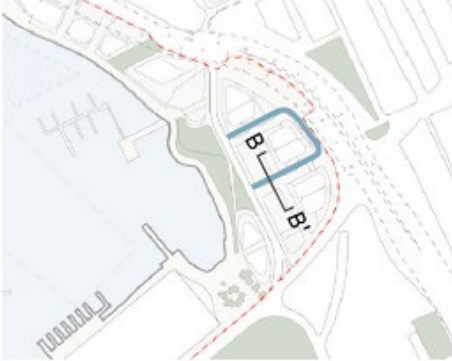
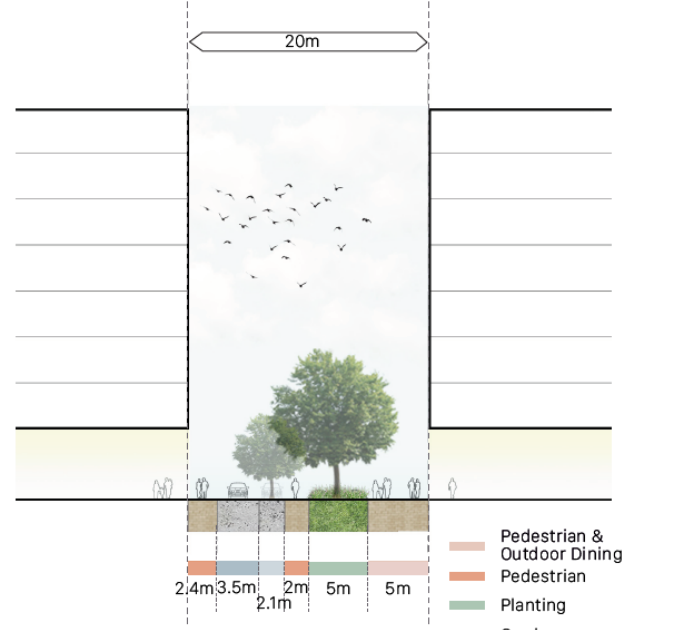
Provisions

- 1 Provide a legible network of pedestrian and cycle links as illustrated in **Figure 20**.
- 2 Ensure that a clear public domain and street network is established that supports the three modes of movement (walking and cycling, public transport and general traffic), and also creates places for gathering and enjoyment.
- 3 Provide a high level of public domain amenity through street design that maximises pedestrian space and calms traffic.
- 4 Design streets and links in accordance with **Table 5** and the *City of Sydney Streets Code*:
- 5 Minimise the impact of basement car park entries on streetscapes and in particular active frontages.

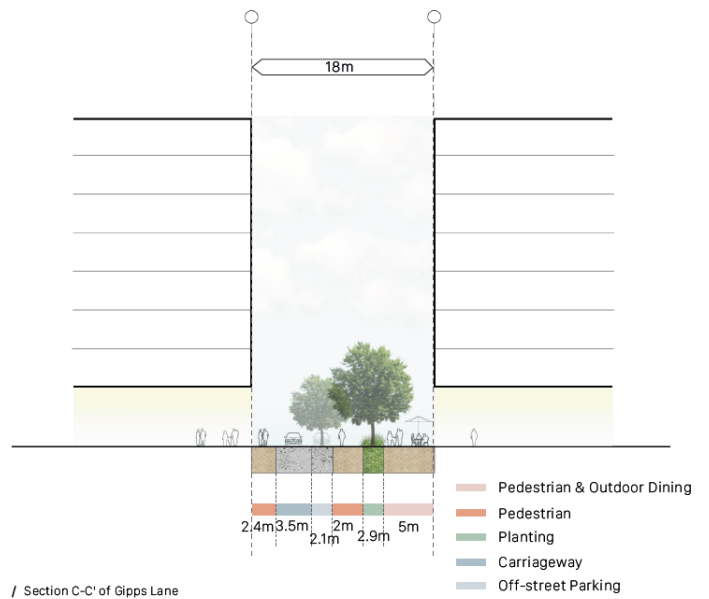
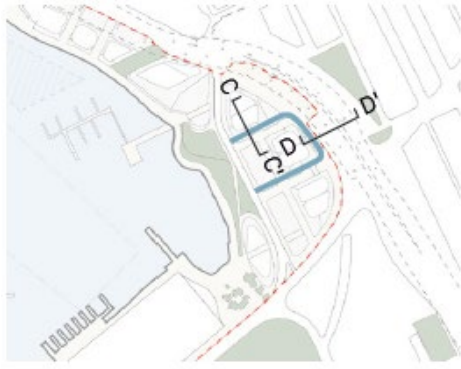


Figure 20 Street hierarchy

Table 5 Street sections

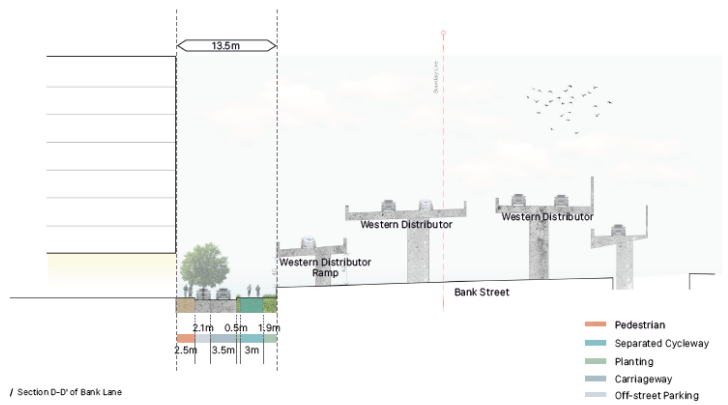
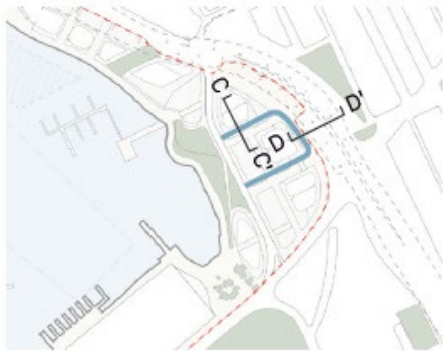
| | |
|--|--|
| <p>Park Street</p>  |  <p>21m</p> <p>Waterside Park</p> <p>2.6m 6.9m 2.1m 6m</p> <p>/ Section A-A' of Park Street</p> <ul style="list-style-type: none"> Pedestrian & Outdoor Dining Pedestrian Park Carriageway Off-street Parking |
| <p>Gipps Street</p>  |  <p>20m</p> <p>2.4m 3.5m 2.1m 2m 5m 5m</p> <p>/ Section B-B' of Gipps Street</p> <ul style="list-style-type: none"> Pedestrian & Outdoor Dining Pedestrian Planting Carriageway Off-street Parking |

Gipps Lane



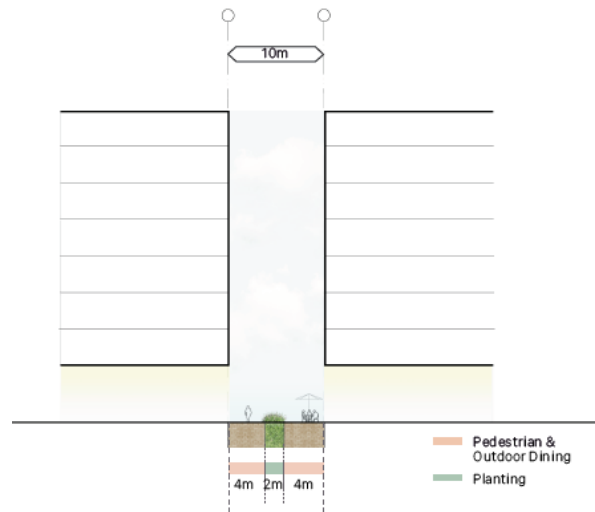
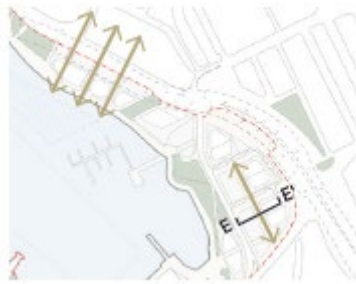
/ Section C-C' of Gipps Lane

Banks Lane



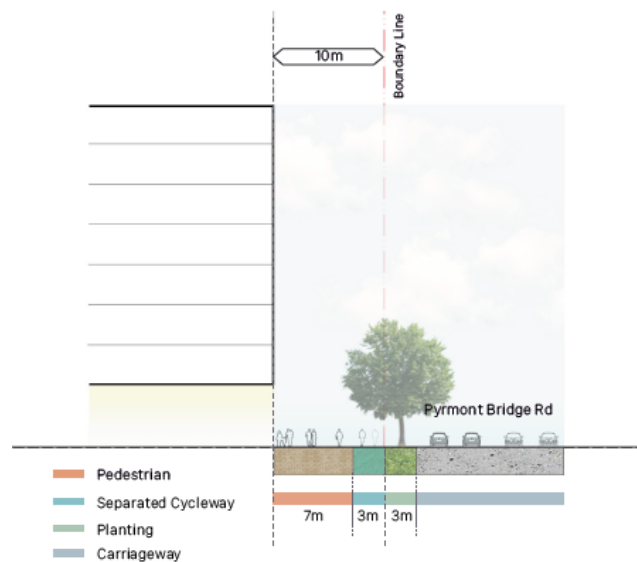
/ Section D-D' of Banks Lane

Through Site Link/Arcades/Park Lane



/ Section E-E' of Park Lane

Separated cycleway



/ Section F-F' of the Separated Cycleway along Pyrmont Bridge Road

6.2 Cycle network

Objectives

- Deliver an extensive network of cycle ways as part of the development of the site that caters to various users and that supports active transport and the accessibility of the site to and from surrounding areas.
- Deliver a separated cycleway 10m setback from the boundary line along Pyrmont Bridge Road and from the Western Distributor on-ramp with minimal cross-over points with vehicle routes.

Provisions

- The cycle network within the Precinct is to be generally in accordance with **Figure 21**.
- The separated cycleway is to be designed as shown in **Table 5** and in accordance with the City of Sydney Street Code.

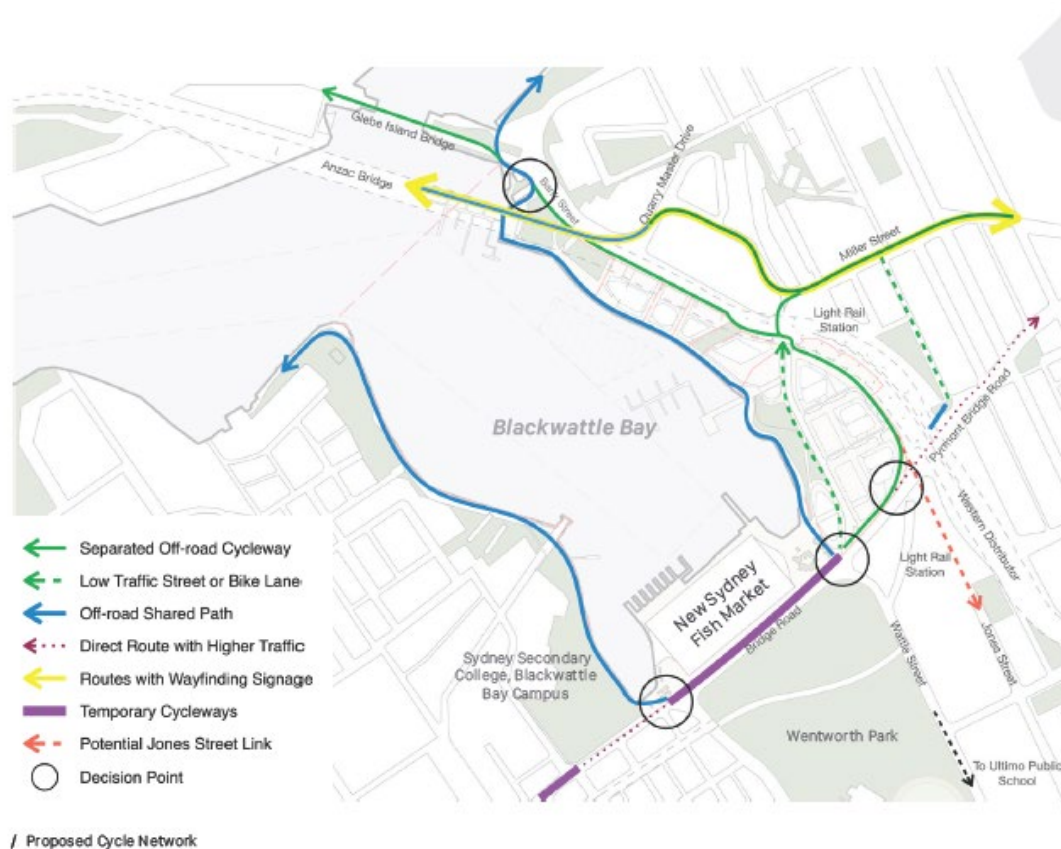


Figure 21 Cycle Network

6.3 Transport and parking

Objectives

- a Ensure that the demand for transport generated by development is managed in a sustainable manner.
- b Ensure that bike parking is considered in all development and provided in appropriately scaled developments with facilities such as change rooms, showers and secure areas for bike parking.
- c Establish requirements for car share schemes for the benefit of people living and or working within a development.
- d Design vehicle access and basement layouts and levels to maximise pedestrian safety and create high quality ground level relationships between the building and the public domain.
- e Provide accessible car parking.

Provisions

- 1 The rate of car parking provision is to comply with SLEP 2012 as well as section 3.11 of *Sydney DCP 2012* in respect of Transport and Parking in respect of Category A (*Land Use and Transport Integration*) and Category E (*Public Transport Accessibility Level*) development except where inconsistent with the provisions below which prevail to the extent of any inconsistency.
- 2 All required private car parking is to be provided at basement level.
- 3 Pedestrian access to residential apartments is to be separated from the commercial/retail uses.
- 4 Bike parking and associated facilities are to be provided in accordance with section 3.11.3 of *Sydney DCP 2012*.

7 HERITAGE

7.1 European heritage and historic archaeology

Objectives

- a Conserve, protect and enhance the Precinct's heritage values and significance and ensure appropriate interpretation.
- b Facilitate the development of the site in an integrated manner that relates to the surrounding context, with particular regard to the area's heritage qualities.

Provisions

- 1 The recommendations of the Blackwattle Bay State Significant Precinct Study Heritage Interpretation Strategy/Plan prepared by City Plan (February 2021) are to be taken into account in the detailed design of the public domain and open space network.
- 2 Future development applications are to be consistent with the recommendations of the Heritage Interpretation Strategy/Plan.
- 3 Consideration is to be given to the potential for adaptive re-use of existing buildings and sites along the same principles as their historic uses particularly with respect to existing buildings within the site is of 1-3 Bank Street. The site has high potential for adaptive reuse, incorporating new structures into the existing Inter-War building. Further consideration should be given to the reinstatement of the former timber wharf that was previously located adjacent to 1-3 Bank Street.
- 4 A detailed archaeological impact assessment in accordance with the requirements of the *Heritage Act 1977* is to be prepared and submitted with any development application that involves disturbance of the ground surface within areas of archaeological potential as described in **Table 6** and shown in **Figure 22**.

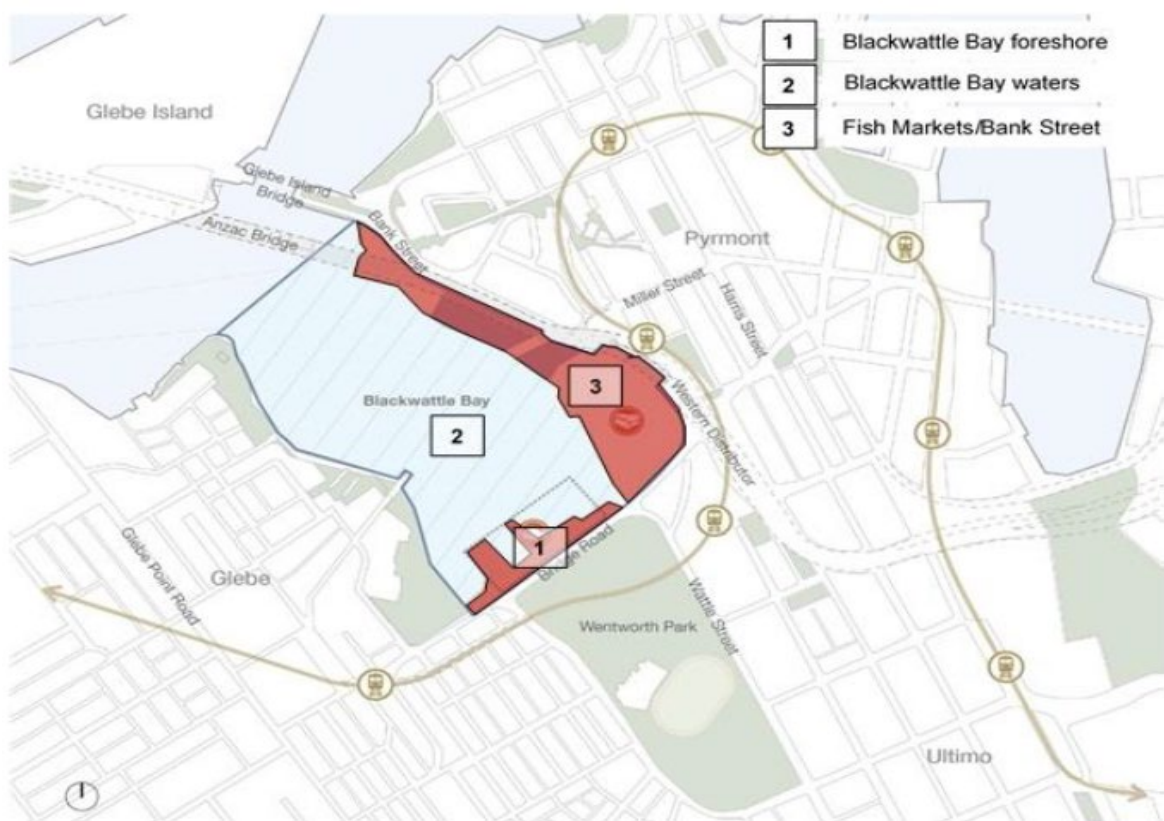


Figure 22 Areas of archaeological potential in Blackwattle Bay

Table 6 Areas of archaeological potential

| Map reference | Location | Nature of deposit |
|---------------|--|--|
| 1 | Blackwattle Bay foreshore (Pymont Bridge Road) | Potential for extant: Causeway Sea walls and pilings Coal depot Timber wharves |
| 2 | Blackwattle Bay waters | Potential for extant: Sea walls Pilings for wharves |
| 3 | Fish market site and Bank Street | Potential for archaeology related to early industrial activities |

7.2 Aboriginal cultural heritage

Objectives

- a Protect Aboriginal archaeological resources within and within close proximity of the area and ensure appropriate interpretation.
- b Recognise that although the Precinct has been found to be of low to nil Aboriginal archaeological potential it is in a foreshore location that was highly utilised by local Aboriginal people and therefore has high associated cultural values not limited to archaeological potential.

Provisions

- 1 The recommendations of the Blackwattle Bay State Significant Precinct Study Heritage Interpretation Strategy/Plan prepared by City Plan (February 2021) with respect to Aboriginal cultural heritage are to be taken into account in the detailed design of the public domain and open space network.
- 2 Future development applications are to be consistent with the recommendations of the Heritage Interpretation Strategy/Plan with respect to Aboriginal cultural heritage.
- 3 Development is to preserve view lines between PAD Jackson Landing Shelter 45-6-2960 (shown on **Figure 23**) and Port Jackson and is not to direct potentially damaging public attention to the shelter itself.
- 4 Conditions of consent are to be imposed on any development application within the Precinct requiring that an unexpected finds policy be implemented.
- 5 Prior to any development which has the potential to affect PAD01 45-6-3339 or PAD02 45-6-3338 (as shown in **Figure 23**) a detailed archaeological assessment is required to be undertaken to assess their archaeological potential and potential impacts. This assessment is to include as a minimum:
 - Direct inspection of ground surfaces that were previously not accessible for survey, particularly in 1 Bank Street
 - Greater analysis of evidence from geotechnical reports
 - Non-invasive remote sensing techniques such as Ground Penetrating Radar (GPR). GPR may assist in detecting areas of potential preservation or disturbance. Even if only at a broad scale, GPR is suited to detecting variations in underlying soil strata, large scale soil disturbance, built objects, and water table levels.
 - If further analysis of available geotechnical information and possible GPR testing indicates that it is highly unlikely for preserved soils to be present, then the status of these areas as PADs should be revised and these areas should be treated in common with the remainder of the investigation area

- If locations of potential buried preserved natural soils are identified within these PADs and would be impacted by the proposed works, archaeological management is to be required. An Aboriginal Archaeological Management Plan should be prepared that will provide management measures including archaeological testing and potentially salvage of identified Aboriginal archaeological values. Results of this testing would be provided as an Aboriginal Test Excavation Report.
- 6 Any proposed development or any ground disturbing works located within the extent of PAD 45-6-3338 or PAD 45-6-3339 must carry out and complete subsurface archaeological investigations in accordance with the *National Parks and Wildlife Act 1974* including Aboriginal community consultation, and provision of reporting prior to commencement of any works.
 - 7 Aboriginal sites identified through subsurface archaeological investigations or otherwise, must not be impacted without an Aboriginal Heritage Impact Permit (AHIP) issued by under Section 90 of the *National Parks and Wildlife Act 1974*.

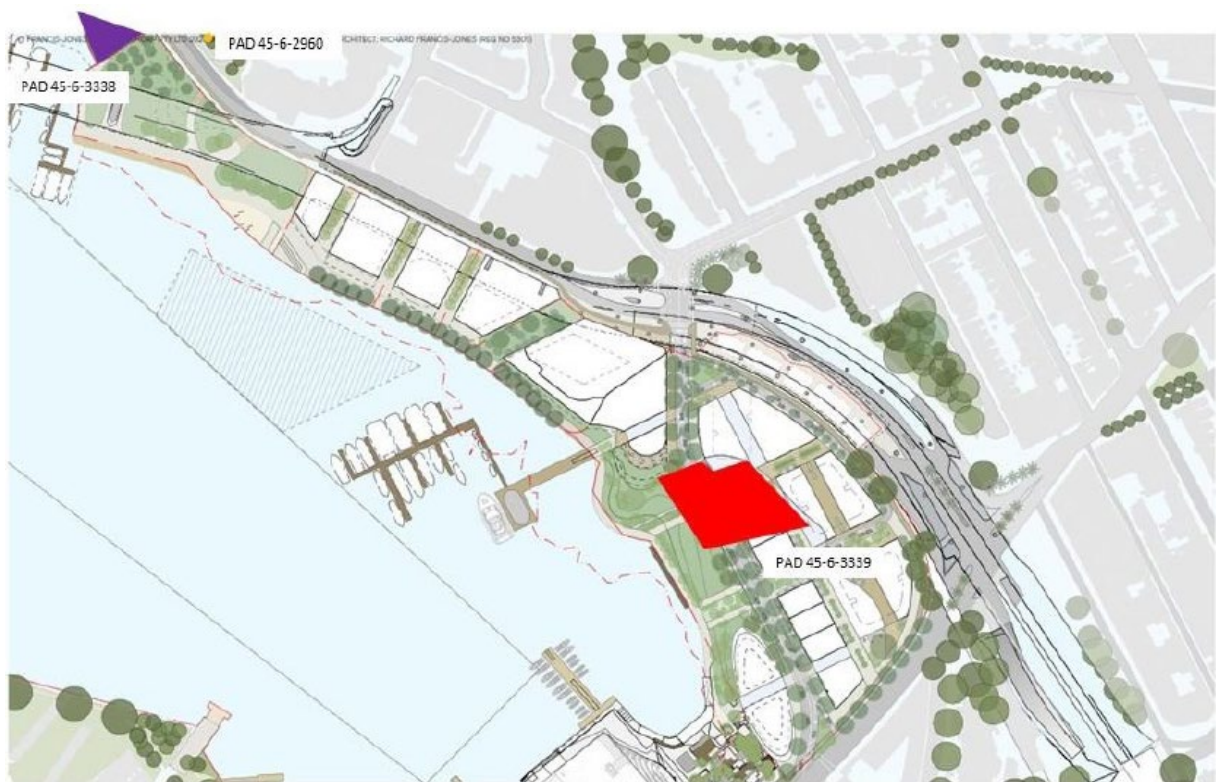


Figure 23 Potential Aboriginal Deposits

7.3 Maritime archaeology

Objectives

- a Protect maritime archaeological resources and ensure appropriate interpretation.

Provisions

- 1 The remains of the sandstone seawall at the former F Buckle & Sons site, located at the northern end of the current Sydney Fish Market car park and just south of the lightweight marina jetty, should undergo conservation works and be included in the presentation and interpretation of the eastern foreshore.
- 2 Any proposed impacts on the existing sandstone seawalls or the stone foundations of the small wharf off the end of Cook Street should be subject to archaeological assessment.
- 3 Archaeological investigations should precede any construction or other ground disturbance works in the vicinity of:
 - The former dock at the end of Gipps Street
 - The early wharf at the end of Miller Street.
- 4 Conditions of consent are to be imposed on any development application within the Precinct requiring that an unexpected finds policy be implemented.

8 ENVIRONMENTAL MANAGEMENT AND SUSTAINABILITY

8.1 Urban and Marine Ecology

Objectives

- a Enhance terrestrial and marine ecology within the Precinct.

Provisions

- 1 Section 3.5 Urban Ecology of Sydney DCP 2012 applies to development in Blackwattle Bay as relevant.
- 2 The consent authority may require the preparation of an impact assessment (Biodiversity Assessment Report (BDAR) and Marine Impact Assessment) where terrestrial and/or marine ecology is likely to be adversely affected by development. The impact assessment should measure loss and calculate biodiversity offsets and include targeted micro-bat surveys around built structures.
- 3 Aquatic habitat enhancement opportunities, summarised in **Table 7** Aquatic habitat enhancement opportunities, should be considered during the detailed design of the public domain.
- 4 Terrestrial habitat features are to be incorporated into landscape plans and building designs. This should aim to provide both micro-habitats, stratified habitats and improve connectivity along existing or broken habitat corridors wherever practicable.

Table 7 Aquatic habitat enhancement opportunities

| Location/environment | Opportunity |
|--|--|
| Subtidal sand (>2 m depth) | <ul style="list-style-type: none"> Install 'oyster reefs' to provide colonisation and refuge for marine fauna. |
| Subtidal sand (1-2 m depth) | <ul style="list-style-type: none"> Subject to boat safety considerations, install scattered rubble to connect macroalgae habitat. |
| Macroalgae (dense <i>Sargassum linearifolium</i>) | <ul style="list-style-type: none"> Plant/transplant native macroalgae and/or increase rocky rubble to improve continuity and width. |
| Intertidal rocky rubble seawalls | <ul style="list-style-type: none"> Construct water retaining features and increase structural complexity of intertidal or subtidal zones of seawalls. |
| Vertical and sloped smooth seawalls | <ul style="list-style-type: none"> Replace with gentle grade wall and/or retrofit with horizontal features like flowerpots, water retaining features and complex hard surfaces. |
| Vertical rough seawalls | <ul style="list-style-type: none"> Retrofit with horizontal features like flowerpots. |
| Sloped stepped seawalls | <ul style="list-style-type: none"> Increase macroalgae habitat at base through planting and/or additional rubble. |
| Future boardwalks, wharves and jetties | <ul style="list-style-type: none"> Design to allow light penetration to water and suspend fish aggregation devices. |
| Future floating boardwalks (temporary) | <ul style="list-style-type: none"> Add benthic habitat features to improve fish shelter and connectivity. |
| Piles | <ul style="list-style-type: none"> Select products with rough surface and/or attach rough material for macroalgae attachment. |

8.2 Climate change and sea level rise

Objectives

- a Mitigate identified risks of climate change by identifying and implementing appropriate adaptation actions throughout the development of the Precinct.

Provisions

- 1 Buildings are to incorporate sustainability measures and initiatives that contribute to achieving net zero emissions by being highly efficient and maximising on-site renewal energy generation.
- 2 All new buildings should be designed to incorporate suitable self-shading elements to minimise undesirable summer afternoon solar gain and improve the passive sustainability performance of buildings.
- 3 Minimum ground floor podium and site levels are to be set at 3.0m AHD elevation, with non-critical areas (e.g. Promenade) designed at 2.5m AHD to account for future sea level rise.
- 4 Shading and seating arrangements are to consider climate change projections, particularly those related to extreme heat and the number of hot days.
- 5 New buildings should provide for green roofs and vertical planting where practicable.
- 6 Building materials should be selected having regard to minimising urban heat island effect.
- 7 Ensure that selection of building equipment and materials caters to higher operating temperatures and extreme heat events to reduce local occurrence of interruptions.

8.3 Environmental performance

Objectives

- a Create an integrated sustainable infrastructure network incorporating transport facilities, public domain, water systems and vegetation to:
 - reduce energy consumption
 - reduce carbon emissions
 - minimise greenhouse emissions
 - reduce the urban heat island effect
 - improved air quality
 - improve absorption of carbon.

Provisions

- 1 In addition to complying with the provisions of Section 3.6 Ecologically Sustainable Development of Sydney DCP 2012 as relevant, development is to be designed to meet the targets set out in **Table 8**.

Table 8 Sustainability targets for precinct

| Target | Minimum goal | Target source* | Comment (where required) |
|--|--------------|----------------------|---|
| Green Star Communities precinct rating | 5 star | | Version 1.1 |
| Green Star Buildings | 5 star | GSC | Version 1 |
| BASIX energy targets | | BASIX SEPP, SSP, CoS | BASIX targets are expressed as a percentage reduction over NSW benchmarks |
| High rise (6 storey units or higher) | 25 | | |
| Mid rise (4-5 storeys) | 35 | | |

| Target | Minimum goal | Target source* | Comment (where required) |
|--|--------------------------------------|--------------------|---|
| NABERS energy rating for office and retail buildings | 6 star | CoS | |
| Net zero carbon precinct | 100% by 2050 | | % reduction in carbon emissions (baseline to be determined) |
| Precinct powered by renewable energy | 50% | SSP | % of total estimated demand provided by renewable energy from off-site and/or on-site sources |
| NABERS water rating for office and retail buildings | 5 star | | |
| High rise and other residential buildings | 40 | BASIX SEPP, CoS | BASIX targets are expressed as a percentage reduction over NSW benchmarks |
| Public open space irrigation with recycled water | 100% | | |
| Operational waste diverted from landfill | 70% | CoS, NSW WARR | |
| Construction and demolition waste diverted from landfill | 80% | GSC, CoS, NSW WARR | Excludes waste that is not normally sent to landfill, e.g. hazardous waste, soil from excavation etc. |
| Climate change and resilience risks addressed through design | All high and extreme risks addressed | GSC | |
| Electric vehicle parking | 10% | | Measured as parking yield per parking lot as EV charge station 'turn key' ready at development completion |

*Abbreviations:

BASIX SEPP – BASIX State Environmental Planning Policy

GSC – Green Star – Communities v1.1

SSP – State Significant Precinct Study Requirements

CoS – City of Sydney requirement and/or target

NSW WARR – NSW Waste and Resource Recovery Target

8.4 Water management

Objectives

- Ensure an integrated approach to water management through the use of water sensitive urban design principles.
- Encourage sustainable water use practices.
- Assist in the management of stormwater to minimise flooding and reduce the effects of stormwater pollution on receiving waterways.
- Ensure that development manages and mitigates flood risk, and does not exacerbate the potential for flood damage or hazard to existing development and to the public domain.
- Ensure that development above the flood planning level as defined in the Sydney LEP 2012 will minimise the impact of stormwater and flooding on other developments and the public domain both during the event and after the event.
- Ensure that flood risk management addresses public safety and protection from flooding.

Provisions

- 1 Development is to comply with section 3.7 of *Sydney DCP 2012* in respect of Water and Flood Management except where inconsistent with the provisions below which prevail to the extent of any inconsistency.
- 2 A WSUD Strategy is to be implemented for the Precinct generally in accordance with **Figure 24** to deliver:
 - Best Practice quality / quantity targets including specifically a total area of 3,100m² for bio retention. Water quality treatment measures are to be incorporated into the development to meet this bio filtration area requirement noting that this area could be reduced/ substituted / offset during detailed design where additional measures such as green roofs, stormwater harvesting etc. are pursued.
 - A reduction in post-development baseline (i.e. proposed development without any water quality treatment) annual pollutant loads of:
 - o Gross Pollutants (GP) (litter and vegetation >5 mm) 90%
 - o Total Suspended Solids (TSS) 85%
 - o Total Phosphorus (TP) 65%,and
 - o Total Nitrogen (TN) 45%.
- 3 WSUD measures are to be incorporated into streets where practicable.
- 4 On-site water capture and reuse is to be provided where practicable.
- 5 Opportunities to reuse water in the landscape through water sensitive urban design are to be maximised.

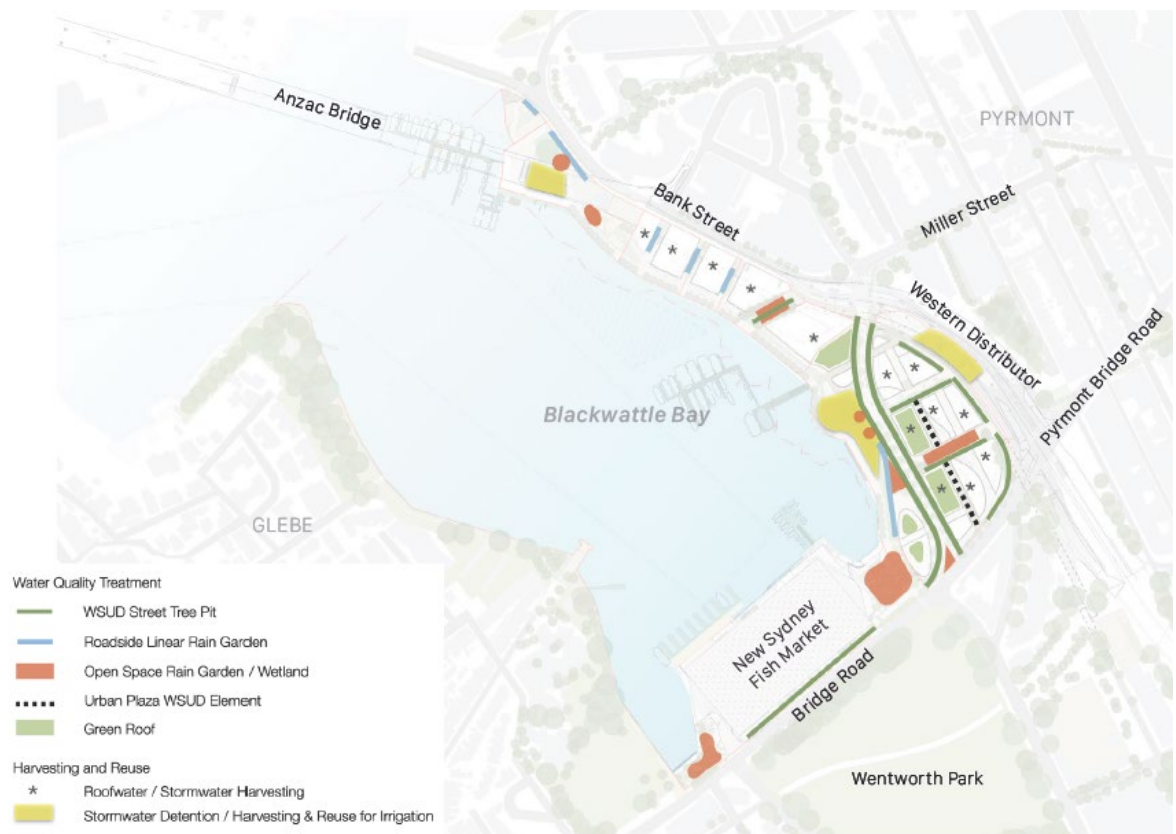


Figure 24 Indicative Water Sensitive Urban Design Strategy