APPENDIX 8

Design Statement

Barangaroo

Design Statement

Response to Director General's Requirements



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This summary report is not a stand alone document: it refers to a number of other relevant documents, drawings and specifications prepared by the project team, and these documents must be referred to for a full description of the design proposals.

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Site Context

Urban context

The site of the Headland Park is surrounded by water to the north and west and is situated at the northern tip of the Barangaroo Precinct. The site is located to the north-west of the Sydney Central Business District, abutting the refurbished finger wharves of Walsh Bay to the north-east, the historic precincts of Millers Point and The Rocks to the west and new developments of King Street Wharf to the south. The site lies immediately adjacent to the curtilage of the relocated Moores Wharf and the sandstone cliff of Millers Point which rise approximately 18m above.

The urban form neighbouring the site evolves from north to south. Walsh Bay is characterised by 20th century forms of piers and shed structures, while Millers Point presents 2-storey terraces built between 1835 and 1879 (Merriman Street) and during the early 20th century (High Street). Further south, the built form is dominated by recent commercial multi-storey city buildings.

Historical context

The area known as Gomora (now Darling Harbour) forms part of the territory occupied for millennia by the Darug coastal nation with the site forming the boundary between the Wangal and Gadigal clans to the west and east respectively and the Gommerigal to the south.

Traditionally, the site was connected to both water and city by industrial, social, physical and visual links. The current isolation of the site is due to physical barriers like the Sydney Harbour Bridge approach and several massive sandstone cuts. These reclamation and filling processes have been carried out progressively since the mid 19th century to the present in order to adapt the formerly steep foreshore lands for port facilities. Former steps, ramps and finger wharves leading to the water's edge have been gradually removed to accommodate the process of containerisation for shipping movements within the port of Sydney. These changes in trading techniques led to a significant change in the demographic of the area with a decrease of wharf personnel living in the immediate vicinity of the site.

Physical context

The Headland Park is situated to the north-west of Sydney's CBD, protruding into the harbour in close proximity to surrounding promontories such as Blues Point, Balls Head, Goat Island, Ballast Point and Illoura Reserve with their typical landscape character of mature trees in rocky sandstone topography.

The Headland Park site is a vast, gently sloping hard stand apron (RL+2.4 to +3.2), having been created through cutting of the indigenous sandstone landform, filling and construction of sea walls and concrete decking. Since the demolition of large-scale storage sheds related to cargo operations in early 2008, few physical elements remain on site.

Environmental context

Munn Street Reserve and the Clyne Reserve are currently the only parklands on the site.

Munn Street Reserve is on the closed part of Munn Street, west of High Street. This area was part of the 1834 land grant to Scotsman James Munn, who operated a shipbuilding yard with a floating dry dock. Munn Street originally ran down to the foreshore and then wrapped around the Dalgety's Bond Stores, thereby connecting Hickson Road via bridge with Argyle Place. This connection was lost during the reclamation works of the late 1970s and resulted in a 14.5m high sandstone cut on the western side. Another 5m high cut separates the northern part of Munn Reserve from the main body of the park. The current tree planting consists predominantly of groups of mature Casuarina glauca (Swamp Oak) and Ficus rubiginosa (Port Jackson Fig). Aside from the tree planting in Munn Reserve, the only other significant tree planting is immediately adjacent to the east of the site: A row of Ficus microcarpa var. 'hillii' (Hills Weeping Fig) runs along the western side of Hickson Road.

Site Context

A children's playground was established on 13 June 1950 at the corner of Dibbs Street and Merriman Street on a site leased from the Maritime Services Board. In 1952 the playground was named Clyne Reserve in honour of Hon Daniel Clyne MLA, 'in recognition of the major part played by Mr Clyne in the negotiations for the lease of the land by Council from the Maritime Services Board'. Clyne, a railway worker and union official, was MP for the seat of King from 1927 to 1956. In 1978 the Maritime Services Board acquired the Clyne Reserve land for excavation and building works to redevelop Darling

Harbour as a container port, which was completed in April 1981. The Board then landscaped the remaining area and handed it back to the Council in September 1981. Four teams of stonemasons worked for six months to construct 420 metres of stone walls around Clyne Reserve. The Board used local sandstone it had preserved from the excavations for No 3 Darling Harbour and about 80 metres of pre-World War 1 wrought-iron fencing. The adjacent Port Operations and Communications Centre tower opened on 12 August 1974.



Barangaroo Site Context

Landscape Vision

Barangaroo is to be a bold and inspiring place defined by its waterfront and CBD location and by the excellence of its urban design, architecture and public domain.

It will be a dynamic place for all people to create an environment, which is connected, supportive, secure, collaborative and diverse.

It will provide places for meeting, gathering and interaction whilst respecting social and architectural heritage of the precinct and its city. It will be an exemplar in sustainable development."

The overriding vision for the Headland Park is to create a grand harbour park as an iconic passive open space with a naturalistic form and character, reminiscent of what historically may have existed on the site.

The Headland Park will be designed to restore the Miller's Point Neighborhood connections to Sydney Harbour and Barangaroo. Direct access to a new waterfront park and continuous foreshore promenade will rehabilitate the area, and in the process transform Argyle Street and Miller's Point from the back side of the Rocks into a dynamic participant in the overall city fabric and public foreshore system.

The park will serve the adjacent neighborhood, the citizens of Sydney, and visitors to Sydney. The headland park will replace the existing void on the Sydney waterfront, adding to the overall international image of grand parks, surrounding landmarks such as the Harbour Bridge and The Opera House, and greatly enhancing the reputation of the Sydney Rocks as one of the most significant places in the city.

The Headland Park will significantly complete the blue/green open space web of Sydney's western harbour and city edge. The new landscaped headland will complete the ring of prominent harbour headlands and islands formed by Blues Point, Balls Head, Ballast Point, Illoura Reserve and Goat Island (Mel Mel) and re-connect the shoreline and pedestrian open space link with Clyne Reserve, Argyle Place and Observatory Hill.

The Headland Park within the Barangaroo District, will create a natural connection to the waterfront, connecting Darling Harbor to Walsh Bay. What has historically been the backside of Sydney, will be transformed into a new and iconic foreground to the city, and as a catalyst for urban redevelopment, fully participating in the city's future potential.

Landscape Objectives

- 1. Establish a new iconic Headland Park on Sydney Harbour at the northern gateway to the Barangaroo development.
- 2. The headland park will have naturalistic form with its perimeter guided by the shape and form of the 1836 shoreline.
- 3. Extend the park from Merriman Street to the water's edge with grassy slopes, steep densely planted slopes on the west and south, pathways and native plantings to highlight the local and harbour context.
- 4. The character of the park will reflect the rugged sandstone topography of Sydney Harbour and include dense plantings of endemic species on the steep slopes and large semi mature trees including Port Jackson Figs on the grassy slopes, similar in character to the parklands at Mrs Macquarie's Chair.
- 5. The park will provide for passive recreation and activities suited to its elevated position, such as for the viewing of fireworks on the harbour.
- 6. Create a generous cove at the southern end of Headland Park, creating a visual link to Hickson Road.
- 7. Incorporate a small wharf as a temporary set down for water taxis and other watercraft.
- 8. Integrate an underground car park for 300 cars under the Headland Park, with entry and exit from Dalgety Road.
- 9. Integrate a large internal space, approximately 75,000m3 in volume, to cater for a future cultural use.
- 10. Ensure an accessible and safe public domain throughout the day and night.
- 11. Ensure the design adheres to relevant Australian Standards.

Crime Prevention and Public Safety

Crime prevention and public safety is an important consideration for the Headland Park and Northern Cove. The Headland Park has been designed to take into account the principles of Crime Prevention Through Environmental Design (CPTED). These principles include:

- 1. Surveillance
- 2. Access Control
- 3. Territorial Enforcement
- 4. Space Management

Surveillance

- It is known that the attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical. Good surveillance means that people can see what others are doing.
 People feel safe in public areas when they can easily see and interact with others. Would be offenders are often deterred from committing crime in areas with high levels of surveillance. This has been incorporated in the design of the park by:
- Extensive lighting of all main pathways and open space areas
- Providing clear sightlines from neighbouring properties on Merriman, Bettington and High Streets and Hickson Road into the public domain
- Providing clear views for vehicles on Hickson Road through the site to the Northern Cove
- Providing a wide foreshore promenade and open public spaces with clear sightlines
- Eliminating the use of tall shrub planting alongside paths and ensuring clear landscaping beneath large trees so that potential offenders have no place to hide or entrap victims
- Use of CCTV cameras

Access control

The park has been designed so that access to the park can be readily controlled in special event mode, for example during marathons or open air concerts. Apart from the two major entries (at Towns Place and off the Hungry Mile), the only other points of access are via bridges from Clyne and Munns Street Reserves and from Merriman Street. All of these configurations allow temporary access control to ensure that the park does not become overcrowded and that undesirables can be excluded.

Likewise during events which are likely to attract large numbers temporary fences can be erected along the top of the (planted) steep slopes and along the water side of the promenade to stop over exuberant patrons falling down the slope or into the harbour.

Whilst it is currently envisaged that the park will remain open 24 hours a day, it will, should it become necessary, be easy to close the park at any desired hour.

Crime Prevention and Public Safety

Territorial reinforcement

Since community ownership of public space sends positive signals, people tend to feel more comfortable in, and are more likely to visit, places which feel owned and cared for. Experience has shown that places with a high level of public use deter criminals because of the higher risk of detection or apprehension of criminals.

This has been accounted for in the design by:

- Strong visual and physical links between the park and its adjacent residential development
- Clear transitions and boundaries between the public domain and private space
- Clear design cues how the space is intended to be used, eg delineation of pedestrian and cyclist paths, picnic space, informal play space.

Space management

Whilst this is not strictly a design issue and is more the responsibility of park management, it is clear that by ensuring that the park is well maintained and well used, the public will have a greater feeling of security. Space management strategies may include:

- Site cleanliness and maintenance
- · Rapid repair of vandalism and graffiti
- Rapid removal or refurbishment of damaged park furniture, signs etc
- Events within the park possibly including summer outdoor cinemas, art displays, street performances and sports events.

The 'Barangaroo Consolidated Concept Plan and Environmental Assessment, October 2007' (CCP) recommended that the headland outline plan be shaped as an 'organic geometry that interprets in a contemporary way the more naturalistic land forms of other headland parks' (CCP pg. 82). This concept was re-interpreted in the October 2008 Modification of the Park proposal which derived a more naturalistic form inspired by the historic 1836 shoreline. The 2008 proposal included a sinuous curve extending to the enlarged Northern Cove.

Recognising the high value of the spectacular Sydney Harbour setting, the 2008 proposal aimed to raise the terrain in a naturalistic form from the sea wall up to Clyne Reserve and Merriman Street whilst increasing views from the park to the water. The substantial increase in elevated landscape created panoramic views of the harbour as well as numerous framed views from the park to the water. This proposal further developed the physical link suggested in the CCP by attempting to reinstate the historic topography of Millers Point thus strengthening the pedestrian connection between the Headland Park and the adjacent elevated plateau around Argyle Place and The Rocks.

The current proposal aims to further develop this theme of a naturalistic¹ headland in the light of more recent research² which has reconstructed the original (pre-occupation) landform.

"The underlying geological formation is the sedimentary deposit known as Hawkesbury Sandstone. When weathered, in an estuarine context following the creation of a drowned rivev alley in the Post Glacial period, it forms a terraced landform with outcropping rocks and steep slopes with intermittent cliff lines. The nature of the landform is influenced by sites of resistance to weathering which have been subject to varying climate regimes and the occupation of humans.

The Barangaroo Headland was a heel formation of a Club cape and referred to as Millers Point reflecting its colonial use as the site for windmills taking advantage of the landforms and its exposure to the west, north and south. The Toe point was called Tara meaning place of stepping stones which gave greater accessibility to the water for both indigenous and colonial occupants and on its spur line was placed William Dawes' Observatory and later a Fort bearing his name.

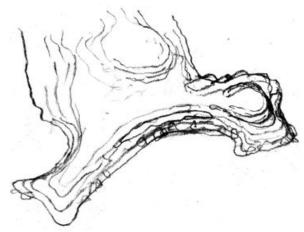
The uppermost landforms were part of a prominent ridgeline with knoll formations and two spurs and once formed points to the north and south which defined a long west facing cove characterised by large broken sandstone boulders collapsed into the tidal estuarine edge and localised sandy embayments cradled along the northern shore. To the south of Millers Point were dramatic sandstone cliffs dropping into Cockle Bay (now Darling Harbour). No distinct cove existed to the immediate south but an elongated embayment between Miller's Point and Soldier's Point to the south. The ridgeline running to the south from Tara defines the catchment of Sydney Cove from that of Walsh Bay and Darling Harbour and this landform also define Gadigal country to the east from Wanagal country to the west".

Thus the overall morphology of the park is that of a landform sloping gradually upwards at a grade of approximately 1:5 from the north near Moore's Wharf and rising to an upper 'bluff' at the level of Merriman Street and falling more steeply at about 1 in 1.5 to the west and south. Around this headland is a relatively flat apron which extends to the water's edge with a curtilage of a naturalistic rocky shoreline. The 'plan form' of the park has been generated from an approximation of the 1836 shoreline (ie from a point in time before Millers Point began to be altered by human activity). This line is marked in the design by a low wall separating the pedestrian and cycle paths which form a grand foreshore promenade linking Walsh Bay to Barangaroo Central and Barangaroo South and thence to Darling Harbour and beyond. These paths will be constructed from sandstone.

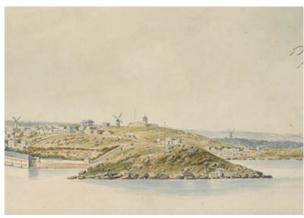
The character of the landscape of the northern slopes and the upper bluff will be one of large shade trees in irrigated grassland. The steep slopes on the western and southern slopes will be very densely planted with endemic tree and shrub species (which are described in more detail elsewhere).

¹ It is important to note the difference between 'natural' and 'naturalistic' in design terms. The current proposal deliberately does not seek to attempt to recreate or restore Miller's Point as it was in 1836. To do so would be a travesty. Rather it seeks to make a contemporary interpretation of the spirit of the headland as it was. It is an interpretation of the original. This is a vastly different proposition.

² CAB Consulting, Barangaroo Headland And Cove: Nature of Place, December 2009.



Sketch interpretation of landform prior to European settlement. Plan. Source: Barangaroo Headland and Cove: Nature of Place Draft Report. Cabconsulting December 2009



North View of Sydney (Detail). Joseph Lycett. 1820. The gentle slope on the north of the Barangaroo headland is evident.



Sketch interpretation of landform prior to European settlement. Section East-West. Source: Barangaroo Headland and Cove : Nature of Place Draft Report. Cabconsulting December 2009



Sketch interpretation of landform prior to European settlement. Section North-South. Source: Barangaroo Headland and Cove: Nature of Place Draft Report. Cabconsulting December 2009



Panoramic Views of Port Jackson (Detail of Panel 3 of 3). Major James Taylor. ca. 1821. The steeper southern slopes of the headland are shown

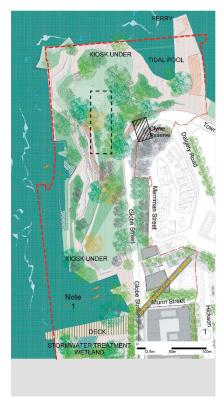
At the north the park is terminated by a harbour re-entrant at Moore's Wharf. The northern slopes are designed for passive use for casual seating and picnicking and they will form a grandstand for large crowds enjoying major harbour events such as the New Year's Eve fireworks. A sinuous path, designed at accessible grades rises up the slope to the upper area which will have gentle grades suitable for informal ball games, kite flying and the like. The path system has been designed around the edges of the upper bluff and there are three connections to the local area - two from Merriman Street and one from Clyne Reserve, all at grade. There will be a further connection with the park from the Munn Street Reserve. The major park entrances will be from Towns Place in the north and from the Hungry Mile at the south. The entire park is accessible, either via the gently graded path from the north or via an internal lift system from the south.

The two major path systems (ie the Foreshore Promenade and the upper pathway) are connected by two major stairways, one at the southwest, the other at the southeast. These grand stairways will be constructed from rock excavated from the site. A subsidiary path system will run through the native planting areas as a 'bush walk' which will have a much more informal character with rock outcrops and gravel surfacing similar to the type of path found on other Sydney headlands such as those on Berry Island. There will be a wide variety of views obtained from all of the pathways – sometimes panoramic, sometimes filtered, but all carefully considered to take advantage of the wonders of Sydney Harbour.

The southern end of the site is terminated by the Northern Cove which will continue the naturalistic approach of a rocky shoreline until it reaches the northern edge of Barangaroo Central where a more formal edge treatment will be employed. The cove is designed to allow access for most leisure craft (refer separate reports) including small yachts, kayaks and motor boats.

Whilst the external form and treatment of the site is based on an interpretation of the pre-settlement headland, the design incorporates an internal carpark for 300 vehicles and a flexible internal space to accommodate a future cultural facility whose use has not yet been determined. The form of these 'architectural' facilities is subservient to the landform design (ie the form of the internal spaces has been driven by the landform above rather than the landform responding to the form of the architecture). As such the design is unique. The basic intent of the cultural space is to express the morphology of the sandstone headland by leaving the sandstone cliff exposed similar in manner to the existing wall in The Bond building on Hickson Road. This will create a space with the potential to provide a venue as evocative as the Tate Modern's Turbine Hall or (locally) the Cockatoo Island halls. The carpark is accessed from Towns Place in the north (refer Traffic Report) and this access also provides for a future loading dock for the cultural space.

The design allows flexibility for sustainable design by utilizing increasing layers of environmental control, from naturally ventilated public circulation zones to, where appropriate, more tightly controlled gallery spaces or the like. Fresh air can be drawn in along the 'slot' on the Merriman Street edge and exhausted through a plenum on the western edge of the structure. Skylights through to the upper parklands will bring in daylight and greater visual connection to the outside.







Design Element within CCP Proposal	MP 06-0162 MOD 3 proposal / Design Developed Profile Rev D (Preferred for Lodgement)	Current Proposal
Shape of the headland foreshore	The shape was altered to a more naturalistic shape to resemble the historic 1836 shoreline.	The 1836 shoreline has been represented by the wall between the foreshore paths.
Shape and size of North Cove	The shape was altered to a more naturalistic shape to resemble the historic 1836 shoreline and the size was increased to allow a greater intrusion of water into the park.	The shape has been further articulated with rocky edges in keeping with the naturalistic vision.
Form of the Headland Park	The contours and retaining walls were shaped to form a more naturalistic topography.	The naturalistic topography has been further developed, whilst still allowing for usable parkland.
Open space adjacent to Globe Street	Globe Street was amended so it didn't run through the Headland Park, which allowed a greater area of open space.	The Globe Street alignment is now a visual corridor aligning with the sandstone rock cutting.
Access to Hickson Road	The removal of Globe Street to the east of the North Cove allowed the open space to form a direct link between the Cove and Hickson Road.	Access to The Hungry Mile has been further improved.
Internal Spaces	300 vehicle underground car park added.	car park and a flexible space for future cultural use incorporated.