

Department of Planning and Environment

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Stage 1 Bays West – White Bay Power Station (and Metro)

Design Guide

December 2022





Acknowledgement of Country

The Department of Planning and Environment acknowledges the Traditional owners and Custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Aboriginal people take a holistic view of land, water and culture and see them as one, not in isolation from each other. The Bays West Master Plan Summary is based on the premise upheld by Aboriginal people that if we care for Country, it will care for us.

A number of quotes within this Guide are sourced from the First Nations Engagement Report. Cox Inall Ridgeway acknowledges the contributions of participants; their input and considerations brought this report to life. Participants included community members in Sydney, aged 18-30 that live/work in inner city, as well as members of the First Peoples Disability Network, Sydney Royal Botanical Gardens, and the Jumbunna Institute, UTS.

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Stage 1 Bays West – White Bay Power Station (and Metro)

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1 Introduction

1.1 Name of Guide

This document is the Guide for Stage 1 - White Bay Power Station (and Metro) sub precinct - (referred to as 'the Site').

1.2 Citation

This document may be referred to as the Guide.

1.3 Commencement

The Guide commences on the day on which the relevant Schedule of the *State Environmental Planning Policy (Precincts - Eastern Harbour City) 2021* (SEPP) is made.

1.4 Land to which this Guide applies

The Guide applies to The Site, being the land identified on Figure 1 - Land Application

This Guide is a matter for consideration under Clause 35 (Additional requirements for development applications in certain areas of Sydney) of the *Environmental Planning and Assessment Regulation (2021)*.

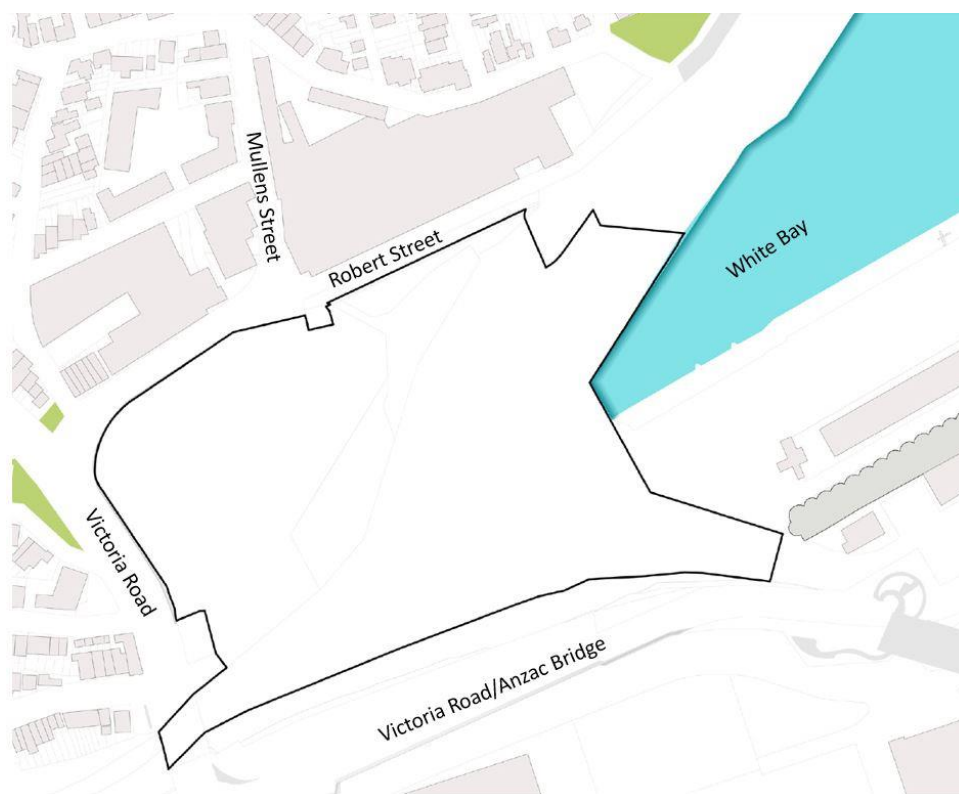


Figure 1 - Land Application Map – the Site

1.5 How to Use this Guide

This Guide provides guidance for development within the site. It comprises a hierarchy of objectives and provisions to inform future design and development. Each topic area is structured to provide the user with:

- **Objectives** that describe the desired outcome(s).
- **Provisions** that provide requirements for how the objectives can be achieved through appropriate design and development responses.

Planning for development in the Bays Precinct should demonstrate how it meets the objectives of this Guide. The Guide sets clear and measurable benchmarks for how the objectives can be achieved, and where alternate solutions to the provisions are proposed it must be demonstrated how the alternative solution achieves its objective.

Definitions

Site – refers to the land subject to this Guide.

FPL – Flood Planning Level.

Build to Line – A build to line prescribes the minimum proportion of a building façade that must be set along the external boundary of the building lot to define and activate surrounding streets and public domain.

End of Trip Facilities – end of trip facilities are to contain: showers, change rooms, lockers and bicycle storage areas.

1.6 Relationship to Other Documents (and Instruments)

The Guide informs future development within the site. Proposed development will need to have regard to this Guide as well as any other relevant Environmental Planning Instruments including but not limited to site specific provisions of the *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021* and the relevant provisions in the *Inner West Local Environmental Plan 2022* (IWLEP 2022) relating to affordable housing.

1.7 Purpose

The purpose of this Guide is to supplement the provisions of the SEPP and any other Environmental Planning Instrument by providing more detailed provisions to control development on land shown in Figure 1 - Land Application.

Development applications (DAs) for new development will be assessed on their individual merit having regard to the SEPP, this Guide, the affordable housing provision within IWLEP 2022, other matters listed in Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and any other adopted relevant policies that relate to development within the site.

1.8 Process and Approach – Connecting with Country

A fundamental principle for the renewal of Bays West has been to integrate principles of connecting and designing with Country in all aspects of the strategy, its design and implementation. Key knowledge keepers including Bangawarra (through the Place Strategy) and Alison Page (for Master Plan and rezoning) that have been at the centre of the project design. First Nations stakeholders have been engaged during Place Strategy, Master Planning and rezoning phases.

This Guide has been structured to ensure that connecting with Country is a principle integrated in every aspect of the project including public domain, built form, activation, the environment and social infrastructure. The Guide ensures the integration of planning controls with key philosophy and principles of Country to ensure the principles are tangibly delivered in this place on Wangal country.

Detailed design outcomes will integrate Aboriginal cultural expression, narratives and heritage in a contemporary and inclusive way. For culturally relevant design outcomes to be realised in all aspects of the development, it is critical that principles of designing with Country are explored beyond standard or typical outcomes.

This approach must also be embedded in the full life cycle of the Project including the design and delivery phases, as well as the construction, implementation and operational phases.

2 Desired Future Character

“Listening and understanding Country creates a greater sense of connection between person and space. A better connection with space can profoundly influence how a person treats and interacts with that space, so by exploring and reflecting Country in all project outcomes, we can help enable people to better appreciate and respect Country in all expressions.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

Country is the wellspring from which all knowledge originates. It holds information, innovations, stories and secrets – from medicine, engineering, ecology and astronomy to social mores on how to live, and social organisation, including moiety division and kinship systems....Songlines are foundational to our culture – to what we know, how we know it and when we know it. Songlines are our library, our archive from which all subjects are derived, including the knowledge of the design, orientation and siting of our built structures, as well as the design of objects such as boomerangs and fish traps, with their ancestral dimension.

Margo Neale, Senior Indigenous Curator National Museum of Australia

Objective

- a) The primary objective of this Guide is to create development consistent with the following desired future character statement below.

Future Character Statement

The delivery of the Bays Sydney Metro West Station by 2030 will be the first step in the renewal of the precinct and will unlock opportunities for renewal and reuse of White Bay Power Station and the land around the new The Bays Metro Station.

An understanding and appreciation of Country should be at the heart of planning and placemaking. It enables an understanding of the landscape and natural processes and allows us to plan to work with the land, not against it, which leads to more sustainable and meaningful outcomes. This principle of regeneration and caring for Country is at the heart of the development vision; and guides the desire for a place that is resilient and integrated into the local and broader community in

a meaningful way. It also provides a richer narrative and understanding of this specific place, reinforcing our role as caretakers of the land for future generations. The principles of designing with and caring for Country underpin all project themes and directions.

“Rather than acting as a stand-alone driver, Connecting with Country underpins all of the themes and their associated directions.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

This precinct is part of a water system that connects the site to the broader natural and cultural systems of the Sydney basin. This cultural aspect strengthens the connections beyond an environmental systems management approach, inviting people to be a part of knowing and exploring a spiritual connection to the natural world.

This deep connection is explored through the design, celebrating *Sweetwater* (inland sweet tasting water), *Bitterwater* or *Sourwater* (sacred brackish fishing water typified by the ebb and flow of the tide, that is always changing) and *Saltwater* (the lagoons, bays, river mouths and out into the ocean).

Bays West can express these stories of water through the parklands and buildings, to be mapped across the site, like a songline. For Aboriginal people, songlines were a system of recording vast amounts of cultural and ecological data without the written word.

Information was encoded in stories that were embedded in the land (such as geographic features and objects) so that as people moved through Country over time, the mnemonic was reinforced and understood.

The connection to Country strategy will augment the former use of the site as a power station into a place of learning as a way of elevating knowledge as the power of the future.

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

This Water Songline will be embedded in all aspects of the Precinct, supported by this Guide.

The Bays West Place Strategy sets out a vision for a connected, vibrant and activated precinct – a kind of urbanism that respects and celebrates Country that is appropriate and relevant to this place, and draws on natural, cultural, maritime and industrial stories to shape an innovative and sustainable place for living, recreating and working.

The heritage-listed White Bay Power Station is one of the most recognised landmarks in the Inner West and includes surrounding lands to the White Bay foreshore. By creating a new landmark for Sydney that draws on the Precinct’s working heritage, the desired future character will acknowledge and respect the area’s history while adapting it for the knowledge-economy jobs of the future.

The principal design narrative of the precinct is embodied in the concept of connecting to the Water Songline on the site. This was a place where *Nattai Gurad* (freshwater) meets *Gari Gurad* (salt water) to form *Biddi Gurad* (brackish water), creating the opportunity of a place that connects people and community to knowledge and each other, as well as a place that is regenerative.

The future development will:

1. Unlock the potential of the White Bay Power Station and recognise its history in a tangible and genuine way.
2. Deliver a mix of land uses to support a vibrant, mixed-use centre with a thriving night-time economy, including sufficient concentration of non-residential uses, that is consistent with the Eastern Harbour City District Plan's Innovation Corridor.
3. Reveal, express and celebrate the natural and cultural narratives and knowledge from Traditional knowledge holders and custodians to strengthen the understanding and sense of belonging to this place, including key themes of knowledge, water and power.
4. Enable a low-car, high public and active transport precinct to be designed using the Movement and Place Framework.
5. Achieve high levels of environmental performance including PV arrays that supply substantial energy, smart use of water and passive design features like sun access and shading and natural cross ventilation suitable for Sydney's climate.
6. Ensure a diverse and rich landscape setting with substantial tree canopy cover, including the integration of landscape used to screen the elements in the precinct that are in place to protect the buildings from flooding.
7. Create a connected and diverse series of open spaces that are concentrated on a large public waterfront park; open spaces that are connected to the White Bay Power Station, and designed to be inclusive with amenity and ecological needs at the heart of the design.
8. Ensure building heights maintain solar access to the waterfront park, Metro Plaza and Power Station forecourt throughout the year.
9. Create a permeable pattern of walking connections through the precinct that also provide on-site at grade servicing.
10. Deliver a rich variety of architectural approaches including of materials and forms, with a range of apartment types and sizes with built form that is considered and well-constructed.
11. Ensure a variety of scales and spaces, with access and services that cater for both large gatherings and everyday enjoyment.
12. Deliver a mix of land uses that can successfully integrate with port and working harbour activities that adjoin Stage 1 and are within the broader Bays West precinct.

3 Staging and Implementation

The Site will have staged construction and implementation to allow for construction and operation of the Bays Metro Station by 2030, with other parts of the sub-precinct being delivered over an extended period.

Any temporary activation or adaptive reuse of the White Bay Power Station will need to balance potential remediation issues and ongoing construction programming within the sub-precinct.

This section of the Guide provides objectives to guide and support the staged construction and implementation of the precinct.

Objectives

- a) Ensure the planning and redevelopment of the White Bay Power Station and Metro sub-precinct is coordinated.
- b) Ensure public infrastructure, including utilities, parks, streets, public art and other social and community facilities, are delivered progressively as the precinct evolves.
- c) Maximise parts of the Site that are activated from Day 1 of Metro operations, including (where practicable) non-residential development surrounding the station, parts of the White Bay Power Station and the future park location. This may require temporary uses and structures in some locations.
- d) Optimise opportunities for sites to develop independently of each other.
- e) Ensure ongoing meaningful engagement occurs with First Nations peoples during the development phase, ensuring that designing for Country principles carry forward and inform development proposals and ongoing operations.
- f) Establish new street blocks that promote permeability.
- g) During all stages of development, deliver a street, pedestrian and cyclist network which takes people easily and safely to the places they want to go.

4 Connecting with Country Principles

“It is only through learning about our culture and our ways of life can we bridge the gap between what non-Indigenous people think our culture is compared to what it actually is.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

The key principle of revealing, expressing, and celebrating the natural and cultural narratives and knowledge from custodians to reveal the richness of layers and stories of place is central to the project.

Objectives

- a) Ensure design and development acknowledges and embeds principles of connecting and designing with Country in the following ways:
 - a. **Elevate First Nations voices** in the process of design and delivery including listening to locally connected Aboriginal community voices and creating opportunities for co-design with Aboriginal and Torres Strait Islander peoples.
 - b. Embed social and environmental sustainability principles throughout all aspects of the design to create a place that truly **cares for Country**.
 - c. **Celebrate Aboriginal cultural practices and knowledge** through opportunities including design of buildings and spaces, embedding language, landscape design, use and access to spaces, management and operations of spaces, opportunities for jobs and training.
 - d. **Deliver the Site Master Plan: Connection to Country** strategy to celebrate and enshrine the design principle of embedding a **Water Songline** that mixes Sweetwater, Bitterwater, and Saltwater and the precinct as a place of knowledge, water and power.

Provisions

Process

1. Development is to demonstrate how it has integrated the key design themes of the *Bays West draft Connecting with Country Framework* (Bangawarra, 2021) and the *draft Stage 1 Bays West Master Plan Connecting with Country Framework* (Alison Page, 2022).
2. Development is to demonstrate how the above Objectives have been achieved in all stages of the development cycle – from project inception, planning, delivery and ongoing use.

Design

3. Development is to integrate design of buildings and public spaces to reflect First Nations design principles and opportunities to connect with Country including:

- a. Cultural knowledge integrated in the design of built form, landscape and public domain design, public art and interpretation, that is guided by First Nations voices and designing with Country principles;
 - b. Support access to Sky Country through incorporating open roof tops; and access to Water Country through the design of public spaces and views towards water; integration of learning spaces, both indoors and outdoors, through 'Water Country' and 'Sky Country' reflecting the themes in the Connecting to Country approach for this place;
 - c. Use of landscape and ecological design that includes indigenous vegetation that enhances environmental quality and optimises opportunities for habitat for native flora and fauna species;
 - d. Acknowledging and celebrating Aboriginal and Torres Strait Islander living cultures and site-specific stories of place through art, performance, and other creative expression involving the engagement of suitably qualified Indigenous practitioners;
 - e. Development is to contribute to strengthening the sense of Aboriginal and Torres Strait Islander community in the Precinct, and where possible create spaces for the Aboriginal and Torres Strait Islander community to meet and connect;
 - f. Consider Aboriginal inclusion, comfort and access in the design and operation of publicly accessible space, including building forecourts, through-site links, retail spaces and hospitality venues; and
 - g. Dual naming and use of Aboriginal language in the development such as streets, public places, community facilities, and wayfinding. Where Aboriginal naming is adopted, consider providing physical material that outlines the pronunciation and history behind the Aboriginal name, where appropriate and agreed to by relevant Aboriginal stakeholders.
4. Targeted engagement with the Aboriginal and Torres Strait Islander community is required to be undertaken prior to any Development Application to seek views on:
 - a. whether the proposed development impacts on existing or recent spaces or activities on the site, or on surrounding properties, that are important for Aboriginal and Torres Strait Islander communities;
 - b. whether the proposed development impacts on the wider context of the Precinct being a place; and
 - c. how the development may best maximise the presence, visibility and celebration of Aboriginal and Torres Strait Islander peoples, organisations, businesses and living cultures.
 5. It is optimal if engagement activities are to be designed and led by Aboriginal-owned consultation advisories to ensure culturally secure practices.
 6. Development applications for new buildings, alterations to or adaptive re-use of elements of the White Bay Power Station, or that propose or include parts of the public domain are to include an Aboriginal and Torres Strait Islander consultation report, that builds on the consultation work/reports undertaken and details:
 - a. pre-lodgement consultation activities;
 - b. the outcomes of consultation;
 - c. how these have informed planning and design of the proposed development; and
 - d. what mitigation measures are proposed to reduce any impacts to the areas of Aboriginal cultural value.

5 Resilience and Social infrastructure

The Organisation for Economic Co-operation and Development (OECD) defines resilient cities as those “that have the ability to absorb, recover and prepare for future shocks (economic, environmental, social and institutional). Resilient cities promote sustainable development, well-being and inclusive growth.”. The concept of resilience reflects the importance and significance of taking an ancient Indigenous concept and applying it to life in modern Sydney. Resilience sits as an overarching term in this document, and also relates to Sections on Country, sustainability, landscape and biodiversity. This Section outlines how development is to demonstrate principles of resilience and Country when delivering social infrastructure.

5.1 Social Infrastructure

Objectives

- a) Deliver development that supports community health and wellbeing using mechanisms that support diversity, inclusion and social engagement.
- b) Provide a range of public open spaces including those that offer respite and are restorative, as well as gathering spaces for small and large gatherings including city scale events.
- c) When planning and delivering key social infrastructure in the precinct, consider how Aboriginal Cultural knowledge and practices, principles of connecting to Country, as well as the key themes of this site (knowledge, learning and power), can inform the process and project and be celebrated.
- d) Ensure the design and management of social infrastructure makes welcoming and inclusive places to create a place of belonging.
- e) Encourage greater social contact by designing and providing opportunities for informal and social gatherings in both the private and the public domain.
- f) Locate social infrastructure near public transport facilities such as the future Metro and bus stops and consider connections to other key destinations via high-quality walking and cycling links.
- g) Ensure social infrastructure is highly visible, convenient, and easy to access.
- h) Improve physical activity by encouraging active mobility and recreational exercise through the provision of diverse and high-amenity public outdoor green spaces.
- i) Maximise the use of existing physical infrastructure such as the White Bay Power Station to meet the evolving cultural and social needs of the community.

Provisions

1. Development within the Site is to incorporate the following indoor social and recreational infrastructure:

- a. Multi-purpose community / library hub that incorporates the stories of Country attached to the site as a foundation for creative and inclusive storytelling and cultural expression, and
 - b. Cultural and community spaces such as creative industry spaces, theatre spaces and flexible event spaces.
2. Development is to deliver a minimum of 2 hectares of open space including landscaped and hardscaped public open spaces across a network of spaces which will include:
- a. A district-level foreshore park of at least 1.5 hectares that visually and physically connects to White Bay and adjacent foreshore, to be the largest green open space on the site;
 - b. Hard and soft surfaces, including curtilage around the White Bay Power Station that include planting and permeable surfaces;
 - c. Passive recreation spaces including areas of respite and calm;
 - d. Communal gathering spaces, including spaces to eat not tied to a retail offering;
 - e. Safe and welcoming spaces, which can be used both day and night;
 - f. Outdoor learning spaces, including spaces that embody the cultural themes of 'Water Country';
 - g. A district level play space; and
 - h. Opportunities for active recreation including potentially outdoor sports court, fitness station and skate friendly area.
3. Power and water infrastructure in the public realm must be adequate to support markets and events including the curtilage around the White Bay Power Station, the Metro Plaza and the district park.

5.2 Affordable Housing and Diverse Housing

Delivery of affordable and diverse social and aboriginal housing is a key priority of the NSW Government, with Bays West identified as a priority project. Affordable Housing is mandated within the precinct through an appropriate Clause in the Inner West Council LEP 2022 and the Affordable Housing Program of 7.5% of new residential accommodation.

Objectives

- a) Ensure that delivery of housing considers affordability, diversity and social need.
- b) Deliver housing within the site that is inclusive, diverse and provides residential dwellings for all people, including those on lower incomes, vulnerable groups, and First Nations peoples.
- c) Ensure that all housing, including affordable housing, delivered in the Site meets the applicable design excellence and amenity threshold criteria detailed within this Guide.

Provisions

1. All housing within the Site must comply with relevant state and local planning policies (SEPP 65, Housing SEPP), applicable sections of the Guide including Design Excellence (Section 13),

Amenity (Section 14) and Access and inclusion (Section 5.3), and any other statutory requirements.

2. A Noise Management Plan is required for all developments within the Site to ensure compatibility of night-time and cultural uses (including late night premises uses) and residential uses. The plan must provide a framework for setting sound criteria for each sound-generating use and/or internal sound criteria for habitable and non-habitable areas within the development to ensure a balance of activation day and night while maintaining acoustic amenity for residents.
3. A minimum of 15% of residential dwellings must be a combination of 3, 4 or 5 bedroom dwellings.

5.3 Access and Inclusion

“There is no word for disability in any Aboriginal language. People with a disability were always included in the daily life of their mob, and while they might not have been able to hunt or fish, they were responsible for other tasks, like child minding or preparing food.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

This approach, along with the concept of dignified access, has informed the below objectives and provisions and will be embedded in all aspects of the design and development of Bays West.

Objectives

- a) Ensure that people of all abilities can access a premises, place or service in a way that is dignified and equitable for all.
- b) Support community wellbeing by delivering equitable access to services.

Provisions

1. Inclusion and accessibility are to be incorporated as core components of the design and development process including implementation.
2. Development should seek to exceed minimum inclusion and accessibility requirements specified in legislation and standards.
3. Development should be designed to support all aspects of inclusive design. This can include, but is not limited to, the following measures:
 - a. Wayfinding and interpretation signage in braille, simple English, other relevant languages and other methods (such as video or sound) to increase access to a broad range of people;
 - b. Use of technology such as QR codes to provide more details about artworks and other design features in both public and private spaces;

- c. Performance and activation spaces to have areas where those using wheelchairs can view performances easily as well as areas of seating that is accessible to people with a range of physical abilities;
- d. Spaces within the development that are designed for people with a range of sensory abilities and experiences;
- e. Consideration of those with sensory issues in public domain design including streets, foreshore areas, and footpaths to enable clear navigation by those with sight impairment; and
- f. Use of colour and other architectural articulation as an accessibility design feature.

6 Innovation

The *Greater Sydney Region Plan* and the *Eastern City District Plan* state that innovation will sit at the heart of the renewal of the Bays West Precinct. The Eastern City District is intended to evolve to be more innovative and globally competitive with a greater portion of knowledge-intensive jobs from the Asia Pacific.

Innovative practices and technologies are necessary for the success of Bays West, including the opportunity to deliver parts of the White Bay Power Station using cutting-edge technologies and heritage responses. Innovation is to be encouraged throughout all phases of the development. The White Bay Power Station will also support innovation through the delivery of start-up, creative, and cultural land uses, that integrate traditional cultural knowledge with western science.

As both the White Bay Power Station and Bays West Precinct have a role in the global innovation corridor, innovation objectives and provisions are designed to enable development that integrates and implements new technologies and opportunities.

Objectives

- a) Enable innovative uses and technologies that are consistent with the Site's key principles of design excellence, sustainability and connecting with Country, to be embedded in the development's design delivery and process.
- b) Support innovation, cultural and creative industries (including night-time economy) to foster knowledge-intensive jobs growth.
- c) Recognise that innovation opportunities available in the future have not yet been identified and to enable future development to take advantage of them (e.g. Smart City Infrastructure).

Provisions

1. Development applications with a Capital Investment Value of \$10 million or greater are to be accompanied by an 'Innovation Statement' that outlines the development's innovative approach to one or more of the following elements:
 - a. design and land uses, including a concentration of businesses and specialist industries;
 - b. Delivery of projects that respond to the connecting with Country framework and controls, including the themes of knowledge, water and power.
2. The innovation statement should also outline innovative technologies incorporated in the design and construction of the development as they relate to two or more of the areas below:
 - a. Connecting and Designing with Country;
 - b. Land uses, including those associated with the night-time economy, creative and cultural industries as well as knowledge intensive industries that support the blue economy;
 - c. Sustainability, Climate Adaptation and Resilience;

- d. Landscape, canopy and biodiversity;
 - e. Heritage and Adaptive Reuse;
 - f. Technology and digital connectivity in both buildings and the public domain;
 - g. Public domain;
 - h. Social impact and social infrastructure;
 - i. Movement and Access;
 - j. Air quality, wind, and noise;
 - k. Stormwater and flooding;
 - l. Geotechnical and contamination; and
 - m. Services and infrastructure, and utilities.
3. The Innovation statement and proposed technologies must be reviewed by the relevant Design Excellence Panel as part of assessing the development's overall consistency with this Section, Section 4 (Connecting with Country Design Principles), and Section 13 (Design Excellence).

7 Key Development Precincts

“Country is all around us – the landscape, the sea, the sky. In a large open space, there is a deep opportunity to reflect on the encompassing nature of Country and appreciate all she has given us and continues to give us.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

“Large buildings should complement Country and embody the essence of the culture and stories underneath and, in essence, be an extension of Country. But often, these big buildings just sit on Country with no regard for the significance of what’s underneath. It would be good to see buildings in the precinct make sense to the story of Country at Bays West and the enduring significance of the place to Gadi and Wangal people.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

Each Key Development Precinct within the Site should reveal the place stories of Bays West that have been used to support the Connecting with Country approach. The location of the key development precincts are shown at **Figure 2 - Key Development Precincts**.

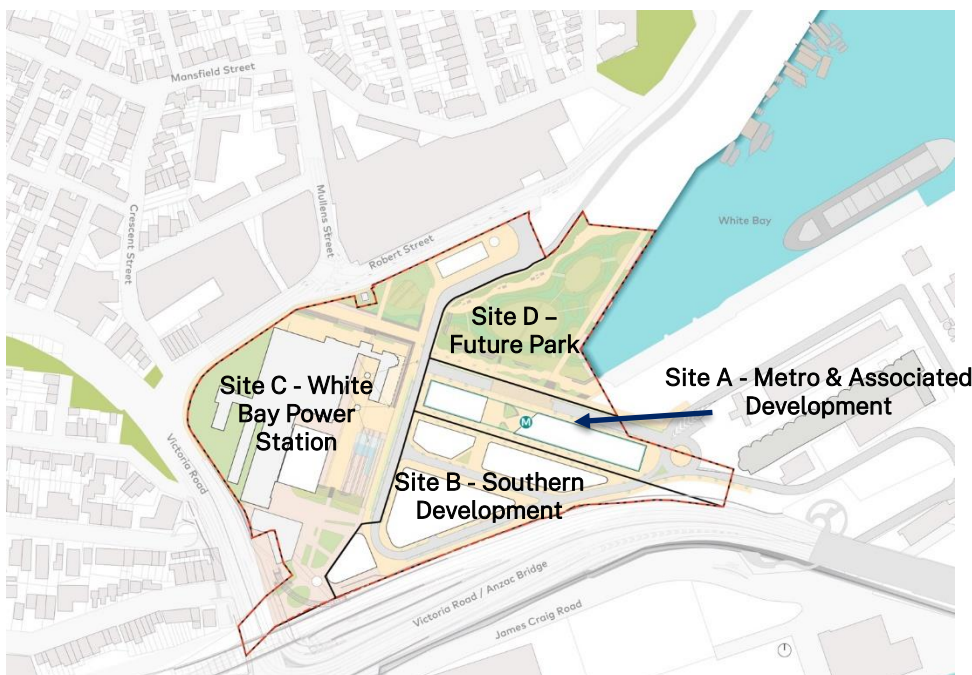


Figure 2 - Key Development Precincts

7.1 Site A (Metro and Associated Development)

Character

The Metro and Associated Development (Site A) is centrally located within the Site. It's a place that will be focused around movement, exchange, and connecting people to the broader Site - the White Bay Power Station, the park and open space network, and beyond to Balmain/Rozelle. From this precinct, people are connected to the Harbour, open spaces, and to the unique experiences that the heritage buildings have to offer.

Site A - Metro and Associated Development will be a vibrant transit node that serves as the primary transport hub within the broader Bays West Precinct. Site A includes The Bays Metro Station, associated services buildings that enable the operation and maintenance of the station, as well as employment-generating commercial and retail premises above and adjoining the station.

Site A will incorporate the Bays Station Plaza, a new civic space located at the junction of primary pedestrian movement paths from the metro station and transport interchange to the White Bay Power Station and future park. To its east, the Plaza will be framed by the station entry and comprised of landscape elements that allow easy and comfortable movement for the significant number of people moving through the plaza.

To the north, a street that has a high place function but could serve as a 'flexible movement corridor' that could cater for pedestrians, cyclists, buses, coaches, cars, kiss'n'ride, taxis, car-share and service vehicles if the Site-wide movement network plans require it in the future.

To the south, another space is comprised of two restricted vehicle areas that enables the servicing and maintenance access to the station services buildings at the eastern and western ends of the station box and a dedicated pedestrian only space.

7.1.1 Built Form and Building Envelopes

Objectives

- a) Protect and enhance the character of the area, particularly elements that contribute to a unique sense of place and identity such as the White Bay Power Station and other heritage buildings and elements.
- b) New built form that is consistent with the future desired character of the whole site.
- c) Ensure important views to the White Bay Power Station are preserved and celebrated in all building designs, particularly when viewed from the Anzac Bridge.
- d) Building orientation that maximises amenity and natural outlook, taking advantage of views towards open spaces and water such as White Bay.
- e) Buildings that are well designed and high quality, with modulated forms and facades and reduce perceived bulk and scale.
- f) Frame and define the streets and public open spaces with appropriately scaled built form.
- g) Reinforce the future desired character and enhance the pedestrian experience with human scaled spaces and walkable streets with shade and places to gather.

- h) Buildings are to address street and open spaces with clearly defined public entries with a sense of address.

Provisions

1. Development is to be designed to have clearly defined station entries.
2. Floor-to-floor heights are to be a minimum of 4m for ground floor uses and 3.8m for above ground uses.
3. Buildings are to minimise impacts on views to the White Bay Power Station from the Anzac Bridge. This includes station ventilation and services structures.
4. Buildings are not to exceed 120m in length and 25m in width with floor plates of no more than 3,000m² GBA per floor.
5. Consideration to be given to using rooftops for gardens, solar panel installation or other sustainable uses, if practicable.
6. Services buildings should be designed in a way that celebrates the working harbour and industrial legacy of the site.
7. Facade treatments, including detailing, colours and materials, are to create visual interest while contributing to the harmony of the overall development.
8. Telecommunications, service structures, lift motor rooms and mechanical plant are to be integrated within the roof design and roof features, contributing to an attractive and interesting skyline for the precinct.

7.1.2 Setbacks, Build to Line and Active Frontages

Objectives

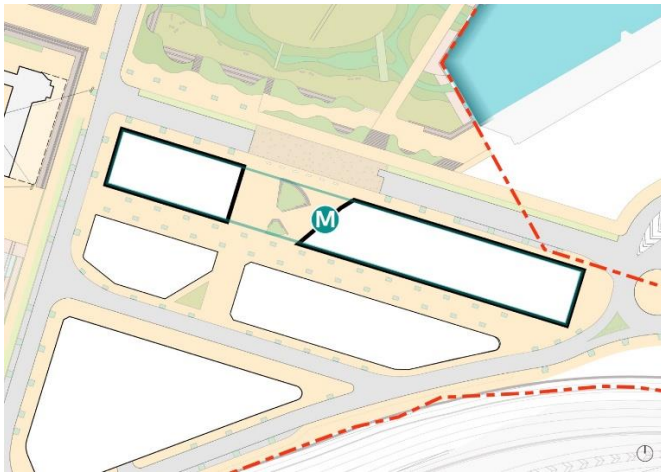
- a) Provide high-quality pedestrian amenity in the public spaces of Metro Station Plaza, surrounding streets and the public spaces of the future park by:
 - i. Having active frontages and active uses in areas of high pedestrian activity;
 - ii. Ensuring ground-floor uses activate the public domain and streets and provide passive surveillance; and
 - iii. Encouraging ground floor activities (uses such as local retail, business and/or community) to spill out into the public domain to activate the streetscape and promote a sense of community.
- b) Ensure high levels of amenity are provided through appropriate building separation, setbacks and depths.
- c) Use build to line guidelines to define and frame primary public spaces and active streets.
- d) Use built form to positively contribute to a sense of place and pedestrian-scaled public domain.

Provisions

1. Primary setbacks are required to define the streets with pedestrian scaled built form and ensure cohesion with the surrounding buildings in adjoining sub-precincts and should be provided consistent with Error! Reference source not found..

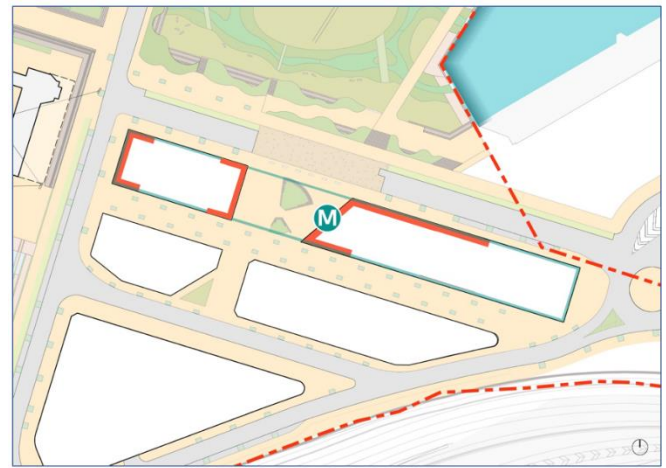
“A build to line prescribes the minimum proportion of a building façade that must be set along the external boundary of the building lot to define and activate surrounding streets and public domain.

2. A minimum 90% build to line applies to the interfaces to the Metro Station Plaza, and the proposed public domain spaces to the north, south east and west of the station and associated development.
3. Active frontages are to be provided as per Error! Reference source not found. such as small scale retail and building entrances, on both the northern, southern and western faces of the buildings. The locations of active frontages is to consider the need for service access to the Metro Station and to the associated station development.
4. Ground level articulation and entry levels are to ensure universal access to all tenancies and properties from the public domain.
5. Building entries are to be clearly identifiable from the street frontage and are to have a direct address to the street. Separate clearly identifiable entrances are required for commercial, retail and station spaces. Lighting is to be provided for safety at night.
6. Where there are non-station related uses, the majority of the building frontage is to be transparent (i.e. windows and glazed doors). Windows and doors are to have clear glazing.
7. Security grilles may only be fitted internally behind the shopfront of any non-station related uses at ground level. They are to be partially transparent and fully retractable.
8. A minimum 3m awning is to extend over the public domain where any active edge is prescribed by this Guide or connecting active edges where appropriate.
9. Footpath awnings are to complement the streetscape and be integrated with the façade and architecture of the building.
10. Ventilation louvres, particularly for the metro services buildings, are to be integrated into facade designs.
11. Services, such as for fire protection, water and power distribution, are not to intrude upon the pedestrian right of way, visually detract from the appearance of the development, and are to be screened from the street frontage with materials which are complementary to the building/s.



— 0m primary setback

Figure 3 - Metro and Associated Development – Primary Setback and Build to Line



— Active frontage

Figure 4 - Metro and Associated Development - Active Frontages

7.1.3 Metro and Associated Development Public Domain

Public Plaza and North Metro interface

The Bays Metro Station is positioned at the heart of the Bays West Precinct, linking people to open space, the White Bay Power Station, the surrounding site and destinations beyond Bays West. The station interface prioritises people, comfort and safety, requiring a flexible plaza that can accommodate day to day use and activities and events in the precinct.

A generous open plaza encourages users to transit through from all directions, promoting exceptional user experience that is enhanced by considered material choices that reflect the heritage character of the surrounding precinct as well as urban furniture that is integrated into the design to aid movement.

Objectives

- a) Create a low speed, legible and accessible streetscape where safety and pedestrian movement is prioritised.
- b) Ensure pedestrian flow is direct and unencumbered when entering/exiting the Metro station and its adjoining precinct.
- c) Ensure important views to the White Bay Power Station are preserved and celebrated in all building designs, particularly when viewed from the Anzac Bridge.
- d) Provide a generous tree canopy along both sides of the adjoining streets as a buffer between the footpath and road carriageways, ensuring continuous natural shade cover.
- e) Provide slow zones at the metro station entry/exit where cars, cycleways and pedestrian paths meet.
- f) Provide well designed and high-quality street frontages that complement the surrounding built form and broader streetscape.

Provisions

1. Provide a passive green space between the Metro station buildings that offers flexible space for meeting, queuing and accommodating an influx of people during peak times of travel.
2. Provide minimal urban furniture in the open space adjacent to the Metro entry/exit to reduce impact on pedestrian movement and flows.
3. Trees to be planted in clusters and / or spaced to ensure visual access to Sky Country.
4. Incorporate a raised pedestrian threshold at the interface of the Metro station entry/exit and the park to the north to slow vehicles/cyclists upon approach and reinforce the primacy of pedestrian movement to the park.
5. Include urban furniture such as bollards, seating and tree planting at the interface between the street and metro station entry/exit and plaza to signal driver caution should be applied within this zone.
6. Landscaping within the street and open spaces should enable natural surveillance and clear lines of sight by minimising obstruction between 0.5m - 2.0m above ground level.
7. Development is to demonstrate how the three themes of knowledge, water, and power are incorporated into the public domain and building design.

7.2 Site B (Southern Development Precinct)

7.2.1 Character

The Southern Development Precinct (Site B) includes a triangular area defined by the White Bay Power Station to the west, The Bays Station to the north, Anzac Bridge to the east and Victoria Road to the south.

The Southern Development Blocks Development Precinct will be a vibrant, mixed-use destination that will provide retail, dining and recreation uses, and other services that support the local community. The ground floor will comprise fine grain uses to create an active and vibrant streetscape with a mix of commercial and residential spaces above ground floor.

Residential development will be located, designed and constructed to adequately mitigate noise, air quality and lighting impacts associated with nearby major roads and adjoining Bays West port and working harbour uses to ensure an acceptable amenity for future residents.

Site B will incorporate a small plaza located at the junction of major pedestrian desire lines from the metro station, bus interchange, and the southern development blocks itself. The plaza will be lined to its east with fine grain retail and dining experiences, with this activity also wrapping around to the north onto a service lane for the associated station development. To the south, the plaza fronts an east-west street that is envisaged to be bus-only, and with very limited vehicular access.

The plaza is to be configured to create a visible and physical connection from the east-west bus street to the metro station entry, to aid legible movement between transport modes.

The northernmost lots within Site B will be characterised by two 4-storey commercial buildings that provide employment-generating uses in an area of high accessibility within the precinct. The lower heights relative to surrounding buildings, will allow views to the White Bay Power Station from the Anzac Bridge to be protected. The rooftops of these buildings will be publicly accessible to allow people to experience Sky Country.

The retail frontages will include fine grain tenancies fronting the streets. The resulting mix of tenants are to provide the services for residents, workers and visitors, enabling the delivery of a truly transit-oriented development.

Site B will have a direct interface with the White Bay Power Station Plaza, transport interchange and the Metro Station Plaza. The streets within will have awnings and carefully consider how corners and building entries contribute to streetscape character and pedestrian amenity.

The topography of the site falls from south to north, creating the opportunity to provide a contiguous parking and servicing area that is located below the new ground level.

7.2.2 Built Form, Building Envelopes and Articulation

Objectives

- a) Protect and enhance the character of the area, particularly elements that contribute to a unique sense of place and identity such as the White Bay Power Station, other heritage buildings and other elements.
- b) New built form that is consistent with the future desired character of the whole Precinct.
- c) Ensure important views to the White Bay Power Station are preserved and celebrated in all building designs, particularly when viewed from the Anzac Bridge.
- d) Building orientation that maximises amenity and natural outlook, taking advantage of views towards open spaces and water such as White Bay, whilst mitigating amenity impacts from surrounding uses including ports, maritime and major roads.
- e) Buildings that are well designed and high quality, with modulated forms and facades to reduce perceived bulk and scale.
- f) Frame and define the streets and public open spaces with appropriately scaled built form.
- g) Buildings address surrounding sound environment, air quality and light spill, taking into account the ongoing port operations and roadways surrounding the site and future active uses in the precinct.
- h) Buildings are to address the streets.

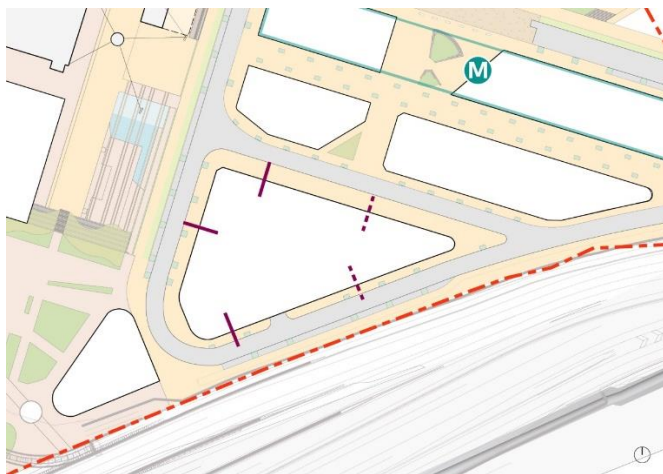
Provisions

1. To create an overall street block that presents as individual buildings to the street as a typology of multiple buildings (or facades); techniques to achieve this aim may include using vertical and horizontal articulation as well as a variety of materials and finishes.
2. To achieve this, the design of the buildings must present as:
 - a. 2 different buildings within the northernmost development parcels.
 - b. A minimum of 4 different buildings and a desire for up to 6 different buildings within the central development parcel.
 - c. 1 building within the southernmost development parcel.

Refer to **Figure 5** below for required and desired building locations for Site B

3. Floor to Floor Heights:

- a. Ground Floor active uses are to have a minimum floor to floor height of 4m.
- b. Commercial uses are to have a minimum floor to floor height of 4m.
4. Facades can extend to ground or sit on a podium of varied architectural expression (including different heights, forms); towers can be built to the boundary with no setback at podium level only where wind, noise and air requirements can be satisfied, and the pedestrian experience at ground level is optimised.
5. The base material is to predominantly be brick; with variation and a high proportion of solid to void.
6. Towers above the street are to minimise wind down draft to street and podium level outdoor spaces.
7. Tower design is to consider future development on adjoining sites through consideration of massing, form and other articulation.
8. Consideration to be given to using rooftops for gardens, solar panel installation or other sustainable uses.
9. Facade treatments, including detailing, colours and materials, are to create visual interest while contributing to the harmony of the overall development.
10. Buildings must be designed to respond and mitigate noise and air quality resulting from port operations and heavily trafficked roads through consideration of construction materials, attenuation, siting, orientation, balconies and mechanical ventilation.
11. Buildings are to consider mitigation of light spill impacts from proximity to port operations and shipping through appropriate design features such as block out blinds.
12. Telecommunications, service structures, lift motor rooms and mechanical plants are to be integrated within the roof design and roof features to contribute to an attractive and interesting skyline for the precinct.



Solid lines delineate parts of the development block where buildings must present directly to the street. Dashed lines delineate parts of the development block where it is desirable for buildings to present directly to the street, but recognise this may not be possible in all land use and built-form scenarios.

Figure 5 – Required and desired building for Site B

7.2.3 Setbacks, Build to Line and Active Frontages

Objectives

- a) Create a viable mixed-use development precinct leveraging the accessibility and amenity of the Metro station, the future Park and the revitalised White Bay Power Station.

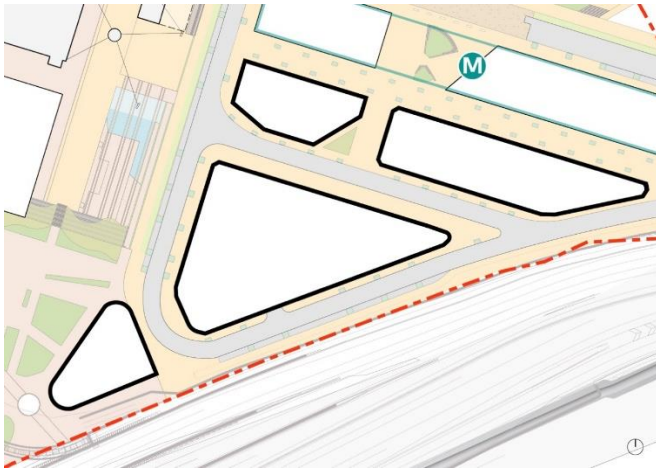
- b) Provide high-quality pedestrian amenity in the public spaces of Site B, including surrounding streets and the public spaces adjacent to the White Bay Power Station by:
 - i. Having active frontages and active uses in areas of high pedestrian activity;
 - ii. Ensuring ground-floor uses activate the public domain and streets and provide passive surveillance; and
 - iii. Encouraging ground floor activities (uses such as local retail, business and/or community) to spill out into the public domain to activate the streetscape and promote a sense of community.
- c) Ensure high levels of amenity are provided through appropriate building separation, setbacks and depths.
- d) Use build to line guidelines to define and frame primary public spaces and active streets.
- e) Use built form to positively contribute to a sense of place and pedestrian-scaled public domain.

Provisions

1. Primary setbacks are to be delivered in accordance with **Figure 6 – Site B - Primary Setback and Build To Line**.
2. A build to line of 90% is required.

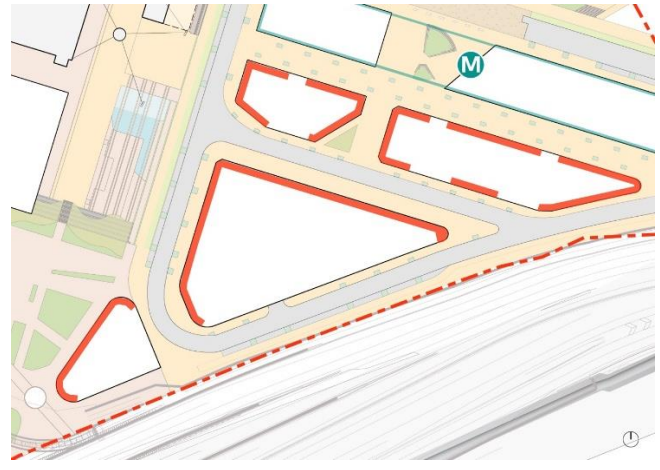
“A build to line prescribes the minimum proportion of a building façade that must be set along the external boundary of the building lot to define and activate surrounding streets and public domain.”

3. Active frontages, such as small-scale retail and building entrances, are to be provided as per Error! Reference source not found. on the interfaces to the surrounding public streets.
4. Ground level articulation is to ensure universal access to all tenancies and properties from the public domain and the sleeving of the contiguous parking and service area to the bus-street.
5. Building entries are to be clearly identifiable from the street frontage and are to have a direct address to the street. Separate clearly identifiable entrances are required for commercial, retail and residential uses. Lighting is to be provided for safety at night.
6. Where there are active frontages, the majority of the building frontage is to be transparent (i.e. windows and glazed doors). Windows and doors are to have clear glazing in line with the design provision of high proportion of solid to void in fenestration where possible.
7. Security grilles may only be fitted internally behind the shopfront of any non-residential uses at ground level. They are to be transparent and fully retractable.
8. A minimum 3m awning is to extend over the public domain where any active edge is prescribed by this Guide.
9. Footpath awnings are to complement the streetscape and be integrated with the façade and architecture of the building.
10. Services such as for fire protection, water and power distribution are not to intrude upon the pedestrian right of way, visually detract from the appearance of the development, and are to be screened from the street frontage with materials which are complementary to the building/s.



— 0m primary setback and build to line

Figure 6 – Site B - Primary Setback and Build To Line



— Active frontage

Figure 7 – Site B - Active Frontages

7.3 Site C (White Bay Power Station Precinct)

“Many people were reliant on the Power Station for their livelihoods – it was symbolic of an industry that sustained people. This is how Aboriginal view Country – it is our life source and provides constant sustenance for us to thrive and survive.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

Site C (the White Bay Power Station) will enliven the Bays cultural and creative arts district, acting as host to various events and experiences for the Sydney Metropolitan Area. The rich layers of pre and post-colonial history are expressed in the fabric of the built form and surrounding infrastructure, making it the historic anchor of the Bays West Precinct. The niche character of the facades of the Power Station provide opportunity for the public domain to deliver innovative user experiences, offering a renewed sense of place and identity whilst bringing new purpose and amenity.

7.3.1 Land Uses

Objectives

- a) Conserve and repurpose White Bay Power Station as a focal point of the precinct incorporating key creative, cultural and commercial uses as part of the Eastern Harbour City innovation corridor.
- b) Ensure the reuse of the White Bay Power Station delivers public benefit and includes a public access strategy underpinning the core reuse.
- c) Ensure future land uses within the Power Station can deliver a viable development outcome that enhances and celebrates the building’s heritage, whilst also supporting a vibrant night-time economy and innovative cultural and creative uses.

Provisions

1. Reuse of the White Bay Power Station and any resultant change must not reduce the heritage significance of the building or the place as detailed in the Statement of Cultural Significance and follow the policies of the Conservation Management Plan. Any adaptive reuse uses must demonstrate consistency with the CMP, including retention and respect for the significant elements and attributes of the place.
2. A majority of the uses operating within the White Bay Power Station must be associated with creative industries, entertainment facilities and/or community facilities.

7.3.2 Built Form - existing

Objectives

- a) Ensure future development retains and respects the visibility and prominence of the power station as a harbour-side, and industrial landmark to the local community.
- b) Ensure views from major axial approaches including Anzac Bridge, Johnston Street Annandale, City West Link, Victoria Road (from northwest), Glebe Point Road, Mullens Street and Robert Street are maintained as substantially unobstructed views.
- c) Integrate and interpret the unique industrial and maritime history of the precinct to inform future uses and character.

Provisions

1. The Cultural Significance of the White Bay Power Station and development precinct (particularly historic, technical and social significance) is interpreted throughout the redevelopment of the place.
2. Retain and respect the significant views and vistas to and from the White Bay Power Station as set out in the Conservation Management Plan and the Figure below:
3. Retain and interpret the importance of historic rail connections to the White Bay Power Station and the precinct generally as a connected precinct with trade and export.
4. Retain visual and physical connection of the White Bay Power Station to water and interpret the important themes of water in the precinct including export, import, trade, transport and industrial processes (underground water canal used for heating and cooling systems).
5. Retain and enhance the historic relationship and connections with surrounding suburbs. Enable public connections with other sub-precincts including other significant heritage items including the Glebe Island Silos and the Glebe Island Bridge.
6. Ensure new development considers and respects the archaeological significance of the White Bay Power Station as identified in the Conservation Management Plan and relevant specialist studies.

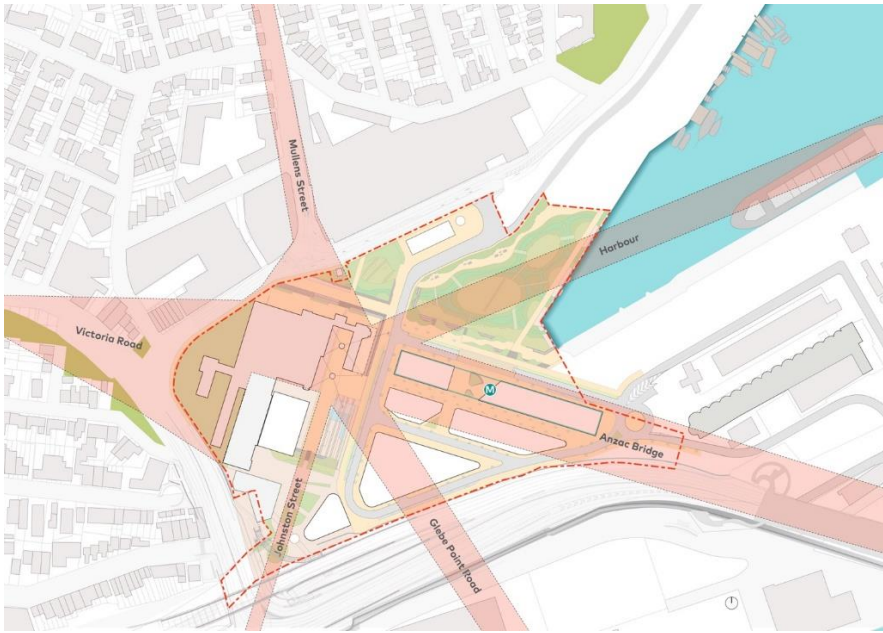


Figure 8 – View corridors to and from the White Bay Power Station

7.3.3 Built Form, Setbacks, Build to Line and Active Frontages – New Boiler House

Objectives

- a) Provide building forms that reinforce the desired character of the area and align with the Conservation Management Plan for the White Bay Power Station.
- b) Frame and define the streets and public open spaces with appropriately scaled built form.
- c) Reinstatement of a built form in the footprint of the old Boiler House no. 2 as a major priority as it will restore the formal massing and balance of the whole power station.

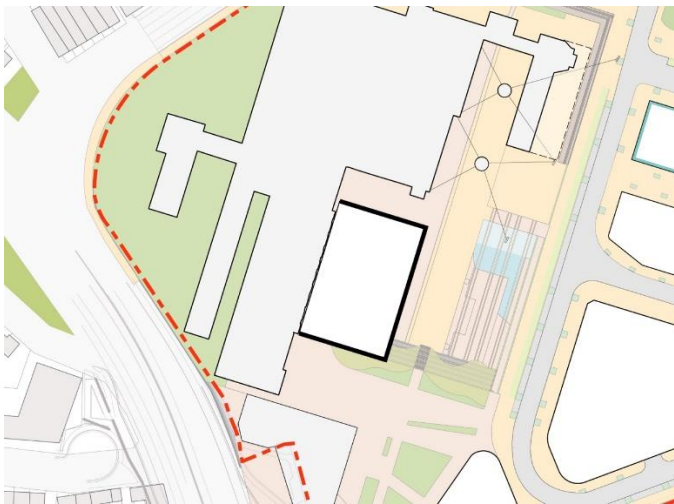
Provisions

1. The footprint of Boiler House no. 2 is to be built strictly in accordance with the policy guidelines contained within the White Bay Power Station Conservation Management Plan.
2. A new building, similar in height to 1958 Boiler House, and can be inspired by the form and mass of the demolished 1922 Boiler House and in accordance with applicable Conservation Management Plan.
3. Access to daylight for the laboratory in the Admin wing must be retained through the design of any new building in the footprint of Boiler House no 2 and the new structure may interconnect into the Pump House via new openings at a variety of levels.
4. The building is to be distinctively different to the existing White Bay Power Station and not attempt to recreate but should interpret it.
5. An awning may be reinstated on the eastern side of the coal handling shed inspired by the demolished Coal Storage. The use of this area within a central location of the precinct and adjacent to the Metro station, should inherently be public use.
6. Consideration to be given to using rooftops for gardens, solar panel installation or other sustainable uses, where this is consistent with heritage and conservation practices.

7. Telecommunications, service structures, lift motor rooms and mechanical plants are to be integrated within the roof design and roof features to contribute to an attractive and interesting skyline for the precinct.
8. Setbacks and Build to Lines are to be delivered as per Error! Reference source not found..

“A build to line prescribes the minimum proportion of a building façade that must be set along the external boundary of the building lot to define and activate surrounding streets and public domain. A minimum 90% build to line applies to the interfaces to the internal and surrounding streets and future public domain within the Precinct.”

9. New Boiler House active frontages are to be delivered as per Error! Reference source not found..



— 0m primary setback and build to line

Figure 9 - White Bay Power Station New Boiler House - Primary Setback and Build To Line



— Active frontage

Figure 10 - White Bay Power Station New Boiler House - Active Frontage

7.3.4 Setbacks, Build to Line and Active Frontages (Robert St Community Zone)

Objectives

- a) Ensure buildings are designed to respect and enhance the heritage and public domain elements in the area including reducing impacts on the penstock and overshadowing of the park.
- b) Developments are to be well designed and high quality, with a diversity to the architecture and built form that creates interest and richness in the streetscape and skyline.
- c) Buildings are to address the streets.
- d) The edge of the White Bay Power Station Northern Plaza is to be defined by landscape treatments in accordance with the objectives and provisions in Section 7.3.5 (White Bay Power Station Public Domain).

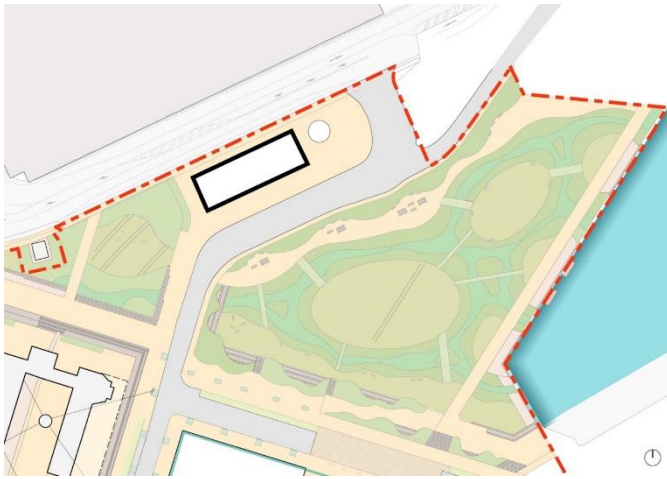
Provisions

1. Facades and built form are to be articulated and well-modulated.

2. The Future Park is not to be overshadowed at all between the hours of 9am and 4pm during the winter solstice
3. Floor-to-floor heights are to be a minimum of 4m for all uses.
4. Buildings shall not exceed 50m in length and 25m in width and shall have floor plates of no more than 1,000m² GFA per floor.
5. No primary setbacks are required to define the streets with pedestrian scaled built form and ensure cohesion with the surrounding buildings in adjoining Precincts, as per Error! Reference source not found..

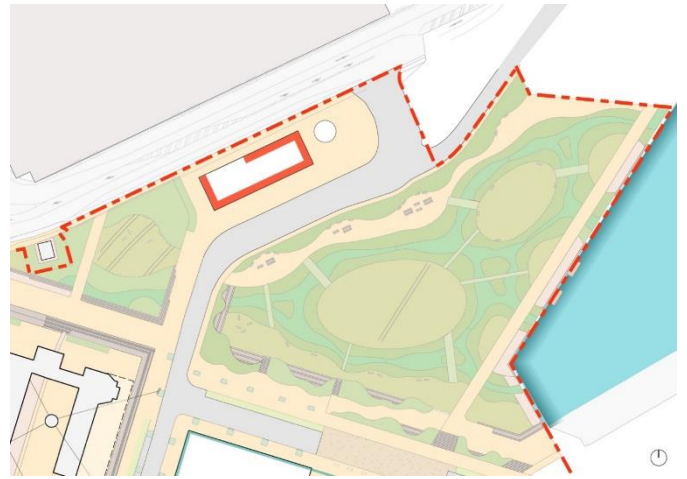
A build to line prescribes the minimum proportion of a building façade that must be set along the external boundary of the building lot to define and activate surrounding streets and public domain.

6. A minimum 90% build to line for the interfaces to the White Bay Power Station Northern Frontage, as per Error! Reference source not found.
7. Active frontages are to be provided as per Error! Reference source not found.. The active frontages are to be comprised of small-scale retail, community uses and building entries.
8. Building entries are to be clearly identifiable from the street with clear and direct address on the street. Separate clearly identifiable entrances are required for commercial, retail and station spaces. Lighting is to be provided for safety at night.
9. Where there are active frontages, a majority of the building frontage is to be transparent (i.e. windows and glazed doors). Windows and doors are to have clear glazing.
10. Security grilles may only be fitted internally behind the shopfront of any non-residential uses at ground level. They are to be semi-transparent and fully retractable.
11. Services such as for fire protection, water and power distribution are not to intrude upon the pedestrian right of way, visually detract from the appearance of the development, and are to be screened from the street frontage with materials which are complementary to the building/s.
12. Telecommunications, service structures, lift motor rooms and mechanical plants are to be integrated within the roof design and roof features to contribute to an attractive and interesting skyline for the precinct.
13. Buildings must incorporate a publicly accessible rooftop structures that maximise opportunities for Sky Country.
14. Facade treatments are to create visual variety and interest while contributing to the continuity of the streetscape.
15. Walls should have a variety of colours to reduce monotony and add variety to the streetscape. This is to ensure that the unique function of this building is readily recognisable.



— 0m primary setback and build to line

Figure 11 - Robert St Community Zone - Primary Setback and Build To Line



— Active frontage

Figure 12 - Robert St Community Zone - Active Frontages

7.3.5 White Bay Power Station Public Domain

The White Bay Power Station will be supported by a broad range of public spaces. These are identified in **Figure 13 - White Bay Power Station Public Domain**.

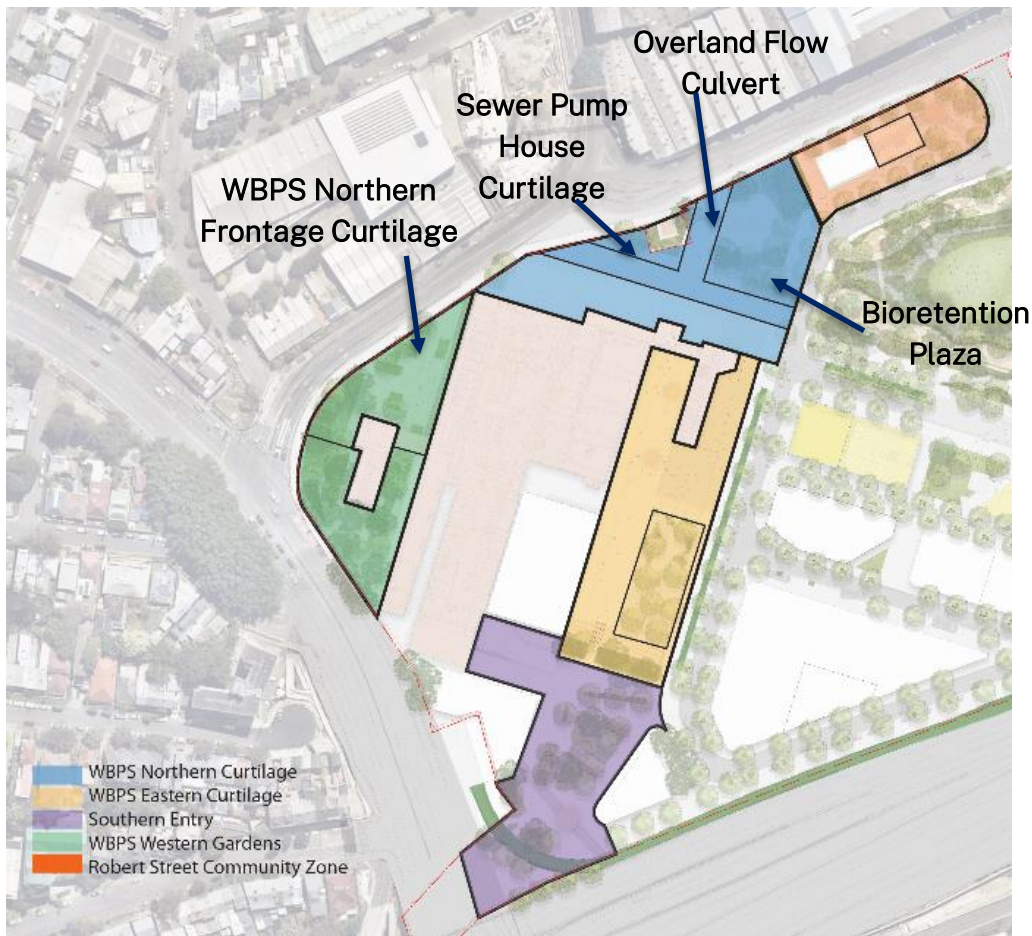


Figure 13 - White Bay Power Station Public Domain

White Bay Power Station Northern Curtilage

The White Bay Power Station Northern Frontage proposes a new pedestrian entry from Robert Street, transitioning up and over existing stormwater infrastructure and into a generous and versatile plaza space.

The public domain will respect the existing built form and character surrounding the Power Station, providing significant open space to allow pedestrian movement and engagement with the built form. Upon entry, the parkland landscape and heritage fabric will be integrated in their design to soften the strong urban frontage and to provide smaller scale breakout opportunities.

Objectives:

- a) Prioritise pedestrian access along key desire lines in east-west and north-south directions.
- b) Provide a strong visual connection to the North elevation of the White Bay Power Station and Coal - Loader Shed to direct pedestrian movement from the north towards the eastern curtilage of the Power Station.
- c) Provide architectural and landscape contrast between the Power Station Northern Frontage curtilage, Sewer Pump House curtilage and Bioretention Plaza.
- d) Develop a strategy to integrate interpretive heritage elements and create visual interest amongst the public domain. Refer to Section 6.3.2 for how to address existing built forms.
- e) Design proposed level changes (related to overland flow channel) to respect the character and curtilage of White Bay Power Station that do not diminish the importance of the Power Station as a landmark in the area.
- f) Embed the knowledge and stories of Country across the public domain including the key themes of knowledge, water and power.
- g) Deliver a high-quality public domain material palette that responds to the heritage of the Power Station and the surrounding precinct.

Within the White Bay Power Station Northern Curtilage there are several key elements which must meet the below objectives. These areas are identified in Figure 13 - White Bay Power Station Public Domain above.

- h) Power Station Northern Frontage Curtilage:
 - i. Prioritise the retention of the Power Station and surrounding heritage features, infrastructure, spaces and fabric.
 - ii. Respect the character and curtilage of White Bay Power Station and design to ensure the Power Station is not diminished as an important landmark to the area.
 - iii. Achieve an adaptable, highly urban plaza space that celebrates the industrial heritage and can accommodate a broad range of uses, experiences and activities.
- i) Overland Flow Culvert:
 - i. The design for the northern frontage incorporates stormwater/overflow infrastructure that is seamlessly integrated into the public domain.

- ii. Stormwater/overflow infrastructure is not to inhibit equal access opportunities. Refer to section 15 for Stormwater, Flood Mitigation and Water Quality.
 - iii. Headwall interface with Robert Street is sensitive to surrounding heritage elements.
 - iv. Material selection for the top of the culvert (raised urban pedestrian platform) is to be seamlessly integrated into the broader public domain.
 - v. Celebrate stormwater low flows from the culvert in Bioretention Plaza.
- j) Sewer Pump House Curtilage:
- i. Retain the Sewer Pump Station as a Heritage Element - Refer to Heritage section below.
 - ii. Retain visual connection to the Power Station and other built form with heritage significance.
- k) Bioretention Plaza:
- i. A permeable plaza space that prioritises soft landscaping with opportunity for a flexible breakout space.
 - ii. Use bioretention planting to filter low velocity stormwater flows prior to entering White Bay Park.
 - iii. Interpret historical elements, including spur lines and surrounding heritage features.

Provisions:

1. Materials used in the public domain are to respond to the industrial character of the Power Station to create a well-integrated space that celebrates the site's heritage.
2. Provide a sunken plaza surrounding the curtilage of the Power Station that is predominately hardscape, offering significant open space and movement that can accommodate major community events, gathering and movement. The raised former rail embankment on the east side will assist to provide containment and can enhance site interpretation elements.
3. Design of the Robert St (north) embankment requires careful consideration to distinguish it from the existing east (railway) embankment.
4. The historic Sewer Pump Station is to be protected at its existing levels, with an appropriate curtilage for servicing which will need to ensure that water from the precinct does not inundate the structure. The surrounding area must be softscaped, inclusive of endemic species and tree planting consistent with the character of the surrounding future Park.
5. Incorporate existing spur lines as a continuous interpretive element in the ground plane from north to south through the Power Station Precinct.
6. Provide a high quality and functional solution to level change between Power Station curtilage and Robert Street that responds to the overland flow and supports seamless access for people of all abilities entering the precinct. This includes:
 - a. Using the Coal Loader Shed as a visual cue and threshold for Power Station curtilage.
 - b. A DDA compliant equal access walkway from Robert Street.
7. A generous raised urban pedestrian platform (level with the Port Access Road junction) will provide equal access and should:

- a. Subtly define the Power Station northern curtilage and protect it from flooding;
- b. Define the curtilage for the existing Pump Station;
- c. Define the curtilage for the Bioretention Plaza;
- d. Follow the culvert alignment below;
- e. Disguise the infrastructure used for stormwater capture and discharge; and
- f. Have a strong urban edge, incorporating bleacher seating, ramps and stairs to manage level change into sunken plazas.

White Bay Power Station Eastern Curtilage

The public domain serves the New Boiler House and entry to the White Bay Power Station East. Positioned in direct alignment with The Bays Station, the sunken plaza accommodates the confluence of movement when travelling to and from the Power Station and should provide an extended breakout space for amenity and events. The significant vertical infrastructure such as the Coal- Loader Shed and chimneys are retained, becoming strong landmark features, establishing a visual connection for users with the existing heritage of the precinct.

Objectives:

- a) Respect the character and curtilage of White Bay Power Station and design to ensure the Power Station is not diminished as an important landmark in the area.
- b) Provide a main entry/exit point into the Power Station building.
- c) Provide a new highly- functioning building that activates the ground plane and elevates the creative and industrial character of the Power Station precinct. Refer to Section 6.3.3. New Boiler House.
- d) Maintain clear sight lines between the Power Station, the New Boiler House and The Bays Metro Station.
- e) Achieve an adaptable, highly permeable plaza space that celebrates the industrial heritage and is capable of accommodating a broad range of uses, experiences and activities.
- f) Prioritise pedestrian access along key desire lines in east-west and north-south directions.
- g) Manage the level changes between the Power Station Eastern curtilage, Southern Plaza and north- south street interface to develop a unique, accessible and multifaceted design outcome.
- h) Encourage active frontage of Power Station East with opportunity for breakout, dining and pop-up/temporary activities.
- i) Celebrate the Coal Loader and chimneys as a vertical landmark within the Power Station precinct.
- j) Learn, understand and embed the knowledge of Country through the inclusion of interpretive overlays of both landscape and historical elements in the ground plane.

Provisions:

1. Design a sunken plaza surrounding the curtilage of the Power Station to accommodate major community events and gathering.
2. Provide a large central entry/exit point into the White Bay Power Station that:
 - a. Celebrates the historic Power Station building;
 - b. Welcomes users into the creative industrial precinct;
 - c. Is well lit and engaging from the street;
 - d. Utilises custom signage and wayfinding initiatives; and
 - e. Connects with the proposed 'New Boiler House'.
3. Define the Power Station Eastern curtilage by the existing Coal Loader surrounds, allowing a clear open plaza space that is aligned with the Robert Street entry.
4. Design a heritage plaza with a series of interpretive overlays which:
 - a. Interpret the pre-colonial shoreline through the design of a shallow wetland;
 - b. Introduce endemic, water sensitive species within the shallow wetland to embrace the pre-colonial planting character;
 - c. Retain expression of historical spur lines and built form footprints in the public domain ground plane;
 - d. Protect and celebrate the White Bay Power Station chimneys;
 - e. Protect the Coal Loader surrounds at its existing level; and
 - f. Enhance the Coal Loader infrastructure as a feature element, with additional awnings and permeable space beneath capable of a variety of uses. This could include multi-level spaces to facilitate views into the Coal Handling Shed.
5. Ensure DDA compliant access from the north- south street and pedestrian priority crossing between the White Bay Power Station and the rest of the precinct.
6. A strong urban edge at the south inclusive of bleacher seating with appropriate landscape treatment.

Southern Entry

The southern entry welcomes users to the Bays West Precinct when travelling from the Rozelle Rail Yards and Anzac Bridge Cycleway. The entry is anchored by the existing heritage penstock, with surrounding landscape spaces organized to allow flexible movement towards the White Bay Power Station East, The Bays Station and proposed mixed use development. The public domain offers smaller, intimate spaces whilst accommodating the functional uses of the surrounding infrastructure.

Objectives:

- a) Embed the knowledge and stories of Country across the public domain.
- b) Seamlessly connect with adjacent pedestrian links from Rozelle Rail Yards, Anzac Bridge Cycleway and Victoria Road Overpass.
- c) Provide a strong visual connection towards the Power Station precinct and surrounding Bays Precinct.

- d) Create a series of small passive landscaped spaces with extensive canopy coverage.
- e) Ensure adequate curtilage is provided for services to the Power Station and ISS Building if provided in this area.
- f) Provide a material palette that responds to the:
 - a. White Bay Power Station heritage
 - b. Surrounding precinct.

Provisions

1. Integrate pedestrian movement paths with native planting and lawn spaces to direct users towards The Bays Metro Station, WBPS, Anzac Bridge and proposed mixed use building.
2. Maximise native tree planting in lawn and garden beds to ensure access to shade and create a soft landscape character.
3. Accommodate a large, passive lawn space upon entry from Rozelle Rail Yards.
4. Curate a clear sight line from the entry lawn towards the Coal Loader in the WBPS Eastern curtilage.
5. Landscaping and open spaces should enable natural surveillance and clear lines of sight by minimising obstructive plantings between 0.5m - 2.0m above ground level.
6. Retain the Southern Penstock as a heritage feature and entry marker into the precinct.
7. Emphasise the cooling tunnels using interpretive design at the ground plane.
8. If the ISS building is provided in this area, provide a shared zone adjacent to the ISS building to optimise entry for vehicles and services. Furniture and planting should be designed in a way which does not compromise the primary function of the zone.
9. Provide a seamless entry for cyclists onto the Anzac Bridge Cycleway where the public domain and cycle route meet.

White Bay Power Station West Gardens

The Western Gardens embrace the rugged and industrial nature of the White Bay Power Station surrounds, and have the opportunity of creating unique plant communities and respecting surviving garden plantings. These are to be intertwined with the relics of the existing infrastructure with minimal intervention, utilising existing levels, terracing and pathways. Level changes between Robert Street, Victoria Road and the Power Station Western Elevation incorporate intimate landscape “rooms”, allowing people to navigate easily through the area. Each garden room encourages biodiversity, responds to the local microclimate and delivers a new landscape supportive of the character of the Power Station.

Objectives:

- a) Develop a passive, landscaped space that celebrates the existing built form and offers places to retreat and relax.
- b) Integrate planting and encourage pedestrian movement into the heritage fabric of the Power Station.

- c) Vegetation to include a diversity of endemic species, including trees and shrubs.
- d) Use remnant materials from the area in the design of the ground plane.
- e) Celebrate the existing hardscape and acknowledge the appreciation of site gardens that were maintained as part of the industrial landscapes when the Power Station was functioning.
- f) Improve access and entry to the Power Station.
- g) Embrace the rugged, existing sloped landscape and significant level changes at the junction between Robert Street and Victoria Road.

Provisions:

1. The North-West Gardens should:
 - a. Create a series of intimate outdoor rooms that express varying planting characters that respond to the microclimate.
 - b. Use the existing upper slab height to create an intimate plaza that is remnant of the historic WBPS ground plane.
 - c. Incorporate sunken gardens amongst the remnants of the WBPS substations, integrating and retaining portions of the existing walls.
 - d. Provide a secondary entry into the gardens via Robert Street ensuring safe, equal access.
 - e. Stabilise existing sloped planter beds.
 - f. Use the overhead infrastructure between the existing control room and WBPS to create a pedestrian through site link to the South-West Gardens.
2. The South-West Gardens should:
 - a. Develop an 'outcrop garden' south of the control room that incorporates a selection of tree species with diverse canopy.
 - b. Reinstate the existing bridge connection between Victoria Road and White Bay Power Station at south of the site.

Robert Street Community Zone

Objectives

- a) Embed the knowledge and stories of Country across the public domain.
- b) Create a pedestrian plaza space that complements the character and uses of the adjacent community building.
- c) Promote an active and engaging user experience when transitioning from the street to the plaza.
- d) Integrate heritage elements to create a unique landmark that creatively reflects the character of the White Bay Power Station.
- e) Facilitate a safe pedestrian travel path by maintaining clear sight lines through the future Park to the Power Station.

- f) Achieve a substantial urban canopy along the street that enhances the planting character established within the future Park.

Provisions

1. Retain the existing penstock as a landmark feature.
2. Include an active play space within the under-croft of the community building.
3. Provide an unobstructed connection for pedestrians from Robert Street.
4. Ensure native tree planting is incorporated throughout the urban plaza in a way that provides shade and does not restrict natural surveillance.

7.3.6 Intake Sub-Station (or alternate use)

At the time of finalisation, the Intake Sub-Station for the Metro line is located adjoining Anzac Bridge within Site C. However, should the location of the Sub-Station move outside of the Site, appropriate built form controls are required to ensure alternate uses are suitable for the character of the area.

Objectives

- a) Ensure alternate use and built form at the location of the Intake Sub-Station is appropriate for the scale and character of the area.

Provisions:

1. Alternate development in the location of the current Intake Sub-Station must be compliant with the permissible uses of the SP1 zone, with a preference for a pub or entertainment facility.
2. Alternate development in this location should be generally consistent with the Figures 14 -16 below.



Figure 14 – Lower level built form opportunity



Figure 15 – Victoria Road built form opportunity

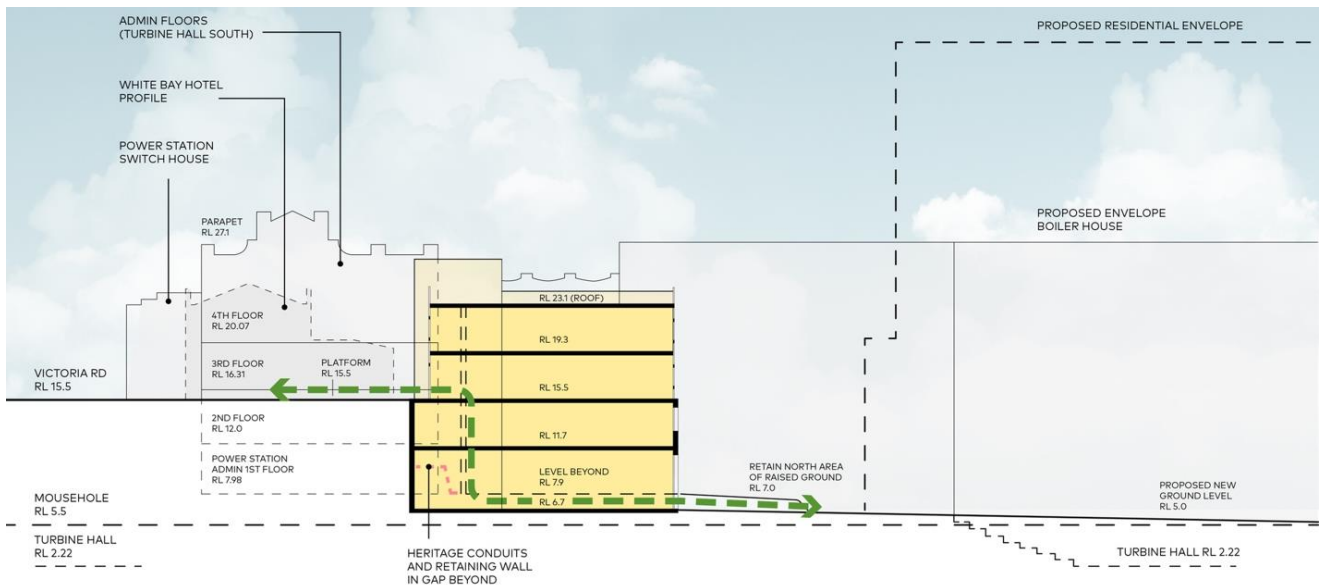


Figure 16 – built form opportunity - section

7.4 Site D (Future Park)

Nestled within an industrial landscape, the Future Park offers significant areas of green public open space that complements the surrounding Rozelle Parklands and activates the Bay’s foreshore. Comprised of a series of passive and active landscapes, the Future Park focuses on creating an immersive experience of Country, telling the story of water as it moves from ‘sweet to sour to salt’.

The below overarching objectives and provisions below relate to the Future Park and sub-objectives and provisions that relate to focus areas of Water and Natural Systems, Play Areas, and Passive and Active Open Space.

Objectives:

- a) Offer a series of accessible and diverse landscaped open spaces at the waterfront that allow passive and active recreation.
- b) Acknowledge and express the Aboriginal cultural narratives connected to this site including songlines and key themes of knowledge, water and power.
- c) Explore and express the contrast between the rich pre-colonial landscape, underlying geomorphology and the later industrial landscape including White Bay Steel Works (1908-30), early petrol refining/ storage, and provision sheds nearby that serviced the Australian and US forces in WWII in the Pacific.
- d) Deliver a high quality and functional solution to level changes across all interfaces with the park that supports seamless access, connections and transitions for people of all abilities.
- e) Maintain strong visual connections from The Bays Metro Station, Port Access Road and the Power Station.
- f) Provide clear connections with equal access from The Bays Metro Station, White Bay and Robert Street.
- g) Ensure there are a variety of spaces and scales, catering for everyday gatherings and for community celebrations.
- h) Strengthen the local ecology by providing an abundance of native vegetation that offers habitat, diverse canopy and understorey.

Provisions:

1. Provide a large, public, waterfront park a minimum 1.5 Ha in size that incorporates the key themes of knowledge, water and power in the design.
2. Implement a wayfinding strategy which allows users to easily navigate from the park's periphery to its internal spaces.
3. Materials used should contrast the industrial heritage of the Power Station, evoking natural earth tones that complement the native planting character.
4. Ensure access to seating, bins, water fountains and other essential furniture at regular intervals, particularly at key activation nodes.
5. The park should offer:
 - a. A large central passive lawn space;
 - b. A district level playground inclusive of nature play;
 - c. Designated spaces with amenities such as seating, BBQs, fitness stations, and lookout/s;
 - d. A series of equal access pathways and bridges to connect activity spaces;
 - e. Interpretive overlays through the ground plane that connect with the historic elements of the WBPS and Country; and
 - f. Include acknowledgements/welcome to Country at major park entries.
6. Interfaces with the park should:

- a. Maintain a strong connection with The Bays Metro Station ensuring DDA compliant equal access from the footpath to the park.
- b. Ensure an unobstructed pedestrian and cyclist shareway along the White Bay Harbour in alignment with the Metro entry/exit.

Natural Water Systems

Objectives

- a) Celebrate the site's water story and natural systems.
- b) Improve the quality of the water before it enters the Bay using water sensitive urban design methods.
- c) Incorporate water sensitive planting that will support and enhance the character of the parklands.
- d) Incorporate key themes of the water songline in design and delivery of these systems.

Provisions

1. Establish an:
 - a. Invert level that enables saltwater to tidally enter the parks creek system.
 - b. Invert level that enables low flow stormwater flows from the culvert to enter the park's creek system ebbs and flows.
2. Establish a water system that:
 - a. Is resilient to flooding and sea level rise.
 - b. Embraces biodiversity and creates opportunities for new habitat and ecological rejuvenation.
3. Allow access to the water's edge at designated points without compromising landscape quality or user safety.
4. Support the waters ebbs and flows with the inclusion of natural sandstone, rocks and battered planting.
5. Ensure that the design of landscaped spaces builds upon the Water Songline theme.

Play Areas

Objectives

- a) A dedicated space for a formal, district scale playground that responds to the local natural environment.
- b) Ensure all-inclusive play and access.
- c) Play elements must be designed and built for all abilities and ages and should connect to the five pillars of play while also incorporating the themes of knowledge and nature in the design and delivery:
 - a. Physical Engagement

- b. Cognitive Play
- c. Social play
- d. Sensory play
- e. Imaginative Play.

Provisions

1. Provide a Nature Play 'island' theme inclusive of bespoke play elements that reflect local ecologies, sandstone geology and Country.
2. Pockets of native planting should envelop the playground, softening the edges and providing a landscape buffer.
3. Inclusion of various measures of shade cover over play equipment and amenities.
4. Materials used for equipment should be robust, high quality, sustainable and durable to withstand extensive use.

Passive and Active Open Space

Objectives

- a) Provide sufficient open space to cater for the current and growing needs of the community.
- b) Provide a balance of passive and active landscape 'islands' that vary in size and shape.
- c) Develop a landscape narrative that binds together all areas of open space, evoking a strong sense of place and identity true to the local character of the Bay.
- d) Ensure access to Sky Country by providing openings in tree canopy.
- e) Design passive open spaces to be used in a variety of ways.

Provisions

1. Provide a large, flat central lawn at the heart of the park that is accessible and visible when entering from the surrounding streets.
2. Include multiple nodes of enclosed spaces with fixed amenities such as picnic shelters, BBQs and shade cover to cater for various sized user groups at all times of the year.
3. Sleeve the 'islands' in diverse native planting to create visual interest from a variety of vantage points within the park.
4. Landscaping should enable natural surveillance and clear lines of sight by minimising obstructive plantings (when mature) between 0.5m – 2.0m above ground level.

8 Movement and Access

The Bays West Place-Based Transport Strategy (PBTS) sets the aspiration to provide an exemplar precinct in Sydney that is designed for sustainable transport with little or no need for private car travel. The Bays West Precinct must prioritise the use of sustainable modes of transport, being walking, cycling and public transport. This should also capitalise on the opportunities for mobility changes supported by e-mobility devices such as scooters and e-bikes, subject to appropriate safety and separation measures.

Planning, design and delivering the transport network should address the TfNSW Movement and Place Framework, ensuring that all road users, including walking and cycling, public and private transport users are considered. Critical to the success of the precinct will be balancing and managing the existing and future traffic movements associated with White Bay Cruise Terminal (WBCT) and Ports and Maritime uses, with those associated with the delivery of Bays Metro Station and the redevelopment of the Site.

Development will be delivered over several years to 2040 and beyond, and the transport network must be able respond to changing needs through a staged delivery of infrastructure and services. The network must be capable of fostering and delivering transport innovation such as electric vehicle transition, dynamic transport services, Mobility as a Service (travel demand management) that will allow the more efficient movement of people and goods to, from and within Bays West.

The objectives and provisions are to be complemented by relevant Australian Standards and relevant NSW Government policies, plans and guidance.

8.1 Walking and cycling

Walking and cycling will be the key modes for movements in the Precinct. This behaviour must be encouraged and supported from day one. Several priority walking and cycling connections are to be delivered early, supported by a comprehensive local network to ensure the focus on sustainable travel creates actual mode shift. This will also need to consider the future opportunities presented by Glebe Island Bridge.

Objectives

- a) Ensure development will result in a high quality, integrated, permeable and accessible pedestrian and cycle network.
- b) Design the walking and cycling network to follow a hierarchy depending on its function:
 - a. Primary – high quality usually separated routes that connect to the wider regional network. These links will provide connection with the transport interchange and key destinations within the precinct e.g. White Bay Power Station and the future Park.
 - b. Secondary – connections to key uses and areas surrounding Bays West. These links provide connectivity between primary links and key uses and can either be shared or segregated depending on number of users and final design of public domain.

- c. Local – finer grain paths that access specific uses. These links should be walkable but do not need to be separated.
- c) Enable all walking and cycling connections to be safe, secure, direct, inclusive, and create enjoyable experiences for all who use them.
- d) Improve public health through increased active transport mode share.
- e) Deliver part of the active transport route between Parramatta and Circular Quay – being within the relevant areas of Bays West and the Site.

Provisions

1. The location of primary walking and cycling connections are provided in accordance with **Figure 17 - Walking and Cycling Connections** and TfNSW guidelines (incl. *Cycleway Design Toolbox* and *Walking Space Guide*) and include:
 - a. A generally north-south link between Robert Street and Anzac Bridge that provides a bicycle path (*Cycleway Design Toolbox 2020*) a type 5 footpath (*Walking Space Guide 2020*) or a shared path (*Cycleway Design Toolbox* Error! Bookmark not defined.2020);
 - b. A generally east-west link between Robert Street and Glebe Island that provides a bicycle path (*Cycleway Design Toolbox 2020*) a type 5 footpath (*Walking Space Guide 2020*) or a shared path (*Cycleway Design Toolbox 2020*); and
 - c. A generally north-south link between Glebe Island and Rozelle Parklands that provides a bicycle path (*Cycleway Design Toolbox 2020*) a type 5 footpath (*Walking Space Guide 2020*) or a shared path (*Cycleway Design Toolbox 2020*) Error! Bookmark not defined.
2. Every road or street provided in the Precinct needs a footpath that, at a minimum, meets the standards set out in the TfNSW *Walking Space Guide 2020*.
3. The location of secondary walking and cycling connections are provided in accordance with **Figure 17 - Walking and Cycling Connections** and include:
 - a. A link under Anzac Bridge towards Rozelle Bay that provides a bicycle path and a Type 5 footpath or a shared path.
 - b. A secondary walking and cycling access points to Robert Street via the internal road network that provides bicycle paths and a Type 3 footpath or a shared path.
4. A Civic Space between the bus interchange and The Bays Metro Station must:
 - a. Provide seamless interchange between public transport modes and interchange facilities;
 - b. Be sufficiently wide to accommodate walking and cycling;
 - c. Have activated frontages and clear sight lines between modes; and
 - d. Provide clear wayfinding.

This link must be well lit, weather protected and attractive public domain.
5. Access for pedestrians and cycling to the Site is to be direct and legible, with access points that are highly visible from main approaches including Robert Street, Rozelle Parklands, Glebe Island Bridge and the Balmain Peninsula.
6. The pedestrian and cyclist network must be designed in accordance with the principles of *Crime Prevention through Environmental Design* (CPTED) to be safe and secure with good passive surveillance opportunities. These areas are also to consider accessibility for all.

7. The pedestrian network is to:
 - a. Support key pedestrian desire lines;
 - b. Provide safe crossing points throughout the network;
 - c. Have generous widths to accommodate the current and future anticipated peak hour pedestrian flows;
 - d. Be designed to incorporate opportunities for respite and pause away from primary pedestrian flows;
 - e. Provide continuous shade coverage along streets, and pedestrian and bicycle routes where possible (natural or constructed);
 - f. Be supported by active frontages; and
 - g. Be designed to support access for people of all abilities equitably throughout the Site.
8. Established and emerging transport innovations, such as micro-mobility or mobility hubs, should be trialled in select locations throughout the precinct to encourage walking and cycling.

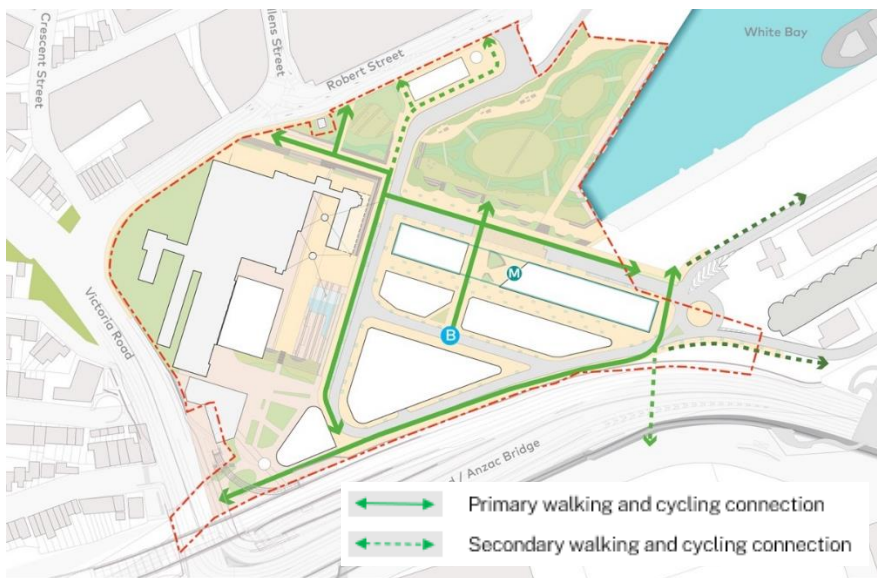


Figure 17 - Walking and Cycling Connections (connections to Glebe Island are potential and to be further investigated)

8.2 End of Trip (End of Journey) Facilities

Objectives

- a) Long-stay bike parking and end of trip facilities are directly linked to a primary link presented in Figure 17, secure, intuitively connected to building entrances, and well sign-posted.
- b) Short stay bike parking facilities are directly linked to a primary link presented in Figure 17, well signposted and proximate to the users' destination.
- c) Public cycle parking is integrated with the public realm and proposed community uses.

Provisions

1. Long-stay bike parking will be:
 - a. Secure and located to avoid cyclist/pedestrian conflict.
 - b. Close to the building's bicycle entrance/exit lockers and end-of-trip facilities.
 - c. Accessible via two methods if a level change is required. This may include a combination of lifts, ramps or stairs with a wheeling ramp.
 - d. Supported by standard bicycle maintenance facilities.
 - e. Supported by amenities such as lockers, bathrooms, showers and change areas. These spaces are to be designed inclusively and are to enable use by people of all abilities, and inclusion of 'Changing Places' amenities.
2. Short-stay bike parking will:
 - a. Be conveniently located to avoid cyclist / pedestrian conflict.
 - b. Include a proportion provided in the public realm that is visible from the building's entrance.
 - c. Be accessible via two methods if a level change is required. This may include a combination of lifts, ramps or stairs with a wheeling ramp.
3. Provide a bike hub in the public realm that is easily accessible from one of the primary links presented in **Figure 17 - Walking and Cycling Connections**.
4. End of trip facilities must be provided in each individual development. Facilities are to have direct and intuitive access for users, including cycle parking for visitors and employees. Minimum bicycle parking rates are presented in site specific provisions which apply to the Site in the Environmental Planning Instrument.
5. A locker will be provided for every long-stay cycle parking space.
6. One shower will be provided for every 10 long-stay cycle parking spaces.

8.3 Transport Interchange and Street Network

The Transport Interchange will deliver a high-quality transport interchange that provides seamless interchange between buses, Metro services and the wider precinct for all customers and users is essential for the success of the Bays West Precinct.

Objectives

- a) Deliver a precinct bus interchange, integrated with The Bays Metro Station, to support the existing and future bus network (including potential rail replacement services).
- b) Deliver a separated bus interchange location which is only accessible by Buses and emergency vehicles.
- c) Ensure interchange between modes is seamless and safe. Interchange modes include metro-bus, walking/cycling-metro and walking/cycling-bus.

- d) Design the Metro station, station plaza, interchange and associated development to encourage an active and attractive public domain that supports a range of amenities for all users.

Provisions

1. Deliver a bus interchange, generally as per Figure 18 - Bus Route Locations and direct link to Metro Station plaza. The bus interchange should:
 - a. Be designed primarily as a bus only interchange; but must be suitable for appropriate emergency access as required.
 - b. Be suitable for all bus types including 12.5m, 14.5m buses, articulated buses, and double decker buses.
 - c. Ensure appropriate bus travel lanes and bus parking lanes. The width of travel lanes is preferably no more than 3.5m.
 - d. Provide bus stops within a 100m walk of The Bays Station gate line as per TfNSW and Sydney Metro requirements.
 - e. Accommodate six bus bays suitable for 14.5m long buses. This should be located on bus route shown in Figure 18.
 - f. Be designed to accommodate bus layover as per TfNSW requirements.
 - g. Provide seating at transfer points between modes for the comfort of waiting passengers.
 - h. Provide canopy cover and weather protection for pedestrians changing modes of transport and waiting for services.
 - i. Provide intuitive and simple wayfinding in accordance with TfNSW guidelines.
 - j. Be designed to be as inclusive as possible to cater for the needs of a broad range of patrons, with a range of differing physical and sensory abilities. This should exceed DDA requirements where possible.
2. Development surrounding the transport interchange should have activated frontages.
3. A direct physical link between the metro station plaza and entry and the bus interchange that is perpendicular to the bus street, and a minimum clear width of 10m at its narrowest point, must be provided in accordance with Figure 18 - Bus Route Locations and direct link to Metro Station plaza. This may require re-planning of the commercial buildings behind the Metro depending on the final location of the Metro buildings and plaza. The intent of the link is to provide a safe, visually and physically connected pedestrian link between the bus street and the Metro Plaza for interchange between bus and Metro.

The transport interchange may be delivered in stages to align with growth in the overall sub-precinct and wider precinct.

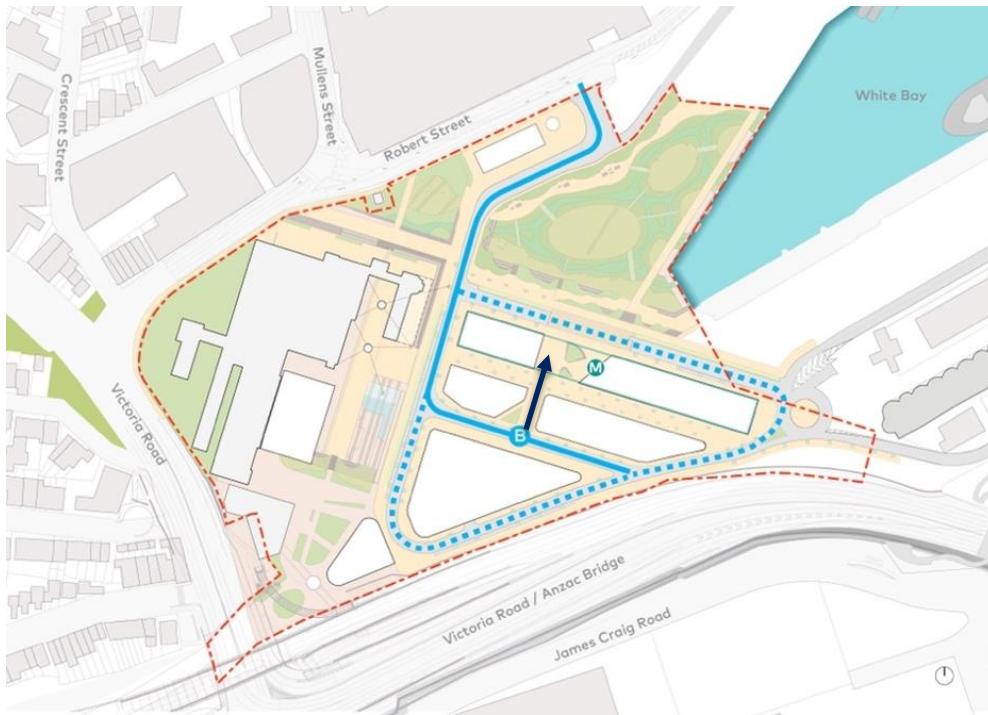


Figure 18 - Bus Route Locations and direct link to Metro Station plaza

- Bus route
- - - - - Bus route options

8.3.1 Street hierarchy and indicative cross-sections

The Design Guide ensures ongoing flexibility for the precinct by allowing all main streets and local streets to cater for a variety of vehicles, including light vehicles, vans, buses, coaches and heavy vehicles. However, there is a strong focus on prioritising walking, cycling and public transport within the Site.

The proposed street hierarchy has considered the need for local traffic to access the Site, whilst also managing vehicle access to the White Bay Cruise Terminal (WBCT). Vehicles accessing the WBCT include private passenger vehicles, ride share/car share/taxis, service vehicles, and coaches carrying passengers to and from the Terminal.

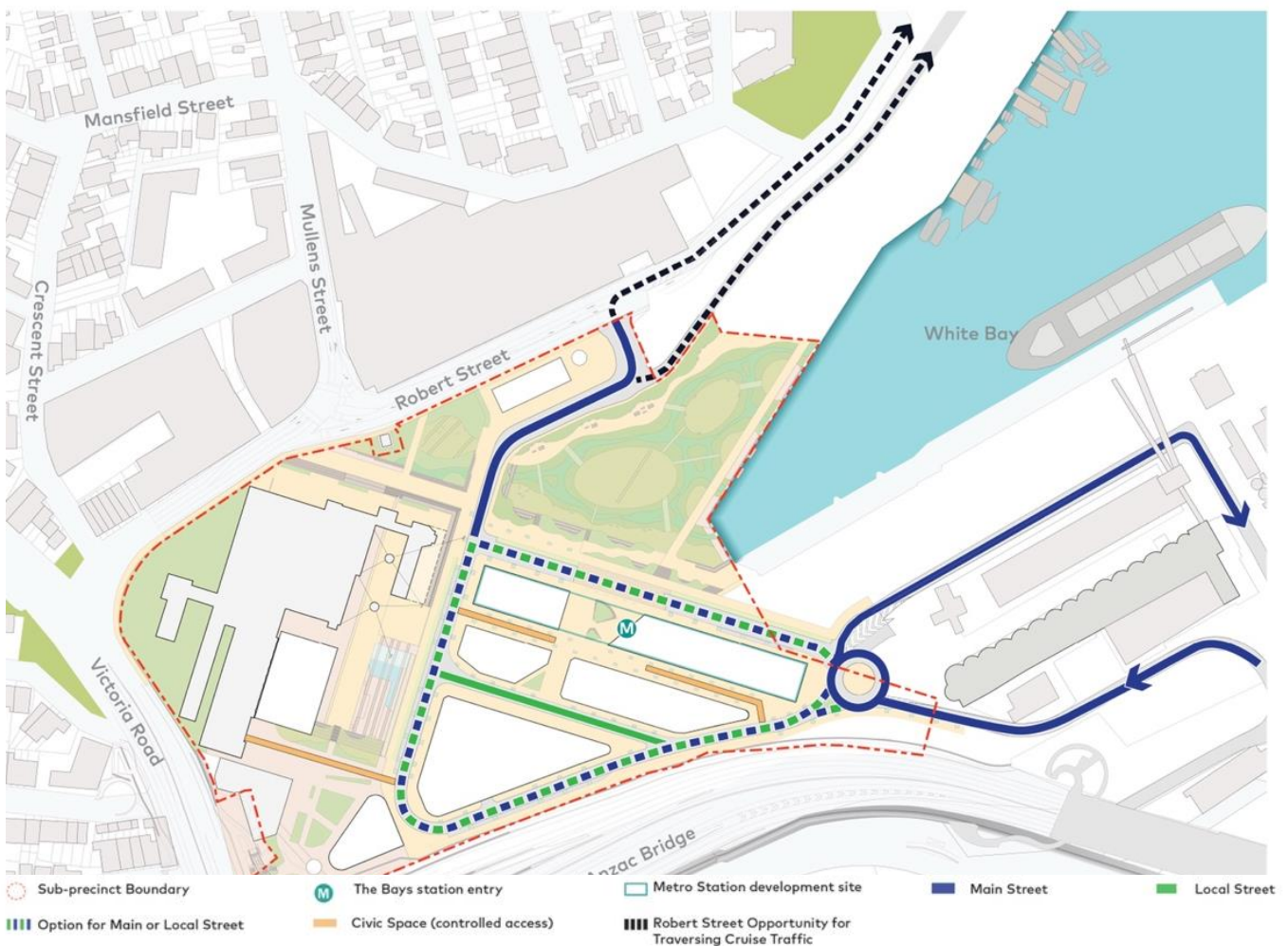
Objectives

- a) Deliver a permeable street network that prioritises walking and cycling over private vehicle use.
- b) Ensure the street hierarchy delivers the principles of a low-car precinct, whilst still enabling flexibility for private vehicular traffic, including those accessing the White Bay Cruise Terminal.
- c) Provide flexibility for future delivery of a 'Main Street' to run either in front of the Metro Station or round the back of the development adjacent to the Anzac Bridge depending on Site and development needs at different points in time.

- d) Ensure the design of the service lane / civic space behind the Metro station prioritises pedestrian and cycling movements whilst still providing essential service and loading access.

Provisions

1. Development is to be consistent with the street hierarchy and indicative cross-sections outlined in the Figures below that delivers several different street typologies to service the differing needs of the Site.
2. Development must ensure flexibility of the street network so that any of the streets can accommodate any type of vehicle to allow for various travel routes during construction and operation of the precinct, during major events within the future Park or the White Bay Power Station or during simultaneous cruise and events days.



Note: Street typologies are from the NSW Movement and Place Framework

Figure 19 – Street hierarchy

Local Street

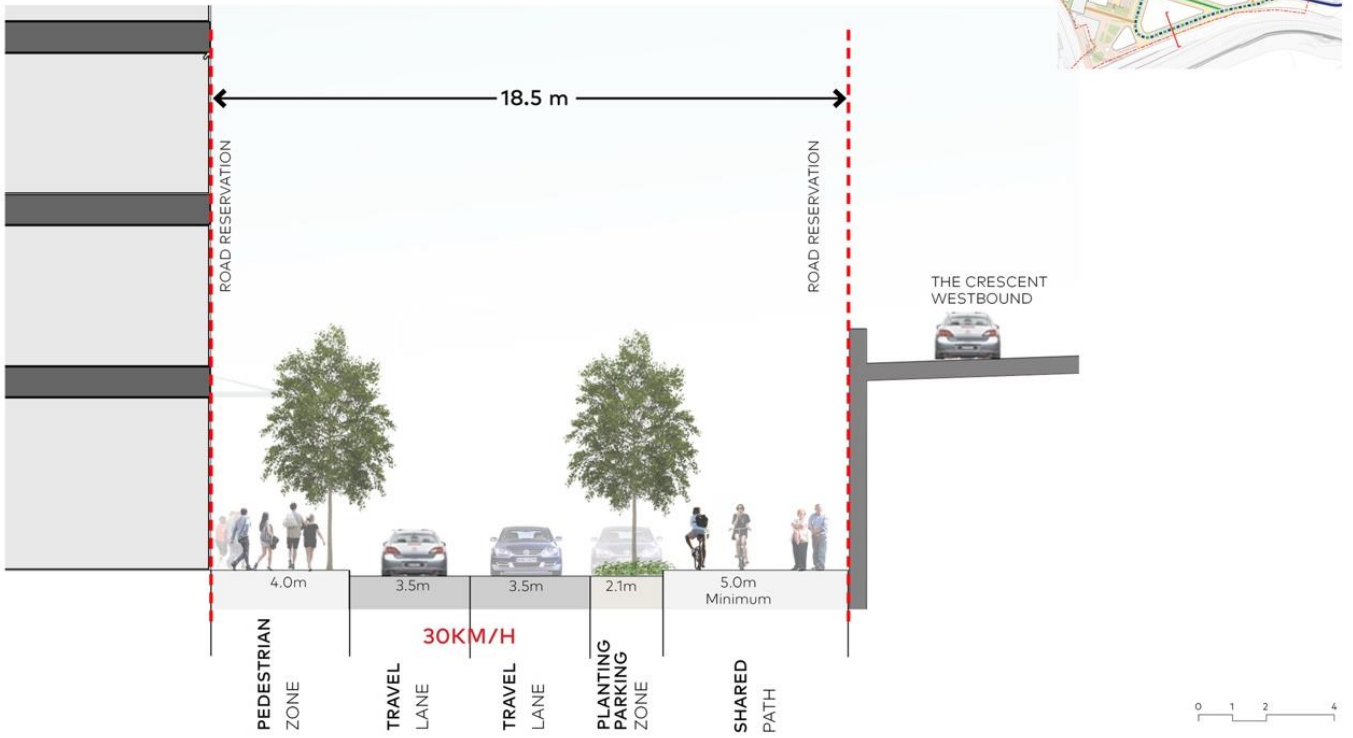


Figure 20 – Local Street - Section

Main Street

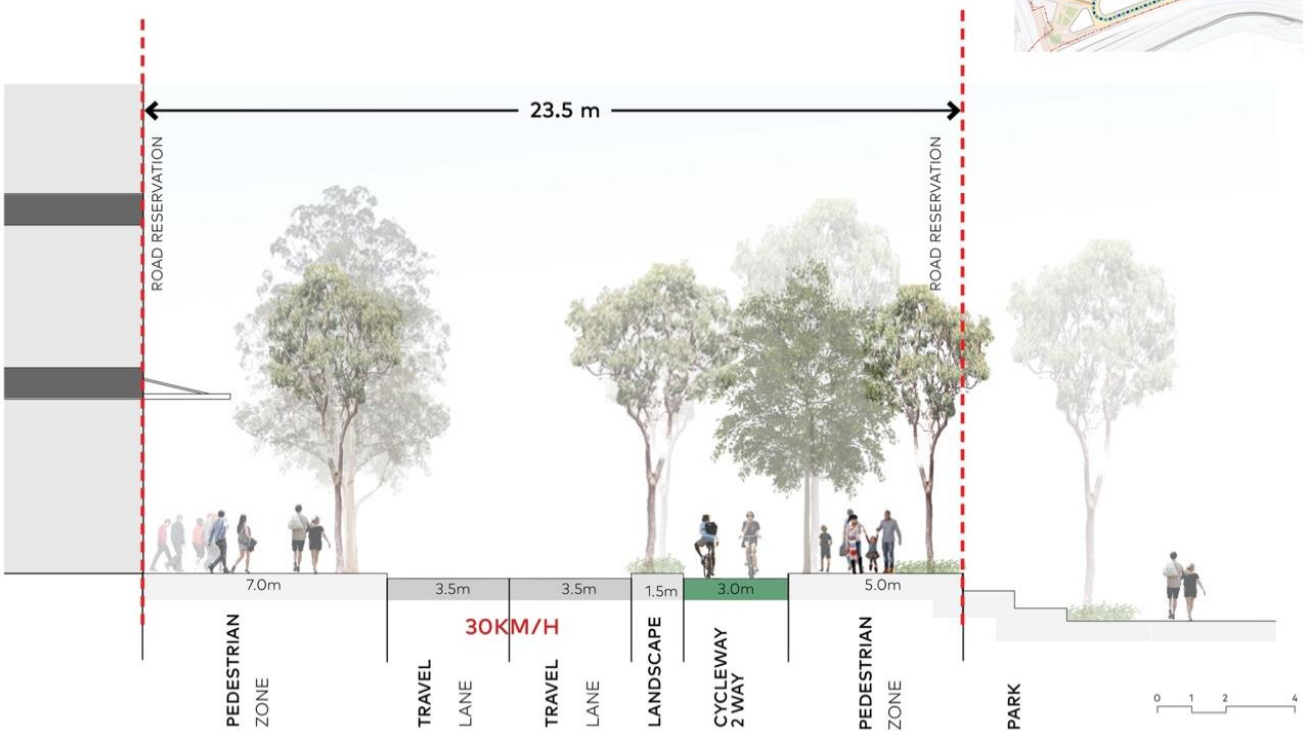


Figure 21 – Main Street - Section

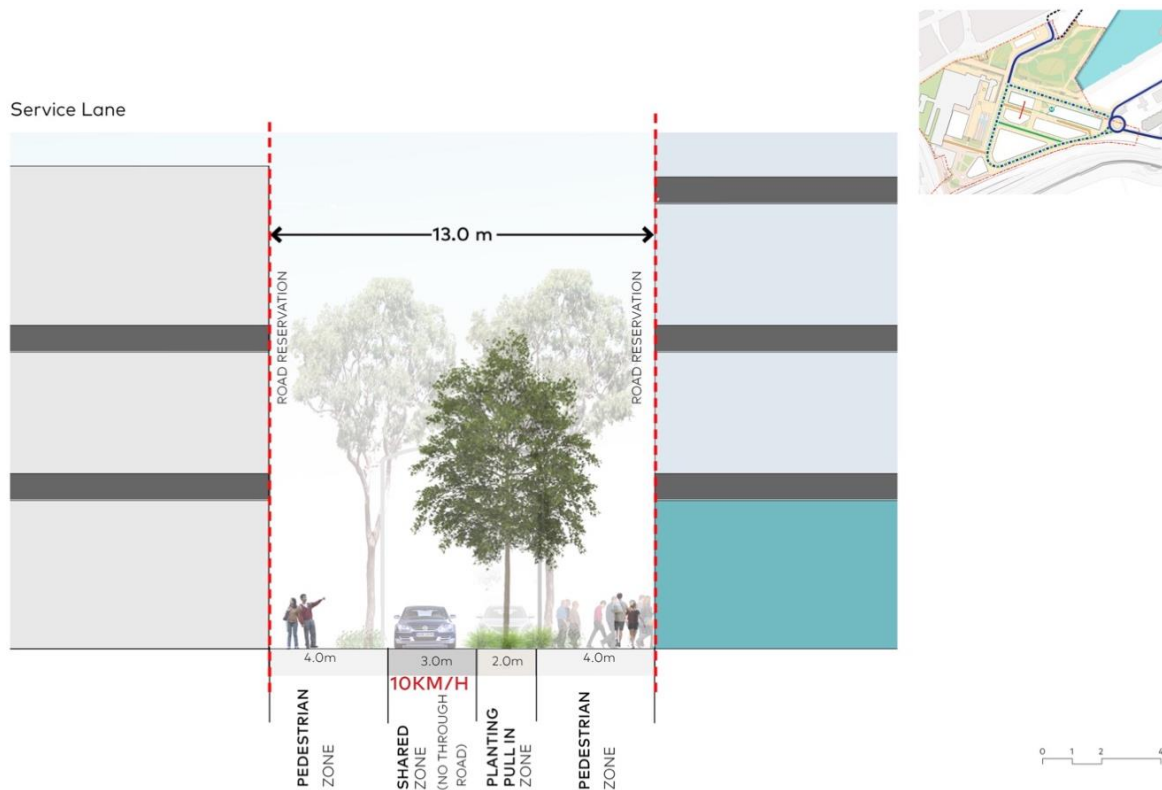


Figure 22 – Civic Space / Service Lane - Section

8.4 Private vehicle access and parking

Bays West is being planned and designed to be a low car use precinct. Private vehicle access is still required and will serve an important function including servicing, building access and emergency vehicle access. Any private vehicular access needs to be carefully planned, designed and managed. Vehicle movements related to White Bay Cruise Terminal are addressed in Section 8.5.

Objectives

- a) Ensure the Site is designed and delivered for low car mode share.
- b) Enable development to be supported by vehicle access arrangements that adapt to the changing needs of the Bays West Precinct.
- c) Use parking provision for the precinct as a demand management mechanism to minimise and reduce vehicle trips to and from the precinct.
- d) Future proof any car parking design and operations to be adaptable to changing needs and land use requirements.
- e) Design the Precinct to support electric vehicular use, including best practice provision of charging facilities.

Provisions

1. Development must demonstrate how it will seek to achieve a 5% private vehicle mode share throughout the precinct. This should be through appropriate planning, design, service

provision and travel demand management. Development applications for redevelopment of any area within the Site is to be accompanied by a transport impact assessment that sets out:

- a. Proposed trip generation rates and access arrangements.
 - b. Proposed measures for managing the effective and safe movement of pedestrians around the development site during the construction process.
 - c. How traffic impacts on the surrounding road network will be managed during construction and once the development is operational.
 - d. How ride share pick-up and drop-off will be managed.
 - e. Development proponents should outline how they will comply with the maximum parking rates, minimum bicycle parking rates, and end of trip facility requirements contained within *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021* (Eastern Harbour City SEPP).
2. Green Travel Plans must be provided for all new developments setting out:
 - a. Access to public transport provision.
 - b. Access to End of Trip facilities and bicycle parking.
 - c. Access to basement carparking facilities.
 - d. Incentives to encourage uptake of sustainable modes of travel.
 3. Adopt and implement maximum parking controls for the Bays West precinct as per those in the Eastern Harbour City SEPP, which will result in low levels of car parking. These car parking rates include requirements for active or passive electric vehicle (EV) charging infrastructure in the future.
 4. The maximum parking rate for commercial development can be allocated to either commercial tenants or retail tenants, but parking spaces cannot be allocated to visitors of retail tenancies.
 5. Development is to provide dedicated car parking for:
 - a. Car share spaces (excluded from the maximum parking rate in the SEPP).
 - b. Accessible spaces.
 - c. Electric vehicle spaces.
 6. All EV charging facilities should be provided in safe, accessible locations that are clearly signed from main Precinct and building access points.
 - a. In residential car parking areas, 100% of spaces need to have passive infrastructure (to enable future EV charging), suitable for transition when required and 20% of these must be active with charging facilities installed.
 - b. In commercial car parking areas 100% of spaces need to have passive infrastructure, 20% of employee parking and 100% of day to day operational parking must have active (capable of charging EV) infrastructure.
 7. Create a new vehicle access point from Robert Street into the precinct.
 8. Vehicular access from the Robert Street entrance to the Port Access Road is prohibited.
 9. Consolidation of basements across individual sites and where possible, decoupling of parking from individual sites, is encouraged.
 10. Sydney Metro has provided the following indicative requirements for The Bays Station:
 - a. 'point to point' (taxi/uber) pick up and drop off bays.

- b. Kiss and Ride bays.
 - c. accessible Kiss and Ride bay.
11. Design and development process to demonstrate that decoupled parking has been considered.
 12. Applications proposing to include car share spaces must demonstrate how the spaces will be operated within the principles of a green travel plan.

8.5 Port and cruise access

Ports, maritime and industrial uses are a major feature of the wider Bays West Precinct. Existing vehicular and pedestrian movements will need to be catered for and balanced against movements generated by renewal of the precinct over time. The precinct road network will need to be flexible and adaptable to ongoing planning for the future of ports, maritime and industrial activities.

Objectives

- a) Continue 24/ 7 working harbour and port operations on Glebe Island, White Bay and Robert Street in conjunction with urban renewal on the Site.
- b) Design the street network in the Site to cater to a variety of different movements and vehicle types, including but not limited to precinct users, cruise passengers and port operations, while being capable of accommodating change over time.
- c) Encourage a mode shift away from private vehicle use for passengers accessing the White Bay Cruise Terminal.
- d) Ensure space for resilience or redundancy is provided in the transport network in the event of a vehicle breakdown or emergency.

Provisions

1. The precinct road network must be designed to accommodate cruise and port traffic, including:
 - a. Additional traffic associated with the arrival of cruise ships (passengers embarking and disembarking; vehicles servicing the cruise ships);
 - b. Additional traffic associated with events and functions held at the White Bay Cruise Terminal;
 - c. Vehicle servicing port and maritime operations (heavy and medium vehicles); and
 - d. Changing requirements as PANSW develops its masterplan for Ports land.
2. Development must not prevent ongoing key port and cruise activities at the following key traffic gateways:
 - a. Limited servicing and logistics use for the White Bay Cruise Terminal using existing PANSW gateway at Robert Street;
 - b. Port related traffic to other parts of White Bay including for land uses and the boat storage and maintenance facility at White Bay 6, using existing PANSW gateway at Robert Street;
 - c. Large / heavy vehicles servicing the Port to continue operations via James Craig Road;

- d. Passenger traffic associated with the White Bay Cruise Terminal traversing the precinct via James Craig Road, Solomons Way, Sommerville Road and the Port Access Road; and
 - e. Passenger traffic to the White Bay Cruise Terminal is not to use Robert Street.
3. Existing heavy vehicle movements to Glebe Island must be maintained through the provision of a new/ upgraded roundabout. The roundabout must be designed to be suitable for heavy vehicles (25/26m B-double vehicles), medium vehicles and 14.5m buses and coaches and should consider the TfNSW Restricted Access Vehicle Map.
 4. Bays West Stage 1 road network needs to connect with the existing Port Access Road within the Robert St sub-precinct.
 5. Main Streets and Local Streets within Bays West Stage 1 must be designed so that they do not prohibit access by ports and cruise traffic in the event of an emergency.

8.6 Service vehicle access

Facilitating the efficient movement of goods through freight and servicing within the precinct will be critical, as will balancing these needs against all other movements, and ensuring that there is appropriate access and dedicated space for all service vehicles.

Objectives

- a) Developments are to adhere to the overall Bays West Delivery and Servicing Plan, which will encompass all existing and future uses within Bays West.
- b) Freight and servicing within the Site is to be managed holistically to enable functional and consolidated servicing across the different development parcels.
- c) Minimise the impact of freight and servicing movements within the Site's street network, particularly at peak times.
- d) Provide clear and direct servicing access to The Bays Metro Station buildings including the Intake Sub Station (if delivered in the Site) and associated non-station uses.
- e) Support innovations and transitions in the freight network, including the electrification of logistics systems.
- f) Freight and servicing activities are to occur off-street.

Provisions

1. Development applications for redevelopment of any area within the Site are to be accompanied by an integrated servicing strategy demonstrating how the respective development will be serviced. The strategy should align with the objectives set out in the Bays West Delivery and Servicing Plan and is to include details on the following:
 - a. Operation of freight and logistics;
 - b. Parking and servicing requirements for each of the developments within the Site; and
 - c. Future servicing for uses associated with Metro station developments.

2. Appropriate facilities for last mile delivery are to be provided (with consideration to be given to the potential for a centralised facility).
3. The street network is not to inhibit servicing access to the ISS (if delivered on the Site).
4. Dedicated space is to be provided for unloading within the precinct to efficiently conduct freight and servicing operations on a precinct level.
5. Vehicular access to buildings must be provided from Main Streets and Local Streets (not Civic Spaces or Bus Street).
6. A Delivery and Servicing Plan for the entire Site is to be prepared and endorsed by TfNSW as part of detailed development assessment.

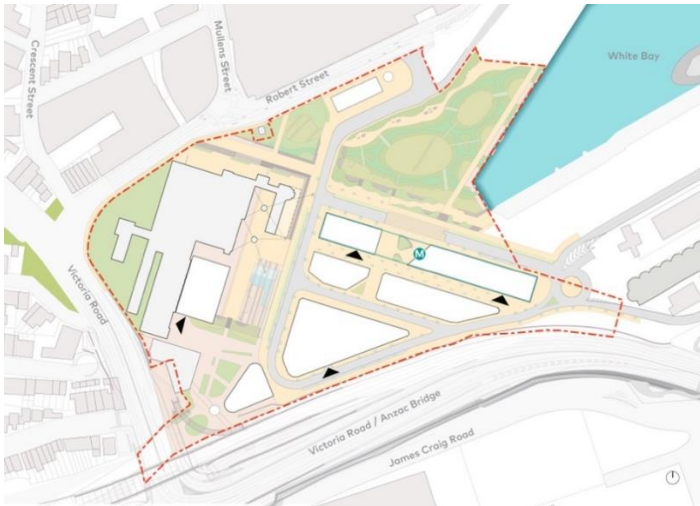


Figure 23 - Service Access

▶ Servicing and loading access

8.7 Event Management

Renewal of the Bays West precinct provides an opportunity for the precinct to facilitate a variety of events – from the everyday to major gatherings. The revitalisation and reuse of the White Bay Power Station and delivery of a new Park and other potential event spaces will attract significant numbers of people to the precinct at different times. Careful design and management of these events from a materials, servicing, access and transport perspective is important to ensure long term viability and access for all users.

Objectives

- a) The Site is to be a place that supports and delivers a range of experiences from the every day to the large scale, ensuring that public spaces are not dominated by event infrastructure and that spaces are designed with intent and purpose, with parks and soft spaces protected from event use.
- b) Ensure that the Site is delivered as a low-car use precinct, including in the management of small and large-scale events.
- c) Prioritise and manage access for gatherings and events through appropriate plan and approval processes.

- d) Support sustainable modes of travel for events as a first choice for event attendees.
- e) Ensure management of events incorporate measures for public safety, crowd control, emergency access and evacuation.

Provisions

1. During special events at the White Bay Power Station and the Future Park, managed servicing arrangements will be required to unload on street or in the public realm at off-peak times.
2. Development applications for redevelopment of sites within the precinct that will hold multiple events are to be accompanied by an Event Management Plan. This must include, but is not limited to, the following:
 - a. Vehicle and parking access arrangements.
 - b. Management of White Bay Cruise Terminal related traffic, including evidence of consultation with Port Authority NSW.
 - c. Patron and movement generated by the event.
 - d. Servicing setup and close out functions.
 - e. Any road closures and associated traffic management plans / measures.
3. Development must facilitate flexible spaces that can adapt to changing functions and temporal travel patterns.

9 Aboriginal Cultural Heritage

The stretch of Country now known as Bays West has been known for millennia as Gari Gurad/Nura (Saltwater Country) and Nattai Gurad/ Nura (Freshwater Country). This Country is celebrated for vast expanses of garaban (rock and sandstone) which in some places provides shelter, gibbaragunya (stone/cave shelters), and in other places creates yiningmah (steep cliffs) where ceremony can be performed privately without uninitiated onlookers. Bangawarra’s Connecting with Country framework specifically notes that:

“One of the difficulties in describing and protecting Country is that Country also includes many intangible aspects of our culture such as stories, memories and Songlines. These aspects of Country are often disregarded or unknown to heritage consultants, as so many parts of Country are classified as “not of cultural significance” and can be destroyed in development.”

Accordingly, the objectives and provisions within the subject chapter must be considered holistically with the overall approach to Country for Bays West. , which is interwoven throughout the Guide and other statutory and strategic planning documents.

Objectives

- a) Ensure that aboriginal cultural heritage is considered holistically as part of a comprehensive connecting with Country framework for Bays West to interpret the area’s natural landscape prior to European intervention.
- b) Create regenerative public spaces that utilise language, cultural stories and locally native ecologies.
- c) Honour the cultural significance of Country by providing space for expressions of culture across public spaces through public art, and through ample provision of space for gathering, enactment of culture and ceremony.

Provisions

1. Development must be carefully considered to ensure it will not cause further damage or disrupt the established ecologies, and as much as possible should make positive contributions to caring for Country, augmenting habitats and repairing damage that has been done in the past.
2. New vegetation must consist of species endemic to Bays West to ensure that everything on Country belongs to Country.
3. Development and design is to connect important public spaces across the precincts of Bays West in a contemporary Songline that acknowledges the knowledges, stories, peoples and languages of Bays West.
4. Any physical remnants of Aboriginal people presence/occupation that remain (likely within sandstone remnants) are to be acknowledged.
5. Development is to allow physical access to the water and waterfront for the enactment of culture on Country.

10 Non-Aboriginal Heritage

Heritage within Bays West is intended to deliver a benchmark for recognition of Country and the value Indigenous cultural knowledge brings, whilst celebrating and revitalising non-aboriginal heritage associated with the precinct's maritime and industrial past.

This section focuses on the heritage and planning process and guidelines that should accompany development for non-aboriginal heritage, including the White Bay Power Station. Refer to Section 7 (Place) for detailed guidance related to the design and development objectives for the Power Station and other non-aboriginal heritage structures within the Site.

Objectives

- a) Ensure new development appropriately respects, celebrates and enhances the heritage significance of the place including the setting, curtilage and legibility of structures and building complexes within State Heritage Register (SHR) listed White Bay Power Station.
- b) Enable the sympathetic adaptive use and enhancement of significant heritage items, features, spaces and extant heritage fabric.
- c) Heritage assets are to be conserved and adaptively reused.
- d) Key views within and across and to the site are identified and respected.
- e) Encourage access to heritage assets particularly to internal spaces of high and exceptional heritage significance.
- f) Interpret the industrial maritime history and land reclamation within the precinct including the historic relationship that the precinct has had to the surrounding suburbs.

Provisions

1. A Statement of Heritage Impact is to accompany a development application for a new building or alterations and additions within the White Bay Power Station and is to be prepared in accordance with the NSW Heritage Manual 'Statement of Heritage Impact'.
2. The Statement of Heritage Impact is to address:
 - a. the heritage significance of the SHR item, the affected component, industrial relics and surrounding heritage items;
 - b. the options that were considered and discounted when arriving at a preferred development scheme and the reasons for choosing the preferred option;
 - c. the potential impact of the proposed development on the heritage significance of the affected component, the SHR item and its setting, including surrounding heritage items and significant views and vistas;
 - d. the compatibility of the development assessed against the guidelines conservation policies and principles contained within the applicable heritage controls and the White Bay Power

Station Conservation Management Plan, Non-Aboriginal Heritage Study, Heritage Interpretation Strategy and other relevant heritage documentation;

- e. the cumulative heritage impact of the proposed development on the precinct and the SHR item; and
 - f. Potential for impact to underground heritage including archaeological impacts and proposals to mitigate such impacts.
3. A development application proposing full or substantial demolition of areas within the White Bay Power Station, including associated in situ industrial machinery and relics that have medium or higher significance will not be supported under any circumstances. It must also be recognized that the significance of the White Bay Power Station is closely tied to its retention as a collective whole that represents the complete operating system and processes of coal fired power generation and supply. This means that structures and spaces of lower significance may have a supporting role for higher significant areas and their removal has the potential to deplete the integrity and significance of the power station as a whole. Any demolition must be assessed in this regard.
4. Any buildings/site elements of low heritage significance proposed for removal must be catalogued and accompanied by a photographic archival recording to establish a recorded inventory of removed heritage items.

11 Sustainability

“Listening and understanding Country creates a greater sense of connection between person and space. A better connection with space can profoundly influence how a person treats and interacts with that space, so by exploring and reflecting Country in all project outcomes, we can help enable people to better appreciate and respect Country in all expressions.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

11.1 Climate Risk and Resilience

Objectives

- a) Embed design for a future climate in all design processes using Representative Concentration Pathway (RCP) 8.5 in 2090 climate scenarios.
- b) Plan for sea level rise and incorporate it productively into a slowly changing landscape.
- c) Identify mechanisms to adapt to, future proof against and manage heat, bushfire (and smoke), flood and storm impacts in extreme events.
- d) Provide community facilities that support social resilience during major shock events.
- e) Effectively mitigate climate risk in alignment with the Taskforce for Climate-related Financial Disclosures (TCFD).
- f) Enable flexible, adaptive and regenerative systems with the capacity to be changed subject to uncertain future pressures.

Provisions

1. Development must deliver a climate positive precinct for normal precinct (non-emergency or land use critical) operations, including:
 - a. All electric built environment with no gas or other fuels; and
 - b. Zero fossil fuel use for regular building operations.
2. Design to Representative Concentration Pathway 8.5 in 2090 climate scenarios.
3. Design all residential buildings, including student accommodation, to achieve thermal safety outcomes aligned with Chartered Institution of Building Services Engineers TM59 Design methodology for the assessment of overheating risk in homes (2017).

4. Plan for sea level rise through design and incorporate it productively into a slowly changing landscape through setting of precinct-wide flood levels, and use of landscape design and planting for stormwater detention and treatment.
5. Development must manage overland flooding by requiring all critical equipment and services to be located above Probable Maximum Flood (PMF) levels; and all structures below PMF must be designed to survive flooding.
6. Where possible, provide space for centralised precinct thermal and power utilities.
7. Include space within buildings for future energy storage (electrical and/or thermal batteries).
8. Community facilities are to be designed to serve as gathering places during emergencies and interruptions in services by allowing for sufficient back up power and water supply; and
9. Utilise both evapo-transpirative planting (non-native) for local passive cooling and drought-tolerant native plant species in precinct and landscape design. This must balance the need for reduced use of water and cooling the local micro-climate.

11.2 Greenhouse Gas Emissions and Energy

Objectives

- a) Deliver a Net-zero carbon precinct at time of delivery and throughout operational life.
- b) Ensure that the precinct does not use fossil fuels in regular precinct operations, but ensures a reliable energy supply that also ensures energy affordability and minimises energy use.
- c) Deliver a precinct that is demand-responsive, and smart utility grid ready.

Provisions

1. All normally-operating building and precinct systems (non-emergency or land use critical) must be electrified.
2. Buildings and public realm design must achieve high levels of energy efficiency through passive design and efficient fixtures, fittings and services.
3. Development must demonstrate how it has reduced embodied carbon in all construction by 30% relative to 'Business As Usual' with a stretch target of 40% using Greenstar LCA methodology.
4. Development must ensure that rooftops used are for energy generation (through Photovoltaic panels) where not otherwise used for services, resident or visitor amenity, or vegetation-based habitat. Where photovoltaic panels are located, development must also explore the opportunity for vegetation to sit beneath the panels.
5. Development applications are to consider and outline where future batteries could be suitable within future development design. This could include potential adaptive reuse of former basement / parking areas.
6. Development is to consider how energy, water, or other utilities are shared between buildings or across the precinct.

11.3 Circular Economy, Supply Chain, and Materials

Objectives

- a) Achieve circularity in the construction (including fit out), operational, and end-of-life stages of all buildings and other constructions throughout the Precinct.
- b) Minimise new resource and new product use and leverage economic supply chain associated with existing adjacent port operations.
- c) Protect natural resources that would otherwise be damaged through resource extraction or deposition.
- d) Prevent waste products littering the public realm and damaging the natural marine and terrestrial ecosystems.
- e) Divert operational and constructional waste from landfill, including waste generated by the fit out of buildings.
- f) Eliminate single-use plastics from the upstream supply chain in both construction and operations.
- g) Establish high levels of recyclability in the upstream supply chain in both construction and operations.

Provisions

1. Building forms must promote longevity by allowing easy adaptive reuse to accommodate alternative occupancies.
2. Building materiality, both exterior and interior, must consider the full lifecycle of the product including end of life recyclability.
3. Provide spaces that facilitate sharing economy programs like car share services, bicycle share services, and community tool libraries.
4. Provide ample space in buildings and public realm to facilitate collection, storage and treatment of multiple waste streams.
5. Organic waste diversion or capture must be provided for all buildings and all use types.
6. Development applications are to be accompanied by a Construction Management Plan demonstrating how:
 - a. recycled content is to be used in all construction in accordance with Greenstar methodology or equivalent;
 - b. the majority of construction waste will be diverted from landfill to beneficial re-use (provisionally 95%, in line with Green Star benchmarks or equivalent).

Note: Sydney Metro's Critical State Significant Infrastructure approval includes initiatives and targets for sustainability as part of the Sydney Metro West Sustainability Plan.

11.4 Sustainability Governance and Assurance

Objectives

- a) Provide a governance framework to ensure that sustainability objectives are delivered in development.
- b) Provide an independent verification process to ensure that sustainability can be delivered and utilised by all.
- c) Ensure that sustainability measures in development are reviewed by an independent third party to provide consent authorities confidence in delivering sustainability objectives.

Provisions

1. Development must meet and, where practicable, seek to achieve the targets and provisions within State Environmental Planning Policy (Sustainable Buildings) 2022.
2. Development is also to achieve the targets provided at Table 1 Sustainability Targets:

Table 1 Sustainability Targets

Development type	Rating tool	Rating type	Target rating
Precinct wide	Green Star	Communities	6 Star
All new buildings	Green Star	Buildings	5 Star - residential and mixed use 6 star - commercial
Commercial buildings	NABERS	Energy	5.5 Star
		Water	5 Star
Residential buildings	WELL	Core & Shell	Silver
			Silver (30% of units) Gold (10% of units)

3. Where development achieves the following targets, up to an additional 5% FSR can be achieved on the site:
 - a. Residential units achieve NatHERS ratings of 7 and 10 points for water and energy above BASIX requirements;
 - b. Residential units are provided continuous mechanical ventilation and exhaust with heat recovery;
 - c. Residential units achieve Liveable Housing Design rating of Platinum;
 - d. Commercial buildings achieve 6 Star NABERS without Green Power; and
 - e. Buildings install dual pipes (purple pipe) for recycled water to all significant single non-potable water end uses.

12 Landscape, Canopy and Biodiversity

“Country is all around us – the landscape, the sea, the sky. In a large open space, there is a deep opportunity to reflect on the encompassing nature of Country and appreciate all she has given us and continues to give us.”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

Objectives

- a) Recreate environmental values across the precinct consistent with Country, including native vegetation, water ways, water bodies and wetlands.
- b) Provide opportunities to increase biodiversity resilience to climate change and natural hazards.
- c) Improve water quality of the harbour while restoring and expanding the green and blue grids.
- d) Deliver a renewal precinct that transforms the site to an ecologically diverse, sustainable and densely planted urban area that connects learning environments and provides a level of habitat connectivity that is currently absent.
- e) Enable greater consultation to incorporate traditional knowledge and cultural views of biodiversity.
- f) Provide habitat connectivity between key local and regional green and blue spaces for mobile species.
- g) Establish a biophilic environment at the Site that provides a material connection for tenants and visitors to natural systems for workers, residents and visitors.

Provisions

1. Development of the precinct must ensure integration of a large public park with a strong Connection with Country framework, regional playground, green spaces, passive open space environmental habitat and amenities.
2. Individual developments must demonstrate how they are contributing to an urban tree canopy that shades 30% of the total site, primarily comprised of local and endemic species – maximising habitat whilst providing amenity and shelter for the community.
3. Design of private and public domain must ensure that 100% surface water runoff is filtered through landscape treatment before discharging to waterways. Captured water is to be used

in terrestrial features, such as wetlands that also provide a freshwater environment for microbat foraging.

4. Development of public domain must include significant street tree canopy consistent with requirements for the rest of the precinct.
5. Development must create interpreted aquatic habitats to include bioretention / water quality improvements for overland flow from the land to marine environments.
6. Development adjoining the water must allow for an interpreted shoreline and using plants consistent with estuarine saltmarsh which could allow for tidal movements onto the land and considers future climate / sea level rise.
7. Protect existing and create new urban habitat for terrestrial and aquatic species at multiple scales, including ecological pockets.
8. Landscaping must consist of durable, endemic, native species that also provide opportunities to share knowledge of Country and reflect vegetation communities that may have existed prior to clearing.
9. Where appropriate, development is to:
 - a. Use stormwater to provide a freshwater environment for microbat foraging.
 - b. Create interpreted aquatic habitats to include bioretention / water quality improvements for overland flow from the land to marine environments.
10. Where appropriate, development is to enable augmented fauna habitats such as:
 - a. Use of microbat chambers where existing habitats are affected;
 - b. Design and deployment of 'seahorse hotels' in the marine environment through collaboration with Port Authority of NSW and Aboriginal artists that also enable reuse of existing urban materials; and
 - c. Design and use of marine tiles to encourage marine plants and macroalgae to colonise and grow along the edge of the sub-tidal marine environment.

13 Design Excellence

Objectives

- a) Embed design excellence, including designing for Country across all aspects and stages of designing for the Site.
- b) Ensure high quality and varied design through the use of competitive design processes for sites within the Site.
- c) Ensure development individually and collectively contributes to the architectural, public space and overall urban design quality of the Site and local government area.
- d) Encourage variety in architectural and landscape design and character across large developments to provide a fine grain which enriches and enlivens the public realm of the Site.
- e) Deliver exceptional public domain, sustainability, heritage and designing with and for Country outcomes for development within the Site.

Provisions

1. Individual projects must have a project specific Design Excellence Strategy approved by the consent authority prior to commencement of a competitive design process (for public domain and State Significant projects not related to the Bays Metro Station) or submission of a development application, whichever is earlier.
2. The Design Excellence Strategy will outline:
 - a. Whether a competitive process is required (for all development greater than \$10 million CIV not related to the Bays Metro Station), or alternate design excellence process is permitted (must be subject to concurrence by Government Architect NSW and Placemaking NSW);
 - b. Where a competitive process is required, the location and extent of each competitive design process or where limited to a single development site or street block;
 - c. How diversity of architectural style and form will be achieved across the precinct;
 - d. The type of competitive design processes to be undertaken: an architectural design competition, open or invited; or competitive design alternatives;
 - e. The number of design entrants involved in the processes; and
 - f. How fine grain and contextually varied architectural design is to be achieved across large sites.
3. For projects requiring a design competition, it must be undertaken in accordance with the 'Draft Government Architect's Design Excellence Competition Guidelines, 2018'.
4. A public art and culture strategy prepared by a suitably qualified person consistent with the Bays West Guide Section on Public Art is to inform the competitive design process and, where appropriate, be included in the competition brief.

5. A 'designing with Country' strategy prepared by a suitably qualified person consistent with the Bays West and Government Architect draft Connecting with Country frameworks, the GANSW 'designing with Country' discussion paper, and this Guide is to inform the competitive design process and, where appropriate, be included in the competition brief.

14 Amenity

The following controls are intended to complement existing amenity provisions required through state policies including *State Environmental Planning Policy 65 (Design Quality of Residential Apartment Development)*, the *Apartment Guide* and *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

14.1 Solar Access to Public Open Spaces

Objective

- a) Maximise solar access to the public domain to support appropriate vegetation growth, access to sunlight, and activation and enjoyment of the open space areas.

Provisions

1. Key public open space areas must provide appropriate shelter structures (in addition to significant vegetation and canopy cover) to protect against heat and sun during warmer months, particularly in the Future Park play spaces.

14.2 Noise

Objective

- a) Ensure an appropriate level of amenity in relation to noise and vibration is provided for workers, visitors and residents, noting existing ports and working harbour operations and busy roads in close proximity to the site.

Provisions

1. A Noise and Vibration Impact Assessment is to be prepared by a suitably qualified acoustic consultant when submitting a development application for a new building in The Site. It is recommended that this analysis be undertaken early in the design phase to properly inform building design, including siting, orientation and location of different uses.
2. The Noise and Vibration Impact Assessment is to consider and respond to noise and vibration impacts from the surrounding road network, future metro rail, harbour activity, port operations, and the future activation of the precinct and other potential noise sources.
3. Development assessment shall include, but not be limited to, consideration of the following (or where updated or superseded), as relevant to the proposed use:
 - a. NSW State Environmental Planning Policy (Transport and Infrastructure) 2021;
 - b. Development Near Rail Corridors and Busy Roads – Interim Guideline 2008;

- c. Glebe Island and White Bay Port Noise Policy 2020;
 - d. NSW Noise Policy for Industry 2017; and
 - e. NSW Assessing Vibration: A Technical Guideline 2006.
4. Noise and vibration emissions shall be assessed at all existing and future receiver locations within the precinct.
 5. To minimise cumulative noise impact across the precinct, determination of Project Noise Trigger Levels in accordance with the NSW Noise Policy for Industry should not correct for high traffic noise based on Section 2.4.1 of the policy.
 6. Assessment of noise including low frequency noise from ports activities shall consider any revised policy and recommendations from the Port Authority of NSW.
 7. Where noise criteria cannot be achieved concurrently with natural ventilation via open windows, alternative ventilation shall be provided complying with the Building Code of Australia requirements as a minimum. Noise from background ventilation systems shall be at least 5 dB below the relevant noise policy internal criteria.
 8. Notwithstanding the provision of alternative ventilation, measures to reduce noise to external areas and via open windows shall be incorporated in the overall design and layout of noise sensitive development.
 9. Design measures such as orientation of buildings and openings and landscaping and façade solutions should be considered holistically to manage noise impacts as part of future design of buildings prior to submission of a DA.
 10. Buildings must be designed to demonstrate that the impacts of noise arising from proximity to both Port operations and heavily trafficked roads are appropriately mitigated to achieve internal noise criteria through construction materials, attenuation, siting, orientation, balconies and mechanical ventilation.

14.3 Wind

Objectives

- a) Ensure development within the Site manages the cumulative impact of development on the local wind environment, and does not result in unsafe wind conditions within the public domain, publicly accessible managed space, and adjacent areas surrounding the development.
- b) Ensure the wind conditions for pedestrian comfort in and around the precinct are suitable for the intended pedestrian use of the spaces.

Provisions

1. New developments are to be designed to minimise the impact of wind on the surrounding areas to ensure compliance with the wind classification for the intended uses of the public domain.
2. A quantitative wind effects report is to be submitted with any development application for new buildings greater than, or equal to, 30m tall, addressing how the proposed development

meets the below criteria. The wind analysis is to be based on a minimum of 16 wind directions at 22.5° increments. The report should compare results in the existing (no development in the Bays West precinct) and proposed configurations (with all proposed developments in the Bays West precinct). A qualitative wind effects report is to be submitted with any development application for new buildings less than 30m tall.

3. Wind impacts from any development must not exceed the Wind Safety Criterion, which is an annual maximum 0.5 second gust wind speed in 1 hour of 24 m/s during daylight hours from 6 am to 10 pm (exceedance probability of 0.0171%). The probability exceedance should be integrated around all wind directions.
4. Wind impacts from any development on the surrounding public domain and publicly accessible space are not to exceed the relevant Wind Comfort classification criterion for sitting, standing, and walking. In determining what Wind Comfort criteria apply where, the consent authority is to consider uses in the space, and what can actually be achieved in by future development. This will need to balance the water front nature of the site and future uses and public domain treatments achieved. Consideration will be based on exceedance of an hourly mean wind speed, or gust equivalent mean wind speed, whichever is greater for each direction, of no more than 5% of the time during daylight hours from 6 am to 10 pm. The classification levels are:
 - a. pedestrian walking – 8 m/s,
 - b. pedestrian standing – at building entrances, bus stops, train platforms – 6 m/s, and
 - c. pedestrian sitting – 4 m/s.

The gust equivalent mean wind speed is equal to the maximum 3 second gust wind speed measured in an hour divided by 1.85. The probability exceedance should be integrated around all wind directions.

14.4 Air Quality

Objectives

- a) The development layout within the Bays West precinct is to be designed to ensure a suitable and acceptable ambient air quality environment such that it adequately protects the amenity of the area as well as the health and well-being of users.
- b) New development within the Bays West precinct must manage emissions to air in a safe and controlled manner, such that it does not pose or give rise to risks of harm to human health or the environment within as well as outside the precinct.

Provisions

1. The design and orientation of all new development within the Site needs to be considered during design in relation to existing and future known sources of air pollution. Where possible, sensitive uses, such as residential, education and health uses (if proposed), should be distanced as far as possible from significant sources of air pollution (e.g. heavily trafficked roads, industrial and port related sources).

2. The design and orientation of all new buildings within the Site precinct are to promote dispersal of and/or shielding effect from air pollution, to maintain amenity for building users as well as at any proposed outdoor recreational activity locations.
3. The design of buildings within 100m of the nearby Victoria Road and Anzac Bridge Access Road will need to take into account elevated pollutant concentrations close to these sources and include relevant design controls including orientation of windows and balconies and appropriate mechanical ventilation mechanisms if needed to protect human health and amenity.
4. The design should aim for net zero emissions in relation to transport and other fossil fuel combustion sources within the precinct.
5. Any air quality assessment required during the planning process will need to be able to demonstrate that air quality has been considered throughout the design process and has minimised the impact on users of the precinct from the surrounding environment.
6. Prior to submission of development applications, consultation with relevant agencies and/or tenants to determine any changes to the local air quality environment that may impact individual development applications is encouraged.

14.5 View Sharing and Outlook

Objectives

- c) Preserve significant views from public places.
- d) Ensure that development does not unreasonably borrow amenity from neighbouring sites including access to views and outlook.
- e) Protect key view corridors to and from the White Bay Power Station from:
 - i. Anzac Bridge.
 - ii. Observatory Hill and the Harbour Bridge.
 - iii. Johnston Street.
 - iv. Mullens Street.
 - v. Glebe Point Road (Chimneys only).
 - vi. City West Link.

Provisions

1. Development must protect views to and from the White Bay Power Station from the key view corridors identified in the White Bay Power Station Conservation Management Plan.
2. Development must consider and assess the impact of proposals on view sharing consistent with the principles identified in *Tenacity Consulting v Warringah Council* [2004] NSWLEC 140.
3. Development must not further restrict views to Sydney Harbour from the future White Bay Park.

15 Public Art and Culture

Public art and culture are critical components in contributing to city making developments – creating a vibrant and culturally rich precinct as envisioned for the Site plays a vital role in establishing the cultural life of this part of Sydney and in showcasing the future character of the wider precinct.

Public art is a powerful means of communicating and celebrating the values, cultural narratives and heritage of a place; Bays West is rich in this area. Public art is also used to conjure a vision of the precinct's future. In recognition of this important role in contributing to place identity and vibrancy in the public realm, public art forms part of the design excellence assessment.

Public Art & Culture Approach

The approach to Public Art and Culture at the Site is guided by the desire to create memorable experiences for visitors to Bays West that connects them to the special qualities and histories of this place – including First Nations, post-contact, and our shared contemporary experience.

By establishing the Site as cultural hub that attracts Sydneysiders, the Precinct will connect Sydney's broader arts and creative community with the living heritage of Bays West. Best practice public art commissioning processes will provide short-term and long-term opportunities for artists across the spectrum of art & cultural practice and experience, and create enduring associations between the Arts and Culture sector and the Site.

Public Art and Culture projects are to illuminate and respond to the themes identified in the Connecting with Country framework. These themes are inspired by the body of work developed by key knowledge-keepers including Bangawarra and Alison Page. Consequently, the references to Saltwater Country, Freshwater Country and Brackish Water Country originate in the documentation prepared by these consultants.

Note, despite the guidance being First Nations led and inspired, this does not determine that all artists involved in the delivery of art at the Site are First Nations peoples. However, First Nations guidance is to be embedded and sought at all stages of the artwork delivery life cycle including the Brief development stage.

The themes are:

Power of Connection

Drawing on Bidji Gurad (Brackish Water Country) concepts in the Connecting with Country themes, this principle recognises the highly nutrient, estuarine ecology that historically defined the site as a place for the meeting and mixing of salt and fresh water. As a place of connection and power, White Bay should be a place that reflects a culture of collaboration, meeting and learning. Public art should reflect this connective power in both its development and practical realisation.

Layers of Time

The concept of Gari Gurad (Saltwater Country) provides a poignant departure point for a principle based on deep time. Over millennia, as sea levels have risen and fallen, the to and fro' of tidal forces

have created a layering of cultural as well as ecological character in this area. This concept is also reflected in the Urban Design Principle ‘Reinforce a Layered and Evolving Heritage’. Historic shorelines, sandstone cliffs, pumping stations, warehouses and the monumental power station all reveal layers of stories and cultural values. Public art in White Bay should draw upon, interpret and celebrate the historical biodiversity and human-built fabric of these multiple layers as a source of inspiration.

New Growth and Flow

Nattai Gurad (Freshwater Country) provides the impetus for this principle: a cleansing element that arrives through rain and flood, refreshing the landscape and generating new growth. In a similar way, public art should help realise a dynamic and engaging public realm. This principle can be achieved by conceiving public art in conjunction with the Innovation principles of this Design Guide. Public art programming is also a key lever in achieving the Urban Design Principles of ‘Precinct-scale activation from Day 1’ and ‘The Everyday and the Event.’

Defining Public Art

The National Association of Visual Arts (NAVA) defines Public art as:

“Art that is made with the specific intention of being situated in the public domain, often outside, and intended to be accessible to a wide audience... (It) includes a wide range of art forms including free-standing sculptural artworks, murals, installations, integrated design projects (where artwork is integrated into the fabric of architecture or applied to buildings, for example), ephemeral art, socially engaged and artist-led participatory processes, and temporary performance works at festivals and cultural events. Public art can be permanent (lasting many years), or temporary (lasting a few hours, days or months)... The purpose of commissioning artwork varies, across diverse contexts that include urban renewal and place making, festivals, percent for art schemes or civic art collection. Public art contributes to our understanding and appreciation of local cultural and social heritage, enhances the natural and built environment, and helps to create meaning in public space”.

National Association for the Visual Arts (NAVA) Australia (2019)

Objectives

- a) Integrate the layered histories and community stories about the edge of the harbour that date back for millennia will be interpreted by Public Art.
- b) Establish Bays West as a cultural hub that attracts Sydneysiders, connecting Sydney’s broader arts and creative community with the living heritage of Bays West.

- c) Deliver a range of opportunities for artists, including short-term and long-term, across the spectrum of art and cultural practice and experience.
- d) Design, public art and cultural programming is to interpret the layered narratives of the site including those that relate to the edge of the harbour, White Bay's biodiversity, the water songline, and other important stories of the area.
- e) Ensure that, from Day 1 through delivery, public art adds vibrancy and reinforces a sense of connection and belonging through art installations, programming and other innovative projects.

Provisions

1. Where practical, development must include dedicated arts and cultural governance groups and mechanisms for the achievement of the public art objectives.
2. A Bays West Public Art Advisory Panel will be established to provide best practice artwork advice to the team; to guide the development of artwork briefs; determine priority projects; and select artists and artwork concepts
3. Public art commissions and programmed activities should demonstrate cohesion and synergies across the precinct. Arts and cultural activities within the precinct boundary and in the surrounding area should be planned in consultation with stakeholders, owners and authorities.
4. Arts and cultural activities should be considered holistically with a range of design disciplines and stakeholders including activation and First Nations design advisors.
5. Competitive design responses must demonstrate excellence in public art delivery and programming that maintains positive community connection and association with the site throughout all stages of development. Responses must include an arts program statement that provides evidence for how culture-led placemaking from 'Day 1' will be achieved.
6. Public art planning must include a variety of approaches, scales and forms and engage the three curatorial principles. Commissions should include:
 - a. A significant relative allocation of capital budget towards public art, comparable to 'percent for art' programs or best practice benchmarks;
 - b. Major art commissions by Aboriginal artists, with the majority of the Public Art budget allocated to this purpose;
 - c. Integrated commission(s) with artists collaborating on artworks integrated with public spaces and built form;
 - d. One of the commissions to be one that promotes biophilic and biodiversity place character; and
 - e. Play-based commission or artist collaborative approach to kids' and teens' play.
7. Public art must be consistent with the Active Multi-modal Interchange Urban Design Principle and must not interfere with lines of sight to the metro, impact solar access or obscure passive surveillance. Public art must also be consistent with the IWLEP 2022 'Public art on footpaths' controls where applicable.

16 Stormwater, Flood Mitigation and Water Quality

“Water is calming, healing, and tactile, and a key part of Country at the site. As a site used for healing and connection for Aboriginal people in pastimes, water should be integrated into the site and public domain wherever possible”

Aboriginal Community Representative, First Nations Engagement Report by Cox Inall Ridgeway (Bays West Stage 1 Master Plan).

Objectives

- a) Ensure development integrates a high-quality water cycle management strategy throughout the precinct.
- b) Deliver clean stormwater to Sydney Harbour.
- c) Solve current flooding issues, and reduce flood and inundation risk as a result of intersecting climate change pressures of sea-level rise and increased rainfall.
- d) Align water quality, supply source, and treatment needs to enable effective water harvesting and re-use.
- e) Ensure development which may be affected by flooding adequately factors in climate change impacts.

Provisions

1. An Integrated Water Cycle Management Plan must be developed for the Site, as well as individual developments as required.
2. Development must capture rainwater and reuse from all non-trafficable roof surfaces with the intention to achieve water quality outcomes prioritising reuse and natural systems rather than engineering mitigations (e.g. cartridge filters).
3. Integrate site layout and the drainage system to avoid nuisance flows and flooding within the precinct and onto neighbouring properties. Relevant considerations are:
 - a. Site layout must be designed to minimise disruption or disturbance of land surfaces or natural drainage patterns. Where natural surface flows from uphill lands have the potential to flow through the property, notwithstanding the presence of fences, walls and minor structures, they must not be blocked or redirected because of the proposal.
 - b. Buildings are to be setback where overland flow paths are needed to convey flows across the surface.

- c. Solid or masonry boundary fences should not be erected where they will divert stormwater runoff to another property. Boundary fences should be of lightweight or partially open construction in these circumstances.
 - d. The site drainage system must be designed to collect and convey flows by gravity and have a pipe system for frequent rainfall events combined with an overland flow path to convey larger flows that are generated during storms.
 - e. Where an overland flow path cannot be provided due to the position of existing buildings and structures that are to be retained, the capacity of the pipe system must be designed to capture and convey the 1% AEP storm event flow from the contributing catchment assuming 80% blockage of the inlet and 50% blockage of the pipe.
 - f. An inter allotment drainage system, and associated drainage easement, must be used where the development would cause existing and/or natural drainage patterns within the vicinity of the site to be blocked, diverted, or concentrated onto another property.
 - g. Adequate provision must be provided to minimise the potential for surface waters entering buildings, including a minimum off 150mm step between the external finished surface level and the finished floor level. A larger step may be required where the surface waters from multiple uphill properties may enter the site.
4. Due to the location in the catchment and adjacency to the harbour discharge point, no Onsite Detention (OSD) is required for this precinct.
5. Stormwater treatment is to ensure that:
- a. A water quality filtration basket, or similar primary treatment device, must be installed on the site stormwater drainage system.
 - b. Water quality treatment techniques to achieve the targets in Provision 6 below.
 - c. Car wash bays must be provided for applications for multi-unit residential development. For developments with 16 or more dwellings, a dedicated car wash bay with appropriate treatment connected to sewer, must be provided at a rate of 1 bay per 60 dwellings or part thereof and must not be connected to the stormwater system.
6. Water quality treatment measures must be installed that meet the following:
- a. Reduction of average annual load for gross pollutants by 90% (Baseline annual pollution load of 500kg/ha/yr).
 - b. Retention of average annual load for total suspended solids by 85% (Baseline annual pollution load of 900kg/ha/yr).
 - c. Retention of average annual load for total phosphorous by 65% (Baseline annual pollution load of 2kg/ha/yr).
 - d. Retention of average annual load of total nitrogen by 45% (Baseline annual pollution load of 15kg/ha/yr).
 - e. Reduction of annual load (no visible discharge) of hydrocarbons by 90%.
 - f. Containment of 100% of toxicants.
7. The design of the stormwater treatment system must be incorporated into the Integrated Water Cycle Plan.
8. Stormwater Infrastructure for Water Disposal - Maintain existing natural drainage patterns and avoid nuisance and flooding to the drainage system and downstream properties:

- a. Where the site drains naturally towards any street frontage, stormwater runoff from all roof and impermeable areas must be drained by gravity to the public drainage system of that street frontage.
- b. Where the site naturally drains away from all street frontages and cannot discharge stormwater directly to Sydney Harbour, stormwater runoff should be drained to the precinct piped trunk drainage system, if it passes through the site, or an existing registered drainage easement benefitting the site.

The drainage of any roof and surface areas that cannot drain to the street must be designed to cause no concentration of flows or nuisance to downstream properties.

- c. Connection to the public stormwater drainage system should be undertaken as follows:
 - i. The site must be drained to the downhill extent of the site, generally in the direction that the site naturally drains. The outlet pipeline must be connected directly to the public piped drainage system. Where the piped drainage system is not available at the street frontage, the existing public system must be extended to the frontage of the site. An assessment of the existing capacity of the stormwater network must be made prior to connection to ensure there are no adverse impacts on the receiving drainage system.
- d. Basements must be of fully tanked construction such that pump-out systems are not required to drain the subsurface drainage system. Consideration will only be given to the provision of a pump-out system where it can be demonstrated by detailed geotechnical investigation that groundwater flows are minimal or intermittent.
- e. For basements other than for car parking purposes this will only be considered where it is demonstrated that they will not be subject to the ingress and surface stormwater, and where the sump and pump facilities can be housed and accessed for maintenance from an area external to the building above. Floor areas partly below the natural ground surface level will only be considered where it is demonstrated that they will not be subject to the ingress of surface stormwater, and where an overland flow path can be provided from all adjacent external finished surfaces.
- f. For basements associated with car parking facilities, a pump out system is permitted for minor surface areas that drain to the basement. All other forms of access to the basement must be protected from the weather so that the entry of stormwater runoff to the basement is minimised.

9. Development in the vicinity of a public drainage systems must:

- a. Ensure that development near the public drainage system does not compromise the functionality of the system and provides adequate access for its future management.
- b. Construction of permanent structures or placing of fill over the precinct piped drainage system is not permitted.
- c. Where the drainage system is within a drainage easement, the above restrictions extend over the width of the easement. If the drainage system is not within an easement, the above restrictions are extended by 1500mm to both sides of the centreline of the drainage structure. These restrictions may be extended further due to considerations associated with flood risk management.
- d. Open structures may be permitted where it can be demonstrated that they will not increase the risk of flooding to the subject or adjoining properties. These structures must not prevent or hamper future access to the drainage system for works and maintenance.

- e. The construction of structures over or adjacent to the Sydney water piped stormwater drainage system must be approved by Sydney Water. This Guide may impose additional conditions to those imposed by Sydney Water.
10. Flood Risk management will be managed through development complying with the below:
- a. Commercial, Industrial and Mixed-Use Development
 - i. All floor levels, including any existing components to be retained, are to be at or above the Flood Planning Level or raised to the Flood Planning Level.
 - ii. If this is impracticable, consideration may be provided to some or all of the non-residential floor levels having a freeboard of less than 500mm above the 1% AEP flood level, provided that satisfactory flood proofing (either wet or dry) is achievable to the Flood Planning level. All entrances and evacuation routes servicing any residential components must be above the Flood Planning Level.
 - b. Land with a High Hazard Category - development must demonstrate that:
 - i. There is no net loss in flood storage and floodway area as a result of the development.
 - ii. The development will not increase velocity, volume or direction of flood waters;
 - iii. The underside of all new floors are above the Probable Maximum Flood Level or Flood Planning Level, whichever is the highest, and all structures designed to withstand the High Hazard condition.
 - iv. The principle entries to all dwellings and common areas are located above the Probable Maximum Flood Level or Flood Planning Level, whichever is the highest, and an evacuation route is provided clear of the floodway.
 - v. Basement (below natural ground level) car parking is only permitted where all access and potential water entry points are above the Probable Maximum Flood Level or Flood Planning Level, whichever is the higher, and clearly signposted flood free pedestrian evacuation route is provided from the basement area separate to the vehicular access ramps.
 - c. Car parking Facilities and Basements
 - i. The floor level of new enclosed garages must be at or above the 1% AEP flood level plus 200mm. Consideration may be given to a floor level at a lower level, being the highest practical level but no lower than 180mm below the 1% AEP flood level, where it can be demonstrated that providing the floor level at the Flood Planning Level is not practical within the constraints of compliance with Australian Standard AS/NZS 2890.1 Parking facilities as amended.
 - ii. On properties with a low flood hazard classification, basement car parking (below natural ground level) must have all access and potential water entry points above the Flood Planning Level and provide a clearly signposted flood free pedestrian evacuation route from the basement area separate to the vehicular access ramps. Refer to part (e) within the Land with a High Hazard Category section for basement car parking in properties affected by High Hazard flooding.
 - d. Flood Mitigation and Modification Works - Those works that modify the stormwater drainage system or flood behaviour within the development site are permitted subject to the following:
 - i. They do not have an adverse impact on any surrounding property.

- ii. Section 88B notation is to be placed on the title of the land that informs future landowners that flood protection measures, and the associated locations, have been undertaken on the property and of the need to retain and maintain these structures and works for future flood mitigation.
- iii. Where it is demonstrated that flood mitigation works result in the safe diversion of the floodwater away from the proposed development, the floor level may be located below the Flood Planning Level.

Table 2 Flood Planning Levels

Flood Planning Levels		
Residential	Habitable Rooms – Mainstream Flooding (flood depth greater than 0.25)	1% AEP flood level + 0.5m freeboard
	Habitable Rooms – Local drainage flooding (flood depth less than 0.25)	1% AEP flood level + 0.5m freeboard OR x2 the depth of flow to a minimum of 0.3m
Residential non-habitable Rooms	Mainstream of local flooding	1% AEP flood level
Industrial or commercial retail floor levels	Mainstream of local flooding	Merit based approach with a minimum level of the 1% AEP flood level
Below ground car parks	Mainstream of local flooding	1% AEP flood level + 0.5m freeboard OR Probable Maximum Flood Level (whichever is higher)
Metro Entrances	Mainstream of local flooding	1% AEP flood level + 0.5m freeboard OR Probable Maximum Flood Level (whichever is higher)

11. Development within the precinct is to comply with the below:

- a. For new residential development and alterations and additions to residential development.
 - i. All floor levels including any existing components of the development (excluding open balconies) must be at or above or raised to the Foreshore Planning Level.
 - ii. However, existing floor levels may be retained below the Foreshore Planning Level for alterations and additions to existing residential dwellings if the following are complied with:
 - A. The floor levels of the additions and any altered floor areas must be at or above or raised to the Foreshore Planning Level.
 - B. Where alterations and additions affect less than 60% of the total existing floor areas, those existing areas that are not to be significantly altered may be retained below the Foreshore Planning Level.
 - C. Where the alterations and additions affect greater than 60% of the total existing ground floor areas and raising some or all of the existing floor levels is impracticable due to Heritage or Conservation Area constraints, only those areas so constrained may be retained at the existing level.

- D. The additions must be designed and constructed such that they do not preclude the raising of the existing floor areas to the Foreshore Planning Level at a future date or when further additions are proposed.
 - E. For any addition above ground floor, the floor level of the addition must be at a height that allows for the ground floor below to be raised in the future (if not required to be raised under the above control) to the Foreshore Planning Level, whilst maintaining minimum floor to ceiling height requirements.
 - F. Any floor areas of the existing dwelling to be retained at the existing level, below the Foreshore Planning Level, must be satisfactorily flood proofed (either wet or dry) to the Foreshore Planning Level.
- b. For all other development types, where constructing the floor level, or raising the floor level of existing development to the Foreshore Planning Level is difficult to achieve, consideration may be given to some or all of the floor levels being up to 300mm lower than the Foreshore Planning Level provided that satisfactory flood proofing (either wet or dry) is achievable to the Foreshore Planning Level.
 - c. For car parking Facilities / Basements
 - i. The floor level of new enclosed garages must be at or above the Foreshore Planning Level.
 - ii. Basements must have all access and potential water entry points above the Foreshore Planning Level and a clearly signposted pedestrian evacuation route from the basement area separate to any vehicular access ramps.
 - d. General Requirements
 - i. Mitigation works that modify the wave action or tidal inundation behaviour within the development site may be permitted on a merit basis subject to demonstrating that there is not adverse impact on the subject property or surrounding land.
 - ii. A Section 88B notation under the Conveyancing Act 1919 may be required to be placed on the title of the land describing the location and type of mitigation works with a requirement for their retention and maintenance.
12. Development is to ensure that the design for drainage and flooding shall be undertaken to include the effects of climate change. This will require that:
- a. Climate change effects are to be incorporated in accordance with ARR2019 guidelines for rainfall intensity increase predicted for year 2090.
 - b. The 2090 interim climate change factor based upon a Representative Concentration Pathway (RCP) 8.5 (as recommended by ARR2019) adopts a 21.3% increase in rainfall intensity at the locality of the proposed works.
 - c. The design for drainage shall apply a 1.213 multiplier to rainfall intensities in determining the runoff and sizing of infrastructure.
 - d. All Flood Planning Levels are to be inclusive of climate change impacts.
13. To ensure that development is carefully designed, constructed and maintained to minimise impacts on the water cycle and counteract the impacts of urban development, the following key factors need to be taken into consideration at the implementation stage:
- a. Each future development is responsible for managing rainfall run-off from their respective development sites both from a quantity and water quality perspective.

- b. Hydraulic calculations at the detailed design development stage will determine the final development lot discharge locations, capacity of the new precinct drainage systems and outlets and interfaces at the properties for water quality.
- c. Development building floor levels to be assessed against proposed flood depths to mitigate future flood risks.
- d. Any harbour outlets to include improvements at the discharge location to provide water quality and ecological improvements.
- e. Consideration of roof water in place of mains supply for non-potable uses, especially for toilet flushing, laundry use and irrigation.
- f. Consideration of reuse of surface runoff for irrigation purposes.
- g. Landscaping designed for cleansing runoff and conserving water.
- h. Protection of native vegetation to minimise site disturbance and conserve habitat.
- i. Protection of stream corridors for their environmental, recreational and cultural values.

17 Geotechnical and Contamination

Objectives

- a) Ensure that the site is made suitable from an environmental and human health perspective for the proposed land uses, by incorporating remediation/management of contamination and acid sulphate soils both on-site and associated with the adjoining Sydney Harbour receiving environment.
- b) Appropriately manage geotechnical constraints associated with the site to mitigate any impacts to existing infrastructure and structures as a result of future development works.
- c) Ensure the cumulative impact of development of the site results in improvements to overall environmental conditions at and down-gradient of the site within the adjoining White Bay and Sydney Harbour.

Provisions

1. Development must comply with the requirements of the NSW Contaminated Land Management provisions as outlined in Chapter 4 of the SEPP (Resilience and Hazards) 2021 demonstrating that the site is, or will following remediation/management be made, suitable for the proposed development. All reports must be prepared with consideration to the relevant guidelines made or approved by the NSW EPA under Section 105 of the Contaminated Land Management Act 1997.
2. Where remediation/management is required, an appropriately detailed Remedial Action Plan (RAP) is required to be submitted documenting the actions required to make the site suitable for the proposed development.
3. An independent review of the assessment report(s) and RAP will be required for each development, resulting in preparation of a A Part B Site Audit Statement and Report, prepared by a NSW EPA Accredited Site Auditor, which confirms that the site can be made suitable for the proposed land use if remediated/managed in accordance with the submitted RAP.
4. The development and its associated remedial/management requirements should consider generation of excess excavated material, including waste handling (transport, identification, classification, stockpiling, tracking and disposal) and excavation water discharge.
5. The development methodology is also required to consider details for the mitigation and management measures to be implemented during the remediation and site construction works to minimize the potential human health risks (occupational exposure and nearby site occupants) and thereby ensure the safety of workers and nearby site occupants, including the measures necessary to monitor and manage the exposure of workers to contaminants as required under the Work Health and Safety Regulation, 2017.
6. Development is required to be undertaken consistent with the requirements of the Acid Sulfate Soil Manual (ASSMAC, 2018) and the National Acid Sulfate Soil Guidance. Australian

Government Department of Agriculture and Water Resources (DAWR), June 2018 (AGDAW, 2018).

7. Where below ground works may/will result in disturbance of known or suspected acid sulfate soil within the development site and/or surrounds, a management plan will be required for the identification, handling, treatment, transport and disposal of any acid sulfate soil material including waste that may be encountered during demolition, site preparation, excavation and construction works. Development planning is to assess (and minimise) the impacts of groundwater drawdown (temporary and permanent) in addition to the actual ground disturbance (including excavation).
8. Assessment will be required to identify geotechnical issues associated with construction of the development, including but not limited to the location and depth of existing basement structures and/or foundations of buildings and other infrastructure (such as the White Bay Power Station and adjoining road infrastructure), below ground infrastructure (including the The Bays Station and tunnels, cooling water canal, etc) and the White Bay foreshore. Considerations include details of ground movement, saline (marine) groundwater conditions, advice on requirements for boundary offsets, underpinning, and other support to adjacent structures. Where appropriate, development of monitoring and mitigation measures will require to be considered.
 - a. Development planning must give consideration to the potential for settlements and ground movements as may occur during/following construction of the development (and the associated below ground infrastructure), including the cumulative impact of development on groundwater characteristics within the precinct and the mixing zone in White Bay.
 - b. A geotechnical model of representative geological and groundwater conditions must be prepared prior to construction to identify geological and groundwater features. The model must include details of proposed construction (including excavations and below ground structures) and construction staging, and identify surface and sub-surface structures, including any specific attributes, which may be impacted by the development. The Proponent must use this model to assess the cumulative predicted settlement, ground movement, stress redistribution and horizontal strain profiles caused by the development (i.e. during excavation and loading of the ground), including groundwater drawdown and associated impacts, on adjacent surface and sub-surface structures.
 - c. Prior to construction, the Proponent must undertake a review of surface and sub-surface structures at risk from damage to determine appropriate criteria to prevent damage that may pose a settlement risk.
9. Planning for below ground construction activities will require a comprehensive groundwater assessment incorporating pre-construction (baseline) conditions, predicted impacts and proposed mitigation and reporting commitments during construction and post- construction and operational phase conditions. Where works will require temporary dewatering during construction, this assessment should identify and evaluate the discharge water quality and degree of potential impact the water may have on the receiving environment, including all pollutants and/or water quality characteristics that may impact upon human health and/or environmental quality.

Note: Ground disturbance on the White Bay Power Station site, where there is potential for archaeological remains, will require approval from the NSW Heritage Council under s.60 the NSW Heritage Act (1977).

18 Services and Infrastructure

This section focuses on the Services and Infrastructure required to be delivered within the Site to accommodate development of the subject and future stages. This includes infrastructure relating to utility services and infrastructure including the Metro Intake Sub Station (ISS), 11kV/415V Distribution substations (Kiosk or Chamber type), 11kV Zone Substation and telecommunication facilities.

General Objectives

- a) Ensure the construction of utility services and infrastructure is delivered in a logical and staged manner, and in sequence with development for the broader Bays West Precinct.
- b) Encourage innovative and sustainable utility servicing across the Bays West Precinct to promote effective and efficient delivery of services.
- c) Ensure utilities designs and locations consider space for alternative future services and do not preclude future developments from occurring.
- d) Ensure works do not impact on Sydney Metro operations.
- e) Ensure utilities are futureproofed to minimise the need for future rectification works.
- f) Design and provide utility infrastructure to integrate with, and not negatively impact, use of the public realm, liveability, and the environment.

18.1 Digital Infrastructure

Objectives

- a) Enable 'smart city' technology within the site to improve access to, and user experience of, social infrastructure (e.g. on-line booking systems; real-time usage data; etc).

Provisions

1. A digital infrastructure strategy is to be developed and integrated into future redevelopment of the Site.

18.2 Potable Water

Objectives

- a) Liaise with Sydney Water to ensure the infrastructure and servicing requirements for the precinct are in alignment with Sydney Water's 2020-2025 Growth Servicing Plan.
- b) Manage and balance urban water elements (drinking water, wastewater, and stormwater) through integrated water management.
- c) Design and delivery of infrastructure, servicing and development shall be driven by an integrated water cycle management approach to build resilience in Sydney's water supply through encouraging the use of recycled water, optimising stormwater management and maximising efficiency in the use of potable water.
- d) Facilitate the delivery of regional water infrastructure to optimise the efficiency of development and deliver better outcomes for waterways, amenity, and liveability through connection to the surrounding Sydney Water network and facilitation of new infrastructure within the wider Bays West Precinct.
- e) Minimise potable water use through water efficient fixtures and alternative water sources (e.g., recycled water and rainwater).
- f) Ensure integrated water cycle management is safe, practicable and provides the best environmental outcomes.

Provisions

1. No potable water is to be used for non-potable uses.
2. The applicant must demonstrate that adequate provisions are in place to connect to reticulated drinking water supply and effluent/wastewater disposal.
3. Avoid planting trees within 3m of a water main. Species selection should be determined with regard to site constraints.
4. Shared utility trenches must combine multiple utilities within a compact area of the street verge, and futureproof service location within road cross sections. Infrastructure should allow for co-location of compatible similar uses.
5. Development near infrastructure easements must not impact on the continued operation of the infrastructure.
6. Universally accessible drinking water fountains, with water bottle filling, are available in all public spaces.
7. Provide purple pipe non-potable water supply within all buildings to major non-potable water end uses.
8. Use harvested stormwater and rainwater (from on-site water storage or regional stormwater harvesting) for all non-potable water purposes, including:
 - a. Passive cooling methods that supplement or preclude mechanical cooling;
 - b. Internal reticulation for toilet flushing and other appropriate uses (e.g. laundry, hot water taps in baths, showers, laundry troughs and washing machines);

- c. Irrigation of landscaped areas (onsite, communal areas and public land) or Vegetation areas (existing where appropriate and revegetation);
- d. Building water features (provided they are not for water play);
- e. Cooling of industrial roofs; and
- f. Connection to regional/precinct harvesting and reuse schemes.

18.3 Wastewater

Objectives

- a) Manage and balance urban water elements (drinking water, wastewater, and stormwater) through integrated water management.
- b) Design and delivery of infrastructure, servicing and development is to be driven by an integrated water cycle management approach to build resilience in Sydney's water supply through encouraging the use of recycled water, optimising stormwater management and maximising efficiency in the use of potable water.
- c) Design and delivery of infrastructure, servicing and development shall be driven by an integrated water cycle management approach to balance urban water elements and build resilience in Sydney's water supply through encouraging the use of recycled water, optimising stormwater management, greywater harvesting and maximising efficiency in the use of potable water.
- d) Wastewater supply is provided to all development, as part of a comprehensive wastewater infrastructure network.
- e) Facilitate the delivery of regional wastewater infrastructure to optimise the efficiency of development and deliver better outcomes for waterways, amenity, and liveability.
- f) Optimise greywater reuse opportunities to minimise wastewater generation.
- g) Ensure integrated water cycle management is safe, practicable and provides the best environmental and health outcomes.
- h) Prioritise Water Sensitive Design initiatives in coordination with sustainability initiatives.

Provisions

1. Development must identify mechanisms for waste-water, stormwater and rainwater treatment and re-use aligned with best practice utilities and implement solutions that can be sustainably operated over the full life of the precinct.
2. The applicant must demonstrate that adequate provisions are in place to connect to reticulated drinking water supply and effluent/wastewater disposal.
3. Protect space for water recycling plant sufficient to serve Bays West.
4. Avoid planting trees within 3m of a sewer main. Species selection should be determined with regard to site constraints.
5. Where storage is utilised, tank systems and or harvesting system requirements are to be determined considering the required effluent management flow targets.

6. Use harvested greywater for appropriate onsite uses based on water quality requirements.

18.4 Electricity

Objectives

- a) Deliver alternative servicing strategies such as solar power, battery storage and district cooling within the precinct.
- b) Design built form to promote low energy usage and minimise energy waste.
- c) Co-locate infrastructure to allow for compatible similar uses.
- d) Enable shared utility trenches to combine multiple utilities within a compact area of the street verge, and futureproof service location within road cross sections.
- e) Ensure development near infrastructure easements does not impact on the continued operation of the infrastructure.

Provisions

1. In multi-floor or multi-tenant or strata-subdivided developments, electricity sub-metering is to be provided for light, air conditioning and power within each floor and/or tenancy and/or strata unit. Locations are to be identified on the development plans.
2. New Distribution substations (Kiosk or Chamber type) and Zone Substation selection and locality to be completed in consultation with Ausgrid.
3. Underground electrical conduits to allow for further 11kV distribution feeders to be added in future.

18.5 Gas

Gas is not to be installed within the precinct as part of sustainability initiatives.

18.6 Telecommunications

Objectives

- a) Provide for the effective, efficient and equitable provision of telecommunications and radio communications facilities.
- b) Co-locate telecommunication facilities to minimise the number of facilities required.
- c) Ensure facilities are designed to be visually compatible with the environmental character and visual context of the surrounding locality, with particular regard to heritage items and areas of heritage and environmental significance.

Provisions

1. The applicant must demonstrate that adequate provisions are in place to connect to the telecommunications network.
2. The design and installation of telecommunication and radio communication facilities, and associated infrastructure is to achieve compliance with relevant Australian Standards, and the Australian Communications and Media Authority (ACMA) guide – “Accessing and Installing Telecommunications Facilities – A Guide, 1999”.
3. Co-location of telecommunication facilities must be demonstrated to minimise the number of facilities required.
4. Telecommunication facilities are designed and located to ensure human health and safety, including risks associated with the emission of electro magnetic radiation.
5. Signs are to be erected around any telecommunication facility to display warnings and information to minimise public risk.
6. Telecommunication facilities are to be enclosed with a minimum 1.8m open mesh (or similar) to prevent public access to the site.
7. Locate the telecommunication structures so they do not detract from:
 - a. The heritage significance or settings of a heritage item within the site
 - b. The amenity of open spaces; and
 - c. District views and vistas to Sydney Harbour.
8. Telecommunication facilities are of a “slimline monopole” construction.
9. The facilities are not include advertising signs, including logos.
10. The facilities are not to contain night illumination (except where a proposed telecommunications facility infringes the Obstacle Limitation Surface (OLS) for aircraft safety).
11. Infrastructure allows for co-location of compatible similar uses.
12. Telecommunications cabling to be provided by the NBN Co, additional allowances for carrier lead in cabling to be provided for precinct requirements.