

Blackwattle Bay
State Significant Precinct

Attachment 2:

SSP Study Requirements

June 2021





Planning &
Environment

Study Requirements for Bays Market District

*Nominated State
Significant Precinct
– The Bays*

April 2017

April 2017

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Introduction

The Bays Market District is being investigated for its urban renewal potential. Situated within the wider Bays Nominated State Significant Precinct, this area offers a key tourist attraction, the Sydney Fish Market, and an area of publicly and privately-owned lands with direct water frontage to Sydney Harbour, connections to major transport routes and proximity to the Sydney CBD.

The Department of Planning has established a Project Review Panel for the Bays Market District investigation area. Membership includes representatives of the Department of Planning and Environment, the City of Sydney, NSW Government Architect's Office and Transport for NSW. The Study Requirements for the nominated precinct have been prepared with the City of Sydney, in consultation with relevant State agencies and endorsed by the Project Review Panel.

This study should demonstrate how the following key principles have been addressed, to the extent that they relate to the rezoning of the land:

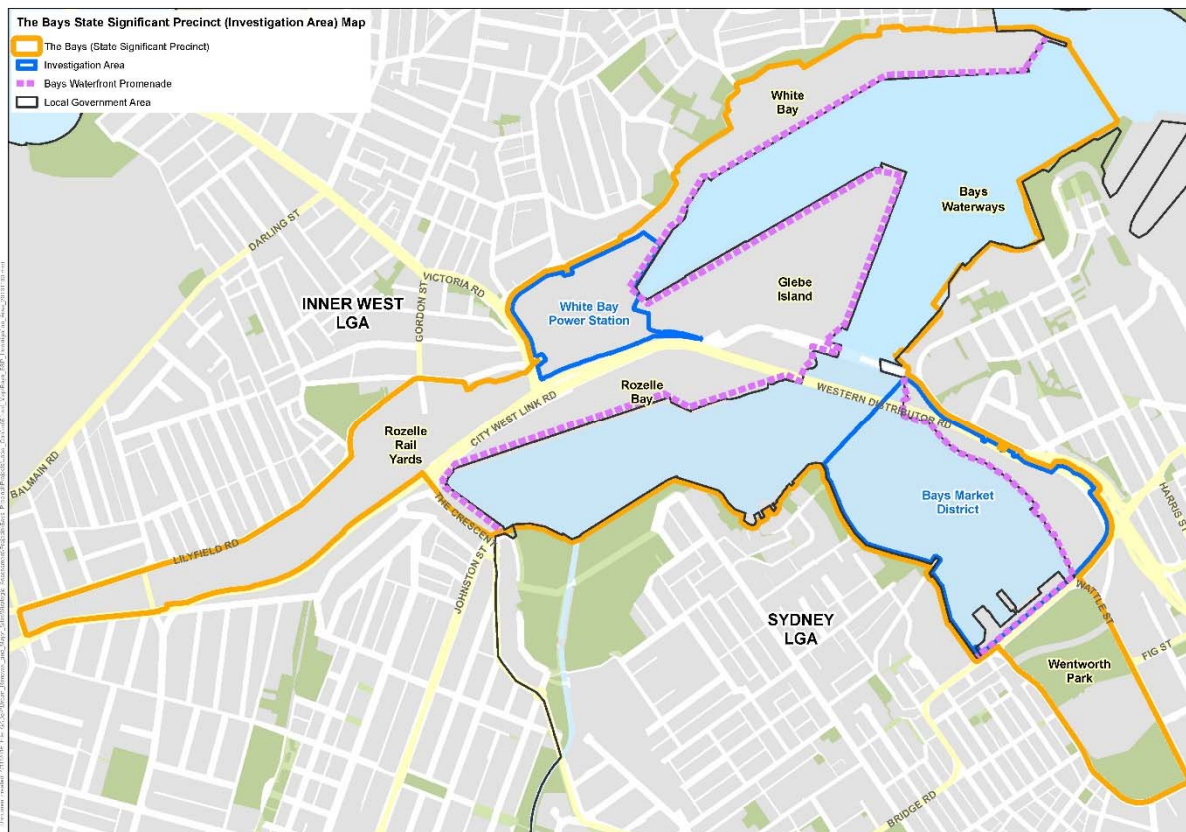
- Ensure the Bays Market District (alongside the Bays Waterfront Promenade) acts as a catalyst for the implementation of the overall Bays Precinct transformation.
- Draw on the natural attraction of people to the water to create a district focussed on tourism and recreation, with compatible uses where appropriate.
- Provide improved passive and active recreational opportunities for visitors, workers and residents through provision of a foreshore promenade and associated public domain setback.
- Maximise public access with legible and direct pedestrian connections to Blackwattle Bay and Wentworth Park from the surroundings.
- Ensure an appropriate mix of uses is provided, including community facilities and services.
- Where business uses are proposed, consider an appropriate range of business types to link with the existing digital economy hub in Ultimo and Pyrmont, and connect to the proposed innovation district at the former White Bay Power Station.
- If residential development is proposed, ensure a range of housing choices, including Affordable Housing, is provided and the health and amenity of residents is protected.
- Within Blackwattle Bay, balance the needs of private commercial marine operations with the need to provide public access for recreational uses.
- Integrate the proposal with the Bays Precinct-wide mass proposed transport investments, including mass transit, a Glebe Island Bridge upgrade, and road network improvements such as on Bridge Road.
- Introduce water quality initiatives into the Bays Waterways.
- Ensure a governance model based on whole-of-government, state and local, collaboration that fearlessly pursues public benefit, is adopted.

Purpose of study

Investigate preparation of a new planning framework for the renewal of the Bays Market District to provide a new world-class food market, connected to the harbour and centred around a rejuvenated Sydney Fish Market. The framework will also provide for new public open space including a foreshore promenade, community facilities, and other compatible uses.

Site

The Bays Market District is an area of approximately 9.2 hectares of primarily government owned land containing the Sydney Fish Market (wholesale and retail), cruise and boating operations and facilities, and 3 privately owned sites. It is located within the City of Sydney Local Government Area and is part of the Bays Precinct. Bays Market District wraps around the southern and eastern edges of Blackwattle Bay and is bounded by Bridge Road to the south and Bank Street to the east. The Western Distributor/Anzac Bridge is located adjacent to the eastern boundary before traversing over the northern section of the site.



Applicant

UrbanGrowth NSW.

Date of issue

28 April, 2017.

Scope of study

The following issues will be considered and assessed as part of the study:

- (1) State or regional planning significance of the site.
- (2) Suitability of the site for any proposed land use, and the intensity of any use; taking into consideration the public domain, transport, heritage, arts and culture, environmental, social, health, economic and urban design factors, the principles of ecological sustainable development, a healthy built environment and any State, regional or local planning strategy, policy or plan.
- (3) Implications of any proposed land use for local, state and regional infrastructure and service delivery.
- (4) Implications of any proposed land uses on existing and future infrastructure in the Bays Precinct.
- (5) Means by which developer contributions should be secured for the site.
- (6) The extent and outcomes of engagement with the local community, landowners, other local stakeholders and Government agencies.
- (7) Local and regional economic, social, health and environmental impacts of the proposed development.
- (8) Recommended land uses and development controls for the site, and the extent to which development potential has been distributed fairly and impartially between government and privately owned land, subject to individual site constraints.
- (9) Effective linkages between the Bays Market District, its surrounds and the entire Bays Precinct.
- (10) Staging strategy for the Bays Market District in the context of the entire Bays Precinct and other projects planned in the area.

Key study requirements

The Study must address the key requirements listed below.

1. Vision, Strategic Context and Justification

- 1.1. Outline the vision for the proposal.
- 1.2. Outline the strategic planning context for the proposal including an assessment of relevant State planning documents such as:
 - A Plan for Growing Sydney December 2014
 - NSW Long Term Transport Masterplan December 2012
 - Sydney's Transport Futures Documents (Walking, Cycling, Ferry, Bus, Rail)
 - Sydney's Bus Future 2013
 - Sydney's Ferry Future 2013
 - Sydney's Walking and Cycling Future 2013
 - Sydney's Rail Future 2013 NSW Freight and Ports Strategy
 - Draft Central District Plan 2016
 - UrbanGrowth NSW - Bays Precinct, Sydney: The Transformation Strategy October 2015
 - Better Placed – A design led Approach: Developing an Architecture and Design Policy for NSW draft version 2016
 - NSW Government Visitor Economy Industry Action Plan
 - NSW Government Sydney Local Health District – A Picture of health – Health Profile 2015
 - NSW Health's Health Impact Assessment: A Practical Guide
 - NSW Government Building Better Health Guidelines
 - NSW Government's Draft Climate Change Fund Strategic Plan and A Plan to Save NSW Energy and Money
 - NSW Government NSW Climate Change Policy Framework
 - NSW Government NSW Energy Efficiency Action Plan
 - Planning New Schools, School Safety and Urban Planning Advisory Guidelines 2014
 - NSW Heritage Manual
 - UrbanGrowth NSW – Guiding Principles for Marine Foreshore Developments – February 2016
 - Create in NSW – NSW Arts and Cultural Policy Framework 2015
 - Sydney City Centre Access Strategy – December 2013
 - UrbanGrowth NSW - Bays Working Harbour Study 2016
 - TfNSW - Construction Materials Supply Chain Study 2016
 - Port Authority NSW – Port Options Study 2016, and
 - INSW – Glebe Island Review (currently underway).
- 1.3. State Environmental Planning Policies (SEPPs) including, but not limited to:
 - State Environmental Planning Policy (State Significant Precincts) 2005
 - State Environmental Planning Policy (Urban Renewal) 2010
 - SEPP 65 (State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development) 2015

- State Environmental Planning Policy (Affordable Rental Housing) 2009.
 - State Environmental Planning Policy (Infrastructure) 2007
 - Sydney Regional Environmental Plan No 26 – City West, and
 - Sydney Regional Environmental Plan (Sydney Harbour Catchment 2005).
- 1.4. Consideration of local planning and other relevant strategies and reports including but not limited to:
- Sydney Local Environmental Plan 2012
 - Sydney Development Control Plan 2012
 - City of Sydney Sustainable Sydney 2030 Community Strategic Plan 2014
 - City of Sydney Draft Environmental Action 2016 – 2021 Strategy and Action Plan
 - City of Sydney Connecting Our City - Transport Strategies and Actions – Summary Report
 - City of Sydney Adapting for Climate Change 2015
 - City of Sydney Social Sustainability Policy and Discussion Paper June 2016
 - Housing Issues Paper April 2015
 - City of Sydney Open Space, Sports and Recreational Needs Study 2016
 - City of Sydney Public Domain Manual
 - Sydney Streets Code 2013
 - City of Sydney Cycle Strategy and Action Plan 2007-2017
 - City of Sydney Walking Strategy and Action Plan
 - City of Sydney Economic Development Strategy 2013
 - City of Sydney Eora Journey Economic Development Plan 2016
 - City of Sydney Blackwattle Bay Catchment Flood Study – September 2015
 - City of Sydney Interim Floodplain Management Policy 2014
 - City of Sydney City Art – Public Art Strategy 2011
 - City of Sydney Public Art Policy
 - City of Sydney Guidelines for Public Art in Private Developments
 - City of Sydney Guidelines for Acquisitions and Deaccessions
 - City of Sydney Lights Design Code 2014
 - City of Sydney Access Policy 2004
 - City of Sydney Landscape Code 2016
 - City of Sydney Greening Sydney 2012
 - City of Sydney Urban Forestry Strategy 2013
 - City of Sydney Tree Management Policy 2013
 - City of Sydney Urban Ecology Strategic Action Plan 2014
 - City of Sydney Street Tree Master Plan 2015
 - City of Sydney Competitive Design Policy
 - City of Sydney A City for All – Social Sustainability Policy 2016
 - City of Sydney Creative City – Cultural Policy and Action Plan 2014
 - City of Sydney Legible Sydney Wayfinding Strategy 2012
 - City of Sydney Legible Sydney Design Manual 2013
 - City of Sydney Decentralised Water Masterplan 2012
 - City of Sydney Decentralised Energy Master Plan Renewable Energy 2012-2030

- City of Sydney Open Sydney – Future directions for Sydney at Night.
 - City of Sydney Policy for Waste Minimisation in New Developments 2005
 - City of Sydney Tourism Action Plan December 2013
 - City of Sydney Visitor Accommodation Plan December 2013
 - The Conservation Plan (J S Kerr 1996)
 - Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter)
 - Connected Corridors for Biodiversity: Guide to regulatory tools, financial incentives and other mechanisms for promoting biodiversity conservation on private property (December 2016)
 - Greater Sydney LLS – Biodiversity Corridor Mapping
<https://trade.maps.arcgis.com/apps/webappviewer/index.html?id=3afa804b96ac4d69a74e9b1ed9780328>
 - Urban Ecology Renewal Investigation Project Report – due for release early 2017, and
 - Greater Sydney Commission's Sustainability Profile for Greater Sydney.
- 1.5. Provide justification for the proposal in the context of A Plan for Growing Sydney, the draft Central District Plan and Sustainable Sydney 2030 Community Strategic Plan 2014.
 - 1.6. Outline how the proposal considers the interface with current and known/planned land uses in the surrounding area including, but not limited to, Bays Waterfront Promenade, Wentworth Park, Glebe foreshore walk, Glebe Island Bridge, Sydney Secondary College, Blackwattle Bay Campus, the working port and other maritime uses in the wider area, as well as reinforcing the role of Central Sydney.
 - 1.7. Outline the historical significance of the site and how the proposal intends to be sympathetic to any State and / or local heritage assets within and adjacent to the Bays Market District and the Conservation Areas located to the north east and south west.

2. Urban Design

- 2.1. Prepare a detailed site and context analysis.
- 2.2. Prepare a review of relevant best practice case studies of areas of similar size, land use and approximate dwelling density to the proposal, outlining transferable principles.
- 2.3. Prepare a review of relevant best practice case studies of food and/or fish markets, outlining transferable principles including logistics and operations, transport and access, and any other strategic aspects.
- 2.4. Prepare comprehensive opportunities and constraints mapping overlays.
- 2.5. Prepare a set of urban design principles that underpin the proposed development.
- 2.6. Prepare an options analysis that examines a variety of appropriate options for the distribution of land use and building bulk in relation to the layout of the public domain. Document the various options including an assessment of how the options respond to the identified constraints and opportunities, and state planning policies (e.g. SEPP 65 and the ADG) and have been used to inform the final proposal.
- 2.7. Prepare a precinct plan that integrates: the public domain plan, infrastructure plan, community facilities plan, buildings types and massing for the site. Demonstrate how this fits within the overall Bays Precinct State Significant Precinct and surrounding context.

- 2.8. Provide a view corridor and visual assessment, with particular focus on significant views to, from and within the site. Use eye level views from public parks and street footpaths. Include views from public places in Pyrmont and Wentworth Park, and to and from the harbour, that bisect the precinct. Simulate a focal length of 55mm, to approximate the correct proportions of the elements of views as experienced by the human eye, compare to existing views and analyse the relative quantity of visible sky and harbour. Include analysis of any visual impacts on the surrounding areas, and mitigation measures. The number and angle of significant views are to be agreed with the City of Sydney and Department of Planning.
- 2.9. Provide a comprehensive sun access analysis for the site and its surroundings at the Winter Solstice between 9am and 3pm, demonstrating the ability of the proposal to comply with standards as follows:
 - For new and existing apartments and private open spaces subject to the Apartment Design Guide, against the standards in that guide
 - For all other new and existing dwellings, and private and public open spaces, against the standards in Sydney DCP 2012
 - For the new 30 metre foreshore promenade (refer to section 3), against standards in Sydney DCP 2012 for public open spaces. Recognising that compliance with this standard may be difficult due to the orientation of this area, particularly in the morning, a sun access plane which maximises sunlight access to the promenade may be proposed
 - For the new area of foreshore promenade in front of the new fish market (refer to section 3), an appropriate standard should be proposed, recognising that solar access to the area is limited, particularly in the morning, and
 - For the existing public open space, Sydney Secondary College, Blackwattle Bay Campus and walkways along the Glebe Foreshore and Wentworth Park, no additional overshadowing at the Winter Solstice 9am to 3pm must be demonstrated.
- 2.10. Provide an analysis and justification of proposed distribution of gross floor area, development yields, building typologies, building envelopes and heights. Demonstrate a fair and impartial distribution of development potential between land in government and private ownership, subject to individual site constraints.
- 2.11. Provide sufficient detail of the building types to demonstrate future compliance with amenity standards can be achieved including the Apartment Design Guide; including careful siting and layout of buildings to minimise the impacts of noise and provide natural ventilation through open windows and to support any calculations that convert building envelopes to gross floor area and development yields.
- 2.12. Demonstrate how the urban design principles established in 2.5 have informed the allocation and location of proposed land uses.
- 2.13. Provide physical and 3D CAD models to fit the City of Sydney's respective models. Include animations and photomontages of key parts of the proposal from eye level positions in the public domain. Consult with the City of Sydney to confirm technical model requirements.
- 2.14. Prepare a subdivision plan that reflects the precinct plan identified in 2.7 and integrates the proposed staging plan.
- 2.15. Outline the proposed staging, including showing how the progressive delivery of the public domain (park and streets) is integrated with the progressive release of development lots and

how the proposed staging will be integrated with the staging of the wider Bays Precinct. Within the staging plan, maximise opportunities for temporary activation and providing public access.

- 2.16. Integrate the findings of other parts of this study and demonstrate how these have shaped the public domain plan and the building typologies to meet their requirements. In particular, how the design of building types respond to ESD, wind, flooding, noise and pollution issues.

3. Public Domain: Public Open Space and Streets

- 3.1. Consult closely with and obtain appropriate endorsement, to the extent that it relates to the approval of the planning framework, for all aspects of the Public Domain from the ultimate owner and manager. RMS will act as the owner and manager of the public domain on water and the City of Sydney will act as the owner and manager of the public domain on land unless and until alternative ultimate owners and managers are agreed by DPE and CoS.
- 3.2. Provide a site analysis of existing physical features and conditions influencing the location and design of a continuous public domain setback from the foreshore on all sites on Bank Street. As envisaged in Volume 2 of the City's Open Space and Recreational Needs Study, this should take the form of a 30 metre public domain setback from the foreshore to the building alignment allowing at least 10 metres width of paths for pedestrians and cyclists; recreational open space; outdoor dining; community facilities, emergency access and the like. The analysis should include but not be limited to sea level rise, tides, flooding, noise and pollution, canopy and trees, heritage, character, function and use. Provide and compare options for its design. Any proposed departure from the dimensions specified above must be fully explained and justified.
- 3.3. Provide and compare options for the design of a continuous, unimpeded, publicly accessible, promenade and provision for cyclists located between the new fish market buildings and the head of Blackwattle Bay. Provide analysis of the future conditions and requirements of the fish market and how these will influence and interact with the promenade.
- 3.4. Provide an analysis of the physical connections between the northern part of Wentworth Park and the Bays Market District. Identify opportunities and options for improving connectivity for pedestrians and cyclists between the two across Bridge Road while ensuring the primary function of Wentworth Park for active recreation is not reduced and, where possible, enhanced.
- 3.5. Provide an analysis of the physical connections between Central Sydney, existing light rail stations and bus stops, and the precinct. Identify opportunities and options for improving pedestrian connectivity between them. Include any works required outside the precinct boundary.
- 3.6. Provide an open space plan for the Precinct, based on providing a 30 metre wide public domain promenade discussed in 3.2. Demonstrate how accessibility to the promenade is maximised by its surrounding street interfaces; how the flexibility and adaptability of use is maximised; how it is protected from noise and pollution; how it connects to the former Glebe Island Bridge as a possible future active transport connection to the other precincts within the Bays; how it connects to the existing foreshore walks in Glebe and Pyrmont; and how connections to it optimise its use for the surrounding community. Explore opportunities to

locate within it suitable public and community uses which may include built structures and unenclosed areas for outdoor dining. The open space plan should also integrate outcomes of the Bays Precinct Social Infrastructure Assessment previously undertaken by the proponent to inform programming, type and size of sub-spaces to be provided within the precinct. Any proposed departure from the dimensions specified above must be fully explained and justified including how the requirements of 3.2 and 3.6 are appropriately met within the proposed dimensions.

- 3.7. Provide a layout plan of the public streets, lanes and walkways, identifying street hierarchy, typologies, movement patterns for all modes of travel, connectivity to the surrounding area and the development lots. Consider reopening former streets, reconnecting existing streets and street widening where beneficial. Provide and compare options for the street layout. Provide detailed sections and plans for typical conditions in each type of street, demonstrating innovative and best practice design for high density, highly connected, and active transport priority environments.
- 3.8. Using data from the Traffic and Transport study, identify key intersections where there are high numbers of pedestrians, cyclists and/or vehicles, and provide detail of how pedestrian and cyclists safety and comfort will be prioritised in these locations. Include any intersections that will be used by children to access schools as pedestrians and cyclists.
- 3.9. Provide a general arrangement plan for streets locating proposed kerb alignments, including intersection arrangements and mid-block crossing arrangements, overlaid with existing and future ownership boundaries.
- 3.10. Provide a public domain plan incorporating the open space plan and street layout and demonstrate how it responds to the analysis and the urban design principles.
- 3.11. Demonstrate how the public domain will be designed to be legible, connected and safe for pedestrians and cyclists at all times of the day and night, considering Crime Prevention through Environmental Design (CPTED) principles.
- 3.12. Provide a (Water Sensitive Urban Design) WSUD strategy that integrates with the flood study the public domain and private open spaces, show any measures on plans and detail street sections.
- 3.13. Provide an indicative material and furniture palette for all areas of public open space and the various street types.
- 3.14. In all of the above, demonstrate consideration and application of City of Sydney public domain codes where appropriate, including the Streets Code and Technical Specifications, Legible Sydney Wayfinding Strategy and Design Manual, and any other relevant City of Sydney draft Codes.

4. Land Use and Planning Controls

- 4.1. Consider and coordinate the findings of other parts of this study to ensure the vision and planning outcomes are achieved through the planning controls and future development.
- 4.2. Demonstrate a fair and impartial distribution of development potential between government and privately owned sites, subject to individual site constraints.
- 4.3. Assess the consistency of the proposal against relevant State and local plans, strategies and policies.

- 4.4. Assess the consistency of the proposal against the principles of Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.
- 4.5. Demonstrate how relevant Actions of the Greater Sydney Commission's draft Central District Plan are met.
- 4.6. Demonstrate how any relevant existing development consents have been considered.
- 4.7. Identify management approaches (including complementary land use approaches such as buffers) to address any potential risks associated with land use conflict in relation to key employment and urban service lands. This should also include the identification and mapping of buffers around the operation of potentially hazardous activities and industries (including Port Related Infrastructure) that have been granted environment protection licences. Buffers will vary based upon the level of risk of impacts on the surrounding community.
- 4.8. Explain the proposed land use and zoning approach and provide justification for the mix and location of proposed land uses. Where zones which permit residential uses are proposed, provide a thorough analysis of the suitability of the site for those uses taking into consideration the findings of all other relevant parts of this study.
- 4.9. Provide draft zoning and planning controls to amend *State Environmental Planning Policy (State Significant Precincts) 2005* including zoning, maximum building height, FSR heritage, lot size, maximum parking rates, active frontages, design excellence provisions and any other provisions needed to achieve the intended planning outcomes. Prepare for each individual block controls with graduated height and future lot FSR and include residential and non-residential floor space mix requirements. SEPP controls are to be consistent, where possible, with the City of Sydney's planning controls.
- 4.10. Justify the proposed development standards identified in 4.9. Explain the methodology adopted to ensure planning outcomes, including appropriate transitions to adjoining areas, development that is sympathetic to heritage items, provision of infrastructure and compliance with amenity standards including the Apartment Design Guide, are achieved.
- 4.11. Develop a design excellence approach which encourages a competitive design process and excellent design outcomes. The City of Sydney's Design Excellence policy framework is the appropriate model.
- 4.12. Prepare a draft DCP, design code or the like, compliance with which is referenced in the proposed SEPP controls and is in a form able to be integrated with the Sydney DCP 2012. It should include appropriate development controls to inform future development of the precinct including: public domain, street hierarchy and typologies, connectivity, car parking, car share parking, bike parking, access and circulation, building footprints, heights including street frontage and podium, setbacks, building typologies, private open space, space for waste management, sun access, public art and heritage.
- 4.13. Detail and provide justification for the mix and location of proposed and existing land uses having specific regard to acoustic compatibility between noise generating and noise sensitive land uses.
- 4.14. Provide draft zoning and planning controls to amend State Environmental Planning Policy (State Significant Precincts) 2005 including maximum building height, FSR, heritage maps and noise compatibility requirements to ensure that potential noise related land use conflicts

are identified, and where necessary addressed at the design and construction stage of development.

5. Traffic and Transport

- 5.1. Prepare a comprehensive transport impact assessment, including maritime users: understand the transport network context, service and network limitations; identify transport solutions that will accommodate planned growth through integrating land use and transport and better managing travel demand and; identify opportunities for improving customer experience.
- 5.2. Hold a scoping meeting to agree upon an acceptable methodology with Transport for NSW (TfNSW), Roads and Maritime Services (RMS) and the City of Sydney Council (CoS).
- 5.3. The assessment should consider, but not be limited to:
 - Definition of a study area to be agreed by TfNSW, RMS, CoS and DPE
 - A broad review of the existing and future land use and transport context within the Bays Market District, including an assessment of access and connectivity within the precinct and its relationship to the surrounding transport network and land uses, including Central Sydney
 - Appraisal of current travel mode share in the Bays Market District including walking, cycling, public transport and private vehicles including shared vehicles
 - Assess the travel needs, behaviours and patterns of a broad range of future customers accessing the precinct including residents, workers, wholesale purchasers, servicing trades/deliveries, logistics providers, customers, visitors, diners and the like. Use benchmarking, forecast modelling tools and other sources of evidence
 - The transport outcomes and the effect of the transport network on the urban and place-making outcomes for the precinct
 - Access and connections to key destinations and infrastructure in the local area, in particular Central Sydney, schools, open spaces (especially Wentworth Park), community facilities, public transport infrastructure including light rail stations and bus stops and other local services, any potential future Metro Station and ferry wharf
 - Road safety, particularly for pedestrians, cyclists and particularly in the vicinity of the access and egress points for the new fish market
 - Location of existing and future wharves, maritime safety for vessels accessing any wharves / berths that are located in the Bays Market District, including any maritime navigational impacts or considerations
 - Access and egress and services arrangements for the new fish market, including management of queueing at peak times, to the extent that it relates to the planning framework
 - Performance of the existing and future pedestrian, cycling, public transport and road network, surrounding the Bays Market District, taking account the Bays Precinct SSP area any planned or proposed transport initiatives, such as: potential Metro Stations, ferry wharf, WestConnex and enabling works, and any modifications to Bridge Road. Performance of the road network is to account for access by pedestrians including waiting time at intersections on streets accessing the site

- Future needs of all water users including recreational, commercial, fish markets and ports users and an outline of how all water users can be accommodated in the future taking into account safety, operational, recreational requirements
- Consult with RMS regarding the potential to reinstate an active transport connection between the Bays Market District and the broader Bays Precinct and, specifically if a ferry service is proposed, in relation to land uses that maybe constrained by its use
- The following trip generating assessments for all modes and purposes associated with the proposal and the adjacent Sydney Fish Markets:
 - Undertake a trip generation survey of the Fish Markets, on a typical day. Report on previous survey or patron estimations from seasonal variations
 - Undertake a trip generation survey of a similar scale residential land use in a comparable geographic context
 - Estimate daily peak trip generation for different transport market segments across the day and week
 - Estimate seasonal peak tip generation for Sydney Fish Markets, including Christmas, Easter and any other potential events. Outline how these seasonal peaks and potential events will be managed from a transport perspective, including parking management, and
 - The trip generation rates are to be prepared specifically for the precinct based on an evidence-based review of standard rates, characteristics of the precinct, the experience of developments of similar scale, geographic context and consultation with key stakeholders, and trip generation surveys. Trip generation rates are to be agreed by RMS, TfNSW, CoS and DPE.
- Cumulative growth of the surrounding area based on committed and planned developments and proposed infrastructure (such as WestConnex and associated projects) as well as historical annual rates of traffic change for the past ten years at least
- Impact of additional travel demands by all modes on the transport network serving the site
- If a ferry service is proposed:
 - Assessment of the type of ferry service and a forecast of its patronage as part of the integrated transport solution servicing the Bays Precinct and the site
 - Consideration of the impacts of any proposed new ferry terminal and associated ferry services on existing and future maritime developments within the White Bay and surrounds
 - Consideration of the impacts on the existing Glebe Island Bridge, and
 - Consideration of the impacts and implications on any potential future upgrade of Glebe Island Bridge.
- Establish a flexible and resilient system of access corridors (that considers the City of Sydney's Liveable Green Network) within the precinct (streets, walkways, open spaces) to connect and serve the precinct and local area, including to Central Sydney. Outline how this system of access corridors will drive visitation to the new Sydney Fish Market and strengthen Sydney's visitor and tourist economy.

- Develop a traffic model to determine improvements to the movement network required to support the proposal, (scope, parameters and methodology to be agreed with RMS and to be carried out in accordance with RMS Traffic Modelling Guidelines 2013) including street hierarchy and spatial provision for all modes of travel, including pedestrians and cyclists
 - Develop an appropriate framework including potential inputs from strategic modelling to identify and validate required improvements to support the uplift in demand and target behaviours
 - Detail the transport infrastructure and servicing improvements including identification of both the land (corridor preservation) and capital components to support the proposal including staging, costings and delivery and funding responsibilities
 - Consider the role of shared vehicles and automated vehicles in managing travel demand and provide any recommendations for implementation of shared and automated vehicle solutions
 - Provide recommendations for land mix use designed to manage travel demand and create a walkable neighbourhood
 - Assessment of the impact of the proposal on the surrounding suburbs of Glebe, Ultimo and Pyrmont identifying existing on-street parking controls and traffic treatments, and identifying parking and traffic mitigation measures to protect local amenity in these suburbs
 - Assessment of the impact of the proposal on access to Sydney Secondary College, Blackwattle Bay Campus, especially during the hours of high traffic use (07:45-09:00 and 14:45-15:45 school days)
 - Provide recommendations for car, car share and bicycles parking rates within the capacity of the existing road network, to reduce private vehicle travel demand and promote travel by walking, cycling and public transport
 - Provide recommendations on the extent of end of trip facilities to be provided to support travel by active transport, particularly by staff to the new fish and food market
 - Provide a strategic level assessment that demonstrates that on-site parking, servicing, access and egress requirements can be designed in accordance with RMS and CoS guidelines and relevant Australian Standards. An assessment of the servicing and queueing rates of any proposed mechanical parking facility should be included
 - Prepare a staging plan that has trigger points for potential future development based on the delivery of transport infrastructure and service improvements
 - Prepare a draft Travel Plan, including intended actions, monitoring, review and implementation as well as responsibilities for implementation and detailing all modes of transport available to future residents, visitors and employees of the site, noting that a final travel plan will be required once final uses and tenants are determined, and
- 5.4. Prepare required DCP / design provisions in collaboration with CoS and DPE.
- 5.5. Provide an overview of potential impacts of construction traffic on existing and potential future development. Identify a strategic construction approach, including identification of potential staging that broadly outlines the construction area and construction related traffic access.

- 5.6. Any proposed physical, access, maintenance, operational, urban design and heritage (if applicable) impacts on Roads and Maritime Services assets that form part of the proposal must involve consultation with and must be approved by Roads and Maritime Services.

6. Housing and Affordable Housing

- 6.1. Undertake a housing needs analysis for the precinct to identify the appropriate mix of dwelling types, tenures, sizes and price-points necessary to support a diverse, healthy and socially sustainable community. The analysis should have regard to the intended provision of affordable housing, consider the needs of renters, investors and owner occupiers and measures to ensure a diverse, inclusive, healthy, socially connected, liveable and sustainable community.
- 6.2. Demonstrate how the proposed planning controls will support the achievement of housing and tenure objectives.
- 6.3. Identify the range of mechanisms/models to provide affordable housing (including affordable rental housing for very low, low and moderate income households) and assess their feasibility. Maximise provision of affordable housing noting the target of 5%-10% of new floor space referenced in the draft Central District Plan or any greater target if NSW Government policy changes.

7. Biodiversity

- 7.1. Assess and document biodiversity impacts in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEHL, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995*.

8. State and Regional Infrastructure

- 8.1. Outline the impact of the proposal on State and regional infrastructure, including public transport, roads, stormwater and drainage, human services, education and health facilities required to meet the characteristics and likely needs of the current population during the development period and the likely future population, including the estimated costs (inclusive of land and capital) and timing of the works.
- 8.2. Outline the scope, mechanism/s and delivery responsibility for development contributions between the Proponent and infrastructure agencies, such as transport, education and health, for infrastructure that meets the needs of the future population having regard to the infrastructure schedule and the City of Sydney Council's existing contributions plans and possible State Infrastructure Contributions plans.
- 8.3. Identify land to be reserved for future provision of state infrastructure including but not limited to public transport, health services, schools and emergency services and identify the appropriate zoning to accommodate their future needs.
- 8.4. Ensure that school provision is determined with reference to the demographic information established by the Population Demographic study at section 26 and outline any consultation with the Department of Education, including reference to their policies and procedures.

9. Local Infrastructure and Contributions

- 9.1. Outline the future community profile, in age groups and time series format, of the proposal (as established by the Population Demographics Study) see section 26.
- 9.2. Analyse the existing and currently planned local infrastructure within the catchment of the Precinct.
- 9.3. The provision of open space and recreation facilities is to be consistent with the City of Sydney Open Space, Sports and Recreational Needs Study 2016. Close consultation with the City of Sydney is required, along with detailed justification for any variation.
- 9.4. Identify the local infrastructure needed to meet the needs of the future community including recreation, open space (active and passive), community facilities, education facilities, health facilities, primary care facilities, libraries, childcare, local pedestrian, cycling and transport facilities, local drainage, seawalls, water sensitive urban design, jetties and other foreshore infrastructure. Develop a cost plan of all infrastructure required to support the proposal.
- 9.5. Prepare an infrastructure schedule for local infrastructure, including the funding arrangements, potential land reservations, floor space provision, estimated costs, timing and delivery responsibilities relevant to staging of the development. The schedule is to differentiate any works that are needed to manage the impacts of the development.
- 9.6. Outline the proposed ongoing responsibilities and maintenance of any proposed open space/connections, drainage reserves, community facilities and foreshore infrastructure identified in 9.4.
- 9.7. Consult with the City of Sydney Council to achieve agreement on the provision and responsibilities for local infrastructure and outline details of any agreements with the City of Sydney for public use of community facilities.
- 9.8. Outline the scope and mechanism/s for development contributions to fund the infrastructure identified in the schedule having regard to existing contributions plans, including the City of Sydney Development Contributions Plan 2015. Identify any gaps in local infrastructure funding and potential funding sources.

10. Utilities

- 10.1. Provide a utilities and infrastructure servicing report identifying existing capacity, required capacity and augmentation needed for the proposal, sustainability and climate change adaptation measures (including Water Sensitive Urban Design (WSUD), and measures to manage increasing heat and changing rainfall patterns) and staging.
- 10.2. The water utilities component must be prepared by a suitably qualified hydraulic consultant. The power utility requirements must be prepared by a suitably qualified (ASP) consultant.
- 10.3. The utilities and infrastructure servicing report should outline the development yield and staging and should include a high-level assessment of the capacity of:
 - o Ausgrid electrical network to service the development and outline the likely impacts on the broader Ausgrid electrical network. This will include direct engagement with Ausgrid on the high-level impacts to ensure early understanding and visibility of any network augmentation required, and

- Sydney Water's network to service the development and the proposed servicing options considered for the development including wastewater and stormwater recycling for non-potable use. It should propose sustainability initiatives for the development, including any proposed alternative water supply, proposed end uses of drinking and non-drinking water and proposed water conservation measures. It should also confirm whether there is adequate capacity in the existing sewerage system to cater for additional loads and the systems environmental performance will not be compromised.
- 10.4. Integrate outcomes of the ESD study and flood risk assessment to ensure optimisation of sustainable infrastructure opportunities.
- 10.5. Investigate a strategy for the undergrounding of overhead power, communication and other utilities.

11. Heritage

- 11.1. Prepare a heritage assessment that investigates the history, physical evidence and significance of the features within the study area, based on a site inspection and documentary research, to identify and conserve features of local or greater heritage significance.
- 11.2. The heritage assessment is to be undertaken in accordance with guidelines set out in the NSW Heritage Manual, the methodology described in "The Conservation Plan" (J S Kerr 1996) and in the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (the Burra Charter).
- 11.3. This assessment is to review, but is not limited to, features of potential heritage significance within the precinct including:
 - Buildings: all existing
 - Landscaping elements: built and planted
 - Waterways
 - Monuments or public art installations
 - Infrastructure: street patterns and stormwater
 - Potential archaeological relics, and
 - Places of social significance.
- 11.4. A detailed Maritime Archaeological and Heritage Assessment (desktop and possible underwater survey) is to be undertaken that assesses the significance of buried or submerged maritime heritage sites (e.g. shipwrecks both archaeologically located and known from historical records, anchors or other historic maritime infrastructure sites including piers, seawalls and other maritime industry components, and associated relics), which may exist underwater, under the seabed or under areas of reclaimed land (especially at the fish markets site and behind the Blackwattle Bay Coal Loader site, and Rozelle Bay Parkland).
- 11.5. The Maritime Archaeological and heritage assessment should be undertaken by a suitably qualified and experienced specialist maritime archaeologist who has an understanding of the effects of dredging and reclamation process on former submerged maritime infrastructure sites and other submerged maritime heritage sites.

- 11.6. Provide recommendations for the management of heritage significance – to guide future development or planning to retain the assessed significance of features, including features to retain and re-use, treatment of specific spaces and fabric of significance, view corridors, setbacks and heights for new development in the vicinity, photographic archival recording or oral histories.
- 11.7. Prepare the required design provisions, in collaboration with CoS and DPE, which are able to be integrated into Sydney DCP 2012 if required.
- 11.8. Provide an interpretation plan having particular regard to the precinct's relationship with nearby heritage items in accordance with *Interpreting Heritage Places and Items Guidelines*.

12. Aboriginal Cultural Heritage

- 12.1. Prepare an Aboriginal cultural heritage study to identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the study. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011).
- 12.2. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the study.
- 12.3. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the study. The study must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the study must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
- 12.4. Prepare the required design provisions, in collaboration with CoS and DPE, which are able to be integrated into Sydney DCP 2012 if required.

13. Arts and Culture

- 13.1. In consultation with CoS (including the City's Public Art Advisory Panel), Create NSW, the community and other cultural stakeholders, prepare an overarching strategy for how arts and cultural infrastructure will be considered at the early planning stages and incorporate into and around the precinct. This should include, but not be limited to, consideration of Aboriginal art, public art, art practitioner spaces, multi-use cultural venues and event spaces as well as festivals, performance, events and programming.
- 13.2. The strategy should propose a sound methodology for the selection, commissioning and delivery of arts and cultural infrastructure as part of future development applications including proposed ownership and maintenance arrangements for major public art.
- 13.3. Demonstrate how the strategy is consistent with the City of Sydney's Public Art Strategy, Public Art Policy, Guidelines for Public Art in Private Developments and Guidelines for

14. Urban and Marine Ecology

- 14.1. Prepare an ecological assessment by a suitably qualified ecologist. Include species and communities of local conservation significance, as identified in the City's Urban Ecology Strategic Action Plan (UESAP), as well as, listed threatened species and ecological communities. Include in the assessment:
- identify any species that are of particular conservation significance (including threatened species and locally-significant species identified in the City's UESAP)
 - determine the nature and extent of impacts to the urban vegetation and fauna and marine habitats, particularly those of conservation significance (if present), that are likely to result from each stage of the development, and
 - outline the mitigation measures that will be employed to avoid or minimise such impacts, including:
 - clearing and relocating of any onsite indigenous flora and fauna prior to works commencing
 - protecting of any significant habitat features, and
 - restoration/creation of compensatory habitat for any important habitat features removed/disturbed as a result of the development.
 - provide recommendations and identify opportunities to create habitat features that will benefit urban terrestrial biodiversity. This report should identify, but not be limited to, what habitat features are to be retained, species to be planted, and other habitat features are to be created.
- 14.2. Demonstrate that the findings of 'Guiding Principles for Marine Foreshore Developments' developed by the Sydney Institute of Marine Science and the University of Sydney have been considered in the proposed planning controls.
- 14.3. Ensure possibilities for the mitigation and restoration/creation of marine habitat are investigated.
- 14.4. Integrate the findings of other urban biodiversity/ecology parts of this study and demonstrate how these have shaped the plan for the site and how they contribute to meeting the City's Urban Ecology requirements and targets.

15. Urban Forest

- 15.1. This study requires a Project Arborist: qualified in arboriculture to Australian Qualifications Framework (AQF) Level 5 or above; and, who has at least 5 years' demonstrated experience in managing trees within complex development sites.
- 15.2. Provide a preliminary arboricultural report that identifies tree location, condition, quality, life expectancy and indicative Tree Protection Zones to enable the urban design to minimise impacts to trees.

- 15.3. Undertake an arboricultural impact assessment for the proposal outlining trees to be removed or retained and the possible impacts on the trees to be retained including allowing for future construction methodology.
- 15.4. The plan for the retention of existing and provision of new trees is to consider:
- The capacity of the public domain and urban design approach to protect existing trees and allow for the growth of new trees
 - Species selection that maximises solar access during winter within new streets and private domain
 - Species selection that complements existing park planting themes in Wentworth Park and Glebe foreshore parks
 - The provision of sufficient soil volumes and quality (including within the private domain) provide for long term tree health
 - Canopy design concepts that consider expanded verges and central verges (through setbacks, reduced carriageway or widened reservation) to increase planting, incorporation of landmark large scale trees in key locations and street gardens and low plantings to improve streetscape amenity, and
 - Coordinate outcomes of the Public Domain Design, Urban Design, Utilities (ensure overground utilities are undergrounded), Wind (ensuring that trees are not expected to be the wind mitigation device) and transport parts of this study.
- 15.5. Demonstrate how the project addresses the City of Sydney Urban Forest Strategy, in particular the following site specific targets:
- minimum canopy cover of 60% to streets, 30% to parks and 30% to private property
 - minimum species diversity targets of 40% family, 30% genus, and 10% species
 - minimum distribution of tree heights of 10% small trees (3-5m), 45% medium trees (5-10m), 35% large trees (10-20m) and 10% extra-large trees (20m+), and
 - Note: Wentworth Park, as a well-established park, is not to be included within the canopy cover measurements or species diversity targets.
- 15.6. Provide an indicative tree and planting strategy across the site, accounting for biodiversity and habitat considerations that includes:
- a tree sensitive public domain and that protects existing trees, and allows for the growth of new trees
 - species selection that maximises solar access during winter, within new streets and private domain
 - Species selection that complements existing park planting themes in Wentworth Park and Glebe foreshore parks and is tolerant to the foreshore site conditions, and
 - sufficient soil volumes and quality are provided for long term tree health.
- 15.7. Demonstrate that all relevant Council policies, strategies and master plans are considered including SLEP 2012, SDCP 2012, Urban Forest Strategy, Tree Management Policy, Street Tree Master Plan, Urban Ecology Strategic Action Plan and the Landscape Code.

16. Ecologically Sustainable Development (ESD)

- 16.1. Provide an Ecologically Sustainable Development Report which details how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated, specifically:
 - identify performance benchmarks to allow sustainability to be considered in site planning, building design and in the construction and operational phases of development to achieve best practice sustainability outcomes, and
 - commitment to compliance with a nationally recognised rating system (e.g. Green Star – Communities).
- 16.2. Provide an Integrated Water Cycle Management Strategy that considers water, waste water and stormwater. The Strategy must consider water sensitive urban design and any future water conservation measures, including water efficiency and reuse, following appropriate best practice and guidelines and priorities meeting non-potable water demands with recycled water or harvested stormwater.
- 16.3. Identify options to achieve a minimum of 50% renewable energy for the precinct, by maximising on-site generation and renewable energy generated off site.
- 16.4. Identify and implement waste management strategies to achieve NSW Government's Waste Avoidance and Resource Recovery Strategy 2007 (WARR) and compliments the NSW Government's Waste Less, Recycle More initiatives and EPA waste and recycling programs. Include measures to ensure effective operational waste management, for example adequate space within buildings for waste infrastructure, off-street storage for collection and accessibility for waste collection vehicles. Identify both building and precinct scale solutions.
- 16.5. Prepare the required design provisions, in collaboration with CoS and DPE, which are able to be integrated into Sydney DCP 2012 if required.

17. Climate Change Adaptation

- 17.1. Undertake a sustainability assessment of the proposal, reflecting the directions outlined in the 'NSW Climate Change Policy Framework', October 2016, and the draft Central District Plan "Creating an efficient Central District" to achieve net-zero carbon emissions by 2050. Investigate options for achieving both net zero buildings and a net zero precinct.
- 17.2. Provide a Climate Change Adaptation Report which details how the proposal will address social, environmental and economic effects of climate change on future communities (see NSW and ACT Regional Climate Modelling: NARCLIM), including designing to manage changing temperatures and rainfall patterns through the integration of vegetation (existing and future), permeable and reflective surfaces, and Water Sensitive Urban Design features.
- 17.3. Assess the potential impacts of climate change on vulnerable groups, including older people, and mechanisms for implementing mitigation strategies.
- 17.4. Undertake sensitivity analysis to address the impact of climate change due to increased temperatures, extreme heat events and changing rainfall patterns as informed by the Water Quality, Flooding and Stormwater Study.
- 17.5. Demonstrate consideration of the *Urban Green Cover in NSW Technical Guidelines* (OEH, 2015).

- 17.6. Demonstrate that compliance with BASIX is achievable and investigate opportunities to deliver beyond-compliance BASIX scores: Energy 40 and Water 60 for residential buildings (6+ storeys).

18. Feasibility and Economic Benefits

- 18.1. Provide an analysis of the market demand for the proposal.
- 18.2. Demonstrate that the development can be delivered in the context of prevailing market demand and supply trends, achievable uptake rates relating to development staging and product mix.
- 18.3. Provide an economic assessment of the proposal, including the likely wider economic benefits.
- 18.4. Provide an assessment of the likely economic impacts of the rezoning of industrial and maritime related land.
- 18.5. Undertake an economic analysis testing feasibility of future development to contribute towards local, State and regional infrastructure.
- 18.6. Investigate the potential for visitor accommodation within the precinct and consider an appropriate target, taking into account access and connectivity to existing and planned nearby visitor accommodation including in the wider Bays Precinct.

19. Economic Development, Local Retail and Services

- 19.1. Prepare and analyse the local economic and employment profile for the precinct and local area.
- 19.2. Analyse the economic development, local employment and local retail and services needs to support the development and economic sustainability of the precinct, ensuring a highly walkable precinct with a high degree of containment, its future community and relevant local and regional centres.
- 19.3. Identify the quantum of floor space required to support economic development, local retail and service provision.
- 19.4. Develop a strategy to deliver strategically important uses, through market delivery combined with targeted interventions where market delivery will not satisfy identified needs.
- 19.5. Consider the role of the precinct in terms of employment, retail, local services and other economic generating land uses within the local and regional context including nearby local centres such as Ultimo, Pyrmont, Glebe and Broadway.
- 19.6. Identify measures to ensure the development of the precinct meets the economic development, local employment and local retail and service needs of the community and supports the economic development of neighbouring centres. This is to consider the different service, business and employment needs of groups within the community.
- 19.7. Provide recommendations to inform planning controls on the quantum of retail, service and employment floor space needed to meet the needs of the vision and objectives of the project.

20. Geotechnical and Contamination

- 20.1. Provide an assessment of the local soil and seabed, outlining its suitability for the proposed uses with respect to erosion, salinity, acid sulphate soils and other relevant considerations.
- 20.2. Provide an assessment of the proposed land uses in accordance with State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55). The assessment should also consider the foreshore area to inform any remediation management approaches and its management. In particular, if lands are being proposed for recreational use the assessment should document management approaches to ensure the lands are fit for their intended use.
- 20.3. Due to the lands current and past industrial use, an EPA-accredited Site Auditor should be involved within the contamination management process. This also includes the provision of a Site Audit Statement certifying that the land is suitable for the proposed use(s).

NOTE: In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with guidelines made or approved by the EPA under Section 105 of the Contaminated Land Management Act 1997 and be in accordance with the requirements and procedures in the Contaminated Land Management Act 1997, Contaminated Land Management Regulation 2013 and SEPP 55 – Remediation of Land.

21. Water, Riparian Land, Flooding and Stormwater

- 21.1. Provide an assessment of any potential impacts of the proposal on the hydrology and hydrogeology of the precinct and adjoining areas. Include particular focus on water quality, the extent to which development protects, maintains or restores water health and the community's environmental values and use of waterways for Sydney Harbour (also known as the NSW WQO). Consider these water quality targets in Sydney DCP 2012:
 - Reduce the baseline annual pollutant load for litter and vegetation larger than 5mm by 90%
 - Reduce the baseline annual pollutant load for total suspended solids by 85%
 - Reduce the baseline annual pollutant load for total phosphorus by 65%, and
 - Reduce the baseline annual pollutant load for total nitrogen by 45%.
- 21.2. Provide a concept Stormwater Management Plan outlining the general stormwater management measures for the proposal, with particular emphasis on possible WSUD options. This should also include measures for ongoing maintenance including any associated funding approaches for ongoing management.
- 21.3. Consider the effect of climate change and changing rainfall patterns on stormwater and floodplain management and undertake a sensitivity analysis to address the risks and impacts including sea level rise.
- 21.4. Provide details, and an assessment, of impacts of the proposal on watercourses, wetlands and riparian land on and adjoining the urban renewal precinct, including proposed rehabilitation, management and maintenance, zoning and proposed future ownership of riparian land.

- 21.5. Provide a hydrogeological assessment, including details on groundwater quality, quantity, levels and flow, groundwater dependent ecosystems, water licensing requirements, proposed monitoring, and consideration of the NSW Aquifer Interference Policy.
- 21.6. Provide a flood risk assessment developed in consultation with City of Sydney Council identifying flooding behaviours for existing and developed scenarios in order to outline the suitability of the land for proposed uses. The flood assessment should identify flooding characteristics i.e. flow, levels, extent, velocity, rate of rise, hydraulic and hazard categories, for the full range of flooding up to the probable maximum flood (PMF), for both mainstream and overland flow path.
- 21.7. Consider the future cumulative flood risk impact across the entire Bays Market District and adjoining land areas.
- 21.8. Address the impact of flooding on future proposed development including flood risk to people and properties for key flood events including the 1% AEP and the probable maximum flood (PMF) event. The assessment should address relevant provisions of the NSW Floodplain Development Manual (2005) and the City's Interim Floodplain Management Policy.
- 21.9. Provide an assessment of possible impacts of the proposal on the flood behaviour (i.e. flow levels, extent, velocities and duration of flooding) and the impact of the proposal on adjacent, downstream and upstream areas.
- 21.10. Provide concept level information on the impacts of future earthworks and filling of land within the proposal. This assessment should be based on an understanding of staging and cumulative flood impacts.
- 21.11. Provide preliminary assessment on recommended flood management measures including mitigation works and development controls in accordance with the City's Interim Floodplain Management Policy.
- 21.12. Provide recommendations regarding the most appropriate emergency response strategy to manage risk to life and property.
- 21.13. Provide concept level details of the drainage associated with the proposal, in accordance with the City's Stormwater Drainage Design Code including stormwater drainage infrastructure and address the impact of stormwater flows on the site from other catchments.
- 21.14. In addition to securing an acceptable level of personal and property safety from flooding, the proposal is to ensure that measures to address flooding can achieve high quality urban design outcomes, including ground floor public – private domain engagement i.e. how ground floor retail can be entered at ground at footpath level, and promote water quality outcomes through measures such as water sensitive urban design (in the public and private domains).
- 21.15. Prepare an implementation plan for the concept Stormwater Management Plan and Flood Risk Assessment.
- 21.16. Demonstrate, through assessment against established criteria, how the proposed flooding and stormwater strategy achieves acceptable water quantity and quality outcomes, and in particular promotes water sensitive urban design.

22. Noise and Pollution

- 22.1. Provide a noise impact assessment for the proposal. The assessment will address the relevant policies and guidelines in relation to noise including *State Environmental Planning Policy (Infrastructure) 2007* and the *Development Near Rail Corridors and Busy Roads – Interim Guideline*.
- 22.2. Consider and assess potential pollution impacts from the proposed rezoning including, but not limited to, water, air, noise and light pollution.
- 22.3. Provide an air quality assessment for the proposal. The assessment will address the relevant policies and guidelines in relation to air quality including State Environmental Planning Policy (Infrastructure) 2007 and the Development Near Rail Corridors and Busy Roads – Interim Guideline. These assessments should also consider other current and future local air and noise issues in the Bays area, including potential cumulative impacts from the current Sydney Fish Market and from maritime uses in the Bay.
- 22.4. Consider the approaches conceptually being applied in the Parramatta Road Corridor Urban Transformation Strategy (noting the difference in noise levels on a vertical plane). A copy of these measures can be obtained at:
<http://www.urbangrowth.nsw.gov.au/assets/Projects/Parramatta-Road/Publications-161109/Strategy-Documents/6.-Implementation-Tool-Kit-Planning-and-Design-Guidelines-November-2016.pdf>
- 22.5. Identify and map current and proposed future sensitive receptors (eg residential uses, schools, child care centres and public open spaces).
- 22.6. Identify current and likely future noise, vibration and pollution affecting the precinct, including sources and nature and impact. Site monitoring will be required to determine current road noise levels for the Anzac Bridge approach, Western Distributor, Bank Street and Bridge Road at a minimum. Monitoring will also be required to determine current noise levels from the Sydney Fish Market (particularly from service vehicles) and maritime uses in the bay. 3D mapping to clearly communicate these impacts, including demonstrating for example how noise reduces with distance from the source, or with the use of barriers, is desirable.
- 22.7. Assess the impact of potential noise generated from the relocated fish market on Sydney Secondary College and Blackwattle Bay Campus (particularly during exam times).
- 22.8. Model the likely future noise, vibration and pollution scenario based on 3D block envelope diagrams prepared by the consultant appointed urban designer. This is to include noise generated by road rail and maritime uses and noise from the Sydney Fish Market, particularly from service vehicles.
- 22.9. Recommend appropriate noise and vibration mitigation measures. The consultant is expected to work with the consultant appointed urban designer, and suggested measures are to cover new buildings (ie careful siting and layout of buildings maintaining natural ventilation through open windows as required by the Apartment Design Guide).
- 22.10. Outline the recommended measures relating to noise, vibration and pollution to minimise the nuisance and harm to people or property within / adjoining the precinct.

23. Wind

- 23.1. Provide a complete understanding of the existing wind characteristics of the precinct. Consider the wind climate of Sydney, local characteristics such as topography that modify this wind climate for the precinct and the impact of existing buildings on wind conditions.
- 23.2. Ensure early consideration of potential wind impacts and amelioration approaches through the layout and arrangement of the public domain and the built form.
- 23.3. Advise on measures to ensure the suitability of areas for their intended use with regard to the impact of wind on comfort and safety. In particular, this is to focus on the public space areas intended to be used for seating (ie the foreshore reserve, outdoor dining areas on footpaths and public plazas) and standing (ie building entries); and, also for outdoor private recreation areas to be suitable for sitting (eg balconies, decks and outdoor communal private open space). Advise on the placement, orientation, shape and external design of buildings, and relevant wind mitigation devices including screens and awnings.
- 23.4. Any advice on landscaping of public space must accord with the City of Sydney's Public Design Manual and the Public Domain design. In general, landscaping can only be used for wind mitigation if it is already in place.
- 23.5. Include areas surrounding the precinct that may be wind affected as a result of the proposal.
- 23.6. Undertake an assessment to demonstrate that subject to any recommended measures, wind will not have an unacceptable impact on the proposal, and the proposal will not generate unacceptable wind impacts.
- 23.7. Wind tunnel testing is required.

24. Aeronautical

- 24.1. Review relevant background information, including the Sydney Airport Master Plan 2033 to understand the current and proposed future operations of Sydney Airport, as relevant to the precinct.
- 24.2. Identify and clearly map the OLS, PANS OPS and any other relevant Sydney Airport height limitation layers, including consideration of Navigation Aid Surfaces.
- 24.3. Translate these layers into a maximum height for permanent structures (e.g. buildings) and temporary structures (e.g. cranes). Engage a building methodology specialist to translate this information into maximum building envelope height planes.
- 24.4. Advise on other measures, if necessary, to ensure the precinct does not have an adverse impact on the operations of Sydney airport, eg lighting, reflective surfaces etc.
- 24.5. Advise on the pathway required to secure approval from relevant bodies, e.g. Air Services Australia, as part of subsequent development application processes, including for temporary structures such as cranes.
- 24.6. Certify that subject to any recommended measures, the precinct proposal will not have an adverse impact on the operations of Sydney Airport.

25. Social Sustainability Assessment

- 25.1. Prepare a comprehensive Social Sustainability Assessment (SSA) of the proposal. The SSA should be prepared in accordance with the Planning Institute of Australia's policy position on SSAs. It should provide recommendations to ensure that the proposal can achieve UrbanGrowth's sustainability goal of creating the world's most liveable urban communities. Specifically, it should:
- demonstrate how the proposal aligns with relevant principles in the City of Sydney's Social Sustainability Policy and Discussion Paper "A City for All: Towards a Socially Just and Resilient Sydney"
 - demonstrate how the proposal aligns with the vision and goals of, and contributes towards the targets in, UrbanGrowth's draft Sustainability Strategy. Specifically, the study should:
 - Identify specific initiatives to foster the integration of existing community networks in the Pyrmont and Glebe communities into the proposal
 - Recommend how existing and future community facilities may be integrated in the proposal to ensure equitable access to a broad range of minority groups and different age, income and cultural groups and to achieve UrbanGrowth's objectives of healthy and inclusive places,
 - Identify how the development, given its proximity to the water, may foster the relationship between water, landscape and urban living in order to enhance social well being, and
 - Identify specific initiatives design strategies and management approaches to embed arts and culture into the existing character, local heritage and sense of place as understood by the existing adjacent communities.
 - Cross reference other relevant parts of the broader State Significant Precinct Study, assessing how their recommendations may contribute to the social sustainability of the proposal. These include: Local Infrastructure and Contributions Plan; social infrastructure component of the State and Regional Infrastructure study; Consultation; Public Domain; Affordable Housing; Population Demographics and Health Impact.
 - Outline opportunities to promote positive social outcomes to meet the needs of the future community and existing adjoining communities including Glebe and Pyrmont and document the measures in a site-specific Social Sustainability Plan. Measures should be tangible, timely and effective within the ability of the proponent to deliver and/or agreed with key partners. Measures require effective and costed implementation mechanisms and responsibilities which are agreed with key partners (where necessary).

26. Population Demographics

- 26.1. Determine the most suitable data set, model (or combination of models) and assumptions to be used to inform forecasts of future population and employment. Assumptions to be agreed include average size of dwellings, average dwelling occupancy, average floor space per worker and others where relevant. Data for employment is to be consistent with the City of

- Sydney's 2012 floor space and employment survey (FES) updated when available. Consult with NSW Department of Planning and Environment, and City of Sydney on methodology.
- 26.2. Identify and clearly communicate (including through the use of maps, tables and charts as appropriate) key population and employment drivers and trends impacting the precinct and surrounding communities.
 - 26.3. Identify the key population and employment attributes of comparable higher density inner city Sydney communities such as Pyrmont, Kings Cross/Potts Point.
 - 26.4. Prepare a population and employment profile of the future community including dwelling types, age profile, ethnicity, education, employment, income, household types, housing tenure, car ownership, trip to work mode and other information required by the various parts of this study.
 - 26.5. Compare precinct data with the remainder of the City of Sydney LGA and Greater Sydney Metropolitan Region for the purposes of benchmarking.
 - 26.6. Prepare time series (5 year increments) population and employment profiles of the precinct and surrounding community (including dwelling and job yields) based on trend, without the SSP Study.
 - 26.7. Prepare time series (5 year increments) population and employment profiles of the Precinct and surrounding community (including dwelling and job yields) based on trend, with the SSP Study. Reference dwelling yields for the precinct will be provided for the precinct.
 - 26.8. Update data as the 2016 census results become available.

27. Health Impact Statement

- 27.1. Using the NSW Government's 'Health Impact Assessment: A Practical Guide' for guidance, prepare a Health Impact Statement for the proposal, including the following steps:
 - Using the data from Population Demographics Study in section 24 prepare a community profile
 - Based on the community profile identify and document potential health impacts resulting from the development
 - Include information provided in Section 16. Noise and Pollution
 - Assess the significance of impacts and prioritise, and
 - Develop action-oriented recommendations to address the identified impacts.

28. Consultation

- 28.1. Undertake an appropriate and justified level of consultation with Council, other relevant State and Federal government agencies, private landowners including those within the study boundary, non-government service providers and community stakeholders during the preparation of the study. Include the Department of Education and Principals of Sydney Secondary College and Blackwattle Bay Campus.
- 28.2. Align consultation with International Association for Public Participation core values and demonstrate integration of the guiding principles of community engagement including:
 - Integrity – clear scope and purpose
 - Inclusiveness - inclusive and accessible for all those affected
 - Open discussion - designed to facilitate genuine dialogue and discussion with the community, and
 - Opportunity to influence - Provides the opportunity for the community to influence outcomes.
- 28.3. Outline a consultation strategy that addresses key aspects of the proposal including spatial arrangement of development, staging, open space, amenity, transport, community facilities, infrastructure and community resilience to manage change.
- 28.4. Demonstrate that the consultation program has built confidence in the process by considering the context including: the role and relationship of the proponent to the existing and surrounding community; the history of development proposals in the area; the history of previous consultation including the Community and Business Reference Groups, open days, summits and surveys; the history of Aboriginal and Torres Strait Islander Communities in the area and the community's perception of its capacity to influence decisions.
- 28.5. Hold at least 2 (two) workshops, to be professionally facilitated, which involve private landowners, DPE and CoS with the intent of understanding private landowner aspirations and how they will be considered as part of the proposal. The number and timing of workshops is to be agreed with DPE and CoS to allow workshop outcomes to inform the vision and options for the project.
- 28.6. Measure and evaluate the adequacy and effectiveness of the consultation against:
 - Appropriateness – Was the engagement appropriate for the communities affected and how well did stakeholders accept the process
 - Reach – Were the people reached sufficiently representative of those affected by the decision, and
 - Outcomes – Were the intended outcomes of the engagement process achieved.
- 28.7. Provide a summary report of the general outcomes of early consultation and how the outcomes have been incorporated into the proposal (or justification where outcomes have not been incorporated into the proposal). The report should contain a specific section summarising the outcomes of private landowner workshops demonstrating how the findings of the workshops have been considered as part of the proposal and how the proposal results in a fair and impartial distribution of development potential between Government-owned and privately owned land having regard to site opportunities and constraints.
- 28.8. Provide evidence of consultation (including letters, minutes of meetings, charrette/drop in event summaries and formal advice) with Council, government agencies and adjoining land owners.

