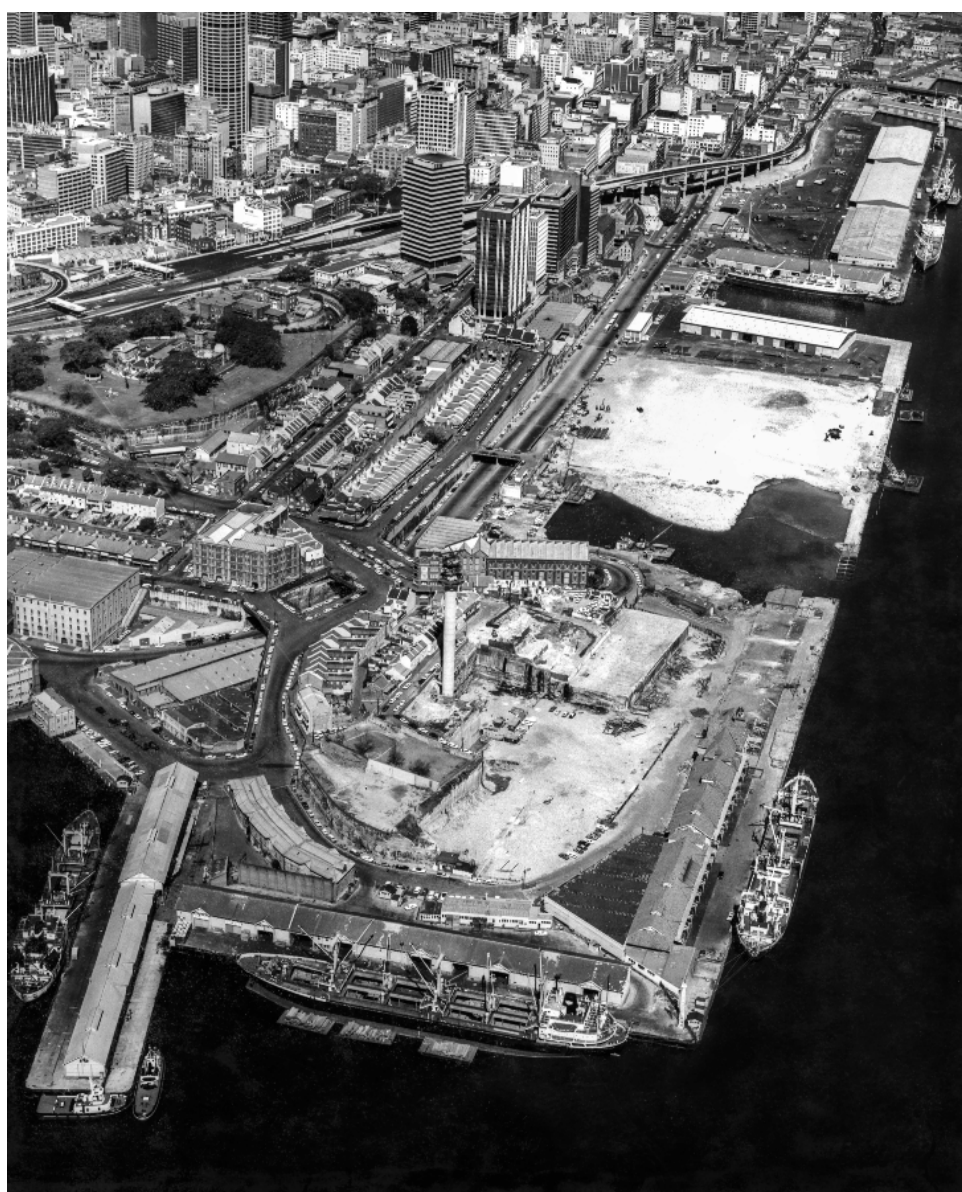


Central Barangaroo Modification 9 Application

Heritage Assessment and Impact Statement

November 2021



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Report Register

The following report register documents the development and issue of the report entitled Central Barangaroo Modification 9 Application—Heritage Assessment and Impact Statement, undertaken by GML Heritage Pty Ltd in accordance with its quality management system.

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GML Heritage Pty Ltd operates under a quality management system which has been certified as complying with the Australian/New Zealand Standard for quality management systems AS/NZS ISO 9001:2016.

The report has been reviewed and approved for issue in accordance with the GML quality assurance policy and procedures.

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Cover Photograph: Aerial photograph of the Barangaroo area in 1971. (Source: City of Sydney Archives, 093479_1971_LR)

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Executive Summary

GML Heritage Pty Ltd has prepared this Heritage Assessment and Impact Statement for Barangaroo Concept Plan (MP06_0162) Modification 9 to the approved Barangaroo Concept Plan for Central Barangaroo (MOD 9) for Infrastructure NSW.

Barangaroo is made up of three distinct precincts, known as Barangaroo South, Central Barangaroo and Barangaroo Reserve, as approved under Project Approval Concept Plan (MP06_0162) (MOD 11). Central Barangaroo contains three proposed mixed use development blocks (Blocks 5, 6, and 7), in addition to land identified in the public domain.

The currently approved Barangaroo Concept Plan (MP06_0162) comprises a maximum gross floor area (GFA) of 602,354m² with building heights ranging between 23 and 273 metres.

This proposed modification (MOD 9) seeks an increase in total permissible GFA from 602,354sqm to 708,641sqm, and amend the building envelope to allow for variation in building heights across Blocks 5, 6 and 7 to enable building form, massing and modulation that is responsive to context and adjusts the development boundary for Block 5.

MOD 9 does not seek to make any changes to the existing approved development blocks 1, 2, 3, 4, X and Y (Crown Sydney Hotel Resort).

Heritage Identification

Aboriginal Sites or Places

Central Barangaroo (the site or the study area) does not contain any previously identified Aboriginal sites or places. The proposed Central Barangaroo development has nil to low potential to contain in situ Aboriginal archaeological evidence. This is due to the nature of the natural topography of the original foreshore, which would have made most of the study area inaccessible to Aboriginal people, as well as the likely high impacts of historical use and construction on any Aboriginal archaeological evidence.

Historical Archaeology

Parts of the site have potential to contain historical archaeological remains associated with the maritime and industrial development and occupation of the area during the late nineteenth century and redevelopment of the site during the early to mid-twentieth century. Most of this evidence, if it survives, would likely be located along the eastern side of the study area, and concentrated in the northern and southern extremities of the site. The potential historical archaeological remains at the site would likely be of local significance with limited research potential. However, the archaeological potential of Central Barangaroo should be recognised as a finite resource becoming increasingly rare in Sydney.

Archaeological evidence associated with the former Australian Gas Light Company (AGL) gasworks, NSW's first gasworks, would be considered a rare resource, but any such evidence would likely be within an area of the site that has been identified as contaminated (Department of Environment, Climate Change and Water [DECCW] Declaration Area N21122). Should evidence of the gasworks exist outside of the contaminated area, this would be of state significance.

Heritage Items, Views and Vistas

The heritage item 'Dalgety Bond Store' is located within the Barangaroo site, but it is not part of Central Barangaroo MOD 9. Central Barangaroo is in the vicinity of two heritage conservation areas of state

heritage significance—the Millers Point and Dawes Point Village Precinct, and the Millers Point and Dawes Point Conservation Area—which also contain individual items of state and local heritage significance. The Walsh Bay Wharves Precinct, Hickson Road, is to the north of Central Barangaroo.

There are a number of significant views, vistas and sight lines to and across the site, in particular from High Street south and north, which demonstrates the historical relationship between the housing along High Street and the former wharves of Darling Harbour, from Observatory Hill west over the conservation area to the harbour and from Sydney Observatory. This visual relationship connecting the residential areas of Millers Point to the former industrial wharves and the harbour provides evidence of their significant historical connection and is an important part of the setting of the High Street Terraces.

Summary Heritage Impact Assessment

This HAIS has been prepared in response to the Director General's Requirements (DGRs) for the Environmental Assessment, in particular DGR 19, Heritage.

The impacts of the proposed MOD 9 on the state significant Millers Point/Dawes Point Precinct are assessed in the context of the currently approved Barangaroo Concept Plan (MP06_0162).

Aboriginal Archaeology

The modifications to the locations and footprint of Blocks 5, 6 and 7 proposed in MOD 9 would be unlikely to result in any Aboriginal archaeological impacts. The proposed modifications would not include any additional Aboriginal archaeological impacts beyond those in the approved Concept Plan.

The proposed future development of Central Barangaroo could commence without the need for further Aboriginal archaeological assessment or physical archaeological investigation of the site.

In the event that any Aboriginal archaeological evidence or objects were discovered at the site, all works in the affected area/s must cease and Heritage NSW must be notified under Section 91 of the *National Parks and Wildlife Act 1974* (NSW) (NPW Act) and a suitable procedure negotiated. Further assessment or documentation may be required before site works could recommence in the affected area/s.

In the unlikely event that human remains are discovered at the site, the findings should immediately be reported to the NSW Coroner's Office and the NSW Police. If the remains are suspected to be Aboriginal, Heritage NSW should also be contacted and a specialist consulted to determine the nature of the remains.

Historical Archaeology

MOD 9 proposes minor reconfiguration of the locations and footprints of Blocks 5, 6 and 7. The revised locations of these proposed built elements should not result in any additional historical archaeological impacts from the approved Concept Plan.

Central Barangaroo is flanked to the north, east and south by archaeological deposits of local and potentially state significance. The likelihood that these deposits will be exposed by the proposed MOD 9 is nil to low.

The historical archaeological impacts of any specific development proposals for Central Barangaroo should be considered as part of any future development applications for the site.

Recommendations are made for the management of the site's historical archaeological potential and significance. A suitably qualified archaeologist with experience in Sydney maritime archaeology should be on call for any unexpected archaeological finds across the site.

Built Heritage

MOD 9 proposes a fine-grained response for Central Barangaroo and to the adjacent setting, including between Blocks 5, 6 and 7, variable built height and form, a taller landmark at Block 7 (which also allows for creation of a north-facing public space—Nawi Terrace), and a new pedestrian bridge which would connect Central Barangaroo to Millers Point and Dawes Point. These features are described by Infrastructure NSW as having urban and architectural benefits over the approved Concept Plan.

The likely adverse heritage impacts of MOD 9 are primarily associated with building height including the impacts on Millers Point and Dawes Point Conservation Area and Millers Point and Dawes Point Village Precinct, heritage items within the Barangaroo site, heritage items in the vicinity (including Observatory Park and the Sydney Observatory site) and established heritage views. These are summarised below.

- Additional height for Blocks 5, 6 and 7 will have some minor additional heritage impacts on panoramic views to and from the western slopes of the Millers Point and Dawes Point Village Precinct and harbour locations to the west. However, the main visual impact would primarily result from the proposed corner tower element of Block 7 (73.7 RL), which is taller than the Observatory domes (54 RL). Otherwise, heritage impacts are generally consistent with the approved Concept Plan. There are no heritage items in Central Barangaroo. There are no identified impacts on the Walsh Bay Wharves Precinct.
- Adverse heritage impacts are mitigated to some degree by the provision of some additional connections through Central Barangaroo and view corridors to the harbour foreshore through Blocks 5, 6 and 7. The proposed pedestrian link created by Barangaroo Steps and High Street Connection would enhance the existing historical connections from Millers Point and Dawes Point to Sydney Harbour. This involves a bridge over Hickson Road making a high-level connection to High Street, which will require further heritage guidance to minimise impacts on the related heritage items in the vicinity: the Hickson Road Wall, and the 'Palisade Fence and High Steps'.
- In regard to the significant sky views of Sydney Observatory, this report relies upon the expert view of the Sky View Loss Assessment prepared by AECOM and UNSW Unisearch. These reports identify that there will be no practical additional reduction in sky views as a result of the Central Barangaroo MOD 9 development, and very limited to no impact arising from additional light spill.
- Recommendations are made for the management of the built heritage values of the site and adjacent heritage places:
 - Specific development proposals for Central Barangaroo as part of any future development applications for the site should be reviewed, and detailed heritage impact assessments should be prepared. This would include proposals for Blocks 5, 6 and 7, and the bridge connection to High Street
 - Design development of the final built form of Central Barangaroo should seek to optimise views to and from High Street and the Millers Point and Dawes Point Village Precinct.

1.0 Introduction

1.1 Background

GML Heritage Pty Ltd (GML) has prepared this Heritage Assessment and Impact Statement (HAIS) for Infrastructure NSW (INSW). This document accompanies an application to the NSW Department of Planning, Industry and Environment (DPIE) to modify the Concept Plan for Barangaroo (MP06_0162). The proposed modification for Central Barangaroo is referred to as Concept Plan Modification 9 (MOD 9).

The Barangaroo Concept Plan has been modified a number of times since 2007. It was most recently modified by Modification 10 (MOD 10) approved in September 2020 and Modification 11 (MOD 11) approved in October 2020. MOD 9 for Central Barangaroo will conclude the renewal of the Barangaroo precinct.

This HAIS considers the heritage values of the Central Barangaroo site (the site or the study area)—including Aboriginal and historical archaeology, built heritage and landscape values—and evaluates the potential impacts that development of the site associated with MOD 9 may have on these values, in relation to the approved Barangaroo Concept Plan.

This HAIS includes a detailed historical archaeological assessment and an Aboriginal due diligence assessment of the site. It also identifies heritage items and conservation areas in the vicinity of Central Barangaroo. In terms of built heritage, this report assesses the impact of the proposed modification only.

This HAIS assesses the impacts of this proposed modification (MOD 9), taking into account the impacts of the currently approved Barangaroo Concept Plan, and does not reassess the development proposed in earlier approved concept plans.

1.2 Acknowledgment of Country

We would like to acknowledge the Gadigal people who are the Traditional Custodians of this land. We would also like to pay respect to the Elders, both past and present, of the Eora Nation and extend that respect to all Aboriginal people.

1.3 The Barangaroo Precinct

The approximately 22-hectare (ha) Barangaroo site is located on the northwestern edge of the Sydney CBD within the City of Sydney Local Government Area (LGA). It is on the western side of Hickson Road between Darling Harbour to the south and Millers Point to the east (Figures 1.1 and 1.2).

Barangaroo is made up of three distinct precincts, known as Barangaroo South, Central Barangaroo and Barangaroo Reserve, as approved under Barangaroo Concept Plan MP06_0162.

Central Barangaroo is the central portion of the Barangaroo precinct (Figures 1.1 and 1.2).

1.3.1 Study Area—Central Barangaroo

Central Barangaroo is located between Barangaroo Reserve, Barangaroo South and the nearby historic suburbs of Millers Point and Walsh Bay. It is adjacent to Barangaroo Station.

As Barangaroo's keystone project, Central Barangaroo will complete the city and foreshore development along the western waterfront of Sydney's CBD.

Central Barangaroo is proposed as a mixed use foreshore precinct that draws together and integrates foreshore public spaces with residential, commercial, retail, community and cultural uses, connected to Sydney's new metro network.

Central Barangaroo comprises the remaining development blocks 5, 6 and 7 of the approved Barangaroo Concept Plan and Harbour Park connecting to the western harbour foreshore. The Central Barangaroo Urban Design Report builds upon the key objectives and core principles of the Skidmore, Owings & Merrill (SOM) Master Plan Framework for Central Barangaroo, providing for a scaled visual transition between the natural setting and scale of Barangaroo Reserve and Nawi Cove, to the high rise scale of Barangaroo South.

The recently completed Wulugul Walk now extends along the entire Barangaroo waterfront as part of the 14km Woolloomooloo to Glebe foreshore walk. Central Barangaroo's Harbour Park will provide a public open space on the western harbour that integrates with Wulugul Walk. To the south, Central Barangaroo will be the backdrop to Hickson Park, and is in close proximity to Nawi Cove in the north.

1.3.2 Sydney Metro—Barangaroo Station

In June 2015, as part of the Sydney Metro City & Southwest project, the NSW Government confirmed a strategic alignment option to build a new metro station at Barangaroo. In November 2015, the location of Barangaroo Station was confirmed as beneath the northern end of Hickson Road in Millers Point, with pedestrian access via Central Barangaroo and Nawi Cove.

Following this announcement, SOM undertook a detailed review of the draft Master Plan Framework to best integrate the new metro transport interchange and ensure the benefits of the proposed Barangaroo Station could be incorporated into the Barangaroo precinct and adjacent neighbourhoods.

Barangaroo Station is currently being constructed beneath Hickson Road. When operational in 2024, the station will be one of four key underground CBD stations on the Sydney Metro City & Southwest line, providing easy access options into Central Barangaroo and Nawi Cove.

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



Figure 1.1 Site locality plan. The approximate location of Central Barangaroo is shown shaded (pink shaded area) within the broader Barangaroo site. (Source: Infrastructure NSW, June 2021)

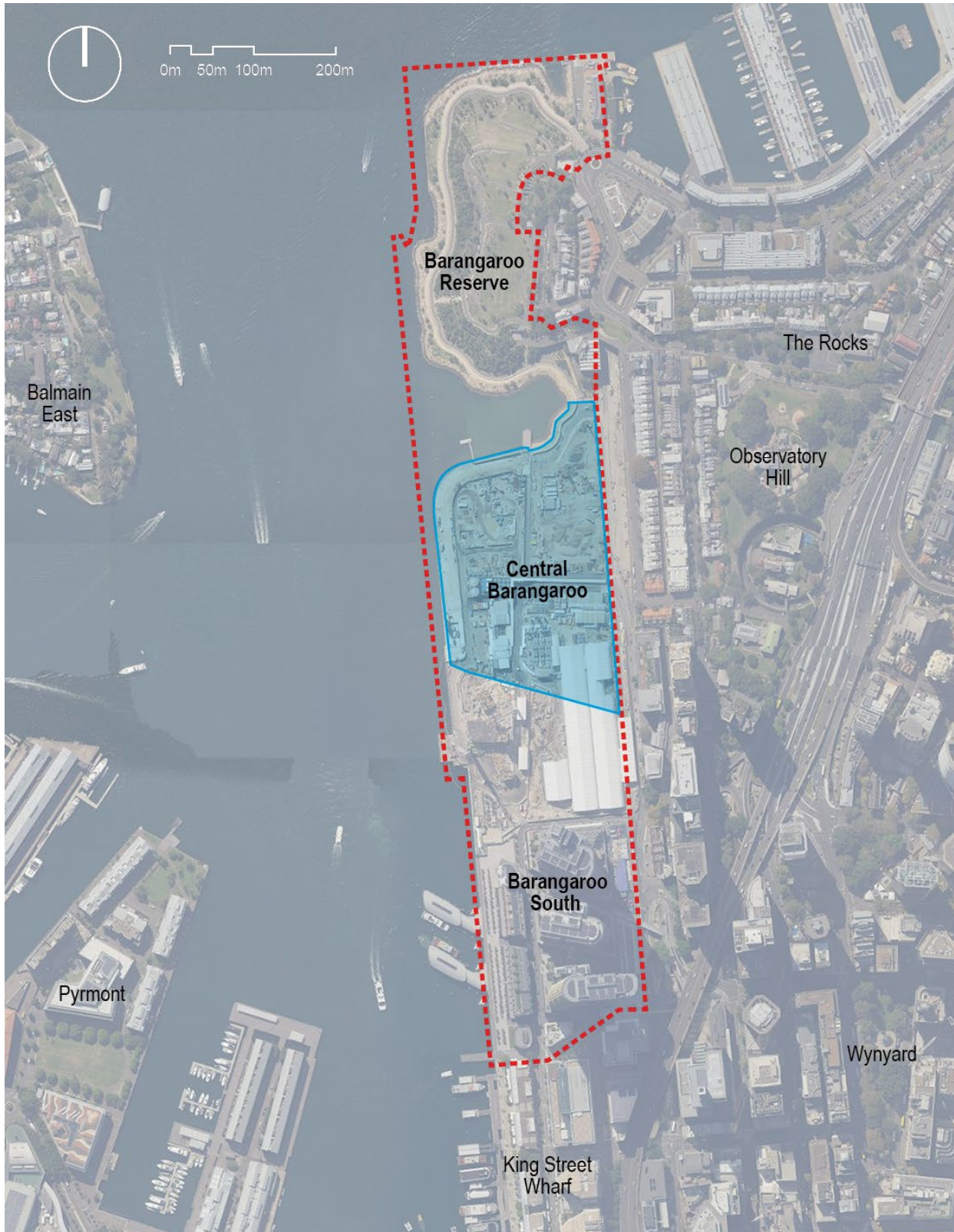


Figure 1.2 Central Barangaroo (shaded in blue) in relation to Barangaroo South and Barangaroo Reserve (Headland Park) within the 22ha Barangaroo site (outlined in red hatching). (Source: SIX Maps, with GML overlay, 2021)

1.4 Proposed Concept Plan Modification 9 (MOD 9)



Figure 1.3 Master Plan Framework Guidance Plan showing key features of the Concept Plan Modification 9 (MOD 9) Masterplan. (Source: Central Barangaroo Urban Design Report, Hassell, 2021, image source SOM)

MOD 9 seeks an increase in total permissible ground floor area (GFA) across Central Barangaroo and Barangaroo Reserve, and involves modifications to the building envelope for Blocks 5, 6 and 7 with a corner tower form. MOD 9 also involves an increase in the overall provision of open space / public domain, including:

- publicly accessible spaces within the development blocks;
- a new pedestrian bridge over Hickson Road;
- an extension of Central Barangaroo's Harbour Park; and
- an allowance for community/cultural facilities within the Cutaway, at Barangaroo Reserve.

Consequential amendments to the *State Environmental Planning Policy (State Significant Precincts) 2005* (State Significant Precincts SEPP) and revisions to the Barangaroo Concept Plan Statement of Commitments are also involved.

Barangaroo Station, as part of the Sydney Metro, was the catalyst to progress this Concept Plan modification.

MOD 9 does not seek to make any changes to the existing approved development blocks 1, 2, 3, 4, X and Y (Crown Sydney Hotel Resort) or existing improvements that form part of South Barangaroo.

The MOD 9 proposal is outlined in more detail in Section 7.0.

1.5 Statutory and Planning Context

1.5.1 Planning Background

The proposed Section 75W Modification 9 to Barangaroo Concept Plan for Central Barangaroo (MOD 9) commenced in March 2014, with Director General's Requirements (DGRs) issued in April 2014.

Between 2014 and 2019, a number of factors have impacted the master planning, design, development and delivery of the Central Barangaroo precinct, including:

- the NSW Government's decision in 2015, to establish Barangaroo as one of four new CBD metro stations on the City & Southwest line, followed by the integrated planning, design and development of Barangaroo Station;
- a two-stage Request For Proposals process for the development of Central Barangaroo, the second stage of which factored in the impacts and benefits of design integration with Barangaroo Station;
- the changes to the approved Barangaroo Concept Plan by the approval of MOD 8, which impacted on the potential built form of Central Barangaroo; and
- view sharing negotiations undertaken and agreed with key stakeholders, which also impacted on the potential built form of Central Barangaroo.

1.5.2 Master Planning of Central Barangaroo

Work on the master planning vision and framework for Central Barangaroo originally commenced in 2013 with the appointment of Skidmore, Owings & Merrill LLP + Andersen Hunter Horne (SOM + AHH).

Skidmore, Owings & Merrill LLP + Andersen Hunter Horne (SOM + AHH) prepared a draft Central Barangaroo Master Plan Framework, building upon the then approved Barangaroo Concept Plan (MOD 6). This framework explored opportunities to enhance the built form and public domain outcomes, and ensure connectivity and access across the whole Barangaroo precinct.

To inform the master planning framework, several early rounds of public consultation were undertaken in 2013. The consultation comprised a public workshop, followed by a four-week interactive online conversation, in addition to direct engagement with key stakeholders.

SOM's Central Barangaroo Master Plan Framework enabled an increase in density of mixed use development to ensure the precinct has its own distinct identity, whilst maintaining an appropriate scale to its context.

SOM's draft Master Plan Framework for Central Barangaroo informed the MOD 9 DGRs request in 2014.

1.5.3 Heritage Considerations

Environmental Planning and Assessment Act 1979 (NSW)

The *Environmental Planning and Assessment Act 1979* (NSW) (EPA Act) is administered by the NSW Department of Planning, Industry and Environment. It provides for the development of environmental planning instruments to guide the process of development and land use.

In NSW, items of heritage significance and archaeological remains (referred to as 'objects' or 'relics') are afforded statutory protection under the following Acts.

Heritage Act 1977 (NSW)

The objectives of the *Heritage Act 1977* (NSW) (Heritage Act) are to conserve NSW's environmental heritage. The Act is used to regulate the impacts of development on the state's heritage assets. The Act defines a heritage item as 'a place, building, work, relic, moveable object or precinct'.

National Parks and Wildlife Act 1974 (NSW)

All Aboriginal objects and places receive statutory protection under the *National Parks and Wildlife Act 1974* (NSW) (NPW Act).

The Consent

The Concept Plan for the Barangaroo project (Barangaroo, East Darling Harbour—MP06_0162 MOD 3) was approved as a 'Major Project' under Part 3A of the *Environmental Planning and Assessment Act 1979* (NSW) (EPA Act) on 11 November 2009. Part 3A approval replaces the approval processes that would usually be required under Part 3 or other parts of the EPA Act and means that the Minister for Planning becomes the consent authority for the project.

The Part 3A approval also effectively 'turns off' the provisions of the *Heritage Act 1977* (NSW) (Heritage Act) and the *National Parks and Wildlife Act 1974* (NSW) (NPW Act), including the need for any approvals or permits under these Acts. However, the terms of Barangaroo's Part 3A approval still require appropriate management of the site's historical archaeological resources. Future development of Central

Barangaroo may require further heritage impact assessment and management of the site's archaeological resource.

The Statement of Commitments (SoCs) for the Barangaroo Concept Plan include a number of clauses related to management of the site's historical archaeological resources (Clauses 60, 60A–C), including preparation of an Archaeological Assessment (Clause 60). The AAMP prepared by Austral Archaeology Pty Ltd in June 2010 was in response to this requirement. This HAIS draws on the findings of the AAMP and includes a detailed assessment of the historical archaeological potential and significance of the Central Barangaroo site.

The 2007 Concept Plan approval for the Barangaroo project did not include specific requirements in relation to Aboriginal heritage; however, this HAIS provides some environmental and archaeological context and a preliminary Aboriginal archaeological assessment.

Heritage Listings

Central Barangaroo does not contain any listed heritage items and is not included in any heritage conservation area. The wider Barangaroo site includes three heritage items, the Dalgety Bond Store adjacent to Nawi Cove, Munn's Slipway and Sewage Pumping Station No.14. The Barangaroo precinct's Heritage and Conservation Register (Section 170 [S170] Register) is included at Section 6.0. There are a number of heritage items in the vicinity of Central Barangaroo, including the state significant Millers Point and Dawes Point Village Precinct. These are also identified in Section 6.0.

1.5.4 Other Heritage Considerations

Director General's Requirements—Heritage

The Mod 9 DGR relevant to this HAIS report, and referred to in Section 8.0, is:

19. Heritage

Undertake an assessment of the likely impacts of the modification on heritage and archaeological items and proposed conservation and mitigation measure., including the Mills Point Conservation Special Area, Observatory Hill and Walsh Bay.

Government Architect NSW—Design Guide for Heritage

The Government Architect NSW (GANSW) Design Guide for Heritage—Better Placed provides seven principles to guide the management of buildings, sites and precincts that contribute to the heritage of NSW. These principles are listed at Section 8.1.2.

1.5.5 Concept Plan Modification Summary

Table 8 from the 2021 Environmental Impact Statement (EIS 2021) prepared by Urbis has been inserted below (unaltered) for reference.

Modification No.	Status	Scope
Modification 1	Approved - 25 September 2007	Correction of minor typographical errors in the concept plan notice of determination and rewording of design excellence modification.
Modification 2	Approved - 16 February 2009	Modification to increase the allowable commercial floor space for Blocks 2, 3, 4 and 5 by 120,000m ² .
Modification 3	Approved - 11 November 2009	Modification to allow for a reconfigured Northern Headland and Northern Cove.
Modification 4	Approved - 16 December 2010	Modification to allow for a mixed-use development involving a maximum of 563,965m ² GFA within 7 development blocks, an increase in height of a number of the proposed towers within Barangaroo South, the establishment of the new ferry pier and landmark hotel extending into the Harbour, and reconfiguration and activation of the public waterfront area.
Modification 5	Withdrawn – DGR's lapsed	Modification to clarify wording within the Concept Plan relating to the distribution of total GFA within the Barangaroo site and correct typographical errors in the approval.
Modification 6	Approved - 25 March 2014	Modification to realign Globe Street and block boundaries, revise the urban design controls and modify numerous conditions relating to floor space and car and bicycle parking.
Modification 7	Approved - 11 April 2014	Modification to provide for the temporary concrete batching plant use on-site in association with construction of development at Barangaroo that is approved pursuant to the Concept Plan.
Modification 8	Approved - 28 June 2016	Relocation of the landmark hotel building (Block Y) from extending over the harbour onto land within the site in front of existing Blocks 4A, B and C and inclusion of the gaming facilities as part of the development. The modifications to Barangaroo South, included increases in GFA and height, increase in tourist GFA, redistribution of GFA and land uses across development blocks, modification to block and building envelopes, reduction in area of the Southern Cove and a redistribution of public domain areas.
Modification 10	Approved – 2 September 2020	Modification relating to Barangaroo South for the following amendments: <ul style="list-style-type: none"> ▪ Increase the Barangaroo South residential GFA allocation for Block 4A from 86,979sqm to 92,629sqm ▪ Increase the Barangaroo South residential GFA allocation for Block 4B from 19,158sqm to 21,508sqm ▪ Increase the maximum building height on the building envelope plan for Block 4B from RL210 to RL235 ▪ Incorporation of an additional 3-metre setback (south-west elevation) of the building envelope for Block 4B above RL209 ▪ Amend the delivery timeframe for Key Worker Housing and update the Barangaroo Built Form Principles and Urban Design (BFPUD) controls.
Modification 11	Approved – 22 October 2020	Modification to allow construction and non-construction vehicles to use Barton Street, amend the timeframe for the delivery of Hickson Park to align with the current development status of surrounding buildings in Barangaroo South and Central Barangaroo, and amend the timeframe for the delivery of Barton Street development.

1.6 Previous Studies

This HAIS draws on information from the following heritage and archaeological studies of the Barangaroo precinct:

- Barangaroo Central Archaeological Assessment (2012 AA), prepared by GML in October 2012;¹
- Barangaroo Archaeological Assessment and Management Plan (2010 AAMP), prepared by Austral Archaeology Pty Ltd;²
- Barangaroo Headland Park, Historical Archaeological Excavation, Volumes 1–5, prepared by Austral Archaeology Pty Ltd;³
- East Darling Harbour Concept Plan—Heritage Impact Statement, prepared by City Plan Heritage in September 2006 (2006 HIS);
- *East Darling Harbour Concept Plan—Heritage Impact Statement (Addendum)*, prepared by City Plan Heritage in September 2008 (2008 HIS Addendum); and
- *View and Visual Impact Analysis—Current Plan Modification 8 and State Significant Development Site Amendment*, prepared by JBA Planning Consultants Pty Ltd, February 2015 (2015 VIA).

This HAIS updates the findings of the 2012 AA in relation to historical and Aboriginal archaeology. Both this HAIS and the 2012 AA draw on historical information and site analysis from the 2010 AAMP.

In relation to the built heritage and views assessment of this HAIS, GML has drawn on the findings of the 2008 HIS Addendum regarding Central Barangaroo, particularly in relation to the site context and identification of important heritage views.

1.6.1 Concurrent Studies

For this HAIS, GML has also drawn on:

- the MOD 9 proposal descriptions, including 3D images from the Central Barangaroo Urban Design Report, prepared by Hassell in September 2021 (Urban Design Report);
- the findings and relevant observer locations from the *Barangaroo Concept Plan Modification 9, View and Visual Impact Assessment*, prepared by AECOM for Aqualand B Development Holding Pty Ltd (AECOM View and Visual Impact Report 2021); and
- the findings in regard to sky view loss and increase of light spill affecting the Sydney Observatory site, of the Sky View Loss Assessments prepared by AECOM and Unisearch:
 - *Sky View Loss Assessment for Barangaroo Concept Plan (06_0162) Modification 9 Commercial-in-Confidence*, prepared by AECOM in December 2021 (AECOM Sky View Loss Report 2021); and
 - Central Barangaroo – Sydney Observatory Sky View Impact Assessment, modification to the Concept Plan (MOD 9), prepared by George Georgevitis (Unisearch Expert Opinion Services), in November 2021 (Unisearch Sky View Impact Report 2021).

1.7 Methodology

This HAIS has been prepared in response to the DGRs in relation to heritage for the Environmental Assessment of the Concept Plan:

19. Heritage—Undertake an assessment of the likely impacts of the modification on heritage and archaeological items and proposed conservation and mitigation measures, including the Millers Point Conservation Special Area, Observatory Hill and Walsh Bay.

This report has been prepared in accordance with the following documents:

- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013* (the Burra Charter);
- the *Statements of Heritage Impact Guidelines*, published by the Heritage Office and Department of Urban Affairs and Planning 1996, revised 2002; and
- *Better Placed. Design Guide for Heritage*, Government Architect NSW 2018.

This HAIS provides a geotechnical background of the Barangaroo area and identifies the Aboriginal archaeological, historical archaeological and built heritage significance of Central Barangaroo (and places in the vicinity) at Sections 4.0, 5.0 and 6.0 respectively.

The MOD 9 proposal is summarised at Section 7.0, using plans, sections and 3D images from the Urban Design Report.

At Section 8.0, the heritage impacts of MOD 9 are assessed where they vary from the approved Concept Plan. Conclusions, recommendations and mitigation measures are provided at Section 9.0.

1.8 Definitions and Terminology

The report uses the following site descriptions:

- ‘Dalgety Bond Store’ is used in this HAIS to refer the property located at 6–20 Munn Street, Millers Point. The NSW State Heritage Register uses ‘Munn Street Bond Stores’ and ‘Dalgety Bond Stores’ to describe the same site. This property is variously known as Dalgety Bond Store, Dalgety Bond Stores, Dalgety’s Bond Stores, 1–3 Munn Street, 25 Hickson Road, 6–20 Munn Street, Munn Street Bond Stores, and Dalgety’s Bond Stores Group of Buildings.

This HAIS follows the *Australia ICOMOS Burra Charter, 2013* (the Burra Charter)⁴ in its use of the following terms and definitions:

- **Place** means site, area, building or other work, group of buildings or other works together with associated contents and surroundings.
- **‘Cultural significance** means aesthetic, historic, scientific or social value for past, present or future generations.’ [Article 1.2 of the Burra Charter]
- **Conservation** means all the processes of looking after a **place** so as to retain its **cultural significance**. It includes **maintenance** and may according to circumstance include **preservation**, **restoration**, **reconstruction** and **adaptation** and will be commonly a combination of more than one of these.
- **‘Fabric** means all the physical material of the place.’ [Article 1.3 of the Burra Charter]

- **Maintenance** means the continuous protective care of the **fabric**, contents and setting of a place, and is to be distinguished from repair. Repair involves **restoration** or **reconstruction** and it should be treated accordingly.
- **Preservation** means maintaining the **fabric** of a place in its existing state and retarding deterioration.
- **Restoration** means returning the existing **fabric** of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.
- **Reconstruction** means returning a place as nearly as possible to a known earlier state and is distinguished by the introduction of materials (new or old) into the **fabric**. This is not to be confused with either re-creation or conjectural reconstruction.
- **Adaptation** means modifying a place to suit proposed compatible uses.
- **Compatible use** means a use which involves no change to the **culturally significant fabric**, changes which are substantially reversible, or changes which require minimum impact.

1.9 Limitations

- This HAIS includes a preliminary Aboriginal archaeological assessment only, in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (13 September 2010), and does not comprise a full Aboriginal archaeological and cultural heritage assessment. No consultation with Aboriginal community members has been undertaken in the preparation of this HAIS.
- No additional historical research has been undertaken in the preparation of this HAIS; it relies on historical research undertaken as part of the 2010 AAMP.
- This HAIS relies on analysis of geotechnical information presented in the 2010 AAMP and more recent information provided by JBS&G.⁵
- No new assessment of significance for heritage items, or potential heritage items, has been undertaken in this HAIS. It relies on the 2006 HIS and 2013 HIS, and the State Heritage Inventory (SHI) citations for conservation areas and heritage items included in these reports. Additional relevant heritage items are included in this HAIS, and SHI citations are relied on for these also.
- This HAIS relies on the observer locations, photographic images and photomontages provided in the AECOM View and Visual Impact Report 2021 and the City Plan 2006 HIS.
- This HAIS relies on the sky view loss information provided in the AECOM Sky View Loss Report 2021.

1.9.1 Author Identification

This HAIS has been prepared by Catherine Macarthur, GML Associate. Emily Bennett, GML Heritage Consultant (Archaeologist), prepared the Aboriginal and historical archaeological assessments. Claire Nunez, GML Senior Associate and Manager, Heritage Places and Abi Cryerhall, GML Principal (Archaeologist), reviewed the report. Various support team members also assisted in the report production.

1.10 Endnotes

- ¹ Godden Mackay Logan, Barangaroo Central Waterfront Promenade and interim Public Domain—Archaeological Assessment, prepared for Baulderstone, October 2012.
- ² Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010.
- ³ Austral Archaeology, Barangaroo Headland Park, Historical Archaeological Excavation, Sydney, Introduction, vol. 1, report prepared for Lendlease Corporation Limited, December 2016; Austral Archaeology, Barangaroo Headland Park, Historical Archaeological Excavation, Sydney, Wharves Site, vol. 2, report prepared for Lendlease Corporation Limited, December 2016; Austral Archaeology, Barangaroo Headland Park, Historical Archaeological Excavation, Sydney, Shipyards Site, vol. 3, report prepared for Lendlease Corporation Limited, December 2016; Austral Archaeology, Barangaroo Headland Park, Historical Archaeological Excavation, Sydney, Interpretation, vol. 4, report prepared for Lendlease Corporation Limited, December 2016; Austral Archaeology, Barangaroo Headland Park, Historical Archaeological Excavation, Sydney, Artefact Analysis and Appendices, vol. 5, report prepared for Lendlease Corporation Limited, December 2016.
- ⁴ Australia ICOMOS Inc, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013*, Australia ICOMOS Inc, Burwood, VIC
- ⁵ Pers comms (email) from Michelle Battam, Senior Environmental Consultant, JBS&G, 21 October 2013.

2.0 Historical Overview

2.1 Introduction

This section presents a summary of the historical development of the broader Barangaroo site and a discussion of the physical development of the Central Barangaroo precinct in particular. The summary and discussion are based primarily on information provided in the 2010 AAMP.¹

2.2 Summary of Historical Development—Broader Barangaroo Site

The historical development of the broader Barangaroo site is largely related to maritime industries, including wharves, shipbuilding, and associated commercial and industrial enterprises. The historical development of the broader Barangaroo site included the following phases:

- Phase 1—Aboriginal occupation;
- Phase 2—private ownership, 1788–c1870;
- Phase 3—intensive development and decline, c1870–1900; and
- Phase 4—change and renewal, 1901–2021.²

2.2.1 Phase 1—Aboriginal Occupation

Aboriginal people occupied the foreshores of Sydney Harbour prior to the arrival of Europeans. The Aboriginal population migrated around the landscape to access seasonal resources. The harbour provided abundant fish resources and the shores of Darling Harbour were an important source of cockles, rock oysters and mud oysters as evidenced in European descriptions of piles of shell and fish bone along the harbour shores and inlets. Section 4.0 of this HAIIS includes further discussion about the pre-contact environment and Aboriginal use of the area.

Following European occupation, Aboriginal people continued to live and work around the harbour including along the wharves of Millers Point, where the Waterside Workers Federation and the Seamen's Union of Australia worked in solidarity with the Aboriginal civil rights movement of the twentieth century.

2.2.2 Phase 2—Private Ownership 1788–c1870

The rugged topography initially discouraged settlement of Millers Point and Darling Harbour.³ Private ownership and development within Millers Point began with the construction of three private windmills there c1800–1810.⁴ There were a number of occupants across Millers Point during the first few decades of the nineteenth century, prior to the establishment of official grants or purchases in this area.⁵

While much of early Sydney was shaped by the colonial government, Millers Point was predominantly developed by private enterprise. From the 1830s, maritime and shipping industries developed around Millers Point and in Darling Harbour related to passenger transport, trade (import and export), cargo storage and shipbuilding.⁶

Numerous shipbuilders, ship owners, transporters, merchants and traders established their businesses in Cockle Bay during the early to mid-nineteenth century. Many traded only briefly while others survived long term, and the development of their enterprises had a major impact on the commercial, industrial and physical character of the precinct.⁷

The development around Millers Point was predominantly maritime related, and included a number of small-scale industries related to maritime and shipping activities (eg boat builders, shipwrights, rope makers, anchor smiths and sail makers). The only large-scale industrial pursuit within the Barangaroo site was the Australian Gas Light Company (AGL), a privately owned company that established a gasworks at Darling Harbour in the 1830s.⁸

By 1870, most of the foreshore between Dawes Point and Darling Harbour had been modified by quarrying, reclamation and/or the construction of seawalls, and the area was almost entirely occupied by wharves, stores and commercial properties.⁹

2.2.3 Phase 3—Intensive Development and Decline c1870–1900

The area around Millers Point and Darling Harbour was subject to major transformation during the late nineteenth century. Many of the facilities had become dilapidated by this time and changes in shipping technology rendered some of the wharf and jetty facilities unsuitable and in need of upgrading. Darling Harbour had also become polluted with rubbish, sewage and industrial waste.¹⁰

The collapse of the wool trade and economic depression of the 1890s signalled upheaval for Millers Point and its waterfront workers. The great maritime strike of 1890 ended with the crushing of the Wharf Labourers Union. In its wake, the work available was often sporadic and insecure. Once symbols of prosperous economy, the wharves were now exposed as a site for renewal.

A major program of government resumption and redevelopment commenced, which had a profound effect on the character and form of Darling Harbour, Millers Point and The Rocks. Between 1880 and 1900, most of the wharves and other structures were demolished during the government resumption. The outbreak of the bubonic plague in 1900 instigated further intervention.

2.2.4 Phase 4—Change and Renewal 1901–2021

Following the outbreak of the bubonic plague the government was able to accelerate the resumption of wharves and the surrounding streets, with the view that the private sector could not manage port infrastructure. The result was a program of ‘some of the greatest public works ever undertaken in Sydney – the creation of modern wharves from Woolloomooloo to White Bay and the building of the Sydney Harbour Bridge.’¹¹ The Sydney Harbour Trust was established in 1900 to control and manage the improvement and preservation of the Port of Sydney. The responsibilities of the Sydney Harbour Trust included demolition of old wharfage, land reclamation, construction of new port facilities, dredging operations and removal of shipwrecks.

Public Works and Public Housing, 1900–1920s

In 1909 the Sydney Harbour Trust began the huge task of modifying the natural landform, reorganising the road networks and constructing the finger wharves. Millers Point became a huge construction site. Up to 1000 men would wait at the corner of Argyle and Kent streets in the morning, hoping to be employed as labourers for the new works. These included the creation of Hickson Road at wharf level by ‘cutting down’ the cliff face in East Darling Harbour. From 1910 to 1914, three road bridges crossing Hickson Road at Millers Point were built by the Sydney Harbour Trust to implement its 1907 plan for the area. In the 1920s the Hickson Road retaining wall was completed, including the northern and southern steps. The metal pedestrian bridge across from High Street to the wharves and the men’s toilets near the High Steps (southern steps) are assumed to have also been built at this time. In 1919, the wharves between Dawes Point and Millers Point were named Walsh Bay after the Sydney Harbour Trust Engineer in Chief, HD Walsh.

By the 1920s, whole streets had been subsumed into hundreds of houses managed by the Sydney Harbour Federation Trust, along with a kindergarten, red brick shops along Argyle Street and hotels like the Hotel Palisade. The area presented as a coherent village and became something akin to a company town. A close-knit, largely working-class community remained, bound to the wharves, right up until the 1980s.

The Depression and ‘The Hungry Mile’, 1930s

Around the same time as the construction of the Sydney Harbour Bridge in 1932, the wharves around Millers Point were entirely removed and new finger wharves were constructed to accommodate new large ship berths. Wharves in the southern part of the Barangaroo site were repaired and altered. In 1936 the Maritime Services Board (MSB) was established and took over the management of the resumed properties in The Rocks and Millers Point from the Sydney Harbour Trust.

During the Great Depression workers named the section of Hickson Road adjacent to Central Barangaroo the ‘Hungry Mile’, as workers used to walk between the wharves searching for work so they could provide for their families. The numbers of men who gathered at the gates was always much larger than the number of jobs available unloading ships docked at the wharves. Waterside workers had been active from the 1870s and the Waterside Workers’ Federation (WWF) grew to be one of the country’s most powerful organisations, leading the fight for fair pay and conditions. The national WWF was formed in 1902. It was notably active during the Great Depression, seeking fair and safe conditions for waterside workers. In the mid-twentieth century labour unions, including the WWF, became supporters of the Aboriginal rights movement.

After the 1920s, very little change occurred to the built fabric of the area for decades. Improved working conditions and entitlements by the late 1940s gave greater job security. By 1947, skilled and unskilled work associated with the waterfront was still the main occupation of most men living at Millers Point. However, the growth of road transport from the late 1940s made serious inroads into coastal shipping, which never really recovered. By the 1950s, ships had become too big for the finger wharves and the shape of waterfront work changed as radio call-up for work gangs made it possible for workers to live at a distance from the wharves and private car ownership increased mobility. For those who aspired to suburban living, these improvements in communications enabled their relocation to the newly developing outer areas.

Sydney’s Commercial Expansion and Wharf Decline, 1960s–1980s

The need to expand commerce and business in Sydney’s CBD gave rise to plans to demolish buildings at The Rocks and redevelop the area for high-rise towers, under the Sydney Cove Redevelopment Authority set up in 1968. Following a general period of disuse of the Walsh Bay wharves around the 1960s, major changes occurred in the area. The Darling Harbour wharves were constructed, the western shoreline was moved around 200m westwards, and a large concrete apron was created, forming the shipping container dock (since demolished). Also in this period, the pedestrian bridge across from High Street was removed, the men’s toilets on Hickson Road were decommissioned and the northern steps were bricked in, changing the connection of the harbour to Millers Point.

From the mid-1970s, major port activities were moved to Botany Bay, leaving excess wharfage at Millers Point and a community dedicated to the protection of its unique nineteenth and early twentieth century heritage. Wharves 4/5 were used by performing arts companies, but the following decades became fraught with legal battles and protests over the future of Millers Point. The handover of housing to the Department of Housing in the 1980s disrupted the close-knit community bound to this area for decades.

In 1999, the State Government passed legislation to redevelop the area and, despite public outcry, one of the Walsh Bay finger wharves was demolished and rebuilt for private residential use.

2003–Present

In 2003, the NSW Government announced that the stevedoring wharves at East Darling Harbour would be developed into a new urban precinct, and by 2013 the majority of port use has ceased. Following a public naming competition, the East Darling Harbour area was renamed Barangaroo after the Aboriginal woman well known to the colonists as a powerful leader of her people and as a wife to Bennelong.

In 2009 the Barangaroo Delivery Authority (BDA) was established to manage development of the Barangaroo area, and under its authority the Barangaroo Concept Plan has evolved.

The three commercial towers at Barangaroo South were completed from 2012 to 2017, along with Barangaroo Reserve and infrastructure connections with Wynyard Station. Construction of the adjacent Crown Sydney Hotel Resort commenced in 2017 and was completed in 2021.

The development of Central Barangaroo, as part of the wider Barangaroo precinct, has involved the creation of Barangaroo Reserve, a foreshore park, and Nawi Cove, recreating the natural headland and shoreline in this area. In 2015 Barangaroo Reserve was opened and the NSW Government announced that Central Barangaroo would include a new metro station (to be completed in 2024).

Central Barangaroo is located on the site of the old wharf and a concrete hardstand, now removed. Central Barangaroo had been home to the Temporary Cruise Passenger Terminal until 2013, when the terminal was relocated to White Bay. During construction of Barangaroo South, part of the site was used for water treatment for construction and a temporary marquee which was formerly used for the Temporary Cruise Passenger Terminal was used to store and process sandstone for Barangaroo Reserve.

Permanent and temporary works associated with the construction of Barangaroo Station are currently in progress, involving extensive excavation and associated major infrastructure works. Related archaeological excavations in 2018–2019 uncovered a boat believed to have been built in the 1830s, the oldest known example of an Australian-built, European-style boat in NSW.¹²

2.3 Summary of Historical Development—Central Barangaroo Precinct

The nineteenth-century development within this part of the harbour was focused around Millers Point and Darling Harbour, to the north and south of Central Barangaroo. Most of Central Barangaroo was originally located below the waterline, and the natural foreshore within Central Barangaroo was very steep. While the northern headland and the southern portion of Barangaroo were extensively developed from the early nineteenth century, the central portion remained relatively undeveloped until the 1860s, owing to the steep topography of this area (Figures 2.7–2.9). Maritime industry extended into this part of the site after this time. This development corresponds with the latter part of Phase 2 of the site's history (Private Ownership 1788–c1870).

John Cuthbert had purchased waterfront land in Darling Harbour by 1849 and bought Munn's shipyard at Millers Point in 1856. By 1865, Cuthbert's shipyard had extended south towards Central Barangaroo, including construction of some wharf infrastructure in this area; this is detailed in Figure 2.1 and further in Section 5.0 of this HAIS.

It is noted in the AAMP that 'Cuthbert's yard was one of the most extensive in the colony employing upward of 250 men at the end of the 1860s' and occupying several properties between Millers Point and

Cockle Bay.¹³ Cuthbert's facilities and operations included 'a large jetty and yard comprising blacksmiths' shops, carpenters' sheds, sail lofts, a steam saw mill and large store of timbers, most sourced from the Sydney region'.¹⁴ However, the exact location of such facilities within the shipyard is unknown and historical plans of the area indicate that the study area remained largely unclaimed during Cuthbert's ownership.

Photographs from the mid-nineteenth century (Figures 2.2 and 2.3) show Clyde Street before it was demolished in 1909, extending almost down to the water's edge. Clyde Street represented the southern boundary of Cuthbert's shipyard at Millers Point, partially overlapping the north eastern end of the current study area. Several other structures such as timber buildings, sandstone jetties, wooden wharves, sheds and floating docks can also be seen within the study area (Figures 2.4 and 2.6).

The Australian Gas Light Company (AGL) was formed in 1836. It was a privately owned enterprise and the largest industrial premises within the Barangaroo precinct. The northern part of the AGL site extended into the area of Central Barangaroo. The land was originally granted to John Macarthur in 1810. Portions of the site were leased and by 1830 part of the foreshore had been reclaimed, and cottages and a wharf had been erected. Preparation of the site for the gasworks involved extensive quarrying to level the gasworks yard and excavation (c6.5m deep) for the installation of two gas holders. The gasworks was partially built on reclaimed land consisting of large wharfs (Figure 2.1). The section of the gasworks site within Central Barangaroo was primarily reclaimed land. The cove to the north of the gasworks was reclaimed by 1865 and a number of buildings were added to the site between 1869 and 1882. Gas production was progressively transferred to Mortlake from the mid-1880s. The gasworks site was acquired by the government in 1912 and cleared by 1922.¹⁵

The late nineteenth century was characterised by phases of reconstruction of wharves and storage facilities. The large-scale resumption and demolition across the area in the late nineteenth century had a major impact on facilities within Central Barangaroo. Cuthbert's shipyard was the first large land parcel to be redeveloped. Cuthbert's land was acquired by TA Dibbs, and was entirely redeveloped for large-scale wharfage and goods storage.¹⁶ Dibbs' wharf was then demolished in turn to make way for further redevelopment and improvement.¹⁷ This period of demolition and change corresponds with Phase 3 of the site's historical development (Intensive Development and Decline c1870–1901). Large finger wharves were constructed in this area c1912 (Wharves 2–4 extended to within the study area). The area continued to be redeveloped throughout the twentieth century as shipping technology evolved. During the postwar period, the finger wharves slowly became redundant and by the 1960s a large, singular concrete apron was constructed to facilitate the move to container shipping. The concrete apron remained extant until the Barangaroo redevelopment began.

Hickson Road was constructed from c1912. These works included excavation of bedrock along the road alignment and major modification of the shoreline along Central Barangaroo.¹⁸ Figure 2.6 is a photograph looking south across the study area, showing construction of the finger wharves in the study area c1912. This photo also shows the excavation of the steep foreshore adjacent to the study area that was in progress as part of the construction of Hickson Road.¹⁹ These periods of major redevelopment correspond with Phase 4 of the site's history (Renewal 1902–2010).

The Patrick Corporation operated as a container terminal operator within the site from 1996 to 2006, when the existing facilities were no longer considered viable for large super freighters. Since 2006, all Patrick Corporation structures have been removed from the site. An interim cruise passenger terminal was established within Central Barangaroo in 2010, as well as site sheds and other temporary facilities associated with the current phase of redevelopment.

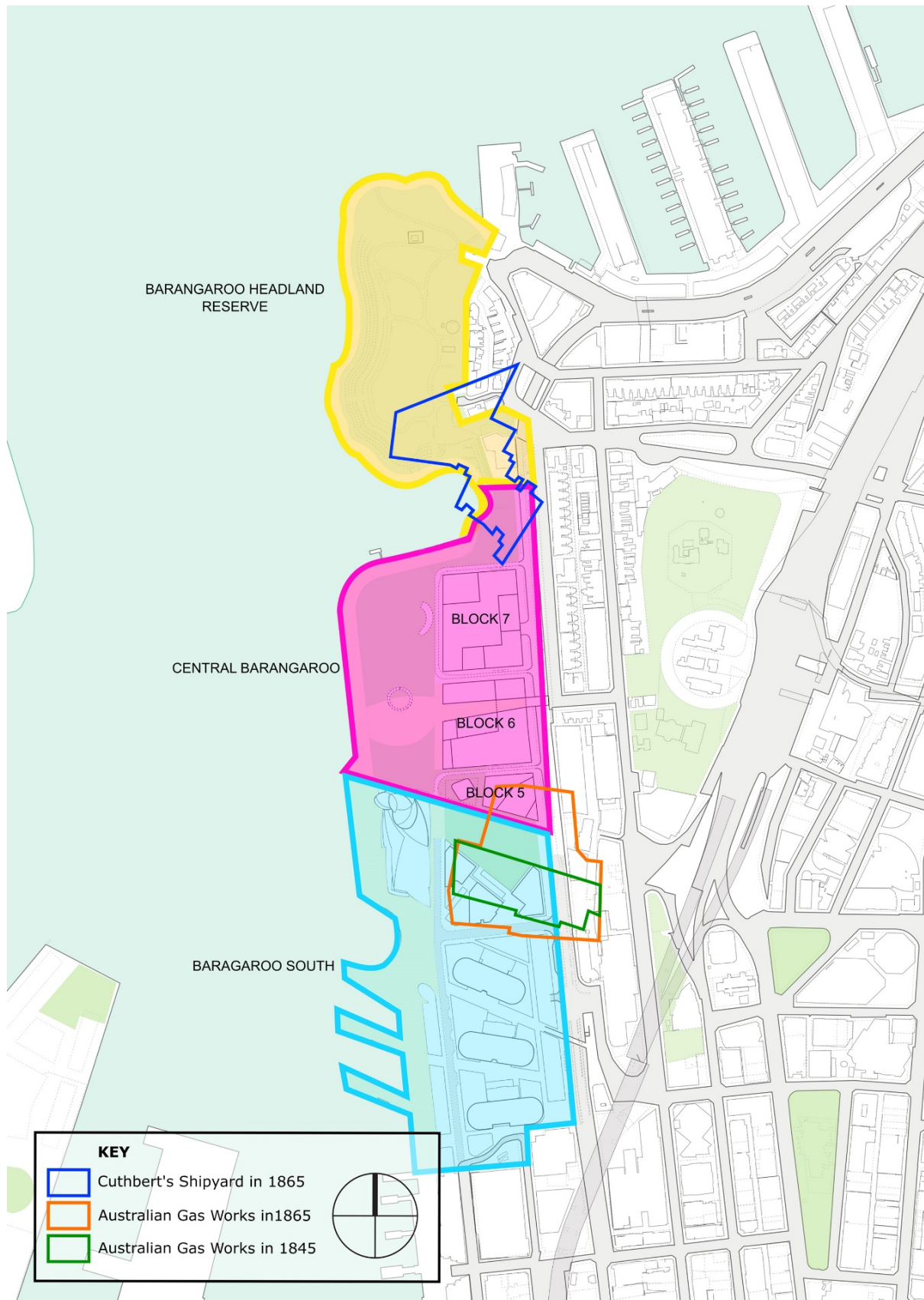


Figure 2.1 Map showing the approximate locations of Cuthbert's shipyard and the AGL gasworks in relation to the Central Barangaroo study area. (Source: Hassell, 2018, with GML update and overlay, 2021)

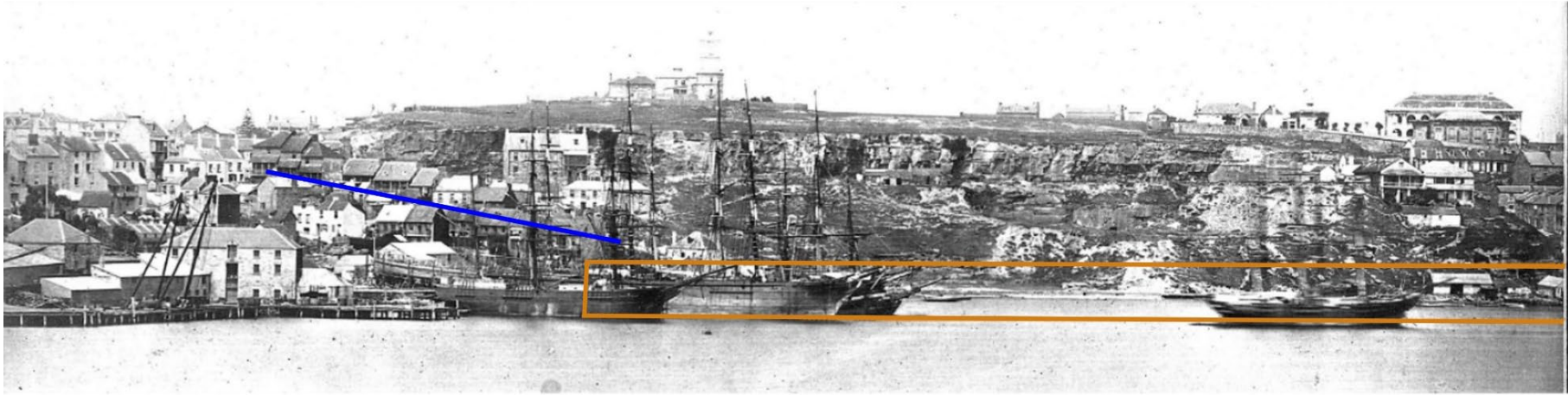


Figure 2.2 Photograph of the study area (its approximate location marked by an orange rectangle) after 1858, showing the steep and rocky terrain of Central Barangaroo, which at that time had little development. The numerous ships are moored at Cuthbert's shipyard and the AGL gasworks is located just out of frame to the right. Clyde Street (blue line) was demolished in 1909 as part of the resumption of the area. (Source: City of Sydney Archives, File 079\079893, with GML overlay, 2021)

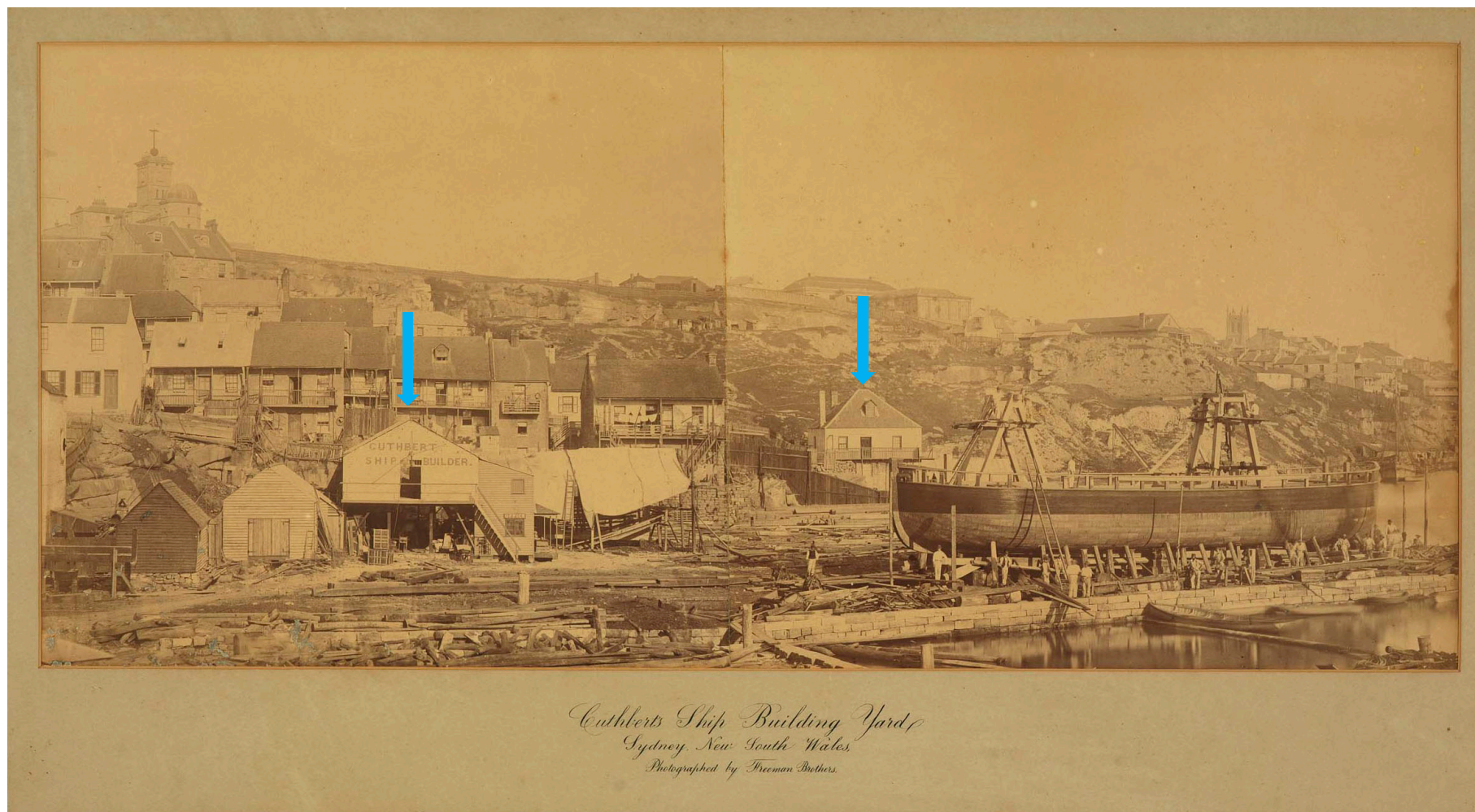


Figure 2.3 c1860 photograph looking southeast showing the southern end of Cuthbert's shipyard, which potentially extends into the Central Barangaroo study area. The blue arrows in this photograph indicate buildings that may fall within the study area and correspond with the blue arrows in Figure 2.4. (Source: State Library of NSW, OAI 188719, with GML overlay, 2021)

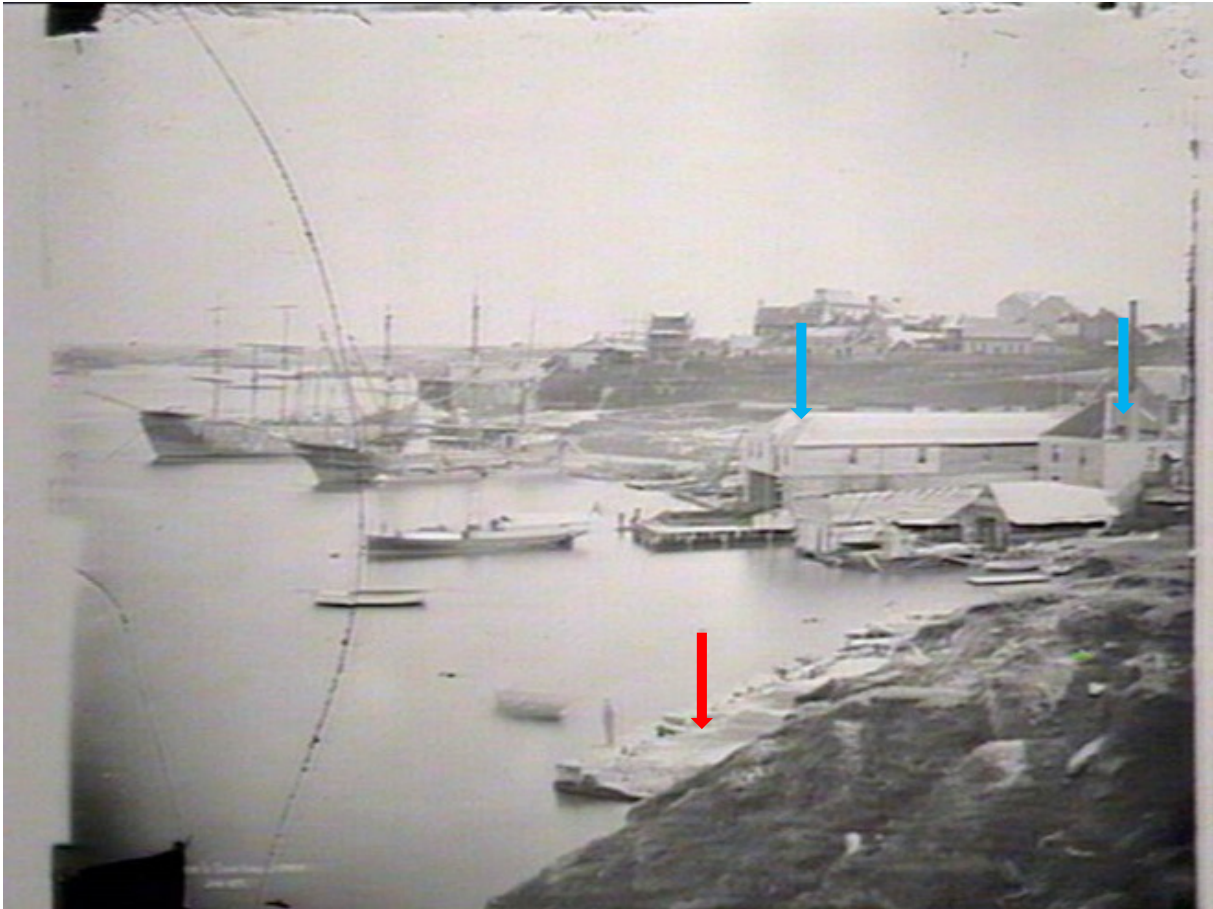


Figure 2.4 1871 photograph looking northwest. The buildings and wharf (blue arrows) are located at the base of Clyde Street and were part of Cuthbert's shipyard. The buildings represent the southern extent of the shipyard and fall within the northeastern part of Central Barangaroo. The sandstone seawall and reclamation (red arrow) are indicative of the type of archaeology that might be extant within the study area from the nineteenth century. (Source: National Library of Australia [NLA], Cuthbert's Shipyard OAI: 167901)



Figure 2.5 View across the study area towards the gasworks around 1870, showing the steep slope down to the harbour. The portion of the gasworks that falls within Central Barangaroo was constructed on reclaimed land. The ships are moored at Rowntree's floating dockyard. (Source: NLA, ON 4 Box 59 No. 320 20)

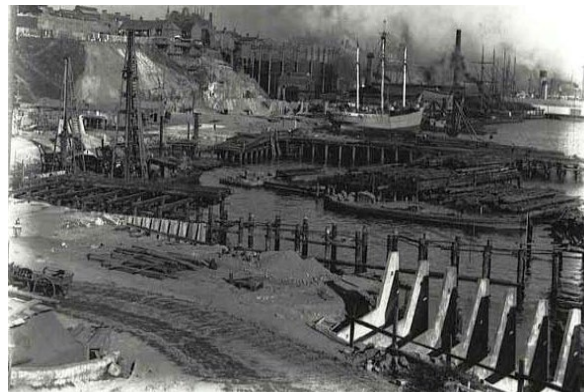


Figure 2.6 Photograph of roughly the same area as Figure 2.5 in c1912, showing the construction of the finger wharves. This photograph also shows the excavation of the steep foreshore for the construction of Hickson Road in progress. (Source: NSW State Archives, ao17-AO17000007)



Figure 2.7 Sydney Harbour Trust's employees' homes and Lance Kindergarten in High Street, Millers Point, c1920. The northern steps of the retaining wall which led to High Street and the bridge deck can be seen to the left of the image. The bridge connection between the wharf buildings and High Street is shown circled in blue, at the 'low point' of High Street. (Source: NSW State Archives)

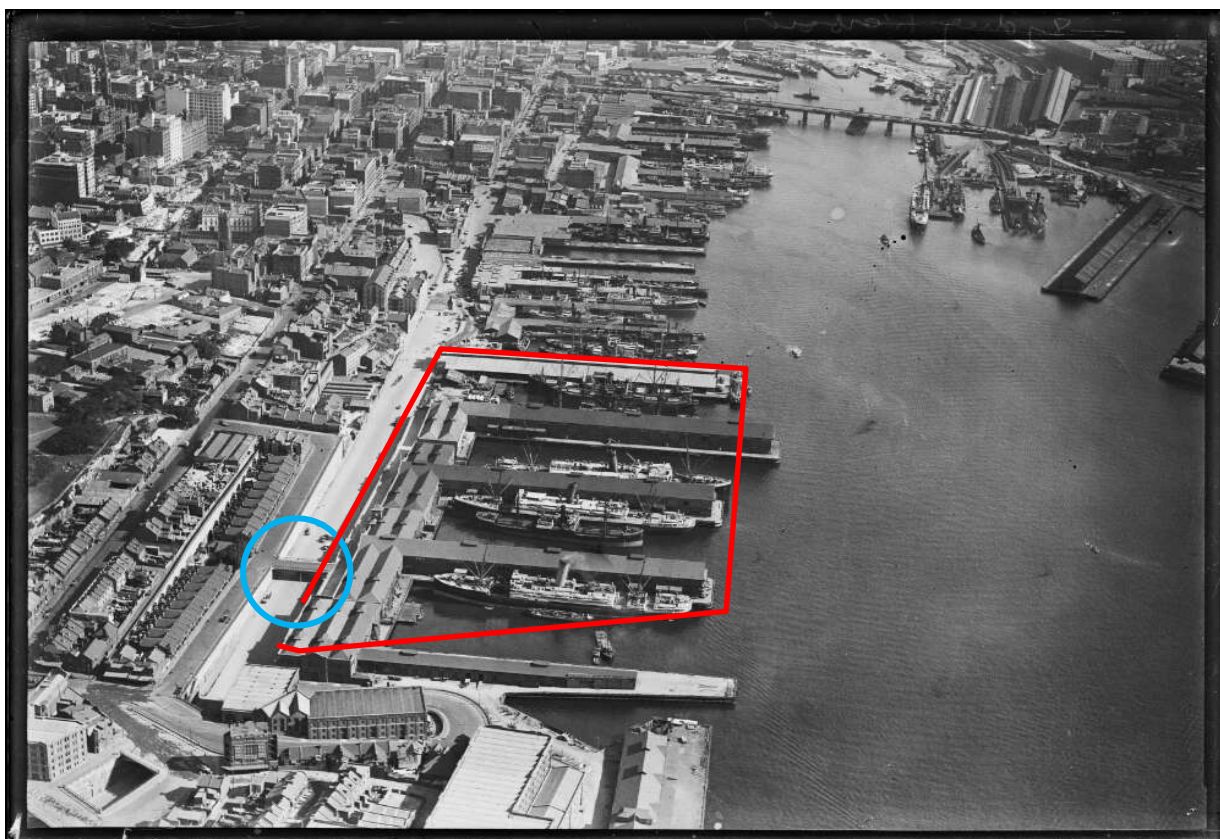


Figure 2.8 Aerial view showing the approximate study area (red) in c1930 after the demolition of Clyde Street and the creation of High Street and Hickson Road. The former bridge connection over Hickson Road to High Street is shown circled in blue. (Source: NLA, PIC 1561114257 LOC21)



Figure 2.9 View from High Street of Hickson Road looking north, showing the bridge connection between the wharf buildings and High Street, 1925–1926. (Source: City of Sydney, Sydney Reference Collection (SRC) Photographs, A-00028983)

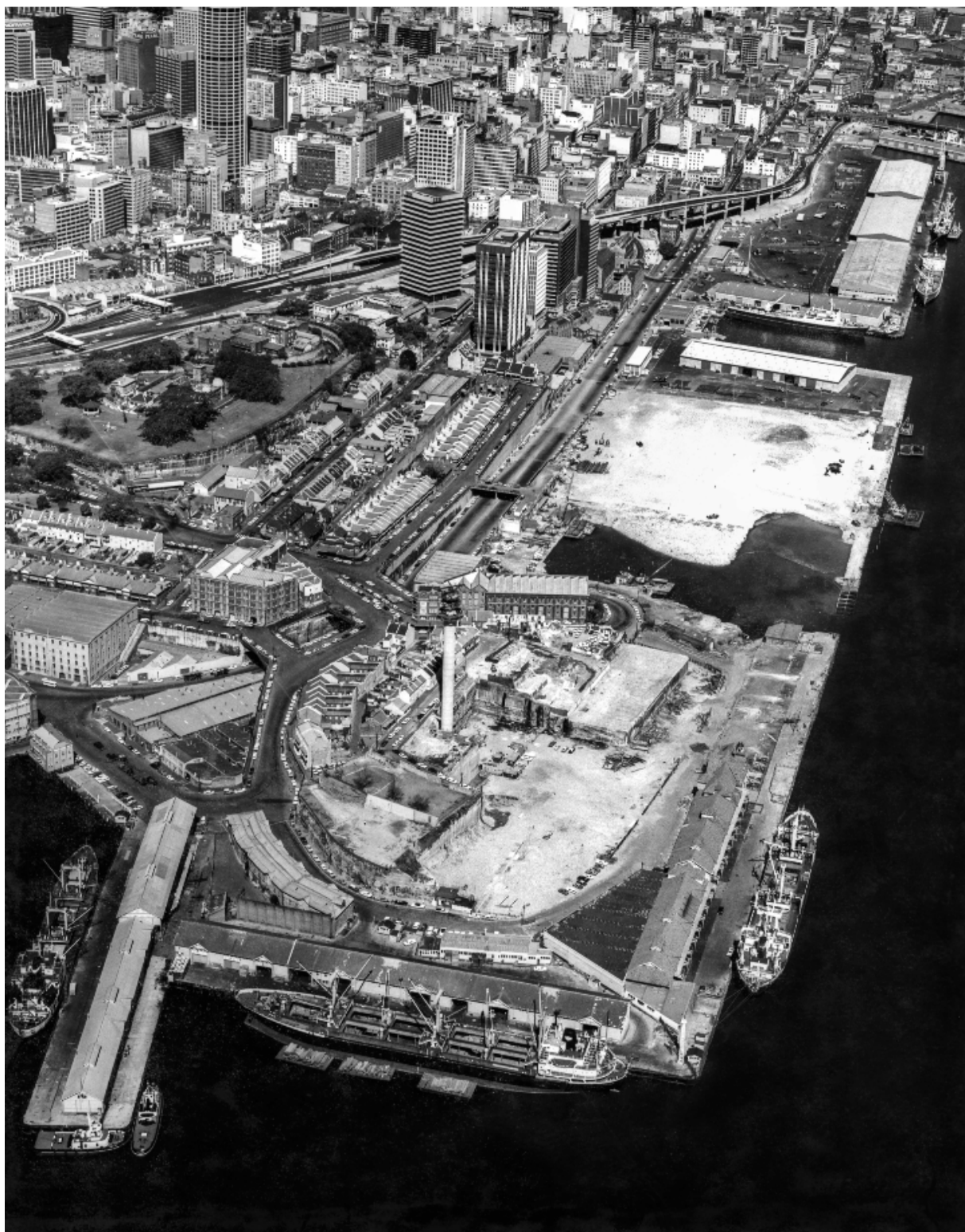


Figure 2.10 Aerial photograph of the Barangaroo area in 1971 showing the infill of the shoreline to create the shipping container dock.
(Source: City of Sydney Archives, 093479_1971_LR)



Figure 2.11 Aerial photograph taken in 2013 showing the location of Central Barangaroo (shaded in orange) in the context of the wider Barangaroo site. (Source: Modification to Concept Plan, Preliminary Environmental Assessment Report, September 2013, p 4)



Figure 2.12 Photograph showing the site conditions at Central Barangaroo in 2013—sandstone extraction and processing. (Source: GML, October 2013)



Figure 2.13 Aerial photograph showing a similar view of the site in 2018, prior to construction of the Crown Towers. (Source: Barangaroo Delivery Authority, 2018)

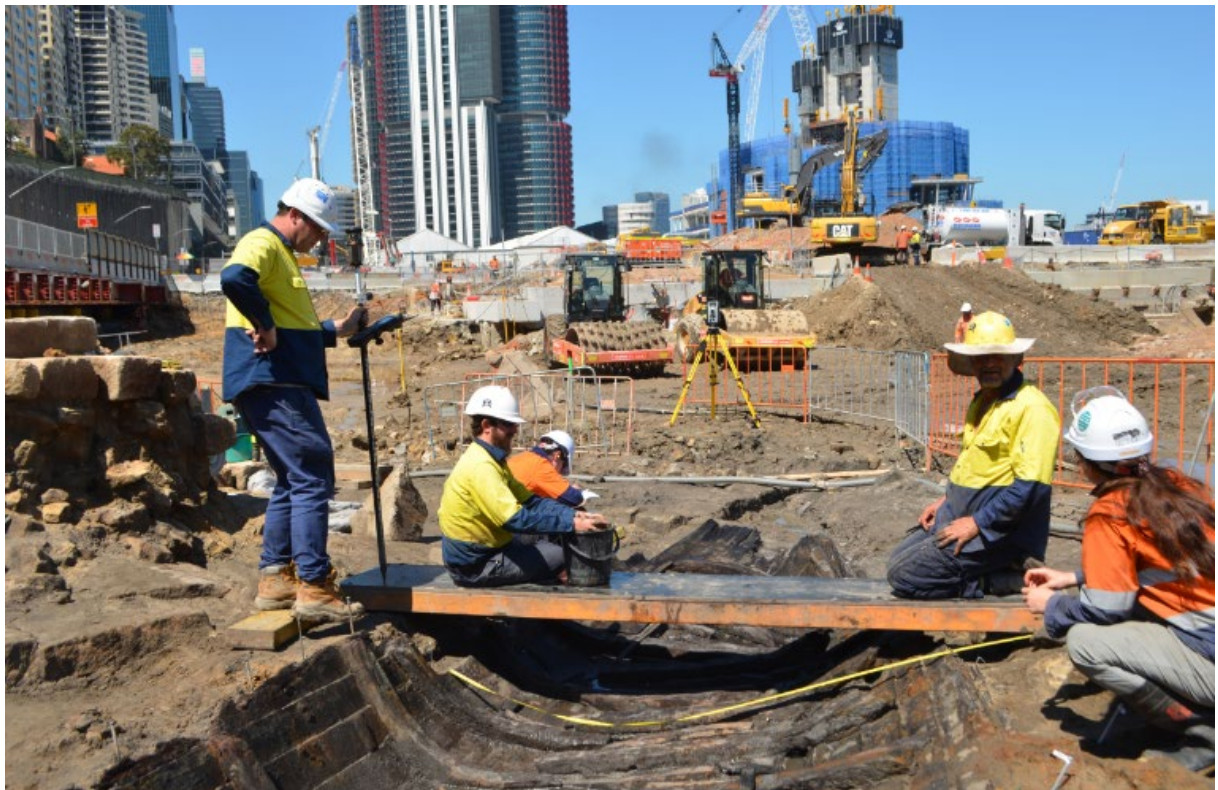


Figure 2.14 View of the timber boat uncovered during excavation works for the new Sydney Metro station located in the vicinity of the northern edge of Central Barangaroo to the west of Hickson Road. (Source: Casey & Lowe, DSC_3067, image taken 2018–2019²²)

2.4 Historical Overlays

The following overlays have been adapted from the AAMP.²³ The overlays are based off historical plans, but provide a purely indicative representation of the shoreline. The historical overlays of plans from 1788 and 1807 show parts of the foreshore extending into the study area; however, these very early plans of Sydney are considered relatively spatially inaccurate and provide indicative information about the landforms and site elements only. Several features may have existed which are not depicted on the plans, including early wharf structures, private docks or bathing areas.

The dotted red line represents the entire Barangaroo redevelopment area, with the Central Barangaroo study area in blue. These figures provide a visual summary of the physical development of the study area. They demonstrate how the majority of the site is reclaimed land and was not substantially historically developed until post-resumption of The Rocks and Millers Point.



Figure 2.15 Overlays from three historical plans showing the indicative shoreline from the late-eighteenth century through to the mid-nineteenth century, illustrating that the study area had minimal opportunity for historical development due to its close proximity to the early shoreline.²⁴ (Source: SIX Maps with GML overlay, 2021)



Figure 2.16 Overlays from three historical plans showing the development and utilisation of the coastline by the late-nineteenth to early-twentieth century.²⁵ (Source: SIX Maps with GML overlay, 2021)



Figure 2.17 Overlays from three historical plans showing the extensive commercial wharfs constructed by the 1930s and the final land extent before the Barangaroo redevelopment in the 1990s. (Source: SIX Maps with GML overlay, 2021)

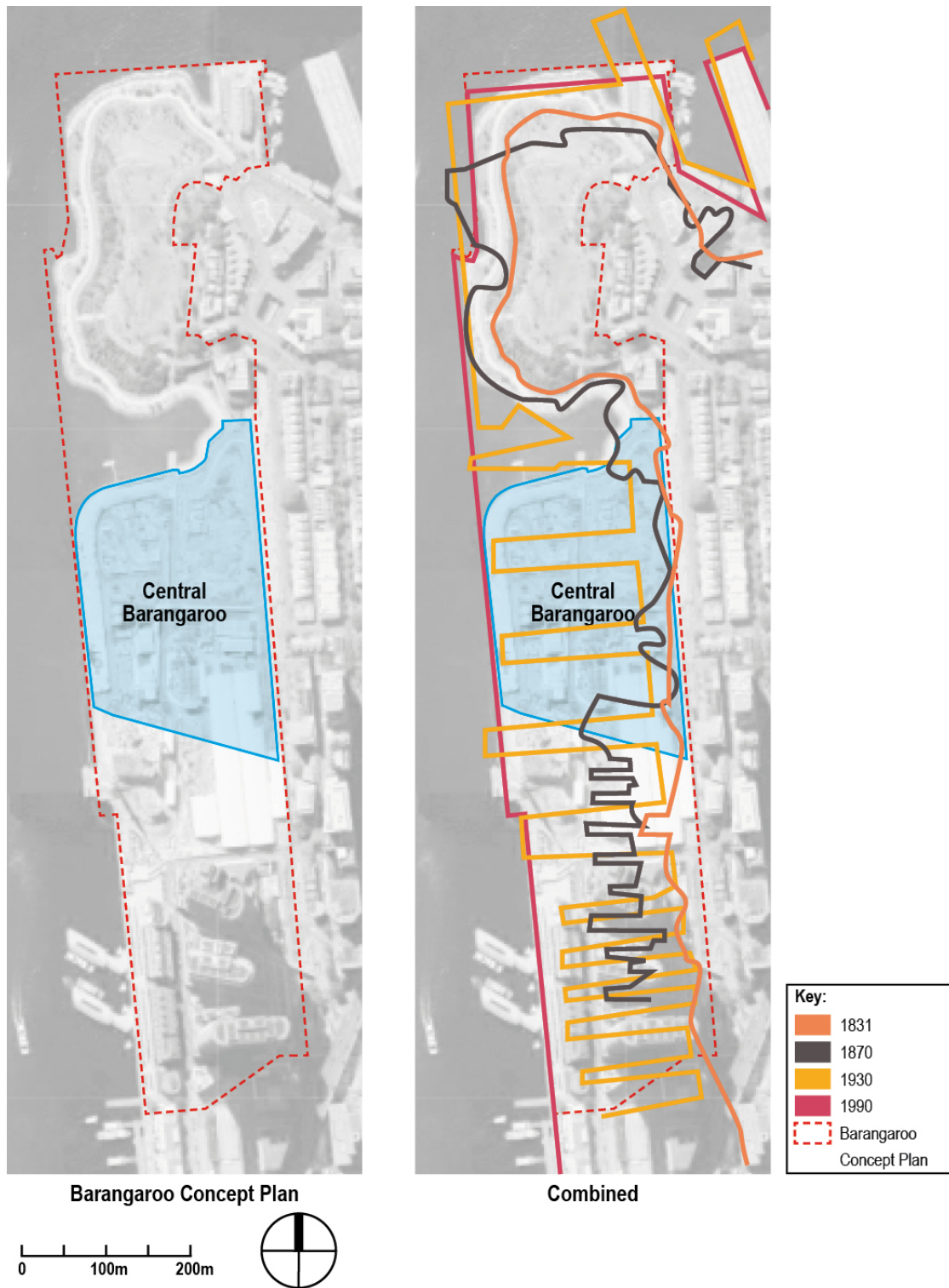


Figure 2.18 Overlays showing the current shoreline (2021) and a combination of select historical overlays to show the evolution of the shoreline in one diagram. (Source: SIX Maps 2020, with GML overlay, 2021)

2.5 Endnotes

- ¹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, pp 11–46.
- ² These historical phases are based on the information provided in the 2010 AAMP.
- ³ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 20.
- ⁴ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 20.
- ⁵ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, pp 23–24.
- ⁶ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 24.
- ⁷ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 24.
- ⁸ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 31.
- ⁹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 30.
- ¹⁰ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 35.
- ¹¹ Shirley Fitzgerald, Millers Point, Dictionary of Sydney, 2008, http://dictionaryofsydney.org/entry/millers_point, accessed 25 June 2021
- ¹² Casey & Lowe, 'SYDNEY METRO PROJECTS: BARANGAROO' <https://www.caseyandlowe.com.au/portfolio_page/sydney-metro-projects-barangaroo-blues-pointpitt-st-north/>.
- ¹³ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 26.
- ¹⁴ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 26.
- ¹⁵ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 31.
- ¹⁶ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 36.
- ¹⁷ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 41.
- ¹⁸ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, pp 41–42.
- ¹⁹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 42.
- ²⁰ National Library of Australia, ON 4 Box 59 No. 320, American and Australasian Photographic Company, 'Rowntree's floating dock', 1870–1875.
- ²¹ NLA PIC 1561114257 LOC, Fairfax Archive of glass plate negatives, Aerial view of Circular Quay [sic], Sydney, c1920.
- ²² Casey & Lowe, 'SYDNEY METRO PROJECTS: BARANGAROO' <https://www.caseyandlowe.com.au/portfolio_page/sydney-metro-projects-barangaroo-blues-pointpitt-st-north/>.
- ²³ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, pp 11–46.
- ²⁴ Sketch of Sydney Cove Port Jackson, 1788, by John Hunter and William Dawes; County Cumberland, Parish of St Philip, NSW Crown Lands Administrative Maps, c1830, in Ashton, P and Waterson, D 2000, *Sydney Takes Shape: A History in Maps*, Hema Maps, Brisbane, p 5; State Archives NSW, Parish Map of St Phillip, No. 14073701.
- ²⁵ William Henry Wells, Map of the City of Sydney, 1843, from Ashton, P and Waterson, D 2000, *Sydney Takes Shape: A History in Maps*, Hema Maps, Brisbane, p 25; Plan of the North West Portion of the City of Sydney Locally Known as The Rocks with its Surroundings From Darling Harbour to Circular Quay, WA Gullick Government Printer, 1900, from Ashton, P and Waterson, D 2000, *Sydney Takes Shape: A History in Maps*, Hema Maps, Brisbane, p 49.

3.0 Geotechnical Background

3.1 Geotechnical Summary

Geotechnical investigation of the entire Barangaroo precinct was undertaken by Environmental Resources Management (ERM) in 2006 and JBS Environmental Pty Ltd (JBS) in 2012.¹ Further investigation of Block 7, Central Barangaroo, was undertaken by Douglas Partners in 2017.²

In 2006, 153 boreholes were drilled across the entire Barangaroo site to map its geology, soils and fills. The concrete deck that extended across the site was of varying thickness and sat above fill and alluvial/marine deposits. The fill material was also variable, and timber, stone, brick, concrete and steel were encountered during drilling.

ERM reported that the fill was compacted at the top but loose at the bottom. The fill directly overlay sandstone bedrock at the eastern end of the precinct, but sat on marine sediments which overlie the bedrock in the middle and western end of the precinct. The fill depth ranged from approximately 0.5m to 4–18m. The results of the ERM investigation indicated fill depths in the shallower range (c1–3m) along the eastern part of the site, adjacent to Hickson Road. The fill was generally deeper with distance from the original shoreline and between the cove on the western side, and the headland to the east. The groundwater level was recorded by ERM as between 0.3m and 0.65m below the deck level.

The investigation found that the natural topography of the precinct formed a bay with the headland at the north and the deepest sandstone sea floor (at 28m) on the southwestern part of the precinct. The natural topography had been cut back along the eastern portion of the site, where the natural foreshore was relatively steep.

Thirty-seven boreholes were dug within the footprint of Block 7 in 2017. The results of this investigation correlated with ERM's 2006 results. Fills containing modern or historical materials such as wood, brick and glass varied between 1.9m and 11m across Block 7. Bedrock was shallower to the east of the site and dropped significantly towards the western edge of the study area.

The results of the geotechnical investigations confirm that the extensive fill deposits across the site have potential to contain demolition material and structural remains related to previous phases of the site's history and formation. The nature, extent and management of these potential remains are discussed in more detail in the assessment of historical archaeological potential and significance in Section 5.0 of this HAIS.

3.2 Site Geology

This geological summary has been provided by JBS following further investigation of the site in 2012³ (with minor edits for GML style).

According to the 1:100 000 Geological Survey of NSW (Sydney) Sheet 9130 (Ed 1) 1983, Central Barangaroo is generally underlain by artificial fill that has been placed over marine sands over Hawkesbury Sandstone, which is described as follows:⁴

- artificial fill may consist of 'dredged estuarine sand and mud, demolition rubble, industrial and household waste'; and
- Hawkesbury Sandstone is characterised as 'medium to coarse-grained quartz sandstone with very minor shale and laminate lenses'.

The general geological profile observed at Central Barangaroo, as reported by previous investigations, is summarised in Table 3.1.

Table 3.1 Summary of Observed Site Geology.

Lithological Unit	Description	Depth (mbgl)
Hardstanding	Asphalt, bitumen or concrete, generally in good condition with no staining.	0–0.46
Road base fill	Very dark grey, dry, loose, medium grained sand to fine gravel, poorly sorted, sub-angular, no odours or staining noted.	0–0.5
Fill	A range of materials have been reported as being present as fill, including silty clay, clayey sand, sand, sandy gravel, sandy gravelly clay, sandy clay and gravelly sand. Sandstone floaters have also been reported as occurring in fill materials. Anthropogenic materials have also been reported in fill material including building rubble, bricks and concrete.	Surface depth to 4–18.3
Marine clay/sand	Interbedded clayey sand and sandy clay, dark greyish brown, saturated, some shell fragments and organic matter. Sandy clay—soft, high plasticity. Clayey sandy—loose to dense, fine to coarse sand, low to no plasticity.	Below 4–18.4
Bedrock	Weathered sandstone, white, light yellowish brown, olive brown and reddish brown, wet, fine to coarse grained, some fracturing noted.	Below 9.5–38

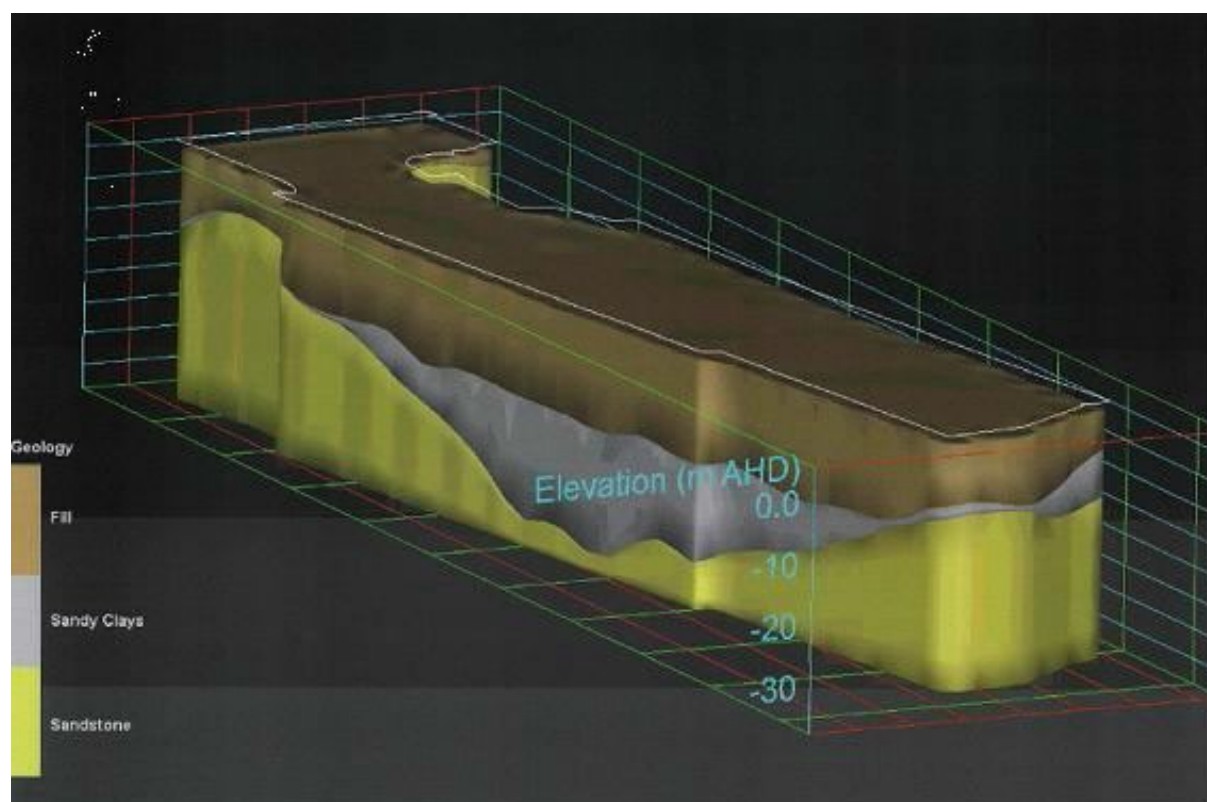


Figure 3.1 Geological deposits of the entire Barangaroo site as predicted by ERM based on borehole sampling. (Source: ERM, 2008)⁵

3.3 Endnotes

- ¹ JBS Environmental Pty Ltd, Data Gap Investigation, Central Barangaroo, Hickson Road, Sydney, NSW, August 2012; Environmental Resources Management (ERM) 2007 and 2008, 'Geotechnical and Environmental Investigation', prepared for Sydney Harbour Foreshore Authority.
- ² Douglas Partners, Central Barangaroo – Block 7, Hickson Road, Barangaroo, prepared for Grocon (CB) Developments Pty Ltd.
- ³ JBS Environmental Pty Ltd, Data Gap Investigation, Central Barangaroo, Hickson Road, Sydney, NSW, August 2012.
- ⁴ ERM, September 2008, 'Stage 2 Remedial Action Plan for Barangaroo, Hickson Road, Sydney', referred to as 'ERM 2008b' in JBS 2012 report.
- ⁵ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, prepared for Barangaroo Delivery Authority, June 2010, p 56.

4.0 Aboriginal Archaeology

4.1 Introduction

This section discusses the potential for Central Barangaroo to contain archaeological evidence associated with Aboriginal occupation and habitation. This assessment has been undertaken in accordance with Heritage NSW (formerly the NSW Office of Environment and Heritage) guidelines which define a 'due diligence' approach to Aboriginal heritage management: *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* 2010 (Due Diligence Code of Practice). The Due Diligence Code of Practice sets out the reasonable and practicable steps which individuals and organisations need to take in order to:

- identify whether Aboriginal objects are, or are likely to be, present in an area;
- determine whether their activities are likely to harm Aboriginal objects (if present); and
- determine whether an Aboriginal Heritage Impact Permit (AHIP) application is required.

GML prepared a Due Diligence Aboriginal Assessment in accordance with the Due Diligence Code of Practice in 2012 (AA 2012) for the Barangaroo Central Waterfront Promenade and Interim Public Domain project.¹ This HAIS is to accompany the Environmental Assessment for the MOD 9 application for Central Barangaroo, and it therefore applies to a slightly varied and larger study area than the assessment undertaken in 2012 (Figure 4.1).

Comber Consultants, on behalf of Casey & Lowe, also completed an Aboriginal Archaeological and Cultural Heritage Assessment and Heritage Impact Statement in 2014 for the remediation works located in the footprint of Block 5.² The report concluded that Block 5 contained no Aboriginal archaeological or cultural heritage potential and that no further Aboriginal archaeological assessment, excavation or testing was required.³

This HAIS has determined that the environmental and archaeological context for the AA 2012 is wholly applicable and directly relevant to the current study area. A due diligence assessment in accordance with the Due Diligence Code of Practice guidelines requires a current search of the Heritage NSW Aboriginal Heritage Information Management Systems (AHIMS) database (ie within 12 months of the assessment taking place). Therefore, an updated search of AHIMS was undertaken for this HAIS to identify any further Aboriginal archaeological sites that may have been registered since 2012.

4.2 Environmental Context

This section provides environmental context information for use in developing a predictive model of Aboriginal archaeological site locations associated with the study area. Interactions between people and their surroundings are of integral importance in the initial formation, and the subsequent preservation, of the archaeological record. The nature and availability of resources, including water, flora and fauna, and suitable raw materials for the manufacture of stone tools and other items, had (and continues to have) a significant influence over the way in which people utilise the landscape.

Alterations to the natural environment also impact upon the preservation and integrity of any cultural materials that may have been deposited. For these reasons, it is essential to consider the environmental context as a component of any Aboriginal archaeological assessment.

4.2.1 Geology and Soils

The study area is located on the GyMEA soil landscape, which is underlain by Hawkesbury sandstone. It is characterised by shallow to moderately deep soils, with frequent rock outcrops.⁴

Prior to historical landscape modification, the land in the vicinity of the study area was characterised by the Barangaroo headland sandstone outcropping and tidal mudflats. However, the study area has been subject to holistic land reclamation—refer to Section 5.3.

4.2.2 Landforms and Landscape Features

The study area's location is on reclaimed land abutting the Barangaroo headland and ridge leading to the headland. The Barangaroo headland to the east of the study area is a rocky ridge dividing Barangaroo from the intertidal estuarine zone of Sydney Cove. Originally, the headland consisted of steeply sloping sides to a gently rounded foreshore plateau. The original topography has been substantially altered by industrial development and other modifications to the area.

Aboriginal habitation patterns are characterised by landforms. The study area was unlikely to contain landforms that would have been suitable for use by Aboriginal people.

4.2.3 Hydrology

The Tank Stream was the nearest freshwater source, located approximately 500m east of the study area. The Tank Stream is formed by seepage springs in underlying sandstone in the vicinity of what is now Hyde Park, and originally formed a definitive creek around King Street before flowing into Sydney Cove.⁵ The study area is located on the estuarine foreshores of Cockle Bay. This location would have provided convenient access to maritime resources.

4.2.4 Fauna and Flora

The natural environment at the study area would have comprised transitional landforms as it changed from the rocky ridge to the mudflats of the intertidal zone. The deep waters near Cockle Bay are unlikely to have supported mangroves on the mudflats.⁶ The rocky ridge of the Barangaroo headland and its steep drop to the water would have consisted of open woodland of scribbly gum (*Eucalyptus racemosa*). A shrubby understorey may have been present, with *Leptospermum flavescens*, *Banksia oblongifolia* and *Callistemon citrinus*.⁷

The fauna of the area at the time of contact was well documented and included many species still present today in other Sydney regions such as the Cumberland Lowlands. The various animals would have included kangaroos, wallabies, wombats, echidnas, flying-foxes, emus, quolls, native rats, native mice, snakes and lizards.⁸ Marine resources such as fish would have been plentiful and accessed from bays near the study area, although in 1788 Watkin Tench, a military officer on the First Fleet, described the fish at Port Jackson as being less plentiful than at Botany Bay. Tench mentions fish species such as:

*bass, mullets, skate, soles, leather-jackets and many other species, all so good in their kind as to double our regret at their not being more numerous. Sharks of an enormous size are also found here.*⁹

4.2.5 Synopsis of the Environmental Context

Central Barangaroo is located almost entirely on reclaimed land. The original shoreline was predominantly steep, with sandstone outcrops and a small strip of sandy beach in some locations, and most of it would have been accessible only by water. A more accessible south-facing bay partially extended into the northeastern portion of the site and the fresh water of the Tank Stream estuary is

located approximately 500 metres away in Circular Quay. Therefore, a wide range of terrestrial and marine resources would have been available in the areas directly surrounding Central Barangaroo; however, the study area is unlikely to have yielded substantial resources.

4.3 Archaeological Context

4.3.1 Search of Heritage Registers

On 3 October 2018, GML undertook an extensive search of the AHIMS database for Central Barangaroo (Lot 101, DP 1204946) with a 1km buffer surrounding the study area. An extensive search was undertaken to confirm no new sites had been added to AHIMS since the approval of Concept Plan 06_0162 (MOD 8).

The results indicate that no previously recorded Aboriginal sites are located within Central Barangaroo (Figure 4.1). No Aboriginal places have been declared within the search area. A search of the SHR also shows there are no Aboriginal sites listed on the SHR in the study area or its immediate vicinity. However, 20 Aboriginal sites were identified within a 1km buffer of the study area.

Two Aboriginal sites (45-6-1939 and 45-6-0519) are recorded directly to the north of the study area, within the Barangaroo Reserve (formerly Headland Park) precinct. One site, 45-6-1939, is a rock engraving which has been destroyed, while 45-6-0519 is listed as an open campsite and shell midden (artefact site). Discussion with Mr Justin McCarthy from Austral Archaeology indicated that the 'Moore's Wharf' site (45-6-0519) was likely to have been excavated in 1981 when the Moore's building was relocated, and that this site was the remnant part of a midden, which has since been removed (see Section 4.3.3 for further details regarding this excavation).

Two other sites (45-6-1853, a midden with artefacts, and 45-6-2742, a Potential Archaeological Deposit [PAD]) are located on the sandstone ridge, now the location of the freeway onto the Harbour Bridge (Figure 4.1), outside Central Barangaroo. Other recorded Aboriginal sites are located elsewhere in the CBD within different landforms to those surrounding the study area.

The most recently added site has been recorded approximately 600m to the east of the study area (200 George Street, AHIMS #45-6-3081). This PAD was registered following a due diligence assessment undertaken for the 200 George Street development (see Section 4.3.3), which concluded that the development area had the potential to retain an Aboriginal archaeological deposit. Further details about this site are summarised in Section 4.3.3 below.

AHIMS results suggest that artefacts (isolated or scatters), PADs and shells/middens are the most commonly recorded Aboriginal archaeological sites near Central Barangaroo.

The pattern of Aboriginal sites revealed by AHIMS is likely to have been heavily skewed by the nature of urban development in Sydney's inner city. The high level of ground disturbance caused by urban development has certainly destroyed and/or damaged high levels of Aboriginal archaeological evidence within the CBD. Many of the recorded sites have been identified and registered within the last 15–20 years as modern development has encroached on less disturbed areas of land and the laws with respect to protection of Aboriginal objects and places have been tightened up.¹⁰

4.3.2 Ethnohistory

Most of the available ethnohistorical information regarding the Aboriginal people who lived at and near Cockle Bay comes from the writings of officials who travelled to NSW with the First Fleet, including Governor Arthur Phillip, Judge Advocate David Collins, Captain Lieutenant Watkin Tench and Lieutenant

William Dawes. Dawes also recorded many words from the language spoken by Aboriginal people around Port Jackson and included notes on pronunciation and grammar. Paintings and sketches were also produced by various artists. They depicted Aboriginal people, camps, tools and weapons.¹¹ These primary sources contain a wealth of information, yet also reflect the biases, assumptions and misunderstandings of their European authors/creators, who lacked an in-depth understanding of Aboriginal culture.

Much of the information presented below has been extrapolated from *Sydney's Aboriginal Past: Investigating the archaeological and historical records*, Val Attenbrow's 2002 seminal work on Aboriginal ethnohistory and archaeology at Sydney. It has been supplemented with some further research of primary and secondary sources. The account below focuses on the aspects of Aboriginal life that would have left physical evidence.

Accounts of Governor Arthur Phillip and Philip Gidley King identified the Gadigal (also spelt Cadigal) people as the inhabitants of the Sydney City region on the southern shore of Port Jackson between South Head and Darling Harbour, and south to Petersham. The Cadigal were part of the Darug language group. The Wangal people were the closest neighbours, residing to the west of the Cadigal, including Goat Island, Balmain, the south side of Sydney Harbour, and Parramatta River to Rouse Hill.¹² The Cameragal (Gammerraygal, Camera-gal, and Kamarigal) people occupied the land on the northern shores of Port Jackson, but the site of present-day Barangaroo is recorded as being of the Cameragal people.¹³ In addition, people living around Darling Harbour are said to have formed their own group separate from the Cadigal.

The original Aboriginal inhabitants of the areas surrounding present-day Barangaroo would have been among the first Indigenous people to experience the effects of physical and social dislocation resulting from the arrival and settlement of the First Fleet at Sydney Cove. Epidemics of smallpox also dramatically affected the Aboriginal population in Sydney, and across Australia. In 1790, Bennelong estimated to Governor Phillip that over half of Sydney's original Aboriginal population had died because of the smallpox epidemic that broke out in 1789.¹⁴ Other effects of European colonisation on local Aboriginal populations included loss of access to traditional lands and resources, intertribal conflict, starvation, and the breakdown of traditional cultural practices. The effects of such severe social dislocation dramatically altered all aspects of the lives of local Aboriginal people recorded by early European observers.

The Aboriginal population migrated around the landscape to access seasonal resources. The harbour provided abundant fish resources and the shores of Darling Harbour were an important source of cockles, rock oyster and mud oysters as evidenced in European descriptions of piles of shell and fish bone along the harbour shores and inlets. Aboriginal people continued to live around the harbour following European occupation.

Subsistence Activities

The people that inhabited the coastal areas of Port Jackson had access to a wide range of natural resources, including terrestrial and marine flora and fauna. For coastal Aboriginal people, marine resources were a vital part of their diet.

Tench suggests that fishing was their primary subsistence activity:

*... [they] wholly depend for food on the few fruits they gather, the roots they dig up in the swamps, and the fish they pick up along shore or contrive to strike from their canoes with spears. Fishing, indeed, seems to engross nearly the whole of their time, probably from its forming the chief part of a subsistence...*¹⁵

Other marine resources such as shellfish and crustaceans were frequently collected and eaten. Historical references and archaeological evidence indicate that beached whales were also eaten. This may have presented an opportunity for different Aboriginal groups to gather and feast together, as suggested Tench's account of the following event at Manly Beach in 1790:

*... a dead whale in the most disgusting state of putrefaction was seen lying on the beach, and at least two hundred Indians surrounding it, broiling the flesh on different fires and feasting on it with the most extravagant of greediness and rapture.*¹⁶

Although marine animals formed a substantial part of the diet of Aboriginal people who lived around the study area, terrestrial animals such as kangaroos, possums, and various birds were also hunted and eaten regularly. The landscape was also manipulated by Aboriginal people through periodic burning of the undergrowth to encourage terrestrial animals such as kangaroos to graze, and thus facilitate hunting. Evidence of this is recorded in the vicinity of Sydney Cove and indicates that terrestrial animals were commonly exploited as a food resource even in such close proximity to marine resources.

Written accounts describe the exploitation of a variety of edible plants in the Sydney region, including seeds, fruits and roots. While there are over 200 edible native plant species known in the Sydney region, it is difficult to reconstruct how important each was to the subsistence diet of Aboriginal people near the study area. This is largely a result of the discrepancies in recording this information, given the widely varying names and descriptions given to different native plant species in the late eighteenth and early nineteenth centuries.

Material Culture

The material culture of local Aboriginal groups is also recorded to some extent in early historical accounts, and is reinforced by the archaeological record. Many of the tools were multipurpose and portable, allowing groups to practice subsistence activities and cultural traditions across the landscape. Aboriginal people made and used a suite of stone tools, and this is one of the most ubiquitous forms of archaeological evidence across Australia. Following contact there are common examples of glass, and sometimes ceramic, being knapped to form tools in the same way that stone was.

Many tools were made of organic materials, such as string bags or bark canoes. Most of these organic materials have not been preserved archaeologically (although some examples are found in museum and private collections). Some organic materials, such as shell and bone, survive better than others, and are well represented in the historical and archaeological records.

Fish hooks were the most common shell implement in the Sydney area; however, they are unique in Australia to the area between Port Stephens and the NSW/Victorian border and all date within the last 1000 years.¹⁷ Historical accounts indicate that in the Port Jackson area, although both genders engaged in fishing, fish hooks were used only by women and spears only by men.

Patterns of Land Use

Many written accounts and drawings record Aboriginal people who occupied the Port Jackson area, including the Gadigal, as camping, cooking, and fishing on the open shoreline, estuarine and river banks, and rock shelters near water. Attenbrow's analysis of ethnohistorical evidence regarding landscape use indicated that Aboriginal activity was focused on valley bottoms and shorelines.¹⁸ Attenbrow's (1991) Port Jackson Archaeological Project demonstrated that archaeological sites were similarly patterned, supporting this focus. She did, however, caution reliance on these patterns as they are skewed by

archaeological preservational factors, as well as biases in what has been portrayed in the historical record.¹⁹

4.3.3 Relevant Local Literature

A number of archaeological studies and academic works that have been prepared for land in the vicinity of the study area (Moore's Wharf, Port Jackson and Darling Walk studies), and for sites in the wider Sydney CBD, indicate Aboriginal archaeological potential, integrity and condition. Those works and reports of relevance to this HAIS are detailed below.

Lampert and Truscott 1984—Bond Store, Moore's Wharf

In 1980, archaeological excavations were undertaken at the Bond Store, Moore's Wharf.²⁰ RJ Lampert undertook the Aboriginal archaeological component of investigation. The excavations recovered 392 stone artefacts that included two scrapers, two polished flakes and a fish hook file. The artefact assemblage was identified as consistent with occupation sites along the coastal areas of the Sydney region. No shell material, usually associated with midden sites, was identified—Lampert concluded that this material must have been deposited at some stage, but has since decomposed. Four sherds of ceramic transfer ware were also identified, suggesting that the site may have continued to be used post-contact.

Val Attenbrow 1991—Port Jackson Archaeological Project

In 1991, Val Attenbrow undertook a project to relocate registered Department of Environment, Climate Change and Water sites (now known as AHIMS sites) as many were poorly recorded. A site survey was undertaken over the Port Jackson catchment, which Attenbrow divided into eight sub-catchments. Over 350 middens and archaeological deposits were relocated or newly identified. Attenbrow identified a number of patterns of site distribution associated with aquatic zones and geological formations within the catchment.

Attenbrow's study found that 98 per cent of middens in the entire Port Jackson catchment were on Hawkesbury sandstone, even though there was a greater area of Wianamatta shale landscapes within the project's study area. The number of middens varied greatly, partly because of variations in the land area of each sub-catchment, the intensity of residential and industrial development and other factors; however, it was clear that the density of middens and deposits was higher in sub-catchments that included an estuary mouth.²¹

Godden Mackay 1998—Angel Place

Godden Mackay (now GML) identified Aboriginal archaeological deposits at Angel Place in Sydney's CBD during its 1997–1998 program of historical archaeological investigations. Following this, GML undertook salvage excavation of the Aboriginal archaeological deposits as part of the archaeological works prior to redevelopment.

The Angel Place site was the first Aboriginal archaeological site identified at the Tank Stream during development works. The assemblage comprised 54 artefacts, including flakes, cores and debitage. The range of artefact types indicated that the assemblage had been formed through on-site knapping processes of a range of raw stone materials, including silicified tuff, indurated mudstone, silcrete and quartz. The nature of the archaeological deposit suggested that the assemblage had not been formed during one isolated event. The deposit was more likely an example of repetitive stone tool manufacture and/or lithic reduction activities undertaken along the banks of the Tank Stream, and may have originally

been part of a contiguous archaeological deposit that was fragmented and largely destroyed by historical land disturbance.

Dominic Steele Consulting Archaeology 2003—Quadrant Development Site

The Quadrant site, on the corner of Broadway and Mountain Street in Ultimo, was the subject of archaeological testing by Dominic Steele Consulting Archaeology in 2001 and 2002. Blackwattle Creek originally passed through the Quadrant site, which was also a natural swamp.

Excavation revealed that natural soil profiles had been preserved in a portion of the site beneath a capping of introduced fill laid in the historical period, although they were truncated and disturbed. The soil profiles comprised a deep alluvial deposit, and the upper layers consisted of a Blacktown soil landscape. This soil landscape is characterised by its poor drainage capacity.²²

An artefact scatter was identified during a program of testing. The scatter was identified as a background distribution of stone artefacts in a landscape visited sporadically by Aboriginal people. Steele concluded that the limited Aboriginal archaeological evidence encountered at the Quadrant site was the product of two factors. The first was the significant disturbance across the site in the historical period. The second was the way Aboriginal people were likely to have utilised the natural environment prior to colonisation:

*The poorly-drained nature of the landscape at the Quadrant site is one possible explanation for the absence of more substantial Aboriginal archaeological remains identified during the investigation program. It is reasonable to assume that Aboriginal people in the past may have exploited the various resources available within these environments, but it is unlikely people established long-term occupation sites on them.*²³

The report identified that beyond the creek line and swamp, more elevated portions of the site located on Hawkesbury sandstone would have been more favourable for Aboriginal occupation and activities, and may have had a more substantial archaeological signature. Steele noted that these locations have generally experienced such a degree of historical development that the natural A horizon soils capable of bearing artefacts and archaeological deposits were removed or heavily disturbed.

Dominic Steele Consulting Archaeology 2006—Kent, Erskine, Napoleon and Sussex Streets Site

The Kent, Erskine, Napoleon and Sussex Streets (KENS) site was subject to Aboriginal and historical archaeological excavation in 2003, prior to the redevelopment of the city block. The Aboriginal archaeological component of this project was carried out by Dominic Steele Consulting Archaeology.

A number of buried pre-1788 soil profiles were identified over the course of the archaeological excavation program. Archaeological testing and salvage across these profiles revealed that they had been truncated and somewhat disturbed by historical activity; however, excavation yielded a total of 952 artefacts across the site. A large proportion of the artefacts were broken by trampling or burning—this damage may have occurred during the early historical period. The assemblage did not provide a large amount of data about the range or nature of stone tool technologies. Analysis suggested that the assemblage dated to the Middle and Late Bondaian period, and the discovery of some flaked glass indicated the site's continued use following contact in 1788.

Although the extant soil profiles and artefact assemblage were not particularly significant in terms of the nature of the stone tool technology identified, the site was important for the way it demonstrated that this part of the Sydney CBD—marginal to the early European settlement and primary records of Aboriginal activity in the late eighteenth century at Sydney Cove—was used intensively by Aboriginal populations prior to, and for a short time following, 1788. It also clearly illustrated processes of site taphonomy where

early historical activities such as land clearing and increased traffic (humans and horses) had had a significant impact on the survival of the Aboriginal archaeological record.

The KENS site is considered significant for its place in the Aboriginal cultural landscape as a rare site that contributed new insights into the documented and potential Aboriginal archaeological resource within the Sydney CBD. The KENS site also demonstrated that Aboriginal archaeological sites could survive in places that had experienced multiple historical phases of development and disturbance.

Comber Consultants 2008–2009—Darling Walk

As part of the redevelopment of Darling Walk in Darling Harbour, an extensive series of Aboriginal and historical archaeological excavation was undertaken in 2008 and 2009. The Aboriginal component of the excavation was carried out by Comber Consultants.²⁴

The Darling Walk site is located along the original foreshore of Cockle Bay (Darling Harbour), on a similar landform to the study area. The excavations identified the remains of a shell midden, which included some possible stone artefacts. The midden deposit was located on an exposed area of sandstone bedrock approximately 3–4m east of the natural high water mark. It is possible that the midden had originally been located on higher ground farther east but had slumped closer to the water's edge.²⁵ Stone, shell, pollen and geomorphological analysis was undertaken for this site.

Godden Mackay Logan 2012–2013—200 George Street

In 2012, GML undertook a Due Diligence Assessment of the 200 George Street site and identified the potential for an Aboriginal archaeological deposit to be present as determined by the archaeological and environmental context of the location.²⁶ As the site was completely covered by modern buildings and hard surfaces such as asphalt, traditional methods of Aboriginal archaeological assessment recommended by the Office of Environment and Heritage (OEH; now Heritage NSW) (ie test excavation prior to the acquisition of a permit) were not possible. Therefore, an AHIP was applied for and granted by OEH. The AHIP required the test excavation of any natural soil horizons encountered during the historical archaeological excavation (required to take place across the site). One of these areas was subject to Aboriginal archaeological test excavation, and uncovered no Aboriginal objects or Aboriginal archaeological deposits. Another natural soil profile that was encountered was confirmed to have formed prior to sea level rise, and therefore would not have contained evidence for Aboriginal occupation or use.

4.4 Historical Development of the Study Area

The extent of land reclamation associated with the study area is instrumental to understanding its Aboriginal archaeological potential. Historical plans from the early nineteenth century map the foreshores of Sydney Harbour during the early years of the city's development (see historical overlays in Figures 2.15–2.18). Historical overlays of plans from 1831 and 1843 show the study area to be entirely below the water line. The 1788 and 1807 overlays show that parts of the foreshore extended into the study area, but these very early plans of Sydney are considered relatively spatially inaccurate and are indicative of the landform only.

Acknowledging continuous changes to sea level throughout the Holocene (the last 10,000 years) in the form of small, periodic rises and falls in sea level, it can be stated that the whole study area would have been below the high water mark c1788. The effect of wave action and daily water level rises and falls on any archaeological deposits within the tidal inundation zone would have been substantial. The effect would have significantly impacted any archaeological deposits, resulting in their erosion and consequential loss.

The initial historical activity that could have affected archaeological deposits that survived sea level changes would have been lime burning. This historical evidence was common around Cockle Bay during the early days of colonial occupation. Lime burning used Aboriginal shell deposits from foreshore areas. Therefore, it is likely that any midden material that may have been located on the former foreshore was used for lime burning.

From the mid-nineteenth century, extensive maritime industries expanded into the study area. Wharf structures and associated infrastructure were built across the study area, altering the original foreshore and modifying the landforms along Cockle Bay.

Land reclamation along the foreshore of Cockle Bay commenced in the late nineteenth century. This process resulted in the importation of large quantities of fill deposit. The deposition of fill would have modified and buried any residual landforms associated with the study area, and impacted areas of bedrock, sand sheets and any associated soil horizons.

Finally, construction of Hickson Road (c1912), including bulk excavation across the eastern portion of the site, would have had a major impact on the topography of the area. This construction would have removed any surviving Aboriginal occupation deposits or other in situ Aboriginal archaeological evidence that had survived the aforementioned historical impacts.

4.5 Statement of Aboriginal Archaeological Potential

The study area is covered by extensive deposits of historical fill material related to successive phases of land reclamation. The study area contains no previously identified Aboriginal sites or places. The impacts of historical use and construction on any Aboriginal archaeological evidence are likely to be very high. Thus, the study area has no to very low potential to contain in situ Aboriginal archaeological evidence.

Owing to the natural topography of the foreshore, much of the study area would have been inaccessible to Aboriginal people for most of the Holocene (when sea levels were comparable to those observed today). It is more than likely that any evidence of Aboriginal use of the area would have been impacted and removed during one of the many historical development events that have occurred in the study area.



Key

— Study Area

AHIMS Search Results

- ▲ Artefact Site
- ★ Ceremony and Dreaming with Midden and Artefacts
- ★ Ceremony and Dreaming, Historic Place with Burial(s)
- Midden
- Midden and Artefact Site
- ◆ Potential Archaeological Deposit
- Rock Engraving



0 100 200 m



Figure 4.1 Aerial view of Central Barangaroo in context showing the registered AHIMS sites and their types. (Source: Google Earth Pro with GML additions, 2021)

Table 4.1 AHIMS Search Results, 30 August 2018.

Site Feature	Frequency	Percentage %
Artefact Site	2	10
Ceremony and Dreaming with Midden and Artefacts	1	5
Ceremony and Dreaming, Historic Place with Burial(s)	1	5
Midden	4	20
Midden and Artefact Site	1	5
Potential Archaeological Deposit	7	35
Potential Archaeological Deposit with Artefacts	1	5
Rock Engraving	2	10
Shelter with Midden	1	5
Total	20	100

4.6 Endnotes

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- ² Comber Consultants, *Aboriginal Archaeological and Cultural Heritage Assessment and Heritage Impact Statement, Barangaroo SSD 6533-2014 Remediation Block 5 Development Application*, report prepared for Casey & Lowe Pty Ltd on behalf of Lend Lease (Millers Point), June 2014.
- ³ Comber Consultants, *Aboriginal Archaeological and Cultural Heritage Assessment and Heritage Impact Statement, Barangaroo SSD 6533-2014 Remediation Block 5 Development Application*, report prepared for Casey & Lowe Pty Ltd on behalf of Lend Lease (Millers Point), June 2014, p ii.
- ⁴ Chapman, GA and Murphy, CL 1989, *Soil Landscapes of the Sydney 1:100 000 Sheet*, Soil Conservation Service of NSW, Sydney, pp 64–65.
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- ⁶ Benson, D and Howell, J 1990, *Taken for Granted: The Bushland of Sydney and its Suburbs*, Kangaroo Press in association with the Royal Botanic Gardens Sydney, Sydney, p 42.
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- ⁹ Tench W, 1789, *A Narrative of the Expedition to Botany Bay*, pp 13–84, in Flannery, T (ed.) 2012, *Watkin Tench: 1788*, The Text Publishing Company, Melbourne, p 76.
- ¹⁰ Godden Mackay Logan Pty Ltd 2012a, Abercrombie Precinct Redevelopment, Preliminary Aboriginal Archaeological Assessment, report prepared for the University of Sydney, April 2012.
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- ¹³ Collins, C 1798, *An account of the English colony in New South Wales, with remarks on the dispositions, customs, manners, etc. of the native inhabitants of that country*, edited by Fletcher, BH 1975, published by Reed in association with the Royal Historical Society, Sydney, p 463.
- ¹⁴ Attenbrow, V 2010, *Sydney's Aboriginal Past: Investigating the archaeological and historical records*, second edition, UNSW Press, Sydney, p 21.

- ¹⁵ Tench, W 1789, *A Narrative of the Expedition to Botany Bay*, pp 13–84, in Flannery, T (ed.) 2012, *Watkin Tench: 1788*, The Text Publishing Company, Melbourne, p 53.
- ¹⁶ Tench, W 1793, *A Complete Account of the Settlement at Port Jackson*, pp 85–274, in Flannery, T (ed.) 2012, *Watkin Tench: 1788*, The Text Publishing Company, Melbourne, p 134.
- ¹⁷ Attenbrow, V 2010, *Sydney's Aboriginal Past: Investigating the archaeological and historical records*, second edition, UNSW Press, Sydney, pp 98–99.
- ¹⁸ Attenbrow, V 2010, *Sydney's Aboriginal Past: Investigating the archaeological and historical records*, second edition, UNSW Press, Sydney, pp 47–48.
- ¹⁹ Attenbrow, V 2010, *Sydney's Aboriginal Past: Investigating the archaeological and historical records*, second edition, UNSW Press, Sydney, pp 50–53.
- ²⁰ Lampert, RJ and Truscott, MC 1984, The archaeological investigation of the bond store, Moore's Wharf, 1980, prepared for the Maritime Services Board and the Heritage Council of NSW, 1984.
- ²¹ Attenbrow, V 1991, Port Jackson archaeological project: a study of the prehistory of the Port Jackson Catchment, New South Wales, Stage I—site recording and site assessment, *Australian Aboriginal Studies* 1991/No. 2, pp 50–53.
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- ²⁴ Casey & Lowe Pty Ltd, Darling Walk Archaeological Excavation 2008/2009, Preliminary Results, prepared for Lend Lease Development, June 2009.
- ²⁵ Casey & Lowe Pty Ltd, Darling Walk Archaeological Excavation 2008/2009, Preliminary Results, prepared for Lend Lease Development, June 2009, p 7.
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5.0 Historical Archaeology

5.1 Introduction

This section discusses the potential for Central Barangaroo to contain archaeological evidence associated with the historical use and development of the study area. This involves analysing the historical development of the site, discussing the site's potential to contain archaeological resources related to this historical development, and assessing the significance of any potential historical resources. This assessment draws on historical research presented in the 2010 AAMP¹ and largely reproduces the historical archaeological assessment presented in the 2012 AA of part of the Central Barangaroo site prepared by GML.²

5.2 Previous Assessment of the Study Area

5.2.1 Barangaroo Archaeological Assessment and Management Plan

The 2010 AAMP included an assessment of the historical archaeological potential of the entire Barangaroo site, including Central Barangaroo. Information and site analysis related to Central Barangaroo has been extrapolated from discussion about the broader Barangaroo site.

As presented in the 2010 AAMP, the historical development of the Barangaroo site is characterised by the development of maritime and wharf industries, and the precinct is significant for its association with the history of reclamation along the Sydney Harbour foreshore, as reflected in its composition, its association with numerous important people, and as a place that has hosted important historical and political events. Parts of the broader Barangaroo site have been assessed as having moderate to high potential to contain historical archaeological remains associated with nineteenth and twentieth-century maritime development, including wharf structures, seawalls, shoreline modification, and maritime-related industrial activities.

5.2.2 Barangaroo Station

Casey & Lowe Pty Ltd prepared the excavation report for archaeological investigations undertaken in 2018–19 directly adjacent to the Central Barangaroo study area, for the construction of Barangaroo Station. Casey & Lowe uncovered an array of structures and features dating from the 1830s, including seawalls, wharves and the foundations of boat builder William Langford's property.³ A boat believed to have been built in the 1830s was uncovered as part of these site investigations, and was located in the vicinity of the north edge of Central Barangaroo adjacent to Hickson Road.

5.2.3 Barangaroo Reserve

Archaeological Testing

Austral Archaeology Pty Ltd undertook archaeological testing in the Barangaroo Reserve precinct in 2010–11. The Barangaroo Reserve precinct had been assessed in the 2010 AAMP as having moderate to high potential to contain archaeological remains. Testing along the northern side of the proposed Northern Cove, immediately to the north of Central Barangaroo, revealed intact archaeological features and deposits associated with nineteenth-century development in this area, including remains of a slipway, earlier seawall and other remains associated with former wharf structures and shipbuilding activities. Further archaeological investigation of this area has been subsequently undertaken, as discussed below.

Archaeological Excavation

A program of archaeological excavation was undertaken in parts of the Barangaroo Reserve precinct between 2013 and 2016, in locations identified in the archaeological testing program as having sufficient historical archaeological potential and significance to warrant detailed investigation, recording and possibly in situ retention. The post-excavation reporting and analysis for this program is now complete.⁴

Key remains uncovered during these works include:

- 1850s (Cuthbert) seawall and associated items, including:
 - a sandstone seawall, constructed from squared and dressed sandstone blocks with relatively tight joints and minimal evidence of bedding mortar;
 - iron mooring elements, including a chain and shackle through the wall and chain deadman anchors;
 - remnant timber posts and dressed beams for wharf structures and deadman anchors;
 - an extensive working surface from the shipbuilding yard;
 - sandstone anchor blocks, including embedded iron rings; and
 - a skittled iron structure comprising plates and riveted girders.
- 1820s (Munn) slipway and associated items, including:
 - a sandstone slipway ramp constructed from roughly dressed random stones bedded in a presently unknown material, and squared and dressed edge walling blocks; and
 - remnant timber elements.⁵

The previous excavations confirmed that the Central Barangaroo study area encapsulated a small part of the southern end of Cuthbert's shipyard relating to the 1861–1875 use of the area as a slip, sawmill and moulding shop.⁶

5.2.4 Barangaroo South

Casey & Lowe undertook archaeological assessment and investigation of the southern portion of the Barangaroo site.⁷ Like the Barangaroo Reserve precinct, the southern portion of the Barangaroo site was extensively developed for maritime and other industrial purposes throughout the nineteenth and twentieth centuries. It is understood that archaeological excavation of this area in 2011–2012 has revealed the presence of extensive archaeological remains associated with these former uses, generally consistent with the historical development of the area.

The contaminated land of the gasworks, which includes part of Block 5 and extends further to the south of the study area, separates the Barangaroo South excavations and Central Barangaroo. Therefore, no archaeological excavation was undertaken—only soil remediation was carried out in this area.

5.2.5 Central Barangaroo

Soil Remediation

The AGL gasworks, which was demolished in 1921, left a footprint of heavily contaminated soil (DECCW Declaration Area N21122). Three areas within Barangaroo required remediation. In Block 5, within Central Barangaroo, remediation began in 2017. The process of remediation nulled the potential for extant archaeology to remain in the footprint of Block 5.

Archaeology

GML's 2012 AA of part of Central Barangaroo was in relation to the first stage of proposed redevelopment of the precinct—the waterfront promenade and interim public domain. The study area of the 2012 AA is very similar to the current study area. The AA findings for the 2012 study area are reproduced in this HAIS, and updated where relevant.

Both this HAIS and the 2012 AA draw heavily on historical information and site analysis presented in the 2010 AAMP. Austral has also undertaken subsequent research and analysis relevant to Central Barangaroo, which has been reviewed and considered in the preparation of this HAIS.⁸

The findings of Austral's additional analysis reinforce and refine the historical archaeological findings of this HAIS.

Casey & Lowe has prepared a draft HAIS for Block 5 of Central Barangaroo, which addresses the potential historical archaeological impacts of remediation works.⁹

The findings of the Casey & Lowe HAIS have been considered in the preparation of this HAIS and integrated where relevant.

5.3 Central Barangaroo—Summary of Historical Development

The historical development of the Barangaroo site is almost entirely related to maritime industries, including wharves, shipbuilding, and associated enterprises. The development and operation of these industries had a profound impact on the physical form of the site, including reclamation and major changes to the shoreline.

The historical development of the broader Barangaroo site included the following phases:

- Phase 1—Aboriginal Occupation;
- Phase 2—Private Ownership 1788–c1870;
- Phase 3—Intensive Development and Decline c1870–1901; and
- Phase 4—Renewal 1902–2021.

Most of the nineteenth-century development within this part of the harbour was focused around the northern and southern parts of the Barangaroo precinct. Most of Central Barangaroo was originally located below the water line, with the natural topography of the foreshore within the Central Barangaroo site being very steep.

The area of Central Barangaroo remained largely undeveloped throughout the nineteenth century and much of the study area now comprises reclaimed land. While the northern headland and the southern portion of the Barangaroo site was extensively developed from the early nineteenth century, the central

portion remained relatively undeveloped until the 1860s, owing to the steep topography of this area. Maritime and other industries only extended into this part of the site after this time.

By 1865, Cuthbert's shipyard may have extended into the area of Central Barangaroo, including construction of some wharf infrastructure at the north end of the study area. Rowntree's floating dock and several ephemeral sheds, huts and wharves were positioned within the study area (Figure 2.1–2.5). Dibbs' wharf, which included substantial reclamation and fortification of seawalls, was constructed in this area following Cuthbert's death in 1874.

The AGL gasworks was established in the late 1830s and expanded into the southern part of Central Barangaroo from the c1860s (Figure 2.1). Initially only a marginal section of the gasworks extended into the current study area, with further development in the 1880s when the gasworks site was extended farther to the north (into Central Barangaroo), including a new large retort house, built by 1903, and other smaller buildings and associated infrastructure.¹⁰ Much of the gasworks was constructed on reclaimed land, predominantly wharves, including those portions that extended into the southern part of the current study area.

By 1870, most of the foreshore between Dawes Point and Darling Harbour had been modified by quarrying, reclamation or the construction of seawalls, and the area was almost entirely occupied by wharves, stores and commercial properties. Between 1880 and 1910, most of the wharves and other structures were demolished as part of the government resumption of the area.

Hickson Road was constructed c1912 (Figure 2.6). These works included excavation of bedrock along the road alignment and major modification of the shoreline along the Central Barangaroo precinct.

The foreshore within Central Barangaroo was partially reclaimed in the early twentieth century, and a number of finger wharves were constructed in this area c1912 (Figure 2.7). By the 1960s, the finger wharves were no longer suitable for modern shipping. The areas between the wharves in the central and southern parts of Barangaroo were progressively infilled, until a single concrete apron existed across the entire Barangaroo site by the 1980s. However, from the mid-1970s major port activities were moved to Botany Bay.

In 2009 the Barangaroo Delivery Authority (BDA) was established to manage development of the Barangaroo area, and under its authority the Barangaroo Concept Plan has evolved. The Central Barangaroo site is located on the site of the old wharf and a concrete hardstand, now removed.

The development of Central Barangaroo, as part of the wider Barangaroo precinct, has involved the creation of Barangaroo Reserve, a foreshore park, and Nawi Cove, recreating the natural headland and shoreline in this area. In 2015 Barangaroo Reserve was opened and the NSW Government announced that Central Barangaroo would include a new metro station (to be completed in 2024).

5.4 Assessment of Historical Archaeological Potential

5.4.1 Potential Archaeological Remains

The Central Barangaroo site has potential to contain physical remains related to Phase 2, Phase 3 and Phase 4 of the site throughout the late nineteenth and twentieth century, as detailed below. The locations of these potential remains are indicated in Figure 5.1.

The study area has nil to low potential to contain historical archaeological remains dating to the late eighteenth or early to mid-nineteenth century (related to the early part of Phase 2 of the site's history), as there was no historical development or occupation recorded within the study area prior to the 1860s.

However, historical photographs show Rowntree's floating dock, numerous wharves, jetties, sheds, and minor alterations to the shoreline, including paths, steps, seawalls and reclamation (Section 2.0).

The northeastern portion of the study area has nil to low potential to contain historical archaeological evidence associated with the mid to late nineteenth-century development of the area (related to the latter part of Phase 2, and to Phase 3 of the site's history—green and blue areas of shading in Figure 5.1). This evidence may include structural supports for wharves and jetties, remnant seawalls, and other infrastructure not added to maps or plans associated with Cuthbert's shipyard, which extended into this area after 1856 (see Figure 2.8). At its peak, Cuthbert's enterprise existed across several lots extending from Millers Point to Darling Harbour. Although Cuthbert's operations included various industrial and structural elements (eg blacksmiths' shops, carpenters' sheds, a saw mill and storage facilities),¹¹ historical plans of the area indicate that the study area remained largely unclaimed during Cuthbert's ownership, and structural elements within the study area were generally limited to wharf/jetty structures constructed over the water. Any operational elements in this area would likely have been constructed on wharf/jetty structures, so archaeological evidence of these elements would likely be limited to pier supports and related infrastructure of the wharves/jetties themselves. It is possible that the northeastern part of the study area was also utilised in a way that was not represented by historical records such as plans and photographs.

The southeastern portion of the study area has low to moderate potential to contain historical archaeological evidence associated with the AGL gasworks that expanded into the area after c1870 (related to Phase 3 of the site's history—pink area of shading in Figure 5.1). However, this area falls within a zone identified as contaminated (DECCW Declaration Area N21122)¹² and has been separately remediated.

The study area has high potential to contain historical archaeological evidence associated with redevelopment of the area during the early to mid-twentieth century (related to Phase 4 of the site's history—orange area of shading in Figure 5.1). This evidence may include structural supports for three finger wharves that ran east–west across the study area, as well as remnant seawalls and other infrastructure.

The study area also has high potential to contain evidence of the large-scale demolition and reclamation that occurred in the area at the end of the nineteenth century and during the early twentieth century (related to Phases 3 and 4 of the site's history). The study area contains extensive fill deposits, which have potential to contain items and deposits from the site, including timber, iron, steel or stone elements from demolished wharves, seawalls or other structures/infrastructure. These elements may be specifically related to the historical development of Central Barangaroo or the broader Barangaroo precinct.

Each phase of demolition, redevelopment and remodelling of the foreshore throughout the historical development of the site would have had some impact on the survival and integrity of evidence associated with earlier phases of development and activity. For example, development of the gasworks may have affected the survival of earlier evidence of wharves, jetties and maritime activities. Similarly, the large-scale demolition and reclamation in the late nineteenth and early twentieth centuries would have disturbed or removed remains associated with the gasworks.

Demolition of some of the wharves and other structures involved manual dismantling, with many of the materials sold or re-used. It is likely that wharves, seawalls and other structures were not completely removed, but some elements (such as piers and segments of seawalls) were left in place and covered with fill during the various phases of the reclamation, as demonstrated in other parts of Barangaroo.

Research in the 2010 AAMP indicates that there are no registered shipwrecks directly off the Barangaroo shore. The potential for maritime infrastructure, including vessels, is nil to low.

5.4.2 Summary of Historical Archaeological Potential

The historical archaeological potential of Central Barangaroo is summarised as follows:

- Nil potential for evidence relating to Phase 1 of the site's development.
- Nil to low potential for evidence relating to Phase 2 of the site's development.
- High potential for evidence relating to Phase 3 of the site's development.
- High potential for evidence relating to Phase 4 of the site's development.
- Nil to low potential for shipwrecks or scuttled maritime vessels.

The historical archaeological potential of Central Barangaroo is summarised in Figure 5.1.

The significance and research potential of these remains is discussed in Section 5.5 and summarised in Section 5.5.4.

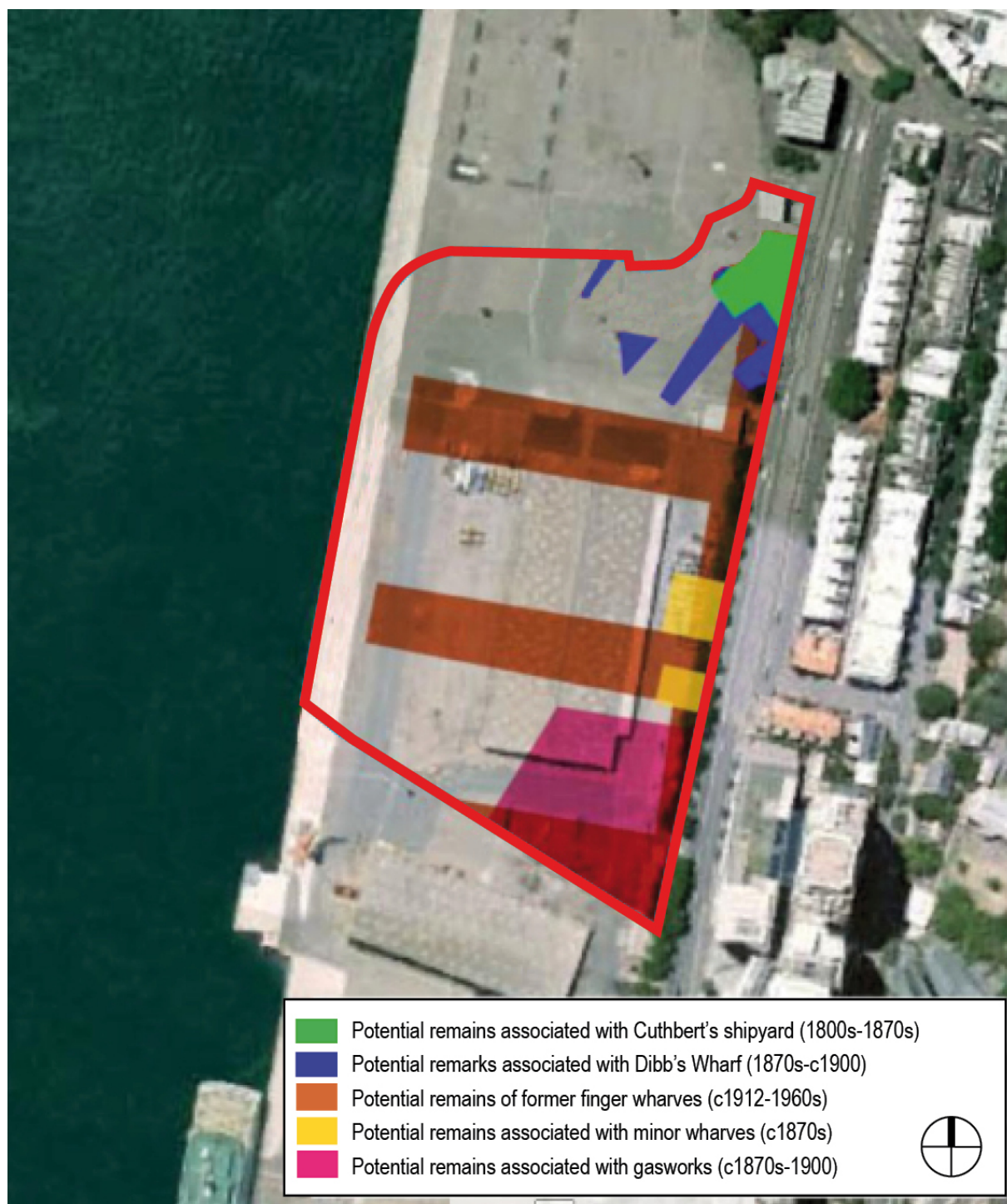


Figure 5.1 Plan of the study area showing areas of historical archaeological potential. The red outline relates to the site boundary for the current MOD. (Source: Google Earth Pro with GML overlay)

5.5 Historical Archaeological Significance

5.5.1 Introduction

Archaeological significance refers to the heritage significance of known or potential archaeological remains. As with other types of heritage items, archaeological remains should be managed in accordance with their significance. In areas where development is proposed, this can influence the degree of impact that may be acceptable or the level of investigation and recording that may be required.

While archaeological remains often form an integral component of the overall significance of a heritage place, it is necessary to assess them independently. Assessing the heritage value of archaeological remains is made more difficult by the fact that their extent and nature is often unknown. It becomes necessary for judgments to be made on the basis of expected or potential attributes. The *NSW Heritage Manual* guidelines¹³ provide the framework for the significance assessment for the study area. These guidelines incorporate the aspects of cultural heritage value identified in the Burra Charter, which are accepted by heritage authorities in NSW.

The Heritage Division, under the OEH (now Heritage NSW), has also issued guidelines for assessing the significance of historical archaeological sites and relics.¹⁴ This calls for a broader consideration of multiple values of archaeological sites beyond their research potential.

The assessment of significance of historical archaeological sites requires a specialised framework for consideration. The most widely used framework is that developed by Bickford and Sullivan in 1984.¹⁵ It comprises three key questions that can be used as a guide for assessing the significance of an archaeological site:

1. *Can the site contribute knowledge that no other resource can?*
2. *Can the site contribute knowledge that no other site can?*
3. *Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?*

The following assessment of archaeological significance for the subject site responds to both the Heritage Division guidelines and Bickford and Sullivan's questions. This significance assessment has also been prepared with regard to the significance assessment presented in the 2010 AAMP. However, as the Central Barangaroo precinct is only part of the broader Barangaroo site, and the historical archaeological potential of this part of the site is different to other areas of the Barangaroo site, this assessment has been prepared with specific reference to the historical potential of Central Barangaroo, the study area of this HAIS.

5.5.2 Assessment of Archaeological Significance—NSW Heritage Criteria

Archaeological Research Potential (NSW Heritage Criterion E)

The Central Barangaroo site is associated with the development of maritime industrial operations within Sydney Harbour during the nineteenth century. The development of maritime industries and infrastructure was focused around the Millers Point headland (to the north of the study area) and within Darling Harbour (to the south of the study area) during the early to mid-nineteenth century. These industries then expanded into the central precinct in the mid to late nineteenth century, before the area was subject to major resumption, reclamation and redevelopment in the late nineteenth and early twentieth centuries.

Parts of the study area have potential to contain physical evidence related to the maritime development of the area during the mid to late nineteenth century and early to mid-twentieth century. Structural elements such as wooden or concrete pier supports and reclamation fills would have limited research potential to provide new or substantive information.

Following the substantial excavations at the Barangaroo Northern Headland¹⁶ site, the shipbuilding technologies of Cuthbert were reported on extensively; his role in shipbuilding in NSW was unrivalled. However, being a finite resource, any further research potential at Central Barangaroo should be exhausted for its potential to provide new or substantive information about the development and occupation of the study area, the broader development of the Barangaroo site as a whole or the history of shipbuilding in NSW.

Association with Individuals, Events or Groups of Historical Importance (NSW Heritage Criteria A, B and D)

While much of early Sydney was shaped by the colonial government, the area around Millers Point was predominantly developed by private enterprise. The maritime development of the broader Barangaroo site throughout the nineteenth century is associated with several individual landowners, businessmen and entrepreneurs who drove the commercial and industrial development and operation of the area. Many of these individual contributions remain invisible in the historical record. However, John Cuthbert stands out as a prominent figure in the development of the study area.

The central portion of the Barangaroo site was developed relatively late, after the shipyard to the north of the study area was acquired and expanded by John Cuthbert in 1856. It is noted in the 2010 AAMP that:

By 1865 (Cuthbert) had expanded his yards north to Millers Point and south almost to the gas works ... He recognized the advantages of Darling Harbour as a shipbuilding site, he appears to have purchased most of the land from (Millers) point south to the gas works and helped to reclaim parts of the harbour. Much of his own property was reclaimed land ... Cuthbert's yard was one of the most extensive in the colony employing upward of 250 men at the end of the 1860s ... In 1871 Cuthbert claimed that his business was 'second to none in Australia'.¹⁷

The AAMP also notes that:

Cuthbert died in December 1874 and is remembered as one of the outstanding colonial shipbuilding entrepreneurs, diligent and responsive to technological change. In his substantial will he left bequests to St Vincent's Hospital, the Randwick Asylum, the Ragged School, and the Kent Street soup kitchen. The yard closed after his death.¹⁸

Archaeological remains in the study area related to Cuthbert's shipyard would have local significance for their association with Cuthbert, who played a decisive role in shaping this part of Sydney. Cuthbert was responsible for constructing a wide range of vessels, including the first naval vessel to be built in Australia. Evidence of any ships built by Cuthbert could range from local to state significance.

Aesthetic or Technical Significance (NSW Heritage Criterion C)

It is difficult to ascertain the aesthetic qualities of archaeological remains, as the nature and condition of the remains are usually unknown prior to their exposure. However, the potential archaeological remains that may survive within the Central Barangaroo study area would likely be fragmentary in nature and limited to remnant structural timbers of former wharves/jetties. Although these remains may be evocative of the former maritime character of the area, they would likely have only limited aesthetic significance.

Regarding technologies, the AAMP states:

The potential archaeological resource may be able to demonstrate technical and creative excellence of the period 1820–1970, including wharfage and warehousing as well as the gas works, the first in NSW. The current site and the previous finger wharfs document the needs of a twentieth century shipping port, developed specifically to accommodate mechanised transportation technology. It demonstrates characteristic dramatic harbour-side – engineering works associated with modification of the topography. The potential archaeological resource related to this criterion is of local significance.¹⁹

Ability to Demonstrate the Past through Archaeological Remains (NSW Heritage Criteria A, C, F and G)

The potential archaeological remains that may survive within the Central Barangaroo site would be representative of the extensive maritime related industries that dominated the precinct and would demonstrate the modifications to this area from the late nineteenth century. Structural supports and other elements of wharves, as well as remnant sections of seawalls or reclamation fill deposits, may indicate how built elements transformed this part of the harbour foreshore, creating an important industrial and maritime precinct.

Remains of former wharves may demonstrate the historical development and operation of the site as well as changes in technology and maritime industries in the late nineteenth and early twentieth centuries. The large-scale physical changes that occurred at the site during this phase may be represented in the archaeological record. The remnant wharf structures that may survive within the Central Barangaroo site would have been largely stripped of their superstructure and entombed by the various phases of reclamation that occurred here.

Remediated soil from contamination areas will have limited the ability to recover information from remains of the AGL gasworks.

5.5.3 Response to Bickford and Sullivan's Questions

Can the Site Contribute Knowledge that No Other Resource Can?

The potential archaeological remains that may survive at the site could provide information about the form, layout and operation of the wharves and other infrastructure in this area, particularly related to Cuthbert's shipyard and the former AGL gasworks, which may not be available from other historical sources such as photographs, maps and plans. Cuthbert owned part of the study area, yet it is largely unknown how this area was utilised. The archaeological evidence at the site may also provide information about the extent of demolition and salvage that occurred across the site during periods of large-scale resumption, demolition, reclamation and redevelopment.

As an archaeological resource, Barangaroo presents a rare and finite resource for the investigation of maritime history in Millers Point and Darling Harbour.

Can the Site Contribute Knowledge that No Other Site Can?

The Central Barangaroo site may contain archaeological evidence that is specific to the historical development and operation of this area, particularly related to Cuthbert's shipyard. However, the archaeological evidence that may survive within the study area would most likely be representative of the broader commercial, maritime, and industrial operations and development that dominated this part of Sydney throughout much of the nineteenth century. The historical archaeological evidence that may survive within the study area may also demonstrate the major changes that occurred along the waterfront as part of the large-scale redevelopment of the area in the late nineteenth and early twentieth centuries. The archaeological evidence that may survive in this part of the site may also be represented in other

parts of the broader Barangaroo site, which were subject to similar phases of commercial, industrial and maritime development and expansion, followed by extensive redevelopment.

If remains of the AGL gasworks site survive in non-contaminated areas of Central Barangaroo they would represent a unique resource as the first gasworks in NSW.

The potential archaeological resources within the Central Barangaroo site would predominantly be part of a broader suite of evidence related to the historical development of the precinct. The archaeological information within the Central Barangaroo study area may supplement archaeological information recovered from other parts of the Barangaroo site.

Is this Knowledge Relevant to General Questions about Human History or Other Substantive Questions Relating to Australian History, or Does it Contribute to Other Major Research Questions?

The site's potential historical archaeological remains would generally be associated with maritime and trade activities in Sydney Harbour that were important to the development of Sydney's and Australia's economy. The site's potential archaeological resources would have limited ability to provide substantive information about the development or occupation of the site or the precinct that have not been realised through other archaeological excavations at Barangaroo Northern Headland and Barangaroo South. However, as an archaeological resource, Central Barangaroo represents a finite resource into Sydney's maritime industry and further archaeological evidence may supplement this record.

Evidence of shipwrecks or scuttled vessels may contribute to research questions relating to the history of shipbuilding in Sydney or Australia.

5.5.4 Summary Statement of Significance

Central Barangaroo has potential to contain an archaeological resource dating from the 1860s to the 1980s. This resource may consist of evidence of maritime infrastructure, shipbuilding and industry, alterations to the shoreline through reclamation, seawalls, wharf remnants and other maritime infrastructure not documented in the historical record.

Recent excavations of Barangaroo Northern Headland and Barangaroo South have realised much of the research potential for the area. Central Barangaroo remains significant as a unique and finite resource which is becoming increasingly rare in Sydney.

All archaeological remains of the AGL Gasworks should have been previously remediated as contaminated soil. Should unexpected aspects of the gasworks survive outside of the remediation area, these would be significant for their association with NSW's first gasworks (1837) and the early industrialisation of Millers Point and Darling Harbour.

A portion of Central Barangaroo may have associations with John Cuthbert (1815–1874), who was one of the colony's most influential shipbuilders. Cuthbert was responsible for producing numerous ships as well as the first naval vessel built in Australia. Evidence of his shipyard would have significance for research potential regarding maritime shipbuilding infrastructure in the mid-nineteenth century and may provide information on a portion of the coast not well documented in the historical record.

Evidence of maritime infrastructure or unregistered shipwrecks or scuttled boats would be significant either for their association with Cuthbert, or for their rarity as an archaeological resource in Sydney.

Central Barangaroo's potential historical archaeological resources from the twentieth century are associated with important phases in the development of Sydney's and Australia's maritime and trading

history, and some of these remains may be evocative of the character of former maritime enterprises in this area. Maritime infrastructure from this period is likely to consist of wooden and/or concrete pier elements and reclamation fills, which have little significance for their research potential.

5.6 Endnotes

- ¹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, report prepared for Barangaroo Delivery Authority, June 2010.
- ² Godden Mackay Logan, Central Barangaroo Waterfront Promenade and Interim Public Domain—Archaeological Assessment, report prepared for Baulderstone, October 2012.
- ³ Channel 7 News clip <<https://twitter.com/7NewsSydney/status/1044533384133767168>>.
- ⁴ Austral Archaeology, Barangaroo Headland Park Historical Archaeological Excavation Report, Volumes 1–5, 2016.
- ⁵ International Conservation Services, May 2013, Barangaroo Northern Cove Exposed Archaeological Remains—Preliminary Conservation Assessment Report, prepared for Baulderstone (attachment to letter of advice from Rintoul Associates to Baulderstone, 30 May 2013, re 'Northern Cove Options Matrix for 19th Century Archaeological Relics').
- ⁶ Austral Archaeology, Barangaroo Headland Park Historical Archaeological Excavation Report, Volume 4, 2016, p 206.
- ⁷ Casey & Lowe 2012, Archaeological Excavation, Barangaroo South Preliminary Results, report prepared for Lend Lease, 2012.
- ⁸ In particular: Austral Archaeology, 'Profile of the Heritage of Central Barangaroo', letter of advice to BDA, 16 July 2012; and Austral Archaeology, February 2013, Proposed Services on Dalgety and Hickson Roads, Barangaroo Northern Headland—Historical Archaeological Assessment, Statement of Heritage Impact and Research Design, report prepared for Baulderstone Pty Ltd.
- ⁹ Casey & Lowe, Heritage Impact Statement—SSD 6533-2014 Remediation Development Application, EPA Declaration Area 21122—Non-Indigenous Archaeology Block 5, Barangaroo Central (Draft Update 4), report prepared for Lend Lease (Millers Point), June 2014.
- ¹⁰ This statement regarding the development and elements of the AGL gasworks that extended into the Barangaroo Central area is based on information included in the Casey & Lowe, Heritage Impact Statement—SSD 6533-2014 Remediation Development Application, EPA Declaration Area 21122—Non-Indigenous Archaeology Block 5, Barangaroo Central (Draft Update 4), report prepared for Lend Lease (Millers Point), June 2014, pp 22–26 and Figures 3.1–3.16.
- ¹¹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, report prepared for Barangaroo Delivery Authority, June 2010, p 26.
- ¹² Casey & Lowe, Non-Indigenous Archaeological Assessment—Barangaroo Stage 1, report prepared for Lend Lease (Millers Point) Pty Ltd, June 2010, Figure 1.2.
- ¹³ *NSW Heritage Manual*, NSW Heritage Office and Department of Urban Affairs and Planning, as amended July 2002.
- ¹⁴ Office for Environment and Heritage 2009, Assessing Significance for Historical Archaeological Sites and 'Relics'.
- ¹⁵ Bickford, A and Sullivan, S 1984, 'Assessing the Research Significance of Historic Sites', in Sullivan, S and Bowdler, S (eds), *Site Surveys and Significance Assessment in Australian Archaeology* (proceedings of the 1981 Springwood Conference on Australian Prehistory), Department of Prehistory, Research School of Pacific Studies, the Australian National University, Canberra.
- ¹⁶ Austral Archaeology, Barangaroo Headland Park Historical Archaeological Excavation Report, Volumes 1–5, 2016.
- ¹⁷ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, report prepared for Barangaroo Delivery Authority, June 2010, p 25.
- ¹⁸ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, report prepared for Barangaroo Delivery Authority, June 2010, p 26.
- ¹⁹ Austral Archaeology Pty Ltd, Barangaroo Archaeological Assessment and Management Plan, report prepared for Barangaroo Delivery Authority, June 2010, p 71.

6.0 Built Heritage

6.1 Introduction

This section provides an overview of the physical location, character and built heritage context of Central Barangaroo as background to analysis of the site's heritage values. The identification of heritage items located within the Barangaroo precinct and in the vicinity of Central Barangaroo relies on historical information and heritage assessments sourced from the NSW SHI database. No new assessment of significance has been undertaken.

The site was inspected by GML in October 2018 and February 2020, to take note of current site conditions and observe the relationship of the site to heritage items in the vicinity of the Central Barangaroo development. GML's site inspection was limited to the surface areas of the site—no inspection of areas beneath the ground level or any supporting structures existing at that time were observed.

6.2 Site and Context

6.2.1 The Barangaroo Precinct

The Barangaroo precinct is made up of three distinct parts—Barangaroo South, Central Barangaroo and Barangaroo Reserve—and the total site area is approximately 22ha. Central Barangaroo is located between the completed developments of Barangaroo Reserve (the northern headland) and Barangaroo South.

Located at the northwestern end of the CBD the Barangaroo precinct was historically divorced from the activity and development of the CBD by the topography as well as The Rocks and Millers Point Conservation Areas.

Millers Point is located to the northeast of Central Barangaroo, which is stepped dramatically from the natural ridgeline down to the west. The topography in the area has been manipulated over time through reclamation of the foreshore and cutting of the land, including the modern recreation of Barangaroo Northern Headland. The Hickson Road and High Street cutting, and High Street profile forms a distinctive V-shape when viewed from the west, while the recreated headland effectively hides the exposed cliff face to the west of Merriman Street. Millers Point consists largely of late nineteenth and early twentieth century residential development with associated buildings such as hotels and corner shops. The northern end of the headland, at the end of Merriman Street, features a small park, Clyne Reserve, and another small park has been created through the closure of Munn Street. The Dalgety Bond Store addresses both Munn Street and the recently created and publicly accessible waterfront comprising Nawi Cove and Wulugul Walk.

Observatory Hill is slightly farther east again. It is the highest point in the area and consists of a grassed public open space with mature fig trees and the significant Sydney Observatory building. The SH Ervin Gallery and National Trust building is located to the south of the Observatory across the Cahill Expressway cutting.

To the southeast of the subject site, late twentieth-century commercial development is prevalent with some heritage buildings nearby including the former Grafton Bond Store, Moreton's Hotel and gasworks buildings (30 The Bond). The eastern side of Hickson Road, south of the High Street cutting, features various buildings sited at the level of the wharves. The southern end of Hickson Road features buildings

along the eastern side of the street at the same level as the study area. The redevelopment of Barangaroo South to the south of the study area contains high-density mixed use high-rise along the Darling Harbour foreshore, which dwarfs the King Street wharf development.

The subject site is also visible in the broader Darling Harbour and Sydney Harbour context. From the north, the site is visible from McMahon's Point, Lavender Bay and Blues Point. Goat Island obscures most views from farther away to the northwest. To the west the site is highly visible from the public parklands of Balmain Peninsula from Peacock Point to Simmons Point as well as from Darling Point Road. From the southwest the site is visible from Pyrmont, particularly the public parks and spaces at Pyrmont Point and Darling Island. Farther south the site is less visible from the western edge of Darling Harbour and the Pyrmont Bridge.

6.2.2 Central Barangaroo

Central Barangaroo is located between Barangaroo Reserve, Barangaroo South and the nearby historic suburbs of Millers Point and Walsh Bay. It is adjacent to Barangaroo Station. Central Barangaroo will complete the city and foreshore development along the western waterfront of Sydney's CBD.

Central Barangaroo is proposed as a mixed use foreshore precinct and will be connected to Sydney's new metro network.

Central Barangaroo comprises the remaining development blocks 5, 6 and 7 of the approved Barangaroo Concept Plan and Harbour Park connecting to the western harbour foreshore. Central Barangaroo proposes to provide for a scaled visual transition between the natural setting and scale of Barangaroo Reserve and Nawabi Cove, to the high-rise CBD scale of Barangaroo South.

The recently completed Wulugul Walk now extends along the entire Barangaroo waterfront as part of the 14km Woolloomooloo to Glebe foreshore walk. Central Barangaroo's Harbour Park will create a western harbour public open space that integrates with Wulugul Walk.



Figure 6.1 Aerial photograph showing Central Barangaroo in the foreground, in context—looking east over the harbour. (Source: Infrastructure NSW, 2021)



Figure 6.2 Aerial photograph showing Central Barangaroo in context and its relationship to the harbour headland—looking northeast over the harbour. (Source: Infrastructure NSW, 2021)

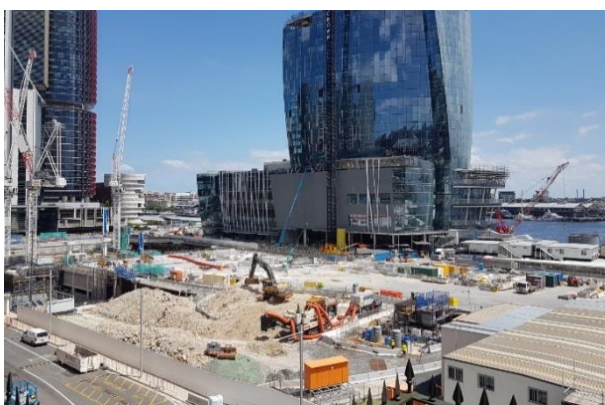


Figure 6.3 Photograph showing the site conditions at Central Barangaroo in 2020—earthworks in the foreground at Central Barangaroo looking towards Barangaroo South and the Block Y (Crown) site. (Source: GML, 2020)

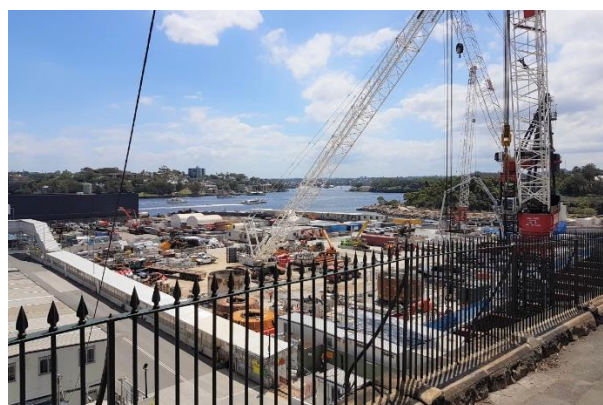


Figure 6.4 Photograph showing the site conditions at Central Barangaroo in 2020—looking northwest towards the earthworks and Barangaroo Reserve. (Source: GML, 2020)

6.3 Heritage Items within the Barangaroo Precinct

SEPP (Major Development) 2005

The Dalgety Bond Store is the only heritage item within the Barangaroo site identified in the *State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP). This site is located within Barangaroo Reserve (north Barangaroo), immediately to the north of the Central Barangaroo site. There are no other heritage items located within the Barangaroo precinct.

The Dalgety Bond Store is also identified as a heritage item in the Sydney LEP 2012 and the NSW SHR. It is included in the SHR conservation area listing for the Millers Point and Dawes Point Village Precinct,

but not the similar LEP listed conservation area. Heritage listings for the Dalgety Bond Store are included in Table 6.3.

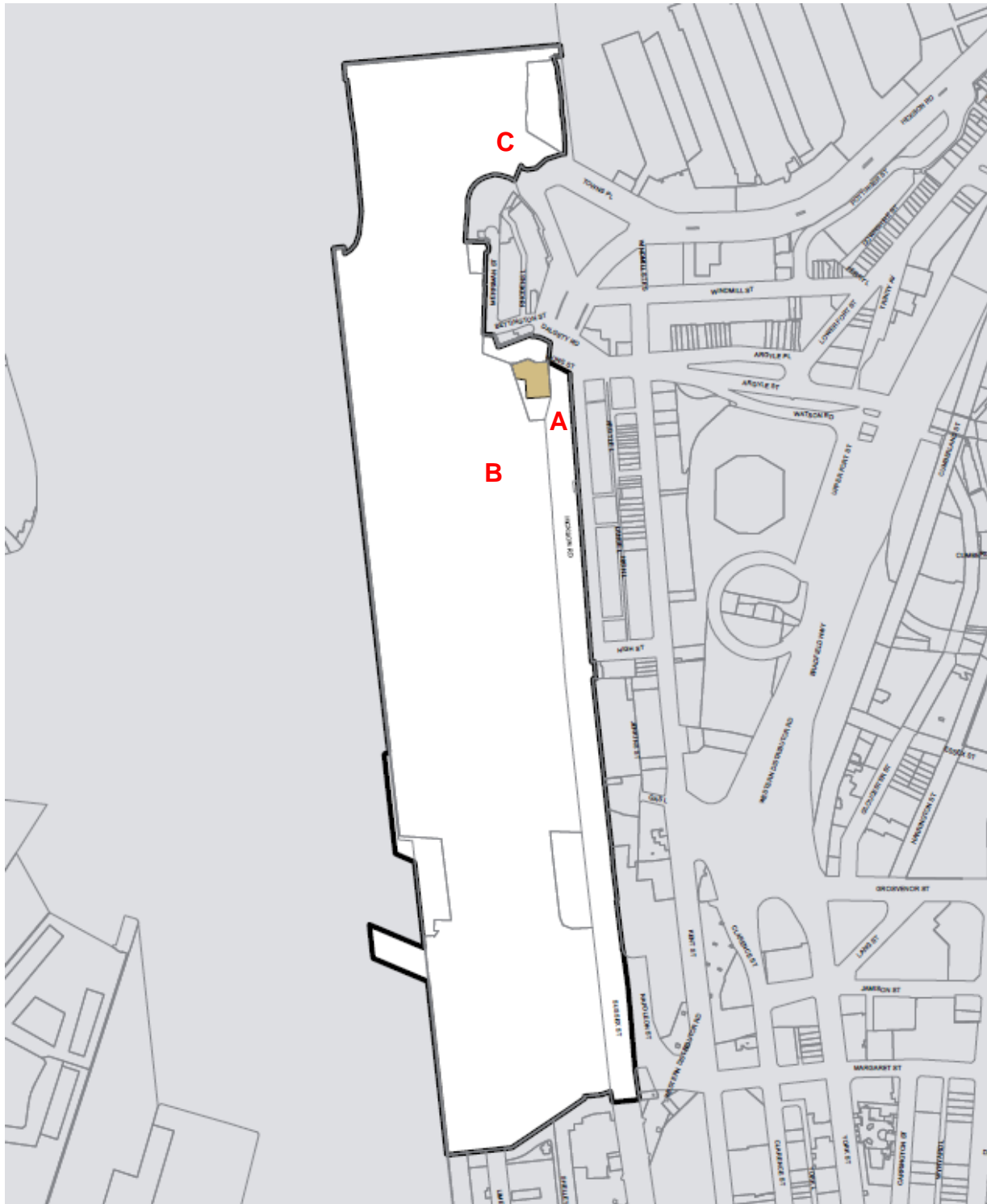


Figure 6.5 The Dalgety Bond Store (A) is shown as the only heritage item within Barangaroo on sheet 001 of the SEPP (Major Development) 2005 Barangaroo Heritage Map. The approximate location of the other S170 heritage items Munn's slipway (B) and Sewage Pumping Station No. 14 (C) are also shown on this plan. (Source: SEPP [Major Development] 2005 Barangaroo Heritage Map, with overlay of the current Barangaroo area by GML, 2021)

Infrastructure NSW Section 170 Heritage and Conservation Register

The Infrastructure NSW S170 Heritage and Conservation Register includes three heritage items within the Barangaroo precinct. None of these sites are with Central Barangaroo. Refer to Figure 6.5 for locations of these items.

Table 6.1 Infrastructure NSW S170 Heritage and Conservation Register (Barangaroo Precinct).

Name of Item	Other Names	Description	Address
A – Dalgety's Bond Stores	Dalgety's Bond Stores Group of Buildings, Munn Street Bond Stores	Former warehouse, now offices.	Munn Street, Millers Point NSW 2000
B – Munn's slipway	N/A	Remains of stone paved slipway.	Nawi Cove, Hickson Road, Sydney NSW 2000
C – SPS 14 – Sewage Pumping Station No. 14	Metropolitan Water Sewerage and Drainage Board (MWS & DB) Sewage Pumping Station	Former sewage pumphouse, now amenities building.	4 Towns Place, Barangaroo NSW 2000



Figure 6.6 Dalgety Bond Store at 6–20 Munn Street viewed from High Street behind the Metro Station site. (Source: GML, 2020)



Figure 6.7 Photograph showing the Munn's Slipway after conservation within the recreated Nawi Cove. (Source: Lime Window website¹)



Figure 6.8 Photograph showing the Sewage Pumping Station No. 14, at the north edge of Barangaroo Reserve. (Source: Google Maps, 2021)

6.4 Conservation Areas in the Vicinity of Central Barangaroo

There are two separately identified conservation areas of state significance to the east of Central Barangaroo. The boundaries of these conservation areas are shown in Figures 6.9–6.10.

Table 6.2 Conservation Areas in the Vicinity of Central Barangaroo.

Location Compared to Central Barangaroo	Name	Address	Listings
East	Millers Point & Dawes Point Village Precinct	Millers Point	SHR (#01682)
East	Millers Point/Dawes Point Conservation Area	Millers Point	SHR (#00884) Sydney LEP 2012 (CA35) (state significance)
North	Walsh Bay Wharves Precinct	Hickson Road	SHR (#00559)

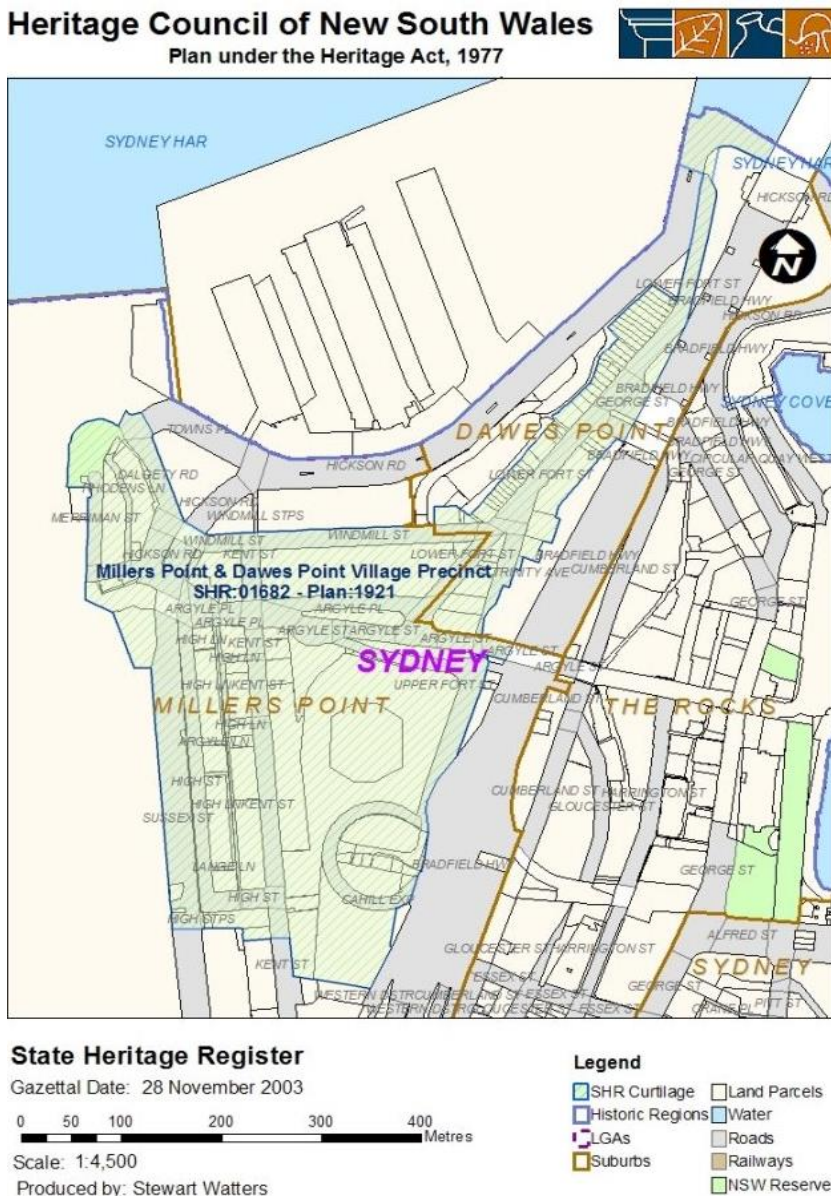


Figure 6.9 Map of Millers Point and Dawes Point Village Precinct (SHR #01682). (Source: NSW SHI database)

6.5 Heritage Items in the Vicinity of Central Barangaroo

There are heritage items of local and state significance to the east and north of Central Barangaroo, and two heritage conservation areas to the east of Central Barangaroo. These items are identified in Table 6.3. The locations of the heritage items (and boundaries of the heritage conservation areas) are shown in Figures 6.9–6.10.

Table 6.3 Heritage Items and Conservation Areas in the Vicinity of Central Barangaroo.

Location Compared to Central Barangaroo	Name	Address	Listings
East	'Terrace Duplexes' (High Street Terraces including interiors)	2–36 High Street	SHR (#00920) Sydney LEP 2012 (1883)
East		38–72 High Street	SHR (#00919) Sydney LEP 2012 (1888)
East		74–80 High Street	SHR (#00868) Sydney LEP 2012 (1889)
East		3–9 High Street	SHR (#00918) Sydney LEP 2012 (1884)
East	Palisade Fence and High Steps	High Street	Sydney LEP 2012 (1882)
East	Lance Kindergarten (including buildings and their interiors, early remnant fencing and grounds), and trees	37 High Street	Sydney LEP 2012 (1886) Sydney LEP 2012 (1887)
East	Shops and Residence	1–7 Argyle Place	SHR (#00863) Sydney LEP 2012 (1870)
North	Dalgety Bond Store (Munn Street Bond Stores)	6–20 Munn Street	SHR (#00526) Sydney LEP 2005 (1316) INSW S170 Register
North	Shops and Residences	6–8 Argyle Place	SHR (#00870) Sydney LEP 2012 (1871)
North	Shops and Residences	10–12 Argyle Place	SHR (#00891) Sydney LEP 2012 (1871)
North	MSB Stores, including interiors	36 Hickson Road	Sydney LEP 2012 (1880) (SHR #01435)
Southwest	Grafton Bond Store	201–217 Kent Street	Sydney LEP 2012 (1813)
Southwest	Lane off Gas Lane	Jenkins Street	Sydney LEP 2012 (18903)
Northeast	Observatory Park including Boer War Memorial, Bandstand, fences and landscaping	Upper Fort Street	Sydney LEP 2012 (1935)
Northeast	The Sydney Harbour Bridge, approaches and Viaducts	Bradfield Highway	S170 NSW Register (State) National Heritage List
East	Sydney Observatory group including buildings and their interiors and grounds	1003 Upper Fort Street	Sydney LEP 2012 (1934) (SHR #01449)

GML Heritage

Location Compared to Central Barangaroo	Name	Address	Listings
East	Fort Street Primary School site including buildings and their interiors, fig trees and grounds	1005 Upper Fort Street	Sydney LEP 2012 (I938)
East	Messenger's Cottage for Sydney Observatory including interior	9A Upper Fort Street	Sydney LEP 2012 (I937)
East	Bureau of Meteorology including interior	9 Upper Fort Street	Sydney LEP 2012 (I936)
East	The National Trust Centre including buildings and their interiors, retaining walls and grounds	1001 Bradfield Highway	Sydney LEP 2012 (I876)
East	Agar Steps	Agar Steps	Sydney LEP 2012 (I868)
East	Agar Steps Terrace Group	5–9 Agar Steps	Sydney LEP 2012 (I921)
East	Tennis Court and Pavilion	96–108 Kent Street	Sydney LEP 2012 (I920)
East	Carlson Terrace, including interior	110–114A Kent Street	Sydney LEP 2012 (I922)
East	Richmond Villa, including interior	116–122 Kent Street	Sydney LEP 2012 (I923)
East	Terrace Group, including interior	123–125 Kent Street	Sydney LEP 2012 (I924)

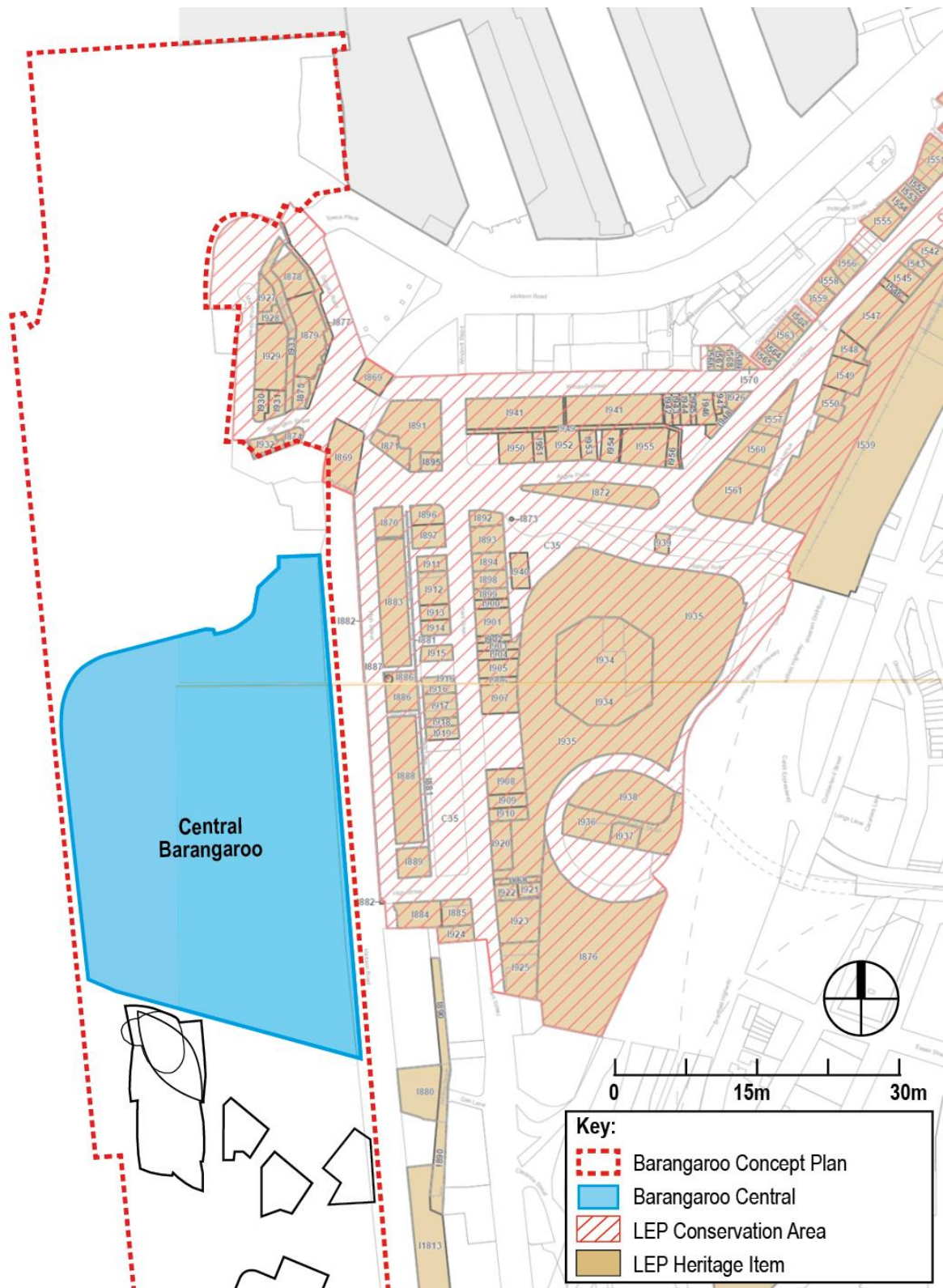


Figure 6.10 Excerpt from heritage map showing heritage items and conservation areas in the vicinity of Central Barangaroo. (Source: City of Sydney LEP 2012, GML overlay, 2021)

6.5.1 Millers Point/Dawes Point Conservation Area

The SHI database contains the following Statement of Significance for this heritage item:

Millers Point Conservation Area is an intact residential and maritime precinct of outstanding State and national significance. It contains buildings and civic spaces dating from the 1830s and is an important example of nineteenth and early twentieth century adaptation of the landscape. The precinct has changed little since the 1930s.

6.5.2 Millers Point and Dawes Point Village Precinct

The SHI database contains the following Statement of Significance for this heritage item:

Millers Point & Dawes Point Village Precinct is of state significance for its ability to demonstrate, in its physical forms, historical layering, documentary and archaeological records and social composition, the development of colonial and post-colonial settlement in Sydney and New South Wales.

The natural rocky terrain, despite much alteration, remains the dominant physical element in this significant urban cultural landscape in which land and water, nature and culture are intimately connected historically, socially, visually and functionally.

The close connections between the local Cadigal people and the place remain evident in the extensive archaeological resources, the historical records and the geographical place names of the area, as well as the continuing esteem of Sydney's Aboriginal communities for the place.

Much (but not all) of the colonial-era development was removed in the mass resumptions and demolitions following the bubonic plague outbreak of 1900, but remains substantially represented in the diverse archaeology of the place, its associated historical records, the local place name patterns, some of the remaining merchants villas and terraces, and the walking-scale, low-rise, village-like character of the place with its central 'green' in Argyle Place, and its vistas and glimpses of the harbour along its streets and over rooftops, the sounds of boats, ships and wharf work, and the smells of the sea and harbour waters.

The post-colonial phase is well represented by the early 20th century public housing built for waterside workers and their families, the technologically innovative warehousing, the landmark Harbour Bridge approaches on the heights, the parklands marking the edges of the precinct, and the connections to working on the wharves and docklands still evident in the street patterns, the mixing of houses, shops and pubs, and social and family histories of the local residents.

Millers Point & Dawes Point Village Precinct has evolved in response to both the physical characteristics of its peninsular location, and to the broader historical patterns and processes that have shaped the development of New South Wales since the 1780s, including the British invasion of the continent; cross-cultural relations; convictism; the defence of Sydney; the spread of maritime industries such as fishing and boat building; transporting and storing goods for export and import; immigration and emigration; astronomical and scientific achievements; small scale manufacturing; wind and gas generated energy production; the growth of controlled and market economies; contested waterfront work practises; the growth of trade unionism; the development of the state's oldest local government authority the City of Sydney; the development of public health, town planning and heritage conservation as roles for colonial and state government; the provision of religious and spiritual guidance; as inspiration for creative and artistic endeavour; and the evolution and regeneration of locally-distinctive and self-sustaining communities.

The whole place remains a living cultural landscape greatly valued by both its local residents and the people of New South Wales.

6.5.3 High Street Terraces

The High Street Terraces are also listed as ‘Terrace Duplexes’ under four separate listings on the SHR (refer to Table 6.3). The terraces were constructed as part of the Sydney Harbour Trust’s redevelopment of Millers Point. The terraces comprise two blocks of two-storey duplexes, designed in the Federation style, with exposed brick walls and timber verandahs. The terraces form a uniform streetscape along High Street.

The SHI database provides the following Statement of Significance for the terraces:

This terrace is one of a group of early twentieth century workmen’s terraces built as part of the post plague redevelopment by the Sydney Harbour Trust.

It is part of the Millers Point Conservation Area, an intact residential and maritime precinct. It contains residential buildings and civic spaces dating from the 1830’s [sic] and is an important example of C19th adaptation of the landscape.



Figure 6.11 2–36 High Street—south end. (Source: GML, 2020)



Figure 6.12 2–36 High Street—north end. (Source: GML, 2020)



Figure 6.13 74–80 High Street. (Source: GML, 2020)



Figure 6.14 3–9 High Street. (Source: GML, 2020)



Figure 6.15 View from steps at entry to heritage item (3–9 High Street, south end) looking northwest toward Central Barangaroo. (Source: GML, 2020)



Figure 6.16 View from entry to heritage item (74–80 High Street, south end) looking west toward Central Barangaroo. (Source: GML, 2020)



Figure 6.17 View from entry to heritage item (74–80 High Street, centre of block) looking west toward Central Barangaroo. (Source: GML, 2020)

6.5.4 Palisade Fence and High Steps

The SHI database contains the following description of this heritage item:

The Palisade fence and High Steps start 300m from Argyle Place and run along the western edge of High Street. Listing includes palisade fence, decorative cast iron posts and sandstone posts that flanked the bridges over Hickson Road (most of these bridges have been demolished).

The SHI database contains the following Statement of Significance for this heritage item:

The High Street sandstone wall and palisade fence are of historical significance for their association with the Sydney Harbour Trust's redevelopment early in the 20th century. They are aesthetically significant as a dramatic landmark feature that defines the edge of the village of Millers Point. The open steps at the southern end of High Street between High Street and Hickson Road are of heritage significance as an integral part of the pedestrian network of Millers Point that connected the wharfs to the suburb above. The remnant elements of the closed steps at the northern end of High Street between High Street and Hickson Road are of heritage significance as an integral part of the pedestrian network

of Millers Point that connected the wharfs to the suburb above. They are of historical significance for their association with the Sydney Harbour Trust's redevelopment early in the 20th century, they form part of the well designed and extensive network of stairs and access routes designed to move large numbers of workers to and from the wharves, and display a fine level of detailing for their period of construction.



Figure 6.18 View from north end of palisade fence looking south and west toward Central Barangaroo. (Source: GML, 2020)



Figure 6.19 View from north end of palisade fence looking south along High Street and over Central Barangaroo. (Source: GML, 2020)



Figure 6.20 View from centre of palisade fence looking north toward Central Barangaroo. (Source: GML, 2020)



Figure 6.21 View from centre of palisade fence looking southwest toward Central Barangaroo. (Source: GML, 2020)



Figure 6.22 View from centre of palisade fence looking west toward Central Barangaroo. (Source: GML, 2020)

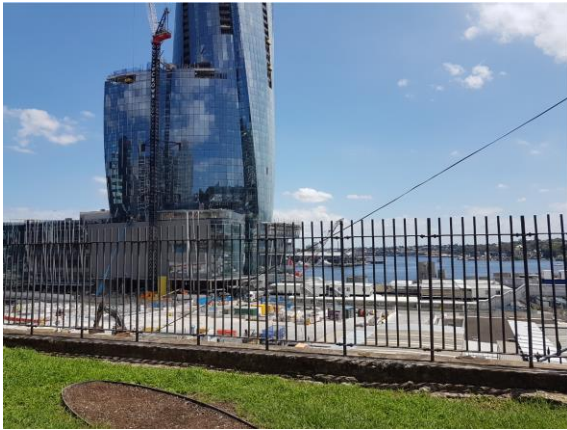


Figure 6.23 View from south end of palisade fence looking west toward Central Barangaroo. (Source: GML, 2020)



Figure 6.24 View from south end of palisade fence looking northwest toward Central Barangaroo. (Source: GML, 2020)

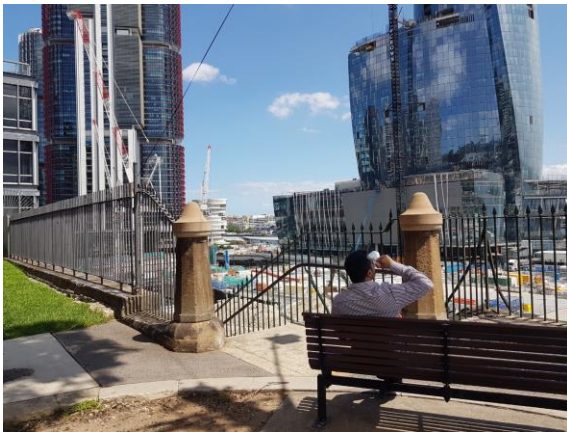


Figure 6.25 Palisade fence and high steps—south end. (Source: GML, 2020)



Figure 6.26 Palisade fence and high steps—north end. (Source: GML, 2020)

6.5.5 Lance Kindergarten

The SHI database contains the following description of this heritage item:

Lance Kindergarten is set within a row of early Federation housing along High Street. To the rear of the site is a very high vertical stone cutting, which is the most imposing element of the site. A narrow lane runs along the back side of the properties in front of the wall. Both sides of the kindergarten site have open laneways. The three exposed sides of the kindergarten have recent palisade fencing on either a stone or brickwork plinth. The stone plinth still shows signs of the early timber post and rail picket fence that enclosed the site. Trees were planted at the inception of the kindergarten and have now become mature street trees that improve the amenity of the site and the neighbourhood.

Within the site there are three main structures. The most prominent building in the front corner is also the oldest, and is a remnant from the site's earliest use as a playground. This building was in part designed by Walsh, in the typical red brick Federation domestic style, but was then altered and extended as a kitchen in 1934. Behind this building to the rear of the site sits two similar larger structures that form the main buildings on the site. Built in an Interwar Bungalow style these buildings are also in brickwork (in this case painted) and have many similar details to complement the earlier structure. All the buildings are single storey with terracotta tiling and are traditionally framed in timber with timber floors.

The SHI database contains the following Statement of Significance for this heritage item:

Lance Kindergarten is significant for the ongoing use of the site, first as a children's playground and then as a kindergarten from 1913 and 1925 respectively. Considered to be the first public playground in the City of Sydney, the

place is of high social significance as a community playground for the use of Millers Point residents developed as compensation for the absence of garden and yard space for the occupants of the Trust's housing developments. It is also significant as physical evidence of the major state government redevelopment of the district in the years following the 1901 bubonic plague. The kindergarten was a product of the movement to provide free preschool education and playground facilities for the children of the inner city.

The facility has historical associations with a former President of the Sydney Harbour Trust after whom the kindergarten is named. The complex is also a testimony to the efforts of the Kindergarten Union of NSW to develop facilities for the use of children in crowded suburbs of the late nineteenth century. The kindergarten is an important element in the townscape, providing a landscaped relief to the townhouse development on the eastern side of High Street. The site also features a number of significant trees that provide amenity, aesthetic value and have historic associations with the development of the centre.



Figure 6.27 Lance Kindergarten at 37 High Street. (Source: GML, 2020)



Figure 6.28 Trees associated with Lance Kindergarten. (Source: GML, 2020)



Figure 6.29 View from Lance Kindergarten south toward Central Barangaroo. (Source: GML, 2020)



Figure 6.30 View from across the street from Lance Kindergarten west toward Central Barangaroo. (Source: GML, 2020)

6.5.6 1–7 Argyle Place

The SHI database contains the following description of this heritage item:

Located within the Millers Point historic district. Important visual relationship with the adjoining commercial group at 9 Argyle Place and with the residential group along High Street. Category: Group of Buildings. Style: Federation Free Style. Storeys: 2.

The SHI database provides the following Statement of Significance for this heritage item:

1–7 Argyle Place is of historical significance as physical evidence of the major state government redevelopment of the district in the years following the 1901 bubonic plague. It is of aesthetic significance as part of an architecturally consistent commercial and residential group.



Figure 6.31 Shop and residence at 1–7 Argyle Place. (Source: GML, 2020)



Figure 6.32 View from Argyle Place, opposite 1–7 Argyle Place, toward Central Barangaroo. (Source: GML, 2021)

6.5.7 6–12 Argyle Place

The SHI database contains the following description of this heritage item:

One of a row of terraces, commercial on ground floor with residential space over. Built c. 1906 in the Federation style, important streetscape element. Storeys: 2 Construction: Face brick and rendered masonry walls with slate roof. Painted timber joinery and trim. Style: Edwardian Orientation: Overlooking Argyle Place

The SHI database provides the following Statement of Significance for this heritage item:

This building is one of a group of five post-plague Edwardian commercial and residential properties, which are very important to the streetscape of Millers Point.

It is part of the Millers Point Conservation Area, an intact residential and maritime precinct. It contains residential buildings and civic spaces dating from the 1830's [sic] and is an important example of C19th adaptation of the landscape.



Figure 6.33 Shop and residence at 6–12 Argyle Place. (Source: GML, 2020)



Figure 6.34 View from 6–12 Argyle Place toward Central Barangaroo. (Source: GML, 2020)

6.5.8 The Dalgety Bond Store (Munn Street Bond Stores)

The SHI database contains the following description of this heritage item:

The former Dalgety's Bond Stores were originally a complex of three warehouse components, known as Dalgety's Bond A, B and C. Only blocks A and C survive. Surviving features of Block B include sawn stonework, beam corbels and flashing grooves provide evidence of its attachment to the surviving buildings. Block A is an irregular gable roofed sandstone structure. Block C is a brick building almost rectangular in plan with a parapeted sawtooth south-light roof. The two buildings adjoin. To the north, facing Munn Reserve (formerly Munn Street) at the Argyle Street bridge, Blocks A and C are 2 and 1 storey in height respectively. To the south and west, however, the steep fall of the site reveals three more storeys below, addressing Hickson Road and the carpark adjacent to the wharf. In the refurbished interiors much original fabric has been kept including the heavy posts, beams and roof trusses of Block A, and the remarkable trussed girders and roof trusses of Block C.

The group consists of two complimentary warehouse buildings fronting onto what is now the Munn Reserve. They both feature free classical facades but illustrate two distinct phases in warehouse construction – one incorporating a timber structure, the other steel. The original detailing is largely in tact, both internally and externally. Contains an hydraulic pump and lift structure which is given an "A" class listing by the National Trust's IEA Committee. The bale lifts and overhead crane were fabricated by Babcock & Wilcox.

The former Dalgety's Bond Store is a good example of an early stone warehouse, which if retained will maintain a link with the early commercial character of the area, once the hub of Sydney's shipping activity.

The SHI database provides the following Statement of Significance for this heritage item:

The Munn Street former warehouse complex is important as a townscape feature in this area of dramatic topography. Its different building forms and shapes display a progression of functional architectural style, reflecting the difficulties of building on this contorted terrain. It also demonstrates the redevelopment and change of the area associated with civil works that followed the bubonic plague of 1901. It perpetuates the memory of Dalgety & Co, one of Australia's largest mercantile companies, and maintains a historic link with the maritime activities of Millers Point. The internal structure and mechanical features provide additional scientific significance.



Figure 6.35 View west to Dalgety Bond Store at 6–20 Munn Street from Argyle Place. (Source: GML, 2021)



Figure 6.36 View east to Dalgety Bond Store (Building A) at 6–20 Munn Street from Munn Street Reserve. (Source: GML, 2016)



Figure 6.37 Dalgety Bond Store (Building C) at 6–20 Munn Street. (Source: GML, 2020)



Figure 6.38 View from Dalgety Bond Store at 6–20 Munn Street toward Central Barangaroo. (Source: GML, 2020)

6.5.9 Walsh Bay Wharves Precinct

The SHI database contains the following description of this heritage item:

Walsh Bay Precinct is located at the northern area of Millers Point. The Walsh Bay building complex is a masterpiece of early 20th century industrial architecture and an important part of Australia's rich maritime and urban heritage. The wharves and bond stores contain a number of significant archaeological, technological and engineering artefacts. The Walsh Bay complex is believed to be the only one of its type surviving in the world. Presently, the finger wharves, connecting shoredsheds, bond stores, Pottinger and Downshire Streets are owned by the Marine Ministerial Holding Corporation, while Hickson Road and Towns Place are owned by Sydney City Council. The Walsh Bay wharves and their associated shore buildings, the bridges over Hickson Road and adjacent bond stores create a cohesive complex of maritime structures. The design of the complex is remarkable in its use of the topography to maximise access to the wharves. The two-storey shore sheds with access at two levels independently were designed to provide rapid shipping turnaround. This use of steep topography has created a sense of enclosure and emphasises the unity of the Walsh Bay area. One of the significant and attractive features of the finger wharves is their simple uncluttered lines, with the individual character of each wharf established by varying detail. Visually, the wharves have a strong, distinctive character created by the use of heavy timber construction and the regular grid-layout of piles, columns, beams, and infill cladding. The whole complex is an important visual element when viewed from the Harbour, from where the simple lines of the wharves can best be appreciated. One of the most impressive features of the Walsh Bay complex is the continuity created by the shore sheds fronting Hickson Road. The attractive brick façade with typical Federation features unifies the complex from the street. The sandstone cliff face on the south side of Hickson Road, the striking brick façade of the shore sheds on the north and the bridges overhead create a canyon-like effect. Other architectural and engineering details include: cast iron railings and decorated posts, bonded brick work, iron ballards, arched and curved openings, trachyte kerbstones and cobbles. The Walsh Bay area provides spectacular view out over the Harbour, with enclosed views between the wharves.

A number of historical items have been retained and displayed following the redevelopment of the site over the last twenty years. These include a wool bale elevator, hydraulic lifting system, jib cranes and early timber piles. Excavation of the area around Wharf 4 revealed the remains of an 1820s cottage.

The SHI database provides the following Statement of Significance for this heritage item:

The Walsh Bay area is of State cultural significance due to its unique combination of steep rocky terrain, early, mid, late-Victorian and Edwardian housing, surviving relatively intact Victorian bond stores, and the results of an early twentieth century urban redevelopment scheme of unique scale: the magnificent timber wharf and shore structures and associated rock cuttings, roads and bridges (Clive Lucas Stapleton & Partners 1999: 75). The Walsh Bay Wharves and associated buildings and works are a virtually intact port and stevedoring facility created by the Sydney Harbour Trust in

response to the requirements of maritime trade at the time (1900s–1910s). The precinct documents the workings of a technologically advanced early twentieth century shipping port, developed specifically to accommodate new mechanised transportation technology. (Department of Urban Affairs and Planning 1989:5) The wharves have a strong distinctive character created by the logical use of heavy timber construction and the regular grid layout of piles, columns, beams and infill cladding. (Little, Clarke, Whittaker 1979) The precinct is unified in materials, form and scale and contains structures demonstrating maritime uses. It demonstrates the life of inner Sydney in the early twentieth century. The precinct demonstrates technical and creative excellence of the period 1820–1930. (Department of Urban Affairs and Planning 1989:5)

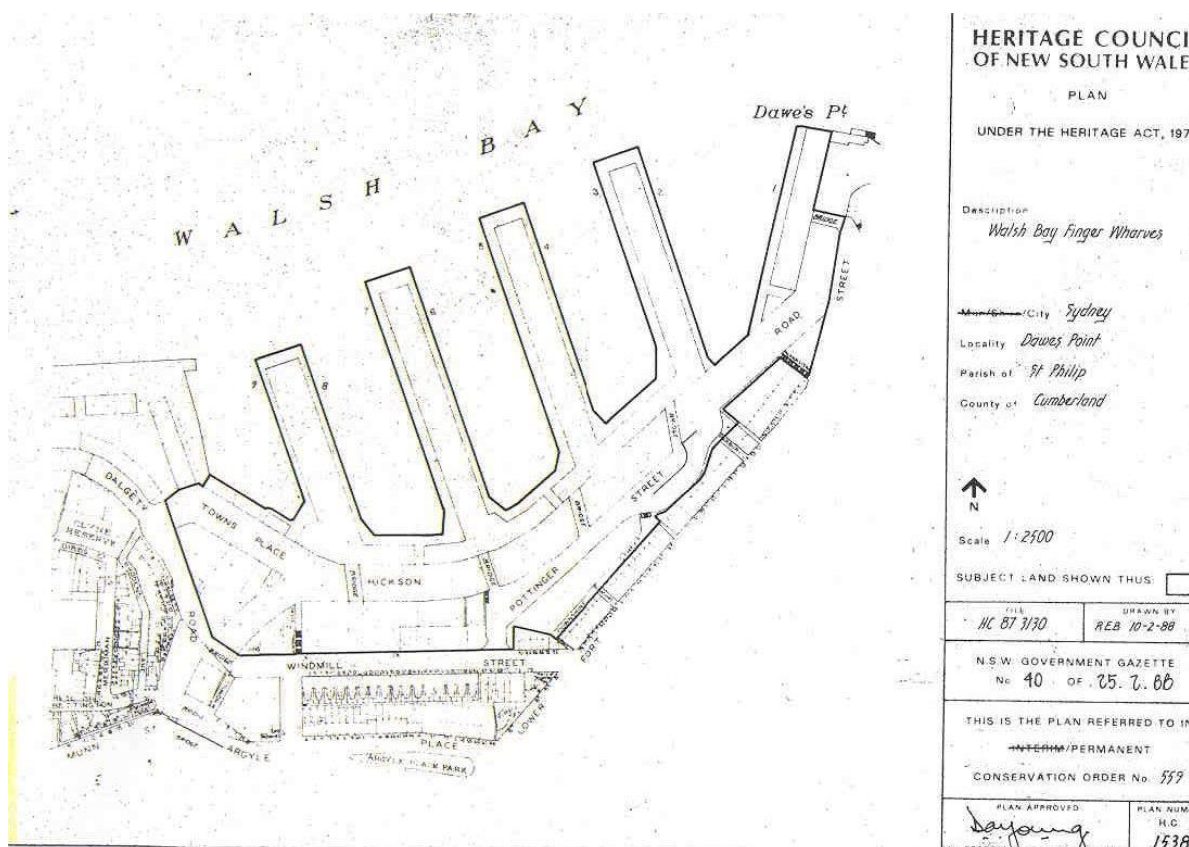


Figure 6.39 Extent of Walsh Bay Wharves precinct. (Source: SHR citation)

6.5.10 Moore's Wharf

The SHI database contains the following description of this heritage item:

A group of 3 storey sandstone walled waterfront warehouses built by Captain Robert Towns in stages from the early 1830's [sic] to late 1840's [sic] of simple pitched roof form, sheeted with corrugated iron, the hoist beams contained within small gables central to each bay. The original north-west bay is separated by a dividing wall and parapet and was built on the northern extremity of Millers Point shoreline at a site known as Jones Wharf. The later additions follow an interesting angled plan, repeating the curve of the once adjacent small shore wharf (D. Sheedy 1976).

The SHI database provides the following Statement of Significance for this heritage item:

Of historical significance for its association with the waterside warehouse activities of the early 19th century that has made an important contribution to industrial settlement and establishment of storage facilities at Walsh Bay in the Port of Sydney (Anglin 1990:1048).



Figure 6.40 Moore's Wharf, viewed from Pier 8. (Source: Google Maps, 2021)

6.5.11 Grafton Bond Store, Hickson Road and Kent Street

The SHI database contains the following description of this heritage item:

The building stands monument like in Hickson Road below the glass towers in Kent Street, a juxtaposition of new and old which, when seen from the west across the water, is one of the most engaging views of Sydney. The building is long and narrow, four and five storeys high at Hickson Road, and three above the rock shelf behind. The Hickson Road facade three bays with plain parapeted gables, one with eaves and two with stepped parapets, one of which curves gracefully around the Napoleon Street corner. The lowest storey is sandstone. The east side, which once faced Jenkins Street, has three stepped gable parapets in the northern European manner, with catheads at the top. Internally the structure is of heavy hardwood posts and girders, with joists, herringboning and timber flooring. Some of the king post roof trusses are visible. It has recently been refurbished with the addition of two masonry service sections to the east linked by a partly glazed access gallery. The walls are built in English bond, of cream bricks believed to have been brought from Newcastle-on-Tyne as sailing ballast. The Dutch gables bear the date 1881 and a monogram formed in red bricks, presumed but without certainty, to be John Frazers. The depressed pointed arches and round arches over openings, and banding in the walling, are laid in red-orange bricks. (Sydney City Council 1989)

The sandstone wall is a substantial cutting of the natural sandstone, on which a cut stone wall has been constructed, increasing the scale and providing level access to properties at Kent Street. A park reserve has been introduced at the top of the wall, adjacent to MSB offices. Once defining the natural harbour foreshore, the wall now forms an eastern boundary to Hickson Road. (Anglin 1990:1043)

The unusual inverted 'V' voussoirs in contrasting brickwork, stepped parapet and curved corner contribute to the striking street facade. (Anglin 1990:1032)

The SHI database provides the following Statement of Significance for this heritage item:

Grafton Bond has historic significance as a remnant of what was claimed to have been the largest bond store complex in Australia. It is a complex building redolent of the busy wharfage area of earlier times and of a large mercantile facility which was once an important part of the city. It has aesthetic significance as an excellent example of urban commercial utilitarian design, by an eminent Australian architect, William Wardell and its design displays the Northern European influence evident in much of the work of the architect, such as the three stepped gable parapets on the eastern elevation. Its recent refurbishment and well contrived juxtaposition with modern glass towers is a most successful conservation project. It has scientific significance for its fine craftsmanship and its clever response to the hilly terrain of this part of Sydney.



Figure 6.41 Grafton Bond Store along Hickson Road. (Source: GML, 2020)



Figure 6.42 Sandstone wall adjacent to the Grafton Bond Store. (Source: GML, 2020)



Figure 6.43 View from heritage item at street level toward Central Barangaroo. (Source: GML, 2020)



Figure 6.44 View from the Grafton Bond Store (at Gas Lane, upper level) toward Central Barangaroo. (Source: GML, 2021)

6.5.12 Lane off Gas Lane

The SHI database contains the following description of this heritage item:

Remnant sandstone walls and decorative wrought iron street light.

The SHI database provides the following Statement of Significance for this heritage item:

The Lane is of historic significance as it contains remnants of a past streetscape.



Figure 6.45 View down Gas Lane toward Central Barangaroo. (Source: GML, 2021)



Figure 6.46 View from Gas Lane toward Kent Street and Sydney CBD. (Source GML, 2020)



Figure 6.47 View south along Jenkins Street, off Gas Lane. (Source: GML, 2020)



Figure 6.48 View north along Jenkins Street, off Gas Lane. (Source: GML, 2020)

6.5.13 Observatory Hill Park

The SHI database contains the following description of this heritage item:

The park includes mature specimens of Moreton Bay Figs, sandstone and iron palisade fences, Boer War Memorial and bandstand. Category: Urban Park. General Details: Refer to Archaeological Zoning Plan.

Observatory Hill is a rare urban space that has remained in its open form with the Observatory located at its heart. The elevated setting, the open grassland with mature trees, the few built features such as the bandstand and the enclosed observatory garden provide a place of exceptional value. Paths, walks, stairs and links to and through this space link it to Millers Point, the Rocks and the city.

Observatory Hill or the area defined by the rock cut and retaining walls that separates the top of the hill from the residential area below. This area largely retains its original landform near the crown of the hill although probably somewhat modified over time with fill behind the various stone retaining walls to create a gentler slope. This area features the observatory complex with its contained garden and fine group of buildings, the rotunda and the mature fig plantings in the park as well as Meteorological Building, Sydney Observatory Messengers Cottage, Messenger's Cottage for Fort Phillip Signal Station, the early school buildings, now the National Trust Centre, and the more recent school buildings set on the circular piece of land left after the excavation for the Cahill Expressway. The two school complexes were connected by footbridges that now form part of the pedestrian access network from the bridge to the city.

The parklands are some of the most attractive in the city and the only public parklands that offer expansive and elevated harbour views and are visible from many points in the area. Set with the Harbour Bridge as a backdrop the location is iconic in Sydney.

The SHI database provides the following Statement of Significance for this heritage item:

The Observatory Park is of outstanding historical significance and a major component of the Observatory Hill precinct. The park commands panoramic views to the north, west and south.

The Observatory is of exceptional significance in terms of European culture. Its dominant location beside and above the port town and, later, City of Sydney made it the site for a range of changing uses, all of which were important to, and reflected, stages in the development of the colony. These uses included: milling (the first windmill); defence (the first, and still extant, fort fabric); communications (the flagstaffs, first semaphore and first electric telegraph connection); astronomy, meteorology and time keeping.

The surviving structures of the Observatory Hill precinct, both above and below ground, are themselves physical documentary evidence of 195 years changes of use, technical development and ways of living. As such they are a continuing resource for investigation and public interpretation.

Observatory Hill has an association with an extensive array of historical figures most of whom have helped shape its fabric. These include: colonial Governors Hunter, Bligh, Macquarie & Denison; military officers and engineers Barrallier; Bellasis and Minchin; convicts: the as yet unnamed constructors of the mill and fort; architects: Greenway (also a convict), Lewis, Blacket, Weaver, Dawson and Barnet; signallers and telegraphists such as Jones and the family Moffitt; astronomers: particularly PP King, Scott, Smalley, Russell, Cooke and Wood.

*The elevation of the site, with its harbour and city views and vistas framed by mature Moreton Bay fig (*Ficus macrophylla*) trees of the surrounding park, make it one of the most pleasant and spectacular locations in Sydney.*

The picturesque Italianate character and stylistic interest of the Observatory and residence building, together with the high level of competence of the masonry (brick and stone) of all major structures on the site, combine to create a precinct of unusual quality.

Finally, the continued use of the observatory for astronomical observations and the survival of astronomical instruments, equipment and some early furniture although temporarily dispersed, and the retention of most interior spaces, joinery, plasterwork, fireplaces, and supports ensure that the observatory can remain the most intact and longest serving early scientific building in the State (Kerr 1991: 39). The site is also of significance for relationship of Commonwealth and State powers. It is the site of the first intercolonial conference on meteorology [sic] and astronomy. (Pearson et al 1999)

The building is an excellent example of a Colonial building erected for scientific purposes and continuing to perform its function at the present time. The structure makes an imposing composition atop the historic hill originally known as Flagstaff Hill and occupies the historic Fort Phillip site (1804–45). It was designed by the colonial architect Alexander Dawson and built in 1858.



Figure 6.49 General view of Observatory Hill Park. (Source: GML, 2020)



Figure 6.50 View from Observatory Hill Park looking towards Central Barangaroo. (Source: GML, 2020)

6.5.14 Sydney Observatory (within the Sydney Observatory Site)

The SHI database contains the following description of this heritage item:

The Observatory is a sandstone, two storey building with two domed observatories on octagonal towers and a four storey tower containing offices and an astronomer's residence. The building is of Florentine Renaissance style and the storeys are divided by string courses with articulated quoins at corners, stone bracketed eaves and entablature to openings. A single storey wing to the north has a timber balcony verandah built above. The building has Georgian twelve pane windows and six panel doors.

The SHI database provides the following Statement of Significance for this heritage item:

The Observatory is a fine and rare example of a purpose built observatory structure and is of exceptional significance for its dominant location in the City of Sydney. The site has a long history of changing uses, all of which reflected important stages in the development of the colony including milling (the first windmill); defence (the first, and still extant, fort fabric); communications (the flagstaffs, first semaphore and first electric telegraph connection); astronomy, meteorology and time keeping. The surviving structures, both above and below ground, are physical evidence of 195 years of social and technical development. The place has an association with an extensive array of historical figures most of whom have helped shape its fabric including colonial Governors, military officers and engineers, architects, signallers and telegraphists and astronomers. The building is amongst the few surviving examples of the work of Alexander Dawson, Colonial Architect.

The siting, with its harbour and city views and vistas framed by mature Moreton Bay fig trees of the surrounding park, make it one of the most pleasant and spectacular locations in Sydney. The picturesque Italianate character and stylistic interest of the Observatory and residence building, together with the exceptional craftsmanship evident in the fabric of all major structures on the site, combine to create a precinct of unusual quality.



Figure 6.51 General view of Sydney Observatory, main south elevation. (Source: GML, 2018)



Figure 6.52 General view of Sydney Observatory, looking towards the main south gate. (Source: GML, 2020)



Figure 6.53 View from Sydney Observatory, southwest corner of the site, looking west towards Central Barangaroo. (Source: GML, 2020)



Figure 6.54 View from Sydney Observatory, ground floor window looking west towards Central Barangaroo. (Source: GML, 2020)



Figure 6.55 View from Sydney Observatory, first floor window looking west towards Central Barangaroo. (Source: GML, 2020)

6.5.15 Signal Station and Fort Phillip (within the Sydney Observatory Site)

The SHI database contains the following description of this heritage item:

The 1848 Signal Master's cottage was originally a square cottage with a central wall running over the top of a north-south section of the rampart of the original Fort Phillip (1804–06). The plan form of the cottage is early, with no central passageway. The building straddles the rampart with a single storey to the east or front end, which was designed as one large space, possibly with a partition. Entry to the cottage was via a southern porch outside this room, with an external stair access to the lower level. There was also a northern door, but the east featured only two windows. The western half of the house steps down over the rampart to form two storeys, the upper floor divided into two rooms (likely bedrooms) with the lower floor housing the kitchen. Each of the upper rooms had a fireplace, and the original bedrooms had a window on two external walls. The original Carron fireplace grates, developed fireplace surrounds, architraves, doors and floors are substantially intact and much of the plaster work survives. The south-west room is linked by an original internal stair to what was probably a basement level parlour.

The 1859 two storey extension to the north added a room to both levels, blocking up a north window in the process, and adding a northern verandah to the main east room. This extension included a chimney at the centre of the northern end wall, and provided an upper level bedroom and a lower level store for the signalling gear. There is some documentary and physical evidence that the east wall to the main room was skilfully moved a metre eastwards to provide more room at this time. By 1864 the north and west ground floor enclosed walkway was completed, connecting the inner rooms with the external toilet. These were probably added by the early occupants and are of sturdy bush carpentry, in contrast to the Colonial Architect design of the north verandah. The date of the extension and enclosure of the south porch is not known. The original cottage and northern extension were built from solid stone with a shingle roof and timber 12 paned Georgian windows.

The 1848 stone cottage is the oldest complete architectural structure on the site. The archaeological remains of the original Signal Station's flagstaff (1808–11) is also within the precinct.

The cottage is generally intact with much original and early fabric extant including masonry, joinery and plasterwork. Externally the overall form, fenestration, wall and roof elements are largely as original with the exception of new galvanised roof cladding and rainwater goods, a vertically boarded timber lean to on the north-west corner and miscellaneous repairs and replacement of other elements. Internally the building has undergone numerous changes but retains much of its significant fabric. The northern extension was altered in the post war period, the basement became a laundry, and the upper room became a radio receiving facility. In the process an internal door on the upper level was blocked up, and a window converted to a door. These alterations have since been reversed. Other changes include the south east room flooring being replaced, flooring being introduced to the roof space to facilitate storage, and a poor infill of the northern Colonial Architect's verandah (since restored by Public Works). The cottage has been recently cleared

of furniture in the 1990s. Most fittings and fixtures that remain are typical of the 1950s. The basement room long used as a kitchen, was renovated in the 1950s or 1960s and fitted with low-cost cupboards. An earlier Sydney-made Fletcher fuel stove survives at the eastern end of the room. The shingles and slates have now been replaced with corrugated iron roofing and rainwater goods.

Immediately adjacent the main building is a group of site artefacts contemporary with the building and associated with its function. These include the flight of stone steps with iron handrail and balusters to the south of the cottage (giving access to the elevated site) the wrought iron fence along the top of the Fort walls (to east and north boundaries) complete with original timber flagstaff rope cleats, the archaeological remains of the two original flagstaff (also along the Station's eastern boundary) and the remains of the original drive and landscaping below.

The SHI database provides the following Statement of Significance for this heritage item:

Fort Phillip Signal Station is significant as part of the Sydney Observatory complex visible from Sydney Cove. It played a significant role in the history and development of early colonial communication system in Sydney Harbour. Built on the remnants of the former Fort Phillip rampart. The building is historically significant as it represents the various stages in the development of the colony's communications (flagstaff, first semaphore and first electric telegraph connection). It is significant for its association with colonial military command and later with the Harbour Master's department, and with colonial architect Mortimer Lewis. The site is significant for the continuity of use dating from 1823. The building is the only remaining Signal Master's cottage in the city.



Figure 6.56 General view of Sydney Observatory Signal Station, Fort Phillip and the Signal Station Messenger's Cottage (left hand side, foreground), Sydney Observatory site. (Source: GML, 2018)



Figure 6.57 General view of the Signal Station, the Fort Phillip wall and its flagstaff (recreated). (Source: GML, 2018)

6.5.16 Signal Station Messenger's Cottage (within the Sydney Observatory Site)

The SHI database contains the following description of this heritage item:

The single storied, rendered brick symmetrical cottage with hipped slate roof and corrugated iron roofed verandah was the second of the residences built on the Hill as "messengers quarters" associated with the signal station. Externally the building retains much of its original form and fabric, components ranging from fair to good condition. Extant original elements include roof slating complete with lead dressed ridging, rendered ornament to brick chimneys and eaves (including corbel bracketing and dentil friezes), sash windows, panelled front door with fanlight and timber framed front verandah. Alterations to original fabric include re-roofing and infilling of the front verandah. Internally the cottage has been considerably altered with the removal and/or modification of original/early layout, fittings and finishes. The original four room layout with central passageway and separate kitchen is intact. Plaster work and joinery replaced by a modern fitout. The four original fireplace surrounds and mantle and the front and back doors survived this work, but no early moveable contents were retained.

In 1990 Museum of Applied Arts and Sciences secured control and title to Fort Phillip precinct and Messenger's Cottage. In 1994 the Cottage was restored as an office for staff thereby releasing space for the exhibition in the

Observatory and residence. Work included the introduction of air conditioning and both the removal of the verandah enclosure and the paint from three of the exterior walls to reveal the structural polychrome brickwork. The brickwork was then sealed. The southern wall was left in its painted state to co-ordinated with the motley array of painted outbuildings. As well as brick kitchen and WC, these included a post-World War II bathroom attached to the covered way. The outbuildings are original fabric.

The SHI database provides the following Statement of Significance for this heritage item:

The Messenger's Cottage for Fort Phillip (c1869) is a single storey brick building constructed in the Victorian Regency style. It was built as an addition to the Signal Station on Observatory Hill as a result of the implementation of the electric telegraph, and is historically significant for the part it played in the Harbour communication network and by its association with prominent persons and organisations such as the Harbour Master's department and Maritime Services Board. The building is significant for its association with the Colonial Architects office and as a design of the prominent Australian architect James Barnett. It has aesthetic significance as a fine and largely intact example of a brick building decorated with a pattern of bitumen impregnated bricks, uncommon in Sydney. The building is significant as a rare example of its type in the city.

The Signal Station Messenger's Cottage can be seen in Figure 6.56. There are no views from the Signal Station or Fort Phillip looking towards the Central Barangaroo site.

6.5.17 Fort Street Primary School

The SHI database contains the following description of this heritage item:

The building is in one complex with several buildings containing a two storey classroom block, a single storey hall block and an attached amenity block that has had some modifications and additions. Overall the building has retained its original form and detail.

It is constructed of face brick with parapeted roof forms, horizontal bands of windows, and a strong vertical stair element that contains a stained glass window. Decoration is simple and robust. The site retains several significant and mature fig trees.

The SHI database provides the following Statement of Significance for this heritage item:

Fort Street School is significant in providing evidence of educational use at Observatory Hill from the 1850s to the present day. The current school building is significant as a good example of post war modernism in a complete building complex with only minor changes since construction. Designed by the Government Architects office, it is part of a fine tradition of well designed school buildings in contemporary styles located in a prominent location within the centre of a very significant historic precinct. The building is a rare example of a modernist school.



Figure 6.58 General view of Fort Street Public School. (Source: GML, 2020)



Figure 6.59 Part view from the public roadway opposite Fort Street Public School (ground level) west towards Central Barangaroo. Note the construction of Block Y in progress. (Source: GML, 2020)

6.5.18 Sydney Observatory Messenger's Cottage (within the Fort Street Public School Site)

The SHI database contains the following description of this heritage item:

Messenger's Cottage for Sydney Observatory was built 1862

Cottage [sic] to serve as quarters for Signal Station 'messengers' erected adjacent to north boundary of National Trust Building (former National School). A single storied non symmetrical rendered brick cottage with hipped corrugated iron roof and timber framed verandah to north and north east elevations. Externally the cottage retains much of its original form and fabric including rendered brick chimneys, windows and doors and timber verandah framing. Recent repair/reconstruction work to interior and exterior carried out by the Young Trust group of the National Trust included the installation of new corrugated steel roofing, gutters and downpipes, removal of non-original verandah infill, general joinery and plastering repair and repainting. The cottage has further been refurbished internally for the use of a child care centre by Esso and current use by Contact.

The present cottage grounds are considerably changed both in character and extent, from the original, with the Bureau of Meterology [sic] to the west and its weather recording instruments to the east of the cottage, each occupying sites of early lawns and garden planting. The present front fence of brick piers and wire mesh also probably dates to the construction of the Bureau and replaces the original timber picket fence (previously located further to the north of the cottage).

The SHI database provides the following Statement of Significance for this heritage item:

Messenger's Cottage for Sydney Observatory (c.1862) is aesthetically significant as a fine and largely intact single storied rendered brick cottage with hipped corrugated iron roof and timber framed verandah in the simple asymmetrical Victorian cottage style. It was built in its current location far from the Observatory on the suggestion of Government Astronomer William Scott in order to reduce expense by allowing a brick building to be constructed. The building is significant [sic] for its association with architect Alexander Graham.



Figure 6.60 General view from the Messenger's Cottage (Sydney Observatory) towards the west. Note: views to the harbour are blocked by the taller Bureau of Meteorology Building. (Source: GML, 2020)



Figure 6.61 General view from the Messenger's Cottage (Sydney Observatory) towards the west. Note: views to the harbour are blocked by the taller Bureau of Meteorology Building. (Source: GML, 2020)

6.5.19 Bureau of Meteorology

The SHI database contains the following description of this heritage item:

A three storeyed face-brick building with hipped tiled roof and restrained Georgian revival detailing including multi-paned double-hung sash windows, panelled front door with decorated fanlight, tied piers, cantilevered balcony with decorative iron balustrade and a Doric columned entablature over the main entrance. Generally an austere structure, reflecting the economic constraints of the mid-war period in which it was built, the buildings' size, colour, massing and position render it a dominant physical element in its immediate setting.

The Bureau has almost no grounds adjacent to its building; to the north are rendered brick planter boxes with shrubbery planting and a small area of fenced lawn, to the east a concreted parking bay used by the adjacent Messenger's Cottage for Sydney Observatory, to the south are the abutting walls of the original Military Hospital grounds and to the west a brick garage used for storage by the National Trust. In consequence of its restricted grounds the Bureau originally positioned its weather recording instruments on the open lawn to the east of the neighbouring Messenger's Quarters. Whilst the instruments have since been removed the area is still largely enclosed with a modern steel mesh fence abutting, on the south, the brickwall to the former Military Hospital compound. The eastern section of the fence, however, does incorporate the stone plinth and corner pier of an earlier iron palisade fence (dating from the general park fencing of the 1870s–80s.)

The SHI database provides the following Statement of Significance for this heritage item:

The Bureau of Meteorology Building is significant as one of the first purpose built building for Meteorology in NSW in 1922. The building is associated with the Bureau of Meteorology which is an Executive Agency of the Australian Government responsible for providing weather services to Australia and surrounding area which was established in 1906 under the Meteorology Act, and brought together the state meteorological services that existed before then. The buildings [sic] dominant location beside and above City of Sydney, made it an appropriate site for meteorological observations. The building its [sic] significant for its operation as a Weather Bureau for over 70 years from 1922 until 1992. The buildings' [sic] size, colour, massing and position render it a dominant physical element in its immediate setting. Designed by the Commonwealth Department of Works and Railways, it is part of a fine tradition of well designed Commonwealth buildings in a prominent location within the centre of a very significant historic precinct. The building is a rare example of a mid war Georgian revival style building purposefully designed for meteorological observations and reflects the economic constraints of the period in which it was built with only minor changes since construction.



Figure 6.62 General view of the Bureau of Meteorology (the Met Building). (Source: GML, 2020)



Figure 6.63 Part view from the public roadway opposite Fort Street Public School (eye height from ground level) looking west towards the Central Barangaroo site. Note the construction of Block Y in progress. (Source: GML, 2020)

6.5.20 The National Trust Centre

The SHI database contains the following description of this heritage item:

The main building in the National Trust Centre was originally designed in the Old Colonial Georgian style but later modified to Victorian Mannerist. It was constructed as the colony's first purpose built hospital and later converted to a school. The building as originally designed was a smaller more refined version of the later 'Rum Hospital' on Macquarie Street.

The National Trust main administration building, formerly the military hospital, is a two storey rendered brick and sandstone building. The original main entrance is located centrally on the eastern elevation facing the Bradfield Highway. Three sets of stairs, located on the north, south and centrally along the western elevation provide entry to the rear of the building. The 'Link' building is attached to the exterior of the western elevation of the admin building. The external wall of the National Trust Centre forms the internal eastern wall of the link. The external configuration of the military hospital has been considerably modified. The building was a load bearing masonry building with a two storey encircling verandah. The encircling verandah was infilled in 1849 to form the two storey arcade, with a solid balustrade at ground floor level. The arcade was further infilled with spandrel panels and glazing to create additional rooms. This process occurred gradually. It is possible that the original timber columns/posts were retained to support the verandah floors and that the masonry work and pilasters were constructed around them. Documentary evidence suggests that the columns were utilitarian with a plate rather than a turned column and capital.

The main front door, located in the centre of the composition includes a beaded flush faced door, a semi-circular archway, and keystone with the date and the King's insignia: GR. The remainder of the surviving openings are now internal. One original window survives in the western elevation, although it now opens onto the infilled arcade. The stone sill and flat arch, carved to resemble voussoirs survive, as do the small paned sashes. Some modification of the sashes has occurred as all of the glass is modern. The remainder of the windows to the west and east elevations were reinstated in c1976. The replacement window joinery does not contain the same level of craftsmanship as the original.

The sandstone base was modified c1850 to carry the two storey arcade. The alignment of the original verandah has not been determined. The blockwork of the plinth appears to have been reused with the majority being sparrow picked. The basecourse is partly obscured at the southern end of the building by recent air conditioning units on a concrete plinth. The surviving original walls are now internal walls. The chamfered sandstone quoin blocks survive to the western elevation, the north-west and the south-west corners which are now within the toilets. The quoins have been painted however some of the paint has deteriorated and peeled revealing the sandstone below.

The building now features a sandstone base and a rendered sandstone brick arcade with a faint ashlar line work which has now been infilled with glazing. The giant order pilasters with Corinthian capitals divide the façade into a Palladian composition, with a central entablature and side bays. The detail of the capital is based on the capitals of the Tower of the Winds in Athens. This is not a widely used form of the Corinthian capital, its route to Australia is via the late Georgian Grecian Revival buildings of Edinburgh. The capitals appear to have been painted for most of the 20th century, possibly earlier. A carved sandstone Royal Coat of Arms is located at roof level on a parapet wall over the original main entrance and entablature. It appears to date from the 1849 conversion. The coat of arms is largely intact except the unicorn has lost its tail. The lettering 'Public School' has been removed.

The four arcades consist of regular, large archways on both levels. These archways originally formed a two storey arcade with a moulded string course at the springing point of the arch. The lower balustrade with its sunk panels date from the 1850 conversion and survive to the front and rear façades. The arcade was progressively infilled with timber panelling, joinery and solid panelling. The surviving joinery reflects the time period that each infill was undertaken, ranging from c1860 until the 20th century.

The upper balustrade to the front or eastern elevation was converted into a spandrel panel in 1885. The openwork of the balustrade was infilled and a cartouche added to each moulded panel. Arch headed windows were inserted above, which survive. The lower arcade of the main façade remained open until well after the turn of the century, possibly until the 1920s. These archways appear to have been the last to have been infilled.

The south façade has undergone many alterations to the configuration of the windows. The arcade was infilled with timber panelling c1860. Further modifications occurred c1890. The timber panelling was removed and the open work balustrade to the upper level infilled. Double hung windows were installed to the first floor similar to those to the remainder of the upper floor. The lower archways were infilled to the level of the stringcourse and small windows installed. One archway remains in this configuration however the window itself has been modified. The remaining three archways were modified again, possibly in the 1920s when the remainder of the archways to the main elevation were infilled. In the 1849 conversion of the north façade a doorway was installed within the arcade. Its position is indicated by the stop chamfer. The doorway led to the staircase to the first floor. The stair was probably removed c1916 and by the mid 1970s a window had been inserted in this location. A modern ledge door, semicircular fanlight and a tiled threshold were installed c1976.

At the ground floor level of the west façade the timber boarding with glazing over installed in the mid 19th century survives. There appears to be a brick skin externally. This detail is now internal and is protected from the weather.

The group includes the Erwin Gallery, gallery administration, cafe and former caretakers cottage. The face brick building west of the old military hospital, was designed as two schoolrooms in the Victorian Regency style, with sandstone pilasters and entablature, and two apsidal projections facing north and south. It is now used as an art gallery and features original cast iron columns with Egyptian motif capitals in the apsidal spaces. New skylights and air conditioning equipment have been installed. A face brick structure with a skillion roof and lantern connects this building and the former hospital. The former entrance to the gallery has been enclosed and converted to a shop and the connecting structure now houses a cafe. To the north west of the gallery is a two storey brick and sandstone building now used as the gallery administration. The caretaker's cottage is located to the north and is a rendered and face brick building with a gabled corrugated iron roof.

The SHI database provides the following Statement of Significance for this heritage item:

The National Trust Centre is of state historical significance providing evidence of the Military Precinct located between Dawes Point and the Wynyard Barracks c1815 to c1850 of which the former Military Hospital; the first and earliest purpose built hospital building associated with the colony, was an integral part. It is of aesthetic significance in providing an example of the spread of architectural taste and standard building forms during the first half of the nineteenth century by the Royal Engineers and subsequently the Colonial Architect and architects designing public schools including John Watts, Mortimer Lewis and Henry Robertson.

The extant building, now the finest largely intact example of the Victorian Mannerist style in the city, includes the adoption of archaeologically correct motifs based on published measured drawings of Greek monuments adapted to new building forms, and demonstrates the alterations carried out by Robertson based on model English design. The building has been associated with a range of institutional purposes, being an early example of the reuse of a colonial building from a hospital to the largest national school of its time and again adapted as the headquarters of the National Trust. The National Trust Centre occupies a prominent position on Observatory Hill overlooking the southern approaches to the Harbour Bridge, its elevated position giving an important visual and contextual relationship to the Observatory and Upper Fort Street.

The major part of associated structures on the site are significant as fine examples of mid-nineteenth century buildings constructed in the Victorian Free Classical and Victorian Regency styles. The buildings have a prominent position and an important visual and contextual relationship with the former Military Hospital building. These buildings have significance as part of the largest national school to be established in the colony during the mid 1850s. They have had a lengthy association with a variety of historically important persons and organisations and are significant as a design of the colony's first Schools Architect, Henry Robertson. The buildings have social significance for their association with the change from denominational to government schooling and for their association with community functions since their construction. The buildings have scientific significance for demonstrating the sequential development of an educational institution.



Figure 6.64 General view of the National Trust Centre (main building). (Source: GML, 2020)



Figure 6.65 General view of the National Trust Centre, SH Ervin Gallery. (Source: GML, 2020)



Figure 6.66 General view of the National Trust Centre, Building C. (Source: GML, 2021)



Figure 6.67 View from rear of the heritage item toward the Central Barangaroo site. The National Trust Centre has limited aspect to the west. (Source: GML, 2021)

6.5.21 Agar Steps Terrace Group, 5–9 Agar Steps

The SHI database contains the following description of this heritage item:

Agar Terraces are an agglomeration of terraces that step up the steep slope adjacent to the Agar Steps. The buildings share common façade characteristics, most particularly their verandah treatment, and as such can be considered a group. Within this commonality there are some variations between the terraces indicating that they developed over time and through different periods.

All three buildings share the same pattern of wrought iron balustrading to the upper floor, iron palisade balustrade to the ground floor and flat cast iron column. In each case the façade is dominated by a timber verandah with projecting blade walls with the same ornamental render work and rendered wall.

Beyond this the fabric differences indicate two main periods of construction.

No 5 has a four panelled door with rounded upper panels under a semi-circular arched transomlight sash. The ground floor window is an arched head double hung timber window. The upper floor has a French door with diminished stiles under a square head transomlight sash.

No 7 has an early stone base wall to the ground floor. The central door has a semi-circular arch but its ornamental quoining and keystone is in render work to match the terraces. The door is a wide four panelled door with upper glazed panes and an arched transomlight sash. The two windows on the ground floor are clearly much later alterations to the stone wall, from the window type they can be estimated as early 1930s. The upper levels of No 7 have a tiled verandah with detailing to match but have a level change that sets it above No 9. The first floor has three doors, two symmetrical French doors and a central very wide four panel door with upper glazed panes divided by a glazing bead. The central door sits neatly under an arched transomlight. The side French doors are the strongest evidence for a modified façade, as they sit underneath square transomlight sashes but the external wall has been shaped into an arched opening. The French doors have diminished stiles and the glazing is separated into three panes per leaf. The upper floor has three matching French doors with diminished stiles and segmental arched transomlights.

No 9 has an Italian Villa style timber double hung window on the ground floor with arched panes on the upper sash, but a square head to the opening. The front door is a four panelled door with square transomlight, and the upper floor has a traditional French door with diminished stiles and a square transomlight. The verandah base appears to be slate.

The conclusion one can draw from these variations is that there was some form of buildings on the site that most likely included No 9 and parts of Nos 5 & 7 that featured square headed openings, French doors with diminished stiles, Italian Villa windows and either no verandah or an earlier type of verandah. A subsequent period of construction introduced new doors and windows with semi-circular arched openings (modifying some of the existing doors), rendered detailing, a new verandah and cast iron details. There may have been additions to No 5 & 7 at this point. If this is true then the stone and trachyte steps with wrought iron handrail to No 7 date from the earlier period (est 1875), and this would indicate the lower section of the Agar Steps is contemporary.

The planning of No 5 is remarkably similar to the layout of the Carlson Terrace with a main front room, a secondary room that incorporates the stair and a smaller utility space at the rear, in this case allowing a rear door from the second room. The rear room was once an outdoor kitchen, but it has since been connected internally. The terrace has been built against the stone rock outcrop, contributing to a significant problem of managing damp. A tight stair with winders leads up to a similar layout to the upper floor, this time with what was an external bathroom (now internal). The CMP indicates the timber panelling in the back room is original but it is hard to resolve with the original planning of the space. The second room's fireplace has been removed and replaced with a window. The restoration works repaired much of the rear verandah.

The planning of No 7 is much more Georgian on the stone walled ground floor. It consists of four main rooms accessed off a central corridor with a stair. Given that both northern windows are later alterations it is difficult to understand how the ground floor was originally configured. Thin external stone walls to the steps with a much thicker wall behind

indicate the ground floor is designed to take an upper verandah. The back room with the large fireplace has all the characteristics of an early kitchen, except that it is internally accessed. The north eastern room appears not to have had any windows. The first floor retains the central corridor and stair but has combined the western rooms into a single large space, whilst the east side retains two rooms. The CMP shows the stair divided to create two residences. The first floor has a very large back verandah. The second floor is arranged to match the first, the rear room has been divided by later bathrooms. The attic consists of a single room with one early window and a large recent window. Early features of the terrace include French doors, fireplaces, panelled doors, the stairs, kauri floors, early skirtings and cornices, and 8" (200mm) timber boarded ceilings.

The planning of No 9 originally consisted of two rooms front and back on both floors. Subsequent additions have extended the rear of the building so that it is now three rooms deep, this room may have replaced a rear utility space. The layout is influenced by the tapering site but the building is otherwise laid out similarly to No 5. The upper level has been subdivided and a bathroom introduced. A bridge to the National Trust site has been cut into the back section of the original wall on the upper level.

The SHI database provides the following Statement of Significance for this heritage item:

The Agar Steps Terraces are significant as an example of the Italian Villa style of architecture in a terrace form, which contributes to an architecturally diverse and historically important residential streetscape of Kent Street/Agar Steps. The terraces contribute to the historical and aesthetic development of late 19th century housing in Millers Point forming an integral part of the Observatory Hill Precinct, which has national significance as one of the earliest surviving residential neighbourhoods in Australia. The Terrace's intimate relationship to the Agar steps demonstrates 19th century pedestrian networks and urban principles associated with the Millers Point precinct.



Figure 6.68 View of Agar Steps Terrace Group, from Agar Steps. (Source: GML, 2020)



Figure 6.69 View from base of Agar Steps Terrace Group towards Central Barangaroo. (Source: GML, 2020)

6.5.22 Agar Steps

The SHI database contains the following description of this heritage item:

The Agar Steps consist of several flights of stairs separate by landings. It has two principle [sic] sections, The Main Stair provides access to the five terrace houses on the southern side of Agar Steps while the West Steps branch off from the second landing to the Main Steps and provide access to Observatory Hill.

The Agar Steps are constructed with sandstone bearing on the natural rock foundation. Steps and landings are of concrete other than basalt steps and landing to the upper section of Main Steps. A tall steel palisade provides safe access to most of the steps, a low stone wall encloses the northern side of the upper section of the Main Steps. Picket heads along the west steps are a simple detail that is thought to be later than other picket heads in Millers Point. Landings are finished in concrete or bitumen. Past repairs to stone masonry have been carried out with cement used to patch damaged blocks and cappings.

A mature Port Jackson Fig Tree is located near the foot of the stairs.

The SHI database provides the following Statement of Significance for this heritage item:

The Agar Steps make an important contribution to the aesthetic quality of Observatory Hill and Millers Point because of their design and the materials used in their construction. Designed and constructed by the Municipal Council of Sydney, they have the ability to evoke the historic character of the place and a sense of past lifestyles in the locality. They have some significance because of the dwellings that line the southern side of the Main Steps and the combination of retaining walls, natural rock faces and landscaping in other sections.



Figure 6.70 Agar Steps Terrace Group and steps viewed from Kent Street. (Source: GML, 2020)



Figure 6.71 View from the National Trust Centre looking over the Agar Steps Terrace Group towards Central Barangaroo. (Source: GML, 2021)



Figure 6.72 View from Agar Steps (mid height) towards Central Barangaroo. (Source: GML, 2020)



Figure 6.73 View from Agar Steps (top of steps) towards Central Barangaroo. (Source: GML, 2021)

6.5.23 Tennis Course and Pavilion

The SHI database contains the following description of this heritage item:

The site contains a hard paved tennis court with small Federation style pavilion with terracotta tiled roof with timber doors and seating. There is a low brick boundary wall to courts with high cyclone fencing. The boundary wall retains evidence of former palisade fencing toward southern end of tennis court. The other low walls are in face brickwork.

The SHI database provides the following Statement of Significance for this heritage item:

The site is historically significant as it demonstrates the use of the area for early Government quarries and areas of land specifically reserved to supply stone for the completion of Public Works. It is significant for its association with the

National School and in providing for the recreational needs of school children and local residents. The continued use of the site as a tennis court since the 1960s is of historical and social significance.

The tennis court and pavilion is a significant streetscape element along Kent Street as an undeveloped space in comparison to the intensity of development surrounding it which comprises of late nineteenth century and early and late twentieth century development. The vacant land allows the dramatic cut (Agar Walls) adjacent the Agar steps to be appreciated and contributes to this important characteristic of the Millers Point area. Retention of the land as undeveloped recreational space in the CBD is rare and provides a break in the intensely developed area.



Figure 6.74 View of heritage item, from the corner of High Street and Kent Street. (Source: GML, 2020)



Figure 6.75 View of heritage item from Kent Street. (Source: GML, 2020)

6.5.24 Carlson Terrace, 110–114A Kent Street

The SHI database contains the following description of this heritage item:

Carlson Terraces are a set of three terraces set behind a common façade which only has a very subtle bracket on a cornice line to denote the boundary between the terraces. Originally each terrace had a four panelled entry door with arched transomlight, a small arched double hung window to the ground floor front room and to the upper floor, each with a single rendered keystone and projecting rendered sill. No 110 has since had the ground floor altered to a plate glass shopfront.

The façade has features of the Italian Villa style, a precursor to Italianate, and is made up of a front parapet wall with rendered ornamental detailing. Doors have label moulds, there are cornices at first floor and parapet levels, and the parapet is decorated with panels and bracket details. A central semi-circular pediment motif sits at the centre of the parapet with the name and date of the terraces in raised lettering. A wrought iron balustrade sits just behind the parapet. Decorative rendered chimneys can easily be seen behind the parapet, although the upper floor of 112 & 114 is almost concealed from the street level.

The parapet detailing wraps around the side of the building to front the Agar Steps, and the building also steps up dramatically to a third floor set back from the street. The parapet is broken and stepped with higher windows sitting on top of the lower cornice line. A side door enters from below the first floor level and steps up.

The ground floor of No 110 is a café space with open plan. It can be assumed that most of the original internal fabric of this space has been removed. The CMP 1997 notes original doors and windows, skirtings, and that the original fireplaces remain even though blocked up. The residence above this space is entered via the Agar Steps and so is now called No 3 Agar Steps. The CMP notes that the residence is largely intact with much original fabric.

No 112 remains a residence and the CMP notes that all three floors are relatively intact with much original fabric including the timber stairs, windows and doors, fireplaces, timber flooring and beaded board ceilings. The central wall

has been opened up and there have been changes to the kitchen and bathrooms, and it appears that the roof deck has been extended from the original.

The SHI database provides the following Statement of Significance for this heritage item:

Carlson Terrace has significance as an example of the Italian Villa style of architecture in a terrace form, which contributes to an architecturally diverse and historically important residential streetscape of Kent Street. The terrace contributes to the historical and aesthetic development of late 19th century housing in Millers Point forming part of the Observatory Hill Precinct, which has national significance as one of the earliest surviving residential neighbourhoods in Australia. The Terrace's relationship to the Agar steps demonstrates 19th century pedestrian networks and urban principles associated with the Millers Point precinct.



Figure 6.76 View of heritage item, from the corner of High Street and Kent Street. (Source: GML, 2020)



Figure 6.77 View from heritage item toward Central Barangaroo. (Source: GML, 2020)

6.5.25 116–122 Kent Street

The SHI database contains the following description of this heritage item:

Richmond Villa is constructed on top of a rock shelf above the level of Kent Street. This rock shelf was likely a result of early stone quarrying that took place in this vicinity c1810 – 1830s. This work would eventually form a regular alignment to Kent Street. The present wall is a combination of vertically cut outcrops of sandstone with large block sparrow picked smooth faced ashlar stone masonry reaching heights of approximately 3m. There is a set of wide trachyte steps in a passage cut through the sandstone outcrop, which is augmented with ashlar sandstone, indicating that this wall was upgraded during the works carried out by Walsh on the wharfs and surrounds. An iron palisade gate secures the base of the steps under a segmental stone arch.

The original buildings on this site, part of the group of buildings owned by James Glover, dated from the 1820s. Some of these were demolished and redeveloped in the 1880s, and it appears most of these structures were then demolished during the plague resumption works in 1900, with only the adjacent Glover Cottages surviving. The site chosen for the reconstruction of Richmond Villa was reportedly vacant from 1880.

Richmond Villa was designed as a Colonial Georgian villa and was most likely an amalgam of designs from Loudon's Pattern Book (1833), however Lewis also experimented with the new romantic gothic style and introduced an elevational features such as a decorative verandah, eaves fascia and barge board from Ziegler's The Royal Lodges (1839). In so doing Lewis presages the impending romantic movement in architecture.

The villa itself is a two storey building with underground basement. Constructed from thick sandstone walls the ground floor features a half round projecting bow window in the drawing room but instead of an encircling verandah Lewis ran a straight verandah across its face. The bow features five sets of curved French doors with transoms and internal shutters. The second principle [sic] room features a rectangular bay window with gothic inspired window openings. The

verandah is paved with stone flagging. Generally the windows throughout the rest of the building are simple rectangular openings with a stone lintel and timber multi pane double hung windows. The upper level windows on the front face are broken into four by a large transom and mullion, and each panel appears to be a 4 pane awning or casement. There is one blind window, which appears to have been open in 1978.

The building originally fronted a garden facing east towards the Domain with its main entrance from the west in Domain Terrace. After reconstruction the building now faces west towards Kent Street. The ground floor consisted of the drawing room and another principle [sic] room, with a rear stair and small space off the entry hall. The upper floor has been described as “less successful” consisting of two large rooms at either end with much smaller rooms set of a central corridor running along the length of the building. Above the entry hall the space has been further divided. The divisions of this space may have derived from its later use as a parliamentary space. The basement space reflects the planning of the ground floor with further subdivision and is accessed by what would originally have been the back steps.

The building was originally described as having a timber shingle roof that was replaced with a corrugated iron roof in 1890. An 1892 plan shows the details of an entrance porch to the rear entrance that was demolished by 1920, this was reconstructed in 1978. Alterations were made in 1912 including new windows to the ground floor on the north and south walls (now the reverse). The bathrooms were remodelled 1934–36. In 1945 an external access was cut for the cellar, and in the 1950s the upper level was converted into sleeping quarters for ten, and the ground floor dining room was subdivided into three rooms with the original door moved.

The dismantling and reconstruction of Richmond Villa in 1975–1978 involved a very considerable intervention in the fabric. During this process many of the details needed to be reconstructed. The glazing bars had been removed in the 1970s and had to be reconstructed. The fretwork was reinstated based on surviving detail, and the roof was reconstructed as a timber shingle roof. The guttering detail appears to have related to the metal roof more than the shingle roof, and the original configuration is not known.

The SHI database provides the following Statement of Significance for this heritage item:

Of architectural significance as one of the primary examples of the Australian domestic Gothic Revival. A successful example of careful dismantling and re-erection and of adaptive re-use. Part of an important streetscape of early residential buildings.

Richmond Villa is of state historical and aesthetic significance as a fine example of a Gothic Revival Cottage designed by the Colonial Architect Mortimer Lewis. The Villa represents the spread of architectural ideas through the colonies via pattern books and is a rare example of a Colonial Architect designing for himself. The Villa demonstrates one of the earliest transitions between the Georgian style (basis of plan) and the neogothic style (basis of elevations). The Villa represents the changes to conservation philosophy since the introduction of the Burra Charter and provides evidence of the need to expand Parliament House in the late 19th century. The Villa is a successful and rare example of careful dismantling, re-erection and adaptive re-use of a state significant building.



Figure 6.78 View of Richmond Villa, from the corner of High Street and Kent Street. (Source: Wikimedia Commons and Sardaka)



Figure 6.79 View from Richmond Villa toward Central Barangaroo. (Source: GML, 2020)

6.5.26 123–125 Kent Street

The SHI database contains the following description of this heritage item:

123 – 125 Kent Street, on the western side of the street, contains a pair of sandstone Victorian Georgian style terraces. A later subdivision created a rear lot, known as 125 A Kent Street, which has reduced the area of the original rear yards.

The pair is among the earliest terrace houses in Kent Street, built between 1846 and 1848. The symmetrical facade, mirrored in plan, has exposed ashlar sandstone walling and simple detailing. A stone course divides the two levels and a double string course terminates the main facades. There are multi-paned sash windows within flat arched openings. A downpipe divides the main façade in the centre. The lower section of the Kent Street elevation appears to have been rendered.

There is a shallow stone parapet, behind which is a corrugated metal roof, originally shingled, with front dormer windows and a simple rectangular chimney stack located on the centre of the roof with a number of modest chimney pots.

The walls of the side and rear walls are coursed rubble sandstone.

The rear verandah, which may have originally been a small cantilevered verandah, has been replaced by a larger post-supported verandah.

The rear yard of the two terraces is subdivided by a timber paling fence. Small brick paved patio/verandahs extend into the rear yard from lower ground floor level.

The SHI database provides the following Statement of Significance for this heritage item:

The terrace at 123–125 Kent Street, Millers Point, is historically and aesthetically significant at a State and local level. It is a fine, and locally rare example of Victorian Georgian terrace pair, one of the earliest to survive in Kent Street, and it is an important streetscape element. This modest terrace was developed by William Palmer between 1846 and 1848, licensed victualler and landlord of the nearby Dumbarton Castle.

The terrace as part of a group demonstrates the development of Kent Street in the 19th century as a residential neighbourhood, mostly inhabited by workers involved in maritime activities in Millers Point. It also demonstrates the demographic change of Millers Point following extensive quarrying, when the suburb started becoming an area dedicated to maritime activities and stonemasons left Millers Point. Building materials for construction are likely to have been quarried in the area.

The terrace pair, as with much of the historic dwellings in Millers Point, is significant for its association with the Sydney Harbour Trust, which resumed ownership of this property and many others in the Millers Point area in 1900. The suburb has had a long association with the provision of low-cost government housing.

The building retains much of its original fabric and has the potential to yield information on construction methods of the time as well as accommodation in the Millers Point area.



Figure 6.80 View of 123–125 Kent Street, along Kent Street. (Source: GML, 2020)



Figure 6.81 View from eye level in High Lane behind 123–125 Kent Street looking toward Central Barangaroo. (Source: GML, 2021)

6.6 Vistas and Views

Site visits were undertaken in February 2020 to assist in the identification and confirmation of significant vistas and views relevant to the proposed MOD 9 development. Images of this section include photographs and diagrams from previous heritage assessments which identified heritage views, as well as recent photographs.

6.6.1 Vistas

Key vistas occur east–west from High Street north and south and north–south along High Street.

The key aspect of the east–west vistas is the visual connection from these elevated terraces and High Street towards the former wharf area and water.

The key aspect of the north–south vista is the High Street streetscape, defined by the terraces on one side, the palisade fence and cutting to Hickson Road on the other. The north–south vista along High Street also allows appreciation of the dramatic topography of the street, a key part of its character.

6.6.2 HAIS Views—Background

Previous HIS, 2006

The City Plan HIS 2006 (amended 2008) which supported the Barangaroo Concept Plan identified the following key heritage views. These views include photomontages of the completed Barangaroo South towers, the MOD 8 (Crown tower) proposal and the Barangaroo Concept Plan at that time. They are included at Appendix A as they provide some background to determination of heritage views assessed in this HAIS.

Heritage Review, 2006

Significant panoramic views were also identified in Paul Davies Pty Ltd, Millers Point and Walsh Bay Heritage Review, prepared for City of Sydney Council, July 2006. The significant panoramic views relevant to Central Barangaroo are:

- View A—the view from High Street west over Darling Harbour to Balmain, Pyrmont and White Bay in the distance. This is approximately the same as view H2 above; and
- View C—the extensive view from Observatory Hill Park that extends from the Harbour Bridge to Darling Harbour. This view is covered in part by view H4 above.²

AECOM View and Visual Impact Report 2021

The numbering system shown in the Map of Observer Locations prepared by AECOM in the View and Visual Impact Report 2021 has been adopted in this HAIS for consistency. These observer locations in relation to views are referred to in the impact assessments of Section 8.0. Note: not all observer locations are relevant for this HAIS.

6.6.3 HAIS Views—Overview



Figure 6.82 View of the High Street Terraces (from the Hotel Palisade), their position in the topography and relationship to the waterfront of Central Barangaroo. Note construction of the Crown Tower did not exist at the time of the photograph. (Source: GML, 2017)

Heritage Items

Views from heritage items are generally shown above in Section 6.5 adjacent to images of each heritage item. Views to heritage items are generally captured within other view descriptions of this HAIS. Refer to Section 8.4.5.

High Street

The High Street Terraces formerly housed people who worked on the nearby wharves of Darling Harbour and Walsh Bay. The position of the terraces provided views across High Street to the wharves and the harbour beyond. For the length of High Street, the views west to the former wharf areas and towards the water are part of the historical setting and significance of these heritage items. The view east from the harbour and wharves back to the terraces and the High Street cutting demonstrates the major transformation of the landscape made for the wharves.

The current expansive character of these views is partially the result of the demolition of the Hickson Road shore sheds and wharves to create the single concrete apron from the 1960s. It is likely that the shore sheds and wharves historically intruded into some of the views of the water from High Street,³ particularly from the lower points of the street around the Lance Kindergarten. However, views and vistas from the higher points of High Street (at its northern and southern ends) were likely to have been unobstructed historically. Some of views from High Street are included below.



Figure 6.83 View west from the corner of High Street (south) and Kent Street. (Source: GML, 2020)



Figure 6.84 View north from the southern end of High Street. (Source: GML, 2020)



Figure 6.85 View south from the northern end of High Street showing Central Barangaroo to the right. (Source: GML, 2020)



Figure 6.86 View west from the Lance Kindergarten showing the visual connection with Central Barangaroo. (Source: GML, 2020)



Figure 6.87 View north from the southern end of High Street showing the visual connection with the location of the northern extent of Central Barangaroo. (Source: GML, August 2018)

Sydney Observatory Site

Observatory Hill Panoramas

The panoramic view from Observatory Hill west towards the harbour demonstrates the historical relationship between the heavily modified landscape, the village precinct and the former wharves of East Darling Harbour (now Barangaroo). This elevated view west over the former wharf area and towards the water is a key view from the Millers Point/Dawes Point Village Precinct conservation area and is part of the significance of the precinct. This panoramic view can be appreciated from Observatory Hill as well as from vantage points within the Sydney Observatory site.

Panoramic views from the Sydney Observatory site are of heritage significance and key views of Sydney city in general, as demonstrated by views from the 1864 Freeman Panorama from the time ball tower of the Sydney Observatory main building.



Figure 6.88 Freeman 1864 view, which corresponds with the view west across Sydney Harbour. (Source: *Observer and Observed*, 2021⁴)



Figure 6.89 View west from Sydney Observatory tower, 2017. (Source: GML, 2017)

Sydney Observatory Time Ball

Figure 6.89 and 6.90 show views from the time ball tower, but also indicate the extent of views to the time ball. The time ball tower was the highest point above Sydney Cove.

The time ball played a critical role in the Sydney Observatory, providing time visually to the early settlers of Sydney Cove and ‘as many ships as possible’⁵ on the harbour. It was raised to the top of its mast a few minutes before 1pm and dropped precisely on the hour.⁶

The time ball continues to drop at 1pm every day, as it has done for over 160 years. As such, views to the time ball are considered of heritage significance for cultural and scientific reasons as noted below under ‘2018 Identified Sky Views’.

Signal Station (Sydney Observatory Site)

Views to and from the Signal Station were important for early communication in colonial Sydney. Key views for this site were to and from Bedlam Point Signal Station, Fort Phillip Signal Station and South Head Signal Station. These views are effectively sight lines, and Central Barangaroo is not generally located in these sight line paths.

Significant Sky Views

A Sky View Loss Assessment was prepared by AECOM and the University of NSW in 2021, which updated previous similar reports. This report comprised the AECOM Sky View Loss Report 2021 and the appended Unisearch Sky View Impact Report 2020. It summarised key operational factors of the Sydney Observatory, such as:

- The Sydney Observatory is on high ground, which affords views out to Sydney Harbour to the north and west. The Sydney Observatory north dome sits at approximately 54m RL, with the Barangaroo ground level RL at 3.5m.
- View corridors from the Sydney Observatory site to the western sky are required to view:
 - the sun, moon and planets;
 - the Southern Cross and nearby objects; and
 - the Ring Nebula and Star Albireo.

Significant view corridors to the Sydney Observatory site in relation to Barangaroo are identified as:

- between 210° and 225° azimuth at 18° altitude (over Barangaroo South, and part of Central Barangaroo); and
- between 236° and 303° azimuth (generally over Central Barangaroo).

The identified sky views and view corridors of the Sydney Observatory and its telescopes are of heritage significance, as indicated by the Statement of Significance of the 2002 Conservation Management Plan for the Sydney Observatory, which includes that:

The continued use of the observatory for astronomical observations and the survival of astronomical instruments, equipment ensure that that the observatory can remain the most intact and longest serving early scientific building in the State (of NSW).

6.7 Statement of Built Heritage Significance

Central Barangaroo is located in the vicinity of two heritage conservation areas of state heritage significance, which also contain individual items of state heritage significance.

There are no built heritage items located within Central Barangaroo itself. The Dalgety Bond Store is located in the immediate vicinity and included in the SHR listed Millers Point and Dawes Point Village Precinct.

The heritage significance of the Millers Point/Dawes Point Village Precinct arises from it being a substantially intact residential and maritime precinct that developed between the 1810s and the 1930s. The prevalence of the maritime industry in the area led to the establishment of a maritime village at Millers Point. While some evidence of this earlier phase remains, the resumption of the area by the Sydney Harbour Trust at the beginning of the nineteenth century led to the demolition of much of the older housing and construction of new workers' accommodation, as well as remodelling of the landscape, including the creation of Hickson Road and the new wharves around Walsh Bay and East Darling Harbour (now Barangaroo). Terraces and commercial and community buildings from both phases remain today and, therefore, have a historical relationship with the former wharf operations at the Central Barangaroo site. This relationship has continued since the 1810s, but has become more of a visual relationship since cessation of the wharf operations in the past 10 years.

There are a number of significant views and vistas to, from and across the site, in particular from High Street south and north, which demonstrates the historical relationship between the housing along High Street and the former wharves of Darling Harbour, and from Observatory Hill west over the conservation area to the harbour. The visual relationship connecting the residential areas of Millers Point to the former industrial wharves and the harbour provides evidence of their significant historical connection and is an important part of the setting of the High Street Terraces and the state significant Millers Point/Dawes Point Village Precinct. Significant views from the state significant Sydney Observatory telescopes (trajectory view skywards), and other telescopes, views to and from the Observatory time ball tower and Signal Station sight lines are of cultural and scientific value to NSW.

6.8 Endnotes

- ¹ Lime Window, 'Australia' <<https://limewindow.blog/2016/05/21/australia/>>.
- ² Paul Davies Pty Ltd, Millers Point and Walsh Bay Heritage Review, prepared for City of Sydney Council, July 2006, pp 103–104.
- ³ Paul Davies Pty Ltd, Millers Point and Walsh Bay Heritage Review, prepared for City of Sydney Council, July 2006, p 106.
- ⁴ Charles Pickett, Nick Lomb, *Observer and Observed: A Pictorial History of Sydney Observatory and Observatory Hill*, Powerhouse Museum, 2001
- ⁵ Kerr, JS 2002, *Sydney Observatory: a conservation plan for the site and its structures*, p 70.
- ⁶ Andrew Jacobs, *A History of Observatory Hill*, Powerhouse Museum, 2018, p 27.

7.0 The Proposal

7.1 Modification 9 for Central Barangaroo (MOD 9)

7.1.1 Proposal Summary

MOD 9 proposes:

- an increase in total permissible GFA from 602,354sqm to 708,641sqm, with the following within Central Barangaroo and Barangaroo Reserve:
 - a) up to 116,189sqm of above ground GFA within Blocks 5, 6 and 7;
 - b) up to 28,166sqm of below ground GFA within Blocks 5, 6 and 7;
 - c) a minimum of 2,800sqm of community uses GFA within Blocks 5, 6 and 7; and
 - d) a minimum of 6,000sqm and up to 18,000sqm of community uses GFA within the RE1 Zone of Barangaroo Reserve, to allow for future community / cultural facilities located in the Cutaway.
- modifications to Barangaroo's movement network to redirect and reduce the impact of vehicular traffic and significantly improve pedestrian movement, safety, and amenity, including the removal of vehicular traffic from Block 5 and 6 and the extension of Central Barangaroo's Harbour Park;

modifications to the Central Barangaroo building envelope that allow for greater variation in building heights across Blocks 5, 6 and 7 to enable building form, massing and modulation that is responsive to context and adjusts the development boundary for Block 5.
- introduction of Design Guidelines for Central Barangaroo;
- consequential amendments to the State Significant Precincts SEPP; and
- revisions to the Barangaroo Concept Plan Statement of Commitments.

The proposed MOD 9 also includes the Barangaroo Steps and High Street Connection at a detail level. Further detail is anticipated in future DAs.

7.1.2 Urban Design Overview

MOD 9 features a fine-grained response within Central Barangaroo and to the adjacent setting (including view corridors between Blocks 5 and 6, and Blocks 6 and 7), variable built height and form, a taller landmark at Block 7 (which also allows for the creation of a north-facing public space—Nawi Terrace), and a new pedestrian bridge which would connect Central Barangaroo to the Millers Point and Dawes Point Conservation Area.

The text and images of this section are extracts from the MOD 9 Urban Design Report and provide an overview of the design framework and strategy, with a focus on the aspects of MOD 9 most relevant to this HAIS.

Building on the Central Barangaroo Master Plan Framework

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

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

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

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

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

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



Figure 7.1 Concept Plan Modification 9 (MOD 9) Masterplan. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

Design Strategy

MOD 9 for Central Barangaroo proposes to achieve this by:

- A. *Extending Harbour Park to the built edge of the development, removing vehicle traffic from Barangaroo Avenue north of Barton Street*
- B. *Enhancing the urban connected experience from the city through Barangaroo Steps to the harbour by providing a network of new urban places – Nawi Terrace at Block 7 and Barton Square at Block 5, each connected by an activated promenade*
- C. *Establishing Barton Street as the northern extent of vehicle movement from Barangaroo Avenue to Hickson Road. This alignment connects Gas Lane and Bond Plaza across Hickson Road with Hickson Park, Crown and the harbour. It provides a better alignment that provides for seamless access from city to harbour, whilst still enabling a sequence of views to the waters edge from Hickson Road.*
- D. *Creating a more sophisticated edge to Hickson Park; the new Barton Street alignment means it makes more urban sense to create a built edge along the street's northern boundary – providing containment of public space. Development is then stepped back to create Barton Plaza, which functions as a pedestrian junction between many destinations. A new flagship pavilion at Barton Square gives definition to the space, provides an urban orientation mechanism and is shaped to enable views from Hickson Park to the harbour between it and Crown.*
- E. *Modifying the built form envelope to respond to the changing need for connectivity in the city. The tower at Block 7 is a consequence of reshaping the envelope to provide for Nawi Terrace, and it reinforces the arrival sequence at Barangaroo Station.*

Design Strategy—Key Moves

The following key design moves have been selected from the MOD 9 Urban Design Report to summarise the relevant features of MOD 9 that require heritage review. These features include variable built height and form (including a taller Block 7), a fine-grained response to the adjacent setting, and a pedestrian bridge which would connect people to Millers Point and Dawes Point.

Optimising Locational Advantages

In optimising its locational advantages and the historic setting of the Millers Point and Dawes Point Conservation Area, MOD 9 for Central Barangaroo proposes to:

- *maximise the benefits of proximity and easy access to Sydney's evolving metro network, via direct connections to the adjacent Barangaroo Station;*
- *create a new city destination – a truly mixed use place with an intensity of activity and diversity of uses, connected over multiple levels, both above and below ground;*
- *design a low to medium scale precinct that responds to local context and opportunity and transitions between Sydney's CBD and adjacent historic areas and the western harbour foreshore; and*
- *To achieve this, MOD 9 proposes to amend the built form, massing and modulation of the Central Barangaroo building envelope. The proposed changes offer a finer grained response to context and opportunity, with new streets and pedestrian paths, a metro connection, three new urban spaces and new building form above and below ground, with a resultant increase in overall GFA.*

Urban Form and Building Heights

In proposing variable built heights across the development, and Block 7 as the tallest structure, MOD 9 seeks to:

- *Respect and enable views from surrounding buildings to Sydney Harbour and to key city landmarks and treat the design of the roovescape as the Central Barangaroo's 'fifth elevation';*
- *Allow for greater variation in the heights of buildings across Blocks 5, 6 and 7 of Central Barangaroo, that will:*
 - *enable Hickson Road to be designed at a civic scale that reinforces its future function as a key city address for Barangaroo, with building heights stepping down from Hickson Road to the Barangaroo Avenue frontage with Harbour Park;*
 - *create the potential for two new 'city marker' buildings for Block 5 and Block 7, designed to become architectural points of distinction that can assist city legibility and local wayfinding;*
 - *modulate building form and heights in Block 7, to reduce building height in the centre of the block and increase building height on the northwest corner. This enables Nawi Terrace to be created as a new north facing urban space overlooking and connected to Nawi Cove whilst allowing sight lines from Nawi Cove to the city beyond. As a city scale marker, the Block 7 tower will define the northern end of Barangaroo Avenue and reinforce Nawi Cove as a new city arrival space for the western CBD;*

High Street Bridge

In making pedestrian connections into the Millers Point and Dawes Point Conservation Area, MOD 9 for Central Barangaroo involves:

- *The High Street bridge provides pedestrian connection from Millers Point to the Central development blocks, Hickson Road, Barangaroo Steps and Millers Point.*
- *Bridge design will be integral with the landscape and architectural designs. The bridge will span Hickson Road without intermediate supports.*
- *The public domain design and finish of the bridge will extend into High Street to provide a clear and cohesive connection.*
- *High Street will prioritise pedestrian comfort through street tree planting. Road pavement will be minimised in width where possible to allow generous pedestrian footpaths.*

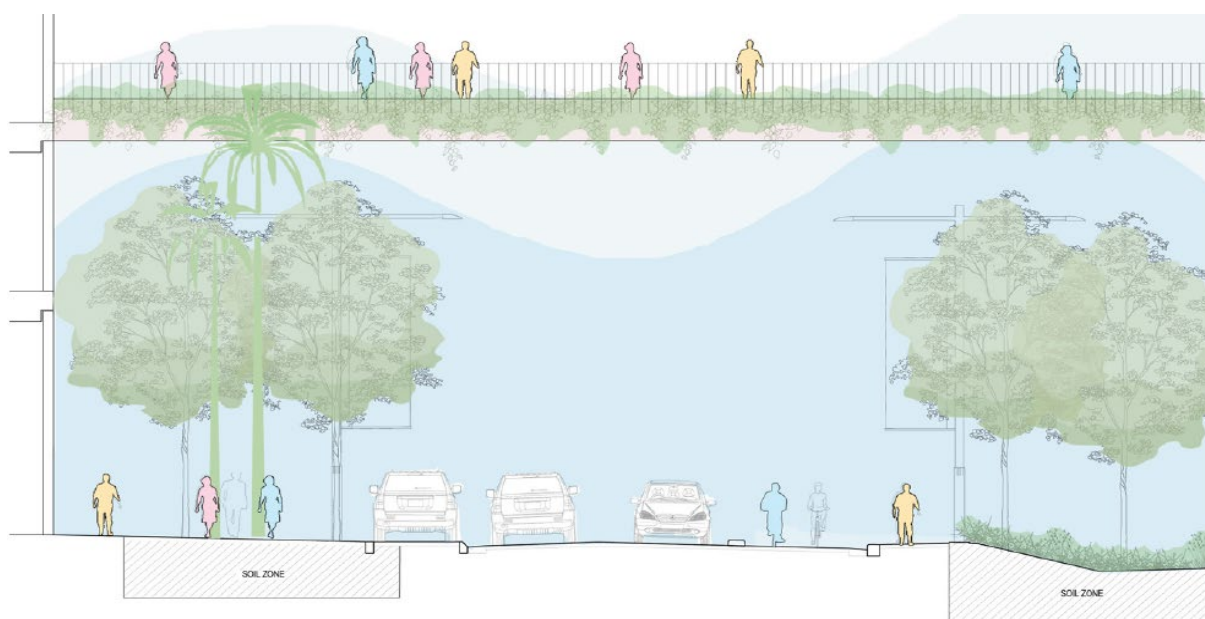


Figure 7.2 Section (indicative) showing the proposed pedestrian bridge over Hickson Road connecting Central Barangaroo to Millers Point over Hickson Road, as proposed in MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

7.1.3 Elevations and 3D Images

3D and Aerial Views



Figure 7.3 Aerial 3D image showing a perspective view of Central Barangaroo, as proposed in MOD 9, in the context of Millers Point. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

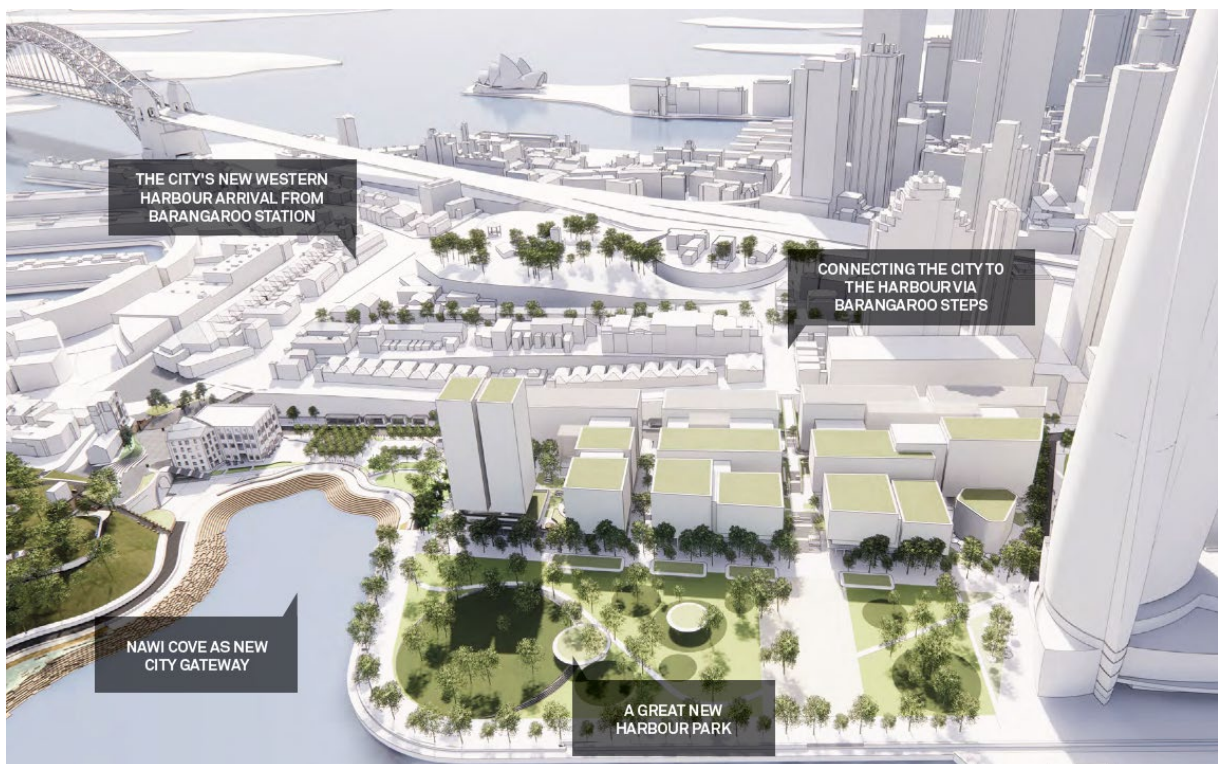


Figure 7.4 Aerial 3D image showing a perspective view of Central Barangaroo, as proposed in MOD 9, in the context of Millers Point, with key features labelled. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)



Figure 7.5 Photomontage showing a perspective view of Central Barangaroo, as proposed in MOD 9, in the context of Millers Point. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)



Figure 7.6 3D image showing a perspective view of Nawi Cove and the north end of Central Barangaroo, as proposed in MOD 9, in the context of Millers Point. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

Building Envelope Sections

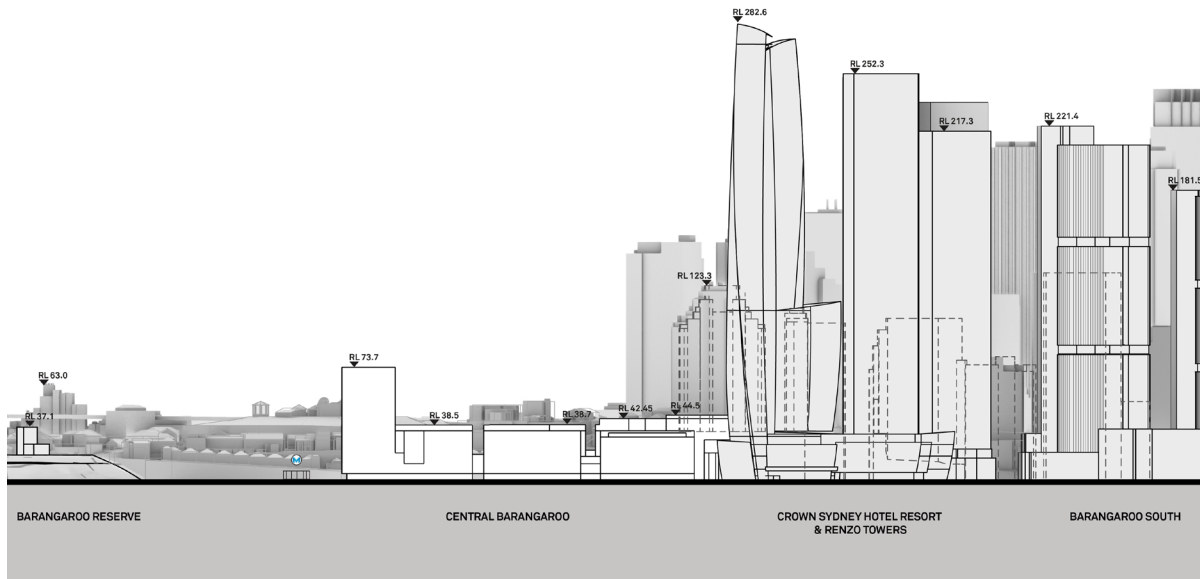


Figure 7.7 Building envelope section, north-south. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

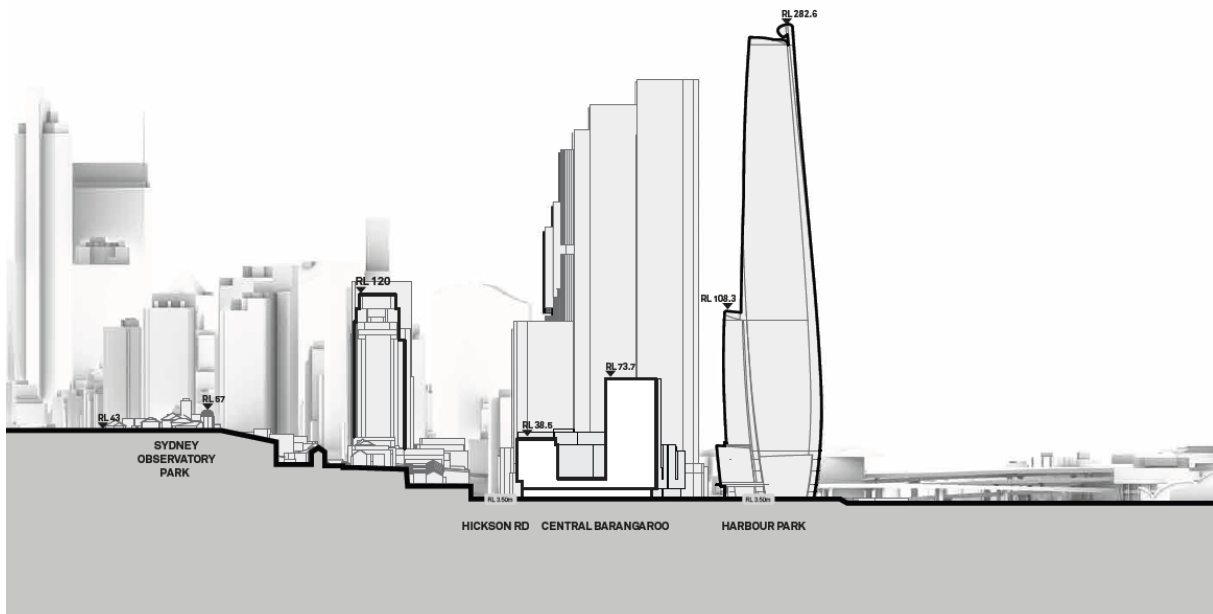


Figure 7.8 Building envelope section, east-west. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

High Street Pedestrian Bridge over Hickson Road



Figure 7.9 Aerial image showing the proposed pedestrian bridge and Barangaroo Steps connecting Central Barangaroo over Hickson Road towards High, Kent Streets and Observatory Hill in the context of Millers Point, as proposed in MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

8.0 Heritage and Archaeological Impact Assessment

Heritage impacts are presented below in context of the Barangaroo Concept Plan and subsequent approved modifications—in particular, MOD 8, approved in 2016, which involves relocation of Block Y (Crown Sydney Hotel Resort, the landmark hotel building, in South Barangaroo) and increases in GFA and heights over the Barangaroo site generally. The Barangaroo Concept Plan has since been further modified by MOD 10 and MOD 11.

8.1 State Government Requirements

8.1.1 DGR—Heritage

The DGR which relates to heritage requires an understanding of the likely impacts of the modification on heritage and archaeological items as well as proposed conservation measures with respect to the Millers Point and Dawes Point Conservation Area, Observatory Hill and Walsh Bay.

Likely impacts are outlined in the following sections in regard to Aboriginal archaeology, historical archaeology and built heritage. Mitigation measures are outlined in Section 9.0.

8.1.2 Government Architect of NSW—Design Guide

Principles and objectives from the GANSW Design Guide for Heritage—Better Placed are listed below.

Objective 1—Better fit—contextual, local and of its place.

Objective 2—Better performance—sustainable, adaptable and durable.

Objective 3—Better for community—inclusive, connected and diverse.

Objective 4—Better for people—safe, comfortable and livable.

Objective 5—Better working—functional, efficient and fit for purpose.

Objective 6—Better value—creating and adding value.

Objective 7—Better look and feel—engaging, inviting and attractive.

The design responses of MOD 9 to these objectives are generally addressed in the Urban Design Report. This HAIS effectively assesses likely impacts of MOD 9 in relation to Objective 1 at Section 8.4.2 below.

8.2 Aboriginal Archaeology

The preliminary Aboriginal archaeological assessment (Section 4.0 of this HAIS) determined that Central Barangaroo has nil potential to contain in situ Aboriginal archaeological evidence. This is due to the nature of the original natural topography of the foreshore with a headland and coves, making most of the study area inaccessible to Aboriginal people prior to colonisation, as well as the likely high impacts of historical use and construction on any Aboriginal archaeological evidence. Therefore, the proposed MOD 9 would be unlikely to result in any impacts to Aboriginal archaeology.

The proposed MOD 9 would not result in any changes in potential impacts on Aboriginal archaeological evidence within Central Barangaroo from the approved Concept Plan.

8.3 Historical Archaeology

The historical archaeological assessment of the study area (Section 5.0 of this HAIS) identifies that parts of the site have potential to contain historical archaeological remains associated with the maritime and industrial development and occupation of the area during the late nineteenth century and redevelopment of the site during the early to mid-twentieth century. Most of this evidence, if it survives, would likely be located along the eastern side of the study area, and concentrated in the northern and southern ends of the site. The potential historical archaeological remains at the site would likely be of local significance and limited research potential.

Geotechnical and archaeological information collected from other parts of the Barangaroo site indicates that much of the Barangaroo site is covered by extensive fill deposits above any surviving cultural material. Potential archaeological remains are therefore likely to be at least 0.5–4m below the existing surface of the concrete apron.

Based on the nature and extent of potential remains within the Central Barangaroo site, any proposed excavation greater than 1m in depth below the existing ground (concrete apron) surface in the areas of historical archaeological potential shown in Figure 5.1 may have potential to disturb or remove these remains. This includes excavation associated with:

- demolition of existing site features;
- removal of site elements or deposits for remediation purposes;
- installation of new underground services and utilities;
- construction of new built elements (development blocks and the cultural venue);
- civil works; and
- landscaping of the proposed park/plaza area.

The proposed MOD 9 comprises building envelopes that indicate the location and scale of proposed built elements, and limited detail of proposed subsurface disturbance that would be associated with site preparation and excavation for basements or construction of these built elements and associated landscaping and infrastructure. MOD 9 indicates that the major new built elements (three development blocks—Blocks 5, 6 and 7) would be located along the Hickson Road boundary of the site. The overall design of Central Barangaroo's Harbour Park will be the subject of later detailed design processes and may contain a number of small park pavilions.

It is likely that the areas of greatest proposed excavation or subsurface disturbance would be those closest to Hickson Road. These areas coincide with areas of potential archaeological remains associated with former finger wharves, minor late nineteenth-century wharves, and wharves associated with the former gasworks in this area. Disturbance or removal of evidence of former finger wharves or minor late-nineteenth century wharves would have little or no historical archaeological impact. Any remains in the southeastern corner of the site, including any remains associated with the former gasworks, would be removed as part of remediation of this area, prior to proposed redevelopment of the Central Barangaroo precinct.¹ The proposed elements of the modified Barangaroo Concept Plan in this area would therefore have no direct impact on any surviving remains of the former gasworks or any other remains in the declared area of contamination (DECCW Declaration Area N21122).

The area of the proposed open space and foreshore walk to the north of Block 7 has potential to contain remains associated with Cuthbert's shipyard (1860s–1870s) that have not been noted in the historical records. Disturbance or removal of these remains would have historical archaeological impact.

The proposed MOD 9 includes reconfiguration of the proposed location and footprints of Blocks 5, 6 and 7. The revised locations of these proposed built elements should not result in any additional historical archaeological impacts from the approved Concept Plan.

The proposed civic park/plaza area along the waterfront to the west of the proposed development blocks has little archaeological potential or significance. Establishment of these open space areas and the public foreshore walk should have little or no historical archaeological impact.

Changes associated with the modifications to the Concept Plan should not result in any additional historical archaeological impacts from the approved Concept Plan.

8.4 Built Heritage

The built heritage summary descriptions and assessments of the study area (Section 6.0 of this HAIS) identify the significance of relevant conservation areas and heritage items in the vicinity of MOD 9.

The following Design Strategy Key Moves of MOD 9 that vary from the approved Concept Plan are identified as most relevant in considering the impacts on the heritage significance of conservation areas and heritage items, and their setting/views, in the vicinity of Central Barangaroo:

- Optimising Locational Advantages.
- Urban Form and Building Heights.
- The High Street Pedestrian Bridge.

MOD 9 features a fine-grained response within Central Barangaroo and to the adjacent setting (including view corridors between Blocks 5, 6 and 7), variable built height and form, a taller, landmark Block 7 (which also allows for creation of a north facing public space—Nawi Terrace) and a new pedestrian bridge which would connect Central Barangaroo to Millers Point and Dawes Point. These design improvements are would have urban and architectural benefits over the approved Concept Plan, and are also likely to have a range of heritage impacts. These heritage impacts are discussed in the following sections of this HAIS.

This section addresses the likely heritage impacts of the modification on the Millers Point and Dawes Point Conservation Area and Millers Point and Dawes Village Precinct, heritage items within the Barangaroo site, heritage items in the vicinity (including Observatory Park and the Sydney Observatory site) and established heritage views. There are no built heritage items in Central Barangaroo.

8.4.1 Heritage Impact and Rating/Extent

The tables in this section list the various aspects of the proposal described in Section 7.0 and set out the likely heritage impacts, which are assessed according to the heritage impact rating/extent definitions presented in Table 8.1 below.

Table 8.1 Heritage Impact Rating/Extent Definitions.

Rating/Extent	Definition
A	Actions that will have a major, long-term and irreversible impact on the setting of a heritage item or conservation area. Actions in this category would include the addition of significant additional height to

Rating/Extent	Definition
Major Adverse	proposed new structures (ie an increase from the approved Concept Plan building heights) that significantly impacts on the visual setting of the item, or its significant views and vistas. These actions cannot be fully mitigated.
MA Minor adverse	Actions that will have a minor adverse impact on the setting of a heritage item or conservation area. This may be the result of the action affecting only a small part of the place or a distant/small part of the setting of a heritage place. The action may also be temporary and/or reversible.
N Neutral	Actions that will have no heritage impact.
MP Minor positive	Actions that will bring a minor benefit to a heritage item or conservation area, such as an improvement in the item's visual setting.
P Major Positive	Actions that will bring a significant benefit to a heritage item, such as removal of substantial intrusive elements, or the reinstatement of an item's visual setting or curtilage (ie a decrease from approved Concept Plan building heights).

8.4.2 Impact on Heritage Conservation Areas (Adjacent to the Barangaroo Site)

The Barangaroo site (precinct) is located to the east of the Millers Point and Dawes Point Conservation Area and the Millers Point and Dawes Village Precinct, which are both of state heritage significance.

The proposed MOD 9 would have no physical impact on these conservation areas (except the pedestrian bridge connection, which is discussed separately in the section for heritage items); however, as MOD 9 proposes a taller building in Block 7, this would have additional adverse impacts on the area's context and setting. The additional impact would primarily result from the proposed new tower at 73.7m AHD. Some positive impacts would result from the variable building heights and greater modulation of the urban form, which allow for view corridors west through Central Barangaroo and for Nawi Terrace to be created as a new public space.

The Walsh Bay Wharves Precinct is also of state heritage significance. No view loss or change in the harbour connection is anticipated for this precinct with the approved Concept Plan or the proposed MOD 9.

Table 8.2 Heritage Impact on Conservation Areas.

Name	Potential Heritage Impact
Millers Point and Dawes Point Conservation Area Millers Point and Dawes Village Precinct	<p>Heritage Comment: Positive (minor)</p> <p>The proposed MOD 9 would potentially have a minor positive impact on the conservation area / precinct, by maintaining and re-establishing earlier pedestrian connections from Hickson Road to High Street, linking through to Observatory Hill and Circular Quay.</p> <p>The proposed MOD 9 would provide view corridors and vistas through the articulation and separation of Blocks 5, 6 and 7, which are not provided in the currently approved Barangaroo Concept Plan (which would present as a singular high wall between High Street and the western harbour and horizon).</p> <p>Heritage Comment: Neutral</p> <p>The proposed MOD 9 would have no physical impact to the conservation areas.</p> <p>The proposed MOD 9 would have no greater adverse impact on the remaining vista across Nawi Cove to the western harbour and the horizon, from the centre of High Street, than the currently approved Concept Plan.</p> <p>Heritage Comment: Additional Adverse (Minor and Major)</p> <p>The impact of the currently approved Barangaroo Concept Plan on the visual setting of the Millers Point and Dawes Point Village Precinct is most evident from High Street and from some locations on Observatory Hill, particularly where local vistas and view corridors provide a high-level harbour aspect towards the south and west, as well as views to the conservation areas from various harbour locations.</p>

Name	Potential Heritage Impact
	<p>The statement of significance for the Millers Point and Dawes Village Precinct indicates the significance of the area's connection to the harbour, referencing its '... vistas and glimpses of the harbour along its streets and over rooftops, the sounds of boats, ships and wharf work, and the smells of the sea and harbour waters.'</p> <p>The impacts of the proposed MOD 9 massing generally remain consistent with the approved Concept Plan, except for the additional height of the Block 7 tower, which would result in some additional impacts on the setting of the Millers Point and Dawes Point Village Conservation Area/Precinct. The Block 7 tower will have some impact on the setting of the precinct and impact some of the views to and from Millers Point.</p> <p>The following heritage comments are made:</p> <ul style="list-style-type: none"> • Visual connections of the Millers Point and Dawes Point Village Precinct west to the former wharf area help demonstrate the historical relationship between this precinct (conservation area) and the harbour. Heights of the approved Concept Plan are already greater than some individual buildings in the conservation area/precinct, notably those in High Street. The proposed MOD 9 seeks to further increase the heights of Blocks 5 and 6, which represents a minor additional heritage impact. The proposed tower on the northwest corner of Block 7 may represent a greater impact depending on the viewpoint. • The proposed MOD 9 increase in the heights of Blocks 5 and 6 and the tower of Block 7 will result in some increase in the sense of enclosure of some of the High Street terraces (southern section), but will not further increase harbour view loss to and from this western edge of the precinct. • The perceived height and bulk of the development at Central Barangaroo, as currently approved in the Concept Plan and proposed in MOD 9, is mitigated to some degree by the physical separation of approximately 40m between the High Street buildings and the proposed built form at Central Barangaroo. • Distant views from Observatory Park and Sydney Observatory to the harbour would be impacted by the proposed Block 7 tower of MOD 9, in addition to the minor view impacts of the approved built form. The additional view loss of the horizon would have some impact on the setting of the park to the southwest but is considered a minor additional impact. (Sky view loss in relation to Sydney Observatory is addressed in Section 8.6 below.) • The loss of views and vistas to and from High Street, its terraces, and the pedestrian High Steps will not be further impacted through the increased heights proposed in MOD 9. • The western vista from High Street (south) to the harbour is impacted by the built form of the currently approved Concept Plan, which would present as a wall to High Street. The historical visual connection between this part of the precinct and the harbour can be maintained in part by MOD 9 through an opportunity for shared public views from the Agar Steps, on axis along High Street, across Hickson Road by the bridge and Barangaroo Steps between Block 5 and 6 to the harbour. • The key vista north-south along High Street would not be further impacted through the increased heights of Blocks 5, 6 and 7, and the tower of Block 7, of the MOD 9 proposal. There will, however, be a minor further increase in the sense of enclosure of the space in front of/above the High Street Terraces and related heritage items. • Historical pedestrian links through the conservation area and High Street to the harbour (Central Barangaroo) will potentially be enhanced though the introduction of the Barangaroo Steps between Blocks 5 and 6 and the bridge connection to High Street, which will continue the historical connections through the steep topography of the Agar Steps and High Steps. The bridge connection to High Street has the potential to adversely impact significant fabric of the heritage item 'Palisade Fence and High Steps', which forms part of the Hickson Road Retaining Wall at the edge of the Millers Point and Dawes Point Village Conservation Area/Precinct. Impacts on the fence and steps are discussed further in Table 8.4. <p>Further information about the views is included at Tables 8.6 and 8.6 below.</p>

Name	Potential Heritage Impact
Walsh Bay Wharves Precinct, Hickson Road	<p>Heritage Comment: Neutral/none</p> <p>The significance of the Walsh Bay Wharves Precinct is summarised earlier in this HAIS, which states that:</p> <p><i>The Walsh Bay area is of State cultural significance due to its unique combination of steep rocky terrain, early, mid, late-Victorian and Edwardian housing, surviving relatively intact Victorian bond stores, and the results of an early twentieth century urban redevelopment scheme of unique scale: the magnificent timber wharf and shore structures and associated rock cuttings, roads and bridges.</i></p> <p>The item's description notes: 'The Walsh Bay area provides spectacular view out over the Harbour, with enclosed views between the wharves.'</p> <p>This precinct is to the north of Central Barangaroo, but not in close proximity to it, and would have no physical impact.</p> <p>No setting / view loss or change in the harbour connection is anticipated to the Walsh Bay Wharves Precinct with the approved Concept Plan or the proposed MOD 9. The proposed buildings of Central Barangaroo would not intrude into the curtilage of the precinct or be visible from it. Walsh Bay is located at the shoreline and is separated visually by the topography of Observatory Hill and the curve of Hickson Road.</p>

8.4.3 Impact on Heritage Items (Within the Barangaroo Site)

The Barangaroo site (precinct) contains three heritage items, including the Dalgety Bond Store, which is of state heritage significance and located in Barangaroo Reserve immediately north of Central Barangaroo.

The proposed MOD 9 would have no physical impact on the heritage item; however, as the current Concept Plan has no tower, MOD 9 would have a minor additional impact on its context and setting. The additional impact would primarily result from the proposed new tower at 73.7m above existing ground level.

Table 8.3 Heritage Impact on Heritage Items within the Barangaroo Site (Precinct).

Name	Address	Potential Heritage Impact
Munn Street Bond Stores (Dalgety Bond Store)	6–20 Munn Street, Barangaroo NSW 2000	<p>Minor adverse (additional)</p> <p>There is no physical impact to the heritage item through the approved Barangaroo Concept Plan, or with the proposed MOD 9 changes.</p> <p>Under MOD 9, the closest proposed new building is Block 7. As Block 7 is sufficiently distant from the heritage item (and across Nawi Cove), the proposed increase in height of Block 7 and its corner tower to 73.7m will not generally have a significantly greater impact than Block 7 (as approved at 33m under MOD 10).</p> <p>Under MOD 9 the proposed new corner tower (at the northwestern corner of Block 7), at 73.7m in height, will have an additional impact on the setting and context of this heritage item.</p>
Munn's slipway	Nawi Cove, Hickson Road, Sydney NSW 2000	<p>Not assessed</p> <p>Heritage impacts are not likely under MOD 9.</p> <p>The slipway is located on the northern edge of Nawi Cove and outside of the Central Barangaroo development area.</p>
SPS 14 – Sewage Pumping Station No. 14	4 Towns Place, Barangaroo NSW 2000	<p>Not assessed</p> <p>Heritage impacts are not likely under MOD 9.</p> <p>This small building is located outside of the Central Barangaroo development area.</p>

8.4.4 Impact on Heritage Items in the Vicinity

Heritage items in the vicinity of the Central Barangaroo site and their heritage significance, including items associated with Observatory Hill, and the Walsh Bay Wharves Precinct, have been identified in Section 6.0 of this HAIS.

MOD 9 proposes the Barangaroo Steps and High Street Connection, which as a pedestrian link would have positive impacts on the conservation areas, but will potentially impact significant aspects of the heritage item 'Palisade Fence and High Steps'. These impacts could be minimised/mitigated at the design development phase, through innovative design guided by ongoing heritage advice. The proposed MOD 9 would have no physical impact on any other heritage items in the vicinity, as for the approved MOD 10.

The main impacts on heritage items in the vicinity are impacts on views to and from the harbour and public foreshores. The changes of the proposed MOD 9 that differ from the approved changes of MOD 10, outlined in Table 8.4, range from positive, neutral and increased adverse heritage impacts on heritage items in the vicinity of Central Barangaroo.

Where impacts on views and setting of heritage items are considered similar to impacts on heritage views generally, the table below refers to Table 8.6 to avoid repetition.

The proposed MOD 9 has been assessed to have little or no adverse impact on the continued use of the Observatory for astronomical observations or on the continued use of the Signal Station for signalling operations.

Table 8.4 Heritage Impact on Heritage Items in the Vicinity—including Impacts on Their Views.

Name	Address	Potential Heritage Impact
Observatory Hill Level Heritage Items		
Observatory Park including Boer War Memorial, Bandstand, fences and landscaping	Upper Fort Street	<p>Heritage Comment: Minor adverse (additional)</p> <p>There is no physical impact to the heritage item through the approved changes to the Barangaroo Concept Plan, or the proposed MOD 9.</p> <p>The significance of Observatory Park summarised earlier in this HAIS references that 'The Observatory Park is of outstanding historical significance and a major component of the Observatory Hill precinct. The park commands panoramic views to the north, west and south.'</p> <p>In addition:</p> <p>'The elevation of the site, with its harbour and city views and vistas framed by mature Moreton Bay fig (<i>Ficus macrophylla</i>) trees of the surrounding park, make it one of the most pleasant and spectacular locations in Sydney.'</p> <p>There will be some additional adverse impact on the panoramic view shed to and from the central and western parts of Observatory Park through the additional heights proposed under MOD 9, particularly as a result of the height of the Block 7 tower. The additional height of Block 7 will impact on the southwest section of panoramic views to the harbour and horizon.</p> <p>Panoramic harbour views to the northwest, north and north east of Observatory Park will not be impacted by the approved Concept Plan, or the proposed MOD 9.</p> <p>Refer to comments in Table 8.5 below—GML01.</p>

Name	Address	Potential Heritage Impact
Fort Street Primary School site including buildings and their interiors, fig trees and grounds	1005 Upper Fort Street	<p>Heritage Comment: Adverse (additional) Refer to Figure 6.58.</p> <p>There will be some additional adverse impacts on the views to and from the Fort Street Primary School site. The additional view loss is primarily related to the height and placement of the Block 7 tower.</p>
Messenger's Cottage for Sydney Observatory including interior	9A Upper Fort Street	<p>Heritage Comment: Neutral/none Refer to Figure 6.60.</p> <p>The Messenger's Cottage does not have a westerly aspect so views would not be impacted by MOD 9.</p>
Bureau of Meteorology including interior	9 Upper Fort Street	<p>Heritage Comment: Minor adverse (additional) Refer to Figure 6.62.</p> <p>There will be some additional minor adverse impact on the views to and from the upper levels of the Bureau of Meteorology. The additional view loss is primarily related to the height and placement of the Block 7 tower.</p>
<p>Sydney Observatory group including buildings and their interiors and grounds.</p> <ul style="list-style-type: none"> • Sydney Observatory and Residence • Signal Station • Fort Phillip • Messenger's Cottage (for the Signal Station) 	1003 Upper Fort Street	<p>Heritage Comment: Neutral</p> <p>The summary of the significance of the Sydney Observatory, referenced earlier in this HAIS, notes the:</p> <p><i>continued use of the observatory for astronomical observations and the survival of astronomical instruments ensure that the observatory can remain the most intact and longest serving early scientific building in the State.</i></p> <p>There will be little or no adverse impact on the continued use of the Observatory for astronomical observations. There will be no sky view obstruction in a designated azimuth range from the north dome by the proposed additional height of the built form of Blocks 5 and 6 of MOD 9. The proposed additional height of the tower of Block 7, which is higher than the north dome, will have no practical impact on sky views from the dome.</p> <p>This HAIS relies on the specialist advice provided in the AECOM Sky View Loss Report 2021 and the Unisearch Sky View Impact Report 2021 in regard to impacts on Observatory functions (ie clear view requirements and light spill). Refer to Section 8.5.</p> <p>The significance of the Signal Station (associated with Fort Phillip) summarised earlier in this HAIS, noting:</p> <p><i>The building is historically significant as it represents the various stages in the development of the colony's communications (flagstaff, first semaphore and first electric telegraph connection) The site is significant for the continuity of use dating from 1823.</i></p> <p>There will be little or no adverse impact on the continued use of the Signal Station for signalling operations which relate to South Head to the east or northwest toward Hunters Hill.</p> <p>Heritage Comment: Minor adverse (additional) Refer to Figures 6.51–6.57.</p> <p>MOD 9 will involve some additional adverse impacts (beyond those approved under MOD 10) on the view sheds to and from the Sydney Observatory site generally, the Sydney Observatory west wing and its north dome, and the Time Ball Tower from the harbour and public harbour headlands, depending on the viewpoint. The most impacted viewpoints, as established in the 2008 HIS, will be to/from the west and southwest ie Pyrmont and Balmain.</p> <p>Refer also to comments in Table 8.6 below—GML02 and GML18.</p>

Name	Address	Potential Heritage Impact
The National Trust Centre including buildings and their interiors, retaining walls and grounds	1001 Bradfield Highway	Heritage Comment: Neutral/none Refer to Figure 6.64 to 6.67. The buildings do not have a westerly aspect so views would not be impacted by MOD 9.
Agar Steps Terrace Group	5–9 Agar Steps	Heritage Comment: Neutral/none Refer to Figure 6.68. These properties do not have a westerly aspect so views would not be impacted by MOD 9.
Agar Steps	Agar Steps	Heritage Comment: Minor adverse (additional) overall Refer to Figure 6.70. There will be some additional adverse impact on the views from the steps through the additional heights proposed for Blocks 5 and 6. The additional height will result in some distant loss of view to the horizon. The introduction of Barangaroo Steps aligned between Blocks 5 and 6, however, will provide an opportunity for shared public views from Agar Steps, on axis along High Street, across Hickson Road and to the harbour foreshore. Refer to comments in Table 8.5 below—similar to GML03.
High Street and Kent Street Level Heritage Items		
Millers Point/Dawes Point Conservation Area	Millers Point	Refer to Table 8.2 above.
Millers Point and Dawes Point Village Precinct	Millers Point	Refer to Table 8.2 above.
'Terrace Duplexes' (High Street Terraces including interiors)	2–36 High Street	Heritage Comment: Positive (minor)
	38–72 High Street	MOD 9 proposes additional views/vistas through the built form of Blocks 5, 6 and 7, which will have positive impacts compared with the approved Concept Plan, for some properties in High Street. These vistas are indicated by the figures in Section 8.5.2 with comparisons between the approved Concept Plan and MOD 9.
	74–80 High Street	
	3–9 High Street	Heritage Comment: Additional adverse (minor)
Lance Kindergarten (including buildings and their interiors, early remnant fencing and grounds), and trees	37 High Street	Refer to Figure 6.11 to 6.34. Additional height will potentially increase the sense of enclosure in High Street from the additional height of MOD 9 overall. The additional height of MOD 9 Blocks 5, 6 and 7 will not, however, further impact views to and from these items. This is indicated in Figures 8.4 and 8.4a below, which show that view 'B1' would remain open to the west and north (from the centre of High Street). Views 'B2' and 'B3' would provide a view corridor to the western harbour. Refer to comments in Table 8.5 below.
Shops and Residence	1–7 Argyle Place	Refer to comments in Table 8.5 below.
Tennis Court and Pavilion	96–108 Kent Street	Heritage Comment: Neutral (additional potential sky aspect loss) Refer to Figure 6.74
Carlson Terrace, including interior	110–114A Kent Street	The additional height of MOD 9 Blocks 5 and 6 will not further impact views to and from these items. Additional height will, however, marginally increase the loss of sky aspect from these items.
Richmond Villa, including interior	116–122 Kent Street	Heritage Comment: Neutral (additional potential sky aspect loss) Refer to Figure 6.78. No harbour view loss is anticipated with the proposed MOD 9. Some additional aspect to the sky may be lost.

Name	Address	Potential Heritage Impact
Palisade Fence and High Steps	High Street	<p>Heritage Comment: Positive</p> <p>MOD 9 proposes the Barangaroo Steps and High Street Connection as a pedestrian bridge that strengthens existing pedestrian access from Millers Point and Observatory Hill to the foreshore at Central Barangaroo and provides a visual connection to the water. The High Steps and other former connection are identified in this report to be of 'heritage significance as an integral part of the pedestrian network of Millers Point that connected the wharfs to the suburb above'.</p> <p>In addition:</p> <p><i>The High Street sandstone wall and palisade fence are of historical significance for their association with the Sydney Harbour Trust's redevelopment early in the 20th century. They are aesthetically significant as a dramatic landmark feature that defines the edge of the village of Millers Point.</i></p> <p>There are a number of existing and former bridge connections over Hickson Road, and as such there is precedent for a pedestrian bridge along this stretch of Hickson Road / High Street.</p> <p>In principle, the pedestrian bridge concept could have a positive impact on the conservation area and its steps, subject to design considerations discussed immediately below.</p> <p>Heritage Comment: Additional Adverse</p> <p>MOD 9 proposes the Barangaroo Steps and High Street Connection that is shown to connect at the south end of the heritage item 'Palisade Fence and High Steps', which forms part of the Hickson Road Wall at the edge of the Millers Point and Dawes Point Village Conservation Area/Precinct. The High Steps are in public use connecting pedestrians from Hickson Road to High Street. The proposed bridge connection to High Street has the potential to adversely impact the significant fabric of the heritage item and precinct, and could adversely impact use of the High Steps.</p> <p>Further details of the proposed bridge connection will be required at future design development stages to assess and minimise heritage impacts to the Palisade Fence. A design solution which achieves the desired linear vista through Blocks 5 and 6, yet maintains the historic fence and steps, could be achieved, but this would require use of the small public park 'High Street Gardens' immediately south of the south steps and connection through the modern infill fence. The High Steps should be conserved and remain accessible in association with the new pedestrian bridge of MOD 9. Refer to the figures in Section 8.5.2 and their explanatory captions. Potential adverse impacts could be mitigated at design development stage and additional heritage guidance would be required. The use of part of the High Street Gardens land would be required.</p> <p>The viability of utilising the location of the original bridge connection centrally located along High Street or the northernmost section of fence at the former northern steps, as alternative locations for connections from Central Barangaroo to High Street warrants investigation as outlined in Section 8.5.1 below.</p>
Terrace Group, including interior	123–125 Kent Street	
Hickson Road Level Heritage Items		
MSB Stores, including interiors	See above	See above under Lane off Gas Lane Level Heritage Items.
Grafton Bond Store		

Name	Address	Potential Heritage Impact
Gas Lane Level Heritage Items		
Lane off Gas Lane	Jenkins Street	<p>Heritage Comment: Additional adverse</p> <p>Refer to Figure 6.45.</p> <p>Views from Gas Lane (above Hickson Road) of the western part of Sydney Harbour would be further impacted (marginally) with the proposed massing of MOD 9 rather than the approved Concept Plan. There would be loss of sky view from this viewpoint, but some sky view to the western harbour would be retained.</p> <p>Refer to comments in Table 8.5—similar to GML09.</p>
Grafton Bond Store	201–217 Kent Street	<p>Heritage Comment: Additional adverse</p> <p>Refer to Figure 6.41.</p> <p>Refer to comments in Table 8.5 below—similar to GML08 and 09.</p> <p>The additional height of MOD 9 Blocks 5, 6 and 7 will result in a sense of enclosure of this item.</p> <p>The additional height of MOD 9 Block 5 will not further impact harbour views to and from these items at a low level. This additional height may, however, increase the loss of sky aspect from these items.</p>
MSB Stores, including interiors	36 Hickson Road	
Walsh Bay		
Moore's Wharf Building	Towns Place	<p>Heritage Comment: Neutral/none</p> <p>The significance of the Moore's Wharf Building is summarised earlier in this HAIS. The structure is:</p> <p><i>of historical significance for its association with the waterside warehouse activities of the early 19th century that has made an important contribution to industrial settlement and establishment of storage facilities at Walsh Bay in the Port of Sydney.</i></p> <p>This site is not in close proximity to Central Barangaroo and as such MOD 9 would have no physical impact.</p> <p>No view or connection loss with the harbour is anticipated with the approved Concept Plan or the proposed MOD 9. The proposed built form of Central Barangaroo will not impact the setting of this building given its siting and the curve of Hickson Road.</p>

8.4.5 Heritage Views—Impacts and Comparisons

Table 8.5 provides a comparison of view impacts from each of the GML viewpoints, taking into account the 'existing' view impacts of the approved Concept Plan.

Heritage viewpoints are generally aligned with the observer location views in the AECOM Views and Visual Impact Report 2021. GML viewpoint numbers continue independent of AECOM observer locations where AECOM views are not relevant to assessing heritage impact—ie from AECOM observer location 15 and onwards.

Key heritage views and impacts are assessed by photographic comparison and diagrams below (refer to Table 8.6 and 8.7).

Table 8.5 Heritage Comment on View Impacts from GML Viewpoints.

Heritage View	Reference Detail—AECOM Views and Visual Impact Report 2021 and HIS 2006/2008	Potential Heritage Impact Comment by GML 2021
GML01	<p>Observer Location 01—Sydney Observatory Park to the western part of Sydney Harbour.</p> <p>2006/2008 HIS—View H4 (included above in Table 8.2 for reference).</p> <p>Relates to Heritage Item:</p> <ul style="list-style-type: none"> Sydney Observatory Park. 	<p>Heritage Comment: Additional minor adverse</p> <p>GML View 01—Sydney Observatory Park to the western part of Sydney Harbour.</p> <p>Blocks 6 and 7 of the approved Concept Plan would impact some distant views from Sydney Observatory Park of the water and harbour headlands at the horizon level.</p> <p>The proposed changes of MOD 9, particularly the increase in height of the Block 7 tower, would result in some increased view impact from the park, involving loss of a section of the horizon to the southwest.</p>
GML02	<p>Observer Location 02—View from the Sydney Observatory North Tower / Telescope looking west across Millers Point, the harbour and Western Sydney.</p> <p>2006/2008 HIS—No image.</p> <p>Relates to Heritage Item:</p> <ul style="list-style-type: none"> Sydney Observatory Park. The Sydney Observatory site. 	<p>Heritage Comment: Additional major adverse</p> <p>GML View 02—View from the Sydney Observatory North Tower / Telescope looking west across Millers Point, the harbour and Western Sydney.</p> <p>Block 7 and part of Block 6 of the approved Concept Plan would impact views of the water and harbour headlands from Sydney Observatory North Dome. The proposed changes of MOD 9, particularly the corner tower element of Block 7, would result in some increased view impact from this location involving loss of a narrow section of the horizon, water and harbour views to the southwest.</p> <p>This HAI relies on the specialist advice of the AECOM Sky View Loss Report 2021 and the Unisearch Sky View Impact Report 2021 in regard to impacts on Observatory function (ie clear view requirements and light spill). Refer to Section 8.5.</p>
GML03	<p>Observer Location 03—High Street South.</p> <p>2006/2008 HIS—View H3 (included in Table 8.2 for reference).</p> <p>Relates to Heritage Items:</p> <ul style="list-style-type: none"> Observatory Park. Terrace Duplexes, High Street. 	<p>Heritage Comment: Neutral (additional sky aspect loss)</p> <p>GML View 03—High Street South, looking west.</p> <p>Block 6 of the approved Concept Plan would impact views of the water and harbour headlands from High Street south. The proposed increased height of Blocks 5 and 6 as part of the proposed MOD 9 would not further increase this outward view loss, but the additional height would result in an additional sense of enclosure. Positively, MOD 9 proposes an opportunity for public access and shared public views from Agar Steps, on axis along High Street, across Hickson Road by bridge and Barangaroo Steps between Blocks 5 and 6 to the harbour foreshore.</p>
GML04	<p>Observer Location 04—Munn Street Reserve.</p> <p>2006/2008 HIS—View H1 (included in Table 8.2 for reference).</p> <p>Relates to Heritage Items:</p> <ul style="list-style-type: none"> Dalgety Bond Store, Munn Street. Terrace Duplexes, High Street. 	<p>Heritage Comment: Neutral (additional setting impact)</p> <p>GML View 04—Munn Street Reserve.</p> <p>Block 7 of the approved Concept Plan would be visible from the Munn Street Reserve behind the Dalgety Bond Store. The increased heights of the Block 7 tower of proposed MOD 9 would be visible behind the Dalgety Bond Store. This is not specifically a heritage view impact as much as a minor increase in encroachment on the general setting of the stores.</p> <p>The bridge between the Barangaroo Steps and High Street would be visible and have some impact on this view south along Hickson Road.</p>
GML05	<p>Observer Location 05—Clyne Reserve.</p> <p>2006/2008 HIS—No image.</p>	<p>Heritage Comment: Neutral (additional setting impact)</p> <p>GML View 05—Clyne Reserve.</p>

Heritage View	Reference Detail—AECOM Views and Visual Impact Report 2021 and HIS 2006/2008	Potential Heritage Impact Comment by GML 2021
	Relates to Heritage Items: <ul style="list-style-type: none"> Merriman and Bettington Street, (various items). 	<p>The construction/development of the approved Concept Plan would be partially visible from the Clyne Reserve. The increased height of the Block 7 tower would be partially visible behind the Dalgety Bond Store to a greater degree as a result of the proposed MOD 9. This is not specifically a heritage view impact, as much as a minor increase in encroachment on the general setting of the reserve.</p>
GML06	Observer Location 06 —Barangaroo Reserve (foreshore). 2006/2008 HIS —No image. Relates to Heritage Items: <ul style="list-style-type: none"> Terrace Duplexes, High Street. Millers Point and Dawes Point Village Precinct. 	Heritage Comment: Neutral (additional setting impact) GML View 06—Barangaroo Reserve—Foreshore Walk. Under the approved Concept Plan, there would be view loss of the High Street terraces (within the conservation area setting) from the Wulugul Walk (low level). With MOD 9, Block 7 presents as a more articulated form with a highly visible corner tower, its notable additional height contributing to the backdrop of the city skyline. There is no additional heritage view loss.
GML07	Observer Location 07 —Barangaroo Reserve (hill). 2006/2008 HIS —No image. Relates to Heritage Items: <ul style="list-style-type: none"> Terrace Duplexes, High Street. Millers Point and Dawes Point Village Precinct. 	Heritage Comment: Neutral (additional setting impact) GML View 07—Barangaroo Reserve—Hill Park. Under the approved Concept Plan, there would be some loss of view of the High Street terraces (and general conservation area setting) from the Foreshore Walk (at a low level). With MOD 9, the Block 7 tower is more visible with additional height contributing to views of the city skyline. There is no additional heritage view loss.
GML08	Observer Location 08 —Hickson Road. 2006/2008 HIS —No image. Relates to Heritage Items: <ul style="list-style-type: none"> Millers Point and Dawes Point Village Precinct. Palisade Fence and High Steps (including the concrete wall). 	Heritage Comment: Additional minor adverse GML View 08—Hickson Road. The approved Concept Plan would result in some loss of open sky view at a low level and loss of distant views of the Dalgety Bond Store, from Hickson Road south of the Central Barangaroo site. The proposed increased height of Blocks 5 and 6 in MOD 9 would result in some additional sky view loss, and a sense of enclosure of Hickson Road and the Palisade Fence and High Steps (and concrete wall). The views from other Hickson Road heritage items are not shown here, but this montage suggests that the upper levels of these heritage items (MSB Bond Store and Grafton Bond Store) may be impacted by loss of water or sky views to some degree.
GML09	Observer Location 09 —Gas Lane. 2006/2008 HIS —No image. Relates to Heritage Items: <ul style="list-style-type: none"> Gas Lane. Grafton Bond Store. MSB Stores, including interiors. 	Heritage Comment: Additional minor adverse GML View 09—Gas Lane. The proposed MOD 9 increase in height of Block 5 will have some incremental impact on the extent of western harbour water and sky views from the upper (Kent Street) section of Gas Lane. The views from other Gas Lane level heritage items (MSB Bond Store and Grafton Bond Store) are not shown, but this montage suggests that the upper levels of these heritage items would be impacted by some loss of water or sky views.
GML10	Observer Location 10 —Ballarat Park, Pyrmont. 2006/2008 HIS —No image. 2015 VIA —View 6.	Heritage Comment: Additional minor adverse GML View 10—Ballarat Park. Views of the top of the Sydney Harbour Bridge would be partially visible with the approved Concept Plan. The proposed

Heritage View	Reference Detail—AECOM Views and Visual Impact Report 2021 and HIS 2006/2008	Potential Heritage Impact Comment by GML 2021
	<p>Relates to Heritage Items:</p> <ul style="list-style-type: none"> • Millers Point and Dawes Point Village Precinct. • Palisade Fence and High Steps (including the concrete wall). • Terrace Duplexes, High Street. • Observatory Park. • The Sydney Harbour Bridge. 	<p>increase in height of the corner tower of Block 7 of MOD 9 would further limit this particular view.</p> <p>The very tops of trees of Observatory Park would be visible with the approved Concept Plan; however, views of the conservation area, Observatory Park, the Palisade Fence (wall) and the High Street Terraces would also be lost. The MOD 9 proposed changes would preclude views to the same extent due to the proposed Blocks 5 and 6, with additional losses due to the Block 7 Tower.</p> <p>The north dome of Sydney Observatory would be visible with the approved Concept Plan, and the changes proposed with MOD 9 are likely to retain these distant views to the north dome over Blocks 5 and 6. The height of the Block 7 tower would not additionally impact views of the Sydney Observatory from this viewpoint.</p>
GML11	<p>Observer Location 11—Pirrama Park, Pyrmont.</p> <p>2006/2008 HIS—No image.</p> <p>Relates to Heritage Items:</p> <ul style="list-style-type: none"> • Millers Point and Dawes Point Village Precinct. • Palisade Fence and High Steps (including the concrete wall). • Terrace Duplexes, High Street. • Observatory Park. 	<p>Heritage Comment: Additional minor adverse</p> <p>GML View 11—Pirrama Park, Pyrmont.</p> <p>The approved Concept Plan would result in substantial distant view loss to the conservation area, Observatory Park and other Millers Point heritage items in the vicinity (along High and Kent Streets and the concrete wall), with only the tree tops of Observatory Park remaining partly visible.</p> <p>The proposed MOD 9 would also result in some additional view loss of treetops as a result of the additional heights proposed by the corner tower of Block 7.</p>
GML12	<p>Observer Location 12—Balmain East—Iloura Reserve.</p> <p>2006 HIS—No image.</p> <p>Relates to Heritage Items:</p> <ul style="list-style-type: none"> • Millers Point and Dawes Point Village Precinct. • Palisade Fence and High Steps (including the concrete wall). • Terrace Duplexes, High Street. 	<p>Heritage Comment: Neutral (little or no additional impact on setting)</p> <p>GML View 12—Balmain East—Iloura Reserve.</p> <p>With the proposed MOD 9, the additional height of the Block 7 corner tower would not result in a heritage view impact, but would result in a minor additional encroachment on the general setting and views to the Millers Point and Dawes Point Village Precinct.</p>
GML13	<p>Observer Location 13—View From Balls Head.</p> <p>2006/2008 HIS—City Plan Figure 12 (included below for reference).</p>	<p>Heritage Comment: Neutral (additional setting impact)</p> <p>GML View 13—Balls Head.</p> <p>The approved Concept Plan would not result in any heritage view loss from the distant Balls Head to Observatory Park, Sydney Observatory or the Millers Point heritage items.</p> <p>With MOD 9, the proposed additional height of the Block 7 tower would be visible from this viewpoint, and there may be minor impacts on setting, but this is not considered a notable heritage view impact given the distance between the study area and Balls Head.</p>
GML14	<p>Observer Location 14—Blues Point.</p> <p>2006/2008 HIS—No image.</p>	<p>Heritage Comment: Neutral (additional setting impact)</p> <p>GML View 14—Blues Point.</p> <p>The approved Concept Plan would not result in any heritage view loss from the distant Blues Point. There would be no loss of heritage view of Observatory Park, Sydney Observatory or the Millers Point heritage items.</p>

Heritage View	Reference Detail—AECOM Views and Visual Impact Report 2021 and HIS 2006/2008	Potential Heritage Impact Comment by GML 2021
		The proposed additional height of the Block 7 tower with MOD 9 would be visible from this viewpoint, and while there may be implications for the setting, this would not be considered a notable heritage view impact.
GML15	Observer Location 15 —Sydney Harbour Bridge. 2006/2008 HIS —No image.	Heritage Comment: Neutral (additional setting impact) GML View 15—Sydney Harbour Bridge. The approved Concept Plan would not result in any loss of heritage view of Observatory Park, Sydney Observatory or the Millers Point heritage items from the Sydney Harbour Bridge (footway level). The form of MOD 9 has potential for negligible loss of view to the southwest horizon due to the additional height of the Block 7 tower.

8.5 Heritage Items, Setting and Views—Diagrams and Photographs

This section includes photographs and diagrams referred to by other MOD 9 reports, supplemented by photographs and diagrams prepared by GML, which assisted in the assessments of the preceding sections.

8.5.1 Heritage Items Potentially Impacted

These photographs, taken by GML, show the locations of three previous pedestrian connections from Hickson Road and the former wharves to High Street.

There was an earlier bridge connection over Hickson Road from c1920s to c1960s, located centrally along High Street. Evidence of this connection remains in the form of gate posts and an infill panel. There is also evidence of the northern steps and its entry to the Palisade Fence, now also blocked in, at the northern end of High Street. The south steps remain as an existing pedestrian connection. Refer to Figures 2.7, 2.8 and 2.9 (of this HAIS) which show these features prior to removal of the metal bridge and blocking in of the central and northern opening.



Figure 8.1 Hickson Road Retaining Wall and Palisade Fence. The locations of existing and former pedestrian links and their connections are shown by arrows. The northern steps are to the left, the central connection of the earlier bridge over Hickson Road is at the central 'dip' and the south steps are at the right of the wall. (Source: GML 2020)



Figure 8.2 Palisade Fence and sandstone piers at High Steps, northern end. The base plinth and fence were infilled (as shown by the red arrow) when the upper stair run was removed. (Source: GML 2020)



Figure 8.3 Palisade Fence at the central low point of High Street, one of two sandstone piers where the metal bridge to the wharves originally connected to High Street. This opening has been infilled, as shown by the orange arrow. (Source: GML 2020)



Figure 8.4 Palisade Fence at High Steps, showing the modern infill section south of the south steps, viewed from Hickson Road. This modern infill is shown by the blue arrow. (Source: GML 2020)



Figure 8.5 South steps arrival point at High Street and associated Palisade Fence and sandstone pier. (Source: GML 2020)



Figure 8.6 South steps connecting Hickson Road and High Street, viewed from Hickson Road. The modern infill to the Palisade Fence is shown by the blue arrows. (Source: GML 2020)

8.5.2 Comparative Site Cross-Sections and View Corridors

The cross-sections from the AECOM View and Visual Impact Report 2021 are indicative of the impact of the proposed heights of Blocks 5, 6 and 7 related to MOD 9, and how these heights would impact Millers Point, Observatory Hill and their related heritage items. The proposed MOD 9 seeks to further increase the general heights of Blocks 5, 6 and 7 to 9 storeys (44m, 38.7m and 38.5m respectively) (ie by 8.45m, 9.7m and 3.5m respectively). The proposed MOD 9 seeks to include a substantially taller building at the northwest corner of Block 7 to 19 storeys (an increase from 33 RL as approved to a height of 73.7 RL).

Impacts on views to and from the Sydney Observatory site are also presented in sections included in the AECOM Sky View Loss Report 2021. Refer to Section 8.4 of this HAIS for more information.

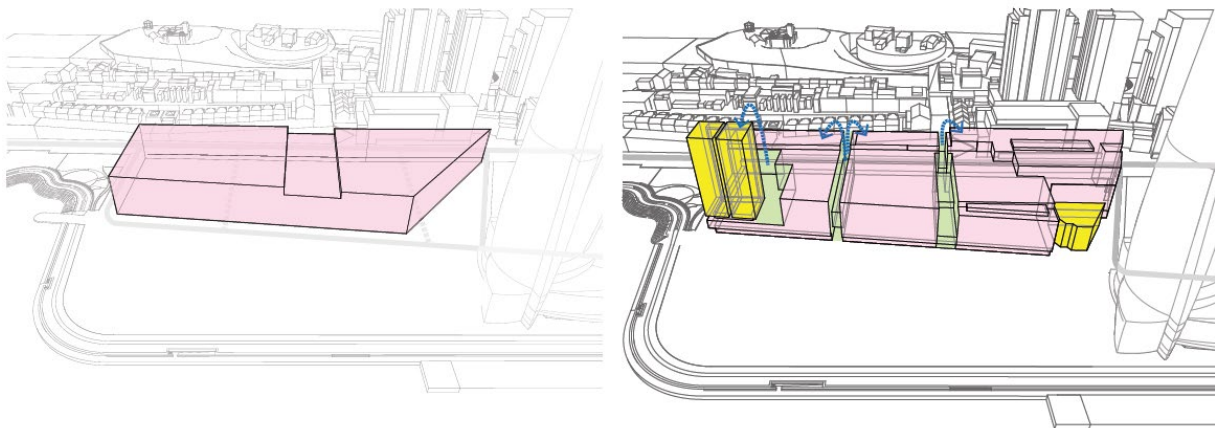


Figure 8.7 Comparison between the approved Concept Plan building form (left) and the MOD 9 proposed building form. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

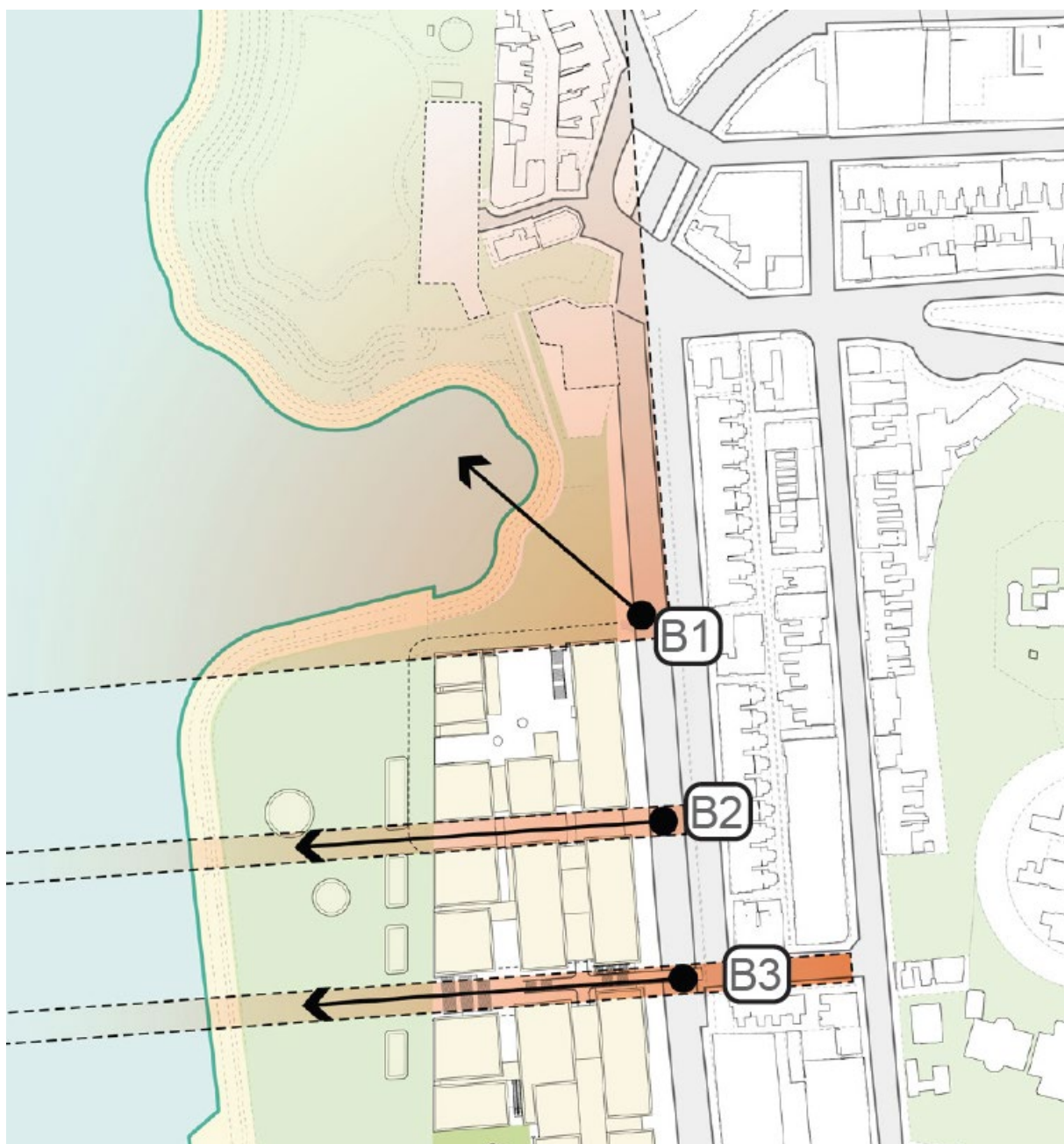


Figure 8.8 Views and view corridors. View B1 north and west of Block 7 would not be further impacted by MOD 9. View B2 between Blocks 6 and 7 of MOD 9 would provide additional visual connection to the foreshore and horizon from this part of High Street and its terraces. View B3 of MOD 9 between Blocks 5 and 6 would also provide additional visual connection. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

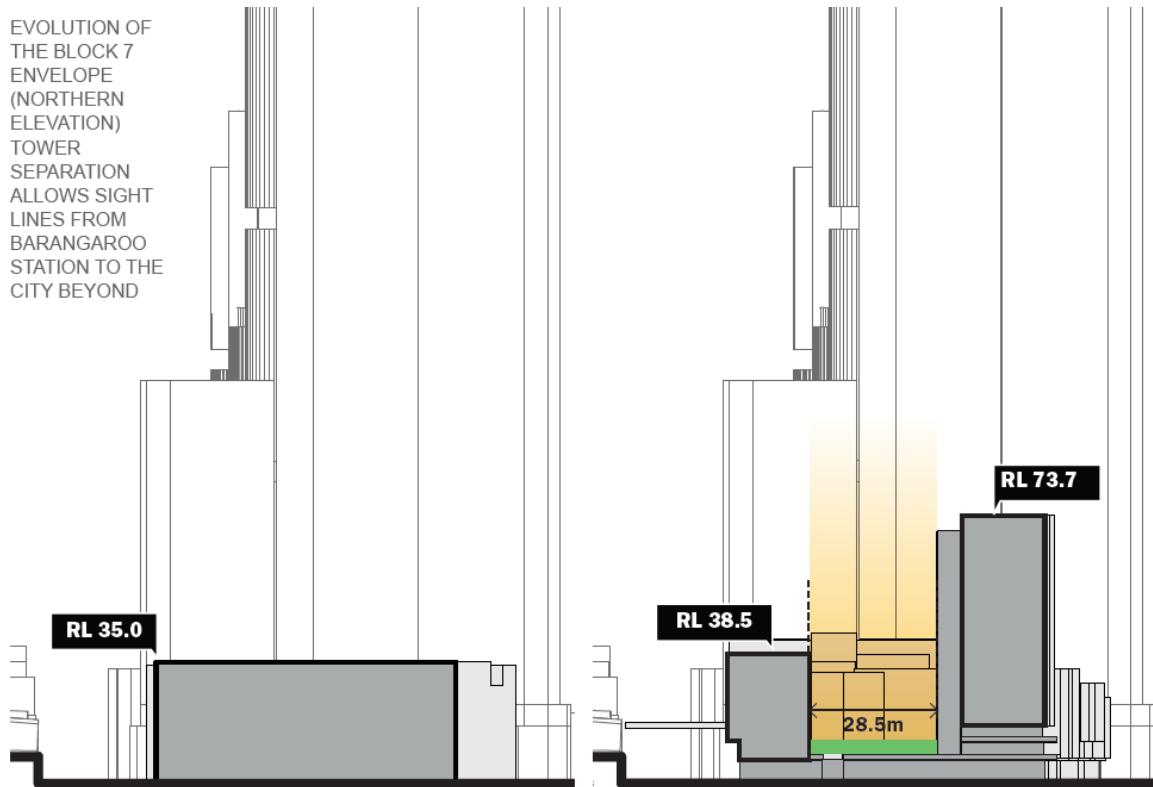


Figure 8.9 Building envelope section, north-south, indicating the proposed change in Block 7 massing to create Nawi Terrace and the corner tower. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

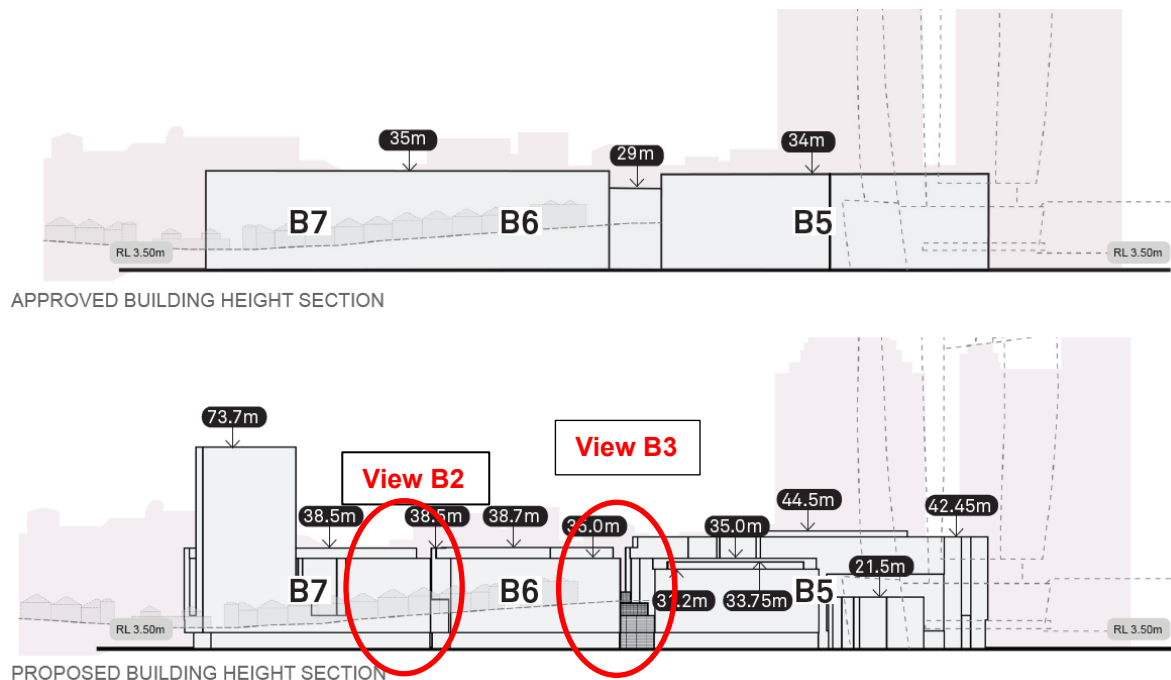


Figure 8.10 Comparison between the approved building height section and the MOD 9 proposed building height. Also visible is the articulation of Blocks 5, 6 and 7, which provides additional view corridors through the built form to those of the approved Concept Plan. The view corridors 'B2' and 'B3' proposed by MOD 9 are shown circled in red. A dotted line behind indicates the location of High Street. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)



Figure 8.11 View B1—3D representation looking north and west of Block 7. This view would not be further impacted by MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)



Figure 8.12 View corridor B2—3D representation of the western view along High Street to the water between Blocks 5 and 6, with the proposed building articulation of MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)



Figure 8.13 View corridor B3—3D representation of the western view along High Street to the water between Blocks 5 and 6, with the proposed building articulation of MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021) View and Visual Impact Catchment

8.5.3 View and Visual Impact Catchment

The following map from the AECOM View and Visual Impact Report 2021 provides an overview of the visual catchment relevant for consideration of heritage view impact. This catchment confirms key harbour and headland viewpoints referred to in this HAIS.



Figure 8.14 Visual catchment map for the Barangaroo site. (Source: AECOM, Barangaroo Modification 9: View and Visual Impact Assessment, 2021)

8.5.4 AECOM / GML Viewpoints

The following map from the AECOM View and Visual Impact Report 2021 provides a key to the AECOM observer locations. GML has overlaid the key to heritage views as defined by City Plan in 2007, which are also referred to in this HAIS.

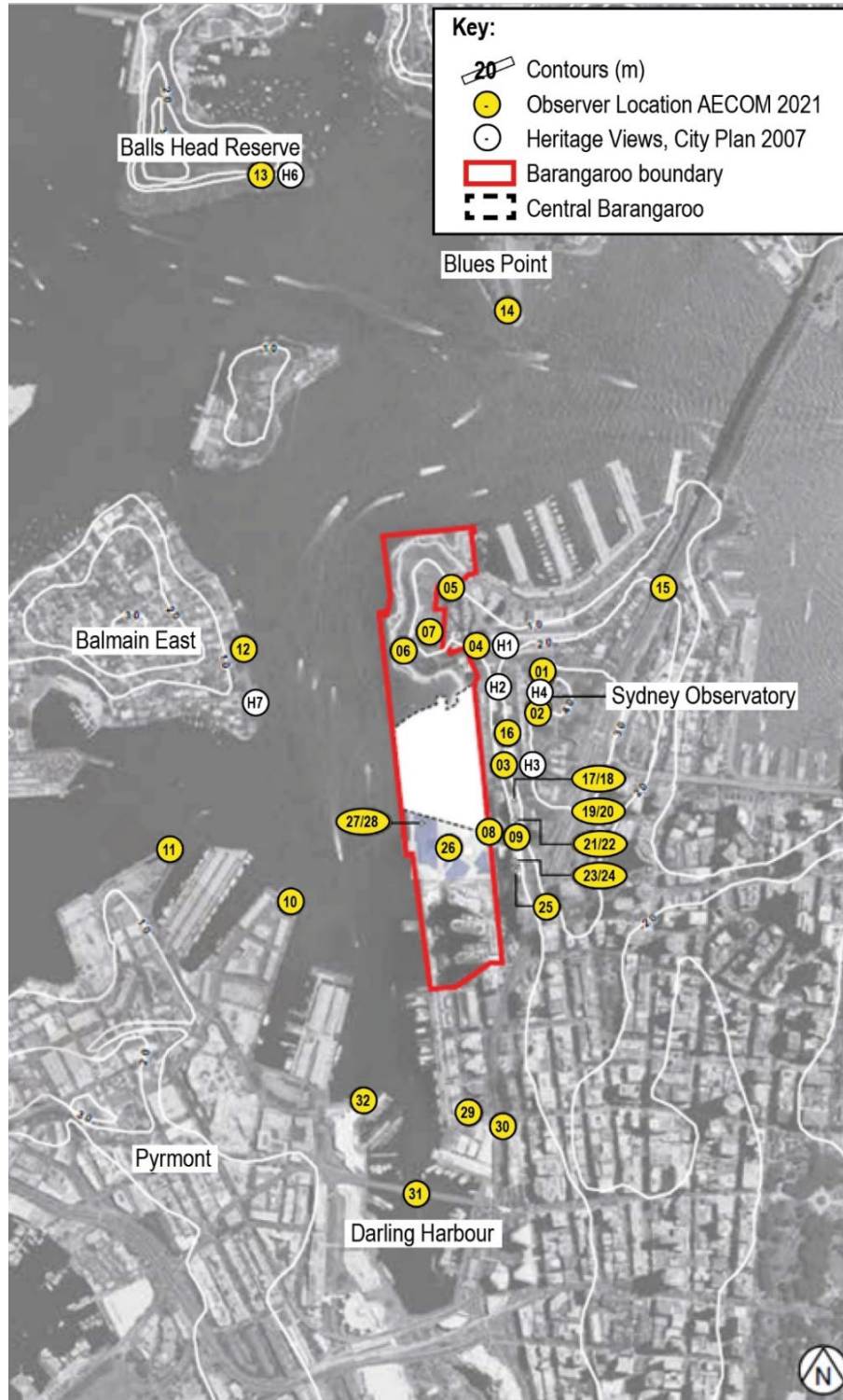


Figure 8.15 Map of observer locations prepared by AECOM, and numbering system adopted for this HAIS. GML heritage viewpoints are generally aligned with the AECOM observer locations. Note: not all AECOM observer locations are relevant or used in this HAIS. (Source: AECOM View and Visual Impact Report, 2021)

8.5.5 AECOM Key Views MOD 9

Key views relevant to Central Barangaroo as summarised by AECOM are:

- Views from Millers Point Conservation Area
- Views from the west looking towards Central Barangaroo.
- Views from Barangaroo South looking north, north-east towards the
- Sydney Harbour Bridge and the Sydney Opera House.

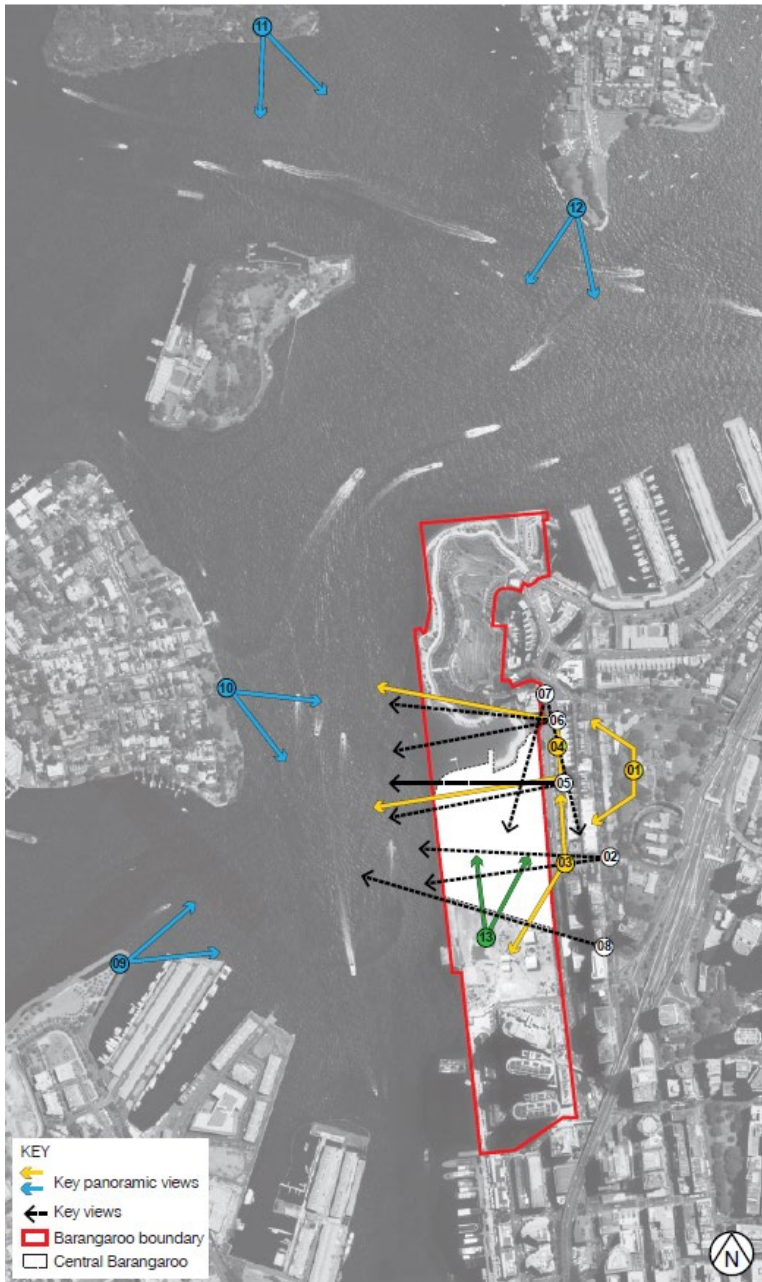


Figure 8.16 Key views to and from Millers Point Conservation Area. (Source: AECOM 2021, modified Google Map)

8.5.6 2006/2008 HIS Heritage Views Comparison with MOD 9 Heritage Views

Key heritage views were identified in the 2006/2008 HIS reports and are outlined below.




Current photographs of these key heritage views are presented adjacent to the proposed MOD 9 photomontages in Table 8.6 below. These comparative images have informed the assessments of view impacts of this HAIS.






Section 6.0 of this HAIS identified the heritage significance of the Millers Point and Dawes Point Conservation Area and Village Precinct, and the heritage items within the conservation area. The heritage significance of the conservation area derives from its relationship to the harbour and from its character as a substantially intact residential and maritime precinct that developed between the 1810s and the 1930s.

The changes proposed under MOD 9 would have a range of neutral to increased adverse heritage impacts on the conservation area beyond those of the current Concept Plan. Heritage impacts are generally considered in terms of views to and from the conservation area, and from places within it.

Key heritage views and impacts are assessed using photographic comparison and diagrams below in Section 8.5.7.

Table 8.6 Heritage Views and Photomontages, from City Plan HIS 2006 (amended 2008), Compared with MOD 9 Views.

City Plan 2006/2008 Heritage Views H1–H8	AECOM/GML Existing View (Based on City Plan 2006/2008 Heritage Views H1–H8)	AECOM/GML Proposed Equivalent View of MOD 9
 <p>Figure 8.17 View H1—2007 view from Munn Street Reserve (road bridge). (Source: City Plan, 2006/2008)</p>	 <p>Figure 8.18 View H1—existing view from Munn Street Reserve (road bridge). (Source: GML, 2020)</p> <p>(GML04—AECOM Observer Location 4)</p>	 <p>Figure 8.19 View H1—MOD 9 view from Munn Street Reserve (road bridge) looking south. (Source: AECOM, 2021)</p> <p>Heritage Comment: From this viewpoint there is considerable separation between High Street and the proposed MOD 9 buildings due to the width of Hickson Road. The proposed bridge connection to High Street would be visible from View H1.</p>

City Plan 2006/2008 Heritage Views H1–H8	AECOM/GML Existing View (Based on City Plan 2006/2008 Heritage Views H1–H8)	AECOM/GML Proposed Equivalent View of MOD 9
 <p>Figure 8.20 View H2—2007 view from High Street, north end. (Source: City Plan, 2006/2008)</p>	 <p>Figure 8.21 View H2—existing view from High Street, north end. (Source: GML, May 2021)</p>	<p>[No AECOM equivalent photomontage]</p> <p>Heritage Comment: MOD 9 from this viewpoint will remain largely open, with Barangaroo Station and Block 7 to the left of this view.</p>
 <p>Figure 8.22 View H3—2007 view from Hickson Road level looking west. (Source: City Plan, 2006/2008)</p>	 <p>Figure 8.23 View H3—existing view from High Street, south end. (Source: GML, 2020)(GML03—AECOM Observer Location 3)</p>	 <p>Figure 8.24 View H3—MOD 9 view from High Street, south end. (Source: AECOM, 2021). Heritage Comment: The proposed bridge connection and Barangaroo Steps located within Block 6 retains the view corridor from High Street to the western harbour foreshore. (Refer to Section 8.5.2 for the fully articulated form showing the proposed view corridor at street level to the harbour.)</p>

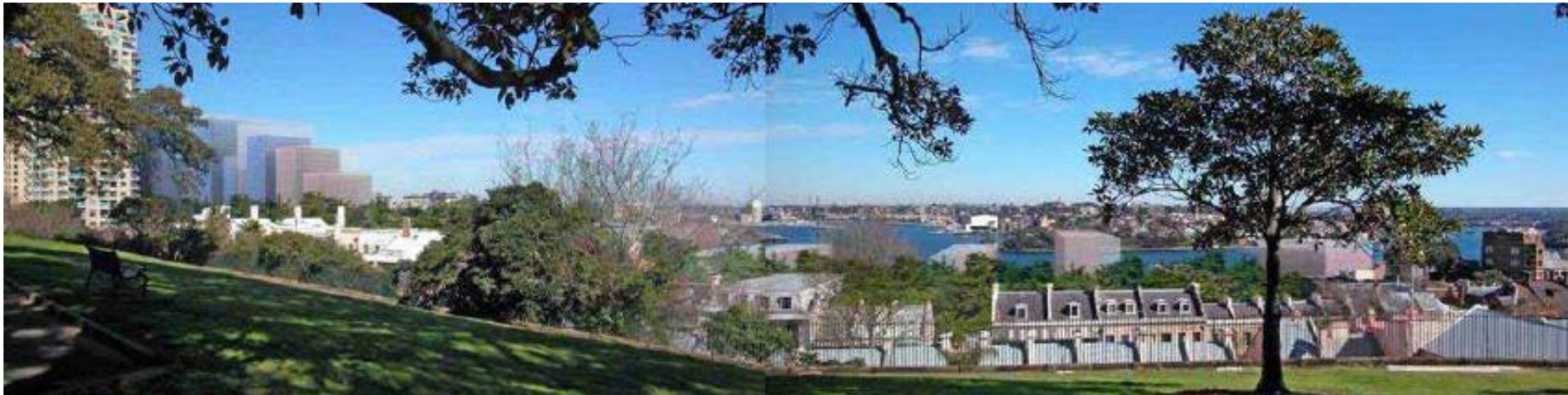


Figure 8.25 View H4—panorama—2007 view southwest from Observatory Hill. (Source: City Plan, 2006/2008)



Figure 8.26 View H4—panorama—MOD 9 views southwest from Observatory Hill. (Source: AECOM, 2021)

Heritage Comment: On the southern part of Central Barangaroo, only the upper levels of Blocks 5 and 6 would be visible from this Observatory Hill viewpoint, but there would be no notable impact on this view. On the northern part of Central Barangaroo, the upper levels of the Block 7 podium would be visible but have no notable impact from this viewpoint. The taller building on the northwest corner of Block 7 would be visible from this viewpoint and have some impact on this panorama. In the northern section of the panorama, Central Barangaroo's buildings would not be visible from this Observatory Hill viewpoint.







City Plan 2006/2008 Heritage Views H1–H8	AECOM/GML Existing View (Based on City Plan 2006/2008 Heritage Views H1–H8)	AECOM/GML Proposed Equivalent View of MOD 9
 <p>Figure 8.27 View H6—2007 view from Balls Head. (Source: City Plan, 2006/2008)</p>	 <p>Figure 8.28 View H6—2018 view from Balls Head. (Note: this 'existing' image doesn't include Crown Towers). (Source: AECOM, 2020.)</p> <p>(GML12 / AECOM, Observer Location 12)</p>	 <p>Figure 8.29 View H6—MOD 9 view from Balls Head. (Source: AECOM, 2021)</p> <p>Heritage Comment: The top of Block 7 and the corner tower of MOD 9 would be visible from this distant viewpoint.</p>
 <p>Figure 8.30 View H7—2007 view from Balmain East, Illoura Reserve. (Source: City Plan, 2006/2008)</p>	 <p>Figure 8.31 View H7—2018 view from Balmain East, Illoura Reserve. (Note: this 'existing' image doesn't include Crown Towers). (Source: AECOM, 2020) (GML12 / AECOM, Observer Location 12)</p>	 <p>Figure 8.32 View H7—MOD 9 view from Balmain East, Illoura Reserve. (Source: AECOM, 2021)</p> <p>Heritage Comment: Buildings 5, 6 and 7 of MOD 9 would all be visible from this viewpoint, and would preclude views of some individual heritage items and part of the western edge of Millers Point.</p>



Figure 8.33 View H8—2007 view from Pirrama Park, Pyrmont.
(Source: City Plan, 2006/2008)



Figure 8.34 View H8—2018 existing view from Pirrama Park, Pyrmont. (Note: this 'existing' image doesn't include Crown Towers). (Source: AECOM, 2020) (Source: AECOM, 2021)

(AECOM, Observer Location 11 / GML11)



Figure 8.35 View H8—MOD 9 view from Pirrama Park, Pyrmont.
(Source: AECOM, 2021)

Heritage Comment: Buildings 5, 6 and 7 of MOD 9 would all be visible from this viewpoint, and would preclude views of the majority of the Millers Point context and associated heritage items.

8.5.7 GML Heritage Views Analysis

Comparison—Approved Concept Plan Views and MOD 9 Views

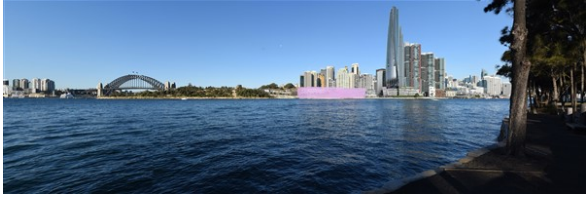






Select photomontages of views under the approved Concept Plan and the proposed MOD 9 views provided in the AECOM View and Visual Impact Report 2021 are included below to assist heritage impact assessment. These comparative images have informed the assessments in Section 8.3 above. Not all AECOM views have been included—only those relevant to heritage. Photographs are referred to by AECOM Observer Location and have not been given report figure numbers.

Table 8.7 Approved Barangaroo Concept Plan (Approved and Built Form) Compared with MOD 9 Views 2021 (Proposed Building Form).

Approved Barangaroo Concept Plan (Approved and Built Form)	MOD 9 (Proposed) AECOM 2021 Equivalent View
GML01, AECOM Observer Location 1 	
GML02, AECOM Observer Location 2 	
GML03, AECOM Observer Location 3 	
GML04, AECOM Observer Location 4 	
GML05, AECOM Observer Location 5 	

GML Heritage

MOD 10 (Approved) Photomontage View	MOD 9 AECOM 2021 Equivalent View
<p>GML06, AECOM Observer Location 6</p> 	
<p>GML07, AECOM Observer Location 7</p> 	
<p>GML08, AECOM Observer Location 8</p> 	
<p>GML09, AECOM Observer Location 9</p> 	
<p>GML10, AECOM Observer Location 10</p> 	
<p>GML11, AECOM Observer Location 11</p> 	

MOD 8 (Now MOD 10) Photomontage View	MOD 9 AECOM 2021 Equivalent View
<p>GML12, AECOM Observer Location 12</p> 	
<p>GML13, AECOM Observer Location 13</p> 	
<p>GML14, AECOM Observer Location 14</p> 	
<p>GML15, AECOM Observer Location 15</p> 	

View Analysis Diagrams

The following plans show the main GML viewer locations referred to in this HAIS, and a visual overview of the impact comparisons of the proposed MOD 9 building envelopes in relation to the approved Concept Plan. These images provide an approximate basis for identifying the degree of impact on heritage views as described in Section 8.3 above.

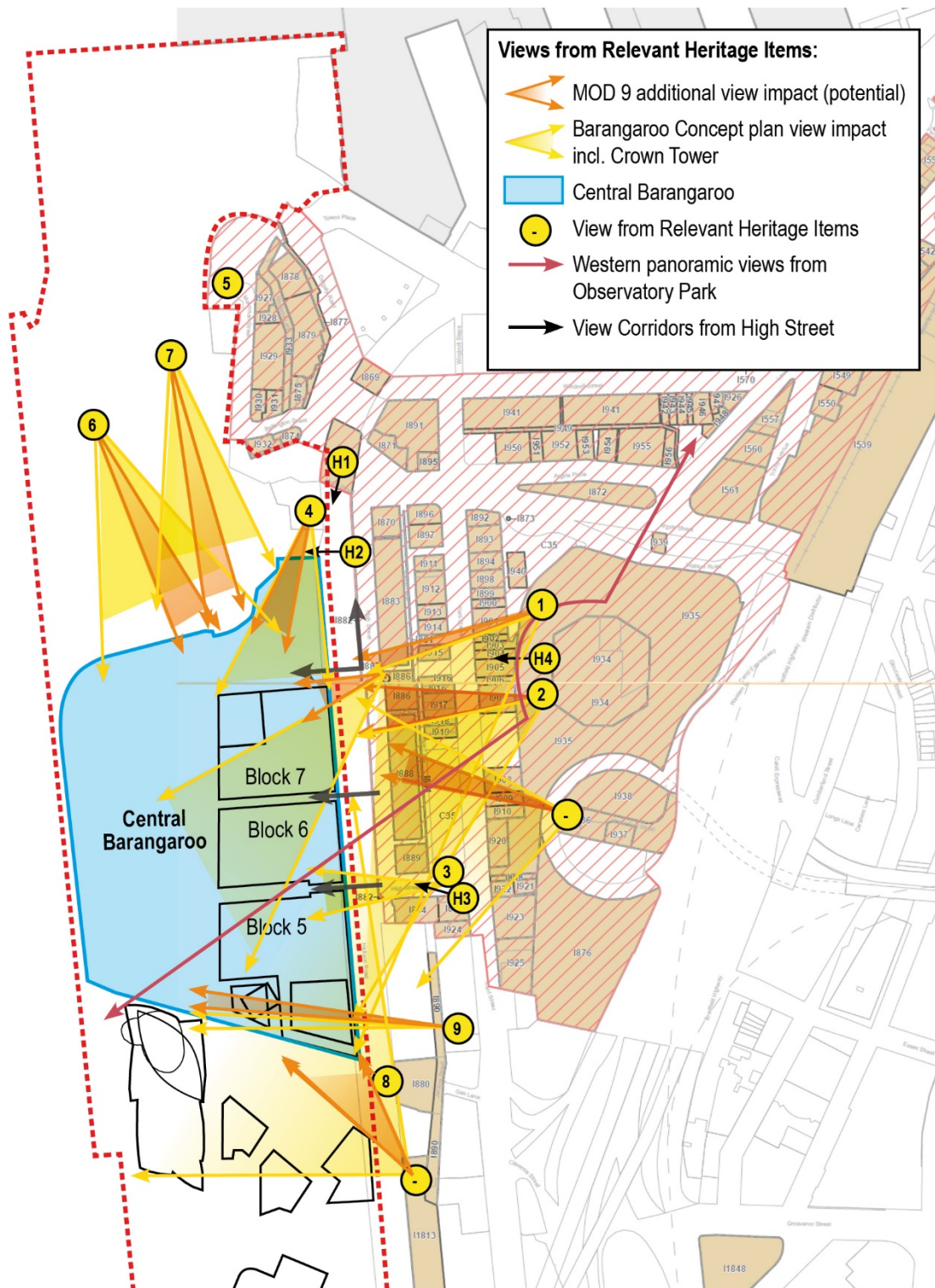


Figure 8.36 Views from key heritage item viewpoints (GML heritage viewpoint numbers). The black arrows indicate the views B1, B2 and B3 shown in Figure 8.10 above. (Source: City of Sydney Heritage Plan, with overlay by GML, 2021)

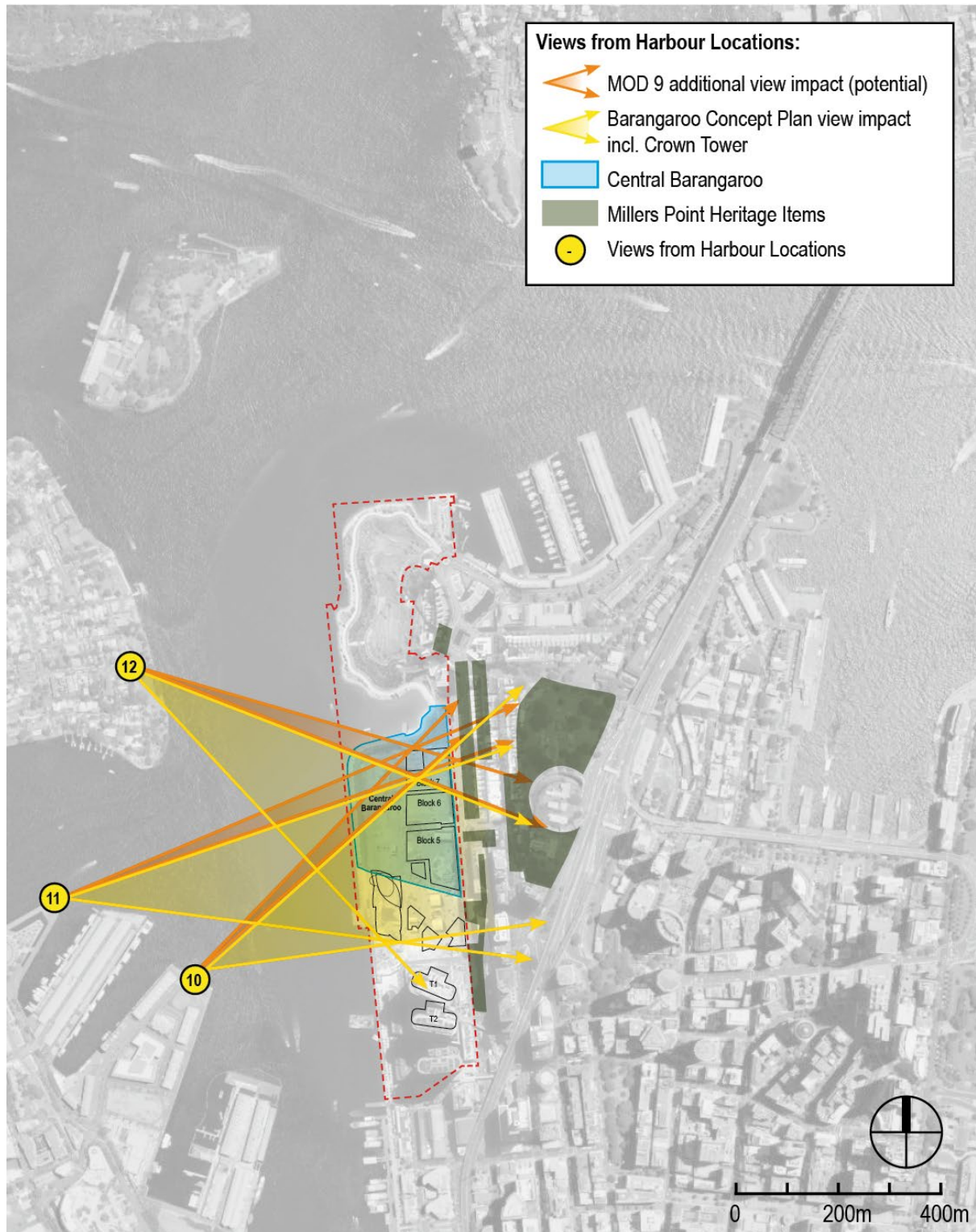


Figure 8.37 Views to heritage items from heritage items (GML heritage viewpoint numbers). (Source: SIX Maps, with overlay by GML, 2021)

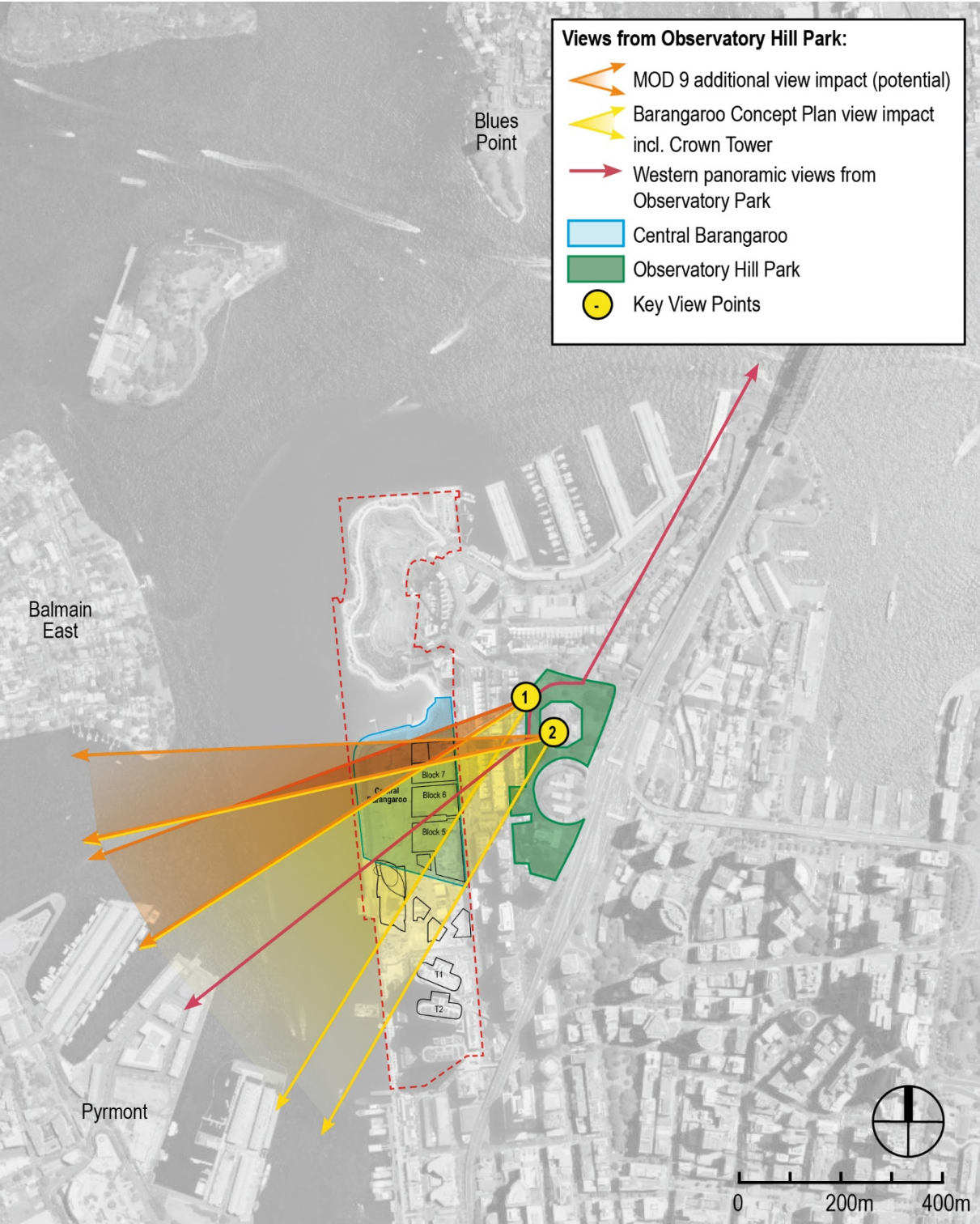


Figure 8.38 Views from Observatory Park (and panorama) (GML heritage viewpoint numbers). (Source: SIX Maps, with overlay by GML, 2021)



Figure 8.39 Preserved Panoramic views from Observatory Park and impacts of Block 7 tower form, as shown in 'Central Barangaroo Urban Design Report'. 'A' District and harbour views to and from Observatory Hill Park, 'B' Local views along existing and new streets / connections 'C' Sydney Observatory sky views. (Source: Hassell, 2021)

8.6 Sky View Loss—Sydney Observatory Site

The AECOM Sky View Loss Report 2021 and the appended Unisearch Sky View Impact Report 2021 assessed the potential sky view loss impacts on the Sydney Observatory in relation to the additional development height proposed under MOD 9.

The reports addressed the DGRs for the MOD 9 Concept Plan relating to Sydney Observatory, and concluded that:

that there will be no practical additional reduction in sky view as a result of the Central Barangaroo MOD 9 development, and very limited to no impact arising from additional light spill.

In summary, the AECOM Sky View Loss Report 2021 identified the following important considerations for the functioning of the Sydney Observatory:

- clear view requirements to the western sky; and
- light spill.

In completing the Sky View Impact Assessment, AECOM assessed the following elements in response to the Mod 6 DRG requirements and the concerns raised by Sydney Observatory regarding:

- Clear view requirements azimuth 210° to 225°.
 - For the azimuth range 210° to 225°, the Block 5 and Block 6 building envelope heights are lower than the Sydney Observatory north dome and there is therefore no new sky view obstruction for this azimuth range by the built form of Central Barangaroo.
- Clear view requirements azimuth 236° to 303°.
 - For the azimuth range 236° to 303°, the Block 7 tower element is higher than the Sydney Observatory north dome; however, due to the viewing angle from the Observatory to the Block 7 tower being less than the practical viewing angle of 10°, there will be no practical impact on the sky view in this azimuth range.
- Lighting impacts.
 - Due to the relatively low building envelope heights in Central Barangaroo and the highly illuminated environment that it will sit within, the Central Barangaroo development is not anticipated to have significant negative impact on the ability of the Observatory to view the night sky. Light spill mitigation measures are also expected to be incorporated in line with current standards. This will further reduce any possible impact.

This HAIS relies on the findings of the AECOM and Unisearch reports, summarised in this section, and recommends that these findings are reviewed by the Sydney Observatory, Museum of Applied Arts and Sciences.

The following images from the Urban Design Report and the AECOM Sky View Loss Report 2021 are included for reference.

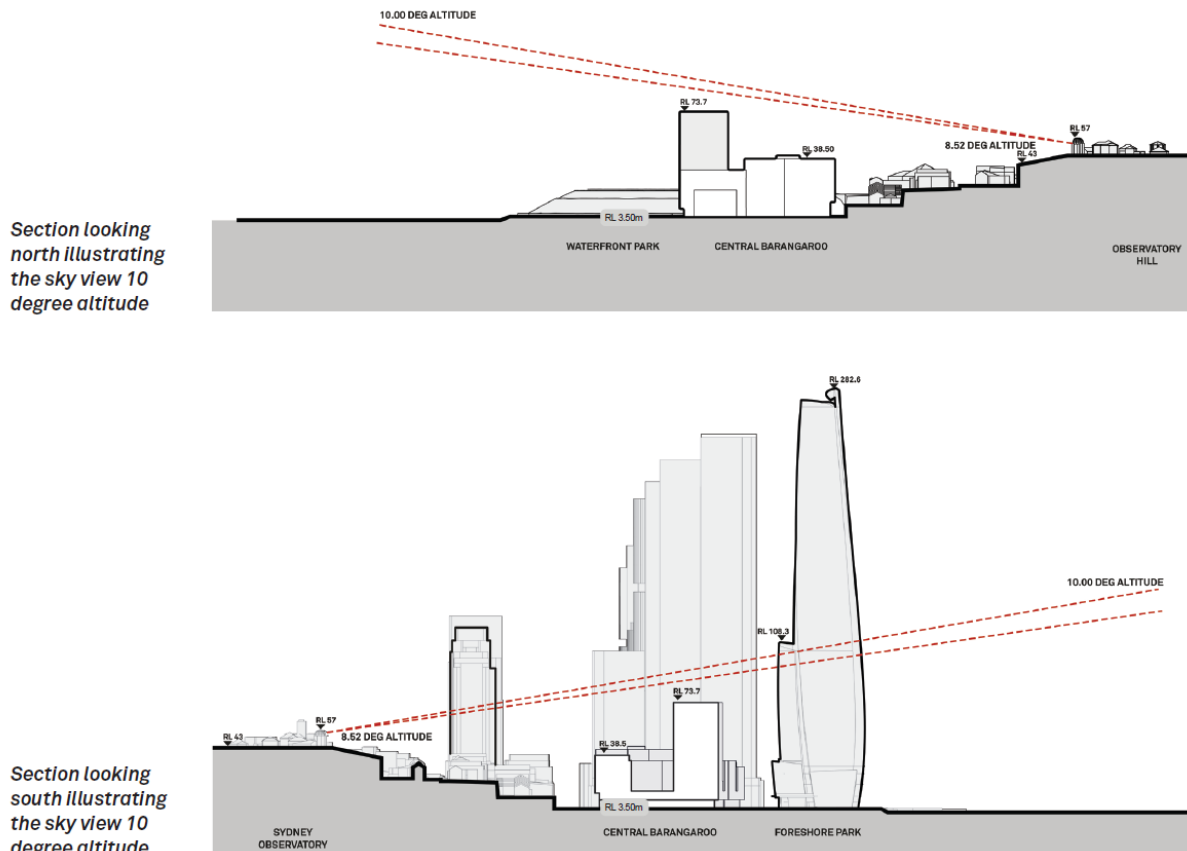


Figure 8.40 Cross sections through Central Barangaroo in context showing sight lines from Sydney Observatory at 10 degree altitude in relation to the built form of Block 7 of MOD 9. (Source: Central Barangaroo Urban Design Report, Hassell, 2021)

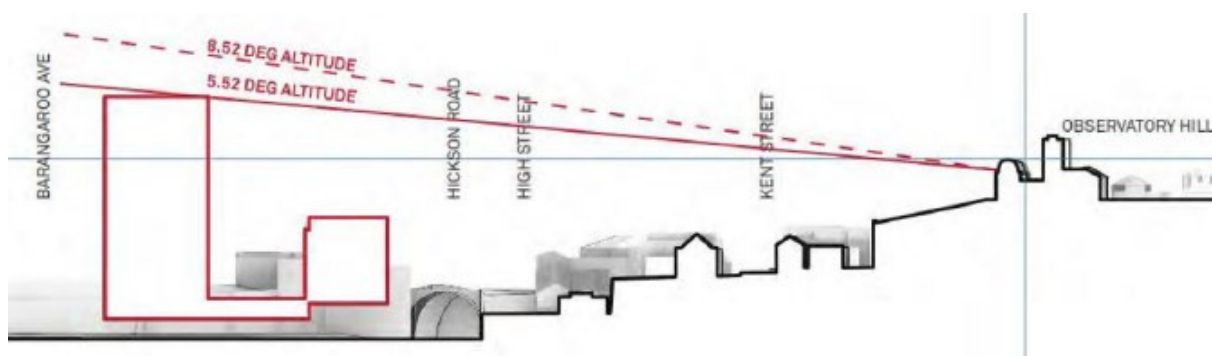


Figure 8.41 Sectional Elevation A, showing the altitude of the corner tower of Block 7 of MOD 9 and viewing angles from the north dome of Sydney Observatory. Figure as included by AECOM from figure prepared by Hassell, November 2021. (Source: AECOM View and Visual Impact Report 2021, Figure 6)

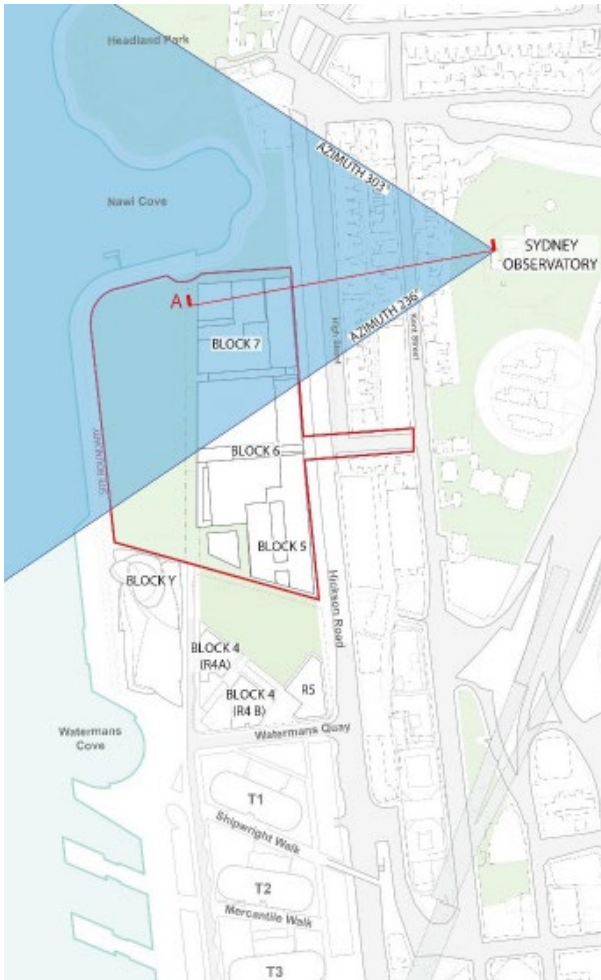


Figure 8.42 Site plan showing view segment over Block 7 of MOD 9 and azimuth clear zone range 236° to 303° in relation to the Barangaroo development. Figure as amended by AECOM from figure prepared by Hassell, December 2018. (Source: AECOM 2021, Figure 5)

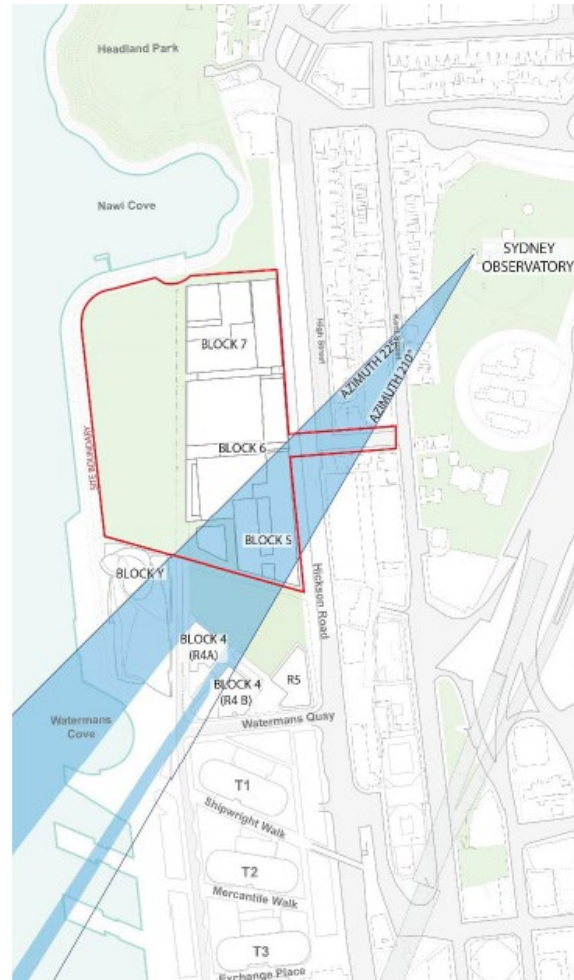


Figure 8.43 Site plan showing view segment over Block 5 of MOD 9 and azimuth clear zone range 210° to 225° in relation to the Barangaroo development. Figure as amended by AECOM from figure prepared by Hassell, November 2021. (Source: AECOM 2021, Figure 4)

8.7 Endnotes

- ¹ This assessment is based on the description of proposed remediation works and the impact of these works on surviving archaeological remains in the affected area, as described in Casey & Lowe, Heritage Impact Statement—SSD 6533-2014 Remediation Development Application, EPA Declaration Area 21122—Non-Indigenous Archaeology Block 5, Barangaroo Central (Draft Update 4), report to Lend Lease (Millers Point), June 2014.

9.0 Conclusions, Recommendations and Mitigation Measures

The following conclusions and mitigation measures summarise the heritage impact assessments in Section 8.0 of this HAIS.

This HAIS has been prepared in response to the DGRs for the Environmental Assessment for MOD 9 to the Barangaroo Concept Plan, in particular DGR 19, Heritage. Assessments of MOD 9 have been made in the context of the approved and modified Barangaroo Concept Plan, the heritage impacts of which have been previously considered.

9.1 Conclusions

9.1.1 Aboriginal Archaeology

MOD 9 proposed modifications to the locations and footprint of Blocks 5, 6 and 7 would be unlikely to result in any Aboriginal archaeological impacts. The proposed modifications would not include any additional Aboriginal archaeological impacts beyond those in the approved Concept Plan.

- The study area contains no previously identified Aboriginal sites or places.
- Two Aboriginal sites are recorded to the north of the study area, within the Barangaroo Reserve precinct (both 'destroyed'), and two others are located on the sandstone ridge outside of the Barangaroo site, now the location of the freeway onto the Harbour Bridge. Other recorded Aboriginal sites are located elsewhere in the CBD, within different landforms to those surrounding the current study area (for eg 200 George Street) and some distance away.
- Owing to the natural topography of the foreshore, it is likely much of the study area would not have been utilised by local Aboriginal peoples. Any evidence of Aboriginal use of the area is likely to have been disturbed or removed by subsequent historical use and substantial development of the site.
- Central Barangaroo is assessed as having nil potential to contain in situ Aboriginal archaeological evidence.

9.1.2 Historical Archaeology

MOD 9 proposes minor reconfiguration of the locations and footprints of Blocks 5, 6 and 7. The revised locations of these proposed built elements should not result in any additional historical archaeological impacts from the approved Concept Plan.

- Most of Central Barangaroo is on reclaimed land.
- Central Barangaroo remained relatively undeveloped until the 1860s, owing to the original steep topography of this area.
- The study area has nil to low potential to contain historical archaeological remains associated with late eighteenth or early to mid-nineteenth century historical development and occupation of the site.
- The northeastern part of the study area has moderate potential to contain historical archaeological evidence associated with maritime-related development during the mid to late nineteenth century.

This evidence may include structural supports for wharves/jetties, remnant seawalls, and other infrastructure.

- The northeastern part of the study area has nil to low potential to contain archaeological evidence associated with the operations of Cuthbert's shipyard, including working surfaces, remnant seawalls, jetties and wharf structures.
- The southeastern part of the study area included the former AGL gasworks, which extended into the study area in the mid to late nineteenth century. This area falls within a zone identified as contaminated (DECCW Declaration Area N21122) and covers part of Block 5. Any surviving archaeological remains in the contaminated zone should have been removed during soil remediation works. Should evidence of the gasworks exist outside of the contaminated area, this would be of state significance.
- Most of the study area has high potential to contain historical archaeological evidence associated with redevelopment of the area during the early to mid-twentieth century. This evidence may include structural supports for wharves/jetties and associated infrastructure, as well as fill deposits introduced for progressive reclamation of the site. The study area may also include evidence of the impact of large-scale resumption, demolition, reclamation and redevelopment on the remains of earlier development.
- Any remains associated with mid to late nineteenth-century maritime and industrial development and operation of the site would be of local significance and have some archaeological research potential.
- Any remains of unregistered shipwrecks or scuttled boats could be of local or state significance.
- Any remains associated with late nineteenth to twentieth-century reclamation and redevelopment of the site would have little or no archaeological significance or research potential.

9.1.3 Built Heritage—Physical, Historical Connections and Views

This section summarises the likely impacts of the modification on the setting and on Millers Point and Dawes Point Conservation Area and Millers Point and Dawes Village Precinct (which also contain individual items of state heritage significance), heritage items within the Barangaroo site, heritage items in the vicinity of Central Barangaroo (including Observatory Park and the Sydney Observatory site) and established heritage views. There are no identified impacts on the Walsh Bay Wharves Precinct. There are no built heritage items in Central Barangaroo.

MOD 9 features a fine-grained response within Central Barangaroo and to the adjacent setting (including view corridors between Blocks 5 and 6 and Blocks 6 and 7), variable built height and form, and a taller landmark at Block 7 (which also allows for design improvements that have urban and architectural benefits over the approved Concept Plan, and are also likely to have a range of additional positive and adverse heritage impacts to those identified in the approved Concept Plan). These heritage impacts are summarised below.

Physical Impacts

While the High Street Pedestrian Bridge proposed with MOD 9 is supportable in principle in heritage terms, and there is historic precedent for this type of high-level connection, there is also potential to

adversely impact the heritage listed Palisade Fence and High Steps which form the western edge of the Conservation Area/Precinct.

- The Barangaroo Steps and High Street Connection is shown to connect at the heritage item 'Palisade Fence and High Steps', which forms part of the Hickson Road Retaining Wall at the edge of the Millers Point and Dawes Point Village Conservation Area/Precinct. The proposed bridge connection to High Street has the potential to impact significant fabric of the heritage item and precinct (and use of the steps).

Historical Connections of Millers Point

Historical connections through the Millers Point and Dawes Point Conservation Area and High Street to the western harbour foreshore, will be enhanced by MOD 9 in the form of east–west pedestrian laneways between buildings 5, 6 and 7 and the High Street Pedestrian Bridge.

Views, Vistas and Setting

Views and visual connections of the Millers Point and Dawes Point Village Conservation Area / Precinct (and its heritage items including Sydney Observatory and Observatory Park) to the former wharf area and the harbour help demonstrate the historical relationship between this precinct and the harbour. The diagrams and photographs of Section 8.0 show comparisons between the existing views, the views as approved under the Barangaroo Concept Plan and the views of the proposed MOD 9. The impacts are summarised as follows:

- Approved building heights in the current Barangaroo Concept Plan are greater than some individual buildings in the Millers Point and Dawes Point Village Conservation Area / Precinct, notably those in High Street. The proposed MOD 9 seeks to further increase the general heights of Blocks 5, 6 and 7 (by 8.45m, 9.7m and 3.5m respectively) which would have a minor additional adverse impact on general views to and from Millers Point.
 - There would be little or no additional impact overall on views to and from the harbour from the western edge of the precinct from , which would be obscured by the development of the approved Concept Plan.
 - Views to the harbour from High Street properties will be impacted by the built form of the current approved Barangaroo Concept Plan, which would present as a wall, particularly to the southern end of High Street. The historic visual connection between this part of the precinct and the harbour would be similarly impacted by MOD 9, despite the increased building heights proposed. Yet public views west to the harbour will be partially maintained via the proposed pedestrian bridge and Barangaroo Steps, creating a view corridor between Blocks 5 and 6 aligned on axis with High Street (Location GML03) and a view corridor along Street C between Blocks 6 and 7.
 - The vista north–south along High Street, maintained under the current approved Barangaroo Concept Plan, would not be further impacted as a result of the MOD 9 proposal's increased heights of Blocks 5, 6 and 7.
 - Views to Observatory Park from public spaces on opposite foreshores (Illoura Reserve, Blues Point and Balls Head) will not be significantly impacted by the increased heights of Blocks 5, 6 and 7, as proposed under MOD 9.

- Views to Observatory Park from Ballarat Park and Pirrama Park will involve an additional minor loss of views to the tops of trees in Observatory Park and the Observatory itself, as proposed under MOD 9.
 - Panoramic views from Observatory Park, and from the rear of some properties on the western side of Kent Street, to the southern areas of the harbour (Pyrmont) will incur some additional minor loss of views of the horizon and harbour as a result of the increase in the heights of Blocks 5, 6 and 7.
- The proposed MOD 9 seeks to include a taller building at the northwest corner of Block 7 (an increase from 33 RL as approved to a height of 73.7 RL) which represents a variable visual impact depending on the viewpoint. As the current approved Barangaroo Concept Plan does not include a taller building in this location, the additional heritage impacts on the Millers Point and Dawes Point Village Conservation Area / Precinct are summarised below:
 - The taller building will be most visible from western harbour viewpoints, and will impact views of Observatory Hill and Sydney Observatory (roof dome 54 RL) most from viewpoints 10, 11 and 12 (Ballarat Park, Pirrama Park and Illoura Reserve).
 - The taller building will typically be visible from higher or more distant viewpoints and heritage items within Millers Point. The additional impact will result from a narrow segment of view loss behind the tower, which would most affect viewpoints 1, 2 and 4 (Observatory Park, Sydney Observatory and Dalgety Bond Store). The additional loss of views to the horizon would impact the panoramic outlook and setting of Observatory Park to the west and southwest.
 - No view loss or change in harbour connection is anticipated for the Walsh Bay Precinct with the approved Concept Plan or the proposed MOD 9.
 - The proposed tower will be visible from harbour locations further north, but would not impact their significant views.
- Some positive impacts would result from the variable building heights and greater modulation of the urban form, which allow for view corridors west through Central Barangaroo. The Barangaroo Steps and High Street Connection would potentially impact the 2006/2008 Heritage View H1, and the GML viewpoints 4 and 8. The proposed bridge connection would be visible across Hickson Road, and approximates a historical connection from High Street to the wharves, since demolished.

Sky View Loss in relation to Sydney Observatory

- The proposed MOD 9 seeks to include a taller building at the northwest corner of Block 7 (to a height of 73.7 RL), which was not part of the approved Concept Plan. The corner tower of MOD 9 will be visible from western harbour viewpoints, and will impact views of Observatory Hill and Sydney Observatory (roof dome 54 RL). However, the AECOM Sky View Loss Report 2021 and the appended Unisearch Sky View Impact Report 2021 concluded that there will be:
 - no practical impact on sky views from the dome as a result of the additional heights proposed. Therefore, MOD 9 will not adversely impact the significance of the Sydney Observatory as the ‘longest serving early scientific building in the State’; and

- very limited to no impact arising from additional light spill, noting the mitigation measures proposed.
- This HAIS relies on these expert findings.

9.2 Recommendations and Mitigation Measures

9.2.1 Aboriginal Archaeology

The proposed future development of the Central Barangaroo precinct could commence without the need for further Aboriginal archaeological assessment or physical archaeological investigation of the site.

- In the event that any Aboriginal archaeological evidence or objects were to be discovered at the site, all works in the affected area/s must cease, Heritage NSW must be notified under Section 91 of the NPW Act, and a suitable procedure for investigation must be negotiated. Further assessment or documentation may be required before site works could recommence in the affected area/s.
- In the unlikely event that human remains are discovered at the site, the findings should immediately be reported to the NSW Police and the NSW Coroner's Office. If the remains are suspected to be Aboriginal, Heritage NSW should also be contacted and a specialist consulted to determine the nature of the remains.

9.2.2 Historical Archaeology

The historical archaeological impacts of any specific development proposals for Central Barangaroo should be considered as part of any future development applications for the site. Central Barangaroo is flanked to the north, east and south by archaeological deposits of local and potentially state significance. The likelihood that these deposits will be exposed by the proposed MOD 9 is nil to low.

The following recommendations are made for the management of the site's historical archaeological potential and significance:

- A suitably qualified archaeologist with experience in Sydney maritime archaeology should be on call for any unexpected archaeological finds across the site.
- All contractors should undergo a heritage briefing to understand the potential for, and significance of, archaeological finds within Central Barangaroo. Areas of specific caution include the northeastern corner of the site, where Cuthbert's shipyard may have extended, and the southeastern corner of the site, where the AGL gasworks was located.
- If any unexpected historical archaeological remains are discovered in the northeastern or southeastern areas of the site, works in the affected area/s should cease and the on-call archaeologist and Heritage NSW should be notified under Section 146 of the Heritage Act. Further assessment may be required before site works could recommence in the affected areas.
- Proposed excavation or subsurface disturbance in other parts of Central Barangaroo could be undertaken without the need for archaeological investigation or recording.
- If archaeological relics are encountered, the approach and methodology for investigation would be determined by the proposed works in this area.

- If any historical archaeological relics are uncovered, opportunities for interpretation of these remains should be considered as part of the broader Barangaroo site.

9.2.3 Built Heritage

Physical

- Potential adverse impacts on Palisade Fence and High Steps could be avoided or mitigated at design development stage. This could be achieved by:
 - Restricting removal of the Palisade Fence to the modern infill section at the southernmost end. Part of the High Street garden land would also be required to avoid impact on the significant fabric of the Palisade Fence and High Steps and allow for its continued public use connecting Hickson Road to High Street. The proposed Barangaroo Steps could remain visually aligned with High Street.
 - Considering the viability of re-establishing the central location of the original bridge connection over Hickson Road along High Street, which existed from c1920s to c1960s, or the northernmost section of the fence at the former northern steps, as locations for connections from Central Barangaroo to High Street. Evidence of these connections remains in the form of gate posts and an infill panel.
- This will require heritage advice to ensure minimal adverse impact to significant heritage fabric of the High Street Palisade fence, the Hickson Road Wall and the High Steps (and their ongoing use) that all form the western edge of the Millers Point and Dawes Point Village Precinct.

Historical Connections to Millers Point

- The urban form of MOD 9 provides for better connections from Central Barangaroo and the harbour to Millers Point, than the approved Concept Plan. These connections draw from the historical connections and fine-grained built form of the adjacent Millers Point and Dawes Point Conservation Area / Millers Point and Dawes Village Precinct.
 - The proposed High Street Pedestrian Bridge, aligned with High Street (at the southern end), has the potential to positively re-establish historic pedestrian connections from the harbour foreshore and Hickson Road to Millers Point and Dawes Point Conservation Area, which would present urban benefits.

Views, Vistas and Setting

- The variable building heights of MOD 9, which provide for increased height overall and a tower at the northwestern corner of Block 7, allow for a range of other urban and architectural design responses to the building envelope, which include:
 - the tower would act as a landmark for Central Barangaroo and the Barangaroo Station (Metro);
 - a fine-grained permeable response within the built form of Central Barangaroo;
 - the creation of view corridors through the separation of Blocks 5 and 6, and Blocks 6 and 7; and

- the creation of a north-facing public space—Nawi Terrace as a new north facing public space within Block 7, directly connected into Barangaroo Station.
- The visual heritage impacts of the variable building heights (and the taller corner tower) of MOD 9 on the High Street Terraces at the western edge of the Millers Point and Dawes Point Conservation Area / Millers Point and Dawes Village Precinct will be mitigated to some degree by:
 - the physical separation of approximately 40m between High Street and the proposed built form at Central Barangaroo. There is little or no change in this regard with MOD 9, despite the additional height of the corner tower of Block 7;
 - the fine-grained modulation of the built form of Central Barangaroo in MOD 9, resulting in a network of public and semi-public pedestrian laneways, which is more consistent with the historic urban form of the adjacent Millers Point and Dawes Point Conservation Area / Millers Point and Dawes Village Precinct;
 - the clearly articulated view corridors through Central Barangaroo, in particular the view corridors between Blocks 5, 6 and 7, which maintain a visual connection to the harbour from Observatory Hill, down Agar Steps and along the south end of High Street; and
 - heritage input at the design development stage.
- The final built form of Central Barangaroo should seek to optimise views to and from High Street and the Millers Point/Dawes Point Village Precinct to the harbour. This could be achieved by further modulating the built form (from that indicated by the proposed building envelopes of MOD 9, to optimise views to the harbour.
- This will require heritage advice to ensure the architectural features of Blocks 5, 6 and 7, and in particular the corner tower) are designed to minimise visual impacts on the Millers Point and Dawes Point Village Precinct. through design considerations including built form / shape, materials, colour, reflectivity etc.

Sky View Loss in relation to Sydney Observatory

- AECOM Sky View Loss Report 2021 and the appended Unisearch Sky View Impact Report 2021 should be reviewed by the Sydney Observatory, Museum of Applied Arts and Sciences (MAAS) to review findings which indicate that:
 - the proposed additional height of the tower of Block 7 will have no practical impact on sky views from the Observatory's north dome and therefore will not adversely impact the significance of the Sydney Observatory; and
 - light spill mitigation measures of the Central Barangaroo development will adequately mitigate potential negative impacts on the ability of the Observatory to view the night sky.

Future Development Proposals

- The heritage impacts of any development proposals for Central Barangaroo should be reviewed, and detailed heritage guidance and heritage impact assessments should be prepared, as part of any future development applications for the site. This should include:

GML Heritage

- The urban and architectural design development for the proposed Blocks 5, 6 and 7 (including its corner tower)
 - The proposed bridge connection to High Street.
- The heritage impacts of any specific development proposals relating to the cultural and exhibition facility in the existing Cutaway beneath Barangaroo Reserve should be reviewed as part of any future development applications for the site.