

Acknowledgment of Country Level 2. Pier 8/9 23 Hickson Road We acknowledge and respect Traditional Owners across Australia as the original custodians Sydney, NSW, 2000 of our land and waters, their unique ability to care for country and deep spiritual connection to it. hassellstudio.com We honour Elders past, present and emerging whose knowledge and wisdom has, and will, @hassell_studio ensure the continuation of cultures and traditional practices.

Completing the Barangaroo Story

Since inception, the renewal of East Darling Harbour and creation of Barangaroo has been Australia's most important urban regeneration project.

Barangaroo is successfully delivering a much needed westward expansion of Sydney's Central Business District, which will be further strengthened in by the opening of Barangaroo Station as part of Sydney Metro's city shaping network.

Barangaroo Station will connect seamlessly into Central Barangaroo and significantly improve access for visitors, residents, workers and shoppers alike. It will transform how people arrive in Sydney CBD and onto the harbour foreshore and enable Sydney to consolidate its role as Australia's global city.

By re-imagining the western foreshore of the city, Barangaroo has substantially increased public foreshore access and enjoyment of Sydney Harbour - most recently through the completion of Wulugul Walk, which connects Barangaroo South with Barangaroo Reserve and is part of the iconic 11km harbour foreshore walk connecting Woolloomooloo with the Anzac Bridge.

By uniting Barangaroo Reserve with Barangaroo South, the development of Central Barangaroo will complete the renewal of the precinct and deliver a new city destination that will play a significant part in the revitalisation of the city's western foreshore.

Connecting with and enriching the harbour city

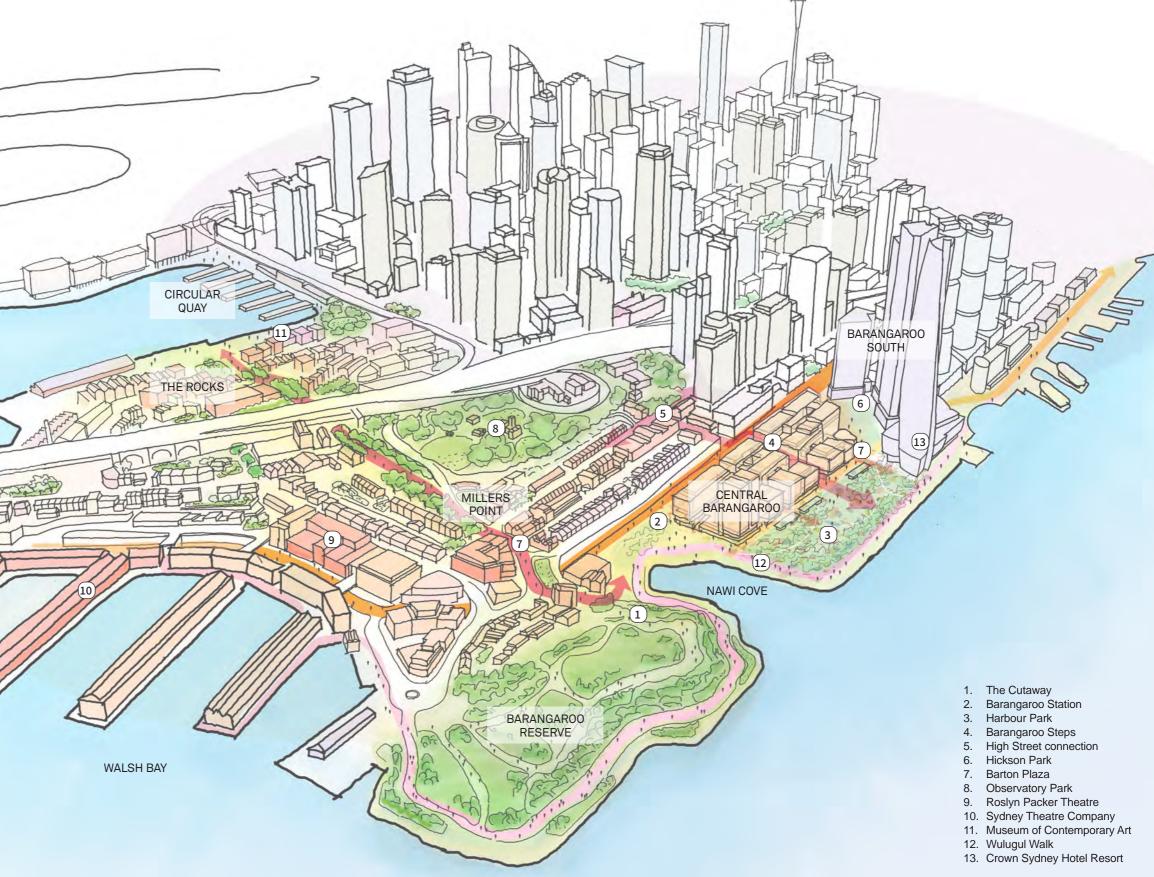
As Barangaroo's final development project, Central Barangaroo and the new Barangaroo Metro Station combine to become a transformative renewal project that will energise and enhance everyday city life.

With Nawi Cove as the setting, these transformative projects come together to create an exciting new place on the western foreshore that transitions between the city's historic and contemporary neighbourhoods and celebrates arrival into the harbour city.

By improving access to Millers Point, Walsh Bay and The Rocks and delivering valuable new local connections between the city's historic neighbourhoods and the western harbour foreshore, Central Barangaroo and Barangaroo Station can re-energise the north-west quarter of the city.

Improved connectivity at both metropolitan and local levels can reinforce and enhance activity and investment in the historic neighbourhoods located between Circular Quay and Nawi Cove.

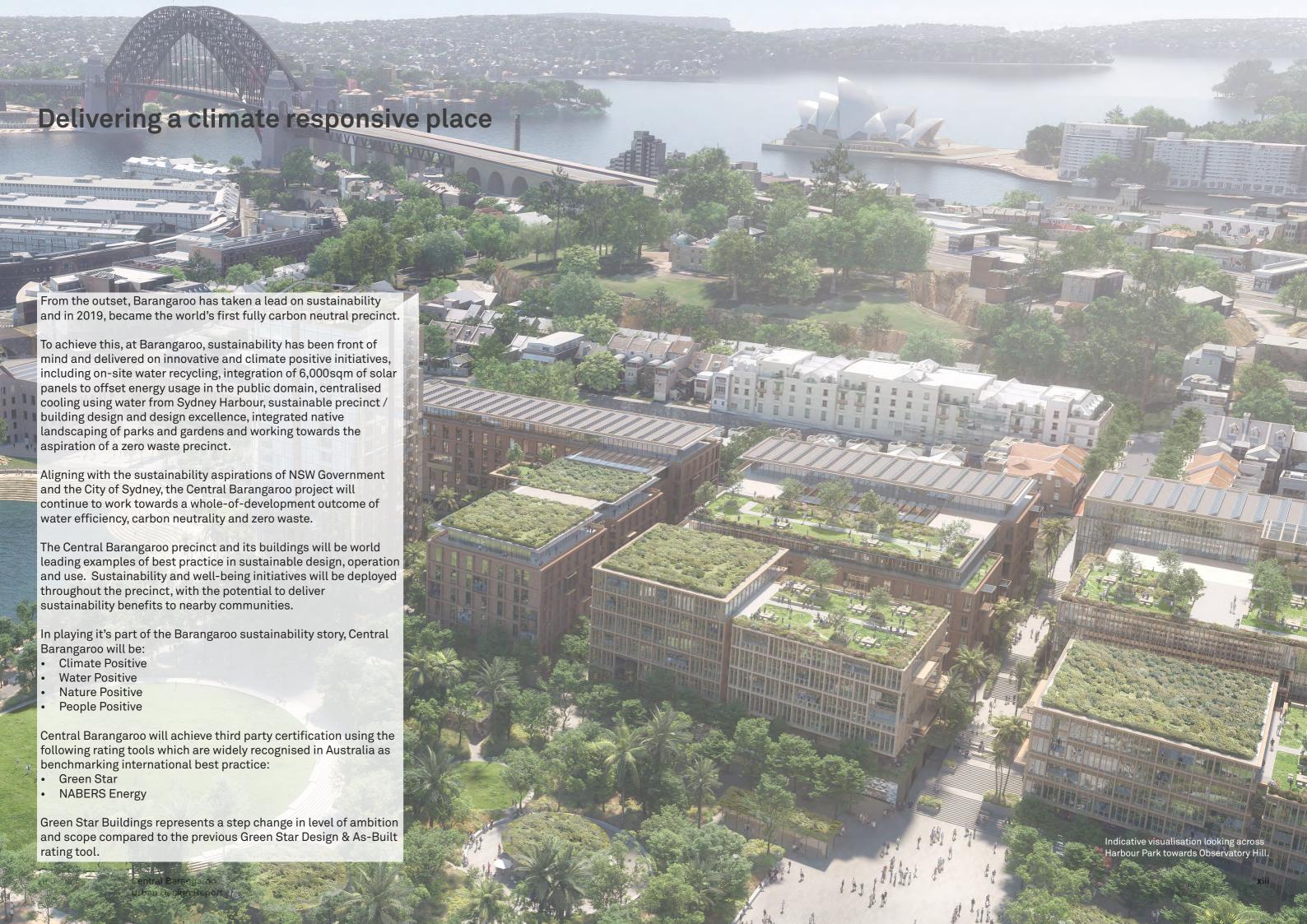
These `Quay to Cove' relationships are important elements in re-imagining, re-connecting and enhancing this north western quarter as a vital part of the city's cultural network.













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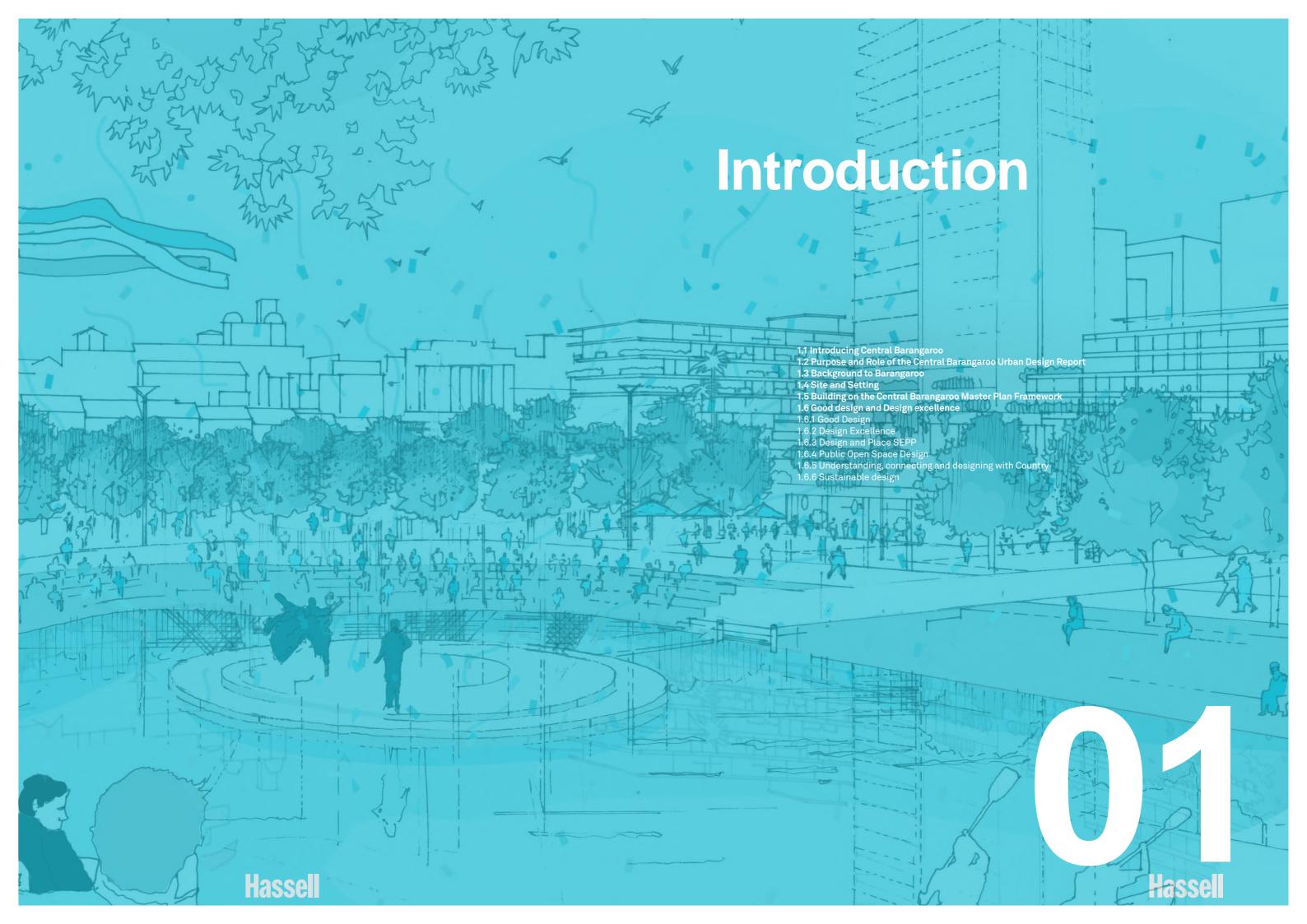
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1.1. Introducing Central Barangaroo

The Barangaroo journey has been like no other in Sydney. The NSW Government has set a bold vision responding to the demands and dynamics of a growing global city and of transformative renewal and evolution of the city's western harbour foreshore as a place for all.

Central Barangaroo is a rare, once-in-a-generation opportunity, for a landmark waterfront renewal precinct to synergise with a new metro system and become a great new city place that celebrates arrival into the harbour city.

Designed as the nexus between Barangaroo Reserve, Nawi Cove,
Barangaroo South and Barangaroo Station and the adjacent
historic suburbs of Millers Points and Walsh Bay, Central
Barangaroo is the keystone renewal project that will unite these
precincts.

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In completing the sweep of city and foreshore experiences along the city's western waterfront, Central Barangaroo and Nawi Cove re-imagine the city's relationship with the harbour to create an active waterfront precinct that will become the civic and community heart of Barangaroo.

The NSW Government has set clear objectives for Central Barangaroo. This proposal presents a unique opportunity to respond to the NSW Government's vision by:

- creating a dynamic, new city place on the western harbour that draws together and integrates high quality public spaces with opportunities for city living, next generation workspace, community and cultural uses, a bustling shopping and dining precinct
- delivering an extensive network of world class foreshore public open spaces and places and a key part of the Eora Journey - Harbour Walk
- designing a 'platform to place' experience that seamlessly connects Central Barangaroo and Nawi Cove with Barangaroo Station and Sydney's growing metro network
- evolving Central Barangaroo as the western harbour counterpoint to Circular Quay and reinforce 'Quay to Cove' as a city scale place making and revitalisation strategy that can energise and enrich the north west quarter of the city
- creating Central Barangaroo and Nawi Cove as a cultural activity hub and a key part of Sydney's evolving cultural network

1. Introduction

The Central Barangaroo Urban Design Report establishes the vision, objectives and intent for development of Central Barangaroo. The report responds to and builds upon the design guidance provided by the Central Barangaroo Master Plan Framework, prepared by SOM for Infrastruct ure NSW to guide the future design and development of Central Barangaroo.

1.2. Purpose and Role of the

Central Barangaroo Urban Design Report

The Central Barangaroo Urban Design Report forms the basis for the Barangaroo Concept Plan Modification 9 (MOD 9) and is structured accordingly:

- **1.0 Introduction**: This section introduces the purpose of the urban design report. It describes the strategic influence and role of the Central Barangaroo Master Plan Framework, prepared by SOM.
- 2.0 Central Barangaroo and the city: This section describes the changed contextual influences since approval of the Central Barangaroo Concept Plan and how the proposal responds to these opportunities through key design moves.
- **3.0 Central Barangaroo**: This section outlines the Central Barangaroo proposal, describing Barangaroo Concept Plan Modification 9.
- **4.0 Design Guidelines**: This section describes the design intent and provides guidelines for the design future built form and public domain throughout Central Barangaroo.

Appendices: The Appendices provide the drawings for approval and supporting information.

Indicative concept drawing for illustrative purposes only.

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1.3. Background to Barangaroo

Barangaroo is a globally recognised 22 hectare urban renewal project located on the western harbour foreshore of Sydney's

As Australia's first carbon neutral urban precinct, Barangaroo showcases world-class sustainability, whilst delivering extensive new foreshore public spaces on Sydney Harbour, international design excellence, the implementation of leading technologies and public art and cultural programs.

In March 2009, the Barangaroo Delivery Authority Act 2009 was established to ensure management and compliance of Barangaroo in achieving the following objectives:

- Encourage the development of Barangaroo as an active, vibrant and sustainable community and as a location for national and global business;
- Create a high-quality commercial and mixed-use precinct connected to, and supporting, the economic development of
- Facilitate the establishment of Barangaroo Reserve and public domain land;
- Promote the orderly and sustainable development of Barangaroo, balancing social, economic and environmental outcomes; and
- Create in Barangaroo an opportunity for design excellence outcomes in architecture and public domain design.

Infrastructure NSW was established in July 2011 to assist the NSW Government in identifying and prioritising the delivery of critical public infrastructure for NSW.

On 1 July 2019, the Barangaroo Delivery Authority Act 2009 was transferred to Infrastructure NSW (INSW) as the State Government agency responsible for the development of Barangaroo and management of its public spaces.

THE BARANGAROO CONCEPT PLAN

The transformation of the former East Darling Harbour site into Barangaroo is Sydney's most important waterfront renewal project in decades, regenerating a once neglected and inaccessible area of the city into a dynamic cultural, residential, business and retail hub.

Barangaroo's mixed use development framework creates three connected precincts each with their own distinct character, known as Barangaroo Reserve, Barangaroo South and Central Barangaroo:

- Barangaroo Reserve. At the northern end of the precinct, Barangaroo Reserve, has been designed and delivered as a six-hectare foreshore parkland offering spectacular panoramic harbour views, extensive walking and cycling trails, idyllic coves, unique event spaces and peaceful picnic
- Barangaroo South. To the south is Barangaroo's commercial and residential precinct featuring dining, retail, accommodation and premium waterfront office space. Barangaroo South includes the three International Towers, International House, Daramu House, five residential buildings, Barangaroo Ferry Wharf, the iconic Barangaroo House, and nearly three hectares of public space. It is also home to Sydney's first six-star luxury hotel and resort, Crown Sydney Hotel and Resort, attracting thousands of visitors from overseas and around Australia.
- Central Barangaroo is a mixed use precinct located between the Barangaroo Reserve in the north, the new workplace, retail and residential address of Barangaroo South and the adjacent historic suburbs of Miller Points and Walsh Bay. As Barangaroo's keystone project, Central Barangaroo will draw together retail, commercial and residential uses with civic spaces and foreshore parklands to create its own distinct identity and become the vibrant civic and community heart of Barangaroo.

SYDNEY METRO - BARANGAROO STATION

In June 2015, as part of the Sydney Metro City & Southwest project, the NSW Government confirmed a strategic alignment option to build a new metro station at Barangaroo. As one of four new CBD stations, Barangaroo Station is located and designed to act as a western city gateway that integrates with the Barangaroo renewal project, whilst greatly improving public transport services to the city's historic neighbourhoods of Walsh Bay and Millers Point. In November 2015, the location of Barangaroo Station was confirmed as beneath the northern end of Hickson Road in Millers Point, with pedestrian access via Central Barangaroo and Nawi Cove. The station is currently being constructed beneath Hickson Road and is due to be operational in 2024 when the City & Southwest line opens.

The benefits of locating a new metro station at Barangaroo and the opportunities identified in the Central Barangaroo Master Plan Framework are unable to be fully realised within the existing Barangaroo Concept Plan approval as it applies to Central Barangaroo, but can be achieved through in the proposed MOD 9 to Barangaroo Concept Plan.





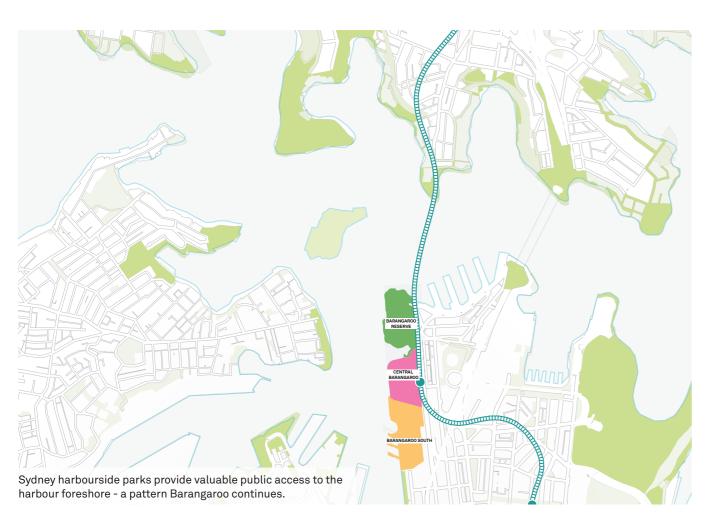
1.4. Site and Setting

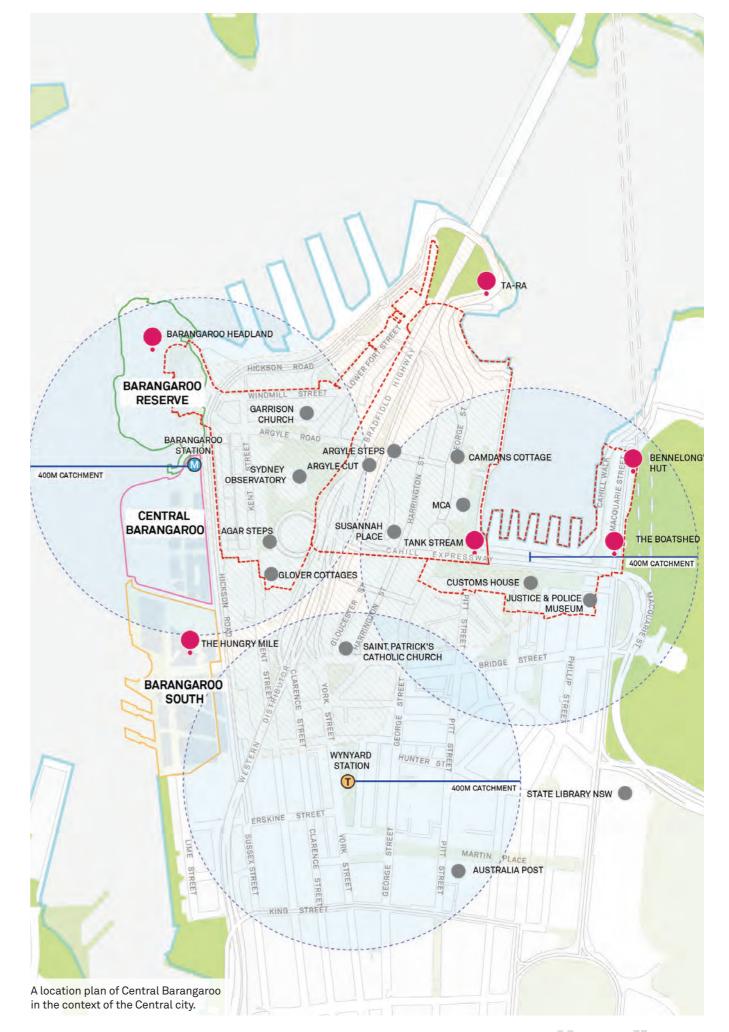
The Central Barangaroo site forms the final piece of the Barangaroo project. It is positioned between the Barangaroo Reserve and Nawi Cove to the north, Hickson Road to the east, the harbour to the west and to the south - Barangaroo South.

The project area is immediately adjacent to Hickson Road. Here, three development blocks will provide sites for future mixed use buildings. Barangaroo Avenue is to be extended along its alignment through to Nawi Cove. A grand new waterfront park will be located between Barangaroo Avenue and the harbour.

Whilst the Hickson Road wall forms a clear interface between the contemporary development of Barangaroo and the heritage character of Millers Point, opportunities for view corridors and new connections towards the harbour foreshore are achievable. Very tall residential, commercial and mixed use towers are located within Barangaroo South immediately adjacent Central, including Crown to the west of Barangaroo Avenue.

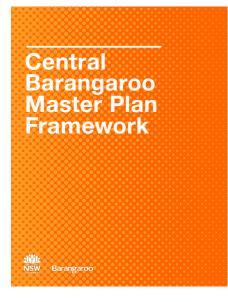
Due to its position below Millers Point, and north of Hickson Park, Central Barangaroo is a distinctly different precinct from the quaintness of Millers Point or the intense commerciality of Barangaroo South. It is the western harbour entrance to the CBD from Sydney Metro and a destination at the apex of Barangaroo Avenue. Its architectural form and quality need to be equally distinct. Three distinct development blocks offer opportunity for activated procession between the city, Millers Point and the western harbour, across a variety of levels to negotiate Sydney's stepped topography to the harbour.





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1.5. Building on the Central Barangaroo Master Plan Framework



The Central Barangaroo Master Plan Framework, prepared by SOM for Infrastructure NSW, establishes design and development guidance for Central Barangaroo.

The Master Plan Framework establishes a structure of key urban and civic elements for Central Barangaroo, including development massing, pedestrian connectors, a street network, development blocks and public domain.

The Master Plan Framework is flexible, allowing for the evolution of the urban design principles for Barangaroo as a result of staged development of this significant urban renewal area over time, changing market conditions and to unlock the once in a lifetime opportunity of a new metro station in CB.

This Central Barangaroo Urban Design Report builds upon the key objectives and core principles of the SOM Master Plan Framework to ensure the proposed built form creates an appropriately scaled visual transition between the natural setting and scale of Barangaroo Reserve and Nawi Cove, to the bustling, high rise central business district scale of Barangaroo South.

1.5.1 Purpose, Objectives and Core Principles

The NSW Government's overall key objectives that informed the Central Barangaroo Master Plan Framework were to:

- Deliver an innovative, creative and dynamic waterfront destination that is permeable and connected within the precinct and connected with the city;
- Ensure the delivery of design excellence in the planning and built form of the precinct, creating a diverse community of architectural expression within an overall coherent urban structure;
- Deliver diversity of products and uses integrating commercial, residential, retail, community, education, civic, cultural and entertainment activities which contribute to a vibrant and active identity;
- Create and deliver a public domain that is distinct, unique and innovative and allows for range of passive and active outdoor spaces and uses that together create a new iconic visitor attraction, consistent with the Infrastructure NSW's Activation Framework;
- Deliver a balance of financial return and public benefit and amenity across the precinct:
- Deliver a culturally distinctive, locally relevant, and internationally appealing canvas for appropriate facilities, experiences and public art;
- Ensure high levels of public attraction, operational serviceability, amenity, and security across the precinct and during staging; and
- Extend the principles and networks of the climate positive promise in line with current world's best practice to deliver a whole of Barangaroo outcome and create projects that respond visibly to the sustainable needs of people and the planet.



Master Plan Framework Guidance Plan

Source: SOM

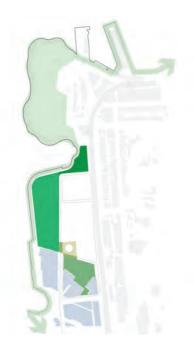
Building on the Central Barangaroo Master Plan Framework

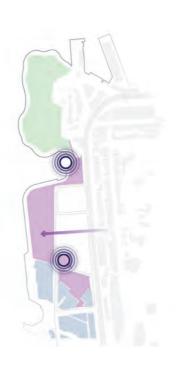
1.5.2 Central Barangaroo Urban Design Response

These principles respond to and build upon the SOM Master Plan Framework. The proposed modification to the Barangaroo Concept Plan is consistent with the intent, objectives and principles of the Central Barangaroo Master Plan Framework.

UNINTERRUPTED PUBLIC DOMAIN - CONTINUOUS FORESHORE PROMENADE







1. A CONTINUOUS FORESHORE WALK

Wulugul Walk extends from Barangaroo South, through Central to Barangaroo Reserve. This is a key move that will help complete the vision for a continuous harbour foreshore walk and Eora journey - Yananurala - from Woolloomooloo in the East and around to the Pyrmont peninsula to the west.

2. MAJOR PUBLIC SPACES

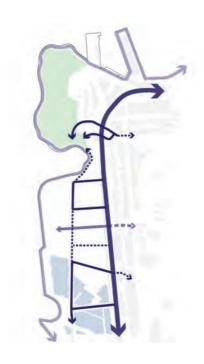
Central Barangaroo will deliver major public spaces for the benefit of Sydney and its people. Harbour Park will be a major foreshore open space - bringing the city to the harbour. Central will frame and activate Hickson Park as a distinct city park. And it will anchor Nawi Cove to provide the Sydney Metro gateway experience. With distinct yet complementary character, these spaces will create a network of public amenity from Barangaroo Reserve, down to Hickson Park, as well as connecting beyond to the Barangaroo South precinct.

3. BARANGAROO'S NEW FRONT DOORS

Nawi Cove, Barton Plaza and Barangaroo Steps can create three key arrival points for Central Barangaroo and the opportunity to provide a first impression of design excellence and high quality public amenity.

- Barangaroo Station will provide a new way to arrive in the city, and Nawi Cove will create the place to arrive in
- Barton Plaza will offer an activated and iconic southern entry, via a network of retail streets and lanes
- The Barangaroo Steps to High Street link offers an opportunity for a locally scaled civic pedestrian connection between Millers Point and the western harbour foreshore.

A CONNECTED CITY PRECINCT







4. A CONNECTED STREET FRAMEWORK

The overarching objective of Central Barangaroo is to create a human scale and public realm. Central Barangaroo's streets and lanes are places that connect the harbour with the city. All streets within Central Barangaroo north of Barton Street are pedestrian prioritised. Vehicles are only permitted on Streets C and D in a shared environment. Laneway B is a pedestrian movement corridor, with a mix of open sky and retail arcade. Barangaroo Avenue is retained as a visual axis, but re-imagined as a people-friendly connector, bringing the park and harbour to the city.

5. HICKSON ROAD - THE CIVIC ADDRESS

Ground level activation, commercial lobbies, streets and civic architecture reaffirm Hickson Road as an important public street and the civic address for Central Barangaroo. Hickson Road will be the principal address for commercial workplace. Lobbies and civic retail will front Hickson Road, returning it to an important workplace for Sydney.

6. A TRANSIT ENHANCED PRECINCT

Sydney Metro's new station at Barangaroo will change the way people travel to the harbour city whilst energising the city's north-western quarter of Millers Point, Walsh Bay, The Rocks and Barangaroo. As metro's front door, Central Barangaroo and Nawi Cove will create a vibrant new place to arrive in the city. An integrated design response will offer pedestrians a seamless 'platform to place' experience with numerous entries and exits and active connections throughout Central Barangaroo. Importantly, alternatives for direct access to the station from Barangaroo South are offered via Barton Plaza and the retail centre, Barangaroo Ave and Hickson Road.

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1.5 Building on the Central Barangaroo Master Plan Framework

A WELL-SCALED AND VIBRANT DESTINATION







7. PERMEABLE, INTEGRATED PRECINCT

Three distinct blocks will create opportunities for a variety of connections east-west and north-south to offer a choice of interesting access routes. The routes extend across multiple levels to provide diverse user experiences for both retail and respite. The laneways, streets and arcades connect people to clear points of destination in a legible way including to Barangaroo Metro Station, the harbour, retail and to workplaces throughout the neighbourhood. The upper level arcade provides public amenity and sunlight access to the ground level retail below, with associated building cantilevers on external streets offering a comfortable pedestrian scale.

8. DISTINCTIVE, WELL SCALED AND

Central Barangaroo's location on the northern edge of Sydney CBD means its built form needs to mediate between and balance the city scale of Barangaroo to the south and historic character and finer grain of Millers Point and Walsh Bay to the east and north. The generally low rise scale and urban form of Central Barangaroo creates a strongly defined city the Harbour Park to the west and Nawi Cove to the north, whilst ensuring permeability and diversity through multiple connections via new streets, steps and laneways.

9. RESPECTING CITY AND HARBOUR

The low scale urban form of Central Barangaroo is designed to respect views to key city landmarks and to the harbour from existing and proposed buildings and from ground level from existing and proposed public open spaces. Central Barangaroo's built form is shaped to respect and fit with its neighbours, whilst optimising and framing public edge to that defines, frames and activates views and vistas to foreshore parks and the western harbour.





1.6. Good design and Design excellence

1.6.1 Good design

The City of Sydney and NSW Government place significant emphasis on the need for good design in the creation of great places.

As a means of improving design quality in the CBD, in the late 1990s, the City of Sydney pioneered competitive processes and the need for major city projects to demonstrate Design excellence that require the highest standards of architectural, urban and landscape design.

The NSW Government Architect revised its Design Excellence Guidelines in 2018 and in recent years has progressively released a suite of design guidance that seeks to improve both design processes and design and places outcomes, such as, Better Placed, Aligning Movement and Place and Greener Places. This suite has been recently supplemented by the NSW Public Spaces Charter (2020) and evolving guidance on Understanding Country, Connecting with Country and Designing with Country (2020).

In 2021, these design guidance initiatives were complemented by a draft NSW Government proposal for a Design and Place SEPP that aims to simplify and consolidate the ways in which good design can be delivered at all scales of development. This section demonstrates how the proposals for Central Barangaroo can, in the creation of a great new city place, achieve design excellence that is climate positive and that connects and designs with Country.

1.6.2 Design excellence

Excellence is an overriding principle for the design and delivery of NSW Government's vision for Barangaroo.

Design excellence is a long standing and overriding principle for the design and development of Barangaroo and its achievement is the result of significant commitment, led by an outstanding team of design specialists.

Infrastructure NSW is committed to design excellence throughout the design, planning approval and delivery processes, as reflected in the exceptional buildings, landscape and public spaces being delivered across the 22-hectare site.

As a key part of the design excellence process, Barangaroo's Design Review Panel provides independent advice to guide both overall concept and detailed design and ensure high quality delivery across the Barangaroo precinct.

Design Excellence in Central Barangaroo

As Barangaroo's keystone project, the development and delivery of Central Barangaroo presents unique design challenges to resolve.

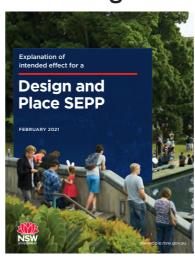
Some of the key challenges are the need for the design of Central Barangaroo to respond to and connect with its historic and contemporary city contexts, whilst optimising the benefit of direct metro access to provide a great new place to arrive in the city and ensuring the precinct contributes significantly to the harbour foreshore experience.

To pursue world's best practice design, the Central Barangaroo developer commits to the pursuit and delivery of design excellence in master planning, urban design, architecture, landscape architecture and public art in Central Barangaroo. The Central Barangaroo developer acknowledges that design excellence requires both high quality design, as well as a structured and managed process to facilitate and achieve it.



Images sourced from Infrastructure NSW.

1.6.3 Design and Place SEPP



As part of a broader review, the NSW Government is introducing a Design and Place SEPP (State Environmental Planning Policy) that aims to simplify and consolidate the ways in which good design can be delivered at all scales of development.

The Design and Place SEPP will be a principle-based SEPP that integrates and aligns good design and place considerations into planning policies. The SEPP will give effect to a number of objects of the Environmental Planning and Assessment Act 1979 including good design and amenity of the built environment, sustainable management of built and cultural heritage, and the proper construction and maintenance of buildings.

The Design and Place SEPP is proposed to be framed around five guiding principles and 19 matters for consideration, that aim to deliver healthy and prosperous places that support the wellbeing of people, communities and Country.

Design and Place SEPP and Central Barangaroo

As the final stage of the Barangaroo project, the design and delivery of the Central Barangaroo precinct is capable of fulfilling the five Design and Place principles, whilst addressing the matters for consideration. And the following table provides a summary overview of the ways in which this can be achieved.

PRINCIPLE 1 Design places with beauty and character that people feel proud to belong to

The concept design response for Central Barangaroo seeks to respect, connect and celebrate the rich and layered history of this part of Sydney CBD. Commencing with an understanding of and respect for Country and the heritage character of the local area, the Central Barangaroo design strategy seeks to optimise Barangaroo's status as a new place to arrive by metro into the city and create an attractive, human scale and vibrant new waterfront destination.

PRINCIPLE 2 Design inviting public spaces to support engaged communities

Central Barangaroo's public spaces will be connected, varied in size, diverse in character and robustly designed for a mix of activities. As Barangaroo's keystone precinct, Central Barangaroo will create Harbour Park as a major new public open space and the city's new western harbour garden, as well as framing and activating Hickson Park to the south and Nawi Cove / Barangaroo Station to the north. Complementing these three major city parks will be a network of new streets, laneways and arcades connecting three new significant publicly accessible urban spaces - Barton Plaza to the south, Barangaroo Steps and bridge connecting to High Street and an elevated Nawi Terrace overlooking Nawi Cove and Harbour Park.

PRINCIPLE 3 Design productive and connected places to enable thriving communities

Central Barangaroo will create a new transit based precinct with a mix of complementary retail, dining, workplace, residential and community uses. In optimising significant access improvements via Sydney Metro's new station at Barangaroo, the Central Barangaroo precinct is designed to minimise car parking and maximise walkability through a network of fine grained, human scale pedestrian connections, spaces and places. Proposed massing and building heights for Central Barangaroo are commensurate with a new transit based precinct that acts as a transition precinct between the scale of the city's historic areas of Millers Point and Walsh Bay and its Central Business District.

PRINCIPLE 4 Sustainable and greener places for the wellbeing of people and the environment

In playing its part of the Barangaroo sustainability story, Central Barangaroo will be a Climate Positive, Water Positive, Nature Positive and People Positive place, fulfilling the vision to be a globally recognised exemplar in sustainable urban development. In the creation of the city's new western harbour garden, Harbour Park, Hickson Park, Nawi Cove and the transformation of Hickson Road into a tree lined boulevard, will combine to significantly increase tree canopy on the foreshore.

PRINCIPLE 5 Design resilient and diverse places for enduring communities

In becoming an integrated and connected part of the city, through its diverse mix of retail, dining, workplace, residential, community and cultural uses, Central Barangaroo is creating a resilient and human centred place, that is capable of managing and adapting to change.



1.6. Good design and Design excellence

1.6.4 Designing parks for people

Through a 50 year vision for Greater Sydney's Parklands and the Public Spaces Charter, the NSW Government is placing greater emphasis on the importance of the city's parks in creating a better environments for people.

These focus on:

- increasing tree canopy to green the city to create more shade, cleaner air and more beautiful places to live
- providing better access to great public spaces that support our health and well-being, environmental resilience and local economies
- creating vibrant streets that add vitality to neighbourhoods and better places to live
- integrating *public facilities* as part of the growth and cultural development of the city

The 50 year vision for Greater Sydney's Parklands recognises that public spaces are integral to the city's landscape and creates an aspirational vision for Greater Sydney:

- _ to evolve as a network of city of community-focused parks and open spaces connected through the Greater Sydney Green and Blue Grid - A City in a Park;
- underpinned by four strategic directions Growing parks for people; Connecting people to parks; Keeping Sydney green and vibrant; and Caring for the environment

The NSW Public Spaces Charter acknowledges that public space is where public life happens and defines 10 principles that can ensure access to high-quality public space that allows people to enjoy and participate in public life.

Central Barangaroo - Exemplar public open space project

As the keystone Barangaroo renewal project, Central Barangaroo will connect and unify a network of four major harbour foreshore and city parks - Harbour Park, Hickson Park, Nawi Cove and Barangaroo Reserve.

In playing this role, Central Barangaroo's Harbour Park has the potential to become an exemplar public open space project that meets NSW Government priorities, forms a key part of the 50 year parklands vision and demonstrates best practice for all 10 principles of the NSW Public Spaces Charter.







The NSW Public Spaces Charter principles are:

Open and welcoming

Public space belongs to everyone.

| Community-focused

Public spaces are where communities forge the ties that bind them.

| Culture and creativity

Public space is where we share our stories and

Local character and identity

Public spaces make us proud of where we live.

5 Green and resilient

Public space can help us adapt and thrive in a changing climate.

| Healthy and active

Public space supports healthy lifestyles and refreshes our spirits.

| Local business and economies

Public space supports more dynamic and exciting local economies.

| Safe and secure

Everyone should feel safe using public space at all times of the day.

Designed for people

Public space that's flexible can meet the needs of our diverse population.

10 | Well managed

Public space is more inviting when it's well

1.6.4 Understanding, connecting and designing with Country

The north western part of Sydney's CBD, where the city meets the western harbour, has a rich and layered history, a significant part of which is the long history of the Traditional Custodians of the place - the Gadigal people of the Eora Nation.

As acknowledged by the NSW Public Spaces Charter, all public space in NSW is on Country, which is at the core of every Aboriginal person's identity and sense of belonging. It is the place from which Aboriginal language and culture is derived, which determine families and kinship and communities. Acknowledging and valuing Aboriginal cultural knowledge in how public space is planned, managed and delivered can promote and strengthen connection to culture and identity and create healing for both Aboriginal communities and non-Aboriginal people too.

Understanding, Connecting and Designing with Country at Barangaroo and Central Barangaroo

People have been an integral part of the local Barangaroo landscape for thousands of years. The Gadigal used this foreshore land for hunting, the harbour for fishing and as a place of congregation. At the time of European colonisation, Barangaroo was a key figure in the local Aboriginal community and her legacy lives on in the cultural significance of Barangaroo - the place.



The urban renewal and transformation of Barangaroo is but one part of the fuller story of urban change of this part of Sydney and awareness and knowledge: the concept and detailed design of Central Barangaroo will continue to respect the rich history of this place and respond to its culture and heritage responsibly, appropriately and respectfully. In respecting the rich cultural heritage of the place, the approach for Central Barangaroo is to:

Understand Country to develop cultural awareness:

- Connect with cultural identity
- Appreciate the richness of living culture
- Gain an understanding of Country
- Think differently about Country
- Move towards a Country centred approach
- Prioritise Country

Create pathways to Connect with Country and apply cultural

- · Engage with First Nations' languages and the meaning of first placenames
- Develop mutually beneficial relationships with Country
- Reawaken memories of cultural landscapes
- Share knowledge and find common ground to support the health and wellbeing

Create a Country centred design approach that:

- Actively seeks and responds to the sense of Country
- Listens to, informs and imagines Country
- Designs to express the culture of Country through shaping, form, design and art
- Cares for Country, with mutually beneficial relationships and responsibilities









1.6. Good design and Design excellence

1.6.6 Sustainable design

Central Barangaroo's sustainability vision is to be a globally recognised exemplar in sustainable urban development delivering positive outcomes for climate, water, nature and people, both now and in the future. To deliver this vision, the design, construction and operation of Central Barangaroo will be guided by a Central Barangaroo Sustainability Strategy (CENSuS) which will provide an overarching framework for all sustainability aspects of the development.

The strategy comprises four pillars and twelve environmental and social impact categories, and is supported by third party certification using internationally recognised sustainability rating tools.

The key commitments in the CENSuS are:

Climate Positive

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- Low energy buildings through a combination of passive design, energy efficiency, smart controls and energy performance monitoring against NABERS Energy and other relevant energy intensity targets
- Minimise use of fossil fuels on site.
- Shared energy infrastructure including central sea water heat exchangers and heat recovery systems.
- On-site renewable energy.
- Carbon Neutral in operation for the duration of the 99-year lease and reporting greenhouse gas (GHG) emissions annually. The precinct will be included in the Barangaroo precinct's annual Climate Active Carbon Neutral certification.

Water Positive

- Water efficiency, sea water cooling and native planting to reduce the demand for water.
- Recycled water infrastructure provided for non-potable
- Rainwater collected and used for irrigation.
- Best practice Water Sensitive Urban Design principles will be applied

Nature Positive

- Create a new public park (Harbour Park) with native gardens and an abundance of nature.
- Green landscaping, green walls and green roofs incorporated into the built areas.
- Extensive planting and tree canopy cover to reduce heat island effect.
- Designing to dark sky principles to reduce night sky pollution.
- Partnership with marine scientists to enhance aquatic biodiversity in Nawi Cove and harbour foreshore with
- potential initiatives including Living Seawalls and artificial
- Preference materials with reduced environmental impacts and third party environmental certification.

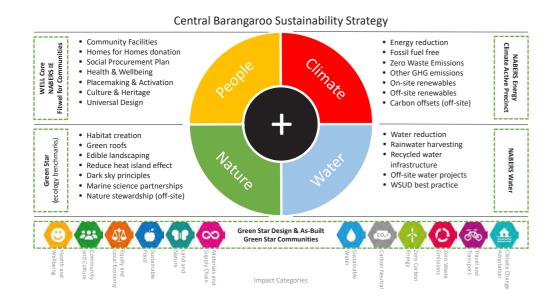
People Positive

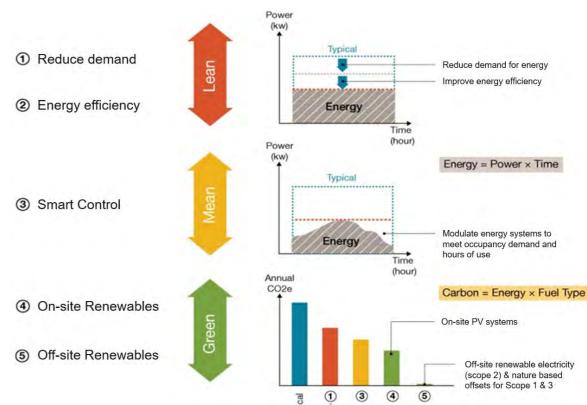
- Provide up to 3,400sqm of adaptable spaces for a range of community and cultural uses
- Create connected harbour foreshore parklands including a major new public park at Harbour Park, that forms part of the 11 ha of public open space at Barangaroo.
- Apply Universal Design principles to ensure places and buildings more inclusive and easily accessible for
- everyone.
- Best practice in indoor environment quality including the application of the ten WELL Building Standard principles
- Strong connection to nature and application of best practice biophilic design principles.
- Implement a Placemaking and Activation Plan including curation of public events.
- Prepare and implement a Designing for Country process with Aboriginal engagement and agency.
- Prepare and implement a Heritage Interpretation Plan to acknowledge and interpret the significant history of the site.
- Active engagement with relevant stakeholders.
- Curate a public art program
- Establish a Social Procurement Plan with targets
- Donate to Homes for Homes charity.

Central Barangaroo will achieve third party certification using the following rating tools which are widely recognised in Australia as international best practice:

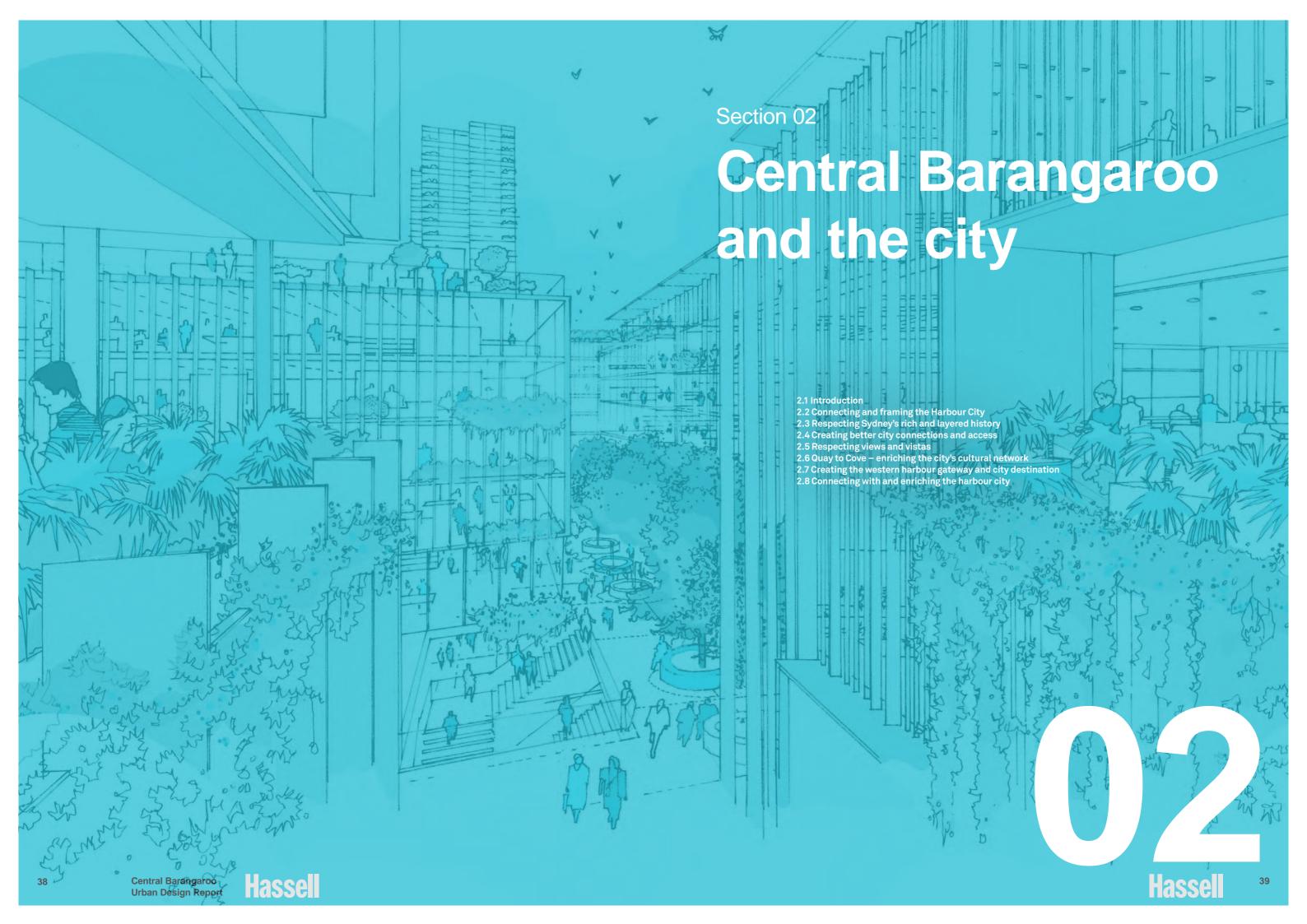
- Green Star
- NABERS Energy

Green Star Buildings represents a step change in level of ambition and scope compared to the previous Green Star Design & As-Built rating tool.









2.1. Introduction

As the city's leading foreshore renewal precinct, Barangaroo is responding to the key drivers of the city's change at three scales:

- 1. Global Scale The influential and growing role of Barangaroo as a key economic driver of Australia's only real global city.
- 2. *Transit Enhanced* City growth and renewal powered by new transit infrastructure better connecting the Sydney at the metropolitan scale.
- 3 'Quay to Cove' Local area revitalisation of the western harbour foreshore and the city's historic arts and culture precinct.

Since the Concept Plan approval for Central Barangaroo, substantial change has occurred within the central city. Most notably, the Sydney Metro is being constructed and delivering substantial new connectivity opportunities.

With this comes the need to provide for a new harbour city arrival, and Central Barangaroo can deliver on this, where Nawi Cove, Sydney Metro, Harbour Park and city development all come together



2. Central Barangaroo and the city

2.2. Framing the Harbour City



Barangaroo is the new vibrant western frame of 'Sydney Global City' with buildings, parks and headlands that complement the more established eastern frame. Central is the final piece of puzzle and the last dynamic stage of Barangaroo.

Central Barangaroo completes the city framework by bookending the western harbour edge with parkland and human scale development.

Key outcomes will be:

- Create a distinct city precinct with human scaled buildings stepping down to the harbourside parklands
- Complement the role of Wulugul Walk as a continuous foreshore promenade
- Create a network of connected public spaces defined by high quality buildings
- Position Central as the civic heart of Barangaroo

2.3. Respecting Sydney's rich and layered history





The north western part of Sydney, where the city meets the western harbour, has a long, rich and layered history.

Defined as land to the west of Sydney Harbour Bridge and Western Distributor, this area includes the historic suburbs of Millers Point, Walsh Bay and The Rocks, along with the evolving renewal areas of Barangaroo, Barangaroo Reserve and Central Barangaroo.

As a key part of Sydney's working harbour, this is an area of the city that has historically experienced much change. From the hunting, fishing and foreshore congregation by the Traditional Custodians of the place - the Gadigal, to early European settlement and evolving as Sydney's trading gateway to the world, through tough economic times, followed by port revitalisation and then decline, leading to present day urban transformation.

Yananurala is the new name for a walk that will share Aboriginal perspectives of place through artworks and installations along the Sydney harbour foreshore. The name Yananurala is from the Gadigal language and translates to Walking on Country. Combining two Gadigal words, yana (walk) and nura (Country), the la adds an instruction: 'So, you go walk Country!

As Barangaroo's keystone project, Central Barangaroo will conclude another significant chapter and layer in the evolution and transformation of this part of Sydney and one characterised by:

- Sydney Metro's new station at Barangaroo, creating a transit based catalyst that both connects, energises and enlivens this north west quarter of the city;
- The emergence of Barangaroo and Nawi Cove as a vibrant new place to arrive in the city on the harbour foreshore; transforming the way people arrive in Sydney.
- The delivery of Central Barangaroo as a vibrant and human scale mixed use place that connects historic and contemporary Sydney and creates extensive new foreshore parklands

Key outcomes will be:

- Acknowledge, respond and celebrate the rich and multilayered history of Sydney's western harbour
- Develop cultural awareness and understanding of Country
 Create pathways for connecting with Country and applying
- Create pathways for connecting with Country and applying cultural awareness and knowledge
- Create a balanced and sensitive design approach that is Country centered and responsive to cultural heritage

2.4. Creating better city connections and access



Central will complement Barangaroo's harbourside walk, providing an uninterrupted and dynamic experience from Pyrmont to Woolloomooloo, helping to complete the Eora Journey - Harbour Walk.

The creation of a network of new east west and north south streets will connect Central and its waterfront park to established east west street linkages, as well as bring people from the city to its western waterfront.

The network of streets will provide legible connectivity through Central's city blocks to the harbour, Harbour Park, Nawi Cove and Sydney Metro.

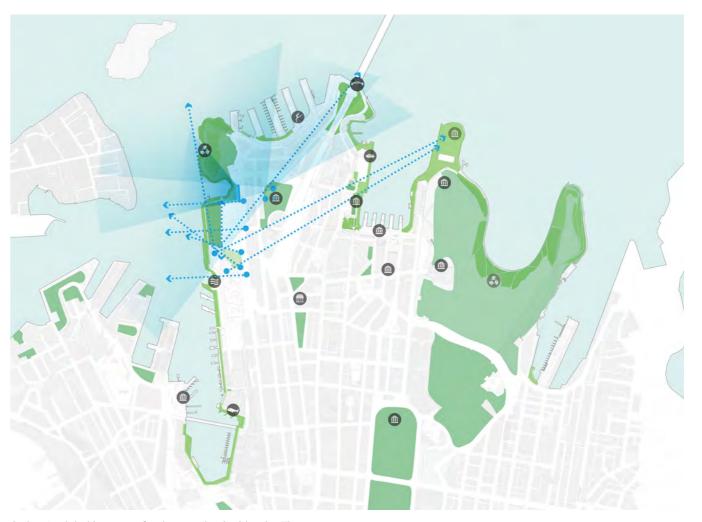
Hickson Road is positioned as an important public address; providing a new civic experience and entry to world class workplace destinations.

Key outcomes will be:

- Completing the harbour foreshore walk
- Unlock the western waterfront with a new Harbour Parkland
- Better connect the city to the neighbourhoods of the north-west city pennisula
- Integrate transit with clear connections to Barangaroo Metro and Wynyard Walk through the development blocks.

2. Central Barangaroo and the city

2.5. Respecting views and vistas



Sydney's global icons are fundamental to its identity. The harbour, its bridge and Opera House make Sydney one of the world's most sought after destinations.

Through careful shaping of urban form, existing views can be protected and maintained. This includes from existing properties along Kent Street in Millers Point, from future tourist and residential destinations in Barangaroo South, and from Observatory Hill.

Key outcomes will be:

- Ensuring the function of Sydney Observatory is maintained
- Providing public amenity by reinforcing views through development blocks to Harbour Park and the western harbour
- Provide a contextual response to the city's urban form, with a distinct difference in scale from Barangaroo South to integrate with the human scale of Millers Point and the north-west quarter
- Carefully balancing development outcomes with public benefit, including by mitigating view impacts with high quality architectural form, and through regular gaps in buildings.

2.6. Quay to Cove - Enriching the city's cultural network



Central will bring together and connect with the cultural and historic networks in the north-west quarter of the city. Along with Sydney Metro, Central can re-energise and enliven this part of the city.

Central enables and extends the Quay to Cove concept, bolstering the Walsh Bay Arts Precinct and the cultural activation of the harbour. At Central, a network of distinct public places, each with their own identity, provide a place of world renown.

A major new harbourside park frames Central by water and landscape. Harbour Park is Sydney's new western harbour parkland; a place for major events and a quiet place to take in the Emerald City.

Nawi Cove is a cultural hub and iconic city gateway anchored with activity and a landmark tower marking the Cove and Metro Station. Hickson Park is a busy city park with an active edge along Barton Street and easy/direct connection to Harbour Park. Barangaroo Steps can become Central Barangaroo's civic heart, connecting people to the place.

The Verandah provides an activated and elevated space to enjoy harbour views.

Barton Plaza is an urban threshold between Hickson Park and Harbour Park, activated by a retail flagship and providing entry to Sydney Metro from the south

Key outcomes will be:

- Enriching and energising the neighbouring arts and historic precincts of Walsh Bay, The Rocks and Millers Point
- Creation of a network of connected and easily accessible places each with their own character and identity

2. Central Barangaroo and the city

2.7. Creating the western harbour gateway and city destination



Sydney's new metro network is a once in a generation investment in public transit infrastructure, massively boosting accessibility to Barangaroo, and creating a new western harbour arrival.

The accessibility benefits of Sydney Metro, and the city centre context of Central demand an intensity of activity reflective of Sydney's global city status.

There is significant opportunity to provide a new destinational offer at Central Barangaroo with a dense mix of commercial workplace, retail, hospitality and residential uses, complemented by a network of new open spaces.

To emphasise the arrival experience, two architecturally significant moments annouce Sydney Metro. An architectural jewel will provide a flagship experience at Hickson Park, whilst a landmark tower will emphasise the cultural experience at Nawi Cove.

Kev outcomes will be

- Offer a key destination that will optimise use of and access to the new Metro Station.
- Provide a diverse array of uses create a destination around the Metro station.
- Articualte arrival points with two distinct architectural moments at Nawi Cove and Barton Plaza each with a high quality public realm sequence to announce arrival into the city.

Hassell

2.8. Connecting with and enriching the harbour city

As Barangaroo's keystone development project, Central Barangaroo and the new Barangaroo Metro Station combine to become a transformative renewal project that will energise and enhance everyday city life.

With Nawi Cove as the setting, these transformative projects come together to create an exciting new place on the western foreshore that transitions between the city's historic and contemporary neighbourhoods and celebrates arrival into the harbour city.

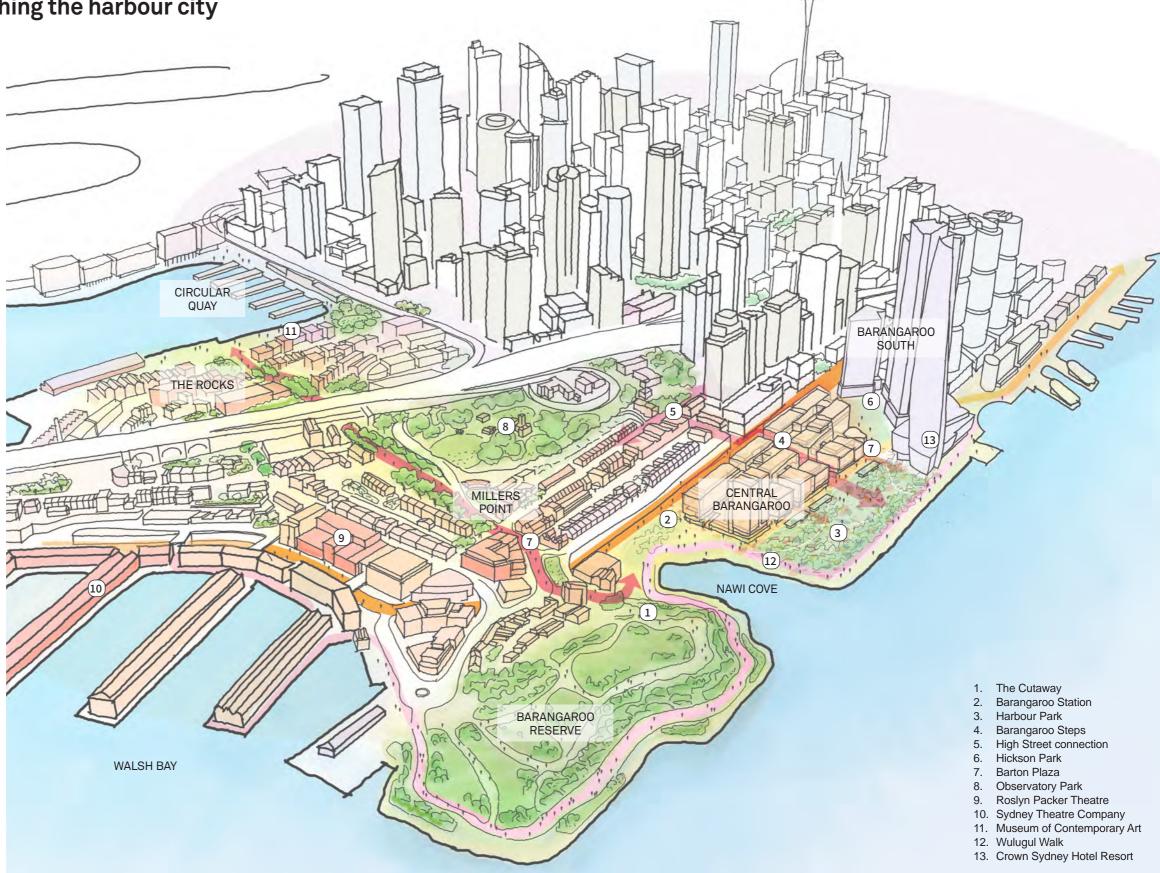
By improving access to Millers Point, Walsh Bay and The Rocks and delivering valuable new local connections between the city's historic neighbourhoods and the western harbour foreshore, Central Barangaroo and Barangaroo Station can re-energise the north-west quarter of the city.

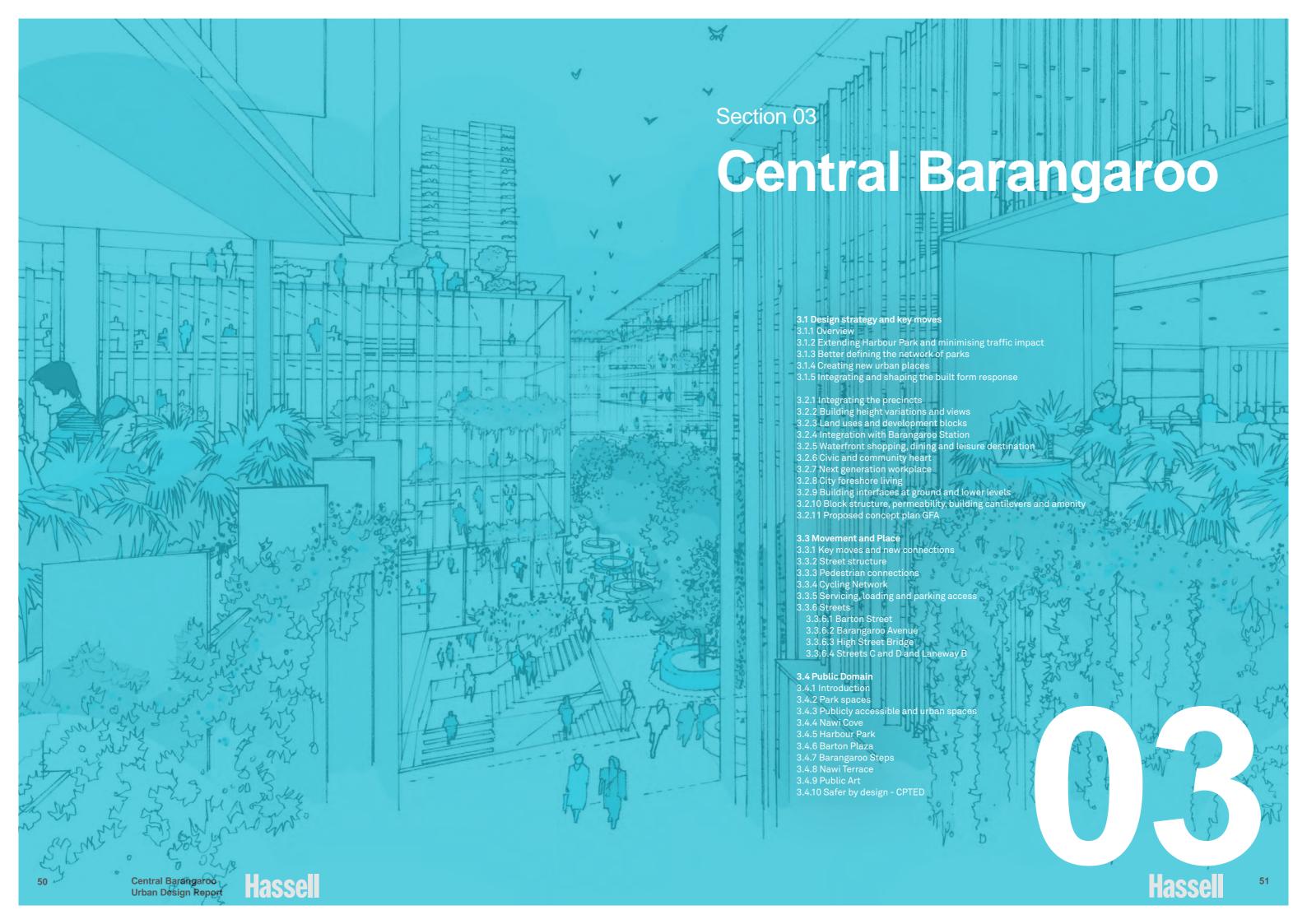
Improved connectivity at both metropolitan and local levels can reinforce and enhance activity and investment in the historic neighbourhoods located between Circular Quay and Nawi Cove. These 'Quay to Cove' relationships are important elements in re-imagining, re-connecting and enhancing this north western quarter as a vital part of the city's cultural network.

To optimise these opportunities, Central Barangaroo proposes to

- a new city destination on the western foreshore of Sydney Harbour, offering world-class workspace, retail, residential, community and cultural uses
- Nawi Cove and Central Barangaroo as a new place in the city that celebrates arrival
- a diverse and highly permeable place that seamlessly connects Barangaroo Station with the harbour precinct and the local neighbourhoods
- opportunities for fine grain pedestrian connections between historic Millers Point, including Central Barangaroo and the western harbour foreshore
- Central Barangaroo and Nawi Cove as a cultural hub that evolves as a focal point on the city's cultural network
- Harbour Park as a major city scale foreshore public open space and part of a network of foreshore including Hickson Park, Nawi Cove and Barangaroo Reserve, whilst integrating Wulugul Walk as a key city section of the Harbour Walk between Glebe and Woolloomooloo

As part of this city renaissance, Central Barangaroo can become one of Sydney's great places and the Harbour Park, one of the city's great public spaces, with economic activity benefitting the local area, the city and the State.





3.1. Design strategy and key moves

Introduction

Section 3 describes, articulates and illustrates the proposed MOD 9 amendments to Barangaroo Concept Plan for Central Barangaroo.

Section 3 contains the following content:

- Design strategy and key moves Summarises the overall vision, key design and development drivers and proposed changes for Central Barangaroo.
- Built form and use Describes the modification proposals in the context of the approved Barangaroo Concept Plan, including building height and views, massing, land use, Barangaroo Metro Station integration, activation and interface conditions.
- Movement and place Outlines the movement structure for the proposed 3.3 concept plan modification, strategies for each transport mode, parking, servicing and street character.
- Public domain Describes the character and intent for the parks, spaces and public places both within and adjacent to Central Barangaroo.

In the context of the approved Barangaroo Concept Plan, the aerial illustration on the right hand page identifies the key elements of proposed MOD 9 for Central Barangaroo, including:

- 1. Harbour Park Sydney's western harbour garden of 2.8 Ha featuring Barangaroo Avenue as an activated pedestrian corridor and the continuous 30-metre wide Wulugul Walk.
- 2. Barangaroo Steps and High Street - The potential for a local pedestrian connection between historic Millers Point and the civic heart of Barangaroo and Harbour Park.
- 3. The Streets A network of east-west streets and pedestrian arcades facilitate connections and access to the development between Hickson Road and the waterfront open space
- 4. Nawi Cove a cultural hub and iconic city gateway anchored with intensity of activity and architectural quality.
- 5. Barton Plaza a vibrant city space with a defined street edge in Barton Street and a plaza connection through to the Harbour Park and Sydney Metro.
- 6. A world class multi-level retail experience – a permeable platform for civic, retail and commercial spaces that has a seamless connections to Sydney Metro station.
- 7. Three development blocks containing mixed use development.
 - A Block 5
 - B Block 6
 - C Block 7
- 8. Sydney Metro integration Central Barangaroo will stitch directly into the new Barangaroo Station, with access from Block 7 to the station concourse, as well as integration at ground through the Metro entry and bus stops on Hickson Road.



3.1. Design strategy and key moves

3.1.1 Overview

The planning and concept design development undertaken for Central Barangaroo has enabled a more informed understanding of constraints and opportunities and has resulted in a more responsive, integrated and finer grained design proposal for the final stage of Barangaroo.

As noted in the Sussex Penn Review of 2011, the successful integration of Barangaroo South, Central Barangaroo and Barangaroo Reserve as distinct but integrated precincts is a longstanding design driver for Barangaroo's renewal.

As the final stage of the Barangaroo renewal project, the design strategy for Central Barangaroo proposes a series of integrated planning and design moves that seek to:

- create a dynamic new city destination that agglomerates a mix of supporting uses and activities that can amplify economic performance and create a viable and successful place;
- create a walkable and active place, with clear and easy human scale connections between precincts, the metro station, the city and the harbour;
- better manage vehicular movement and improve the quality and safety of the pedestrian domain;
- create a network of high amenity foreshore parks, urban spaces and places, designed to offer unique scale, character and experiences.

MOD 9 for Central Barangaroo proposes to achieve this by:

- A. Extending Harbour Park to the built edge of the development, removing vehicle traffic from Barangaroo Avenue north of Barton Street and south of Street C.
- B. Enhancing the urban experience by creating a connected network of new urban spaces and places, with opportunities for a north facing space at Nawi Terrace, a central connecting space at Barangaroo Steps and a transitional space at Barton Plaza.
- C. Establishing Barton Street as the northern extent of vehicle movement from Barangaroo Avenue to Hickson Road. This alignment connects Gas Lane and Bond Plaza across Hickson Road with Hickson Park, Crown and the harbour. It provides a better alignment that provides for seamless access from city to harbour, whilst still enabling a sequence of views to the waters edge from Hickson Road.
- Creating a more sophisticated edge to Hickson Park; the new Barton Street alignment means it makes more urban sense to create a built edge along the street's northern boundary - providing containment of public space. Development is then stepped back to create Barton Plaza, which functions as a pedestrian junction between many destinations. A new flagship retail building at Barton Plaza gives definition to the space, provides an urban orientation mechanism and is shaped to enable views from Hickson Park to the harbour between it and Crown Sydney Hotel Resort.
- E. Modifying the built form envelope to respond to the changing need for connectivity in the city. The tower at Block 7 is a consequence of reshaping the envelope to provide for Nawi Terrace, and it reinforces the arrival sequence at Barangaroo Station.

The following pages describe the design strategy and key moves in more detail.

"Accepting there are three clear precincts, it is important to ensure the precincts work together as a whole, with effective physical and conceptual connections which help make the place legible and engaging, as well as ensuring clear linkages to adjacent areas and the Sydney CBD".

Barangaroo Review, Meredith Sussex AM and Shelley Penn, 1 Aug 2011



3.1. Design strategy and key moves

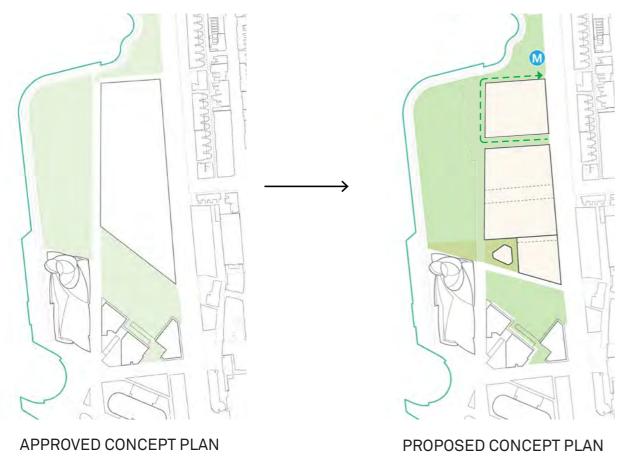
3.1.2 Extending Harbour Park and minimising traffic impact

The key benefit of these integrated moves is to ensure that the Central Barangaroo precinct, being the area north of Barton Street, west of Hickson Road and south of Barangaroo Reserve, is designed to create a network of accessible and contiguous public open spaces that place the highest importance on pedestrian amenity, safety and the creation of place.

To improve Barangaroo's overall movement and access network, MOD 9 for Central Barangaroo proposes to:

- 1. Transform Barangaroo Avenue by removing vehicular traffic from Blocks 5 and 6 to create a tree lined pedestrian avenue and enable Central Barangaroo's Harbour Park to extend eastwards between Hickson Park and Street C;
- 2. Redirect Barangaroo Avenue's north south vehicular traffic along Barton Street to Hickson Road, with Barton Street as a two way and permanent connection;
- Consistent with the Barangaroo Avenue proposals, redesign Streets C and D as shared pedestrian street zones that connect Hickson Road with Barangaroo Avenue, Harbour Park and Nawi Cove;

- Concentrate broader Barangaroo precinct vehicular movements onto Barangaroo Avenue (South), Barton Street and Hickson Road;
- Redesign Street B as an active east west pedestrian laneway that connects Hickson Road with Barton Plaza and the Harbour Park;
- Construct an elevated pedestrian bridge over Hickson Road that connects High Street, Millers Point with Central Barangaroo and Harbour Park;
- Enable pedestrians to walk directly via Gas Lane and Bond Plaza over Hickson Road via a pedestrian crossing and onto the northern pavement of Barton Street and directly onto the foreshore parklands beyond; and
- Improve the ease of access, amenity and safety for pedestrians and metro and bus customers by creating seamless and activated transitions between Barangaroo Station platforms into Nawi Cove, Central Barangaroo and the foreshore parklands.





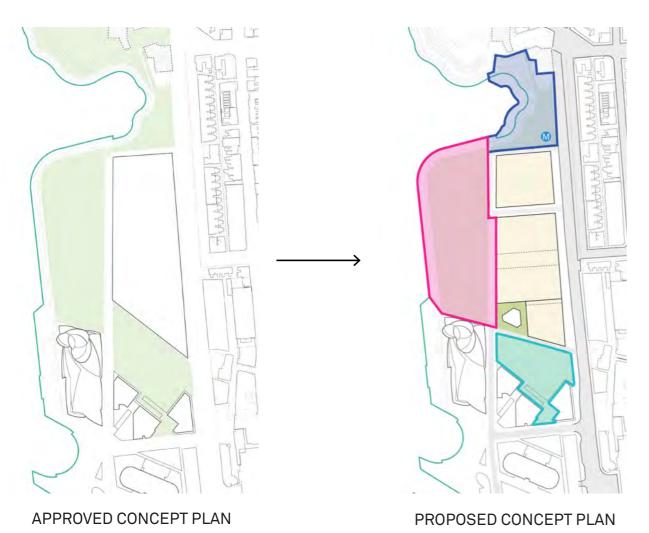
3.1. Design strategy and key moves

3.1.3 Better defining the network of parks

Central will complete Barangaroo's network of parks and places.

- Nawi Cove's amphitheatre setting creates a unique city space that will become the city's new western harbour gateway. Nawi Cove, the Cutaway and Central Barangaroo will combine to create a new cultural lifestyle hub for the city.
- Harbour Park will become Sydney's Western Harbour Garden. As a major city foreshore park (2.8ha), it will be Barangaroo's main forum for a dynamic and diverse mix of landscaped open spaces, and civic and cultural activities
- Hickson Park is a city scale park, framed and activated by iconic adjacent buildings and acting as a key green space mediating between the city and Barangaroo and the foreshore.

The changed configuration of Hickson Park better defines it as a distinct city park within an urban setting. The tall towers of Barangaroo South are complemented by the lower form of Central Barangaroo to the north. This allows sunlight access throughout the year whilst creating a clear edge. The changed alignment also provides legibility of access from the city through gas lane to Barton Street and the harbour beyond.









3.1. Design strategy and key moves

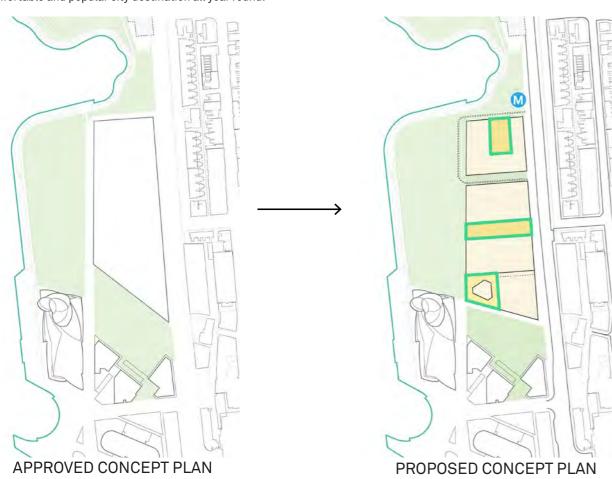
3.1.4 Creating new urban places

MOD 9 for Central Barangaroo proposes to create a network of finer grained streets, laneway and pedestrian connections and create opportunities for new publicly accessible urban spaces integrated as part of Blocks 5, 6 and 7.

Central Barangaroo creates opportunities for three urban spaces that can complement the main foreshore public parks and positively contribute to the creation of a cohesive urban neighbourhood that connects the city with the western harbour. These urban spaces play different roles within the Central Barangaroo precinct:

Nawi Terrace is an opportunity to create a sunny, north facing urban space as part of Block 7. An urban space in this location can offer northerly connections and views over Nawi Cove and westerly connections and views over Harbour Park. Nawi Terrace also benefits from direct access to Barangaroo Station and has the potential to become a comfortable and popular city destination all year round.

- Barangaroo Steps, when combined with a potential bridge link over Hickson Road, create an opportunity for a local civic connection between historic Millers Point and the western harbour foreshore. As a central connecting space, Barangaroo Steps creates the potential to become a local hub of future community and cultural activities.
- Barton Plaza is the opportunity to create a busy urban space where Hickson Park and Harbour Park, Barangaroo South and Central Barangaroo all converge. In playing this role, Barton Plaza proposes to act as a hub for existing and proposed pedestrian connections within the Barangaroo precinct and work in unison with the retail flagship building to create an iconic city marker and urban space for





3.1. Design strategy and key moves

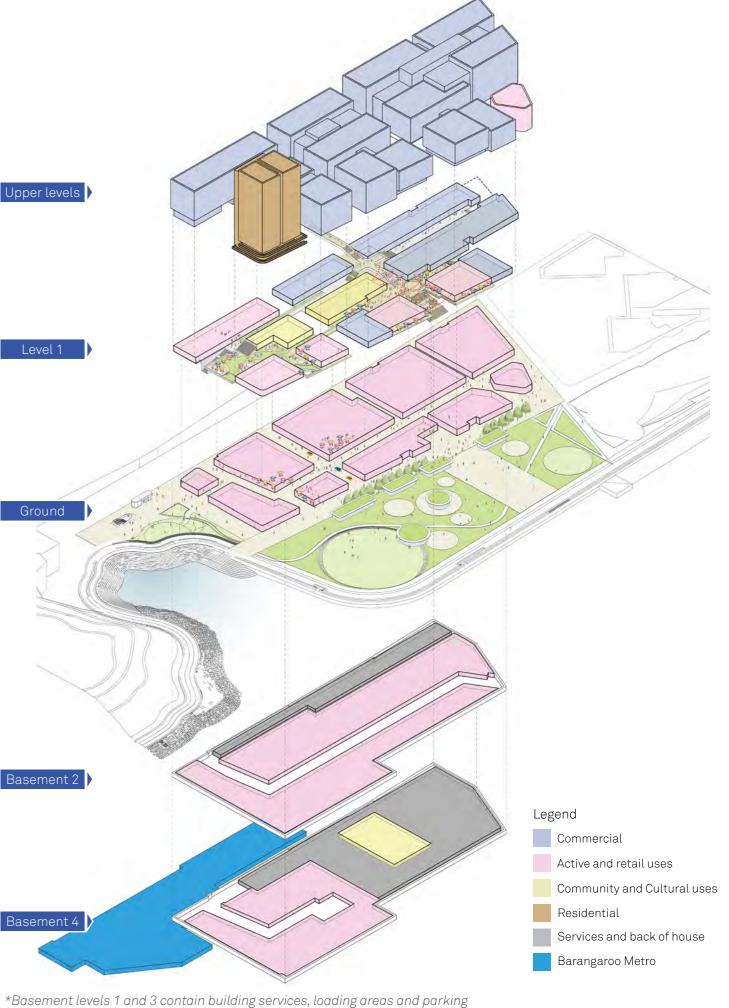
3.1.5 Integrating and shaping the built form response

In optimising its locational advantages, MOD 9 for Central Barangaroo seeks to:

- maximise the benefits of proximity and easy access to Sydney's evolving metro network, via direct connections to the adjacent Barangaroo Station;
- create a new city destination a truly mixed use place with an intensity of activity and diversity of uses, connected over multiple levels, both above and below ground; and
- design a low to medium scale precinct that responds to local context and opportunity and transitions between Sydney's CBD and adjacent historic areas and the western harbour foreshore.

To achieve this, MOD 9 proposes to amend the built form, massing and modulation of the Central Barangaroo building envelope. The proposed changes offer a finer grained response to context and opportunity, with new streets and pedestrian paths, a metro connection, three new urban spaces and new building form above and below ground, with a resultant increase in overall GFA.









3.1. Design strategy and key moves

3.1.5 Integrating and shaping the built form response

The key built form and land use changes to the Central Barangaroo building envelope and consequential amendments to the concept plan are:

Urban form and building heights

- Respect and enable views from surrounding buildings to Sydney Harbour and to key city landmarks and treat the design of the roofscape as the Central Barangaroo's 'fifth elevation';
- Allow for greater variation in the heights of buildings across Blocks 5, 6 and 7 of Central Barangaroo, that will:
 - enable Hickson Road to be designed at a civic scale that reinforces its future function as a key city address for Barangaroo, with building heights stepping down from Hickson Road to the Barangaroo Avenue frontage with Harbour Park;
 - create the potential for two new 'city marker' buildings for Block 5 and Block 7, designed to become architectural points of distinction that can assist city legibility and local wayfinding;
 - modulate building form and heights in Block 7, to reduce building height in the centre of the block and increase building height on the northwest corner. This enables Nawi Terrace to be created as a new north facing urban space overlooking and connected to Nawi Cove whilst allowing sight lines from Nawi Cove to the city beyond. As a city scale marker, the Block 7 tower will define the northern end of Barangaroo Avenue and reinforce Nawi Cove as a new city arrival space for the western CBD;
 - modulate the building form and height of Block 5
 adjacent to Harbour Park and Hickson Park to reduce
 building height, limit building footprint and establish
 setbacks for a retail flagship building to act as a city
 marker for the precinct. Located as part of Barton
 Plaza, the lower scale and iconic form of the retail
 flagship building is designed to juxtapose the adjacent
 Crown Sydney tower, whilst defining the threshold
 between Barangaroo South and Central Barangaroo
 and an entry to access Barangaroo Station;
 - Enable cantilevers on buildings that address
 Barangaroo Avenue, Street D and Hickson Road,that
 allow buildings to partially extend over the public
 domain to provide shade and shelter and improve
 street level pedestrian amenity

Block 5 site boundary

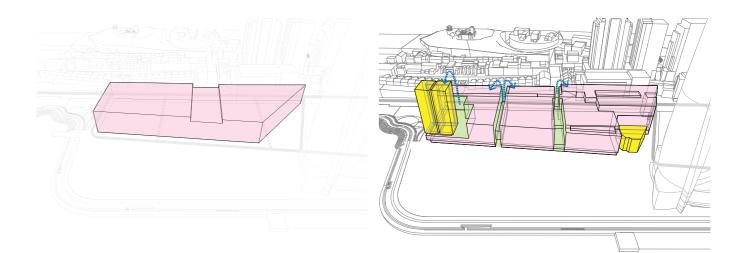
- Create closer connections and a stronger relationship between Central Barangaroo, Crown Sydney and Barangaroo South by redesigning the interface between the built form of Block 5, Barton Plaza, Harbour Park and Hickson Park, whilst maintaining views between the harbour and the city;
- Adjust the Block 5 site boundary to reflect the proposed alignment of Barton Street as a permanent vehicular street connecting Barangaroo Avenue with Hickson Road and the proposed building footprint and setbacks of the retail flagship retail building;

Integrated mixed use development and GFA

Increase allowable Concept Plan GFA to enable the
proposed mix and intensity of commercial, retail, residential
and community uses over multiple levels, in a location with
optimal access to new metro infrastructure, to Central
Sydney activities and services and harbour foreshore
amenity, that has limited overall development impact.

Development block permeability

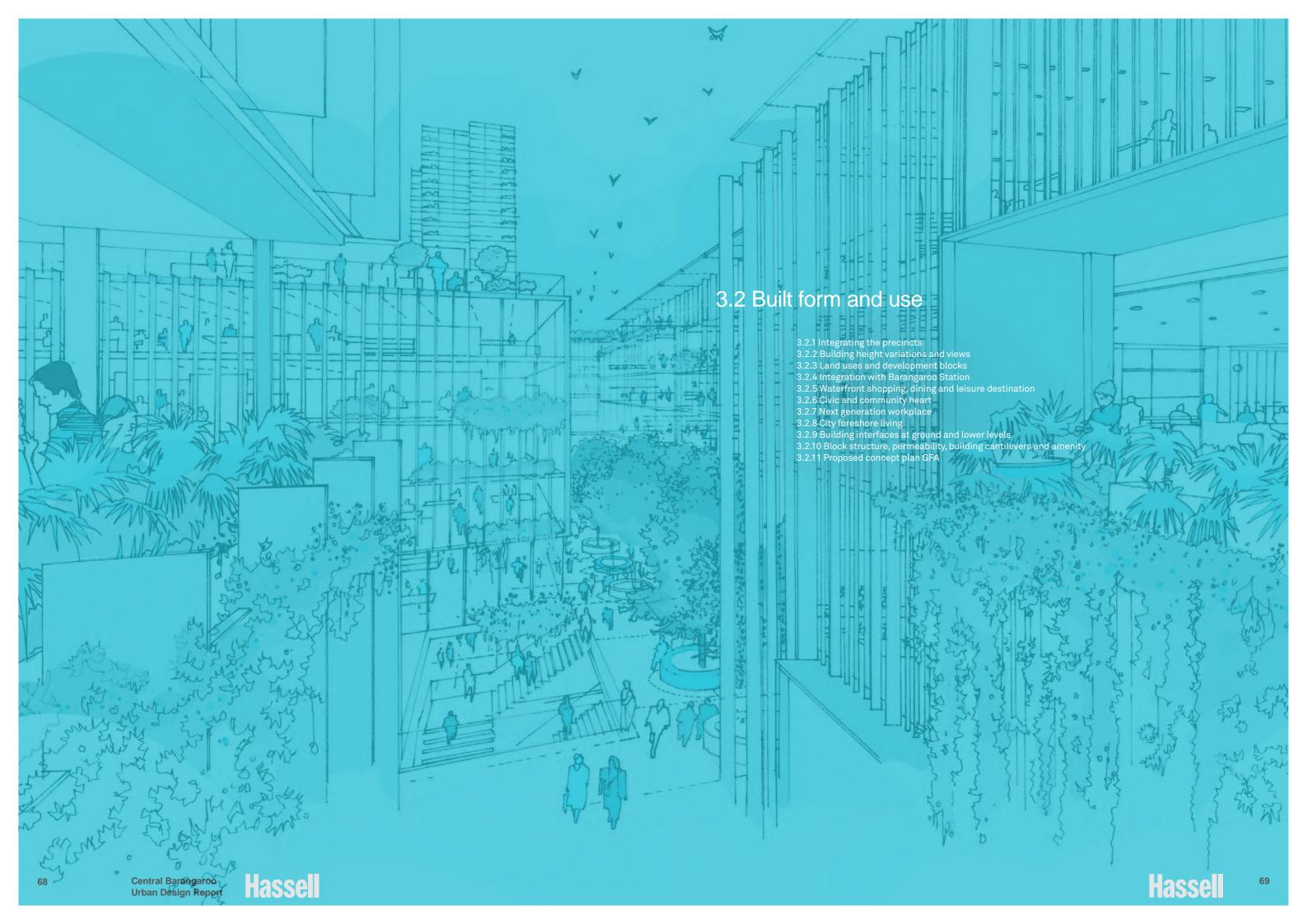
- Visual and physical permeability is provided through the envelope. These provide a clear connection from Hickson Road through to Harbour Park.
- These streets and lanes will be activated with retail at ground level, and commercial uses at upper levels.











3.2. Built form and use

3.2.1 Integrating the precincts

MOD 9 for Central Barangaroo proposes to adjust the land use zoning controls in the approved Concept Plan. The intent of the proposed MOD 9 change is to:

- Establish a closer and stronger relationship between the Barangaroo South and Central Barangaroo precincts;
- Create Harbour Park and Hickson Park as public open spaces of distinct character; and
- Enable a finer grain network of streets, lanes and publicly accessible spaces, connecting through Blocks 5, 6 and 7 of Central Barangaroo.

The structure, rhythm and character of the proposed foreshore park network will be created through the expansion and compression of open spaces within Barangaroo:

- From Barangaroo Reserve to Nawi Cove by a program of harbour edge activities around the cove, together with the potential for future adaptive re-use of Dalgety Bond Store providing ground level activation (not part of MOD 9 proposals)
- From Nawi Cove to Harbour Park, framed by the proposed activity hub and with connections into Nawi Terrace and Barangaroo Station
- From Harbour Park to Hickson Park by Barton Plaza and the flagship building.

At different points along this journey, built form and public realm intertwine to mark transition and establish clear markers in the urban landscape.

The adjusted interface to Hickson Park will enable Central Barangaroo to become the beating cultural heart of Barangaroo through its diverse programs, experience, and a series of distinct and connected human scale open spaces offering sun, shade, shelter and activity.

These foreshore open parks and spaces combine to provide over 31,400 sqm public open space for future cultural, civic and event and activities

Public Open Spaces	Area
Nawi Cove	3,300 m ²
Harbour Park (includes Wulugul Walk and Barangaroo Avenue)	28,100 m ²
Total	31,400 m²

- Barangaroo Reserve
 Dalgety Bond Store
- Dalgety Bond Store
 Nawi Cove
- Nawi Cove civic space
 Harbour Park
- 6. Barton Plaza
- 7. Hickson Park



A network of finer grain urban spaces and places

A key design driver for Central Barangaroo is the proposal to create a network of finer grained streets, laneway and pedestrian connections and opportunities for the design and integration of smaller scale publicly accessible urban spaces.

These urban spaces can create opportunities to add diversity, character and finer grain of spaces and places that can complement and work in concert with the broader network of foreshore public open space established by Harbour Park, Nawi Cove and Hickson Park.

Some of the opportunities to create urban spaces within Central Barangaroo are:

- Nawi Terrace an opportunity to create a sunny, north facing urban space as part of Block 7 that can offer northerly connections and views over Nawi Cove and westerly connections and views over Harbour Park. Nawi Terrace also benefits from direct access to Barangaroo Station and has the potential to become a comfortable and popular city destination all year round.
- Barangaroo Steps when combined with a potential bridge link over Hickson Road, the Barangaroo Steps is an opportunity for a local civic connection between historic Millers Point and the western harbour foreshore. As a centrally located connecting space, Barangaroo Steps creates the potential to become a local civic hub of future community and cultural activities.
- 3. Barton Plaza an opportunity to create a busy urban space where Hickson Park and Harbour Park, Barangaroo South and Central Barangaroo all converge. In playing this role, Barton Plaza proposes to act as a hub for existing and proposed pedestrian connections within the Barangaroo precinct, whilst working in unison with the retail flagship building to create an iconic city marker and urban space for Barangaroo.

Required Concept Plan amendments

- Readjust the south western site boundary of Block 5 to generally align with the boundary as it existed prior to the June 2016 amendment to SSP SEPP associated with MOD 8; and
- 2. Readjust the B4 Mixed Use zone boundary to the south, to align with the relocated Block 5 boundary.



3.2. Built form and use

3.2.1 Integrating the precincts

The south western part of Block 5 is at the future hub of Barangaroo and a main intersection of precinct activity. SOM's Central Barangaroo Master Plan Framework acknowledges this and refers to the area between Block 5 and the harbour foreshore as 'Barton Plaza'.

Barton Plaza is designed as a pivotal and transitional urban space at the hub of Barangaroo that is designed to:

- Unite the two major Barangaroo precincts of Barangaroo South and Central Barangaroo and acts as a key hub and intersection of precinct activity;
- Distinguish between the vehicular function of Barangaroo Avenue south of Barton Plaza and its pedestrian function
- Allow seamless pedestrian access along the north side of Barton Street to the watefront, unimpeded by vehicle
- Create a hub of activity at the key intersection of Barangaroo Avenue and Barton Street;
- Act as the focal point for significant view corridors and urban and landscape axes designed to structure the overall Barangaroo precinct;

- Provide the setting for landmark buildings including the Crown Sydney Resort Hotel and the Central Barangaroo flagship building;
- Maximise the potential for spatial sequencing and experiential differentiation between parklands by compressing the street wall between Crown and flagship;
- Provide views and strong visual connections between Hickson Road, Hickson Park and the foreshore at Harbour

The Central Barangaroo activation strategy proposes to create the opportunity for a future iconic landmark building that anchors Barton Plaza. This flagship building is strategically located to act as an urban marker and future city landmark to provide a clear connection between Barangaroo South and Central Barangaroo and manage the transition between the city park character of Hickson Park the foreshore character of Harbour Park.

To facilitate this future iconic landmark and enable it to be seen in the round, as part of the proposed MOD 9 changes, the Block $5\,$ flagship building will have a limited site coverage, a reduced building envelope / height and setbacks to Hickson Park, Harbour Park and Barangaroo South.



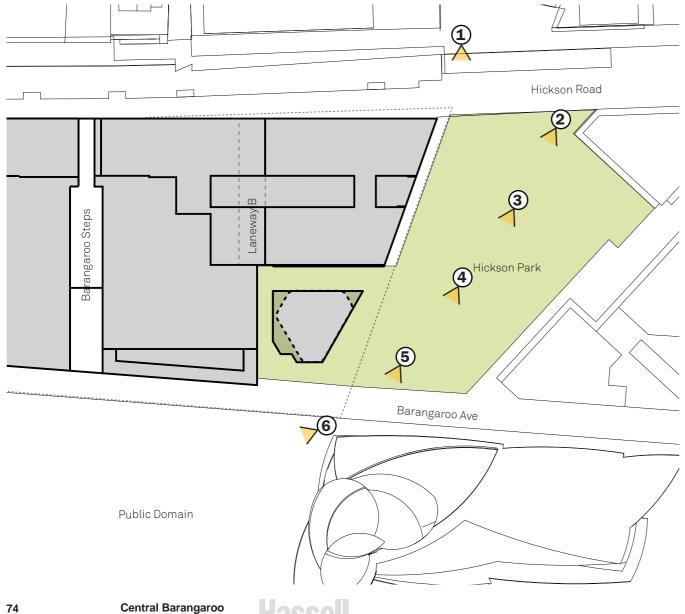


3.2. Built form and use

3.2.1 Integrating the precincts

The reference model images on this and the proceeding pages describe the sense of connection between Hickson Park and Harbour Park when viewed from within Hickson Park. The progression of movement shown in these images demonstrate that the Harbour Park and harbourside beyond are always evident from within Hickson Park, whilst the built form on Block 5 allow for the intended containment of Hickson Park.

Owing to the separation between Crown and the Flagship afforded by Barton Plaza, a sequence of unique harbour and city experiences can be accommodated through development of Central Barangaroo. Pedestrian legibility is always maintained through clarity of sight lines between these park spaces.





3.2. Built form and use

3.2.2 Building height variations and views

The integrated design of the Central Barangaroo precinct, Sydney Metro's Barangaroo Station and Nawi Cove, creates significant opportunities for new design thinking at the scale of the city.

As a once in a lifetime city transit infrastructure catalyst, Sydney Metro is connecting and re-shaping Sydney and an embedded part of Barangaroo's evolution.

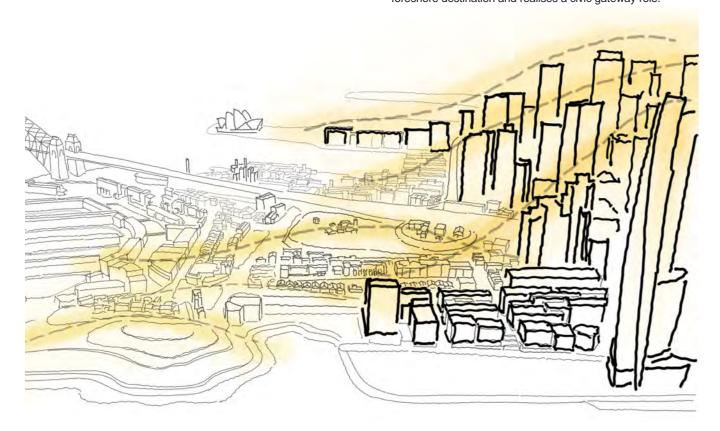
As the most northerly of four new CBD metro stations, Barangaroo Station will revolutionise access, movement and activity in this northwestern part of the city and deliver a major activity and movement generator.

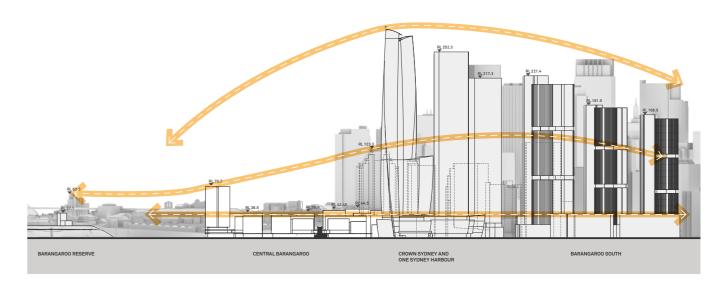
Sydney Metro's new metro station at Central Barangaroo will create opportunities to better connect with the metropolitan region and create a new city gateway for Barangaroo, the western harbour foreshore, Millers Point, Walsh Bay and The Rocks. In optimising access and connectivity to the new metro network, Central Barangaroo will create a dynamic new, accessible mixed use multilevel city destination on the western harbour foreshore.

Central Barangaroo's Block 7, Barangaroo Station, the Cutaway and Dalgety Bond Store will combine with the amphitheatre setting of Nawi Cove to create a new civic space and gateway that celebrates arrival into the city and onto Sydney's western harbour foreshore. As a civic arrival space and new city destination, Nawi Cove and Central Barangaroo will become part of an evolving cultural network that connects with, enlivens and energises Millers Point, Walsh Bay and The Rocks.

As the final element of the urban renewal of the city's north-western foreshore, Central Barangaroo presents civic design opportunities

- mediate between the diverse scale and character of adjacent precincts -the foreshore parklands, the adjacent historic areas of Millers Point and Walsh Bay and the scale of Barangaroo South and Sydney CBD;
- create a sculpted and appropriate urban form for the city's western edge, of a scale and character that can define, frame and activate proposed new harbour parks and civic spaces;
- create the opportunity for a taller building with a clear identity that acts as a city landmark for Barangaroo Station, Nawi Cove, Barangaroo Reserve and Central Barangaroo as a new foreshore destination and realises a civic gateway role.







3.2. Built form and use

3.2.2 Building height variations and views

In the context of Nawi Cove, at a local scale, Central Barangaroo's Block 7 presents design opportunities to create a distinct built form and public space that strengthens identity and acts as a local landmark and a cornerstone for the Barangaroo precinct.

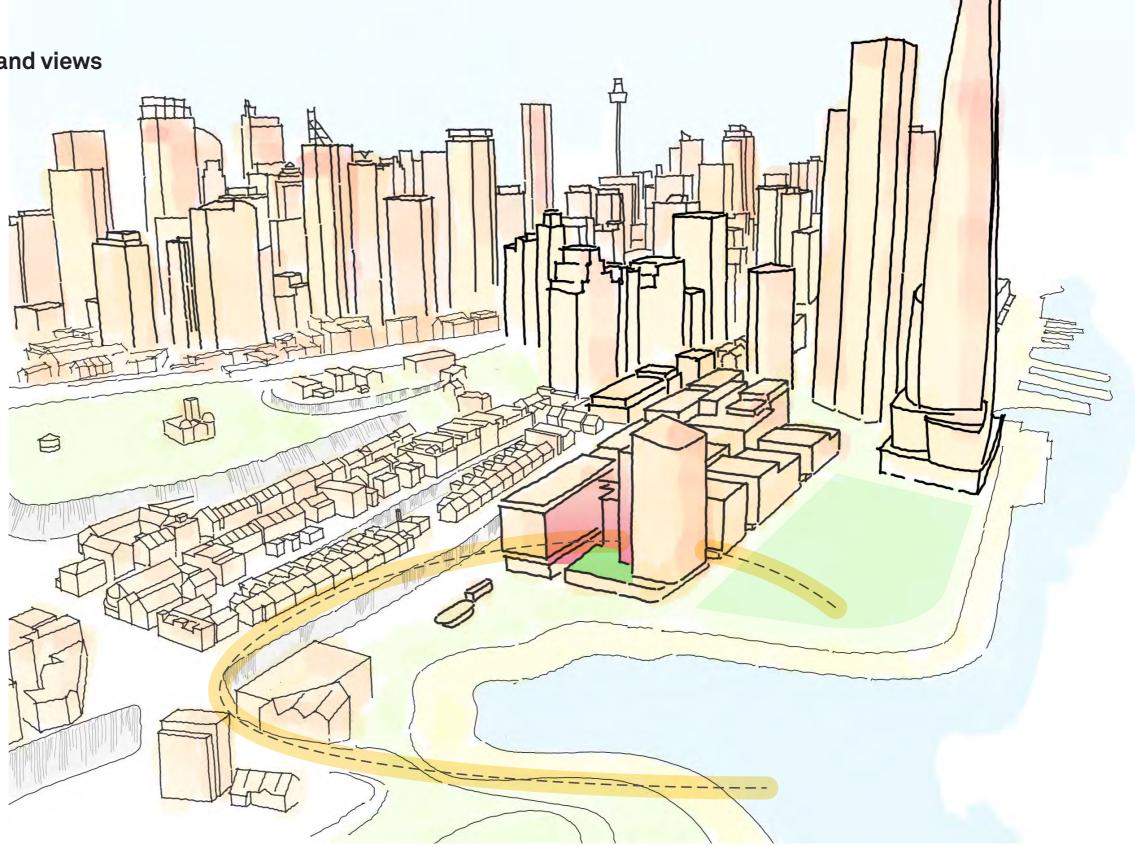
Block 7 will be the most dynamic place within the Central Barangaroo precinct, combining retail, dining, workspace, community and residential uses with sunny public open space and easy, direct connections to Barangaroo Station platforms.

From a civic design perspective, the design of Block 7 will combine with the future activities in the Cutaway and the Dalgety Bond Store, to frame and activate the southern edge of Nawi Cove and contribute to the amphitheatre setting and character of this new civic space.

Central Barangaroo's Block 7 will create active and high amenity frontages to all streets and spaces - Hickson Road, Street C, Barangaroo Avenue and Street D (defining the southern edge of Nawi Cove) that offer a sense of enclosure to streets and public spaces and easily connect with Nawi Terrace activities.

The opportunity for a taller building in the northwest corner of Block 7 creates design opportunities to:

- contrast with the general mid-rise form and horizontality of Central Barangaroo and add character and diversity to the precinct;
- create an appropriately scaled landmark building that reinforces a clear sense of identity and improve city / precinct legibility and assist local and metro wayfinding;
- define the northern termination of Barangaroo Avenue and southern edge of Nawi Cove and elegantly 'turn the corner' into Nawi Cove;
- reshape and redesign the Block 7 building envelope massing to create Nawi Terrace as a large, north facing, sunny public open space at the heart of the block, with elevated views over Nawi Cove and direct connections to Barangaroo Station; and
- demonstrate design excellence that responds to and celebrates its city context, creates civic amenity and helps delivers another important destination for Sydney.



3.2. Built form and use

3.2.2 Building height variations and views

To better respond to city scale transit and local placemaking opportunities, the design thinking for Central Barangaroo has undergone significant development since the approval of MOD 8 in June 2016.

The Central Barangaroo design development process has taken into account many factors, including:

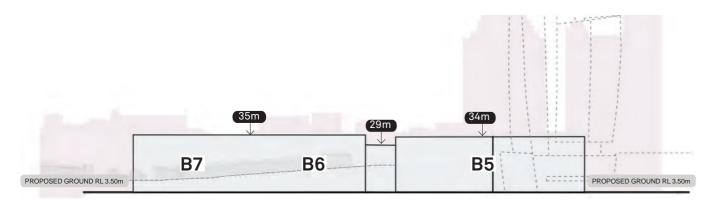
- the impact and integration of a new metro station at Barangaroo;
- a range of building envelope responses to respect views across the precinct;
- changes to ensure better connections between Central Barangaroo and Barangaroo South; and
- a robust but flexible approach to the future mix of land uses, that can respond to changing market conditions.

As a consequence of this design development, MOD 9 for Central Barangaroo proposes to:

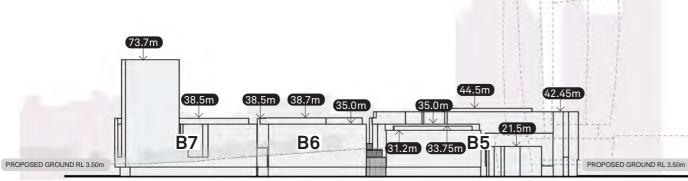
- vary the approved boundary alignment of Blocks 5, 6 and 7 and change where proposed new building heights will apply;
- vary and modulate the approved Barangaroo Height Buildings Map for Central Barangaroo, which allocates one maximum building height (RL) for each of the three development blocks: Block 5 - 34m; Block 6 - 29m; Block 7 - 35m.

The proposed MOD 9 changes to building height and block boundary alignment across Blocks 5, 6 and 7 are considered a balanced and reasonable response that will facilitate the pivotal role of Central Barangaroo as part of the overall Barangaroo renewal vision.

The proposed MOD 9 development block and building height (RL) changes for Central Barangaroo are described and illustrated on the following pages.



APPROVED BUILDING HEIGHT SECTION



PROPOSED BUILDING HEIGHT SECTION

Block 5 - Sout

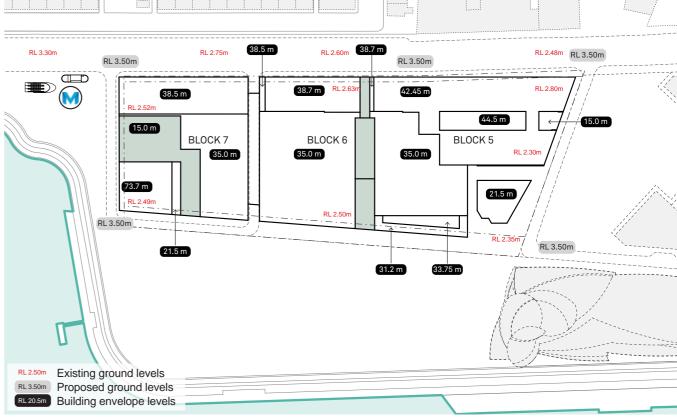
- Block 5 South is bounded by Hickson Road in the east, Barangaroo Avenue in the west and Barton Street in the south.
- Block 5 steps down from Hickson Road towards the foreshore. On Hickson Road, the proposed building height for Block 5 is 42.45m, rising to a maximum 44.5m in the centre of the block. On Barangaroo Avenue, the proposed building height for Block 5 varies between 31.2m and 35m;
- For the retail flagship building proposed on the south west corner of Block 5, the maximum building height is reduced from 34m to 21.5m.

Block 6 - Central

- Block 6 Central is bounded by Hickson Road in the east and Barangaroo Avenue in the west.
- Block 6 Central steps down from Hickson Road towards the foreshore. On Hickson Road, the proposed building height for Block 6 is 38.7m and on Barangaroo Avenue, the currently approved building height of 35m is maintained.

Block 7 – North

- Block 7 North is bounded by Hickson Road in the east, Barangaroo Avenue in the west and Street D / Nawi Cove in the north.
- Variable building heights are proposed for Block 7 in response to context and opportunity.
- On the Hickson Road frontage between Street C and Street D, a slight increase in building height is proposed from 35m to 38.5m;
- Along its Street C frontage to Barangaroo Avenue, the currently approved building height of 35m is maintained;
- To create the opportunity for Nawi Terrace in the centre of the Block 7, maximum building heights reduce from 35m to 15m
- In the north western part of the block, at the intersection of Barangaroo Avenue and Street D, maximum building height increases from the currently approved 35m to 73.7m.



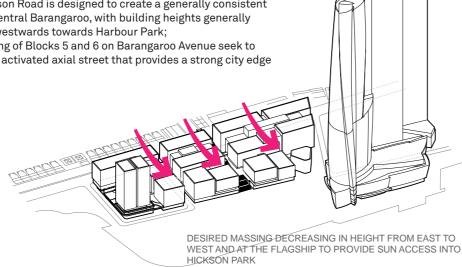
PROPOSED BUILDING ENVELOPE

3.2. Built form and use

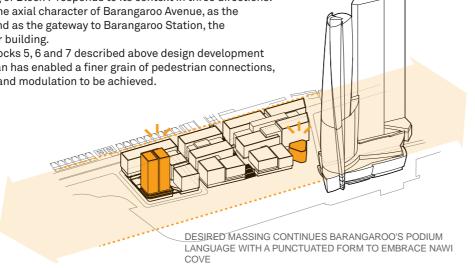
3.2.2 Building height variations and views

Precinct / building massing

- At the city scale, Central Barangaroo's role in the Barangaroo vision is to create an appropriately scaled visual transition between the natural setting and scale of Barangaroo Reserve, Nawi Cove and the historic suburbs of Miller Point and Walsh Bay, with the bustling, high rise central business district scale of Barangaroo South and the city;
- Central Barangaroo seeks to establish an overall building massing and consistent street wall, that generally responds to and extends the Barangaroo South podium datums and massing language through to Central Barangaroo;
- Overall building massing along Hickson Road is designed to create a generally consistent street wall and a civic address for Central Barangaroo, with building heights generally stepping down from Hickson Road westwards towards Harbour Park;
- Proposed building height and massing of Blocks 5 and 6 on Barangaroo Avenue seek to provide an appropriately scaled and activated axial street that provides a strong city edge to Harbour Park;



- Proposed building height and massing of Block 5 onto Barton Street seeks to frame and activate Hickson Park as a busy city scale public spaces at the heart of Barangaroo and the opportunity to create an urban marker building at the transitional space between Central Barangaroo and Barangaroo South;
- Proposed building height and massing of Block 7 responds to its context in three directions: the civic character of Hickson Road, the axial character of Barangaroo Avenue, as the southern urban frame of Nawi Cove and as the gateway to Barangaroo Station, the opportunity to create an urban marker building.
- Within the overall block massing of Blocks 5, 6 and 7 described above design development of the Central Barangaroo concept plan has enabled a finer grain of pedestrian connections, spaces and places, building massing and modulation to be achieved.



City Markers

The concept design for Central Barangaroo creates opportunities to design future landmarks or city markers that can contribute to the everyday legibility, orientation and experience of the city.

Located on the northern, southern and eastern edges, where Central Barangaroo connects and integrates with Barangaroo South and adjacent precincts, two new buildings and a new pedestrian bridge are proposed as city markers:

- 1. In Block 5, the flagship retail building
- 2. In Block 7, the proposed tower building and
- 3. A proposed new pedestrian bridge connecting to High Street

Block 7 - Arrival space and city landmark

- Defined by Hickson Road, Street D, Barangaroo Avenue and Street C, Block 7 will create the southern urban frame of Nawi Cove and will act as a gateway to Barangaroo Station;
- Positioned at the culmination of Barangaroo Ave and overlooking Nawi Cove, the north west corner of Block 7 is the opportunity for a taller building to 'turn the corner' and act as an urban marker building highlighting the location of the new metro station at Barangaroo and defining Nawi Cove as the new place to arrive in the harbour city.

Block 5 Flagship

- The Block 5 Flagship building anchors Barton Plaza on the south western corner of Block 5, close to the intersection of Barangaroo Avenue and Barton Street;
- To facilitate this future iconic landmark and enable it to be seen in the round, the Block 5 flagship building will have a reduced building height from 34m to 21.5m combined with building setbacks to Hickson Park, Harbour Park and Barangaroo South and a limited site coverage / building
- By reducing building height, site coverage and providing building setbacks, the proposed articulated massing for the Block 5 Flagship building maintains good levels of solar access and amenity to the western part of Hickson Park throughout the year;
- The proposed articulated massing for the Block 5 Flagship building opens up views to Harbour Park and the harbour from Hickson Park and facilitates the Barton Street view corridor



3.2. Built form and use

3.2.2 Building height variations and views

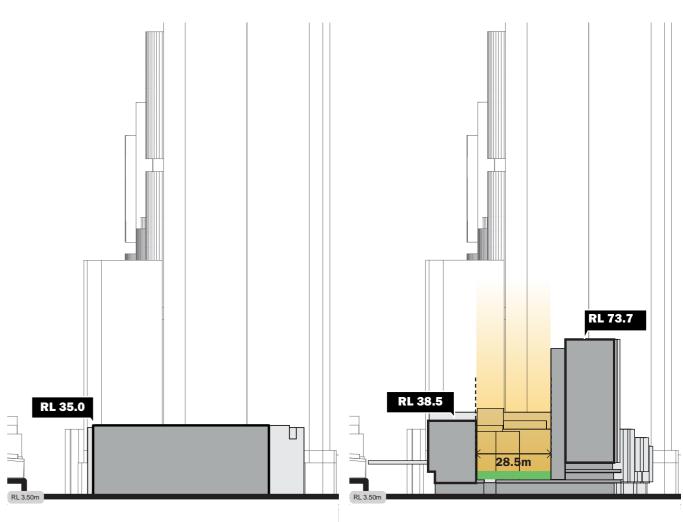
Block 7 - Arrival space and city landmark

- To create the opportunity for a more distinct and appropriate urban form, the massing of the proposed Block 7 tower is separated from the Block 7 podium.
- Massing studies have explored the relationship of tower to podium to consider the appropriate separation in form; by creating the proposed 28.5 metre separation in the street wall when viewed from Nawi Cove and Barangaroo Station, views through to Barangaroo South and the city beyond are afforded. This establishes Central Barangaroo within its city context and grounds people in place upon arrival at the western harbour
- Articulation and massing studies demonstrate how the tower can be modulated to create an architecturally distinct form one that emphasises the residential use of the building and the potential to further break down the building mass. These studies demonstrate that an architecturally responsive outcome to context, to place and to design quality can be achieved within the proposed envelope.



Block 7 - approved building envelope

Block 7 - illustrative reference design



The current approved Block 7 building envelope proposes a north facing 35m high street wall as the interface to the Nawi Cove public open space.

The proposed building envelope modulates the massing and building height of Block 7, to retain a similar street wall height to Hickson Road, create a taller building on the NW corner and create Nawi Terrace as an elevated, sunny public space in the centre of the block. As a north facing public space, Nawi Terrace creates the opportunity for a green connection with Nawi Cove, whilst connecting south to Barangaroo Steps and linking direct directly into Barangaroo Station.

DESIGN EVOLUTION OF THE BLOCK 7 ENVELOPE (NORTHERN ELEVATION)

3.2. Built form and use

3.2.2 Building height variations and views

Responding to city context and respecting views

Central Barangaroo's location on the north western edge of Sydney CBD means it's built form needs to mediate between and balance the city scale of Barangaroo and the CBD to the south, with the historic character and finer grain of Millers Point and Walsh Bay to the east and north and the naturalistic character of Barangaroo Reserve.

Central Barangaroo seeks to make an overall positive contribution to the evolving character of the north western district of the city. The general mid-rise scale and urban form of Central Barangaroo will create a strongly defined city edge that frames and activates Harbour Park to the west and Nawi Cove to the north, whilst ensuring permeability and diversity through multiple connections via new streets, steps and laneways.

Central Barangaroo's general medium scale urban form is designed to fit with its neighbours, respect views to key city landmarks and optimise, create and frame public views and vistas to foreshore parks and the western harbour.

A view and visual impact assessment has been undertaken by AECOM for the proposed Central Barangaroo envelope. The report recognises that the building envelope will facilitate an articulated, architectural form. To achieve an articulated form, the AECOM report makes recommendations to the built form with regard to:

- Ensuring an articulated and architectural building form
- Application of green roofs
- Complementing the scale of building podia across
 Barangaroo South
- Providing a contemporary and contextual response to building materiality and design.

In responding to the local city context and respecting views, the proposal for Central Barangaroo addresses:

- A. District and harbour views to and from Observatory Hill Park;
- B. Local views along existing and new streets / connections; and
- C. Sydney Observatory sky views.



3.2. Built form and use

3.2.2 Building height variations and views

District and harbour views to and from Observatory Hill Park

To the north east of Central Barangaroo, the historic Observatory Hill Park offers high level, sweeping panoramic views of Sydney Harbour and the city, views which are achievable from many locations and in many directions.

Observatory Hill Park's harbourside geography and elevated city setting is best appreciated with a walk around the park, where:

- to the east, it offers glimpses of Sydney Opera House;
- to the northeast, it provides clear and oblique views of Sydney Harbour Bridge;
- to the north and northwest, it offers an uninterrupted sweep of Sydney Harbour from Milsons Point, Lavender Bay and Blues Point to Me Mel (Goat Island);
- to the west, it offers views over Central Barangaroo to the
- to the southwest, south and southeast, the high rise urban form of Barangaroo and Sydney's CBD creates a strong city setting for the park.

The proposed redesign of Central Barangaroo's Block 7 creates the opportunity for an urban response that integrates the new

Barangaroo Metro Station, creates Nawi Terrace as a new elevated public open space and combines with the amphitheatre setting of Nawi Cove to create a new civic gateway and civic space that celebrates arrival into the city and onto Sydney's western harbour foreshore.

Reshaping Block 7 creates the opportunity for a taller building with a clear identity that becomes the city marker for Barangaroo Station, Nawi Cove, Barangaroo Reserve and Central Barangaroo as a new city destination and fulfils the civic gateway role.

Whilst western harbour views from Observatory Hill Park and Millers Point are to some extent impacted by the proposed Block 7 tower building these impacts can be mitigated by the building's limited height and a slender form and shape and the public open western harbour, Balmain East, White Bay and Pyrmont; and space opportunity the taller form creates within the centre

> At the local precinct level, the Block 7 tower building can shape the northern termination of Barangaroo Avenue, 'turning the corner' into Nawi Cove and create an appropriately scaled landmark building to improve precinct legibility and assist local (metro) wayfinding and activate the southern edge of Nawi Cove.





3.2. Built form and use

3.2.2 Building height variations and views

Local views along existing and new streets / connections

To better connect with, build upon and improve the city's urban structure, Central Barangaroo seeks to create new east-west streets and pedestrian connections that link with existing streets and create / enhance public views to the harbour and the foreshore parklands.

Central Barangaroo's five proposed east-west street and pedestrian connections are:

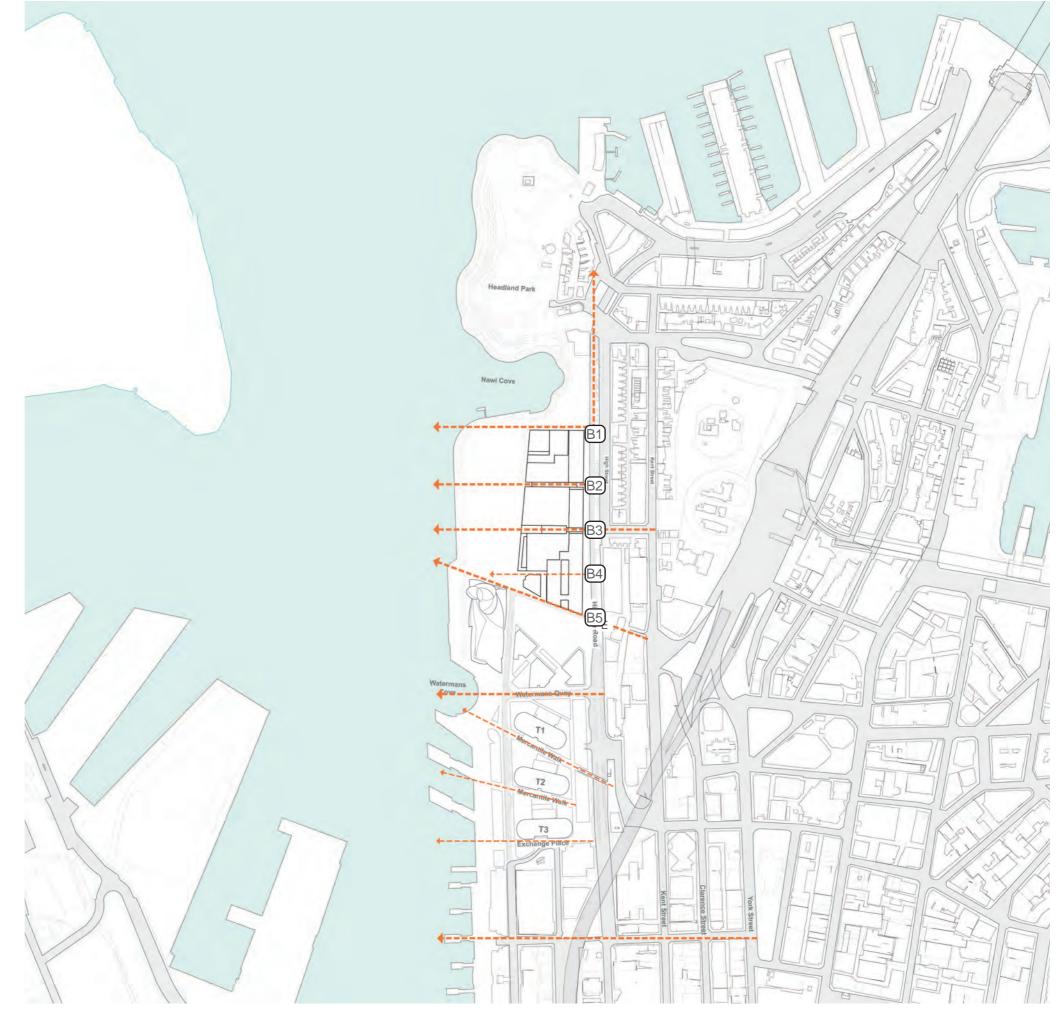
B1. Street D - a new pedestrian friendly street that connects Hickson Road and High Street with Harbour Park and activates the southern edge of Nawi Cove;

B2. Street C - a new pedestrian friendly street between Blocks 6 and 7, that connects Hickson Road and High Street with Harbour Park and the western harbour;

B3. Kent Street / High Street / Harbour Park - a potential pedestrian connection and view corridor that directly links historic Millers Point with Harbour Park and the western harbour foreshore;

B4. Laneway B - a new pedestrian laneway designed within Block 5, that directly connects Hickson Road with Harbour Park and the western harbour, via Barton Plaza;

B5. Gas Lane / Barton Street - a new pedestrian and street connection, visually and directly linking Kent Street to Harbour Park and the western harbour, via Gas Lane, Bond Plaza, Barton Street, Hickson Park and Barton Plaza.



3.2. Built form and use

3.2.2 Building height variations and views

View Considerations from HIgh Street and Kent Street High Street and Kent Street are historic north-south streets in Millers Point. Kent Street is one of Sydney's longest streets and was named in 1810 by Gov. Macquarie after the Duke of Kent.

High Street forms part of a group of early twentieth century workman's terraces, built c. 1911 by the Sydney Harbour Trust and created by quarrying to sea level required for the Darling Harbour section of Hickson Road.

Both High Street and Kent Street run at higher levels and step up 1. in elevation from the foreshore elevation of Nawi Cove, Hickson Road and the proposed Central Barangaroo. High Street has a variable elevation that ranges from approx. RL 20m in the north and south and dropping to approx. RL 10m at its midpoint opposite the historic KU Lance Children's Centre. Kent Street has more constant elevation that ranges from approx. RL 23m in the north at the junction with Argyle Street, to approx. RL 24m in 2. the south at the junction with High Street.

Depending upon location and aspect, High Street and Kent Street properties have western harbour views towards Barangaroo Reserve, Nawi Cove, East Balmain, White Bay, Pyrmont, Barangaroo South.

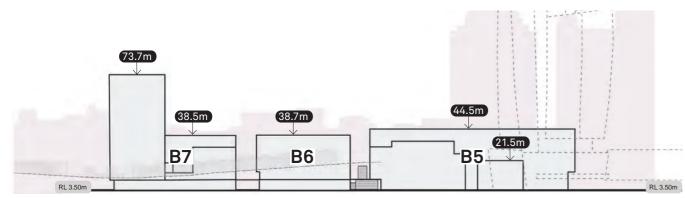
Existing and proposed building envelope for Central Barangaroo

The current Barangaroo Concept Plan, as it applies to Central Barangaroo, has a building envelope with approved building heights that range from RL 35m in the north to RL 34m in the south, separated by a narrow section at RL 29m. Whilst these existing approved building envelope heights are greater than properties located on High Street and Kent Street, the impacts of the proposed Central Barangaroo project to views from High Street and associated properties and Kent Street and associated properties, will vary depending upon both location and aspect.

The MOD 9 proposal for Central Barangaroo seeks to modulate the massing of the approved building envelope by introducing new streets and new pedestrian connections, whilst refining the urban form and distribution of height within the overall building

To enable visual permeability and address westerly views, the proposed MOD 9 building envelope seeks to::

- Create Street D as a new public street that defines the northern extent of Block 7 and respects the setting and form of Nawi Cove and Barangaroo Reserve, whilst retaining westerly public domain views from High Street, as well as High Street properties and Kent Street properties located north of the KU Lance Children's Centre;
- Create Street C as a new public street between Block 6 and Block 7, which acts as an east west view corridor to the western foreshore for elevated public domain views from High Street, including a number of High Street and Kent Street properties;
- Create a new public connection and view corridor from the southernmost section of High Street, Millers Point, through Central Barangaroo to the western foreshore, thereby retaining westerly public domain views from High Street, Kent Street and Agar Steps, including a number of High Street and Kent Street properties.



PROPOSED BUILDING HEIGHT SECTION





B2: STREET C PROVIDES A VIEW CORRIDOR TO THE **HARBOUR**









Image showing the development envelope of the Approved Concept Plan for MOD 8 and the potential massing of the Proposed Concept Plan (MOD 9) (Source: AECOM, August 2021)

3.2. Built form and use

3.2.2 Building height variations and views

Local views along existing and new streets / connections

B4 - Laneway B

Laneway B is a proposed finer grain pedestrian connection between a revitalised Hickson Road, to Barton Plaza and leading to Harbour Park and the western harbour foreshore.

Designed as an activated retail link within Block 5, Laneway B will enable ground level views from Hickson Road through to Barton Plaza leading to a series of spaces and experiences.

B5 - Gas Lane / Barton Street

Central Barangaroo MOD 9 proposes Barton Street as a permanent, two way street that connects Barangaroo Avenue with Hickson Road. This change will improve and better manage pedestrian movement and safety by enabling pedestrians to walk directly from Gas Lane / Bond Plaza over Hickson Road via a pedestrian crossing, onto the northern pavement of Barton Street and directly into Harbour Park and the foreshore parklands

The Barton Street alignment will create a direct view corridor that extends from Bond Plaza on the western side of Hickson Road to the western harbour foreshore. At the higher, Kent Street level, this street alignment and view corridor will connect and visually extend along Gas Lane and enable glimpsed views of Barangaroo and the western harbour from both Gas Lane and Kent Street.



This view looks west from Bond Plaza along Barton Street. It illustrates the direct view corridor towards Harbour Park and the western foreshore, framed by the Crown Sydney Hotel Resort and the proposed building envelope and massing for Block 5 of Central Barangaroo. (Source: AECOM, August 2021)



Artist impression of the interface of Hickson Park and Harbour Park,

showing the separation between Crown and the flagship building



3.2. Built form and use

3.2.2 Building height variations and views

Sydney Observatory sky views

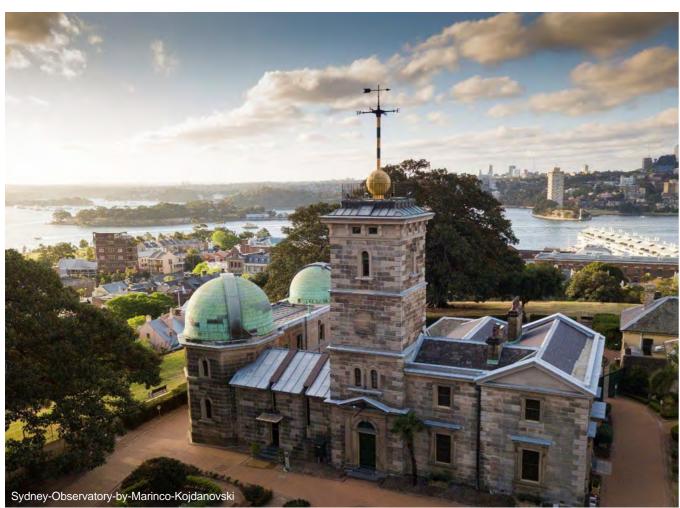
When viewed from Observatory Park and Sydney Observatory, Central Barangaroo's medium rise urban form generally lies below the western horizon line. The exception is the proposed Block 7 tower building, located on the corner of Barangaroo Ave and Street D, which does interrupt the horizon line.

From the perspective of Sydney Observatory, the 73.7m height of the proposed Block 7 tower building obstructs an area of sky that is less than 10 degrees above the horizon and occupies an area that is less than 1% of the total night sky. As such, the proposed Block 7 tower building is too low in the sky to have any impact on the quality of night time observations from Sydney Observatory.

'The viewing levels on the first floor of observatory's north and south domes are both at approximately RL54.0m. Given that the tops of all the buildings in Block 5 and Block 6 are well below this level, the buildings in these blocks will not obstruct the sky view from Sydney Observatory.

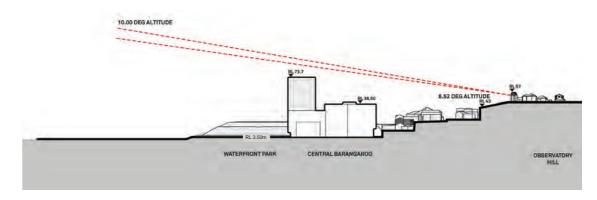
Of the three buildings in Block 7, only the taller tower building is high enough to obstruct the sky view from Sydney Observatory, but the area of sky obstructed is all less than 10 degrees above the horizon, in the area of sky where it is too low to permit viable observing. Thus the presence of the proposed taller tower building in Block 7 will have no adverse effect on the sky view from Sydney observatory.'

Source: Central Barangaroo - Sydney Observatory Sky View Impact Assessment; UNSW, 7 July 2021

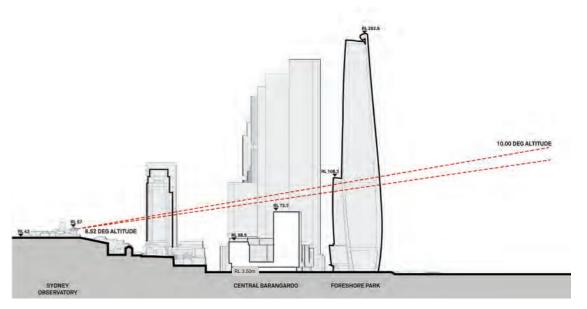




Plan illustrating the Azimuth clear zone range 236° to 303° for Central Barangaroo Blocks 6 and 7 (Source: Aecom Sky View Impact Assessment, Septembner 2021)



Section looking north illustrating the sky view 10 degree altitude



Section looking south illustrating the sky view 10 degree altitude

3.2. Built form and use

3.2.2 Building height variations and views

High Street Bridge

The High Street pedestrian bridge is an opportunity to better connect Millers Point with Central Barangaroo, via the Barangaroo Steps to Harbour Park. This local connection can improve access and permeability between Observatory Hill Park and the city with Barangaroo's network of foreshore parks, providing significant public benefit.

A proposed bridge across Hickson Road continues the precedent of pedestrian bridges that connect the city escarpment west towards the harbour that include:

- Mercantile Walk Bridge across Sussex Street, connecting Wynyard Station to Exchange Place; and
- Napoleon Bridge across Sussex Street, connecting Napoleon Street to Shipwright Walk.

A bridge proposed in this location would fully span Hickson Road and be constructed at a height allowing sufficient clearance to large vehicles. Visually, the bridge could provide a frame for north-south views along Hickson Road, whilst acting as a local city marker to assist legibility and wayfinding. The following images illustrate the visual impact of a pedestrian bridge in this location.

If supported, a pedestrian bridge connection between Central Barangaroo and Millers Point will be subject to a future detailed design and engagement process, separate to this concept plan modification.





1. A view looking north on Hickson Road, with Hickson Park to the left of the image and Bond Plaza to the right.



2. A view looking north on Hickson Road, with Block 5 to the left of the image.



3. A view looking south on Hickson Road, with the future Barangaroo Station to the right of the image.

3. Central Barangaroo3.2. Built form and use

3.2.2 Building height variations and views









3.2. Built form and use

3.2.3 Land uses and development blocks

Central Barangaroo offers an intensity of land uses to support the Sydney Metro, anchor the substantial public realm adjacent the harbour, and provides a frame for the events and urban life so associated with Sydney's waterfront.

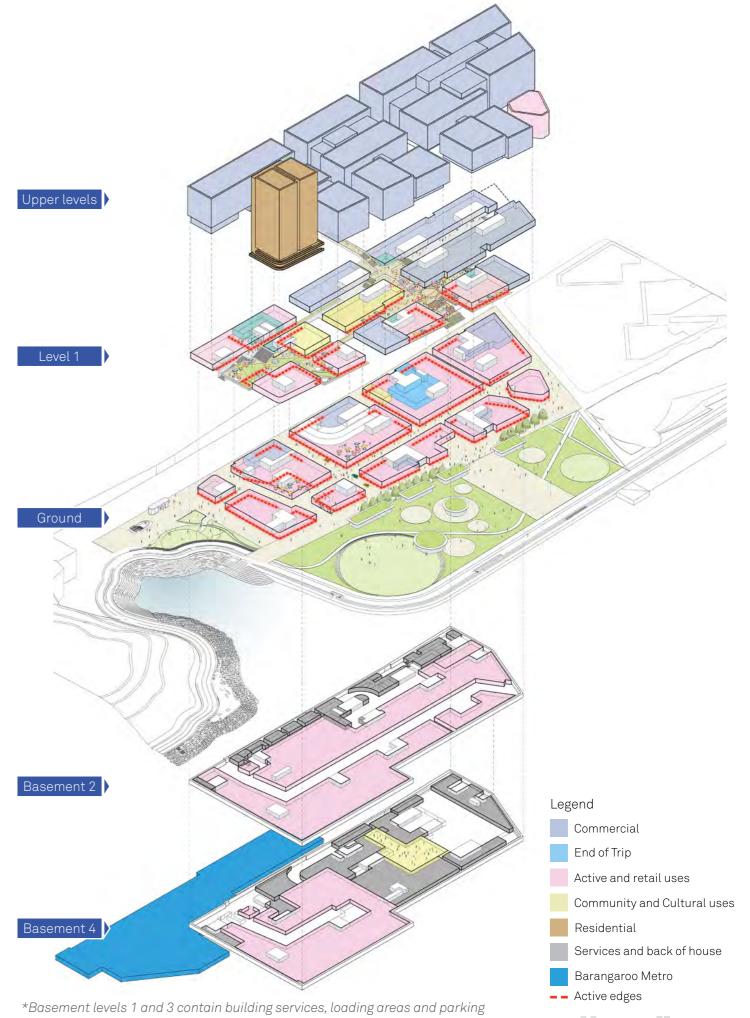
The overall intent for Central Barangaroo is to create a flexible land use framework that supports the creation of a dynamic new activity centre and city gateway on the western harbour foreshore.

The general principles seek to create a multi-level and highly permeable place that directly connects Barangaroo Station into Central Barangaroo with vertically integrated retail uses that connect and extend through basement levels to activate the local streets and the network of Level 1 pedestrian links and spaces.

Located above the the active uses on ground level and Level 1 is campus style commercial workspace connecting Blocks 5, 6 and 7 and residential uses in Block 7 overlooking Nawi Cove and Harbour

Central Barangaroo's blocks contains a mix of land uses according to the table below:

	Block 5	Block 6	Block 7
Basements	Retail, back of house services to all blocks and community uses		
Ground	Retail, dining, entrance lobbies and basement entry (from Hickson Road)		
Level 1	Ancillary retail and community uses to activate key public areas. Commercial office and building entries.		
Upper levels	Commercial office	Commercial office	Commercial office / residential



3.2. Built form and use

3.2.4 Integration with Barangaroo Station

Central Barangaroo will provide key connections to Barangaroo Station at Nawi Cove, with direct portals providing accessibility to the park, directly into Block 7 and through the multitude of ground plane and upper level passages to Hickson Park and beyond to Barangaroo South.

Engaging with Nawi Cove and the Sydney Metro Portal

Central Barangaroo will facilitate Barangaroo Station as the western harbour arrival point to the city. It will do this by providing:

- clear connections and pathways from the CBD to the station
- activated pathways above and below ground that encourage use of those connections
- a permeable network offering choice of movement paths
- establishing a high quality frame to Nawi Cove, where its cultural activation can be magnified

Framing Nawi Cove and Barangaroo Station allows a new destination to be created - one that leverages its harbour setting and offers a new opportunity in Sydney's network of public

Direct connections from Block 7

To facilitate the choice of connections to Metro, and offer alternative pathways for different times of the year, Block 7 will connect directly to the station concourse at lower ground. This connection will direct pedestrians through the light-filled retail network to Barton Plaza and Hickson Park, as well as providing an alternative pathway to Nawi Cove and the Harbour Park.

Integrating transport modes

Sydney Metro offers a new destination opportunity at the Western Harbour. It will also be the interchange point for other forms of travel, and so Hickson Road is being designed to accommodate bus stops and cycle paths.

Central Barangaroo promotes a high quality exchange experience by:

- providing activated and weather protected frontages adjacent to the bus stand on Hickson Road
- enabling clear sight lines from station entrances to the bus stand and cycle network
- accommodating end of trip facilities for building tenants so that use of the cycle network is maximised.

Barangaroo Station Barangaroo Station concourse is located 25 metres below Hickson Road.

Station Platforms

Projected metro travel times from Barangaroo: Martin Place - 2 mins; Central - 8 mins; Victoria Cross - 3 mins; Chatswood - 9 mins.

The Barangaroo Station concourse is directly and seamlessly connected into Central Barangaroo, arriving at the heart of the Block 7.

Bus stop

Proposed bus stops on Hickson Road will create an interchange with Barangaroo Station and directs pedestrian paths into Central Barangaroo and Nawi Cove.

Nawi Cove

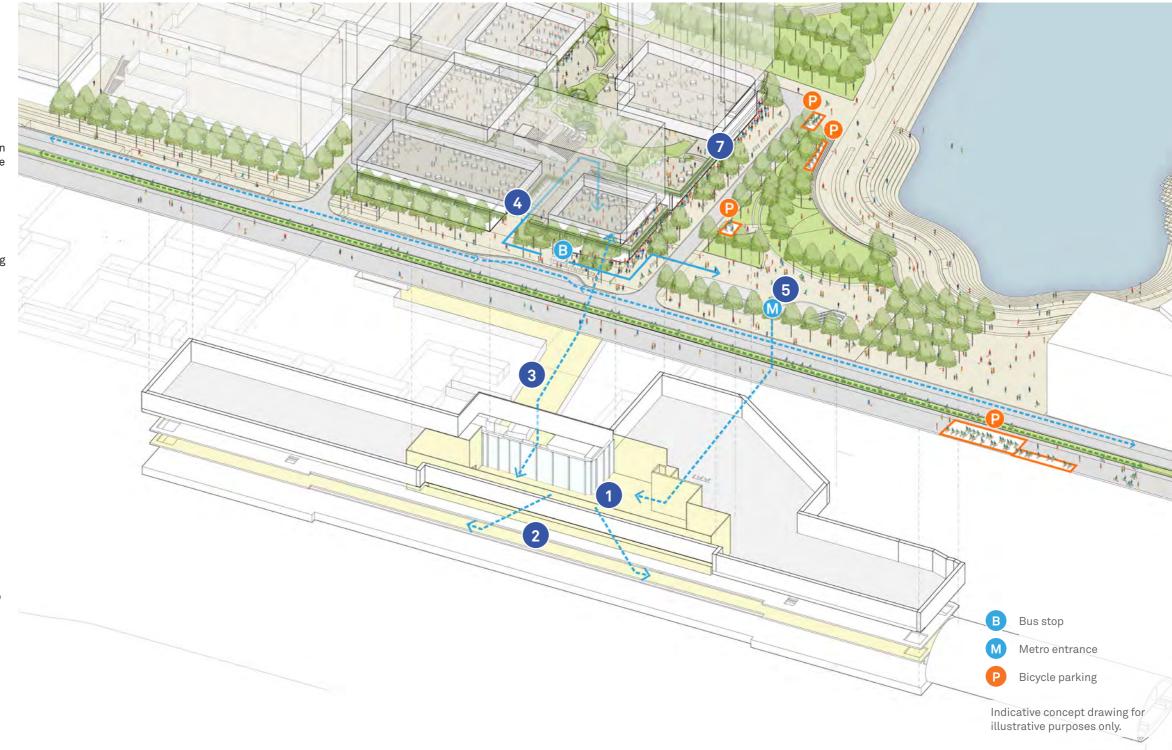
Nawi Cove contains the escalator and lift portals to the Barangaroo Metro Station and will function as a the western harbour arrival into the CBD. Central Barangaroo complements Nawi Cove's public space by framing activity and allowing clear and activated pedestrian access to transit.

Promenade

Hickson Road to be transformed into a wide, tree lined avenue providing a comfortable and high amenity environment for walking and cycling.

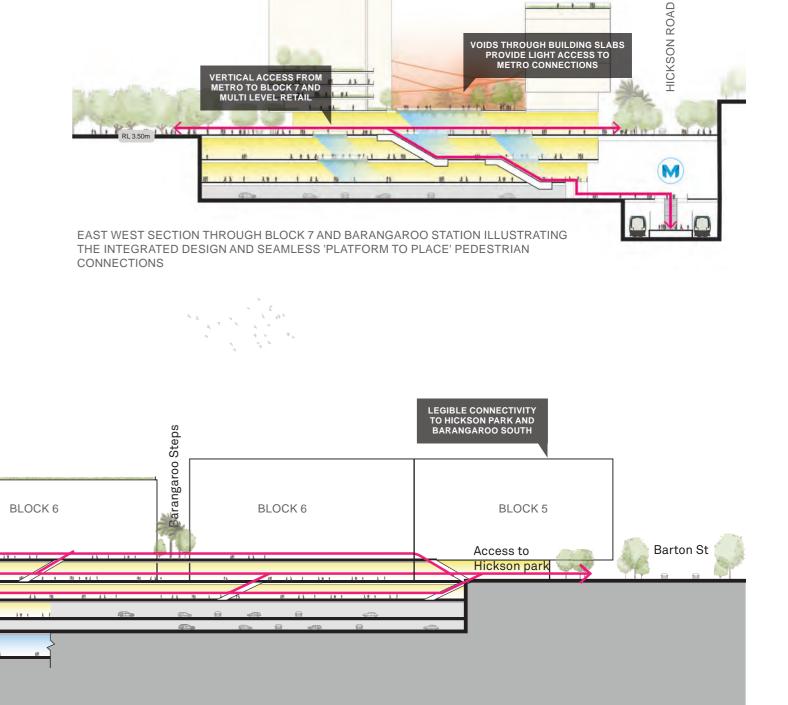
Nawi Cove Activation

The north facing edge of Central Barangaroo will frame Nawi Cove and offer shops, cafes, restaurants and building entrances provide an engaging pedestrian environment and promote public transit use.



3.2. Built form and use







DIRECT METRO CONNECTIONS AT BLOCK 7

BLOCK 7



NORTH SOUTH SECTION THROUGH NAWI COVE TO HICKSON PARK ILLUSTRATING THE INTEGRATED DESIGN AND THE THREE MAIN METRO ENTRANCES WHERE BARANGAROO STATION CAN BE ACCESSED - NAWI COVE, NAWI

BARANGAROO STATION PORTAL AT NAWI COVE

North Entrance

Barangaroo Station

3.2. Built form and use

3.2.5 Waterfront shopping, dining and leisure destination



In Sydney's more established areas, innovative approaches are required to create new mixed-use activity centres that are well serviced with good public transport and can become an integrated part of the city's growth and renewal. In these circumstances, it's rare that a landmark waterfront CBD precinct combines with a state of the art metropolitan rapid transit system for the opportunity to create a vibrant new activity centre on the harbour foreshore.

The realisation of Central Barangaroo, the Western Harbour Gardens and Barangaroo Metro Station, presents a once-in-ageneration opportunity to re-imagine Sydney's western foreshore as an iconic world-class waterfront retail, dining, entertainment and leisure destination, for locals and visitors alike.





Strategic Design Drivers

The key strategic design drivers underpinning Central Barangaroo's retail and leisure strategy are:

1. Strategic location

Central Barangaroo is the realisation of a significant new retail, leisure and cultural destination strategically located in the north western quadrant of Sydney CBD, capable of serving multiple local, city and regional markets, by:

- servicing the growing worker populations of the Sydney's Western and Northern CBD and Barangaroo;
- connecting with and enriching the local residential and business communities of Millers Point, Walsh Bay and The Rocks, which are currently poorly serviced by retail and business services;
- optimising the frequent services and easy access offered by the future Sydney Metro network, to service both worker and residential populations in North Sydney and the Lower North Shore locations with good access to Victoria Cross and Crows Nest metro stations, which are 3 mins and 5 mins that create a fusion of between inside and outside. travel time to Barangaroo Metro Station, respectively;
- accessing Sydney' metropolitan population via the new metro network and the wider transit network, who are seeking a waterfront lifestyle city destination
- attracting local, regional and overseas visitors to Barangaroo, Barangaroo Reserve and Sydney Harbour

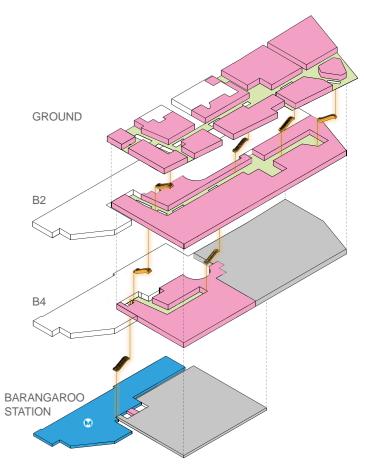
2. New city destination

Central Barangaroo is the opportunity to create a new city destination on the western foreshore of Sydney Harbour, offering world-class retail, leisure, lifestyle and cultural uses, as well as workplace and residential uses.

Combine with Nawi Cove to create an extraordinary new place to arrive in the city and provide metro passengers a 'platform to place' experience between Barangaroo Station, Central Barangaroo, Barangaroo South and the Western Harbour Gardens.

3. A connected and active place

Central Barangaroo is designed as a highly permeable place through a network of active streets, laneways and arcades. These offer multiple east to west and north to south connecting pathways to seamlessly connect metro with the harbour precinct and the local historic neighbourhoods. Central Barangaroo' street network is complemented by the creation of a landscaped human scale public spaces and places



THE RETAIL FRAMEWORK

Barangaroo Station

Retail mall

Non retail basement area



3.2. Built form and use

3.2.5 Waterfront shopping, dining and leisure destination



Fashion & Active Streets

Fashion retailing will be a key element characterising Central Barangaroo's streets, lanes and arcades. Central Barangaroo's multi-dimensional fashion offer will showcase some of the best fashion houses in Australia and international retailers, appealing to city locals and overseas visitors alike. International mini majors located in below ground levels will easily connect with the streets, lanes and arcades and to Barangaroo Station.

Food Emporium

110

At Central Barangaroo's northern end, next to Nawi Cove, there is potential to introduce a Food Emporium or Market Hall, anchored by a supermarket. Easily and directly accessed via Barangaroo Station, the Food Emporium will bring together a range of fresh produce and food specialty stores in a 'street market' setting to service and enrich the daily needs of local residents, busy commuters, visitors and the time-poor workers.

Waterfront Dining

Waterfront dining experiences will be a mainstay of Central Barangaroo and cater to the full spectrum of the consumer needs.

With views towards the waterfront over Harbour Park, Barangaroo Avenue will be characterised and activated with a range of restaurants and alfresco dining opportunities. This will create a relaxed and sophisticated environment for the bustling daytime workers, as well as the weekend visitors. Café and dining opportunities will be created in spaces and places throughout the precinct, providing places to gather, dwell, sit back and relax.

Luxury Retail

Focused on the flagship retail in Barton Plaza, a luxury retailing precinct is proposed that connects with Crown Sydney Hotel Resort and Barangaroo South. As the hub of Barangaroo, this precinct will bring together a collection of the best global fashion houses that distinguish Barangaroo as a world class destination.



The proposal is to develop a world class and iconic retail and lifestyle centre, delivering to the city, a premier destination for shopping and lifestyle experiences.

To respond the changing dynamics of the retail, dining and entertainment landscape, Central Barangaroo will develop, implement and evaluate short, medium and longer term strategies that can adeptly respond to evolving customer preferences.









3.2. Built form and use

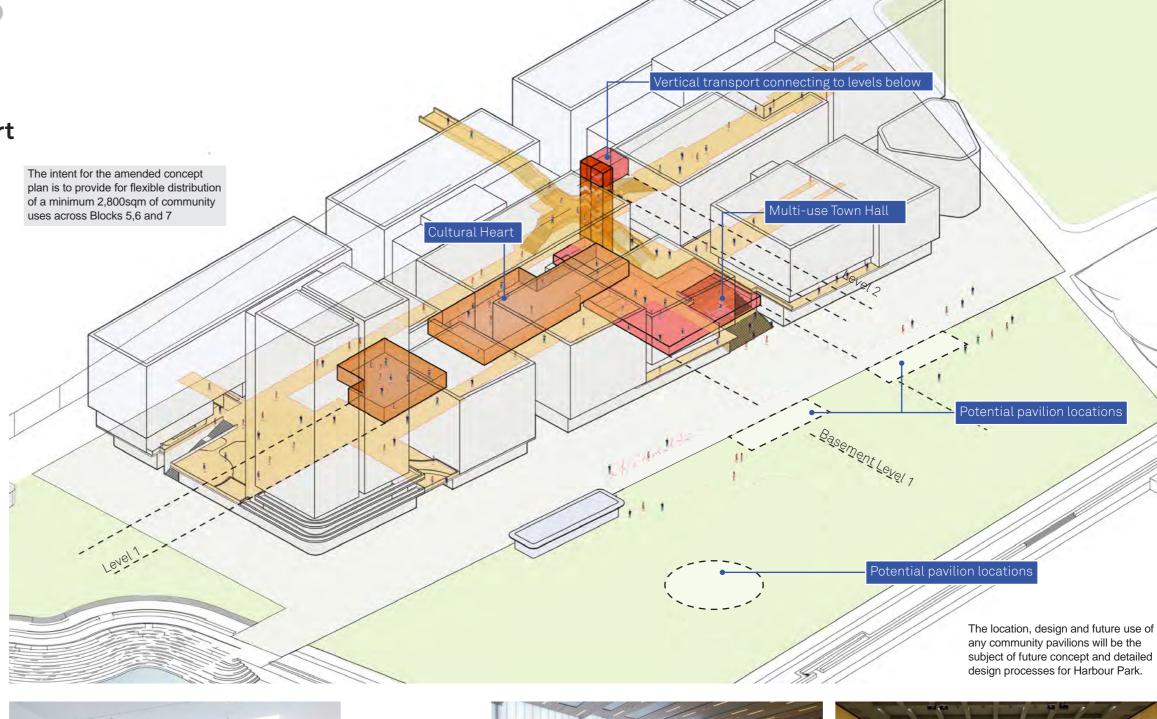
3.2.6 Civic and community heart

As the final stage of Barangaroo, Central Barangaroo proposes to become the civic and community heart of the precinct, whilst connecting with and enriching the nearby historic communities of Millers Point, Walsh Bay and The Rocks.

Central Barangaroo's community and cultural facilities are anchored at the heart of the proposed precinct, where Barangaroo Steps, Hickson Road, the (level 1) Verandah, Barangaroo Avenue and Harbour Park, all interconnect. As part of MOD 9, Central Barangaroo's community and cultural facilities are proposed to comprise:

- 1. A large and flexible multi-purpose venue of up to 1,000sqm in the basement level, adaptively designed to be suitable for a range of community and cultural uses including but not limited to: community hall and meeting space, dance or drama school studio, performance space, rehearsal space, small format cinema, exhibition space, event space, gallery space and the like. The venue's entrance foyer is to be easily located on Hickson Road, marked by the High Street bridge connection and Barangaroo Steps;
- 2. Two adaptable community and cultural spaces are proposed on the Level 1 Verandah. Connecting with Barangaroo Steps, these spaces are adaptively designed to be suitable for a range of community and cultural uses and at the centre of community and cultural activity within Central Barangaroo.
- 3. Moving down into the foreshore parklands there are opportunities for the introduction of a number of community pavilions within Harbour Park. Potential future community park pavilions could align along Barangaroo Ave and the edge of Harbour Park and / or be located within the park itself. The community park pavilions can provide opportunities for the design of elegant, architecturally designed pavilions that can offer a range of adaptable spaces for a wide range of programmed activation, whilst complementing future park design and character. The location, design and future use of any community pavilions will be the subject of future concept and detailed design processes for Harbour Park.

Access to these community assets will benefit from the open and permeable character of Central Barangaroo and provide significant public benefit for the community.



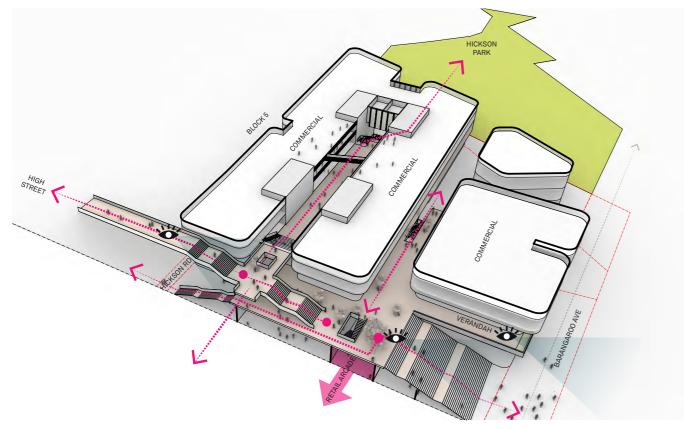






3.2. Built form and use

3.2.7 Next generation workplace



Cities are generally resilient and enduring places that respond and adapt to change. However, a pandemic such as COVID-19 can cause significant disruption across society – and in turn, impact infrastructure, city form, building design and everyday life.

In our workplaces, the COVID-19 pandemic accelerated evolving workplace usage patterns and workspace design challenges that had been underway for some time.

In the context of the pandemic, Central Barangaroo is a unique opportunity to re-imagine Sydney's next generation workplace, revitalise the city, focus on human centred design and set new benchmarks for healthy and sustainable workplaces.

Directly connected to the city's new metro network, Central Barangaroo proposes a sustainable campus style workplace in a unique harbour setting and the new place to arrive and work in the city. The Central Barangaroo workplace proposes to exemplify world's best practice design to create an egalitarian, sustainable, human scale and human centred workplace, designed for optimal health, comfort and wellbeing, set in extensive harbour foreshore parklands.

Central Barangaroo proposes a next generation workplace that will be:

- Resilient and regenerative to create a long life, loose fit, low impact workplace, designed to be climate positive, water positive, connected with nature, healthy and responsive to human needs
- 2. 'Inside out + outside in' to embed a workplace design strategy that melds 'inside' with 'outside', creating strong connections to light, fresh air and nature, with workspaces connecting directly with outdoor terraces, roof gardens and the extensive Western Harbour Gardens
- 3. Design for change to create flexible workspaces designed to manage future workforce fluidity, density and distancing, whilst fostering collaboration and cultural growth.

 Designed with contiguous and connected floors that offer good daylight access, ventilation, visibility and circulation, the workplaces can be compartmentalised into networked spaces or smaller working neighbourhoods and suitable for large of smaller organisations









- 4. Easy access and safe movement to provide workers and visitors with easy, direct and safe access to public transport, pedestrian and cycling networks, and design for safe movement and circulation between buildings, parks, spaces across Barangaroo
- 5. Smart spaces to create smart and technologically advanced workspaces that augment and support healthy human interaction and collaboration. Embrace smart and embedded building and place technologies that support the employee experience whilst monitoring performance of environmental, sustainability, health and wellness initiatives
- 6. Third places to create convenient and well-designed 'third places and spaces' to augment and extend the workplace allowing people to connect and work in alternative settings that can add to the vitality of the place



Central Barangaroo's next generation workplace will create a flexible, connected and healthy campus style environment that meets the emerging needs of modern business.

3.2. Built form and use

3.2.8 City foreshore living



Building upon a unique foreshore setting overlooking Nawi Cove, Central Barangaroo will offer opportunities for harbourside living, whilst setting new benchmarks for Sydney's world-class quality of life.

Central Barangaroo proposes a range of apartments designed for contemporary city living. Living on the Barangaroo foreshore will provide all the benefits of the harbour on your doorstep, with the convenience of the city nearby, including::

- being part of Nawi Cove, as a new harbourside activity hub and new place to arrive in the city, that will bring together an eclectic mix of restaurants, bars, cafes and shops, entertainment, culture and lifestyle experiences
- 2. easy and direct access to Sydney CBD, North Sydney CBD and the wider metropolitan region, via Barangaroo Station and the city's evolving metro network
- easy walking access to cultural attractions in local historic suburbs of Millers Point, Walsh Bay, The Rocks and Circular Quay
- direct access to extensive foreshore public open space including Barangaroo Reserve, Harbour Park and Hickson Park, combined with easy walking and cycling connections in either direction along the Harbour Walk / Wulugul Walk
- a range of harbour views, to the north over Nawi Cove and Barangaroo Reserve, over the western harbour towards Balmain and Pyrmont and more panoramic higher level views towards the Harbour Bridge, Sydney Opera House and the CBD.





Future residential uses in Central Barangaroo will propose a range of apartments types and sizes, designed and specified for contemporary city living.

At this early concept plan stage, the percentage mix of apartments currently anticipated for Central Barangaroo has not been determined. The actual number, mix and size of proposed apartments will be determined through market research and form part of later, more detailed development applications for Central Barangaroo.



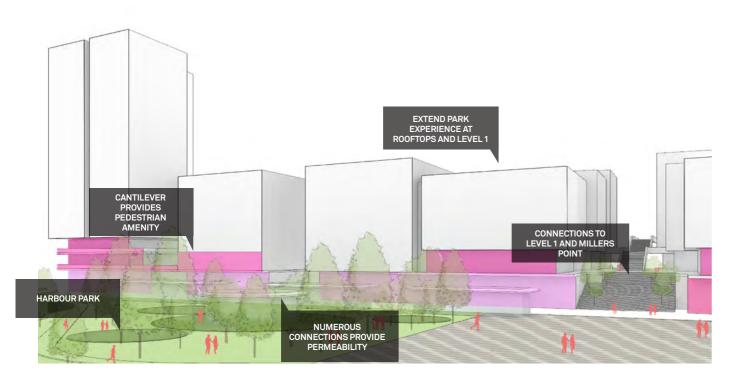




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3.2. Built form and use

3.2.9 Building interfaces at ground and lower levels

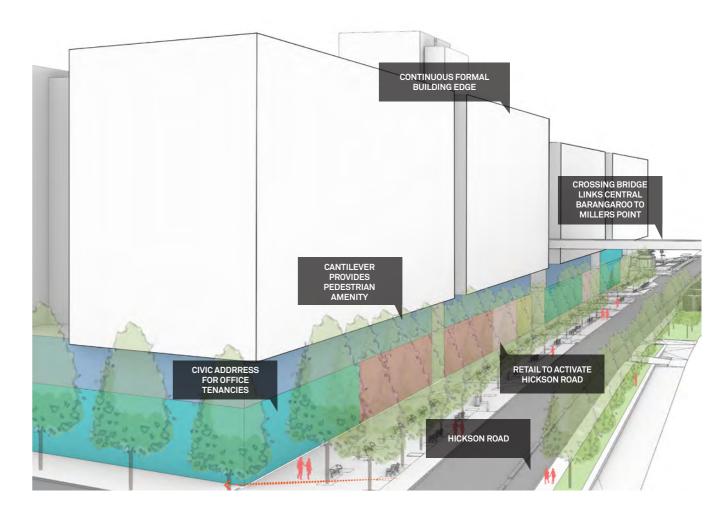


Interface with Barangaroo Avenue

118

To complement the role of Harbour Park and Barangaroo Avenue, the interface of built form will provide an activated edge, and permeability to the city via east-west streets and connections. The street wall will accommodate experiential retail offer at ground with connections to terraces at level 1 and rooftops that allow the park experience to fold over and integrate with Central Barangaroo's built form.

Laneways, streets and the Barangaroo Steps provide engaging connections east to west and break up the building form. Buildings will cantilever over Barangaroo Avenue to provide pedestrian and alfresco amenity.

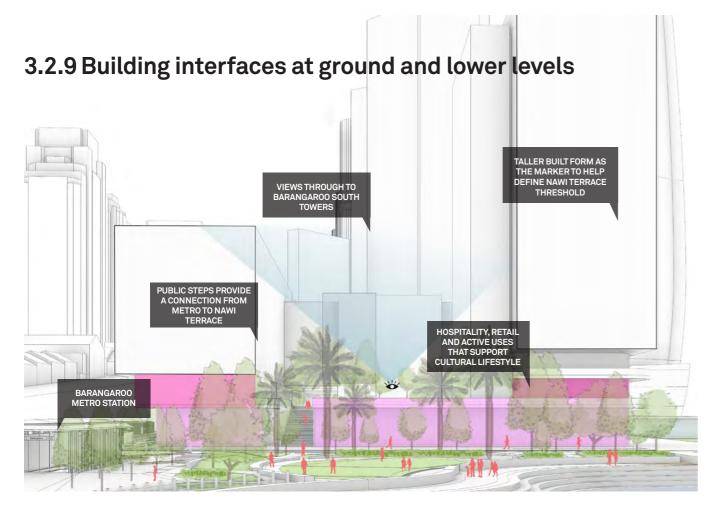


Interface with Hickson Road

In contrast to the playful and dynamic edge of Barangaroo Avenue, Hickson Road forms the primary business address for commercial office tenancies. It is more restrained in form, providing a civic quality that continues the building edge character in Barangaroo South and referencing the solidity of urban form provided by the opposite Hickson Road wall.

Office lobbies and retail uses will activate Hickson Road. Streets and laneways break the mass of the street wall. Where buildings continue over pedestrian mid-block links, the building facade is recessed to reinforce legibility of entry and diminish the length of the street wall. Buildings cantilever over the Hickson Road footpath to provide pedestrian amenity.

3.2. Built form and use



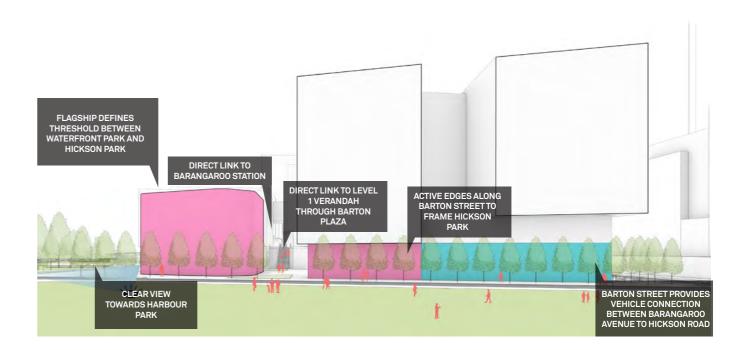
Interface with Nawi Cove

120

Central's interface to Nawi Cove supports it as a cultural lifestyle hub. A major arrival point, buildings and the public realm announce entry for Metro patrons to the city and embrace Nawi Cove. Thus Nawi Cove and the adjacent Harbour Park function as an event space.

Ground level retail and restaurant uses support event activity at Nawi Cove. Buildings are separated above ground to provide views through to the towers of Barangaroo South from Nawi Cove, and to offer entry to Nawi Terrace on level 1. Steps to level 1 continue the Sydney tradition of transitions to raised platforms offering views to the harbour and links pedestrians through the Verandah to Barton Plaza and Hickson Park.

Taller built form announces Nawi Cove as a destination, and marks Barangaroo's intersection with the harbour edge. A shared street provides slow vehicle accessibility and defines the interface between Central Barangaroo and Nawi Cove.



Barton Street and Block 5 Interface

The interface to Hickson Park provides the final framing element, creating it as an urban green space, distinct from the expansiveness of Harbour Park. Buildings are separated from the park by Barton Street, a vehicle connection between Barangaroo Avenue and Hickson Road. Ground level lobbies and retail face onto and activate Hickson Park.

The retail flagship acts as an architectural pavilion to provide a distinctive and memorable city marker to the threshold between Hickson Park and Harbour Park. Designed and positioned as an object in the cityscape, it frames views through to the harbour from Hickson Park, whilst defining pedestrian connections through Central to Barangaroo Station and level 1. Opportunity exists for weather protection along Barton Street.

3.2. Built form and use

3.2.10 Block structure, permeability, building cantilevers and amenity

As the final stage of precinct renewal, Central Barangaroo presents Public domain - Pedestrian comfort and amenity integrated design opportunities to:

- 1. rethink the design of Central Barangaroo's block structure for greater permeability and finer grain connections;
- 2. optimise the location opportunity to create a best practice workplace; and
- 3. create comfortable streets and spaces with good pedestrian amenity and activation.

Key design moves

To fully realise these opportunities, the MOD 9 proposal seek to articulate and extend the Central Barangaroo building envelope to enable building cantilevers and floor space beyond the building lines of Blocks 5, 6 and 7, for Barangaroo Avenue, Hickson Road and Street D.

The following key design moves are integrated into the MOD 9 proposals for Central Barangaroo:

Structure, permeability and movement

- Design a finer grain block structure to improve north-south movement and pedestrian amenity between Barangaroo Metro Station and Barangaroo;
- Separate building massing in Blocks 5, 6 and 7 to create a new 6m wide, mid-block pedestrian arcade that connects Nawi Terrace with Barangaroo Steps and Barton Plaza;

Workplace design and amenity

- Design best practice human scale and human centred workplaces, designed for sustainability, optimal health, comfort
- For future workplaces in Blocks 5, 6 and 7, separate commercial floorplates to create a centralised spine of north-south atria spaces, enabling a connected network of horizontal and vertical and movement;
- Design for contiguous and connected floors that offer good daylight access, ventilation, visibility and circulation, with a minimum depth of 22m for commercial floorplates;
- To enable optimum commercial floorplates depth to be achieved, design buildings to cantilever over Barangaroo Avenue, Hickson Road and Street D.

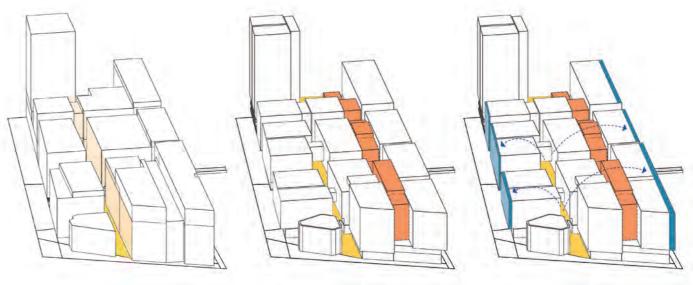
- Design integrated building cantilevers to benefit the public realm interface by offering weather protection through shade and shelter that improves pedestrian comfort, amenity and
- Create activated, comfortable and human scale pedestrian interfaces with three of Barangaroo's significant parks and spaces: Barangaroo Avenue on the eastern edge of Harbour Park, Street D on the southern edge of Nawi Cove and Barton Street on the northern edge of Hickson Park;
- Design integrated building cantilevers to enhance the ground level interface and retail experience and positively contribute to future street character of Barangaroo Avenue, Street D, Barton Street and Hickson Road;
- Create a dynamic and high quality facade zone with opportunities for creative climate and weather responsive
- Design the north-south pedestrian arcade as a direct connection, that offers shade and shelter for optimum pedestrian comfort and amenity and is activated with a mix of retail, dining and community/cultural activities.

Central Barangaroo's streets

Cohesive streetscapes are formed in part by the continuity of buildings within city blocks - particularly their scale, street wall character and articulation at lower levels. In Central Barangaroo, the design intent for each street and its built form interface, will resonate with its intended future role and function:

- Barangaroo Avenue a pedestrianised axial extension of Barangaroo Avenue character defines a strong and activated city edge, whilst responding to the future character and activation of Harbour Park;
- Hickson Road A tree lined boulevard connecting Barangaroo with the city, with a consistent street wall that creates the precinct's civic address;
- Street C an east-west shared pedestrian street zone that connects Hickson Road with Harbour Park; and
- Street D an east-west shared pedestrian street zone that defines and activates the public realm interface between Central Barangaroo Block 7 and Nawi Cove.

Interface	Barangaroo Avenue	Street D	Hickson Road
Cantilever Distance beyond development boundary	3m	3m	3m
Facade projection zone	650mm	650mm	650mm

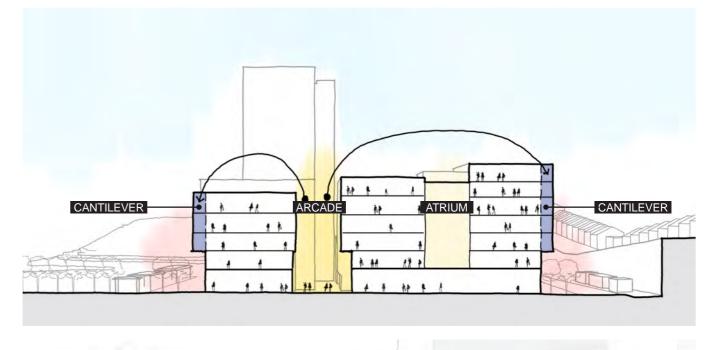


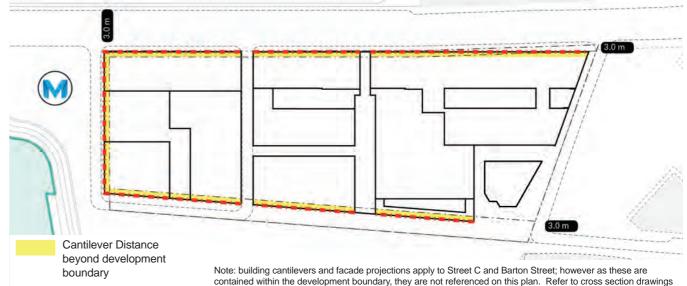
1. A central arcade provides north-south pedestrian access and allows daylight to ground level activation.

Facade projection zone

for detail

- 2. A central atrium provides daylight access for contemporary workplaces.
- 3. Cantilevers offer civic amenity and a pedestrian scale at street level, containing displaced floorspace.





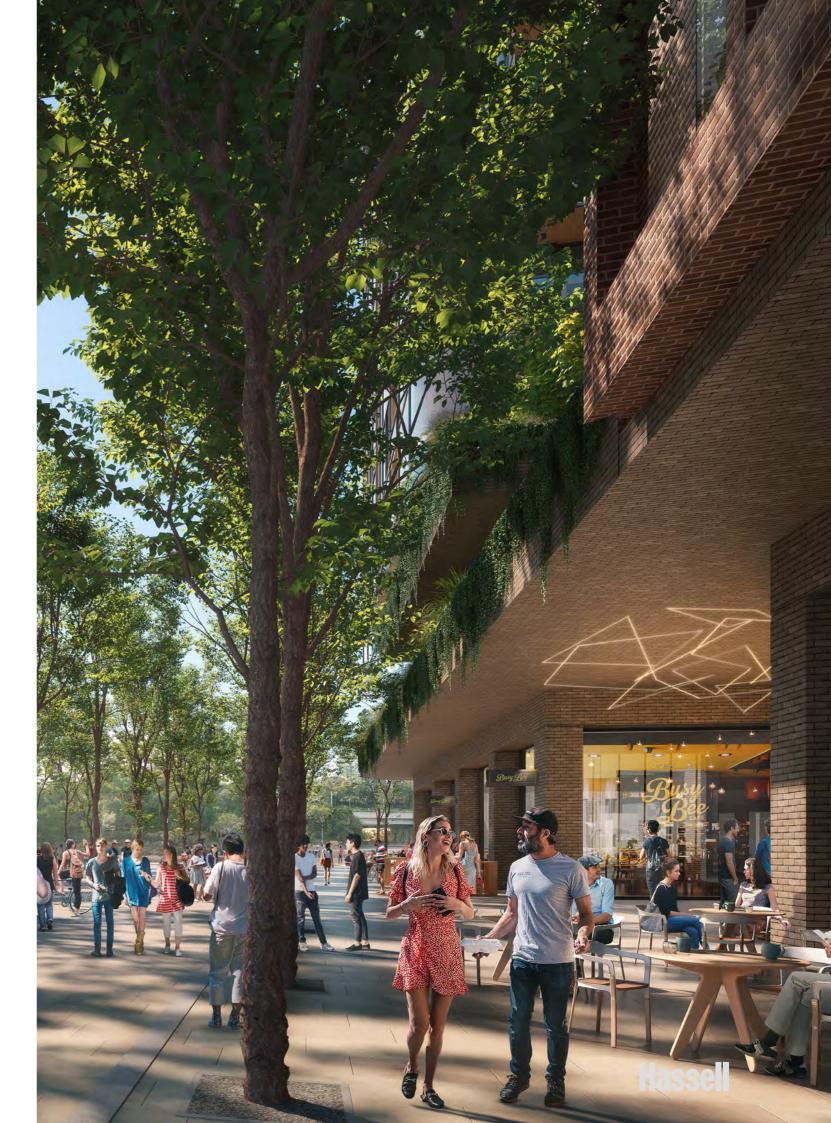
3.2. Built form and use

3.2.10 Block structure, permeability, building cantilevers and amenity

Barangaroo Avenue

Barangaroo Avenue will be focused on retail with a high degree of activation. The architectural intent is to create a clear distinction between the retail ground level, with a dynamic façade, and the commercial architecture above. Each will have a distinct identity, and the associated cantilever enables a clear separation to be made. The associated cantilever also offers a zone of weather protection, and when combined with the associated potential awning and street tree planting, provides a comfortable environment





3.2. Built form and use

3.2.10 Block structure, permeability, building cantilevers and amenity

Integrating Central Barangaroo with a re-imagined Hickson Road

Hickson Road was created in the early 20th century as a key wharf renewal project by the newly created Sydney Harbour Trust. Hickson Road was designed to follow the shoreline connecting Circular Quay to Walsh Bay and Darling Harbour and was a key element in the response to the outbreak of bubonic plague in the city.

The road was named after Robert Hickson, the first president of the Sydney Harbour Trust and continues to play an important structural role in facilitating movement and access within the city. Sussex Street and the western section of Hickson Road provide the main street access for the Barangaroo precinct and the western harbour. The section of Hickson Road to the south of Munn Street is characterised on its eastern side by the heritage listed High Street wall which offers no shade or shelter and provides poor amenity for pedestrians and cyclists.

Hickson Road is being rejuvenated as part of the Barangaroo project by Infrastructure NSW, and in concert with the adjacent metro station by Sydney Metro. Whilst Hickson Road is not a part of the Central Barangaroo concept proposal, it provides an important interface and civic address.

The completion of Barangaroo Station as one of four CBD stations on Sydney Metro's City and Southwest line, will transform the way people arrive in the city. When combined with realisation of the Central Barangaroo precinct, these major projects come together to act as catalysts for re-imagining the role and design of Hickson Road.

Transforming Hickson Road

Re-imagining the role and design of Hickson Road presents transformative opportunities to:

- Create Hickson Road as a busy tree lined city boulevard that integrates Barangaroo's renewal with adjoining historic areas of Millers Point & Walsh Bay;
- Optimise active transport and design bus, walking and cycling networks to seamlessly integrate with Barangaroo Station;
- Design Hickson Road with a high amenity landscaped streetscape that provides pedestrian comfort, shade and shelter and safe walking and cycling environments;
- Create Hickson Road as the civic address for Central Barangaroo
- Activate the western edge of Hickson Road with ground floor retail, lobbies for commercial workplaces and community and cultural facilities and new pedestrian priority streets and laneways that connect to Central Barangaroo's Harbour Park;
- Create safe ground level and high level pedestrian connections across Hickson Road, that link Millers Point with Central Barangaroo and the western harbour foreshore:
- Design Central Barangaroo 's built form on Hickson Road to reflect its civic role, including an appropriate form and scale of buildings and integrated design of the public realm with awnings, cantilevers and tree planting that can provide shade and shelter in all weather; and
- Explore opportunities to connect and design with Country as well as reflect the role of Hickson Road as The Hungry Mile during the Great Depression.

Contributing to Hickson Road as a new city boulevard

The vision for Hickson Road is for leafy, tree-lined city boulevard. Designed at a human scale, with reduced road lanes, generous shaded pedestrian footpaths and a dedicated bike lane on its eastern edge, Hickson Road will give pedestrians and cyclists greater priority and make the city more walkable.

To create an appropriate civic response and a high amenity active edge designed as part of the public realm, for Block 5, 6 & 7, a building cantilever is proposed along Hickson Road. The building cantilever is designed to improve pedestrian amenity by providing shade and shelter, whilst working in conjunction with the avenue style continuous canopy of street trees proposed for both western and eastern footpaths.

This building cantilever seeks to reinterpret the building colonnade typology further south on Sussex Street in Barangaroo South. The key design differentiator for Central Barangaroo is the alignment of Barangaroo Station located below Hickson Road and the need to exclude structural supports within the western footpath.



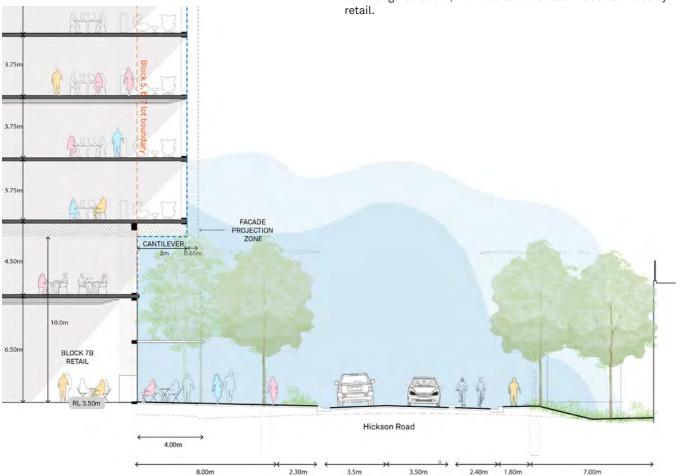
3.2. Built form and use

3.2.10 Block structure, permeability, building cantilevers and amenity

Hickson Road – The proposed cantilever will provide a civic interface to the public realm, extending the colonnade built form language evident along Hickson Road in Barangaroo South. The differentiator for Central Barangaroo is the requirement to exclude structural supports within the footpath zone; rather, the intent for Central Barangaroo is to correlate the tree line and canopy of street tree planting to continue the colonnade character. The canopy of the trees will assist in creating an urban room along Hickson Road – further emphasising its intended civic character.



Photograph showing the built form condition along Hickson Road at Barangaroo South, with a substantial colonnade activated by



Barton Street – The building does not project beyond the Block 5 southern boundary. Here, the cantilever condition is created via a greater ground level setback, providing a comfortable footpath width between the ground floor building edge and Barton Street kerb line.



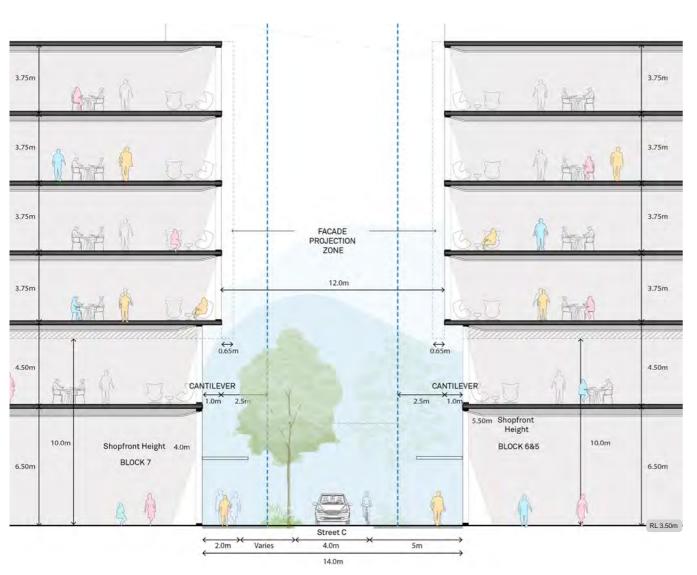
3.2. Built form and use

3.2.10 Block structure, permeability, building cantilevers and amenity

Central Barangaroo - Street C

Street C is an east-west shared pedestrian street zone that connects Hickson Road with Harbour Park and internal to the B4 mixed use development area.

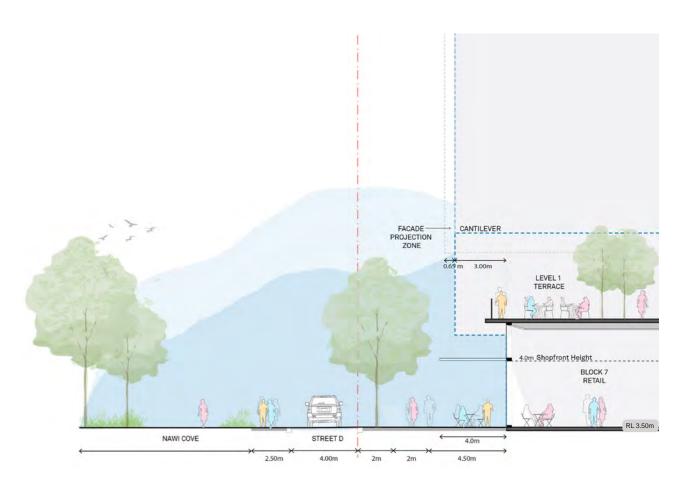
The proposed 1m building cantilever expression is contained within the development zone, extends along the street to unite the building design and create a cohesive streetscape environment.



Central Barangaroo - Street D

Street D is an east-west shared pedestrian street zone that defines and activates the public realm interface between Central Barangaroo Block 7 and Nawi Cove and is designed to function as an extension of the Barangaroo Avenue retail experience.

To provide shade and shelter for pedestrians and alfresco dining along the street edge, a 3m building cantilever is proposed for Street D. The building cantilever zone allows for a comfortable public interface at street level whilst enabling the commercial and residential buildings above to have distinct architectural expression responding to their use.



3.2. Built form and use

3.2.11 Proposed Concept Plan GFA

As Barangaroo's final renewal project, Central Barangaroo will create a vibrant mixed use city destination. With its own distinct identity, Central Barangaroo will draw together retail, commercial and residential uses with community, cultural and civic spaces and foreshore parklands, to create and become the vibrant civic and community heart of Barangaroo.

Central Barangaroo presents a unique opportunity to:

- optimise the benefits of new metropolitan transit infrastructure and improved connectivity offered by the new metro station at Barangaroo;
- create a transit enhanced hub with a commensurate agglomeration and intensity of mixed use activity;
- create Central Barangaroo and Nawi Cove as a new place to arrive in the city and a new cultural hub as part of a broader revitalisation of the north west quarter of the city.

The concept design for Central Barangaroo proposes a complex and multi-level mixed-use development that successfully integrates above ground retail, commercial, residential, community and cultural uses, with a direct below ground pedestrian connection to Barangaroo Station, below ground retail, community uses, parking, loading and servicing.

Central Barangaroo's basement integrates a direct and easy pedestrian connection to and from Barangaroo Station with vertical integration with proposed below ground retail and multiple connections through Central Barangaroo to Harbour Park, Hickson Park, Hickson Road, Barangaroo South and Nawi Cove / Barangaroo Reserve.





3.2. Built form and use

Proposed Concept Plan GFA 3.2.11

Extension of basement retail in the RE1 zone

MOD 9 proposes to extend the Central Barangaroo basement area beyond the B4 Mixed use boundary line, beneath Barangaroo Avenue and into the RE1 zone. The basement area beneath the RE1 zone includes proposed retail, car parking and plant.

Development and design rationale

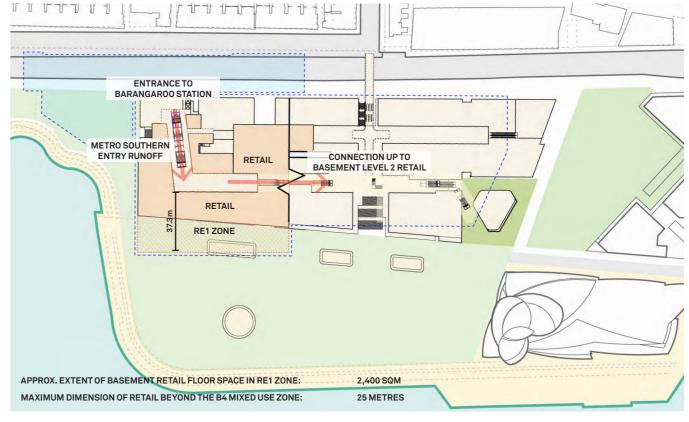
The development and design drivers for the proposed change

- facilitate the potential for a supermarket below ground at Central Barangaroo, of a size that can meet increasing demand from Barangaroo's growing population of workers, residents and visitors and fulfil latent local demand from local residents and workers in the existing areas Millers Point, Walsh Bay and The Rocks;
- create sufficient building depth to accommodate and service a mix of anchor tenants within the basement including a high-quality supermarket and associated specialty retail; and
- design the supermarket as a legible retail anchor, located adjacent to the main north south retail circulation path and with easy and direct access to and from Barangaroo Station;
- design the retail as part of an integrated and connected network of retail arcades, streets and laneways on multiple levels

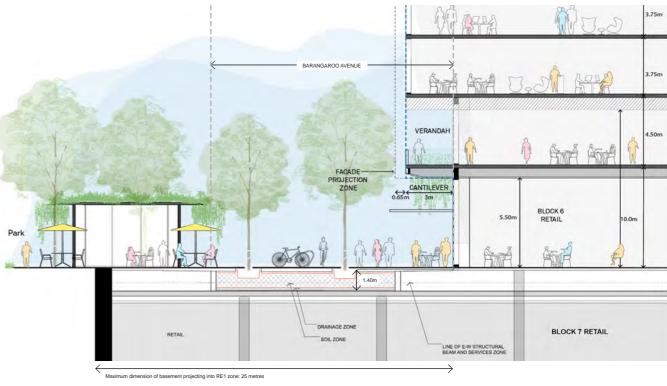
The below ground floorspace proposed for Central Barangaroo will have no discernible urban design impact at ground level and will enable sufficient depth for mature tree planting along Barangaroo Avenue.

Section A illustrates the extent of the retail basement area and demonstrates the capability for 1400mm deep soil pits that can support mature trees and ensure the quality of the public domain outcome for Barangaroo Avenue and Harbour Park.





ILLUSTRATIVE PLAN INDICATING BASEMENT METRO CONNECTIONS AND POTENTIAL RETAIL LAYOUT



SECTION A

3.2. Built form and use

Proposed Concept Plan GFA 3.2.11

MOD 9 seeks to increase the maximum permissible GFA in the Barangaroo Concept Plan from 602,354sqm to 708,041sqm and located within the Central Barangaroo precinct and Barangaroo Reserve.

The proposed GFA in MOD 9 for Central Barangaroo and Barangaroo Reserve comprises of:

- up to 116,189 sqm of above ground GFA within Blocks 5, 6
- up to 28,166sqm of below ground GFA within Blocks 5, 6 and 7
- a minimum of 2,800sqm of Community uses GFA within Blocks 5, 6 and 7 and
- a minimum of 6,000sqm and up to 18,000sqm of Community uses GFA within the RE1 Zone of Barangaroo Reserve, to allow for future community / cultural facilities located in the Cutaway.

Central Barangaroo GFA

The proposed GFA for Central Barangaroo will allow for an intensity of uses that supports both day time and night time activity. It will enhance sustainable transport options by locating mixed use floor space immediately adjacent to Barangaroo Station, as well as supporting city scale events by providing extensive foreshore public space. The mix of cultural, commercial and retail uses will become a driver for high-quality jobs and economic activation.

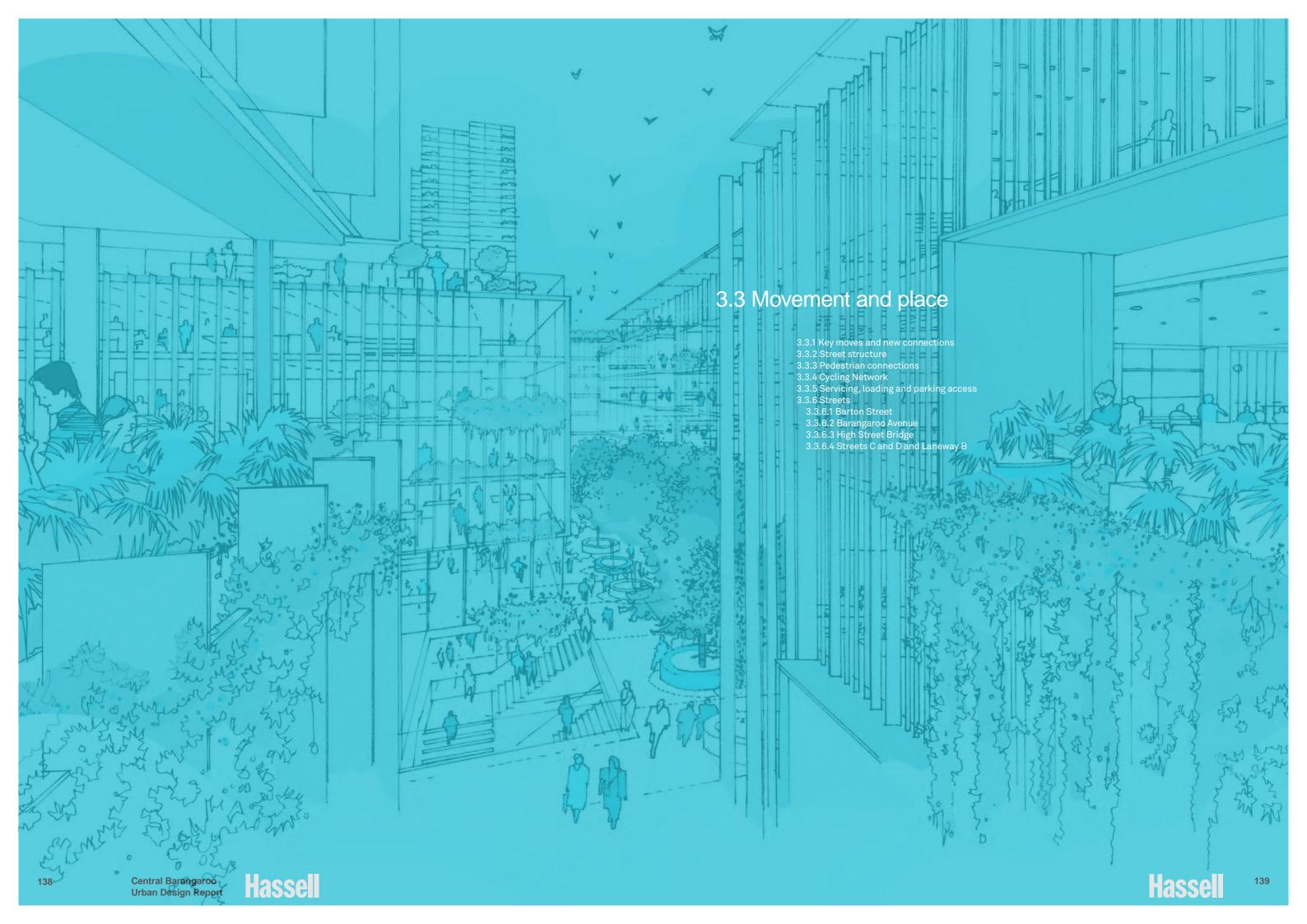
Barangaroo Reserve, Cutaway GFA

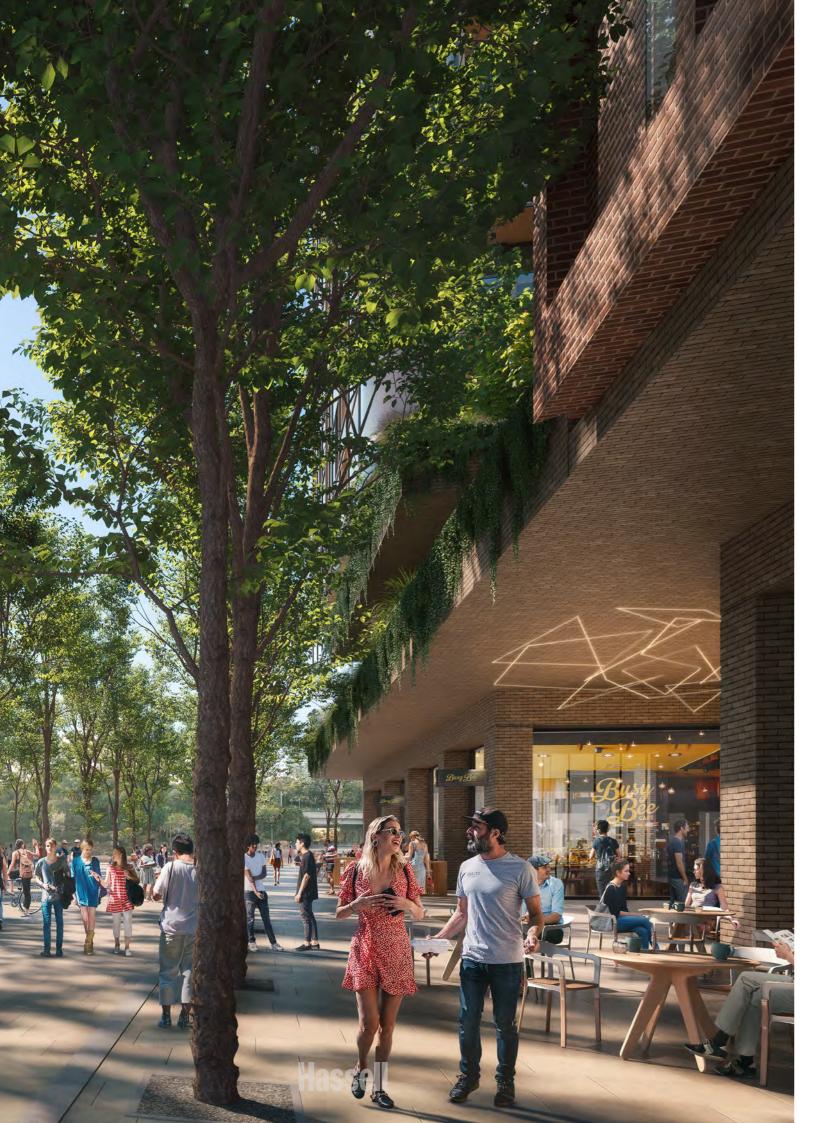
The allocation of a minimum 6,000sqm and up to a maximum of 18,000sqm GFA within the Barangaroo Reserve RE1 Zone allows for the future development of a multi-function community, cultural and exhibition facility in the Cutaway, located beneath Barangaroo Reserve. This future facility is located within 100m of Barangaroo Station and can be easily accessed via Nawi Cove and Barangaroo Reserve.

The table below summarises the proposed GFA for Central Barangaroo and Barangaroo Reserve, in the context of the currently approved Barangaroo Concept Plan.

Precinct and Block	Total GFA (Max.) (sqm)	Residential GFA (Max.) (sqm)			
BARANGAROO SOUTH - EXISTING					
Block 1	1,927	0			
Block 2	197,280	0			
Block 3	129,934	10,515			
Block 4A	92,629	91,816			
Block 4B	21,508	20,637			
Block X	18,908	16,463			
Block Y	77,500	22,600			
Barangaroo South subtotals	539,686	162,031			
CENTRAL BARANGAROO - PROPOSED					
Blocks 5, 6 and 7 above ground	116,189	28,000			
Blocks 5, 6 and 7 (below ground)	28,166	0			
Blocks 5, 6 and 7 subtotals	144,355	28,000			
COMMUNITY AND ACTIVE USES (RE1)					
Community uses (in the Cutaway, located below the Barangaroo Reserve RE1 Zone)	18,000	0			
Active uses in the RE1 Zone	5,000	0			
Community uses in the RE1 Zone (Central Barangaroo and Barangaroo South)	1,000	0			
Community and active use subtotals	24,000	0			
BARANGAROO CONCEPT PLAN TOTAL	708,041				







3.3. Movement and Place

3.3.1 Key Moves and New Connections

Reconfiguring ciruclation throughout the precinct will provide new and safer connections for both pedestrians and vehicles. Permeablility through the blocks from harbour to Hickson road are maintained, however, reallocating street space to pedestrians along Barangaroo Avenue, and Street B will deliver better public domain and circulation outcomes.

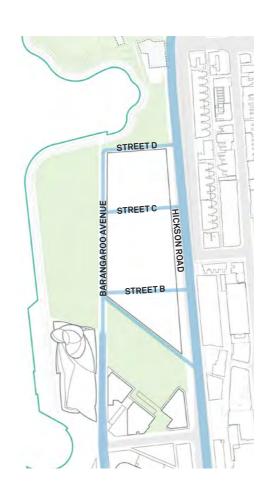
Pedestrian movement from Block 5 to the waterfront park will be more seamless and Barangaroo Steps will enter onto the now people-focused boulevard of Barangaroo Avenue, allowing activation and program to continue on the boulevard.

High St pedestrian bridge will enable acces from High street and surrounding Millers point into the Central Barangaroo precinct as well as activating Barangaroo Steps.

pedestrians along Barangaroo Avenue, and Street B will deliver better public domain and circulation outcomes.

The new Metro Station at Barangaroo will seamlessly connect pedestrians into the basement retail levels of Central Barangaroo Block 7 and onto Barton Plaza, as well as Nawi Cove.

New pedestrian connections to the lower ground precincts provides for greater permeability to Barangaroo Station.







PROPOSED CONCEPT PLAN

3.3. Movement and Place

3.3.2 Street structure

Three shared street types have been identified for Central Barangaroo. Their functionality and location has been based on the intended function of the adjacent public realm, and providing adequate circulation around the block edges.

Pedestrian Spaces

The Barangaroo Steps and movement spaces that directly interface with areas of public realm focus have been designated as pedestrian spaces. Ordinarily, vehicles will be prohibited from these areas, with the exception of service vehicles for enabling

The area of Barangaroo Avenue in front of Blocks 5 and 6 will directly link with Barangaroo Steps and Waterfront Park. A civic program will be promoted through public realm design and a dynamic events calendar.

One Way Shared Streets

Streets C and D have been identified for one-way shared streets. Pedestrians will be prioritised through public realm design, any zones where vehicles are permitted, kept to a minimum. Areas for alfresco dining, general street seating, planting and pedestrian promenading will be maximised.

Urban Streets

Other streets within Central Barangaroo, notably Hickson Road, have been designated as urban streets. Hickson Road will carry two-way vehicle flows, but contain ample and comfortable pedestrian footpaths and a separated cycle path.



STREET AND MOVEMENT STRUCTURE



3.3.3 Pedestrian connections

People's city experience is a fundamental driver to the urban design approach at Central Barangaroo. Prioritising pedestrian movement and circulation is therefore a critical development outcome. Streets, public spaces and promenades need to be comfortable, safe and attractive to promote a lively, well used and loved precinct.

The basis of the pedestrian network is formed by the ladder of streets framing the development blocks. These provide pedestrians with direct access to buildings as well as to the harbour beyond and back into the city grid.

Complementing the role of the streets is the Wulugul Walk and associated public domain. Here, the pedestrian experience is founded on the harbour. Views from Central Barangaroo out to the harbour embed the precinct in its place and encourage users to get out and experience Sydney.

The pedestrian movement framework will be complemented by additional pathway options providing connections to the east via existing stairs from Hickson Road, as well as a mid-block north-south link between Blocks 5, 6 and 7. This will function as an activated retail arcade, offering a direct connection to Barangaroo Station.



Street based pedestrian connection ← → Non-street based pedestrian connections Potential pedestrian bridge crossing Potential surface pedestrian crossing Existing surface pedestrian crossing 0 Wulugul Walk

PROPOSED PEDESTRIAN NETWORK

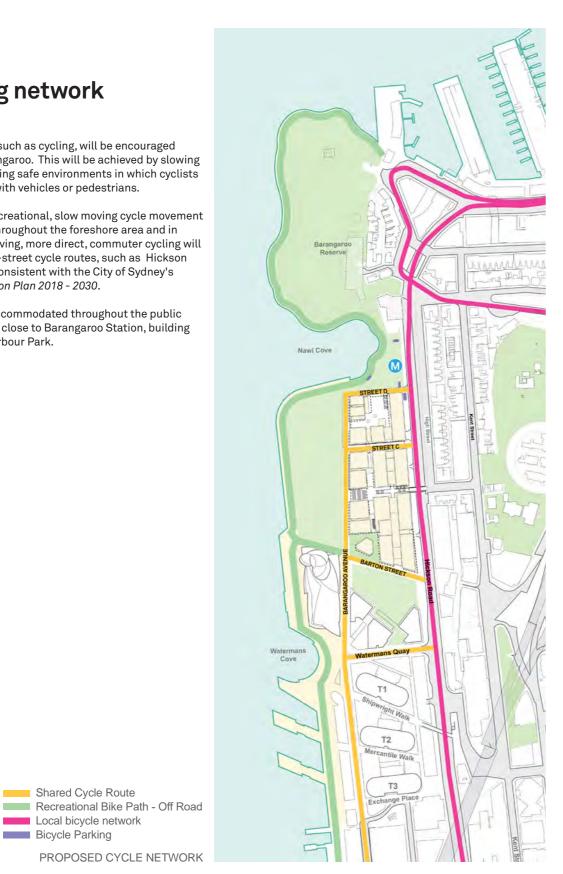
3.3. Movement and Place

3.3.4 Cycling network

Active transport modes, such as cycling, will be encouraged throughout Central Barangaroo. This will be achieved by slowing vehicle speeds and creating safe environments in which cyclists can share space, either with vehicles or pedestrians.

As a general principle, recreational, slow moving cycle movement will be accommodated throughout the foreshore area and in Harbour Park. Faster moving, more direct, commuter cycling will be encouraged to use on-street cycle routes, such as Hickson Road. This approach is consistent with the City of Sydney's Cycling Strategy and Action Plan 2018 - 2030.

Bicycle parking will be accommodated throughout the public realm especially in areas close to Barangaroo Station, building entrances and within Harbour Park.



3.3.5 Servicing, loading and parking access

The key MOD 9 Movement and Place initiatives proposed for Central Barangaroo place an emphasis on vehicular movement within the precinct on Hickson Road and Barton Street and seek to improve access for servicing, loading and parking activities. Consistent with the key moves, the proposed servicing, loading and parking strategy seeks to minimise the impact of servicing, operational traffic and parking, whilst enhancing the amenity, activation and safety of the pedestrian domain and cycle

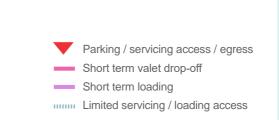
To achieve this, the majority Central Barangaroo's servicing, parking, loading activities are proposed within a contiguous and shared basement, located beneath Blocks 5, 6 and 7. Access to the basement levels are proposed from within Block 6, via a combined entry and egress located on Hickson Road.

To facilitate the servicing of the public domain, street level retail, dining uses, outdoor markets, events, programmed activities and the like, controlled access will be provided along Barangaroo Avenue, Street C and Street D at selected times of the day.

The Street C, Street D, Barangaroo Avenue loop is proposed as a one-way shared street and slow speed pedestrian zone. Limited car parking is provided for retail customers. To service retail and dining operations across Central Barangaroo, valet drop-off and pickup service is proposed and located at either Hickson Road or Barton Street.

As the main civic address for Central Barangaroo, the design of the western edge of Hickson Road will need to fulfil a mix of on-street servicing and loading, parking and drop-off / pickup functions, as well as the integration of public transport interchange functions close to Barangaroo Station.

The design of Barton Street will need to allow a mix of on-street servicing and loading and potential drop-off / pickup functions.



INDICATIVE ACCESS AND SERVICING NETWORK



Shared Cycle Route

Local bicycle network Bicycle Parking

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3.3. Movement and Place

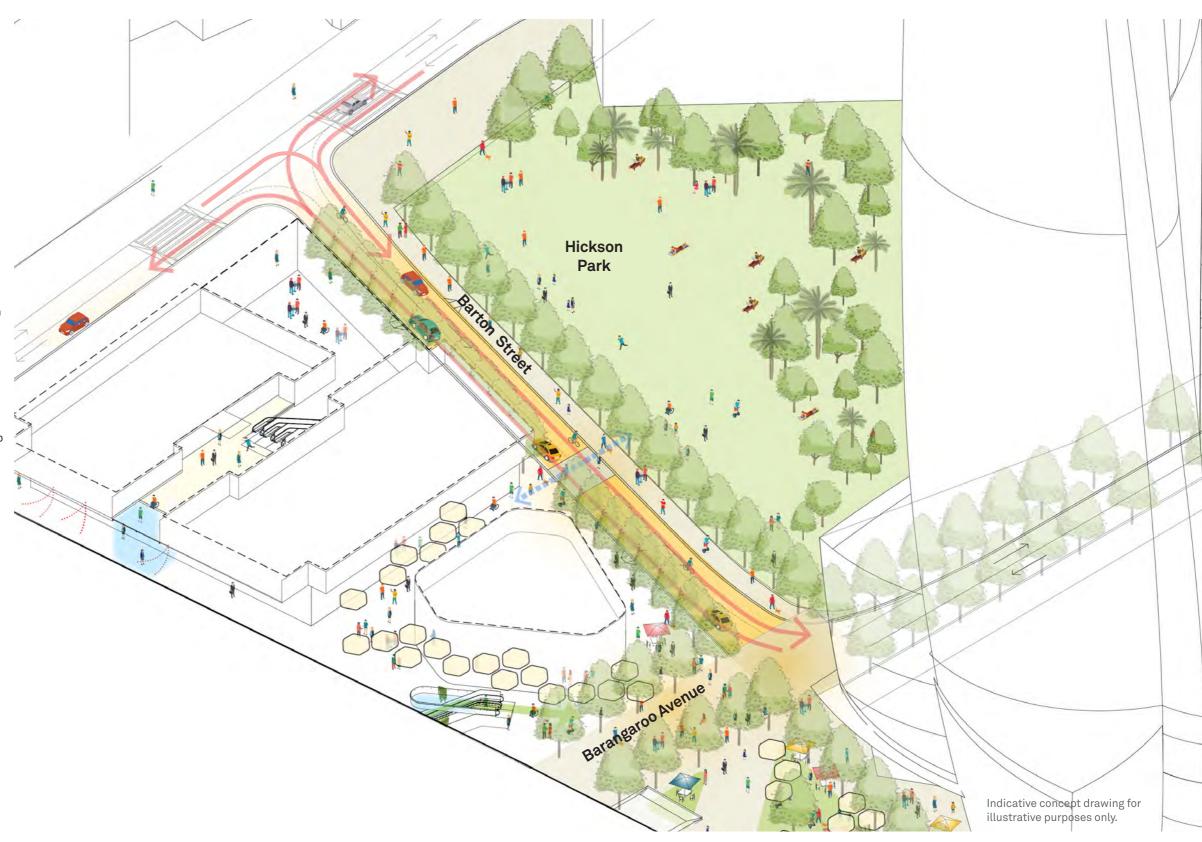
3.3.6 Streets

3.3.6.1 Barton Street

One of the key MOD 9 moves for Central Barangaroo proposes to establish Barton Street as a permanent, two way street, connecting Barangaroo Avenue with Hickson Road.

The benefits of this Barton Street move are that it can:

- better manage Barangaroo Avenue's north south vehicular traffic by redirecting vehicles along Barton Street to Hickson Road, and concentrate the majority of the precinct's local vehicular movements onto Barangaroo Avenue (South), Barton Street and Hickson Road;
- enable the transformation of Barangaroo Avenue (North) from a vehicular street into a tree-lined, car free, pedestrian avenue that extends the eastern edge of Harbour Park;
- improve and better manage pedestrian movement and safety by enabling pedestrians to walk directly from Gas Lane / Bond Plaza over Hickson Road via a pedestrian crossing, onto the northern pavement of Barton Street and directly into Harbour Park and the foreshore parklands beyond;
- better define Hickson Park as a city park, by activating its northern edge with high-quality retail, including the flagship building, Barton Plaza as a busy new urban space, workplace entrance lobbies and connections north towards Barangaroo Station;
- allow pedestrian to move easily from Hickson Park to Harbour Park and Central Barangaroo across at pedestrian crossings; and
- better align movement and place to create people focused public parks and urban spaces, that are well connected, easy to navigate and of the highest amenity;



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3.3. Movement and Place

Urban Theatre

A decision point with incredible views to

Promontory

Barangaroo station

A space elevated above water to watch events and eat lunch

Direct connections to Sydney's newest

Streets

Central Barangaroo's E/W streets connect in the Avenue

Treed Avenue

Formal tree avenue with touching canopies creates dappled shade long the Avenue.

Barton Plaza

A meeting place, vibrant and nature filled plaza

Pavilions in the Park

Street on one side, park on the other, new pavilions line Barangaroo Avenue

Connected

Metro Station

Connected to Barangaroo's street and



3.3. Movement and Place

3.3.6 Streets

3.3.6.3 Pedestrian Bridge to Millers Point

Central Barangaroo presents an opportunity to create a new high level pedestrian bridge over Hickson Road as a local city connection to High Street, Millers Point.

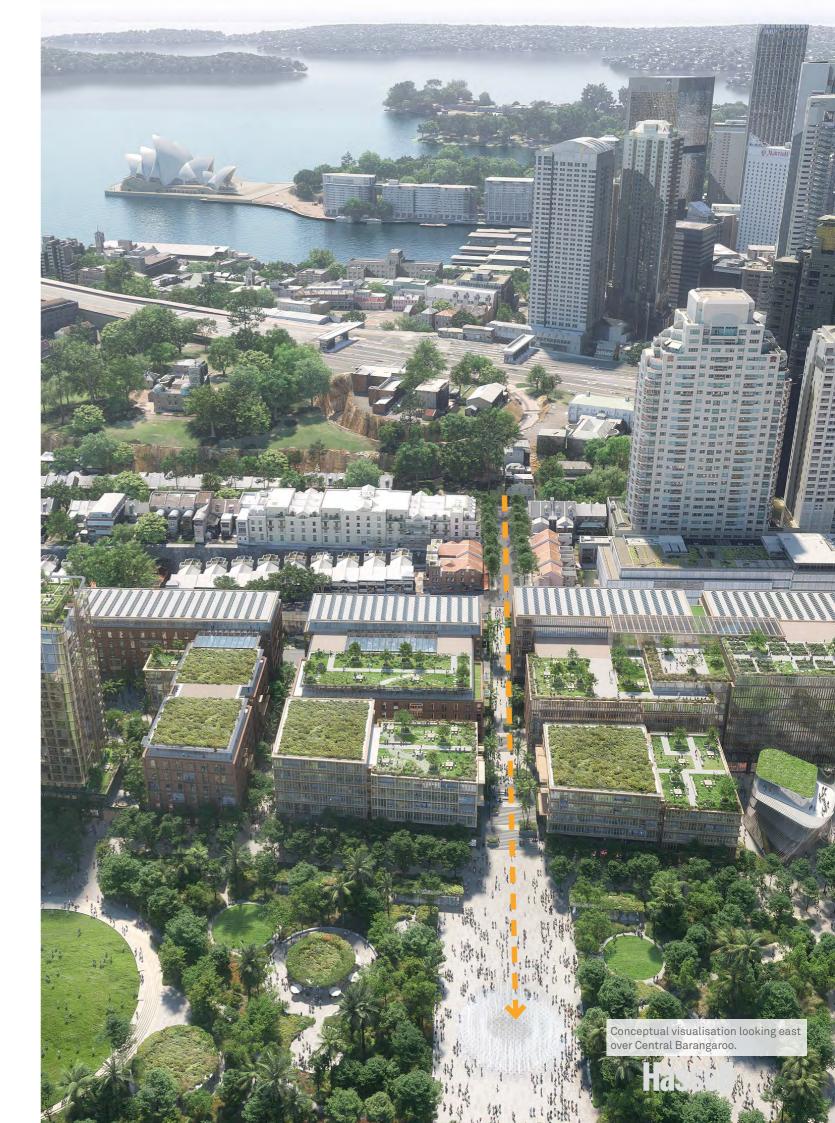
Central Barangaroo and its public domain is currently separated from Millers Point and the city by the historic Hickson Road / High Street wall, which acts a barrier to local pedestrian movement. One way of better connecting the city's western foreshore with Millers Point, is with a pedestrian bridge over Hickson Road that connects Central Barangaroo with High

A pedestrian link into Millers Point would improve permeability and local connectivity north to Millers Point and Walsh Bay, south to the city along Kent Street and east to Observatory Hill Park and The Rocks.

Aligning the proposed bridge with High Street and the proposed Barangaroo Steps would create a continuous visual and pedestrian connection from Agar Steps / Kent Street to the western harbour foreshore. Its visual legibility can assist intuitive wayfinding to the western harbour, many Barangaroo destinations and Barangaroo Station to the north.

A pedestrian bridge connection over Hickson Road also presents an opportunity to design an elegant structure that continues the language of existing pedestrian bridges, further south over Sussex Street and has the potential to become a new city and civic landmark.





3.3. Movement and Place

3.3.6 Streets

3.3.6.4 Streets C and D and Laneway B

Street C and Street D

Streets C and D are proposed as pedestrian-oriented shared environments, where slow vehicle movements are subservient to people-movement.

The Hickson Road spine provides a clear movement corridor for vehicles, including bus public transport north and south between Millers Point, Barangaroo South and the western edge of the CBD. Hickson Road provides the service and access spine for Central Barangaroo and its development blocks. All parking and basement access to service the precinct will be via Hickson Road only.

By limiting free access for vehicles to the eastern edge of Central Barangaroo, all spaces, streets and movement corridors can be prioritised for pedestrians. In this regard, there is limited need for vehicles to traverse west of Hickson Road.

Laneway B

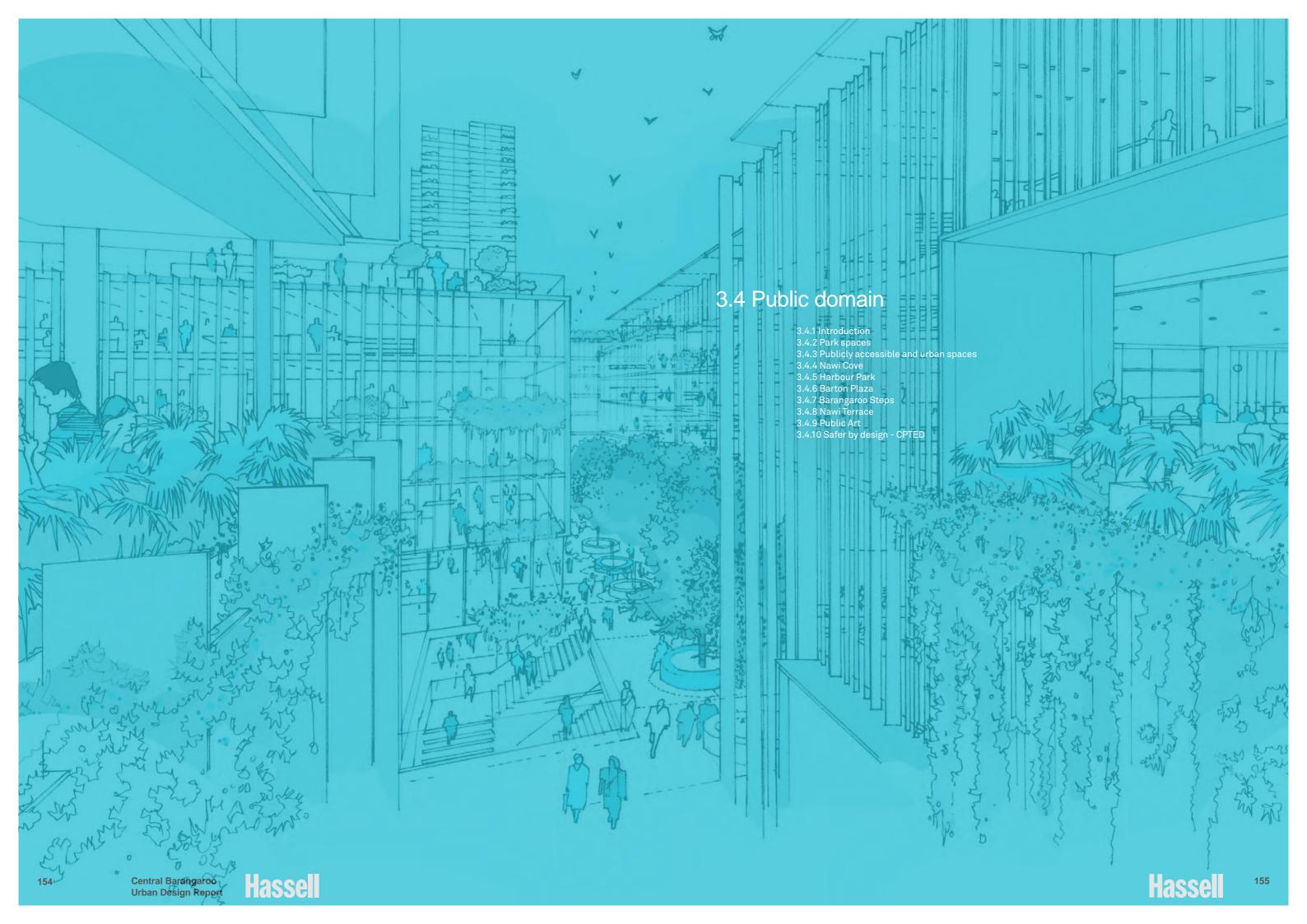
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Laneway B will contribute to the permeability and pedestrian orientation of Central Barangaroo, by providing an activated retail link between Hickson Road, Barton Plaza and Harbour Park.

The importance of east - west movement between Hickson Road, Barangaroo Avenue and Harbour Park is enhanced through Laneway B. It provides activated, pedestrian focused movement, with a mix of retail environment and plaza environments.

Movement clarity and legibility is provided via the urban design of Block 5, which are articulated to emphasise the entrance from both Hickson Road and Barton Plaza. By providing a sequence of movement conditions, a variety of experiences can be enabled shopping, outdoor alfresco dining and plaza. This sequenced series of urban condition enables the provision of contemporary workplace floorspace across Block 5 above, with a network of north-south movement corridors providing connections between Barangaroo South and Barangaroo Station.





3.4. Public domain

3.4.1 Introduction

This section addresses the intended public domain framework across Central Barangaroo and the intended function and outcome of the network of open spaces from Hickson Park to the urban conditions across Blocks 5, 6 and 7 are outlined. It also identifies the required Mod 9 changes to the Concept Plan to facilitate the intended public domain framework..

Central Barangaroo's public domain design principles seek to create spaces and places for a wide range of uses, whilst seamlessly integrating them with the rest of the precinct, creating a living, greener neighbourhood that softens the edge of the city.

Central Barangaroo's streets, parks and places will be designed to be:

- Human in scale a pedestrian first environment, with human scale public spaces, urban places, streets and laneways that are connected, comfortable and enjoyable to visit and linger;
- Immersed in nature with an extensive tree canopy, shady tree lined streets and integrated planting to improve pedestrian comfort and connect with the foreshore parkland setting;
- Where Sydney meets a diversity of public parks, places, streets and spaces designed to a rich mix of activity and encourage groups of people to meet, linger and gather;
- A network of incredible spaces offering diverse and rich foreshore experience with tree lined avenues and streets connecting with extensive foreshore parks and sunny urban spaces and busy plazas;
- Sustainable and resilient with a tree canopy offering shade and shelter, water sensitive urban design integrated into the streets and public spaces, sustainable public realm technologies and cooler pavement materials.



Central Barangaroo Urban Design Report



3.4. Public Domain

3.4.2 Park spaces

Central will both add to and complement the existing public space network across Barangaroo. Its strongly defined built edges create a network of clearly defined and distinct parks and public spaces.

The strategic approach to parklands at Central Barangaroo is to establish a distinct character for Harbour Park that provides a complementary role to Nawi Cove and Hickson Park. Here, each park has distinct identity that emphasises their sense of place and purpose, and they are united by thresholds in the urban form - a rhythm of compression and expansion throughout the public domain to create a sense of arrival and sequence of movement.

The Public Domain plan delivers the key public domain elements proposed for Central Barangaroo, comprising:

- _Nawi Cove: a cultural lifestyle hub and gateway to the city via Sydney Metro. This is a key arrival, meeting and events space anchored by Block 7.
- _Harbour Park: An active green park with a diverse range of program set amongst richly planted gardens and under tree canopy. It is where Sydney's waterfront experience can be celebrated. The character will be distinct from Barangaroo Reserve and Hickson Park.
- _Wulugul Walk: A broad public promenade along the harbour's edge, providing a unifying and physical connection along the harbour - from Walsh Bay through Barangaroo Reserve, to Central Barangaroo and beyond to Barangaroo South and Darling Harbour.
- _Hickson Park: Framed as a city park, its expansive green lawn is available for flexible programming, contained by the urban scale of Crown, Barangaroo South's residential towers and Block 5. The threshold to Central and the Waterfront Park is defined by Barton Plaza.
- _Potential Park Pavilions: Future Harbour Park design processes could consider opportunities for discrete pavilion buildings within the park. Such pavilions could be located along Barangaroo Avenue or within the park itself to provide shelter and amenity and opportunities for community and limited food & beverages uses.



3.4.3 Publicly accessible urban spaces

To create a precinct of distinction, where a variety of experiences are on offer day and night, the strategy for open space at Central is to provide a network of smaller urban spaces. Each responds to their context, be it providing elevated views of the harbour, connecting to the city, or establishing an urban 'nexus' between different parks.

To cater for the variety of spaces, the shape of the urban interface to Hickson Park has necessarily changed. In this way, the richness of experiences across Central can be broadened to cater for many people, at many times, and for a variety of

The publicly accessible urban spaces across Central are:

- _Nawi Terrace an activated urban room providing elevated views of the harbour, with sheltered outdoor spaces for _community and active uses.
- Barangaroo Steps is an opportunity for new local connector and civic place that can give identity to Central Barangaroo, whilst linking to Millers Point and the city beyond.
- _Barton Plaza, a threshold between Hickson and Harbour Parks, anchored by a flagship retail building; this urban plaza announces the southern entry to Barangaroo Station.

Connecting elements

In addition, the connecting elements that integrate Central Barangaroo with Sydney's existing urban fabric:

- _Hickson Road, a civic street and address for Central Barangaroo, where pedestrians have a clear path to Sydney Metro, and where street design is based on the human
- _High Street pedestrian bridge a connection from High Street, Millers Point across Hickson Road via the Barangaroo Steps to the foreshore parklands.
- Barangaroo Avenue, providing a seamless connection from urban activity within street blocks and Harbour Park.





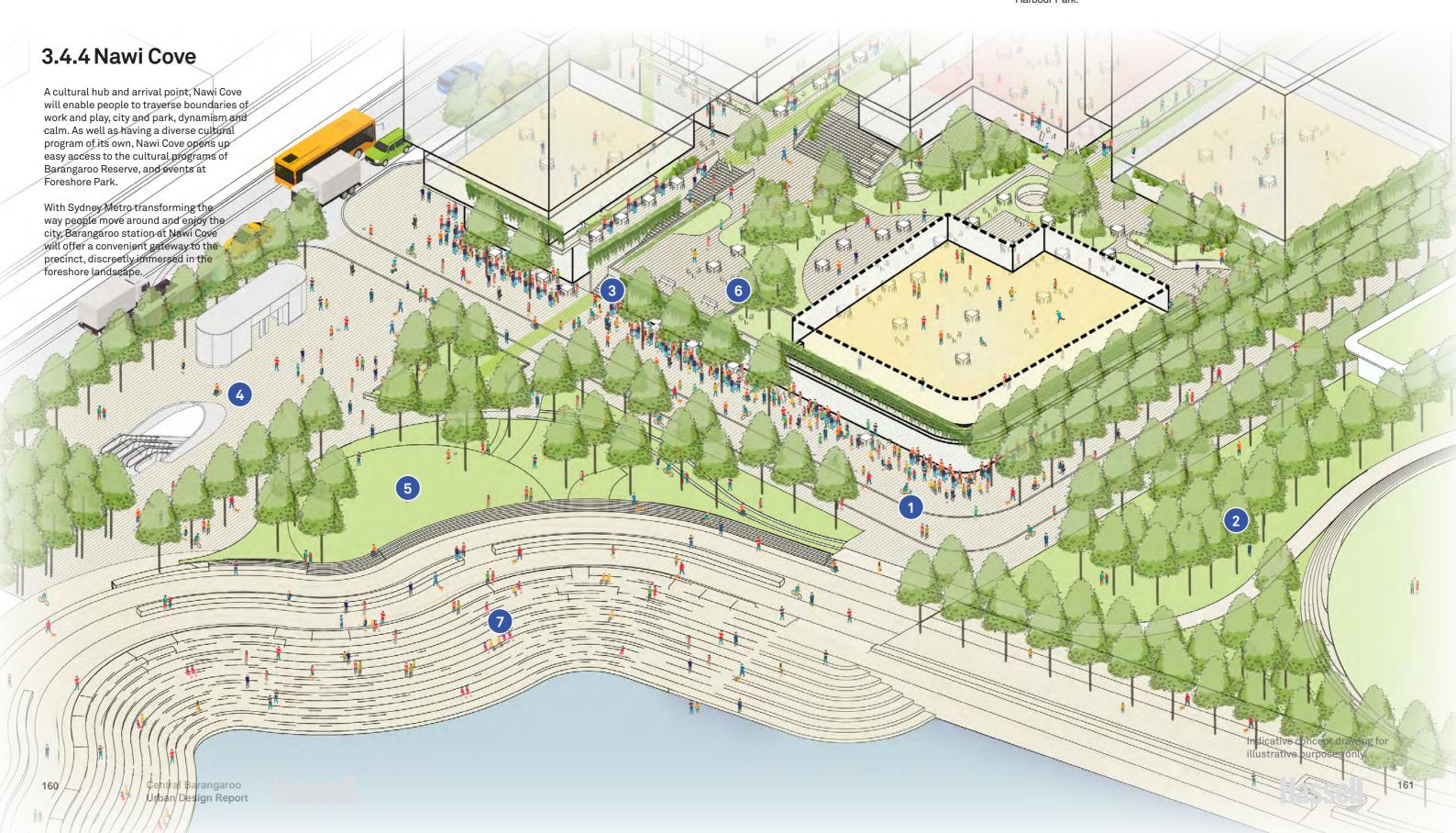
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3.4. Public Domain

- Street D
 Pedestrian priority street with stunning water views
- Barangaroo Station Entries
 Metro entrance into a civic treed plaza
- Nawi Cove
 Direct link to water and views to the harbour

2 Harbour Park

- Nawi Lawn
 A place to sit and enjoy elevated water views
- 3 Stair Connection
 Clear connections between levels.
- 6 Nawi Terrace
 A sunny publicly accessible civic space,
 with elevated views over Nawi Cove and
 Harbour Park.



3.4. Public Domain

- Northern Lawn
 Continuing Sydney's tradition of great harbour-side gardens.
- Cultural Gardens
 A variety of spaces ranging to allow a wide range of programme
- The beating heart of Barangaroo. designed for large gatherings
- Barton Plaza
 An urban green plaza
- Wulugul Walk
 Sydney's Harbour walk continues
- Pavilions at the Park
 Potential locations for multi-functional pavilions
- 6 Water play
 Dancing fountains cooling and playful

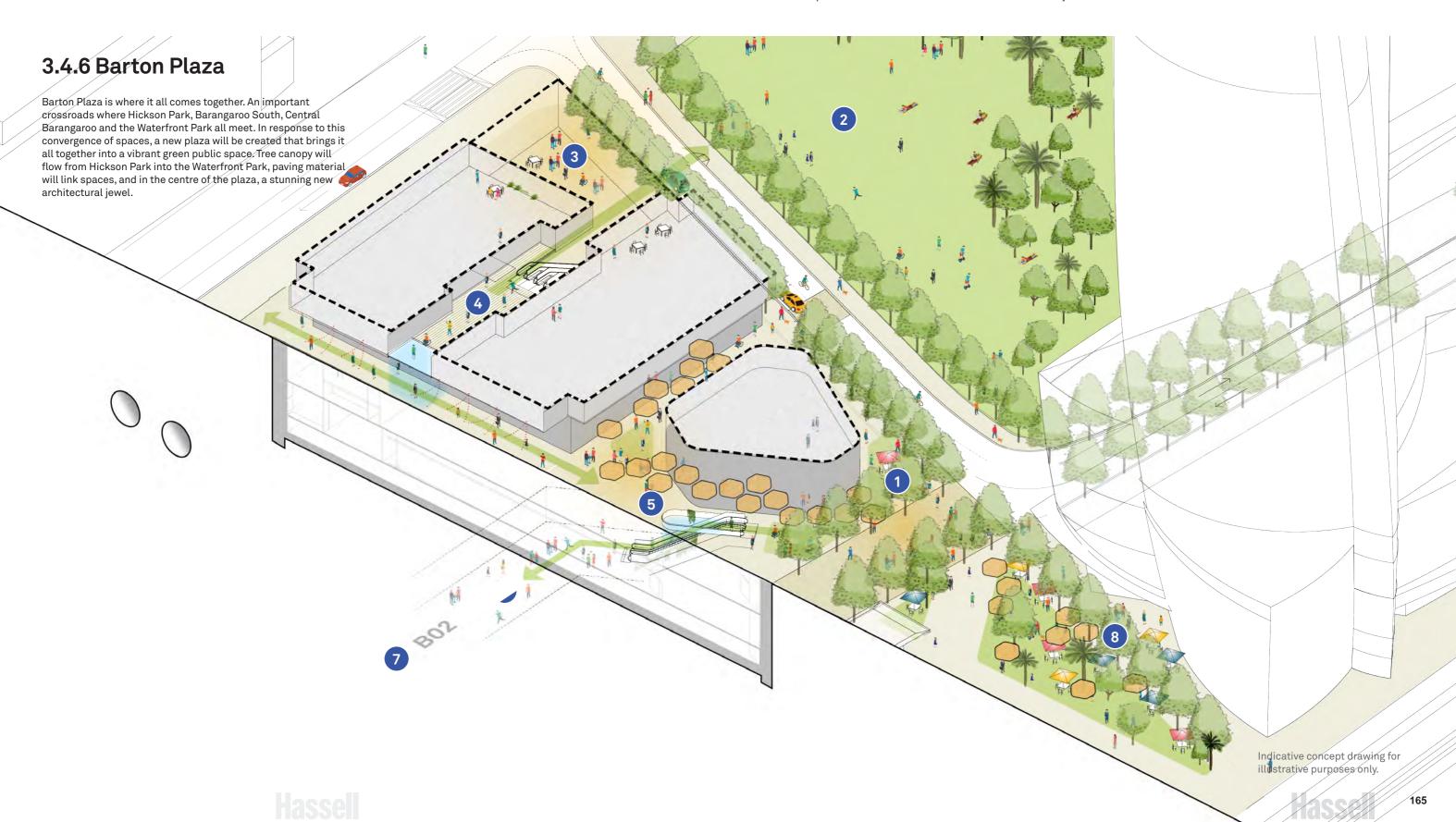


3.4. Public Domain

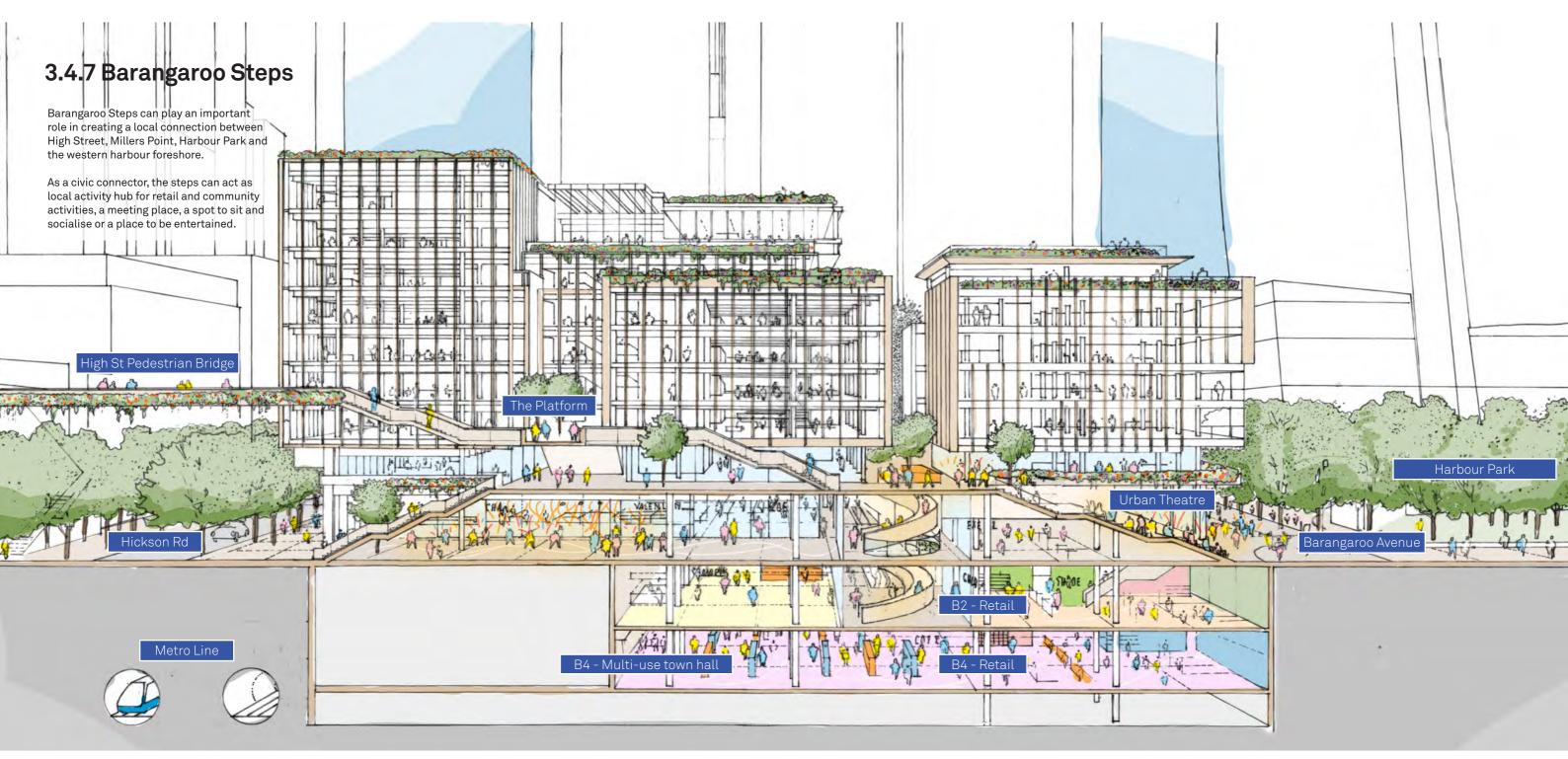
- **Barton Plaza**A key node, and primary destination.
- Internal Route
 A shared space, used by the public as an internal route.
- Metro/Retail Link
 Link to B02 retail and Metro.

- Hickson Park
 A quiet lawn in the city
- Barton Lane
 Link to B02 retail and Metro.
- Activated building edges

- **Commercial Lobby**Primary commercial address, connected
 - **Barton Street** A clearly defined road, marking boundary to Hickson Park



3.4. Public Domain

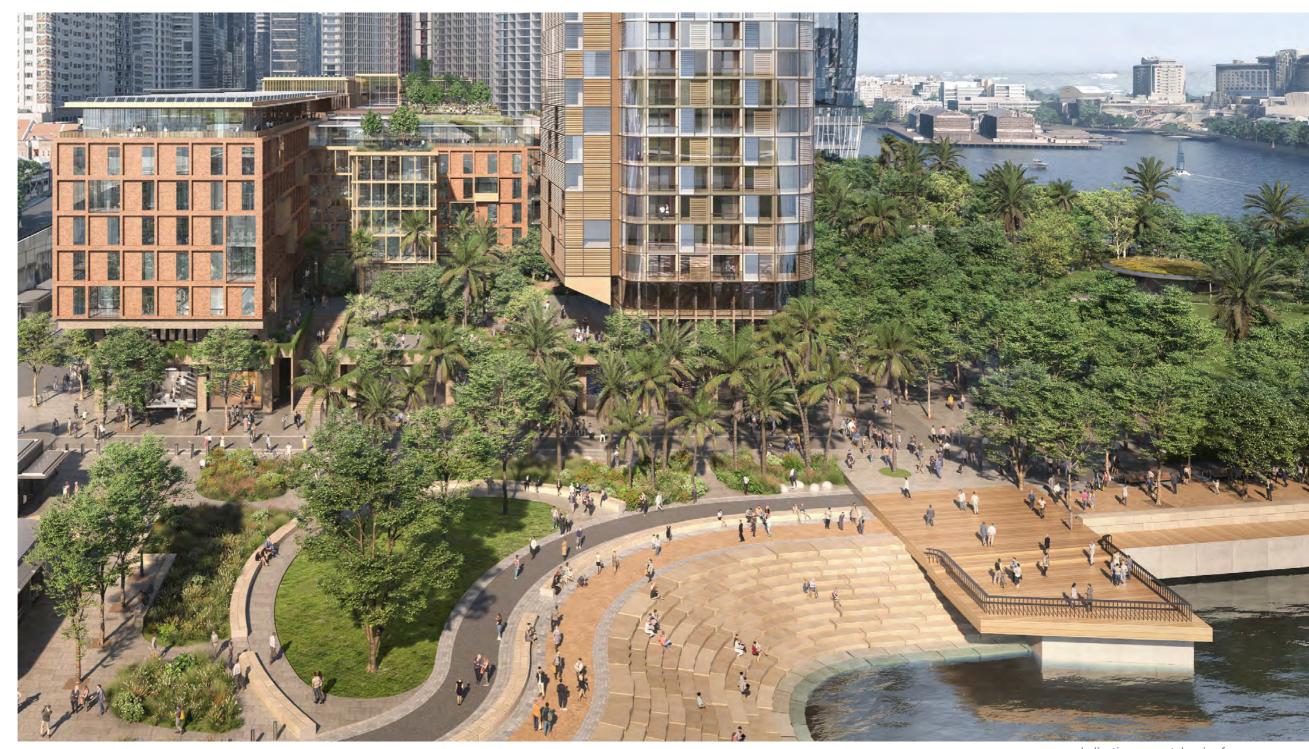


Illustrative east - west section from High Street to Harbour Park. looking south from Barangaroo Steps.

3. Central Barangaroo3.4. Public Domain

3.4.8 Nawi Terrace

Nawi Terrace is a new focal point for Sydney - an activated public terrace, fringed by active and community uses. It serves as a new place to go and experience the harbour, with extraordinary views across Nawi Cove and the Harbour Park. It is accessed via direct stair connections from Nawi Cove and Barangaroo Station, ensuring it has a clear public address.



Indicative concept drawing for illustrative purposes only.

3. Central Barangaroo3.4. Public Domain



Indicative concept drawing for illustrative purposes only.

3.4. Public Domain

3.4.9 Public art

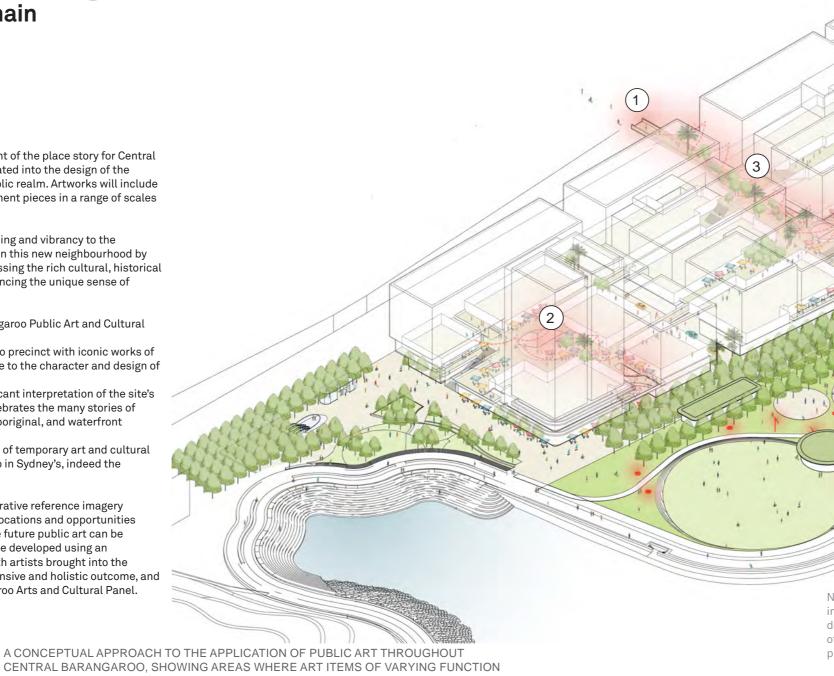
Public art forms a core component of the place story for Central Barangaroo, and will be incorporated into the design of the precinct, its architecture and public realm. Artworks will include integrated and innovative permanent pieces in a range of scales across the site.

The creative works will add meaning and vibrancy to the experience of living and working in this new neighbourhood by giving voice to community, addressing the rich cultural, historical and ecological context, and enhancing the unique sense of place.

This is consistent with the Barangaroo Public Art and Cultural Plan, which aims to:

- Enliven the entire Barangaroo precinct with iconic works of public art that will contribute to the character and design of memorable public spaces;
- Provide engaging and significant interpretation of the site's history that reflects and celebrates the many stories of Barangaroo, including the Aboriginal, and waterfront histories; and
- Deliver a distinctive program of temporary art and cultural events to embed Barangaroo in Sydney's, indeed the nation's, cultural landscape.

This public art diagram and illustrative reference imagery identifies a number of potential locations and opportunities across Central Barangaroo where future public art can be explored. Specific artworks will be developed using an integrated public art strategy, with artists brought into the design process to ensure a responsive and holistic outcome, and in consultation with the Barangaroo Arts and Cultural Panel.



Note: pavilion locations are indicative only and subject to design consideration as part of the Harbour Park design process.



Canopy Artwork around the Flagship



Artist designed seating using nature and lighting.



COULD BE LOCATED.

Integrated artwork within the design of High St Bridge



Suspended artwork above the Nawi Terrace



Suspended artwork above the Barangaroo Steps



Integrated sculptural artwork with child's play at the Park



Local Artists integrating art and



Water feature in the Urban

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3.4. Public Domain

3.4.10 Safer by design - CPTED

Crime Prevention through Environmental Design (CPTED) or Safer by Design is a socio-scientific approach to planning, designing and managing the built environment to ensure it can passively assist public safety, crime prevention and detection of crime and support the feeling of safety within a community.

CPTED seeks to influence the design of buildings and places by:

- increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture
- increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended
- reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'
- removing conditions that create confusion about required norms of behaviour.

CPTED can provide positive community safety benefits by improving planning and design decisions in ways that provide organisations, communities and businesses with practical crime prevention tools. CPTED fundamentals are generally practical applications of security theory, which are enabled though the intelligent built environment design, architecture and planning.

Responding to key CPTED principles

The DPIE's current CPTED guidance identifies the four key principles of Surveillance, Access control, Territorial reinforcement, Space management, to be used in the design and assessment of development.

These CPTED principles have been applied to the planning and concept design development informing Central Barangaroo and the following summarises the CPTED - Safer by Design response for MOD 9 to the Barangaroo Concept

As the design of the Central Barangaroo precinct progresses beyond MOD 9, CPTED - Safer by Design principles will continue to be applied to the planning and design development of detailed development applications for Central Barangaroo Block 5, 6 and 7, as well as proposed foreshore open space of Harbour Park.

1. DESIGN FOR PASSIVE SURVEILLANCE

- At a concept design level, Central Barangaroo's network of streets, laneways, arcades, publicly accessible open spaces and its future proposed built form have been designed to optimise opportunities for effective passive or natural surveillance on multiple levels;
- Central Barangaroo's permeable network of active streets and pedestrian connections over multiple levels is designed to offer clear and direct sightlines;
- On ground and first floor levels, Central Barangaroo's proposed streets and pedestrian connections will be activated with a mixture of retail, dining, food and beverage and community uses;
- Direct connections into Barangaroo Station, along with the bus interchange and cycle parking areas will benefit from passive surveillance from surrounding uses and activities:
- Effective lighting of proposed public streets and public spaces will assist passive surveillance and is achievable in detailed design stages;
- Landscaping of streets and public parks will be designed to be attractive, but not provide opportunities for offenders with places to hide or entrap victims;
- Where required, passive surveillance should be supplemented with integrated technical surveillance.

2. DESIGN FOR EASY AND EFFECTIVE ACCESS

- MOD 9 for Central Barangaroo proposes key integrated 'Movement and Place' initiatives that seek to improve the quality of the pedestrian domain and better manage vehicular movement, design a walkable network of foreshore parks and urban spaces to create better places and create a dynamic mixed use urban precinct that connects the city with the harbour.
- For the areas west of Hickson Road and north of Barton Street, these integrated moves will reduce conflict between vehicles, cyclists and pedestrians and improve both pedestrian safety and overall amenity.
- The key changes to movement patterns within the precinct are supported by Central Barangaroo's permeable and multi-level structure of streets, laneways and connections, designed to promote clear and legible paths of pedestrian movement:
- The overall structure is designed to provide a variety of routes and reduce or limit risk from assault by providing well-lit, active and overlooked places and pedestrian and cyclist pathways and routes to key places

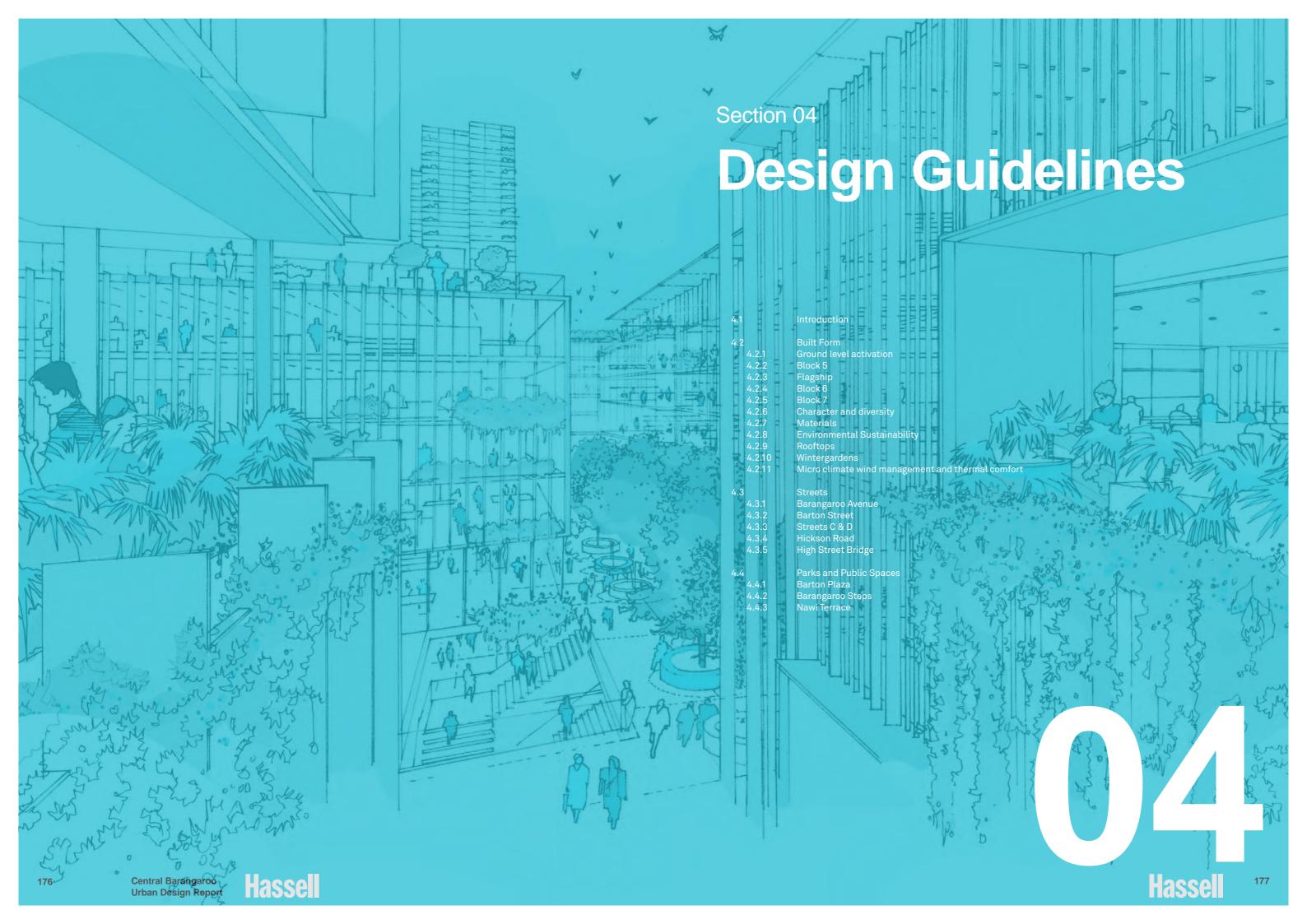
- Metro connections into Barangaroo Station will be clearly legible and easily accessible from Central Barangaroo, Nawi Cove, Hickson Road and Harbour Park.
- As harbour foreshore destinations, both Nawi Cove and Harbour Park will busy and active places. Nawi Cove will become an active arrival and departure space for metro passengers travelling to and from the city, whilst Harbour Park, as the main foreshore park, will act as attractor for a range of future open space uses and activities.

3. DESIGN FOR TERRITORIAL REINFORCEMENT

- At the concept design level, Central Barangaroo's overall structure designs its proposed streets, blocks, buildings and spaces to support security to clearly define legitimate paths, boundaries and transitions between public and private space:
- Future detailed design development of Central Barangaroo's blocks, buildings and public spaces will need to balance territoriality with the need for passive surveillance;
- Future detailed design development of public spaces should design for public safety in ways consistent with the purpose of the space, integrating design cues on what it is to be used for and who is to use space and to engender some responsibility for its use and condition.

4. DESIGN TO BETTER MANAGE SPACE

- Detailed design development of Central Barangaroo's blocks, buildings and public spaces should promote a feeling of individual and community ownership of the public realm that promotes and encourages shared responsibility for the security of built environment;
- Detailed design development of blocks, buildings, public spaces and public domain furniture should factor in robust design solutions that can minimise potential damage and the need for undue maintenance;
- To maintain the quality of Central Barangaroo's public spaces, Infrastructure NSW to implement systems of both regular and reactive maintenance and repair and manage a regular auditing system for safety issues.



4. Design Guidelines4.1. Introduction

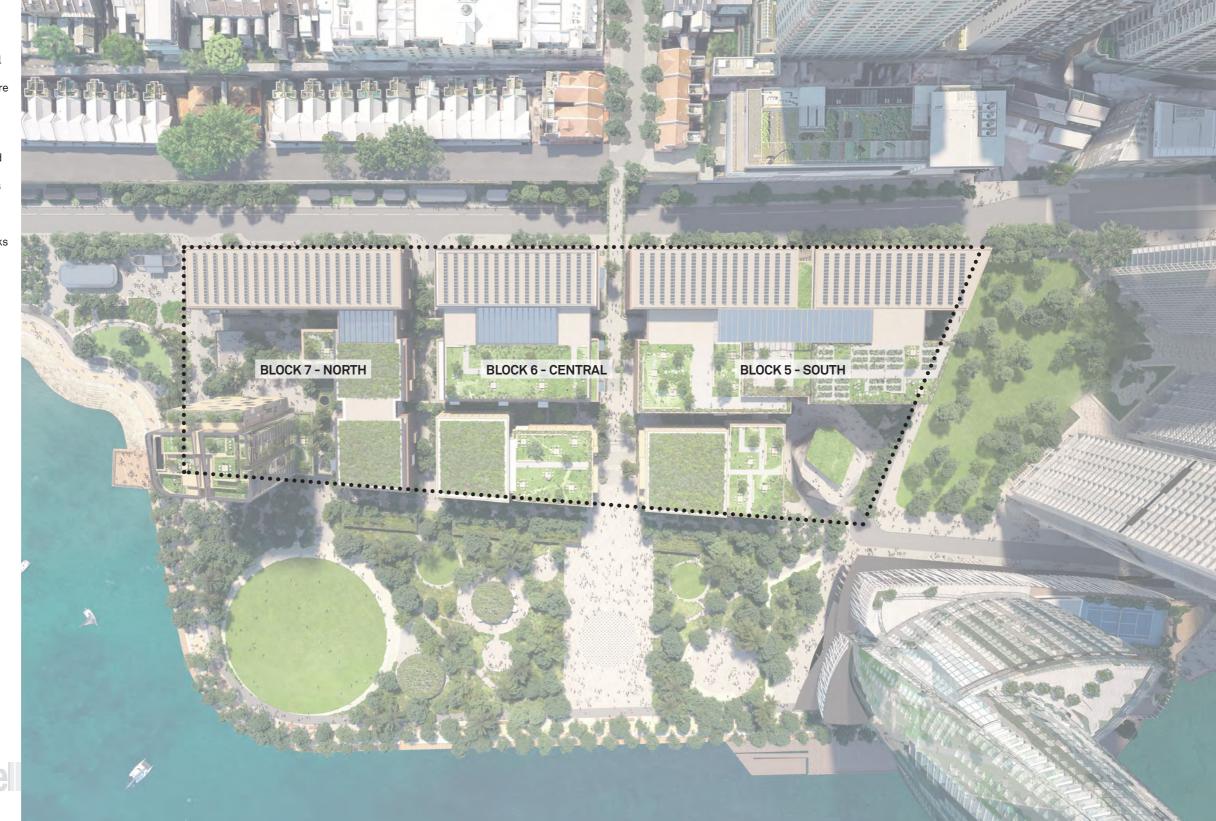
The design guidelines for Central Barangaroo describe the principles and and intended development standards across public realm, streets and development blocks.

The guidelines confirm the development aspirations for Central Barangaroo to provide ongoing certainty. They will be used to inform future development proposals across Central, and ensure a consistent outcome across stages and timeframes.

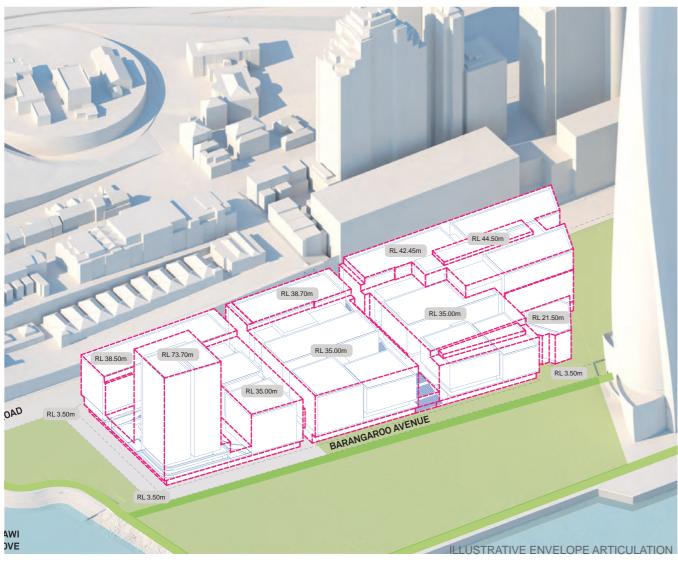
Design Guideline Structure

The design guidelines address:

- Built form the principles and strategic outcomes required across development blocks 5, 6 and 7, this includes consideration of technical studies, including wind analysis and the AECOM View and Visual Impact Assessment.
- Streets the framework, character and intent for streets and movement corridors
- Parks and public spaces the character and intent for parks and publicly accessible spaces



4.2. Built Form



The building envelope proposed for Central Barangaroo establishes a three dimensional volume that defines the outermost part of the precinct that buildings can occupy and sets the appropriate scale of future development in terms of bulk and height relative to streetscape, public open spaces and block size.

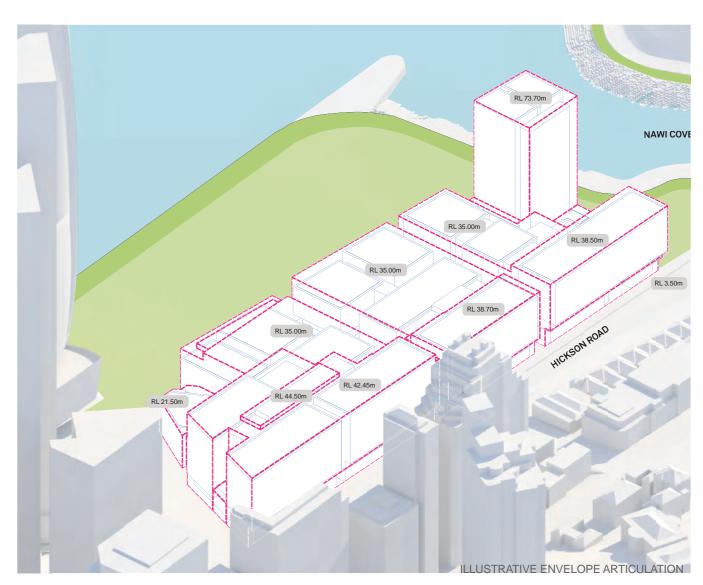
A building envelope is deliberately larger than the actual building, so as to allow for future flexibility of building design and articulation and the achievement of design excellence. The Central Barangaroo building envelope is Illustrated in the figures above.

As a building envelope can be interpreted creatively in many ways, to illustrate a potential urban form and design for Central Barangaroo, an indicative reference design has been prepared.

The reference design prepared for Central Barangaroo fits within the overall precinct and street block building envelopes and is illustrated in the envelope drawings above.

The purpose of the reference design is to demonstrate variations in building form, bulk scale and articulation within the building envelope, consideration of technical analysis such as visual impact and also demonstrate overall achievable gross floor area.

The reference scheme drawings in this section conceptually demonstrates this intent. The objectives and guidance statements within this Built Form section provide guidance to further inform the urban design response of each street block.



Key Objectives

- _Establish the maximum development parameters for each development block via building envelope controls
- _Inform the location of height, scale and building bulk across Central Barangaroo
- _Communicate a finer grain of control and guidance to inform building design and ensure the intended urban design response



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4.2. Built Form

4.2.1 Ground Level Activation

Active frontages provide the face of commerce and activity to the street and represent the inherent value of public and commercial uses to the city. They provide amenity, enhance safety and encourage use of streets and public spaces for city

Central Barangaroo will be a highly active place and its ground level will invite the public in. The following guidance applies:

Objectives

- To allow for a vibrant mix of active uses that address the ground level of Central Barangaroo
- To provide visual interest and a quality urban condition to the street level

Design Guidance

- Active frontages are to be provided in the locations nominated on the Ground Level Land Use Activation plan
- Active frontages are to contribute to the liveliness and vitality of streets by:
- maximising entries and display windows to shops and/or food and drink premises or other uses, customer service areas and activities which provide pedestrian interest and interaction.
- minimising blank walls (with no windows or doors), fire escapes, service doors, plant and equipment hatches;
- providing elements of visual interest, such as display cases, or creative use of materials where fire escapes, service doors and equipment hatches cannot be avoided.
- providing a high standard of finish and appropriate level of
- architectural detail for shopfronts.
- Generally, a minimum of 50% of the ground floor frontage is to be transparent glazing which may include a variety of material finishes.
- Foyer and lobby spaces also assist in activation and are to be well designed and offer a high level of legibility for the building address.
- Active frontages are to be designed with the ground floor level at the same level as the footpath.



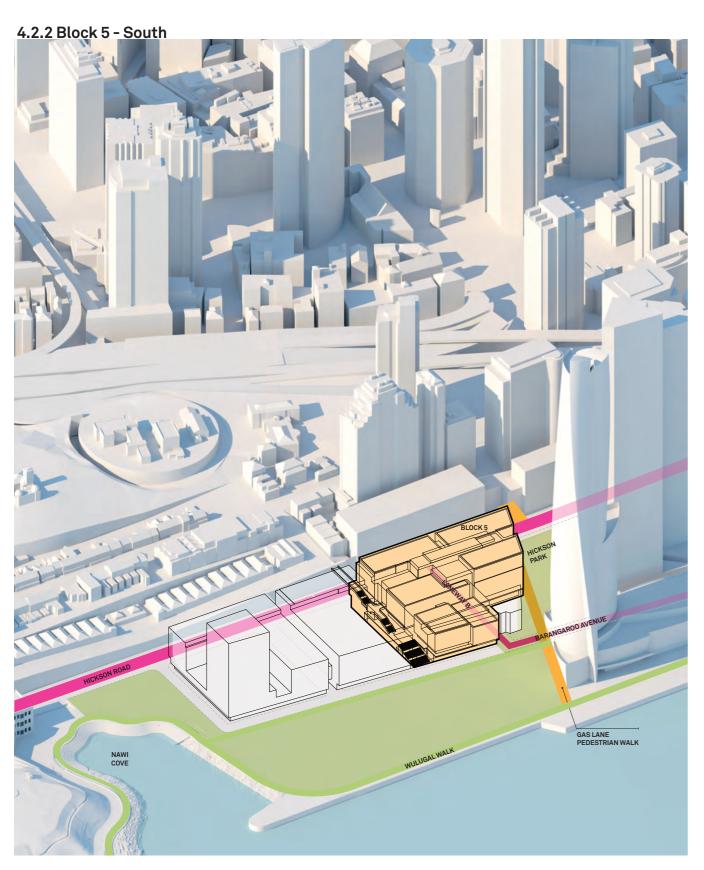
Residential Lobby

Retail

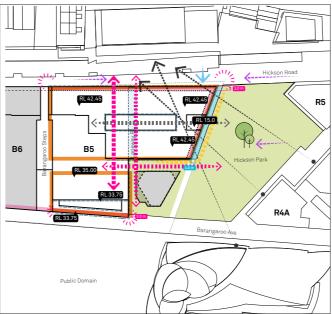
Commercial Lobby Cultural/Community

End-Of-Trip

4.2. Built Form



ACTIVATION AND ACCESS PLAN





Land Use Mix **Objectives**

_To allow a mix of retail and commercial uses

Design Guidance

- _The commercial lobby entrance shall be designed to high quality with clear sight lines from the public realm into the lobby space
- _In addition to the lobby entrance, Barton Street, Barton Plaza, Laneway B and Hickson Road will be activated with retail uses
- _Generally, commercial workplace uses should be located above ground level

Ground Level Activation

Objectives

_To activate the public realm with retail and commercial lobby

Design Guidance

- _The commercial lobby entrance shall be designed to high quality with clear sight lines from the public realm into the lobby space
- In addition to the lobby entrance, Barton Street, Barton Plaza, Laneway B and Hickson Road will be activated with retail uses _Public connections and spaces at upper levels will be activated
- with commercial, community and retail and hospitality uses Provide fixed or retractable awning along active frontages (unless building overhang provides required weather

protection, or retail design requires otherwise

Address

Objectives

- _To provide identifiable addresses to primary streets and city
- _To provide a high degree of visual interest and articulation to Hickson Road, Hickson Park and Barangaroo Avenue /Harbour Park.

Design Guidance

- _Lobby entrances to be clearly visible from primary streets or major public spaces.
- _Predominant land use to have a clear primary entry point.
- _The Hickson Park interface of Block 5 should contain extensive glazing, terracing and occupied uses to activate Hickson Park.

Access

Objectives

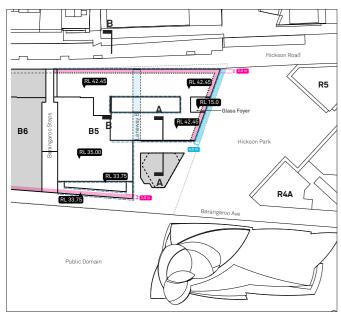
- _To provide pedestrian permeability and accessibility through the development with direct connection to Barangaroo Station.
- _To ensure vehicle access crossovers and service zones do not detract from pedestrian amenity and comfort.

Design Guidance

- _Provide Barangaroo Station access from Block 5 and its public domain.
- _Contribute and enable the north-south mid block access with Blocks 6, 7, Barangaroo Station and Barangaroo South.
- Provide provision for potential additional basement entry off Hickson Road.
- _Building service areas, parking and loading docks will be provided within consolidated basement.

4.2. Built Form

BUILDING ENVELOPE PLAN





Building Lines and Setbacks Objectives

- _To ensure the buildings reinforce the street framework on Hickson Road, Barangaroo Avenue, Barton Street and Laneway R
- _To ensure the buildings define the northern edge of Hickson Park.

Design Guidance

- _Maximum 1.0m building overhang above ground level fronting Laneway B.
- _Maximum 3.0m building overhang above ground level beyond the boundary fronting Hickson Road and 3.0m building overhang above ground level fronting Barangaroo Avenue (awning to be introduced if no building overhang eventuates in resulting building outcome).
- _Where no building overhang is proposed fronting Hickson Road, an awning should be provided for pedestrian weather protection.
- _Maximum 600mm facade projection zone permitted beyond the maximum extents of the building (facade projection zone may include external facade elements such as sun shading devices).

Building Height and Distribution

Objectives

- _To ensure street wall heights and building height respond appropriately to the surrounding context.
- _To ensure building height and density responds appropriately to the scale of Barangaroo South.
- _To ensure an appropriate transition in height between Central Barangaroo and Barangaroo South, and the harbour.

Design Guidance

- _Massing of podium to provide appropriate relationship to adjacent Block 6 building height and form.
- _Height to provide a contextual response to Barangaroo South, Hickson Road and Kent Street and the intended transition from the mid-rise developments at Blocks 7 and 6 to the high-rise buildings of Barangaroo South.

Building Mass & Articulation Objectives

_To ensure the building mass is appropriate within the envelope.

Design Guidance

- _To reduce the impact of the overall building mass, the envelope and floor plates are to be articulated.
- _A glass foyer provides a legible address to Barton Street.
- _Introduce articulation to reduce impact of overall height and create a human scaled condition at street level.
- _Facade articulation, to respond to the specific conditions of its surroundings.

Views and visual impact

Objectives

- _To balance view sharing with neighbouring buildings on Hickson Road and Kent Street buildings, and Barangaroo South.
- _To design to respect privacy.

Design Guidance

- _Building form and articulation within the envelope to balance visual impact and sight lines with existing and future neighbours
- _Consider roof gardens to soften the visual impact of buildings when viewed from above.

Building Overhang

Objectives

- _To provide passive weather protection for pedestrian activity along key street, including Hickson Road, Barton Street and Barangaroo Avenue.
- To align with the historical colonnade of Hickson Road.

Design Guidance

_Overhang to be integrated into the built form language.

BUILDING ENVELOPE BUILDING ENVELOPE RL 44.5 View to North-West Corner Legend Zone above ground level (inclusive of GFA) 650mm facade projection Maximum building envelope Active ground floor level Articulated massing 4m Setback south boundary Other development blocks Active Ground Active Ground Active Ground

Block 5

Flagship Store

Section AA

. Ha

Hickson Road

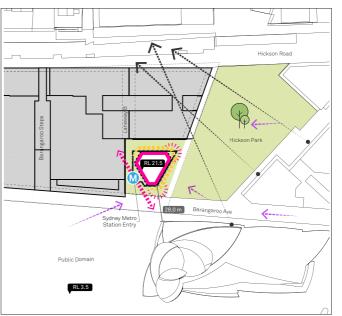
Block 5

Section BB

4.2. Built Form

4.2.3 Block 5 South - Flagship Building

ACTIVATION AND ACCESS PLAN





Land Use

Objectives

- $_\mbox{To contain a highly active use or mix of uses throughout the building.}$
- _To create an active ground plane containing high quality retail uses.

Design Guidance

- _Active retail located within the flagship building.
- _Where possible, the rooftop of the building should be accessible as a rooftop terrace for tenants of the building.

Ground Level Activation

Objectives

- _To ensure a vibrant public domain will be created at street level with a variety of active retail uses that contribute to the liveliness and vitality of the streets.
- _To minimise blank facades.

Design Guidance

- _Frontages to the public domain are to contain active uses and no blank walls. This zone of active frontage can include lobby entrances and architecturally designed facades.
- _The entire ground plane is to be attractive and engaging and comprise active retail uses to interface with the surrounding public domain.

Address

Objectives

- _To provide an identifiable address.
- _To provide a high degree of visual interest and articulation to, Barton Street and Barangaroo Ave.

Design Guidance

- _The entrance is to be clearly visible from the public realm.
- _The building should have visual prominence and relationship to public domain, pedestrian paths and desire lines.

Access

Objective

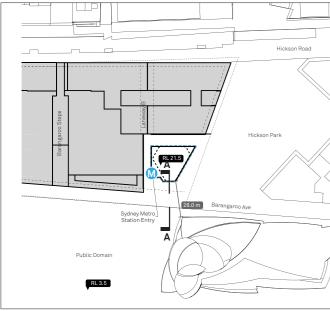
_To provide clear pedestrian access to the building from Hickson Park / Barangaroo Avenue.

Design Guidance

_The building entry should be integrated into the architectural design of the building so that it appears as a clear entry point.

4.2. Built Form

BUILDING ENVELOPE PLAN





Building Lines and Setbacks

_To ensure the flagship building reads as a iconic and sculptural form within Hickson Park.

Design Guidance

- _The flagship building should be designed to anchor its position at the intersection of Hickson Park and Waterfront Park. Its position within the building envelope is flexible subject to that
- _The minimum separation between Block Y (the Sydney Crown Resort Hotel podium) to the flagship retail building should be

Building Height and Distribution Objectives

_To provide a low scale of building that allows sun access to Hickson Park and provides a pedestrian scale at the intersection of Hickson Park and Harbour Park.

Design Guidance

- _Building height is contained within the building envelope.
- _Height distribution is proportionate to the building scale.

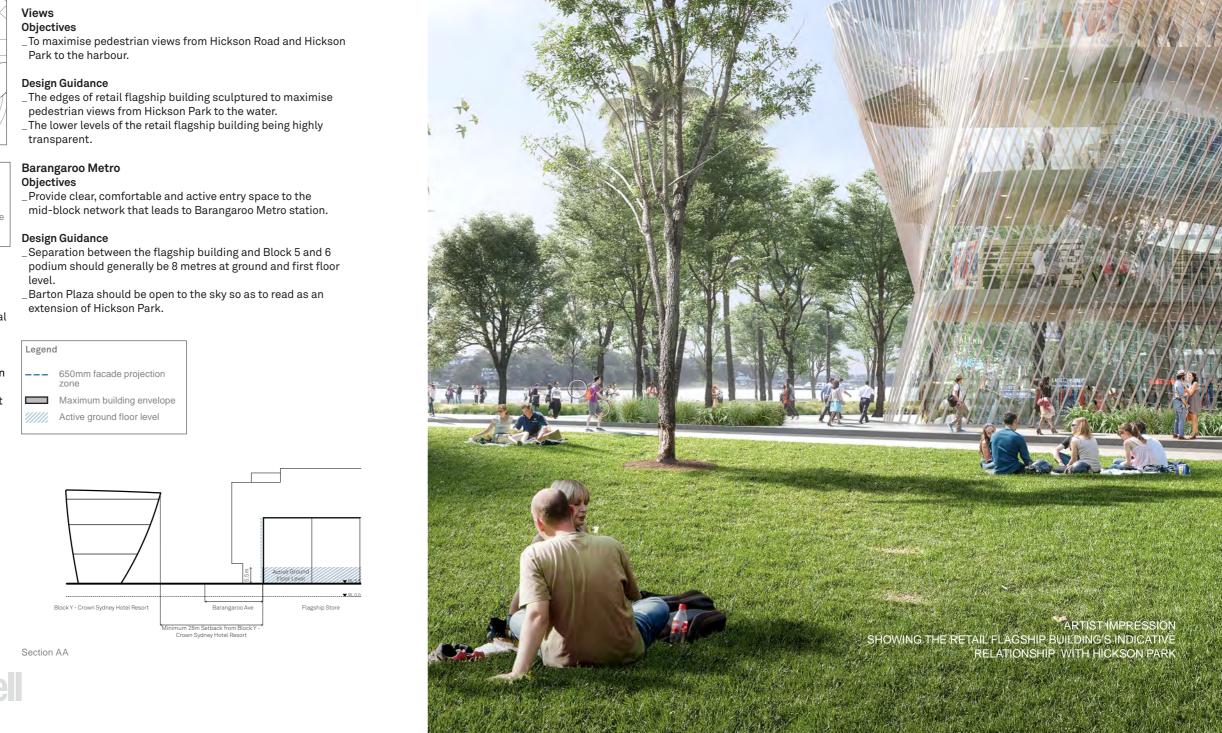
Building Mass & Articulation

Objectives

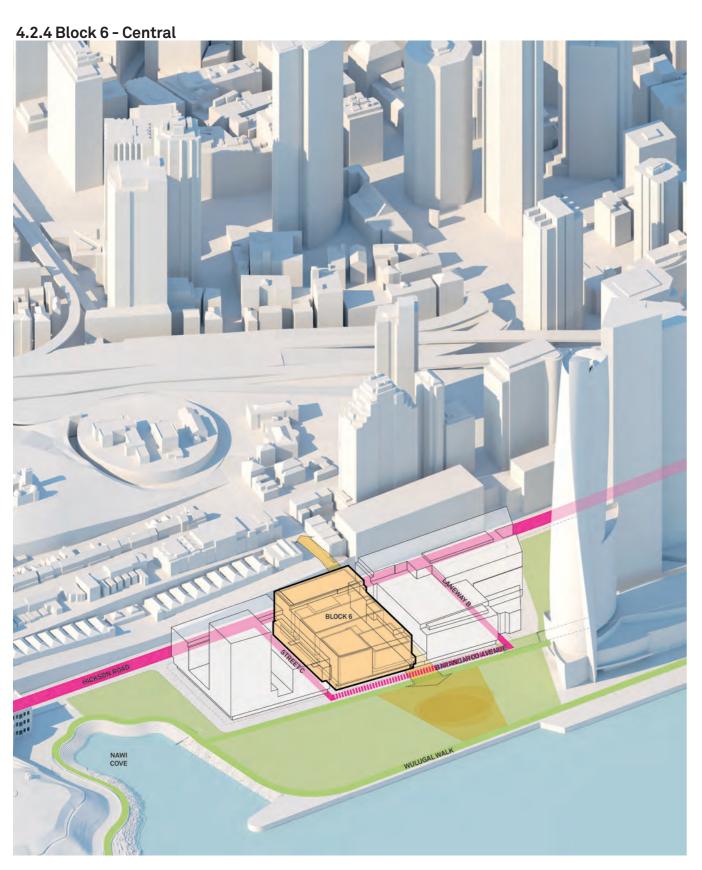
- _The building mass and articulation will be highly sculptural so that it appears as a complete object within the public domain.
- _Provide a marker in the urban fabric of Central Barangaroo.

Design Guidance

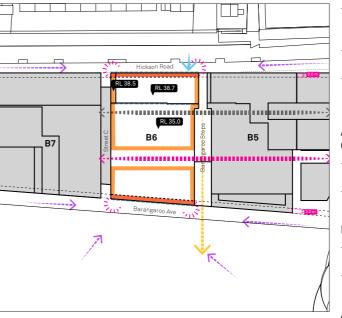
- _The building facade should be substantially glass to maximise transparency and visual connections between Hickson Park and Waterfront Park.
- _The building floor space should not contain more than 45%-50% of the building envelope.



4.2. Built Form



ACTIVATION AND ACCESS PLAN



Legend •••• Ground level setback Maximum building envelope Active frontage Lobby entry Atrium throughsite pedestr Active arcade, through site Other development blocks Visual prominence Key Views & Sightlines Pedestrian path to Harbour Park ____ 650mm facade projection zone

Land Use

Objectives

- _To create next generation attractive commercial space located at a prime waterfront position within close proximity to Barangaroo Metro station.
- _To create an active ground plane with a mix of retail uses.

Design Guidance

- _Active retail located at ground and basement levels.
- _The mid-block connection to contain a high level of activation to ensure engaging public access to Metro station.
- _High quality commercial office or mixed use space located above ground level.

Ground Level Activation

Objectives

- Barangaroo Avenue is focused towards promenade and park activation with dynamic retail uses
- _Hickson Road is focused towards civic retail uses.

Design Guidance

- _Layered activation along a sequence of platforms that extend from the upper levels of Barangaroo Steps to the ground, with a greater focus at the level 1 civic plaza.
- Active mid-block links or arcades are to have a comfortable
- Provide fixed or retractable awning along active frontages (unless building overhang provides required weather protection or retail design requires otherwise).

Address

Objectives

- _To provide identifiable addresses to primary streets and city
- Lobby entrances to be clearly visible from primary streets or

Design Guidance

- _Lobby address to be clearly defined through building massing
- _Access to the building should be provided from the civic plaza at the Barangaroo Steps.

Access

Objectives

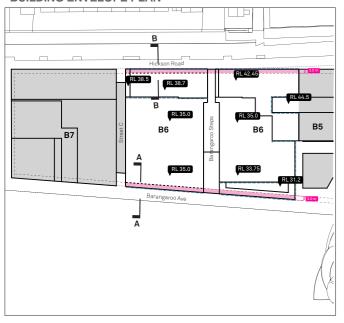
- _To provide pedestrian permeability and accessibility through the development with direct connection to Metro station.
- _To create a pedestrian prioritised environment with minimal (and calmed) vehicular traffic, especially along Streets C and Barangaroo Avenue.
- _To provide a pedestrian bridge connecting High Street to Block

Design Guidance

- _Contribute and enable north-south mid block access connecting through to Metro station, Blocks 7, 5, and Barangaroo South.
- _To provide 24 hour pedestrian access through Barangaroo Steps, connecting High Street through to Waterfront Park via a bridge over Hickson Road.
- _Upper level access to internal office spaces available from the level 1 civic plaza of Barangaroo Steps.
- _Basement access should be via the consolidated servicing and parking access via Hickson Road.
- _Building service areas, parking and loading docks will be provided within consolidated basement.

4.2. Built Form

BUILDING ENVELOPE PLAN





Building Lines and Setbacks Objectives

- _To ensure the building reinforces the street wall on Hickson Road, Barangaroo Avenue, and Streets C.
- _To ensure the building addresses and defines the Barangaroo Steps including an emphasis on the civic presence at the western end fronting Barangaroo Foreshore.
- _To consider upper level setbacks where required to optimise solar access to public spaces and enhance view sharing with neighbours.

Design Guidance

- _Maximum 1.0m building overhang above ground level fronting
- _Maximum 3.0m building overhang above ground level beyond the boundary fronting Hickson Road and 3.0m building overhang above ground level fronting Barangaroo Avenue (awning to be introduced if no building overhang eventuates in resulting building outcome).
- _Maximum 650mm facade projection zone permitted beyond the maximum extents of the envelope (facade projection zone may include external facade elements such as sun shading devices).
- Building design contributes to the intended scale of the Barangaroo Steps.

Building Height

Objectives

_To ensure maximum building and street wall heights respond appropriately to the surrounding context.

Design Guidance

- Building height to relate to adjacent heights of block 5 to the south and Block 7 to the north and Millers Point to the east.
- Building height to step down in height towards Barangaroo Avenue.
- Building height to comply to the building envelope.

Building Mass & Articulation

Objectives

_To ensure the building mass is appropriate within the envelope.

- _To reduce the impact of the building's overall mass and height, the envelope and floor plates are to be articulated.
- Building articulation and shaping within the maximum
- Building form to emerge from the landscape and transition to a clean, refined and elegant facade at the upper levels.

Objectives

_To provide strong, direct visual connection from High Street, Millers Point, to Harbour Park via Barangaroo Steps.

Design Guidance

- _Increased width of Barangaroo Steps as they descend towards the west, increasing civic presence and natural amphitheatre for people to gather with maximised views to the harbour. _Building form and articulation within the envelope to balance visual impact and sight lines with existing and future
- Consider roof gardens to soften the visual impact of buildings when viewed from above.

Building Overhang

Objectives

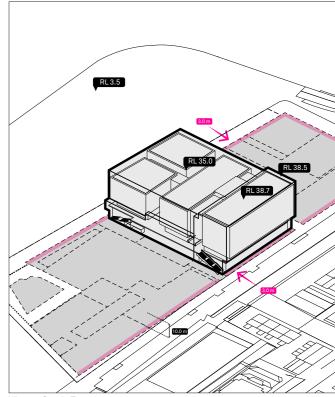
- _To provide passive weather protection for pedestrian activity along Hickson Road and Barangaroo Avenue
- _To align with the historical colonnade of Hickson Road

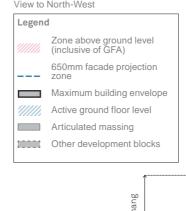
Design Guidance

_Overhang to be integrated into the built form language.

BUILDING ENVELOPE RL 35.0 RL 3.5 View to North-West Legend Zone above ground level (inclusive of GFA) 650mm facade projection

BUILDING ENVELOPE

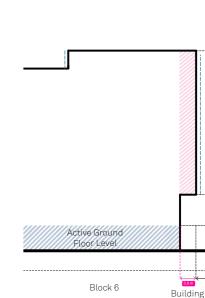




Barangaroo Ave

Building

Cantilever Zone



Active Ground

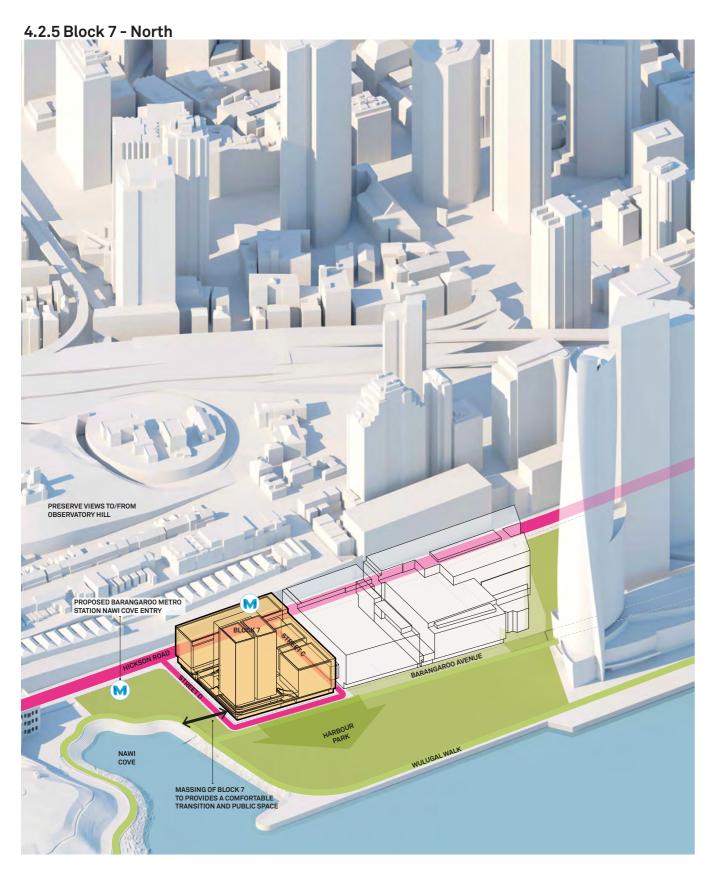
Floor Level

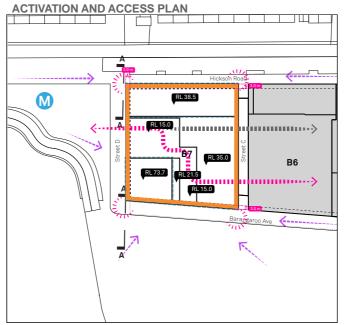
Block 6

Hickson Road

Section AA

4.2. Built Form







Land Use

Objectives

- _To create a vibrant, mixed use community
- _To increase the number of people living and working within close proximity to Metro station
- _To create a new retail and entertainment destination related to Metro station

Design Guidance

- _Active retail located throughout the ground level and lower levels
- _Commercial workplace and residential apartments comprising a mix of 1, 2 and 3 bedroom dwellings above ground level

Address

Objectives

- _To provide identifiable addresses to primary streets and city parks.
- Lobby entrances to be clearly visible from primary streets or major public spaces.

Design Guidance

_Residential lobby entrances accessed via Street D.

Access

Objectives

- _To provide pedestrian permeability and accessibility through the development with direct connection to Metro station
- _To create a pedestrian prioritised environment with minimal (and calmed) vehicular traffic along the exterior streets, especially along Streets C, D and Barangaroo Avenue
- To ensure clear and legible basement entries and drop-off zones (and consolidated across all blocks) to maintain clear, unencumbered traffic and pedestrian flows

Design Guidance

- _Contribute and enable north-south mid block access connecting through to Blocks 6, 7, Sydney Metro station and Barangaroo South
- _To provide pedestrian access into internal retail space from all frontages
- Provide direct access to Sydney Metro station from internal retail arcade
- Where possible, design to allow natural light access to the Sydney Metro station entry
- Basement entry and exit ramp accessed from Hickson Road away from street intersections and pedestrian crossings
- Building service areas, parking and loading docks will be provided within consolidated basement

Ground Level Activation Objectives

- _Nawi Cove is addressed with active uses that promote it as a meeting place associated with Barangaroo Station
- _To ensure a vibrant internal retail arcade experience

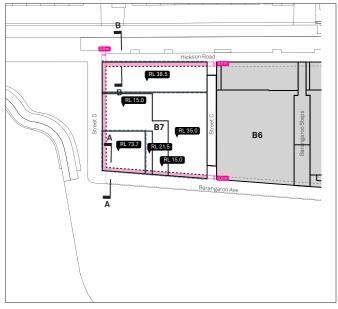
Design Guidance

_Lower building levels, from Nawi Terrace to ground level contribute to activation of Central Barangaroo, and create meaningful meeting places within the public realm

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4.2. Built Form

BUILDING ENVELOPE PLAN





Building Lines and Setbacks Objectives

- _To ensure the building reinforces the street framework on Hickson Road, Barangaroo Avenue, Street C and Street D
- _To ensure the building defines the eastern edge of Barangaroo Foreshore Park
- _To ensure the building defines the southern edge of Nawi Cove _To ensure the colonnade condition along Hickson Road at
- Barangaroo South continues to Central Barangaroo

Design Guidance

- _0m setback at ground level along all frontages
- _Maximum 3.0m building overhang above ground level beyond the boundary fronting Hickson Road; 3.0m building overhang above ground level fronting Barangaroo Avenue and Street D (awning to be introduced if no building overhang eventuates in resulting building outcome).
- _Consistent building edge along southern edge of Nawi Cove defines the street reserve (Street C).
- Facade projection zone may include external facade elements such as sun shading devices.

Building Height, Mass and Articulation Objectives

- _To ensure street wall heights and increased height respond to the surrounding context.
- _To define prominent corners.
- _To ensure the building mass is modulated within the envelope.

Design Guidance

- _Street wall height along Hickson Road to conform to the prescribed envelope.
- Increase in envelope height to the north-west corner to mark Barangaroo Avenue and the southern edge of Nawi Cove.
- To reduce the impact of the buildings overall mass and building length, the envelope should be articulated in the vertical
- Provide gaps in the street wall above ground level to open views to the harbour and minimise building bulk.
- General building orientation to address major frontages and respond to sustainability aspects
- _A central courtyard can provide light and amenity for residential apartments above ground level.

Views

Objectives

_Permeability is provided in the street wall above ground level to Barangaroo Avenue and Street D.

Design Guidance

- Openings of approximately 18 metres wide provided in the built form above RL+15.0 facing Street D and Barangaroo Avenue.
- Building form and articulation within the envelope to balance visual impact and sight lines with existing and future neighbours.
- _Consider roof gardens to soften the visual impact of buildings when viewed from above.

Height Zone

Objectives

_At the north west corner of Block 7, allow additional height within the nominated building envelope to anchor Barangaroo Avenue and Nawi Cove.

Design Guidance

_The additional height above the podium should present as an elegant form complementary in scale to the building and ensure built form anchors Barangaroo Avenue and Nawi Cove.

Building Overhang

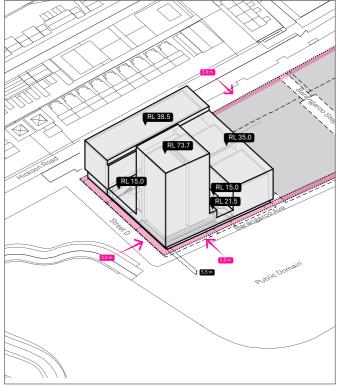
Objectives

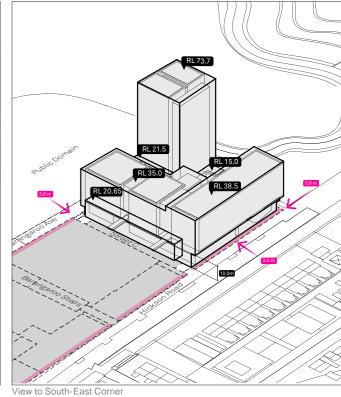
- _To provide passive weather protection for pedestrian activity along Barangaroo Avenue
- _To align with the historical colonnade of Hickson Road

_Overhang to be integrated into the built form language.

BUILDING ENVELOPE

BUILDING ENVELOPE





View to North-West Corner

Legend Zone above ground level (inclusive of GFA) 650mm facade projection Maximum building envelope Active ground floor level Articulated massing Other development blocks Active Ground Floor Level → RL3

Active Ground Floor Level

Section AA

Urban Design Report

4.2. Built Form

4.2.6 Character and Diversity

Objectives

- _To promote an architectural character that is evidently 'of Sydney and the harbour'
- _To demonstrate exemplary and unique design quality of an international standard, generating interesting, innovative and creative architectural expression whilst remaining respectful to the Sydney context and surrounding neighbourhoods.
- _To ensure a diversity in design and character of architecture across the precinct.
- _To ensure buildings provide a comfortable and amenable public environment conducive to public activity, especially at ground

Design Guidance

- _Respond to adjacent buildings, streetscape design and city identity when developing the design solution.
- _Buildings provide opportunities to reflect the distinctive qualities of Central Barangaroo by incorporating landscape, heritage and cultural assets and working with these to enhance local place identity.
- _Encourage variety at the ground floor to enhance comfort and the pedestrian experience. Where relevant, lower active levels can incorporate 'domestic' scale materials such as stone, masonry and a mix of glazing.
- _Create a distinct identity to building entrances across each street block to reflect building use.
- _Provide appropriate articulation, material variation, and/or landscape elements to break down building mass into a composition of well-scaled components.
- _Architectural elements such as balconies, winter gardens and canopies are to be integral and considered against the overall building composition and scale.













CHARACTER AND DIVERSITY REFERENCE IMAGES

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4.2.7 Materials

Objectives

- _To ensure a material palette that enhances the urban fabric and character of Sydney's waterfront, and is born from the
- _To ensure a material palette that has qualities of permanence and durability, that stands the test of time and is climate appropriate.

Design Guidance

- _Sandstone (or similar materials) should be given a strong consideration as a fundamental building and public domain material, especially to lower building levels along Hickson Road and at key address points.
- _Lower building levels should incorporate material appropriate to their public interface role. Where possible, key public interfaces at ground and first level should incorporate a 'domestic' or fine grain of materials, such as sandstone, brick or other like materials.
- _The finish and detailing of building materials is to be consistent with the intent for architectural quality throughout Central
- _Facade treatment of upper levels to be sympathetic to its context and internal uses.
- _Facade articulation to respond to sustainability aspects and













MATERIALITY REFERENCE IMAGES

4.2. Built Form

4.2.8 Environmental Sustainability

Objectives

- _To demonstrate design excellence in sustainability, meeting the sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security, and resource, energy and water efficiency
- _To meet the sustainability requirements including:
- _Carbon neutrality;
- _Water positive;
- _Zero waste emissions;
- _On-site renewables;
- _Green certification;
- _Indoor environmental quality;
- _Biophilic design

Design Guidance

- _Environmental sustainability elements should be core to building design, enhancing worlds best practice approaches.
- _Optimise solar access to privately accessible roof top terraces and internal communal courtyard(s).
- _Building articulation and shaping, podium levels and canopies to mitigate accelerated wind conditions and maximise solar access to all public and private outdoor spaces.
- _Use a combination of integrated passive design, demand reduction, energy efficiency, smart intuitive controls and facility management to minimise the energy consumption of the buildings.
- _Dynamic shading systems and deep winter gardens and balconies help to mitigate impacts from western and northern summer sun (without compromising view access).
- _Maintain appropriate depths to commercial floor plates with internal atria where required for adequate daylight penetration.
- _Encourage integration of renewal energy infrastructure.
- Buildings designed to maximise natural ventilation.
- _Buildings are oriented to minimise solar heat gain.
- _Soft landscaping is integrated into the building design to minimise solar heat gain.
- _Buildings are designed to maximise water efficiency.
- _Materials are selected that provide for a long design life, minimise the need for maintenance and are low in embodied
- _Create internal and external spaces which embrace the benefit of nature to human wellbeing, and enhance the biological value of the site.





4.2.9 Rooftops

Objectives

- _Architectural treatment of the roof and its form is to be designed, coordinated and remain sympathetic to adjacent
- _Maximise private access to rooftops and terraces where possible.
- _Design rooftops to separate infrastructure spaces from useable spaces
- _Maximise use of rooftops for stormwater management and renewable energy strategies.

Design Guidance

- _Where possible, rooftop spaces and terraces of podium levels to be habitable for private or community use by commercial tenants within Blocks 5 and 6, and by residents within Block 7.
- _Rooftop mechanical systems including plant, lift overruns and communication devices may be incorporated within the building envelope and be shielded from public view.
- Rooftops may be used for photovoltaic systems subject to being contained within the overall building envelope.

APPROACHES TO PROVIDING USEABLE ROOFTOPS













ENVIRONMENTAL SUSTAINA MEASURES DEMONS BLIGH STREET, SYDNEY

4.2. Built Form

4.2.10 Winter Gardens

Winter gardens offer external amenity to both residential and non-residential uses akin to balconies, and also protect from microclimatic conditions such as strong winds and wind-driven rain. Flexible window systems allow building occupants to control the openness of the facade to the outside, allowing more useable and adaptable internal spaces.

Objectives

Require that the design satisfies the following:

- The enclosure is designed as a balcony for use as external open space for residential and non residential uses
- The winter garden has adequate natural ventilation and cannot be fully enclosed
- The bulk of the building would be no greater than if the balconies were not partly enclosed

Design Guidance

Location – all residential and non residential uses above ground level regardless of the height of building.

Need – enable the partial enclosure of balconies to provide private open space that is usable and has reasonable amenity.

Size – allow the maximum area that may be excluded from the calculation of GFA to be limited to:

- in the case of residential uses, up to 15% of the GFA of the associated apartment except where design excellence can be achieved
- in the case of non-residential uses, the equivalent area of the enclosed balcony.











4.2.11 Micro-climate wind management and thermal comfortCentral Barangaroo is a generally low scale urban precinct,

Central Barangaroo is a generally low scale urban precinct, compared to the heights of Barangaroo South and the nearby Sydney CBD. The Harbour Park provides an important city scale public open space located between the harbour foreshore and Central Barangaroo.

Creating public outdoor spaces and streets that are comfortable and fit for purpose is more important now than it has ever been. In balancing variable environmental conditions and delivering comfortable public spaces, precinct wide wind management and mitigation strategies are required.

Wind analysis for the Central Barangaroo precinct in its context was undertaken by RWDI, using the reference design for Central Barangaroo Blocks 5, 6 & 7, combined with an illustrative landscape concept design for the Harbour Park.

The analysis indicates the existing wind conditions in and around the site are expected to be generally appropriate for the intended use throughout the year. Relatively windier conditions, suitable for strolling and walking use, are likely at the base of Crown Sydney Hotel Resort and One Sydney Harbour and along the waterfront areas due to the exposure to the prevailing winds. Within the Central Barangaroo precinct, the analysis indicates three areas that will require specific wind mitigation.





Conceptual resolution strategies only. Acceptable alternatives may be applied.

LEGEND:

3M HIGH TREE

5M HIGH PALM TREE

2M HIGH SHRUB

WIND MITIGATION REQUIRED

Design guidelines

The three areas that will require specific wind mitigation are:

_Crown Sydney Hotel Resort / Harbour Park interface

To avoid uncomfortable wind conditions, the future landscape design of the south western corner of the Harbour Park (Barton Plaza) should propose a mixture of tree planting and high-quality architectural canopies capable of reducing wind impact, improving pedestrian amenity, whilst complementing the north edge of the Crown Sydney Hotel Resort and the design of the Harbour Park and Wulugul Walk.

_Nawi Cove, north of tall B7 building

To avoid uncomfortable wind conditions in the area immediately to the north of tall B7 building, the use of tree planting, comprising a mix of 5m tall palms, 3m tall trees and 2m tall shrubs, is recommended.

_Nawi Terrace, south of tall B7 building

To avoid uncomfortable wind conditions in the area immediately to the south of tall B7 building, the use of both tree and garden bed planting, as well as possible architectural canopy structure.

Detailed design development applications for Blocks 5, 6, and 7 at Central Barangaroo are required to prepare a Thermal Comfort Study that assesses microclimate factors such as sunlight, skylight, shade, wind, landscape, temperature and humidity.



Hasse

4. Design Guidelines4.3. Streets

The street network of Central Barangaroo will deliver a series of active and vibrant streets that are dedicated pedestrian prioritised streets, designed as active urban spaces and permeable pedestrian environments.

Each street will have a different character due to built form, aspect and vehicular requirements, but all will be united in consistent materiality, street furniture and the ability to 'turn on and turn off' activation.

Location of street furniture, planting and trees will reflect retail strategies and encourage gathering and activation in areas with greatest solar aspect.























4.3. Streets

4.3.1 Barangaroo Avenue

Barangaroo Avenue is the primary active street providing a continuous pedestrian extension from Barangaroo South, reinforced by its adjacency to active built form and Harbour Park.

Barangaroo Avenue will be a unique experience within Central Barangaroo with its own character and identity and designed to be active for extended hours through the day.

Its eastern edge will be defined by retail and active uses along buildings. Its western edge will flow seamlessly into the Harbour Park and be defined through street tree planting and pavilions contained within the structured tree line. The pavilions will create a two sided street experience and, along with street trees, ameliorate solar and wind impacts from the west.

Clear sight lines will be maintained along the avenue with unobstructed views through to Nawi Cove to the north and to Barangaroo South. The avenue nature is reinforced through structured tree planting, with the species selection to be coordinated with the proposed Barangaroo Avenue to the south.

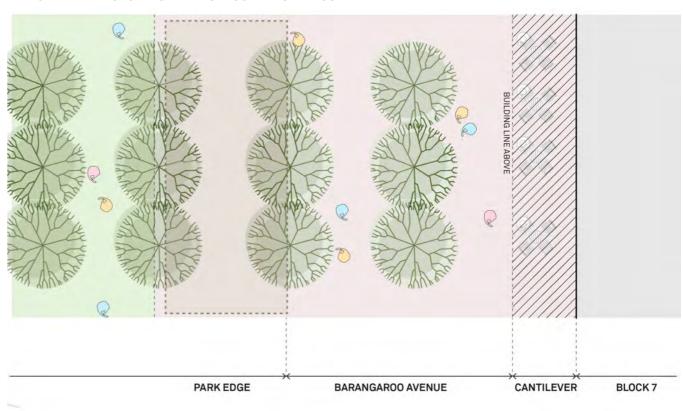
Barangaroo Avenue will primarily by closed to vehicular traffic in front of Blocks 5 and 6. Traffic management measures to facilitate this will be developed during design development. One directional vehicle flow will occur from Street D, through Barangaroo Avenue to Street C.

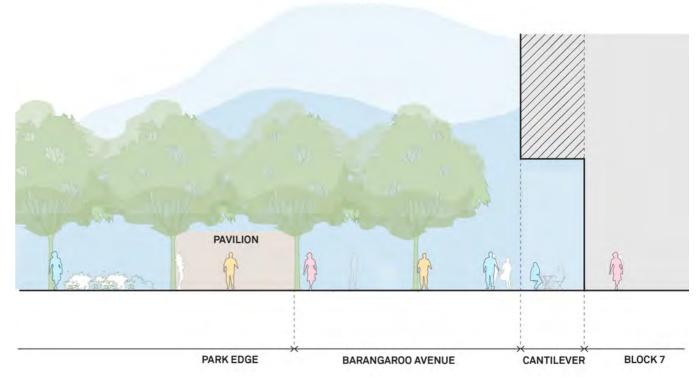
Barangaroo Avenue should be characterised by:

- _Reinforcement of its role as the axial north-south connector within Barangaroo
- _Pedestrian priority;
- _Slow, one-way vehicular circulation within Central Barangaroo development zone in front of Block 7;
- _Urban elements and planting arranged to define the street;
- _Tree planting aligned to the Barangaroo South tree axis;
- _Designed to integrate the community and retail pavilions
- _Ability to accommodate small events such as markets and retailer activations and performances;
- _Planned and designed to accommodate alfresco dining and associated licensed zones.



INDICATIVE PLAN SHOWING BARANGAROO AVENUE LAYOUT





INDICATIVE SECTION SHOWING BARANGAROO AVENUE LAYOUT

4. Design Guidelines4.3. Streets

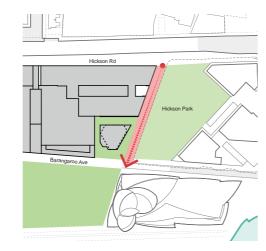
4.3.2 Barton Street

Barton Street will be a key local connecting street, providing vehicle access between Barangaroo Avenue and Hickson Road. It provides an address and access for development on Block 5 and defines the built form edge to the adjacent Hickson Park.

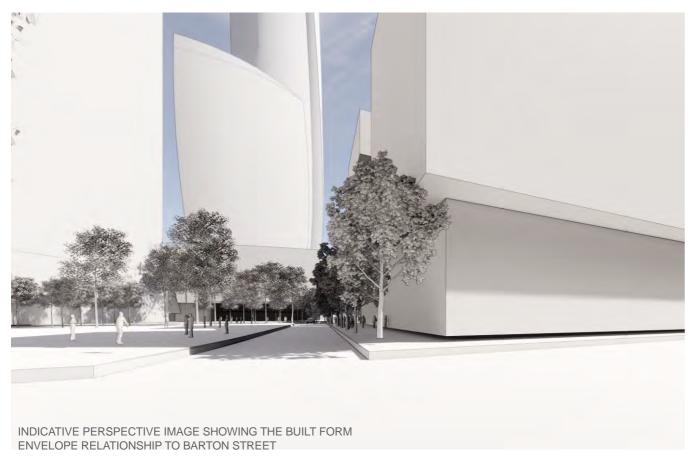
Barton Street should be characterised by:

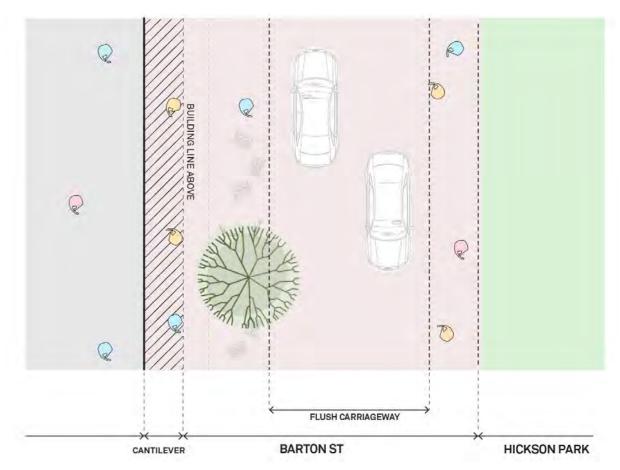
- _A two-directional, 7 metre vehicle carriageway connecting Barangaroo Avenue and Hickson Road
- _Development on Block 5 may cantilever over the northern footpath to provide pedestrian cover and amenity
- _A slow speed traffic environment to allow ease of pedestrian access across to Hickson Park
- _A left-in / left-out configuration at Hickson Road
- _A short term loading zone within the road area
- _Regular street tree planting along the northern kerb / footpath.

The design of Hickson Park has been subject to existing approvals and is not park of this modification.

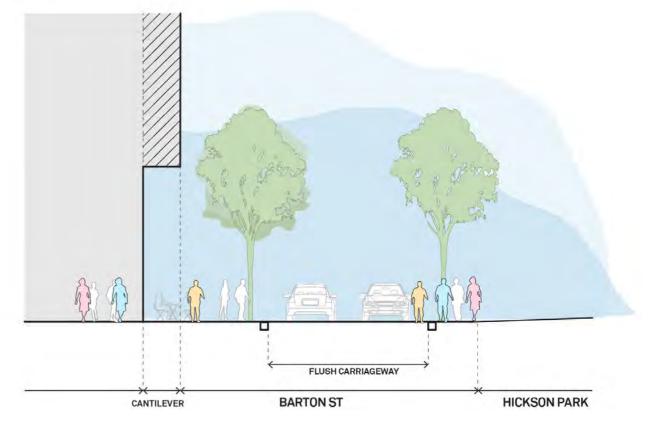


KEY PLAN





INDICATIVE PLAN SHOWING BARTON STREET LAYOUT



INDICATIVE SECTION SHOWING BARTON STREET LAYOUT

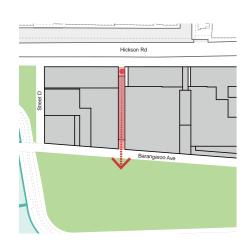
4.3. Streets

4.3.3 Streets - C & D

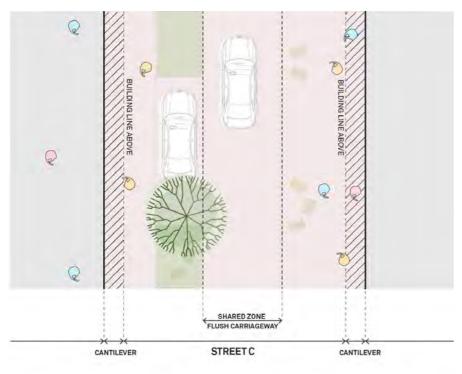
The east-west street network will be a series of active and vibrant streets consisting of a straight path of vehicular travel and clear priority for pedestrians. Vehicular circulation will be onedirectional, providing drop off areas adjacent entries and lobbies and minimal on street parking.

The relationship between public domain and building is enhanced by the variety of widths created by the building form and landscaping zones to create pockets of activation along the streets. Location of street furniture, planting and trees reflect retail strategies and encourage gathering and activation in areas with greatest solar

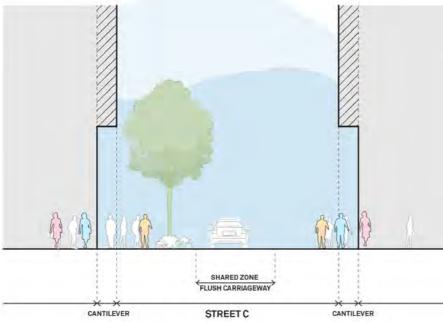
The streets will be largely activated by retail and / or dining uses and be pedestrian prioritised featuring low speed, increasing pedestrian permeability between both sides of the street. The streets will provide a strong visual and physical connector between Hickson Road and the harbour, and provide visual amenity from High Street behind due to the unobstructed view between blocks.



KEY PLAN



INDICATIVE PLAN SHOWING STREET C LAYOUT



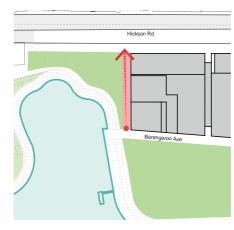
INDICATIVE SECTION SHOWING STREET C LAYOUT

East-west streets will be characterised

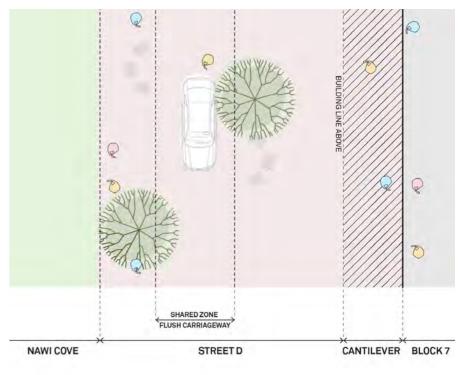
- _Pedestrian priority;
- _Slow, one way vehicular circulation;
- _Urban elements and planting arranged to promote pedestrian priority and create a shared, slow vehicle environment;
- _Discrete areas for on street parking and drop off:
- _Street C is proposed as a one-way 'shared street' with retail activity on both
- _Street D is proposed as a one-way 'shared street' with retail activity on one side overlooking the Nawi Cove.

Streets C and D should:

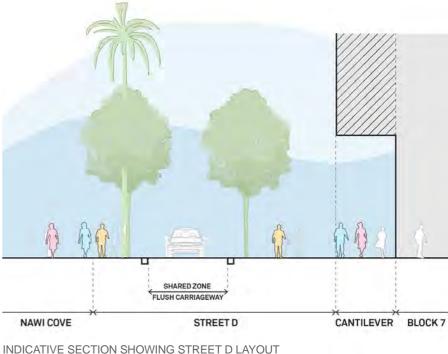
- _Maintain a consistent street wall at the building base that also provides for retail expression; and upper level terraces, such as Nawi Terrace, provide elevated public spaces at level 1
- _Enable clear pedestrian priority for access from Harbour Park and Block 7 to Nawi Cove and Barangaroo Station
- _Accommodate pedestrian movement from street level to Nawi Terrace at level
- _Street C should accommodate a level 1 pedestrian bridge between Block 6 and Block 7
- _Provide adequate daylight and ventilation to streets
- _Maximise sunlight and views to and from all building floors
- _Consider western edge of building form to all blocks to minimise impact on public domain and view corridor through and over the site



KEY PLAN



INDICATIVE PLAN SHOWING STREET D LAYOUT



4.3. Streets

4.3.4 Hickson Road

In the design and delivery of Barangaroo Station, Sydney Metro and INSW are collaborating to create a strong vision for Hickson Road as a landscaped city boulevard and people oriented environment. Central Barangaroo buildings that address Hickson Road will support the creation of a civic, people-focused and active boulevard. An attractive and engaging place that fosters city life. The scale, grain and interface of buildings with the street is critical.

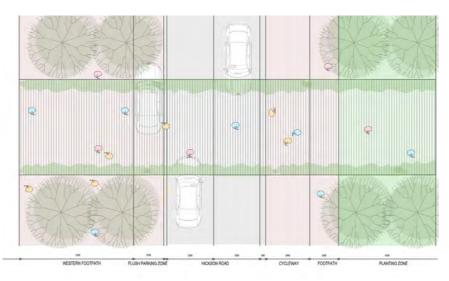
The scale of the built form will respond to two drivers:

- _A boulevard scale, with a clearly defined street wall that emphasises the civic function of Hickson Road as a commercial
- _Realignment of the section to create added dimension on the western side of the street as the primary circulation zone.

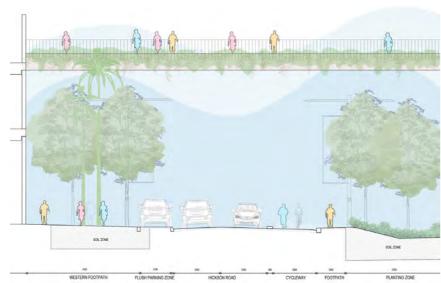
Development will front and activate wide pedestrian footpaths along the western edge of the road, with weather protection active retail, connected lobbies and outdoor seating spilling out onto the boulevard.

Hickson Road will be characterised by:

- _A traditional kerbed road concept, where pedestrians are provided clear accessibility along the footpath
- _street materiality is continuously applied across the ground plane
- _A consistent line of street trees providing shade and extending the concept of the 'urban room'
- _East-west block connections to link with the harbour
- _Boulevard scale of built form to Hickson
- _Consistent weather protection provided by awnings or cantilever building elements _A strong and consistent building edge to Hickson Road
- _Activate the ground plane with people attractors such as civic retail, food and beverage uses and office lobbies.
- _Well integrated and discrete areas for bus stops, taxi drop offs and parking



INDICATIVE PLAN SHOWING HICKSON ROAD LAYOUT



INDICATIVE SECTION SHOWING HICKSON ROAD LAYOUT

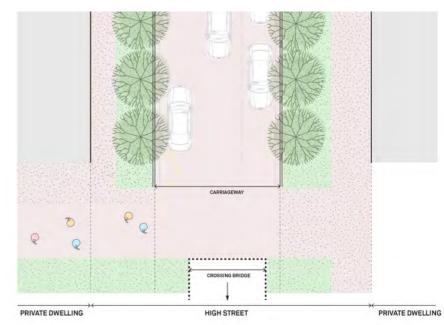
4.3.5 High Street Bridge

The High Street bridge provides pedestrian connection from Millers Point to the Central development blocks, Hickson Road, Barangaroo Steps and Millers Point.

Bridge design will be integral with the landscape and architectural designs. The bridge will span Hickson Road without intermediate supports.

The public domain design and finish of the bridge will extend into High Street to provide a clear and cohesive connection.

High Street will prioritise pedestrian comfort through street tree planting. Road pavement will be minimised in width where possible to allow generous pedestrian footpaths.



INDICATIVE PLAN SHOWING HIGH STREET LAYOUT



KEY PLAN

4. Design Guidelines

4.4. Parks and Public Spaces

4.4.1 Barton Plaza

Barton Plaza acts as a connector in all directions, with green corridors leading to Waterman's Cove via the Strada, Barangaroo Avenue and Barangaroo South

via Watermans Quay, Hickson Road and Foreshore Park.

Barton Street acts as a distinct boundary to Hickson Park, and will become a flush pavement where Barton and Barangaroo Avenue meet. The transition between natural and urban environments is signalled by activated edges and an avenue of trees. Ground floor retail eases the introduction of commercial space with an iconic, flagship luxury retail store, complementing the aspirational feeling brought to the precinct by Crown.

Trees and sculptural shades will filter through the site, mitigating wind and providing shade and comfort. They will help define this specific area and connect the many parts of Barangaroo.







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Artist designed shade structures flow through the area, a defining character for the Plaza







Green Spaces

Smaller green spaces with occupiable seating edges will create places to meet and hangout.







Hickson Park Experience

A retreat at the geographical heart of Barangaroo. A civic lawn in the tradition of NYC's Bryant Park.







Visitors from the new Metro will emerge into a vibrant, aspirational and green environment.



Tree Planting

Extensive lawn and tree planting will cool the streets and mitigate wind









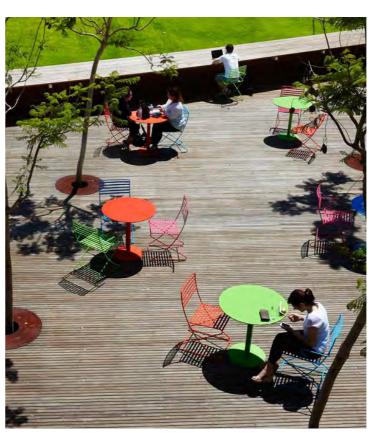
Park to Park to Water

Paths and tree planting will frame clear views from park to park to water.











4. Design Guidelines4.4. Parks and Public Spaces

4.4.2 Barangaroo Steps

Barangaroo Steps is a potential connector between the Rocks and the Harbour. The steps will be a place for all, a dynamic mixed use public space activated by community uses, retail uses, restaurants, cafes and workplaces.

The Barangaroo Steps will act as both a comfortable connection between Millers Point and Central Barangaroo. The space is designed to welcome the outdoors in. Green, open and airy, it will offer inviting gardens, connections to Nawi Cove, as well as small pockets of green space for people to enjoy.

Key Plan



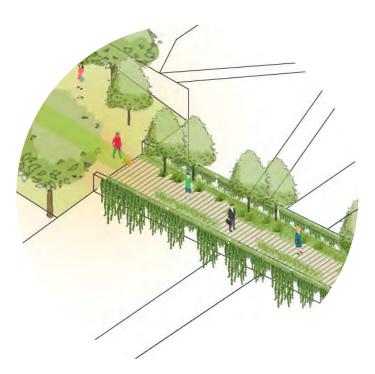


The Platform

A decision point with elevated views to water. The space has clear links to Blocks 5 & 6 public lobby spaces.



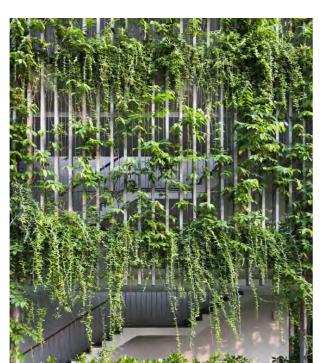




Bridge to Millers Point

220

A potential pedestrian bridge allows direct access from Millers Point to Central Barangaroo.





A space sheltered green space perfect for meeting friends before embarking on adventures at Barangaroo.







Connection

An identifiable meeting space and an opportunity to discover the multi-layered complexity and excitement of Central Barangaroo.



The Urban Theatre

222

Sitting on the steps allows the opportunity to watch both daily life and curated events occur within the Waterfront Park











Inside -Outside

The materiality of the steps will continue beyond glass lines and lobby doors, creating seamless transitions from outside to inside.







4. Design Guidelines

4.4. Parks and Public Spaces

4.4.3 Nawi Terrace

Nawi Terrace at Level 1 has been designed to welcome the outdoors in. Green, open and airy, Nawi Terrace offers inviting rooftop gardens, a verandah connecting Nawi Cove and park, as well as small pockets of interconnected spaces for people to enjoy.

Voids provide sight lines from Nawi Terrace through to the basement below, offering insight into the multi-layered experience of Central Barangaroo, and allowing natural light into these areas.

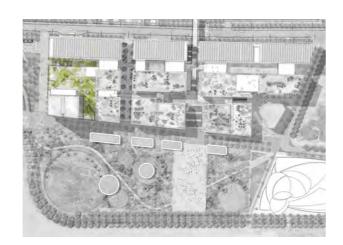
Green and leafy, the Terrace will be a new meeting place for a Friday drink, a weekday lunch or any time in between. Nawi Terrace will be a destination, offering elevated views of the harbour and Nawi Terrace, where northern light provides comfort all year round.



Terrace Garden

A sun drenched northern terace, with gardens, tree grove and sculpture activation











Block 7 Connection

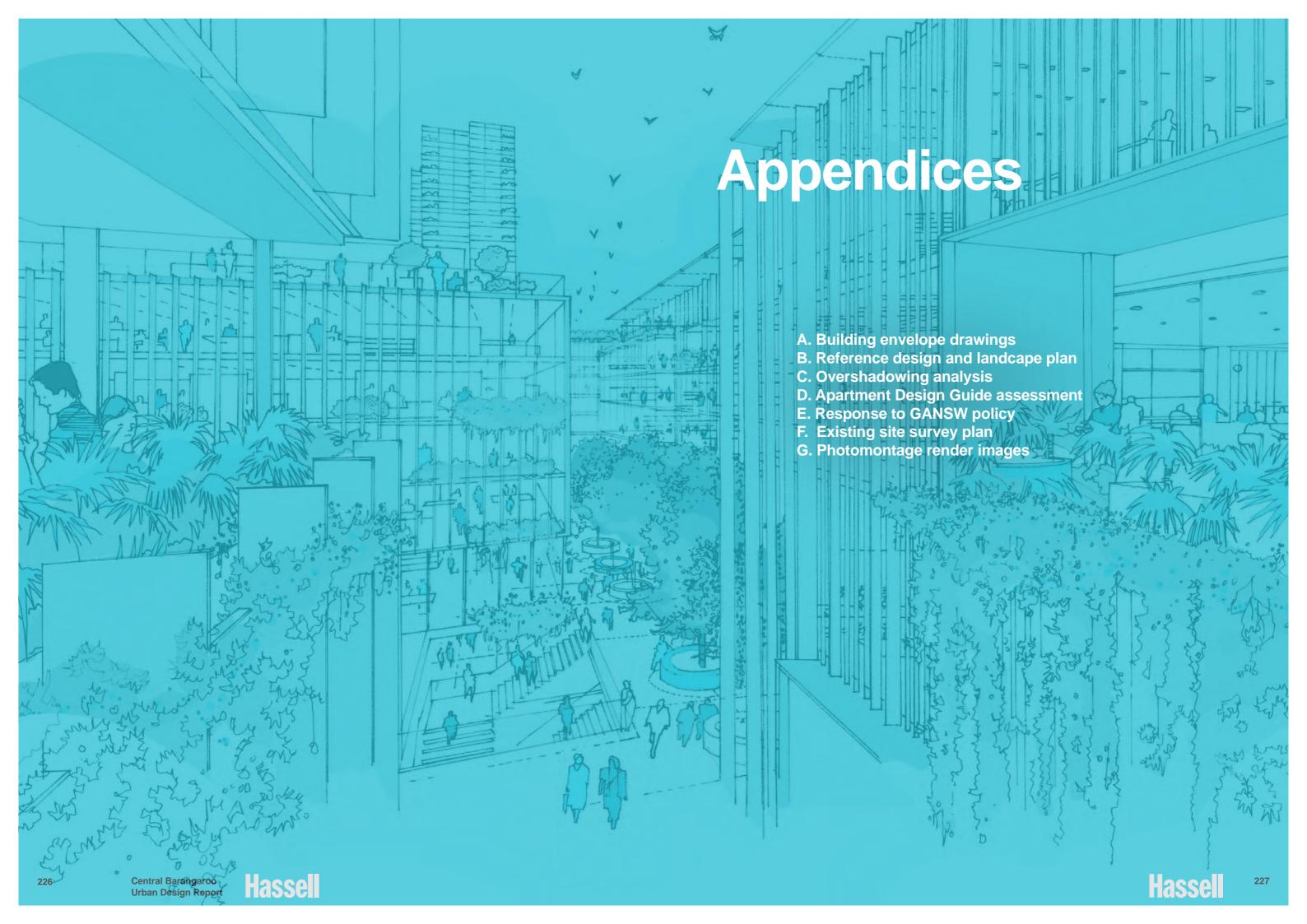
A potential building connection that can act as a civic space for events or informal public gatherings.

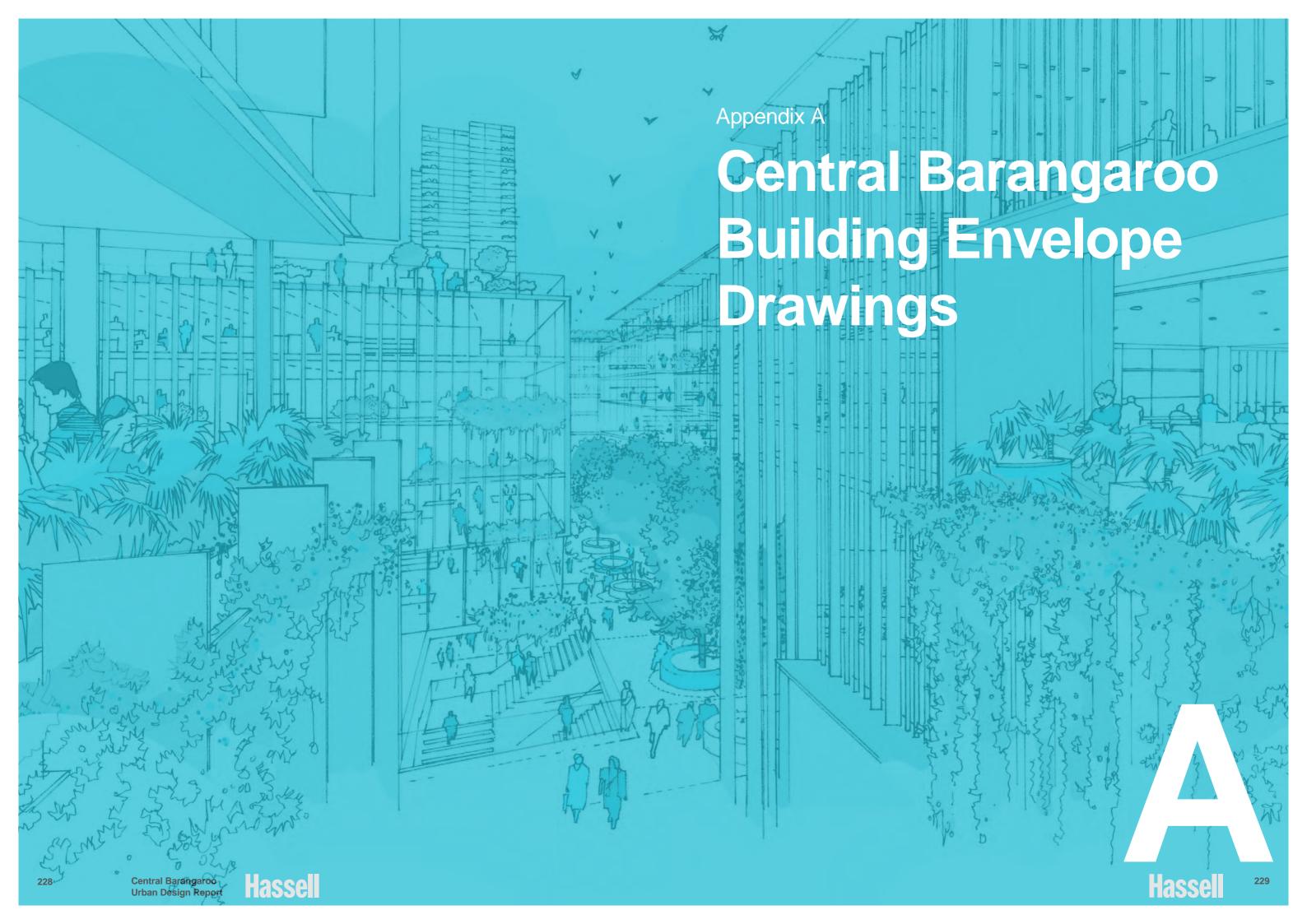














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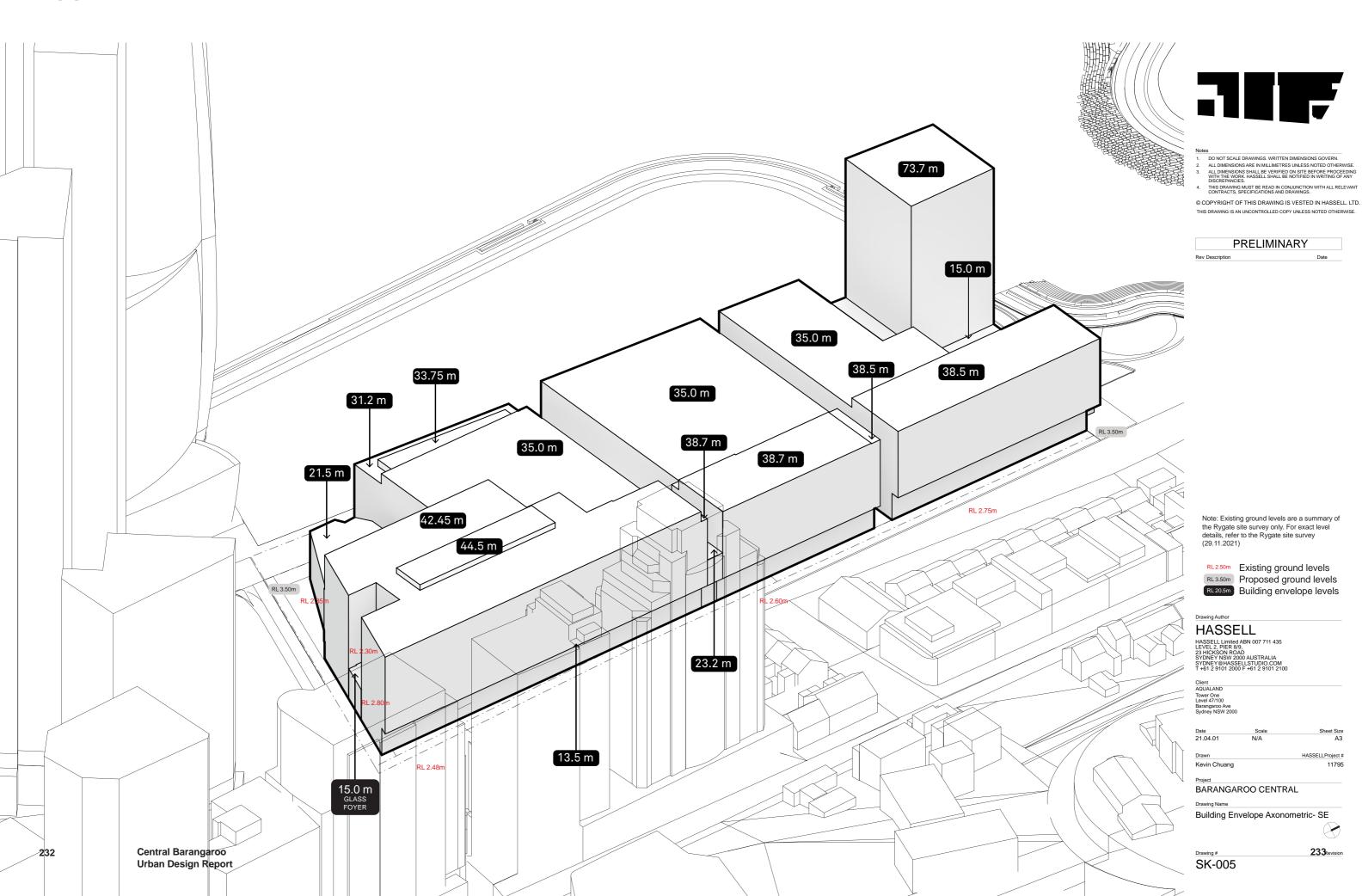
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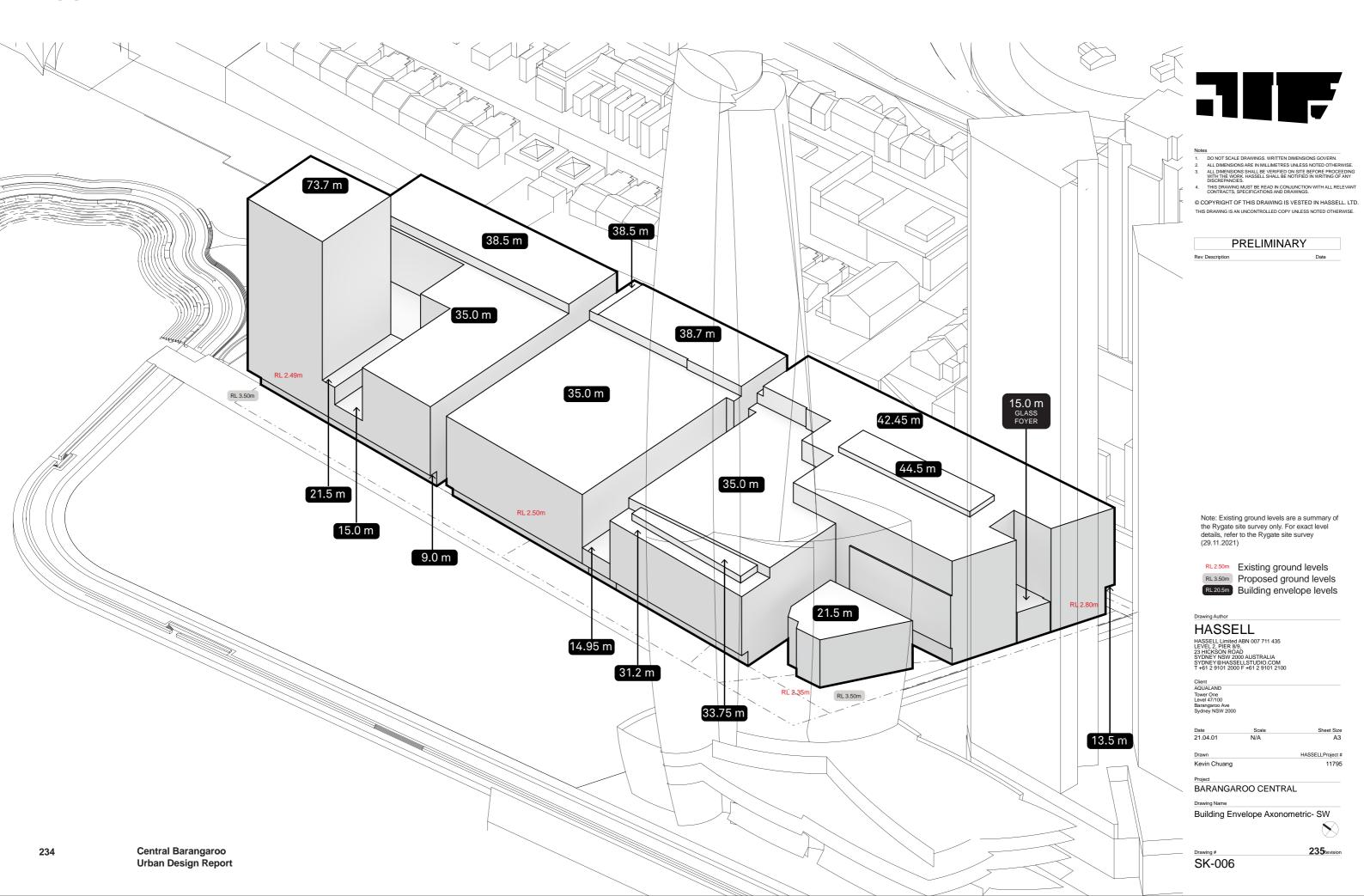
231Revision

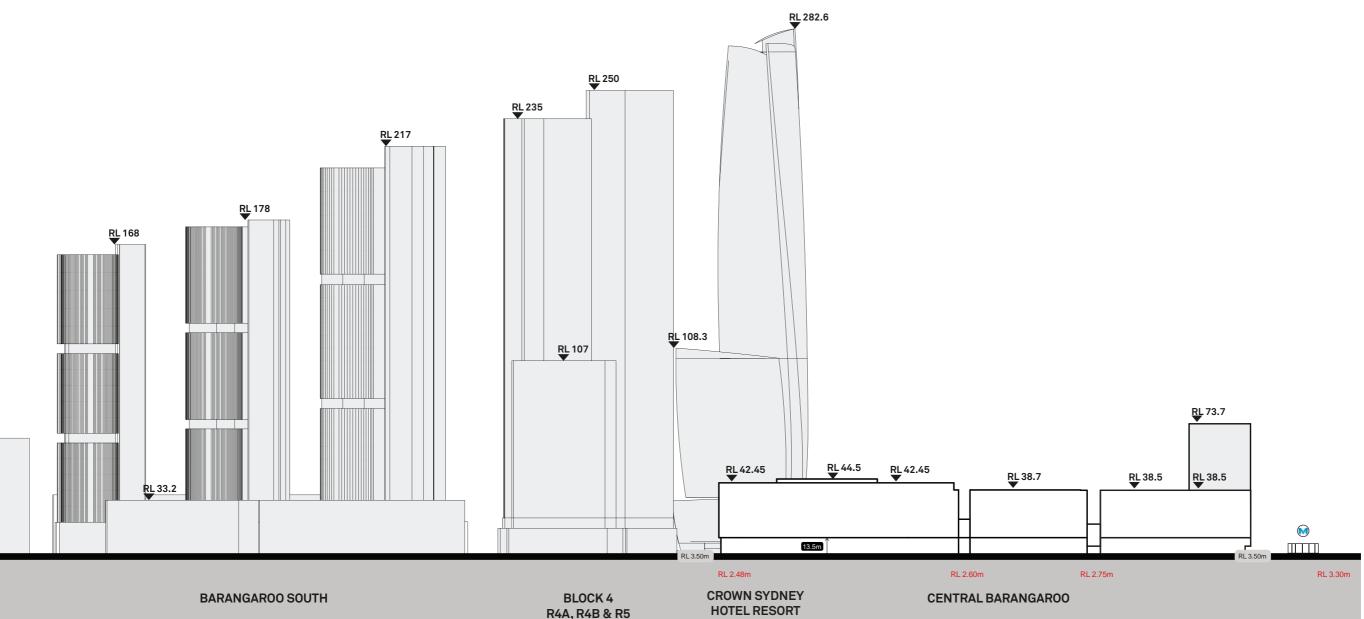
BARANGAROO CENTRAL

Building Envelope Plan

Drawing Name







(BLOCK Y)



- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN.
 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTEO OTHERWISE.
 ALL DIMENSIONS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING
 WITH THE WORK HASSELL SHALL BE NOTIFIED IN WRITING OF ANY
 DISCREPANCIES.
- THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTS, SPECIFICATIONS AND DRAWINGS.

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PRELIMINARY

Note: Existing ground levels are a summary of the Rygate site survey only. For exact level details, refer to the Rygate site survey (29.11.2021)

RL 2.50m Existing ground levels RL3.50m Proposed ground levels
RL20.5m Building envelope levels

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Client AQUALAND Tower One Level 47/100 Barangaroo Ave Sydney NSW 2000

Date 21.04.01 Scale 1:2000 @ A3

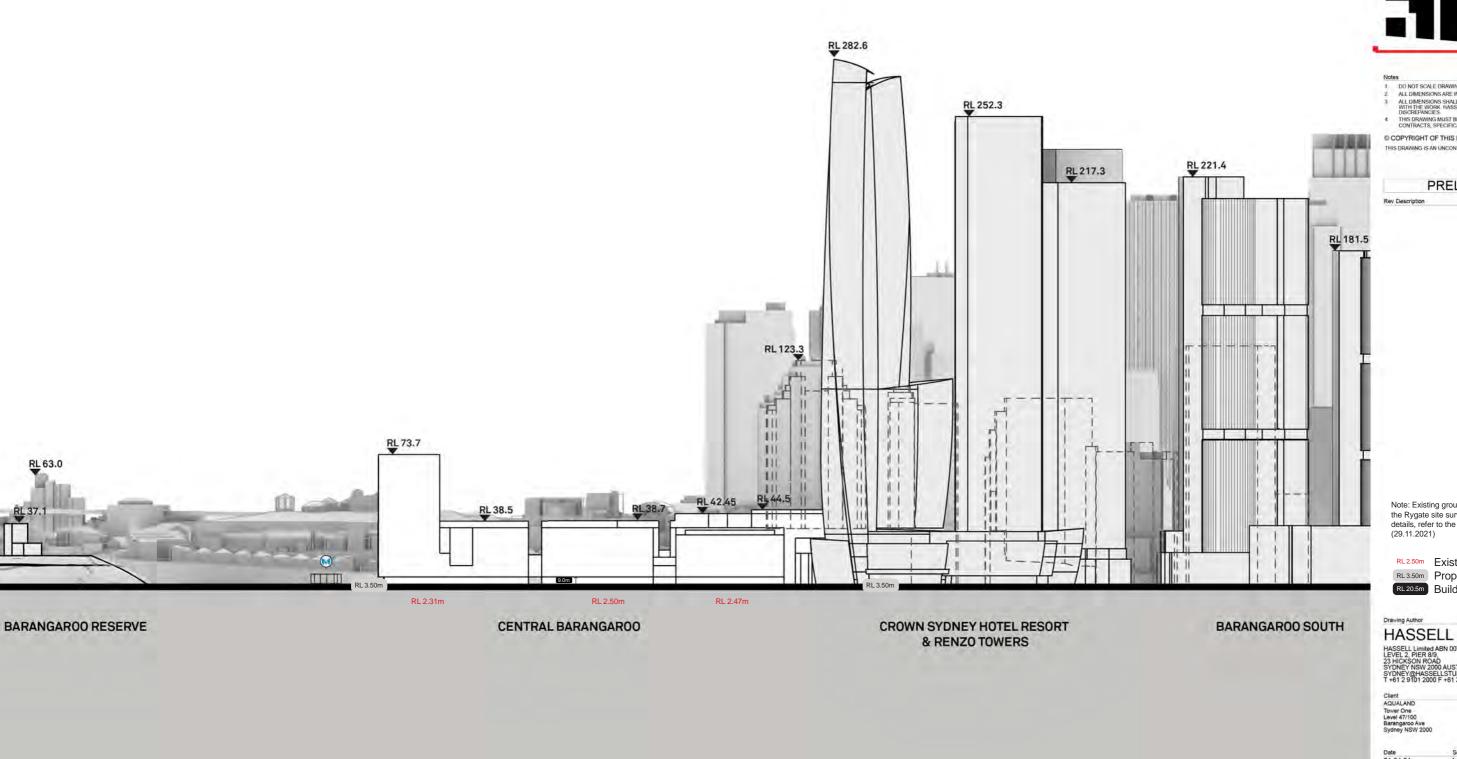
Kevin Chuang

BARANGAROO CENTRAL

Drawing Name

Building Envelope Section

237Revision SK-007





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PRELIMINARY

Note: Existing ground levels are a summary of the Rygate site survey only. For exact level details, refer to the Rygate site survey (29.11.2021)

RL 2.50m Existing ground levels RL3.50m Proposed ground levels
RL20.5m Building envelope levels

Scale 1:2000 @ A3 Date 21.04.01

Kevin Chuang

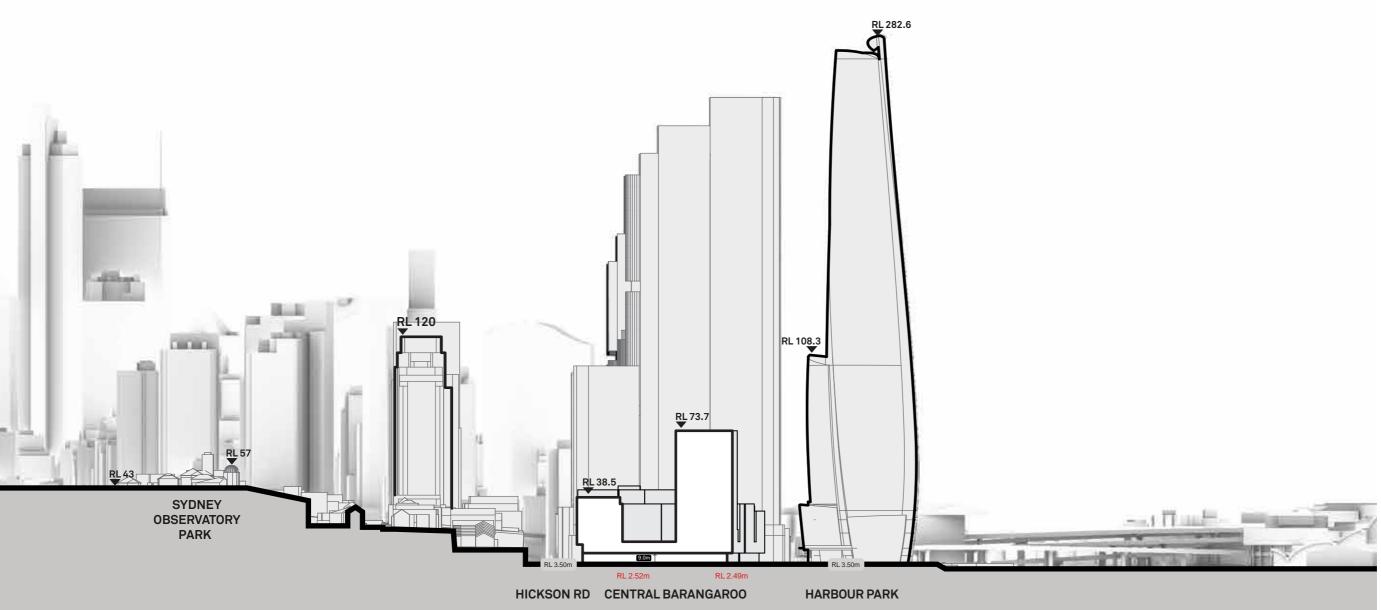
239Revision

BARANGAROO CENTRAL

Drawing Name

Building Envelope Section

SK-008





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PRELIMINARY

Note: Existing ground levels are a summary of the Rygate site survey only. For exact level details, refer to the Rygate site survey (29.11.2021)

RL 2.50m Existing ground levels Proposed ground levels RL 20.5m Building envelope levels

Drawing Author

HASSELL

Date 21.04.01 Scale 1:2000 @ A3

Kevin Chuang

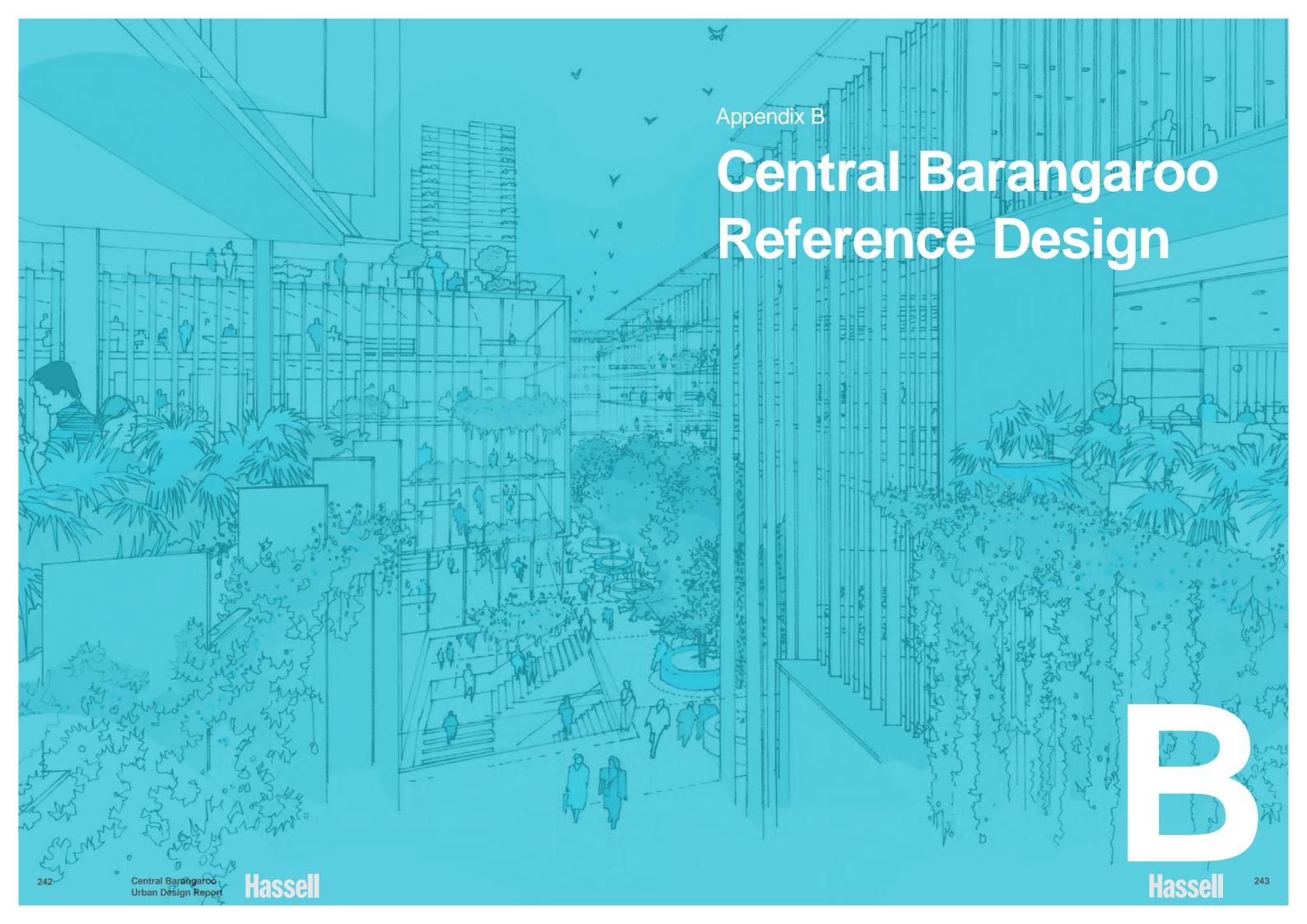
Project
BARANGAROO CENTRAL

Drawing Name

Building Envelope Section

SK-010

241Revision



Appendix B Central Barangaroo Indicative Reference Design – Ground floor

This indicative reference design for Central Barangaroo is not prescriptive or restrictive, but conceptually illustrates one of many potential development schemes achievable within the proposed building envelope.



Appendix B Central Barangaroo Indicative Reference Design – Level 1

This indicative reference design for Central Barangaroo is not prescriptive or restrictive, but conceptually illustrates one of many potential development schemes achievable within the proposed building envelope.



Appendix B Central Barangaroo Indicative Reference Design – Typical floor

This indicative reference design for Central Barangaroo is not prescriptive or restrictive, but conceptually illustrates one of many potential development schemes achievable within the proposed building envelope.



Appendix B Central Barangaroo Indicative Reference Design – Site landscape plan





Overshadowing Analysis - Solar access comparison studies

Enabling Hickson Park's distinct character

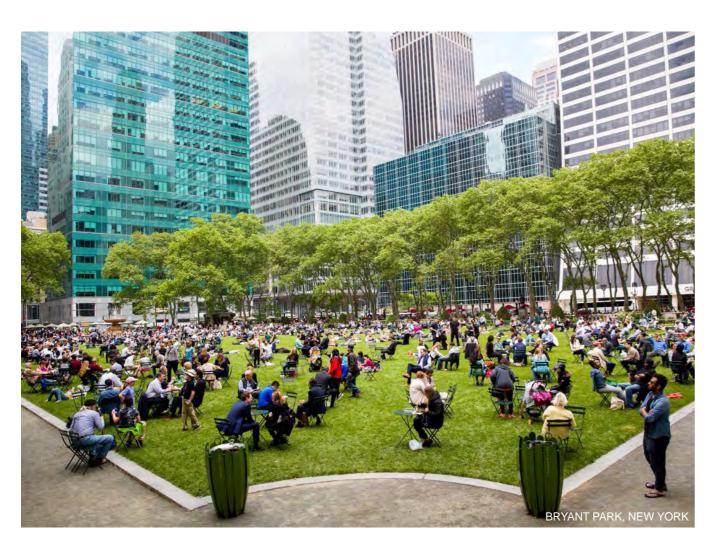
Hickson Park is an important part of the public space network throughout Barangaroo. It will function as a distinct city park with a strong and clear connection to Harbour Park. It will be activated on all sides with cultural and retail offerings, as well as lobbies to the residential buildings.

Similar to Bryant Park in New York City, Hickson Park will serve as an 'urban room' away from the overtly programmed spaces of Harbour Park. Its design and character is a contained urban lawn, a space of respite from the intensity of activity brought by surrounding tall buildings. The central lawn will be ringed by soft understorey and tree planting - acting as a counterpoint to the scale of adjacent towers.

The park is visually permeable, with views through to the foreshore and Hickson Road. Sight lines are available from Bond Plaza and Hickson Road, through the park to the waterfront.

Buildings are oriented to enable clear wayfinding through to Harbour Park. Through reorientation of vehicle movement, an unimpeded pedestrian pathway provides direct access along Barton Street to the harbour. Ground floor activation promotes this accessibility throughout the day and year.

Hickson Park offers an alternative experience to the network of open spaces throughout Barangaroo. By completing the urban frame on its northern edge, Central Barangaroo ensures a cohesiveness to the overall urban design approach to Barangaroo, whilst ensuring ongoing amenity and functionality of Hickson Park.



Defining Hickson Park Boundary

The northern boundary of Hickson Park has been the subject of a number of iterations in the design development of the Barangaroo Concept Plan. Most recently, the MOD 8 approval to the Concept Plan amended the northern boundary of Hickson Park to widen the aperture of the park along Barangaroo Avenue.

This widened threshold, whilst connecting Hickson Park to Harbour Park, forces a blended character of the two proposed public spaces, limits the potential to create two distinct park experiences, impacts circulation and limits the ability to create a positive urban space connection between Central Barangaroo and Barangaroo South.

The approved MOD 8 Concept Plan defines Hickson Park's characteristics as:

"providing view corridors from Hickson Road to the harbour supporting large mature trees, including with the provision of at least 2,000 sqm deep soil with a depth of at least 3 metres not to be overshadowed by built form over more than an average area of 2,500 square metres between the hours of 12:00 and 14:00 on 21 June each year to be primarily comprised of soft landscaping, including extensive areas of grass".

The urban design response in this MOD 9 proposal creates Barton Plaza as a distinct space within Central Barangaroo to help define Hickson Park, whilst marking the threshold to Harbour Park. A flagship building announces the changed urban experience, and marks the transition through to multi level retail, and Sydney Metro. This integrated approach amplifies the pedestrian experience, allowing Hickson Park to be accessible from all directions.

The Central Barangaroo MOD 9 proposal enables Hickson Park to:

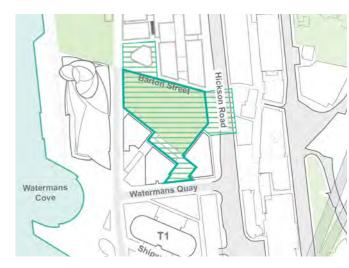
- Create an integrated response at the interface with Barangaroo Avenue, the flagship building and Hickson Park
- Enhance connectivity to the adjacent key spaces, programs and corridors
- Allow visual permeability across Hickson Park to the Harbour Park



MOD 6 HICKSON PARK



MOD 8 HICKSON PARK



PROPOSED MOD 9 HICKSON PARK

Overshadowing Analysis - Solar access comparison studies

Hickson Park Environmental Impact

Environmental comfort within Hickson Park is an important design consideration that has influenced the form of the building envelope, as well as specific design controls relating to the eventual built form. The project will ensure a substantial portion of the park is in sun on the winter solstice between 12pm and 2pm. Building and landscape design is carefully considered to provide wind mitigation to ensure a comfortable place for people to dwell and enjoy.

Owing to Hickson Park's location inboard of Barangaroo Avenue, its urban enclosure provides opportunities for a different character and alternative activities to emerge. As a space defined by clear urban edges, Hickson Park provides an open 'clearing' to the tight laneways and tall towers evident throughout Barangaroo South. As people emerge from the network of lanes that converge on Hickson Park, it will function as a green room, surrounded by retail and commercial space that give it a sense of activity, and a 'hum'.

Solar Access and Amenity Analysis

Sunlight access throughout the year is important. The diagrams below demonstrate the extent of sunlight access into Hickson Park between 12 and 2 on 21 June and relate to previous Concept Plan Modifications 6 and 8 and proposed Modification 9 to the Concept Plan. The MOD 9 design proposal shows a similar amount of overshadowing to the MOD 6 proposal, but the proposed built form offers a more beneficial overall impact with solar access achieved in more usable areas of public open space and closer to the park's connection with Harbour Park. Furthermore, the intended MOD 9 articulated massing provides for an average of 50% of the park being in sun during 21 June. This allows a minimum of 30 metre by 60 metre space measuring 1,800sqm in area that can accommodate over 800 people sitting comfortably.

This contrast between light and shade, activity and restfulness, intensity and space is consistent with providing a uniquely urban experience. Bryant Park in New York has been a touchstone for the design approach to Hickson Park, where intense active edges and tall urban towers provide a contrasting frame to areas of open lawn at its centre.

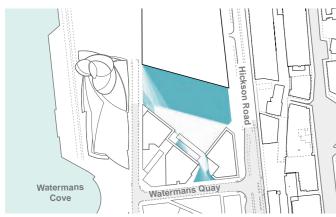
Wind Mitigation

Hickson Park is framed by multiple buildings on all sides, which creates wind condition that is unique to the location. To align with the proposed character and purpose of Hickson Park in creating a place for rest and retreat, pedestrian comfort and safety is therefore important.

This consideration has driven landscape design to provide wind mitigation measure to reduce wind speed and create comfortable pedestrian conditions in line with the aspiration of Hickson Park. The tighter aperture between Crown and Block 5 as evident in wind model testing provides for a more comfortable, safer Hickson park environment. Hard and soft landscaping is proposed in locations to best ease wind condition yet not impede on key sight line and movement corridors.

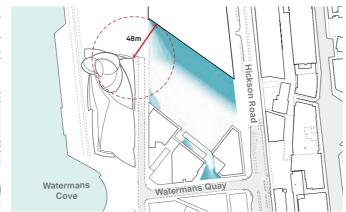
The Objective is to:

- Provide an attractive park setting that provides an peaceful and relaxing alternative to the highly active waterfront
- Create comfortable environment that is protective from cold winds
- Create a sunny area that is warm in winter and 50% of Hickson Park area



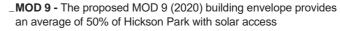
_MOD 6 (2014) - The former MOD 6 building envelope provided an average of 39% of Hickson Park with solar access.

- _The MOD 6 envelope overshadowed the park on average (between 12-2pm June 21st) by = 4,835.6 sqm
- _That is on average 61% of the park in shadow between the given threshold.

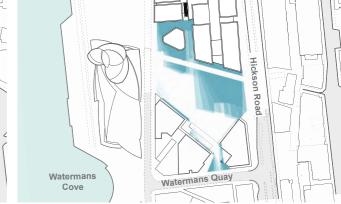


_MOD 8 (2016) - The MOD 8 building envelope provided an average of 61% of a larger Hickson Park with solar access





- _The envelope overshadows Hickson park on average (between 12-2pm June 21st)
- _That is on average 50% of the park in shadow between the given threshold

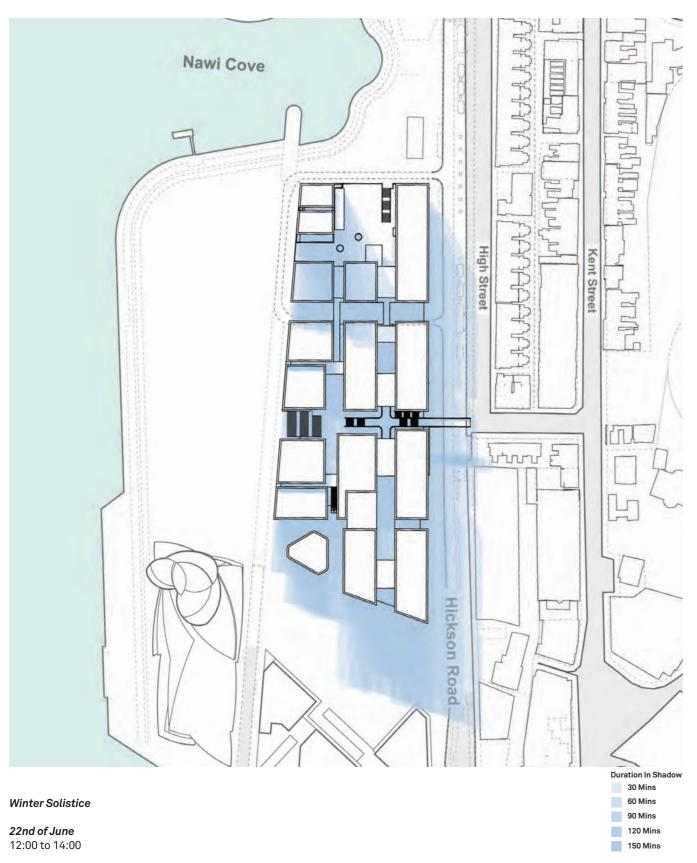


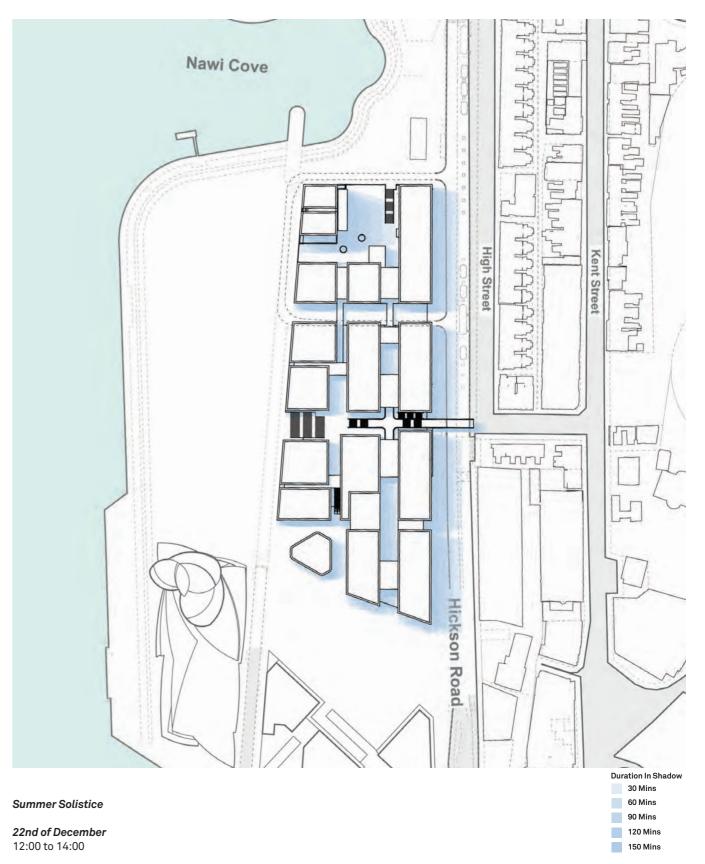
MOD 9 - Articulated: When articulated massing is applied to the proposed MOD 9 (2020) building envelope, it provides an average of 59% of Hickson Park with solar access

_That is on average 41% of the park in shadow between the given threshold (3,237.6 sqm)



Overshadowing Analysis - Solar access comparison studies





Overshadowing Analysis - Solar access comparison studies



_MOD 9 - The proposed MOD 9 (2020) building envelope provides an average of 50% of Hickson Park with solar access between 12 and 2pm at the winter solstice

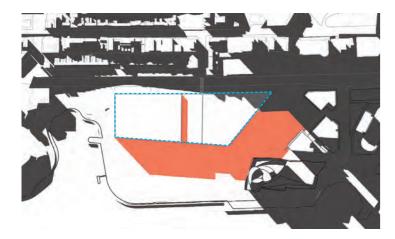


_MOD 9 - Articulated: When articulated massing is applied to the proposed MOD 9 (2020) building envelope, it provides an average of 59% of Hickson Park with solar access

Overshadowing Analysis - Solar access comparison studies Winter Solstice - 9am

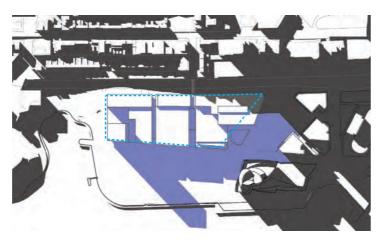
23,181

Approved Envelope



Area of shadow outside of approved envelope:

Proposed Envelope



31,016

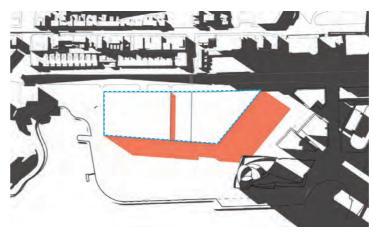
Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Appendix C

Overshadowing Analysis - Solar access comparison studies Winter Solstice - 10am

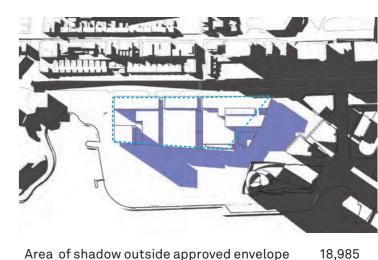
Approved Envelope



Area of shadow outside boundary

13,989

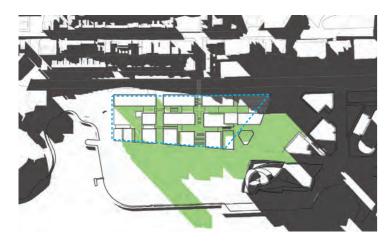
Proposed Envelope



Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

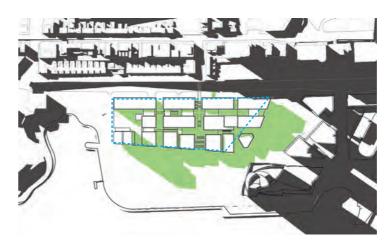
Reference Design



Area of shadow outside approved envelope Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

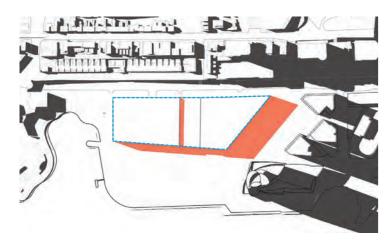
Reference Design



Area of shadow outside approved envelope 18,960 Inclusive of building footprint outside approved envelope boundary

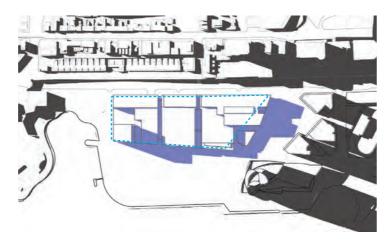
Overshadowing Analysis - Solar access comparison studies Winter Solstice - 11am

Approved Envelope



Area of shadow outside approved envelope 8,814

Proposed Envelope

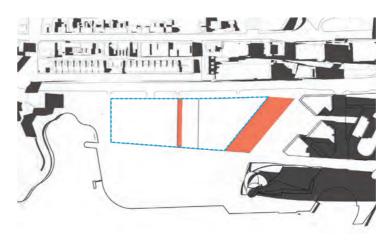


Area of shadow outside approved envelope 12,189 Inclusive of building footprint outside approved envelope boundary

Appendix C

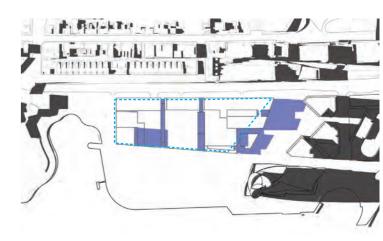
Overshadowing Analysis - Solar access comparison studies Winter Solstice - 12pm

Approved Envelope



Area of shadow outside approved envelope 4,715

Proposed Envelope

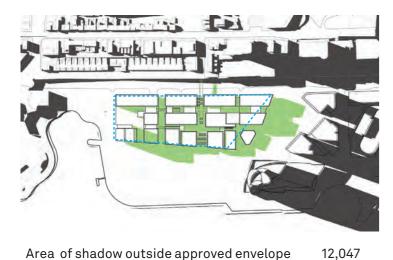


Area of shadow outside approved envelope

7,462

Inclusive of building footprint outside approved envelope boundary

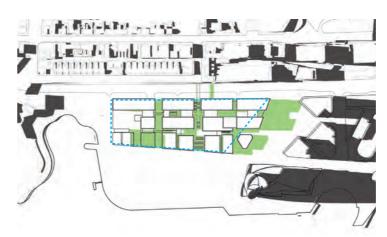
Reference Design



Area of shadow outside approved envelope Inclusive of building footprint outside approved

envelope boundary

*All figures are in square metres



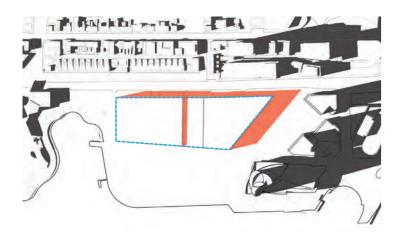
Area of shadow outside approved envelope 7,340 Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design

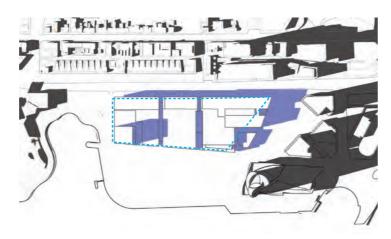
Overshadowing Analysis - Solar access comparison studies Winter Solstice - 1pm

Approved Envelope



Area of shadow outside approved envelope 6,914

Proposed Envelope

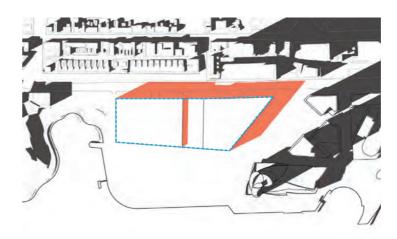


Area of shadow outside approved envelope 10,647
Inclusive of building footprint outside approved envelope boundary

Appendix C

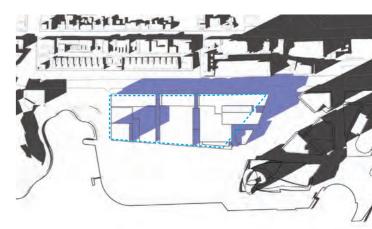
Overshadowing Analysis - Solar access comparison studies Winter Solstice - 2pm

Approved Envelope



Area of shadow outside approved envelope 11,161

Proposed Envelope

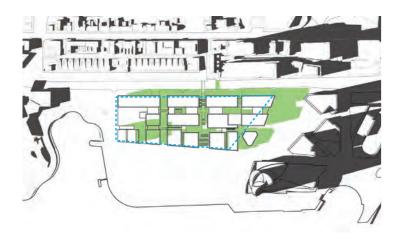


Area of shadow outside approved envelope

16,423

Inclusive of building footprint outside approved envelope boundary

Reference Design



Area of shadow outside approved envelope 10,560
Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

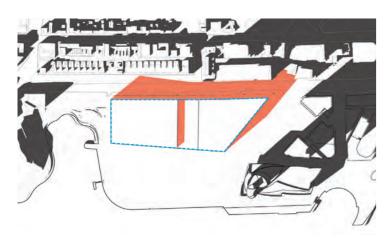
Reference Design



Area of shadow outside approved envelope 15,297
Inclusive of building footprint outside approved envelope boundary

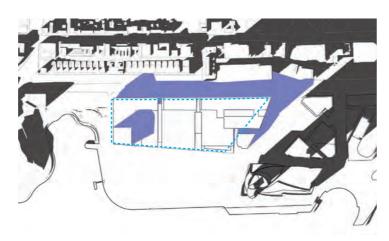
Overshadowing Analysis - Solar access comparison studies Winter Solstice - 3pm

Approved Envelope



Area of shadow outside approved envelope 12,005

Proposed Envelope



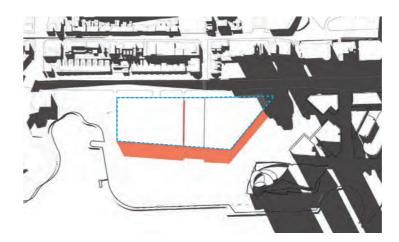
Area of shadow outside approved envelope 15,767
Inclusive of building footprint outside approved envelope boundary

Appendix C

Overshadowing Analysis - Solar access comparison studies Equinox - 9am

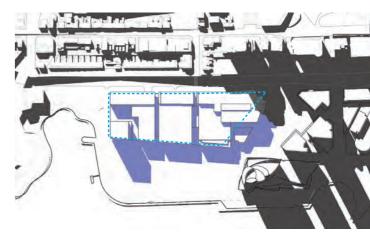
11,173

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope

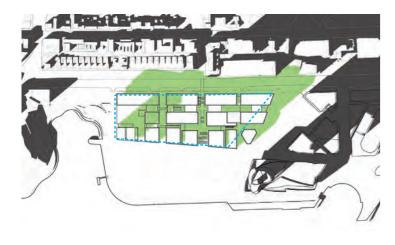


Area of shadow outside approved envelope

15,037

Inclusive of building footprint outside approved envelope boundary

Reference Design

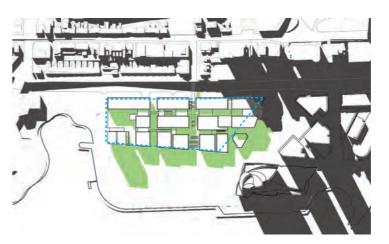


Area of shadow outside approved envelope 14,810
Inclusive of building footprint outside approved

envelope boundary

*All figures are in square metres

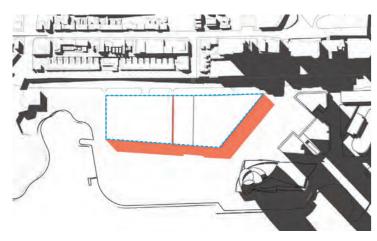
Reference Design



Area of shadow outside approved envelope 13,497
Inclusive of building footprint outside approved envelope boundary

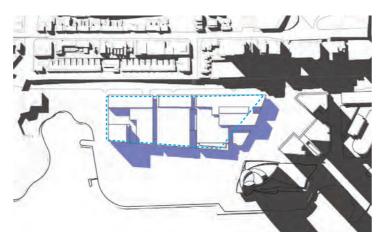
Overshadowing Analysis - Solar access comparison studies Equinox - 10am

Approved Envelope



Area of shadow outside approved envelope 7,228

Proposed Envelope



10,418

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

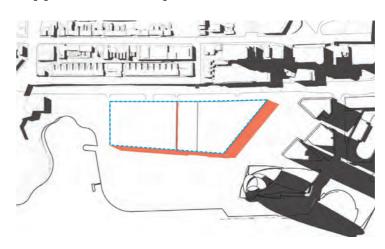
Appendix C

Overshadowing Analysis - Solar access comparison studies Equinox - 11am

4,215

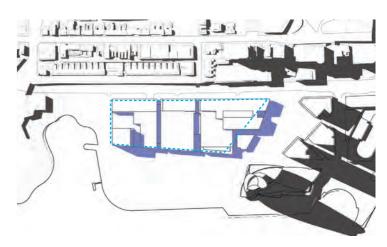
6,408

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope

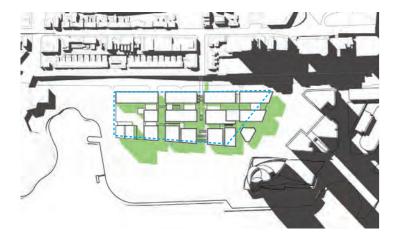


Area of shadow outside approved envelope

Inclusive of building footprint outside approved

envelope boundary

Reference Design

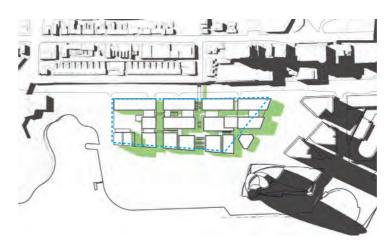


Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design



Area of shadow outside approved envelope

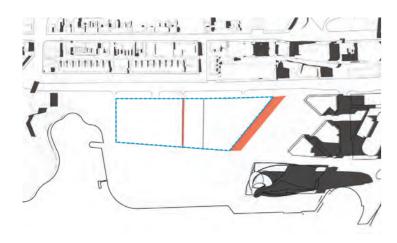
Inclusive of building footprint outside approved envelope boundary

Overshadowing Analysis - Solar access comparison studies Equinox - 12pm

1,880

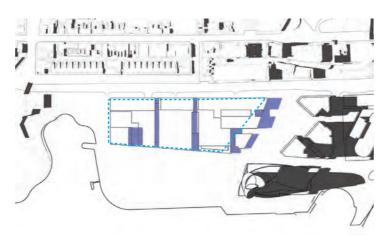
4,599

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope



4,750

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

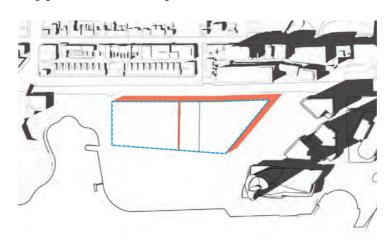
Appendix C

Overshadowing Analysis - Solar access comparison studies Equinox - 1pm

4,013

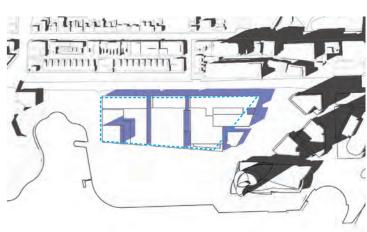
7,410

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope



7,694

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Reference Design

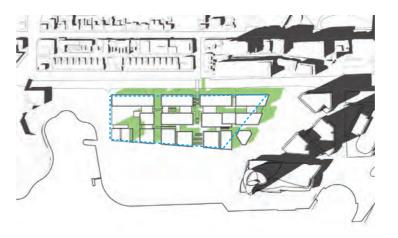


Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design

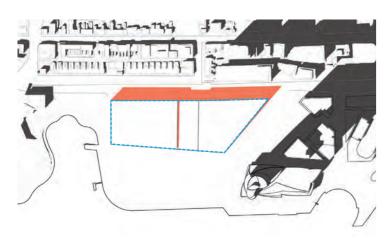


Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

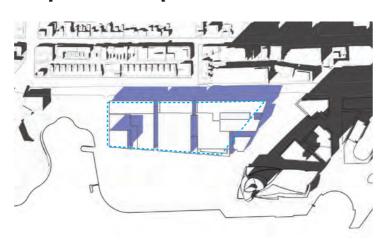
Overshadowing Analysis - Solar access comparison studies Equinox - 2pm

Approved Envelope



Area of shadow outside approved envelope 6,467

Proposed Envelope



10,945

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

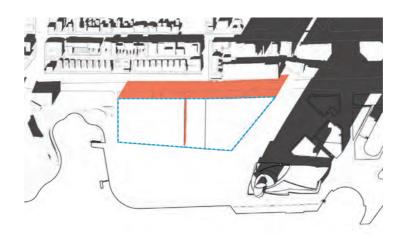
Appendix C

Overshadowing Analysis - Solar access comparison studies Equinox - 3pm

9,537

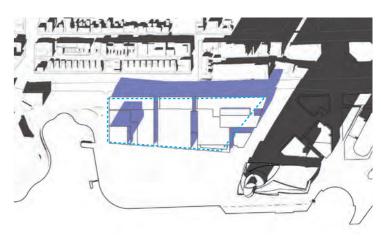
11,410

Approved Envelope



Area of shadow outside approved envelope

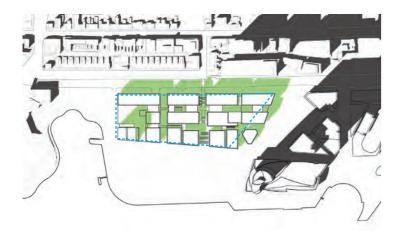
Proposed Envelope



Area of shadow outside approved envelope

Inclusive of building footprint outside approved

Reference Design



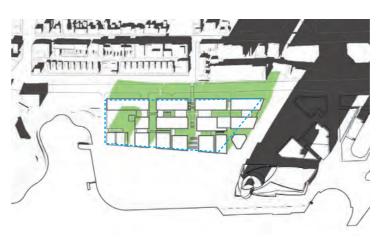
10,966

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design



Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

11,381

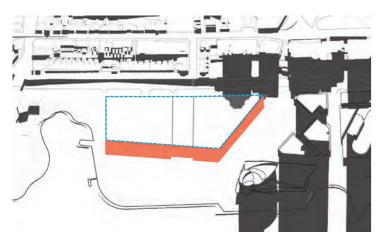
envelope boundary

Overshadowing Analysis - Solar access comparison studies Summer Solstice - 9am

6,903

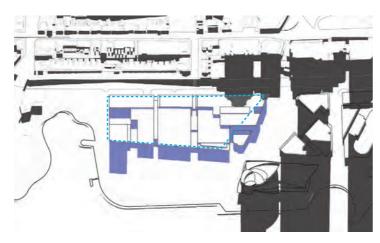
8,338

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope



9,478

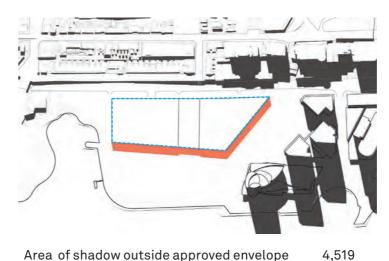
Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Appendix C

Overshadowing Analysis - Solar access comparison studies Summer Solstice - 10am

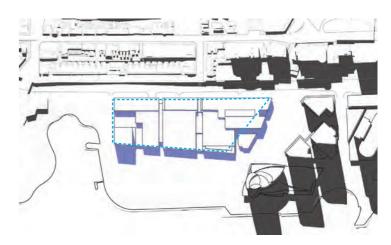
Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope

envelope boundary

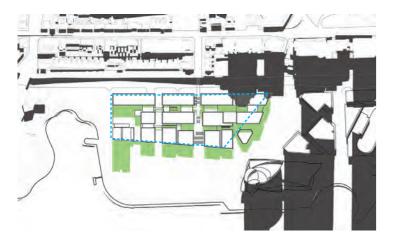


6,986

Area of shadow outside approved envelope

Inclusive of building footprint outside approved

Reference Design

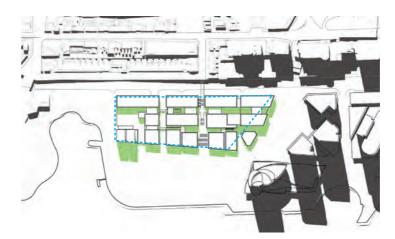


Area of shadow outside approved envelope

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*All figures are in square metres

Reference Design



6,214

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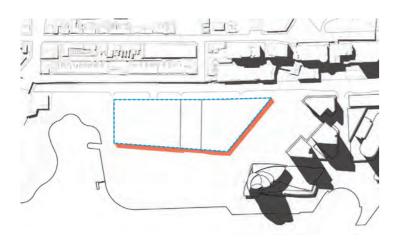
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Overshadowing Analysis - Solar access comparison studies Summer Solstice - 11am

2,396

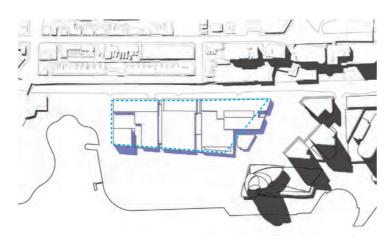
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Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope



3,958

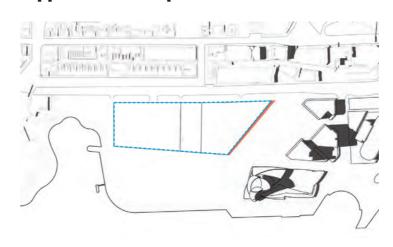
Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Appendix C

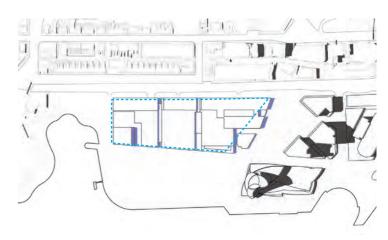
Overshadowing Analysis - Solar access comparison studies Summer Solstice - 12pm

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope

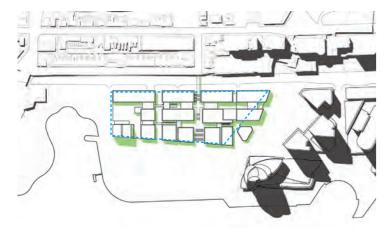


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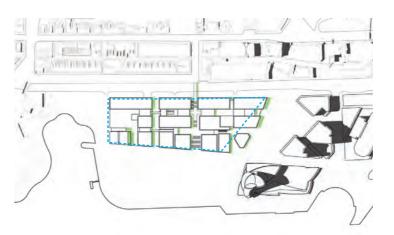


Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design



Area of shadow outside approved envelope
Inclusive of building footprint outside approved

*All figures are in square metres

envelope boundary

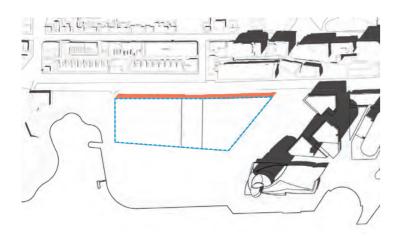
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507

3,24

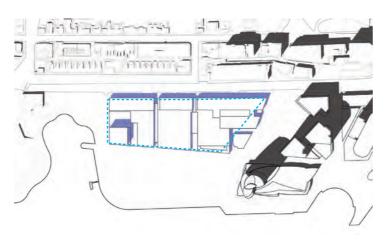
Overshadowing Analysis - Solar access comparison studies **Summer Solstice - 1pm**

Approved Envelope



Area of shadow outside approved envelope 2,265

Proposed Envelope



5,576

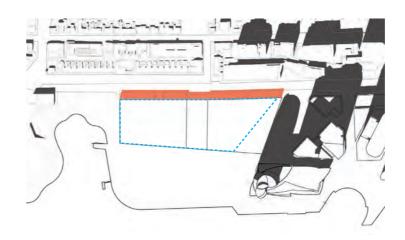
Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Appendix C

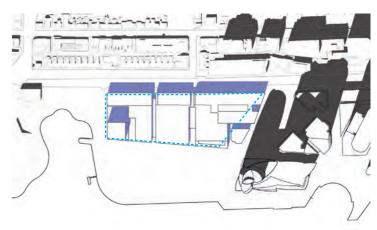
Overshadowing Analysis - Solar access comparison studies **Summer Solstice - 2pm**

Approved Envelope



Area of shadow outside approved envelope 4,683

Proposed Envelope

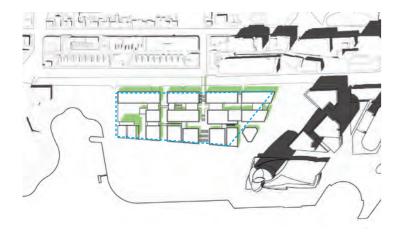


8,211

Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

Reference Design

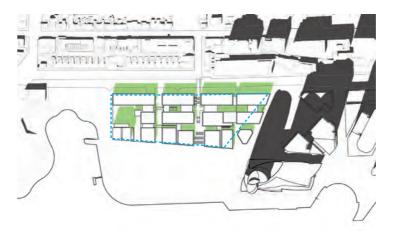


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Inclusive of building footprint outside approved envelope boundary

*All figures are in square metres

Reference Design



6,887

Area of shadow outside approved envelope

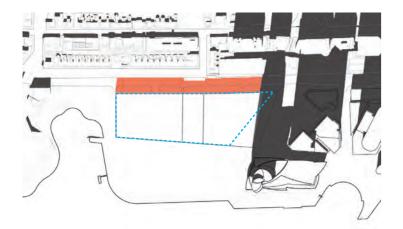
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Overshadowing Analysis - Solar access comparison studies Summer Solstice - 3pm

7,628

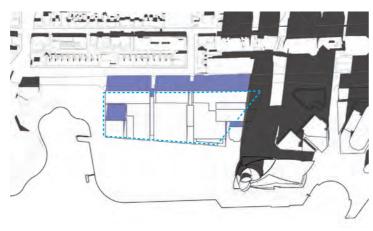
10,515

Approved Envelope



Area of shadow outside approved envelope

Proposed Envelope



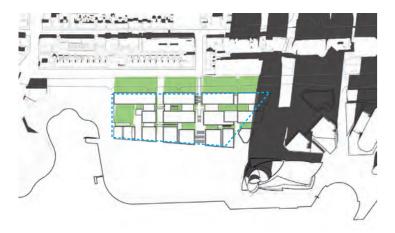
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Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

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Reference Design



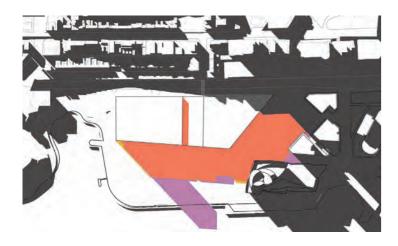
Area of shadow outside approved envelope

Inclusive of building footprint outside approved envelope boundary

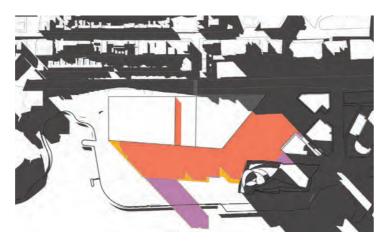
Overshadowing Analysis - Solar access comparison studies

Winter Solstice - 9am

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

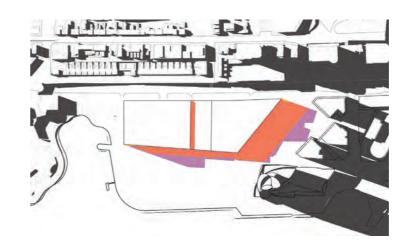


Appendix C

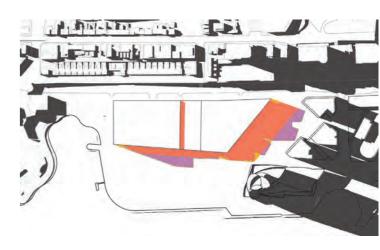
Overshadowing Analysis - Solar access comparison studies

Winter Solstice - 11am

Approved Envelope vs Proposed Envelope

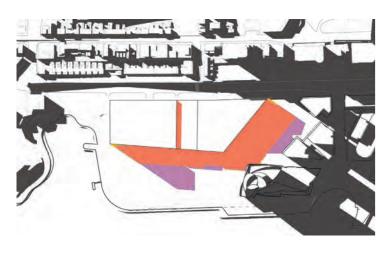


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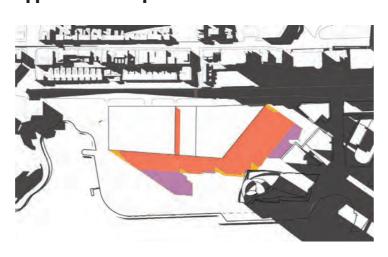


Winter Solstice - 10am

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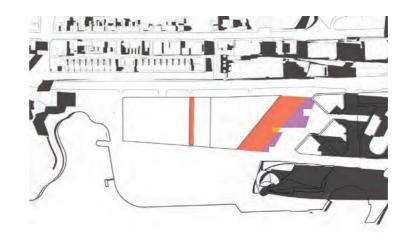


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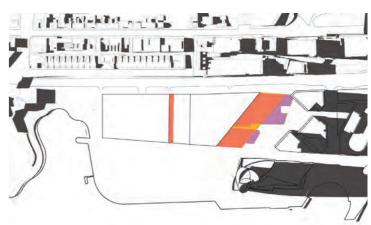


Winter Solstice - 12pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Legend

Approved Envelope

Proposed Envelope

Area of Reduction in Shadow

Reference Design Area of Additional Shadow Legend

Approved Envelope

Proposed Envelope

Reference Design

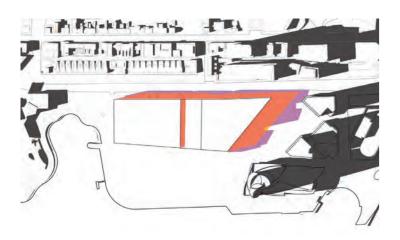
Area of Additional Shadow

Area of Reduction in Shadow

Overshadowing Analysis - Solar access comparison studies

Winter Solstice - 1pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

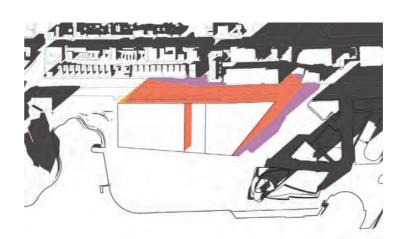


Appendix C

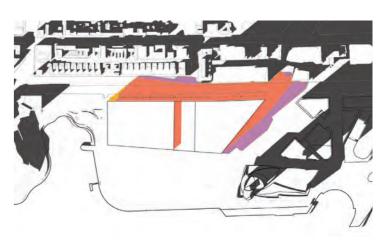
Overshadowing Analysis - Solar access comparison studies

Winter Solstice - 3pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Winter Solstice - 2pm

Approved Envelope

Proposed Envelope

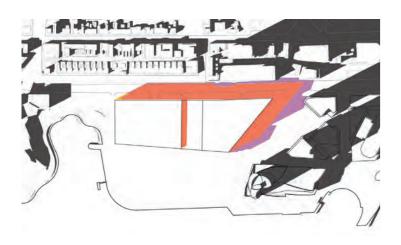
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Area of Additional Shadow

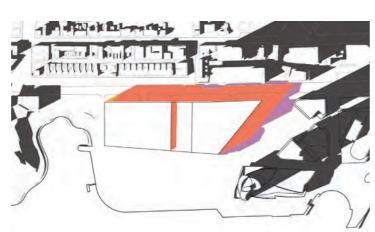
Area of Reduction in Shadow

Legend

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

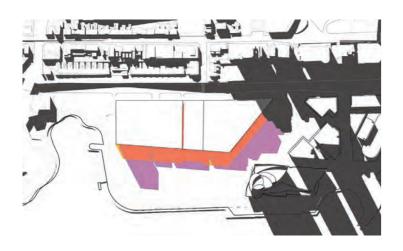


Approved Envelope Proposed Envelope Reference Design Area of Additional Shadow Area of Reduction in Shadow

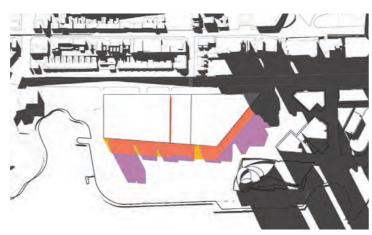
Overshadowing Analysis - Solar access comparison studies

Equinox - 9am

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

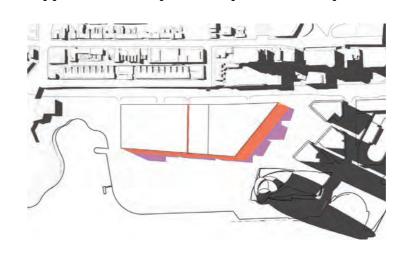


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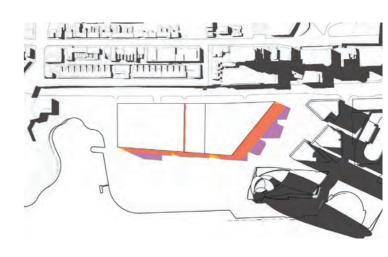
Overshadowing Analysis - Solar access comparison studies

Equinox - 11am

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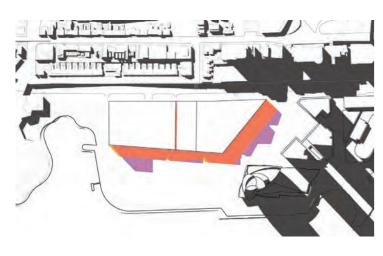


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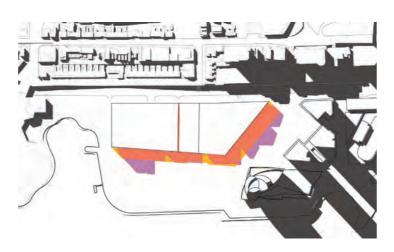


Equinox - 10am

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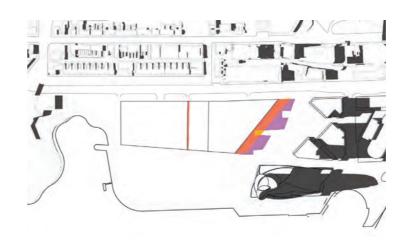


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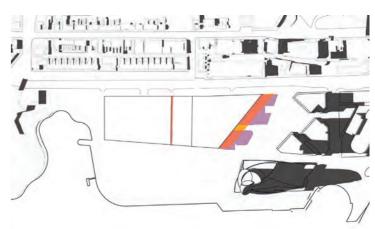


Equinox - 12pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Legend

Approved Envelope

Proposed Envelope

Reference Design

Area of Additional Shadow

Area of Reduction in Shadow

Legend

Approved Envelope

Proposed Envelope

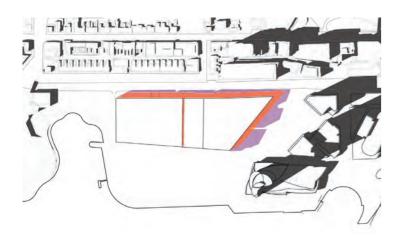
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Area of Additional Shadow

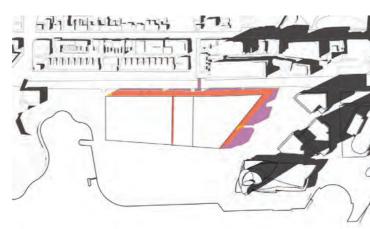
Overshadowing Analysis - Solar access comparison studies

Equinox - 1pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

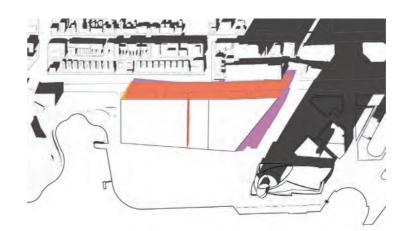


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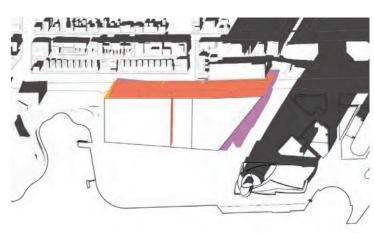
Overshadowing Analysis - Solar access comparison studies

Equinox - 3pm

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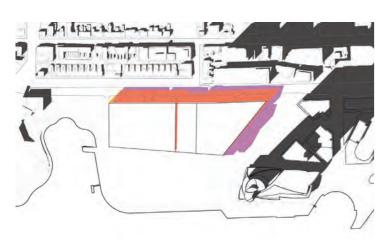


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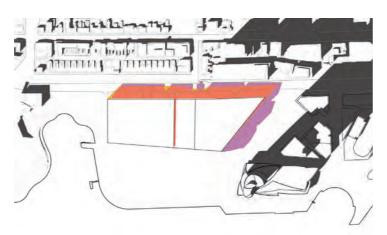


Equinox - 2pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Approved Envelope Proposed Envelope Reference Design Area of Additional Shadow Area of Reduction in Shadow

Approved Envelope

Proposed Envelope

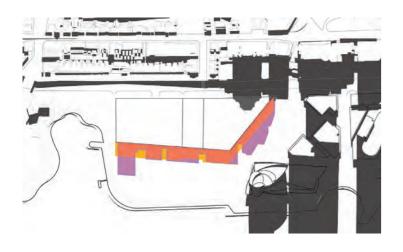
Reference Design

Area of Additional Shadow

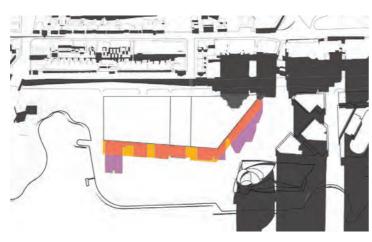
Overshadowing Analysis - Solar access comparison studies

Summer Solstice - 9am

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

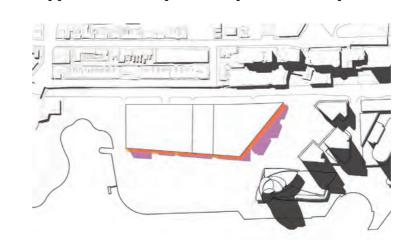


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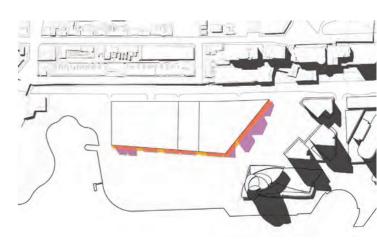
Overshadowing Analysis - Solar access comparison studies

Summer Solstice - 11am

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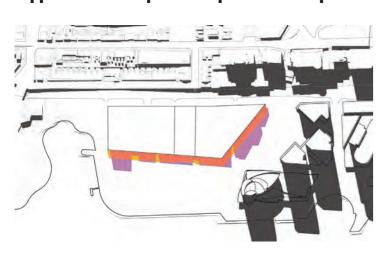


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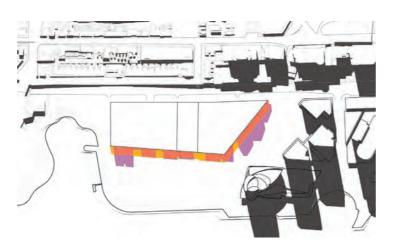


Summer Solstice - 10am

Approved Envelope vs Proposed Envelope

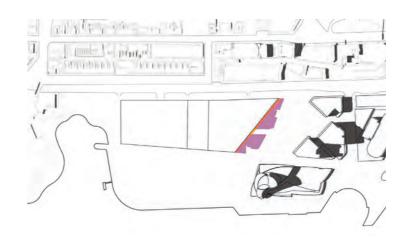


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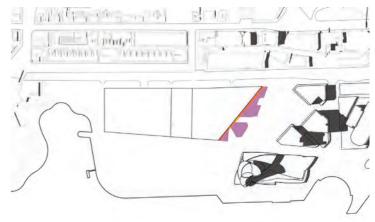


Summer Solstice - 12pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Legend

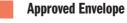
Proposed Envelope

Reference Design

Area of Additional Shadow

Area of Reduction in Shadow

Approved Envelope







Reference Design



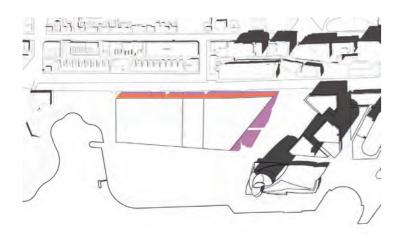
Legend

Area of Additional Shadow

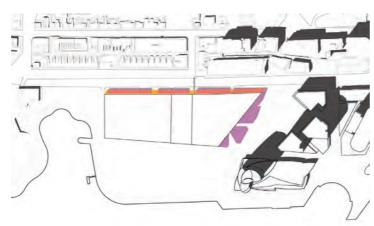
Overshadowing Analysis - Solar access comparison studies

Summer Solstice - 1pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme

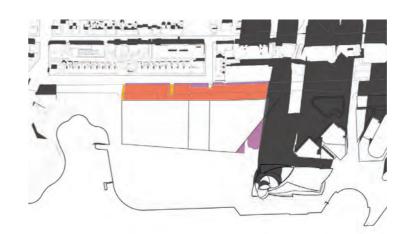


Appendix C

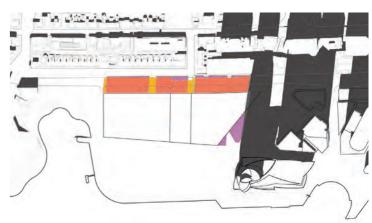
Overshadowing Analysis - Solar access comparison studies

Summer Solstice - 3pm

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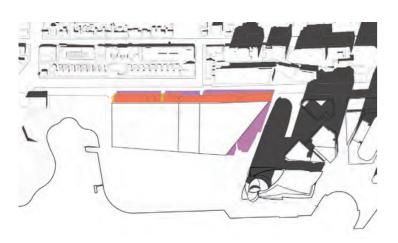


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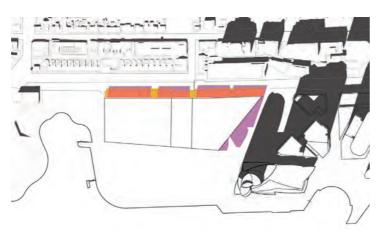


Summer Solstice - 2pm

Approved Envelope vs Proposed Envelope



Approved Envelope vs Reference Scheme



Approved Envelope Proposed Envelope Reference Design Area of Additional Shadow Area of Reduction in Shadow

Approved Envelope

Proposed Envelope

Reference Design

Area of Additional Shadow

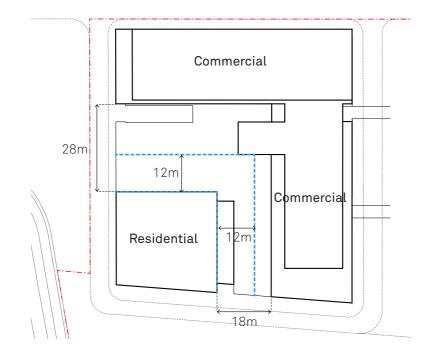


Appendix D Apartment Design Guide Assessment

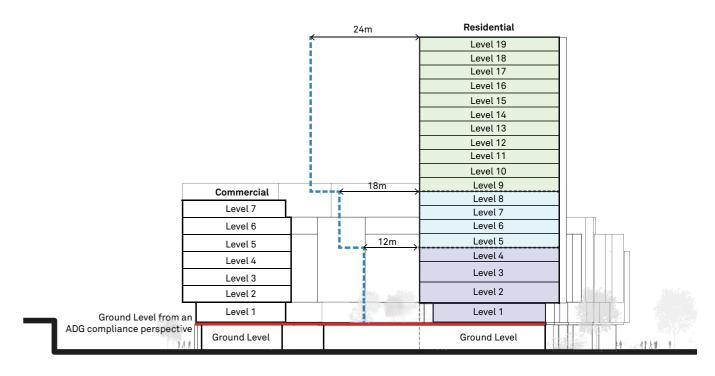
Building Separation

_The following diagrams describe how the building massing conforms to the Apartment Design Guide with regard to minimum building separation.

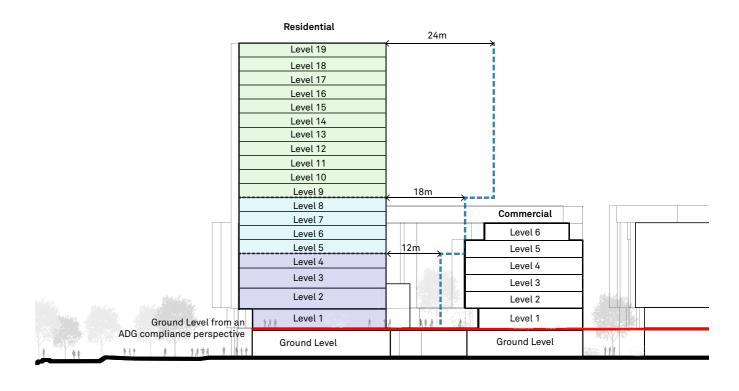
Number of Storeys	Minimum separation distances for buildings are:
Up to four storeys	12m
Five to eight storeys	18m
Nine storeys and above	24m



Top Plan - Total building separation between residential and commercial blocks



Elevation - Street D

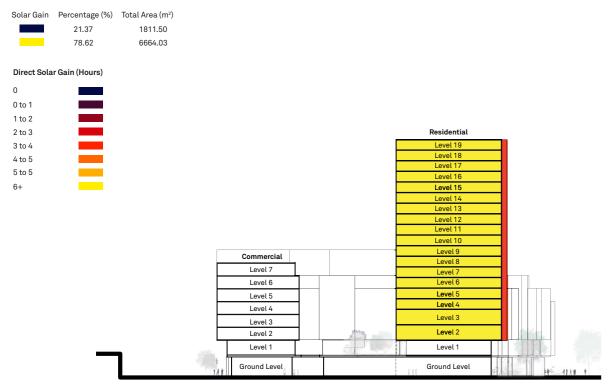


Elevation - Barangaroo Avenue

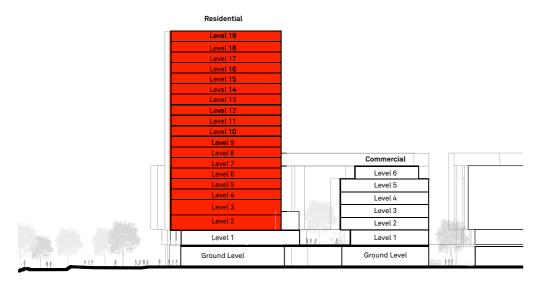
Appendix D Apartment Design Guide Assessment

Solar Access Analysis

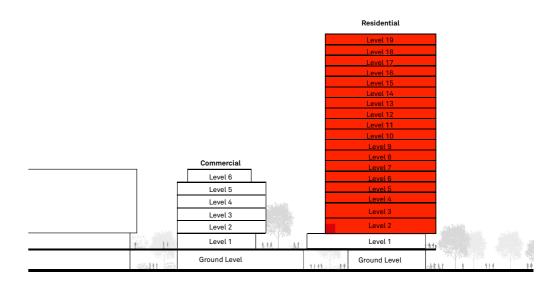
_The following diagrams describe how the building massing performs with regard to solar access to residential facades.



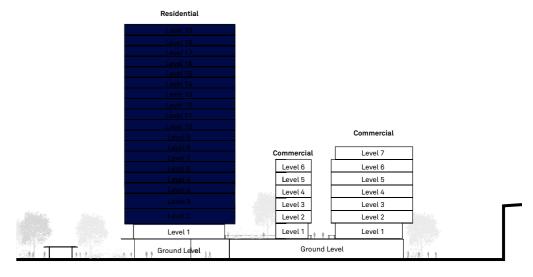
North Elevation



West Elevation



East Elevation



South Elevation



Appendix E

Response to GANSW Policy



Better Placed - Government Architect New South Wales

Better Placed is state design policy for the future design of infrastructure, architecture, and public spaces, and promotes design excellence to enable a better and resilient outcomes.

The guide establishes key design concepts and provides a framework for examining and reviewing design proposals.

The guide outlines seven objectives for consideration in the design of the built environment including:

- 1. Better fit contextual, local and of its place
- 2. Better performance sustainable, adaptable and durable
- 3. Better for community inclusive, connected and diverse
- 4. Better for people safe, comfortable and liveable
- 5. Better working functional, efficient and fit for purpose
- 6. Better value creating and adding value
- 7. Better look and feel engaging, inviting and attractive



Better Placed; Aligning Movement ans Place - Government Architect **New South Wales**

Aligning Movement and Place is a state design guide which sets out an approach, methods and processes to aligning movement infrastructure and places and promotes placebased approach to planning and delivery of transport network.

The guide further outlines seven objectives established in Better placed with regard to relationship between movement and place.

This document will be further supported by: A Practitioner's Guide to Movement and Place and Toolkit, which will provide:

- → Tools for delivering better places on movement links,
- → Indicators to recognise the degree of balance required in a given context,
- → Mechanism for shaping project briefs to reduce severance and improve mobility.
- → Mechanism for ensuring place benefits are included in briefs and realised.



Greener Places - Government Architect New South Wales

Greener Places is a state design guide and strategy which promotes connection and integration of green

- Overarching document outlining NSW Government position on green infrastructure.
- Green infrastructure should be developed as a network rather than separate elements.
- Green infrastructure is integral to other forms of infrastructure and should be designed in coordination with these other layers.
- Greener Places is supported by Greener Places Design Guide, which includes information relating to:
- → Open Space for Recreation -Green infrastructure for people
- → Urban Tree Canopy Green infrastructure for climate adaptation and resilience
- → Bushland and Waterways Green infrastructure for habitat and ecological health.



Draft Greener Places Design Guide - Government Architect New South Wales

The Draft Greener Places Design Guide framework provides information and methodology on how to design, plan, and implement green infrastructure in urban areas throughout NSW.

The major components that make up the green infrastructure network fall into three categories:

- 1. Open space for recreation provides a framework for improved public open space planning.
- 2. Urban tree canopy provides recommendations for planning and improvement in urban tree canopy.
- 3. Connecting bushland and waterways - provides a framework for improving connectivity between bushland and waterways supporting habitat and biodiversity in urban areas. It promotes the connection of people to nature within a sustainable environment.

The Greener Places Design Guide framework supports two of the NSW Government's priorities for:

- → Greening Our City, and
- → Greener Public Spaces

Open space for recreation

_Strategies:

- → Improve the provision and diversity of open space for recreation
- → Understand the demands on existing open space, and plan for open space in new and growing communities
- → Improve the quality of open space for better parks and facilities
- → Use open space to connect to nature
- → Link to the network of green infrastructure
- → Encourage physical activity by providing better parks and amenity
- → Provide open space that is multifunctional and fit for purpose
- → Design versatile, flexible spaces
- → Consider life-cycle costs, management, and maintenance
- 6 criteria:
- → accessibility and connectivity
- → distribution
- → size and shape
- → quantity
- → quality
- → diversity

Urban tree canopy

_Strategies:

- → Protect, maintain, and enhance the existing urban tree canopy
- → Create an interconnected urban tree canopy across NSW
- → Build knowledge and awareness of urban tree canopy across State and local government, and the community

The target for the Greater Sydney Region is to achieve 40% urban tree canopy cover by 2056. Current state of tree canopy in Greater Sydney 21%.

- → Urban residential (mediumto high-density) and light commercial areas tree canopy target > 25%
- → Suburban area tree canopy target >40%.

Bushland and waterways

Strategies:

- → Protect and conserve ecological values
- → Restore disturbed ecosystems to enhance ecological value and function
- → Create new ecosystems
- → Connect people to nature
- → Connect urban habitats





Appendix E

Response to GANSW Policy



Better Placed

Central Barangaroo is the last piece of the Barangaroo urban regeneration project, and will set the tone of the project into the future. To achieve a contextual vet forward looking design outcome, a number of strategies have been developed based on the seven Better Placed objectives. These strategies will ensure the built environment will be healthy, responsive, integrated, equitable and resilient.



Better Fit

Contextual, local and of its

Good design is place based and relevant to and resonant with local character, heritage and communal aspirations. It contributes to evolving and future character setting.

The Central Barangaroo response:

→ Positively responds to the existing character and built environment established by Barangaroo South, and decreasing in scale and mass to respond to Millers Point. Nawi Cove and Barangaroo Reserve.

Additional analysis of the contextual opportunity has informed the scaleand configuration of building envelopes.



Better Performance

Sustainable, adaptable and durable

Environmental sustainability and responsiveness is essential to achieve the highest performance standards and for functional, whole of life design.

The Central Barangaroo response:

- → The design of built form considers the environmental impact of the development onto the surrounding context and their inherent environmental amenities;
- → Detail design of Central Barangaroo and the choice of high quality and durable materials and finishes will tie into the existing character;
- → Innovative and best practice sustainability initiatives are inherent to the design proposal.

An integrated sustainability strategy has been developed for the whole of the Central Barangaroo precinct.



Better Look and Feel

Engaging, inviting and attractive

The built environment should be welcoming, aesthetically pleasing and promote positive engagement by encouraging community use and enjoyment.

The Central Barangaroo response:

- → Variety of land uses proposed to establish Central Barangaroo as a destination:
- → A range of public spaces and buildings over a number of levels culminating in Harbour
- → Potential for the community to program the public space for events:
- → Community uses contained across the project area for public benefit.

Integration between public spaces and community uses is provided. A broader range of public spaces offer a unique sequence of experiences throughout the year and day and night.



Better for People

Safe, comfortable and liveable

Design should focus on safety, comfort and the functionality of place to support good and functional places for people.

The Central Barangaroo response:

- significantly enhanced
- → Convenient and easy navigation through Central choices:
- → Passive surveillance promoted through siting and location of active uses:
- finishes.

Permeability and sightlines across the site are enabled. Retail and commercial activity supports attraction of a wide user group, and extends activation of the precinct.



for purpose

- → All inclusive access and connections to the city:
- Barangaroo, with a variety of
- → Public spaces provided with good amenity and quality of



Better Working

Functional, efficient and fit

Buildings and spaces that work well for their proposed use and have the ability to adapt to change will remain valuable and well-

The Central Barangaroo response:

- → Non residential uses provide services and facilities required for the future community;
- → Buildings and spaces are designed to accommodate future change and adapt by providing flexible floor plates and appropriate heights;

→ Residential uses are elevated

above busy public spaces so that activation does not diminish amenity

> Diversity is provided through the range of commercial, retail, community, open space and residential uses. Workplace spaces will beconfigured for a range of tenants, flexibility and adaptation over time.



Better Value

Creating and Adding Value

Good design generates ongoing value for people and communities. minimises costs over time, raises standards and quality of life for users and provides return on investment for industry.

The Central Barangaroo response:

- → Use of high quality finishes that require less cost to maintain:
- → Buildings located to maximise amenity benefits for solar, wind and noise mitigation;
- → World class public domain quality

Solar access and wind

improved amenity and

the current status.

mitigation strategies have

comfort on the site and in the

surrounding area compared to

→ A precinct that is a reference for future design.



Better Look and Feel

Engaging, inviting and attractive

The built environment should be welcoming, aesthetically pleasing and promote positive engagement by encouraging community use and enjoyment.

The Central Barangaroo response:

- → Design of safe and attractive public domain:
- → Spaces designed to encourage social interaction (both programmed and unprogrammed).

Public space variety has increased, with greater resolution of program, activation and precinct wide circulation strategies.





Appendix F Existing site survey plan

