



Integrated
Management
System

Planning Approval Consistency Assessment Form

SM ES-FT-414

Sydney Metro Integrated Management System (IMS)

Assessment Name:	Barangaroo Additional Areas for Implementing the SDPP
Prepared by:	Pam Tummers
Prepared for:	Sydney Metro
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The Planning Approval Consistency Assessment Form should be completed in accordance with the Sydney Metro Planning Approval Consistency Assessment Procedure (SM ES-PW-314) and Sydney Metro Environmental Planning and Approval Manual (SM ES-ST-216)

1.0 Existing Approved Project

Planning approval reference details (Application/Document No. (including modifications)):

SS115_7400 Sydney Metro City & Southwest – Chatswood to Sydenham

Mod 1 Victoria Cross Station, Artarmon Substation and minor administrative mod

Mod 2 Central Walk mod

Mod 3 Martin Place Station mod

Mod 4 Sydenham Station and Sydney Metro Trains Facility South mod

Mod 5 Blues Acoustic Shed

Mod 6 Administrative Changes

Mod 7 Administrative Changes

Date of determination:

Infrastructure Approval date 09 January 2017

Modification 1 Approval date 18 October 2017

Modification 4 Approval date 13 December 2017

Modification 2 Approval date 21 December 2017

Modification 3 Approval date 22 March 2018

Modification 5 Approval date 02 November 2018

Modification 6 Approval date 21 February 2019

Modification 7 Approval date 29 June 2020

Consistency Assessment Traction Substation and Construction Footprint at Barangaroo Station (TfNSW 7 Approved 9 May 2017)

Consistency Assessment Protection of High Street Cutting (TfNSW 9 Approved 6 September 2017)

Consistency Assessment Barangaroo Utilities Augmentation (TfNSW 10 Approved 11 December 2017)

Consistency Assessment Barangaroo Temporary Additional Land (TfNSW 23 Approved 11 October 2017)

Consistency Assessment Barangaroo Northern Shaft (TfNSW 20 Approved 14 March 2018)

Consistency Assessment Barangaroo Additional Land (TfNSW 25 Approved 27 June 2018)

Type of planning approval:
Critical State Significant Infrastructure

Description of existing approved project you are assessing for consistency:

The Chatswood to Sydenham component of Sydney Metro City & Southwest comprises a new metro rail line, approximately 16 kilometres long, between Chatswood and Sydenham. New metro stations will be provided at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo, as well as a new underground metro platforms provided at Central Station.

Section 6.6.3 of the Environmental Impact Statement outlines the description of the approved infrastructure at Barangaroo Station. The indicative layout provided in Figure 6-16 of the EIS shows two station entries both to the west of Hickson Road – one to the north (in North Cove Park) and one to the south (north of the proposed Agar Street and integrated with future development).

The station strategy for Barangaroo would:

- Maximise connectivity and legibility to the primary uses within and nearby the Barangaroo precinct.
- Ensure legible and direct access to Barangaroo Reserve and Barangaroo Ferry Hub.
- Integrate with development plans for Barangaroo.

Key features associated with this strategy include pedestrian access, kiss-and-ride, bicycle pathway, bus/ coach parking.

The construction footprint for Barangaroo Station is shown in Figure 7-13 of the EIS, and developed further in the SPIR as Figure 3-8.

Additional land was also added to the construction footprint, and site layouts amended via Consistency Assessments TfNSW7, TfNSW 23 and TfNSW 25. TfNSW20 also approved construction, operation and decommissioning of a shaft and shed in the northern laydown area, where decommissioning involves the reinstatement of Hickson Road.

Utilities and Power Supply were described in Section 7.11.5 of the EIS, with Figure 7-26 indicating the route along Hickson Road, which was augmented by TfNSW10.

These figures and relevant maps of areas and currently approved works are contained in **Appendix A**.

Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

Central Barangaroo – Public Domain Performance Brief

Barangaroo Station Design & Precinct Plan

EIS State Significant Site Study prepared by JBA (dated February 2007)

MP06_0162 - Barangaroo Concept Plan Approval

SSD 5897 - Remediation of "Block 4" (Note: at the time of the application the "Block 4" comprised part of Block 3, part of Blocks 4A-C and part of the Southern Cove – but the block arrangements were subsequently amended to remove Block 3)

SSD 6533 - Remediation of Block 5, Barangaroo Central

SSD 6617 - Hickson Road Remediation Works

2.0 Description of proposed development/activity/works

Describe ancillary activities, duration of work, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used.

The Station Design and Precinct Plan (SDPP) for Barangaroo has been developed in consultation with Infrastructure New South Wales (iNSW) (formerly Barangaroo Delivery Authority) to integrate Sydney Metro works into the development planned for the Central Barangaroo precinct. The SDPP sets out how the station, in particular its above-ground and landscape components, integrate with the landscape and urban design of the surrounding context.

This integration has led to Sydney Metro proposing an extension of works along Hickson Road to Watermans Quay in the south, and to Windmill Street overbridge in the north, refer to **Figure 1** which shows a northern extension (shaded light blue), and a southern extension (shaded purple).

The northern extension is consistent with the laydown and shaft and shed approved in the Submission and Preferred Infrastructure Report (SPIR) (Figure 3-8) and Consistency Assessment TfNSW20 respectfully. Reinstatement of this area, according to the agreed SDPP is considered consistent with both the SPIR and TfNSW20.

Whilst the southern area reflects the indicative power supply route in the EIS (Figure 7-26 in **Appendix A**), including the relocation approved by TfNSW10, the full boundary of the proposed works are considered outside of the footprint currently described within the approved CSSI.

The proposed works within the additional areas are integrated with the reinstatement requirements and upgrading of the existing area, and involve:

- Removal and relocation of utilities so that Hickson Road can be upgraded through alteration to the geometry along an extended length allowing the works to be consistent through the precinct.
- Improvement in the overall management of stormwater in the area from services modification and road regrading.
- Installation of traffic management devices and furniture.
- Urban architecture and landscaping

This Consistency Assessment clarifies additional area boundaries; given the above proposed works are already consistent with both reinstatement requirements as well as the approved integration strategy for the station.

The station and transport interchange arrangement have been developed in consultation with iNSW to respond to the Barangaroo master plan and the preferred design for Hickson Road. Consultation would continue with iNSW in relation to the coordination of works and traffic management during construction of the works along Hickson Road. Following construction the area is handed over to iNSW, and eventually the City of Sydney Council who have also been consulted in the development of the SDPP. **Appendix B** includes pages from the SDPP related to the built, natural and community context related to landscape, vegetation and topography which illustrate the extension of the proposed works in the precinct from Watermans Quay to Windmill Street overbridge.

The scope and methodology of the proposed activities within the additional areas are consistent with those along all the Hickson Road works. The extension of the work area would not significantly change the duration of work, completion for handover in 2024 remains consistent. Machinery and/or staffing levels would be managed to achieve on schedule handover. Working hours are expected to remain unchanged.



Figure 1: Additional Areas for Hickson Road and Barangaroo Precinct works.

Consistency assessment TfNSW25 approved use of area SA-H21 (refer to the map of approved area in **Appendix A**) for laydown and stockpiling purposes, noting minimum disturbance of the ground for the purpose. The final design of the Barangaroo station precinct stormwater network, developed in consultation with iNSW, has pipework within this area that Sydney Metro also need to install. This will involve trenching up to approximately 3 m bgl in this area. Although this Consistency Assessment focuses on the additional areas of Hickson Road, to remove any doubt these stormwater works are also assessed in this document.

The approximate location of the stormwater pipework in area SA-H21, between pits H01-03 and H01-02, is shown in **Figure 2**.



Figure 2: Approximate location of new stormwater pipework into block SA-H21

From pit H01-02, the drainage network ties in with an existing seawall harbour outlet, refer to design shown as **Figure 3**.

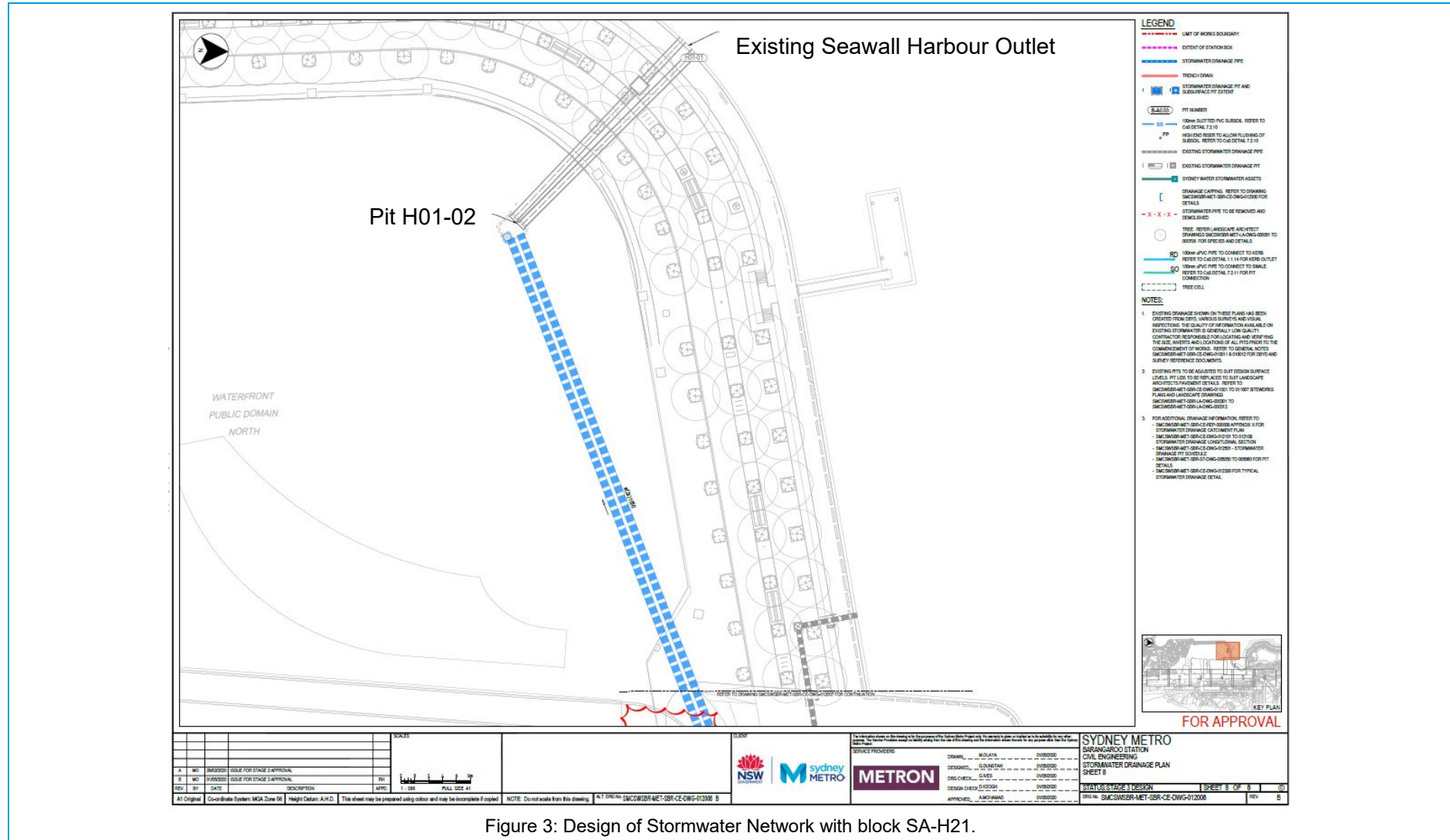


Figure 3: Design of Stormwater Network with block SA-H21.

3.0 Timeframe

When will the proposed change take place? For how long?

Installation of the improvement works are proposed to be undertaken along Hickson Road, including the additional areas, commencing 2021 and completed by the end of 2024.

Stormwater works in area SA-H21 is likely to be undertaken in 2020-2021.

4.0 Site description

Provide a description of the site on which the proposed works are to be carried out, including, Lot and Deposited Plan details, where available. Map to be included here or as an appendix. Detail of land owner.

Barangaroo Station is located between Hickson Road and Nawi Cove/Sydney Harbour, within the suburb of Barangaroo and to the north of the Central Barangaroo development. The proposed improvement works are to be located within the Hickson Road reserve, adjacent to Lot 101, DP 1204946, Lots 213 & 214, DP1221076 and Lot 100, DP838323 on the western side. Eastern site is bounded by Lot 1, DP813557, 38 Hickson Road, Lots 11 & 12, DP1065410, 30 – 34 and 36 Hickson Road and the Hickson Road wall

The road reserve is City of Sydney Council land, currently managed by iNSW.

The northern additional area, as with the length of Hickson Road to the High Street Steps, is within the Millers Point & Dawes Point Village Precinct (SHR: 01682), refer **Figure 4** below.

Heritage Council of New South Wales



State Heritage Register - SHR:01682 - Plan:1921
 Millers Point & Dawes Point Village Precinct
 Upper Fort Street, Millers Point

Gazettal Date: 21 November 2003

0 50 100 150 200
 Metres

Scale: 1:5,000 @A4
 Datum/Projection: GCS GDA 1994



- SHR Curtilage
- Land Parcels
- Railways
- Roads
- LGAs
- Suburbs

Figure 4: Work Area (in Blue) and the Millers Point & Dawes Point Village Precinct (SHR: 01682)

5.0 Site Environmental Characteristics

Describe the environment (i.e., vegetation, nearby waterways, land use, surrounding land use), identify likely presence of protected flora/fauna and sensitive area.

The additional areas for the purpose of installing the proposed improvement works are parts of the existing one lane each way, Hickson Road. Road reserve land area on the western side is occupied by the Barangaroo Central Development.

The additional area in the north, up to the Windmill Street overbridge, currently includes the construction area and access to the northern shaft acoustic shed currently housed between Dalgety Road and Windmill street overbridges. Archaeological Assessment Research Design (AARD) was reported for this area in the SPIR as area B1 with nil potential for archaeological remains.

Similarly, the Aboriginal Cultural Heritage Report (Appendix I in the SPIR) indicates that the “north-eastern portion of the Barangaroo Station footprint does not demonstrate archaeological potential due to the large-scale removal of the original sandstone context”.

For the southern additional area, borehole information presented in the Sydney Metro, City & Southwest Aboriginal Archaeological Method Statement: Barangaroo, Martin Place, Pitt Street & Waterloo (AMBS, February 2018) indicates fill into sandstone with no archaeological potential due to the large scale removal of the original sandstone context. This is supported by the issue of B22 clearance certificates for the station box area without the need to conduct physical investigation works on site.

The additional area in the south extends past area B2 in the SPIR AARD, and the works area assessed in the later Barangaroo Archaeology Method Statement, refer Figure 5. Just past the High Street steps, SSD_6617 – Remediation of Hickson Road has assessed archaeology potential within Hickson Road up to (now) Watermans Quay (previously Globe Street), noting potential to contain remains including early and later maritime infrastructure and substantial reclamation of the foreshore, mid to later nineteenth-century shipbuilding as well as the remains of Australia’s first gasworks site, as well as that the impact of the known contamination affects the significance of the site. Ex-situ remediation of the Hickson Road site has since been completed and the area backfilled.

Between the Hickson Road Remediation Area and the **Figure 5** assessment area there are potential for the smaller Cureton’s wharf, T. Paton, and Buckley’s wharf, and associated warehouses, refer to **Figure 6** and **Figure 7** below.

Residential properties are directly adjacent to the southern additional area of Hickson Road, and just north of the northern boundary of the additional area. The site is significant disturbed and does not contain any vegetative matter. The waters of Nawi Cove are approximately 50 m away at the closest point.



Figure 5: Archaeological potential across the whole Barangaroo Station Site (from Final Barangaroo Station Hickson Road, Barangaroo Sydney Metro Project Archaeological Method Statement Casey & Lowe, December 2017)



Figure 6: 1865 survey showing southern end of the Barangaroo station assessment area (from Final Barangaroo Station Hickson Road, Barangaroo Sydney Metro Project Archaeological Method Statement Casey & Lowe, December 2017)

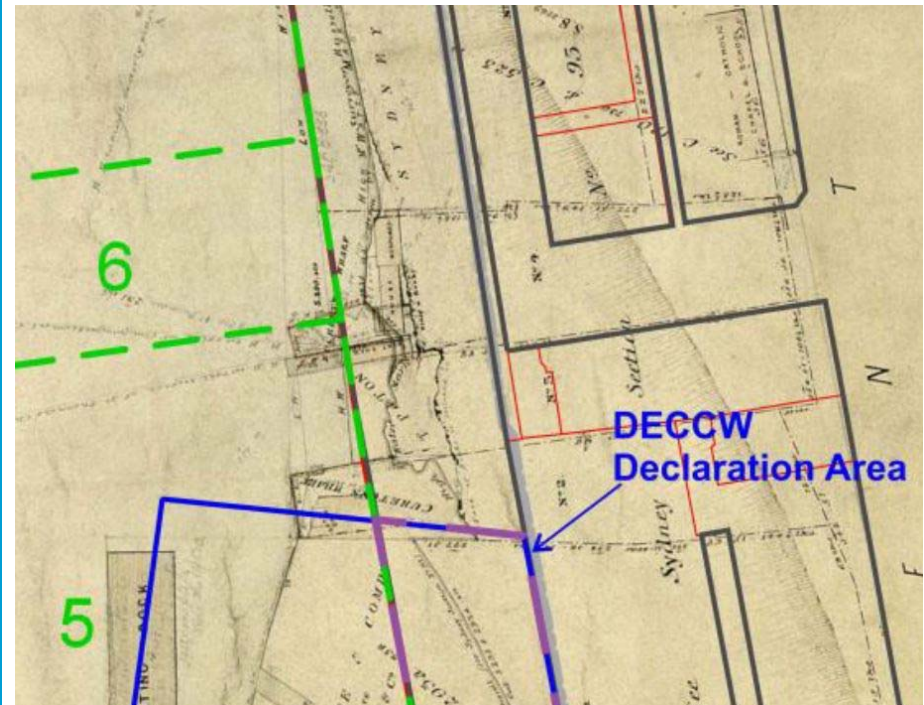


Figure 7: 1875 historic plan showing northern boundary of SSD_6617 remediation area with Cureton's wharf, T. Paton and Buckley's wharf beyond in the north (north is to the top) (from Heritage Impact Statement SSD 6617-2014 Remediation Development Application EPA Declaration Area 21122, Casey & Lowe, August 2015)

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(Uncontrolled when printed)

Spoil, including contaminated material, has been removed to 25 meters below ground level (mbgl) in the area of the Sydney Metro Barangaroo station box, and to 10 mbgl in the Hickson Road Remediation Area between Waterman’s Quay and 30 Hickson road, both areas shown in blue in **Figure 8**.



Figure 8: Remediated areas (in Blue) within the SDPP footprint.

The geological profile up to 2.2 mbgl for combined utilities and up to 3 mbgl for stormwater, consists of handstand, road base and into fill or shallow bedrock. Outside of the station box and Hickson Road Remediation Area, excavation for installing these services in the fill profile is likely to encounter contaminated materials.

6.0 Justification for the proposed works

Address the need for the proposed works, whether there are alternatives to the proposed works (and why these are not appropriate), and the consequences with not proceeding with the proposed work.

The proposed works are needed to implement the Station Design and Precinct Plan for Barangaroo. Without the extension, the beneficial landscape impacts described in the EIS Technical Paper 6 for Barangaroo Station, from improved access of public transport and public realm enhancements, and integration of the station with development plans for Barangaroo, may not be fully realised.

Reinstatement is required along the Hickson Road area covered by the EIS/ SPIR and Consistency Assessments, and the inclusion of additional adjacent areas for improvement works ensures continuity of the urban design and landscaping, and allows extension of road upgrades and associated stormwater management.

Not proceeding with the works will not allow Sydney Metro to implement the SDPP to therefore ensure the *principles of integration with the streetscape and adjacent built environment are achieved*.

7.0 Environmental Benefit

Identify whether there are environmental benefits associated with the proposed works. If so, provide details:

The environmental benefits of extending the improvement works along Hickson Road are an overall improvement in flood immunity in the area.

Although for Annual Exceedance Probability (AEP) event of < 0.2% the modelling indicates an increase in flood levels to 28 and 30 Hickson Road, all other flood events model a decrease in flood hazard for the overall precinct.

8.0 Control Measures

Will a project and site specific EMP be prepared? Are appropriate control measures already identified in an existing EMP?

Stormwater works in area SA-H21 is to be managed according to the JHCPBG Construction EMP and site specific Site Environmental Plan (SEP).

A site specific Environmental Management Plan will be prepared by the Barangaroo Station contractor for the construction of works in the additional areas along Hickson Road.

9.0 Climate Change Impacts

Is the site likely to be adversely affected by the impacts of climate change? If yes, what adaptation/mitigation measures will be incorporated into the design?

The temporary occupation of this space for construction would not be impacted by the effect of climate change.

Following construction, modelling of the proposed Hickson Road masterplan, coupled with the stormwater drainage design plan, demonstrates that for the applied climate change scenarios flood level sensitivity for existing developments noted an average increase of ~0.2 m. At the eastern Hickson Road area, increases in the peak flood level of 0.3 – 0.4 m were modelled with sensitivities to blockage in this area already being problematic and not related to climate change impacts.

10.0 Impact Assessment – Construction

Attach supporting evidence in the Appendices if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from approved project.	No additional measures required	Y	Y	
Water	No change from approved project.	No additional measures required	Y	Y	
Air quality	No change from approved project.	No additional measures required	Y	Y	
Noise vibration	No change from approved project.	No additional measures required	Y	Y	
Indigenous heritage	<p>Technical Paper 5 in the SSD_7400 EIS states no recorded Aboriginal sites are located within 100 meters of the station, with the closest sites located 300 meters to the north and east.</p> <p>SPIR Appendix I re-iterates that no aboriginal sites would be impacted by the proposed station works.</p> <p>Similarly, the Aboriginal Cultural Heritage Assessment undertaken for SSD_6617 – Hickson Road Remediation identified no registered sites within or around the vicinity of the development area and no Aboriginal archaeological or cultural heritage potential in the Site Remediation Area.</p>	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Non-indigenous heritage	<p>Archaeology potential for the northern additional area has been assessed in the SPIR as nil as the 1950's excavation of Hickson Road corridor into sandstone bedrock will have removed all archaeological remains.</p> <p>The majority of the southern additional area was assessed under SSD_6617 – Hickson Road Remediation and has been excavated during the ex-situ remediation completed in the area.</p> <p>Disturbance from the reinstatement and Hickson Road integration works has potential to impact non-indigenous archaeology. Likely archaeological remains are consistent to those identified within the following:</p> <ul style="list-style-type: none"> • EIS for Barangaroo Station as high potential to contain archaeological evidence of post-1850's wharfage and warehousing. • AARD for Barangaroo (area B2) as moderate potential for local / state significant evidence associated 19th century wharf development and occupation. • AARD for Hickson Road Power Supply Routes as low – moderate potential for truncated archaeological remains relating to the Gas Works and mercantile warehouse structures along the foreshore. <p>Drainage works (Figures 2 and 3 above) are within reclaimed fill areas and have no archaeology potential. No listed heritage items would be directly affected by the proposed works.</p>	<p>CoA E10, E17, E18, E19, E20, REMM NAH2 continue to apply and works are required to be compliant with these conditions.</p> <p>The requirements of E17 are contractually allocated and passed down to the contractor for implementation during construction.</p> <p>This will require the preparation and implementation of an Archaeological Method Statement for the Hickson Road works. Archaeological excavation and investigation is required to be over seen by an approved excavation director under E18.</p>	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Community and stakeholder	<p>The temporary occupation of the additional areas for construction of the precinct works would have negligible impact on the community and other stakeholders. Visitors to Nawi Cove and the Barangaroo Headland may be temporarily disrupted as a result of the proposed works through the use of pedestrian diversion routes. However, access to the Reserve and Wulugul Walk would be maintained during the proposed works.</p> <p>The works are contained within the same community area, and no additional stakeholders will require consultation.</p>	<p>The impact is temporary and aligns with the current land use and consultation strategy.</p>	Y	Y	
Traffic	<p>No increase in construction traffic is anticipated as a result of the proposed change.</p> <p>Traffic and pedestrian access through the area would be managed during the proposed works.</p>	<p>CoA's E81 and E82 continue to apply.</p>	Y	Y	
Waste	<p>Contamination likely to be encountered in the reclaimed fill areas and from the adjacent former gasworks was assessed in the EIS as high risk and mitigation measures are proposed.</p> <p>Although all spoil removed off-site will require waste classification, there are particular locations as shown in Figure 8 that are outside of the station Box and Hickson Road Remediation Areas that likely to identify contaminants.</p>	<p>CoA's E106 and REMMs SCW1 – SCW2, and WM1-WM4 continue to apply and are required to be complied with during works.</p> <p>Specifically, the requirements of E66 – E69 for Phase 1 and Phase 2 contamination assessments are contractually allocated and passed down to the contractor for implementation during construction.</p>	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	
Visual	No change from the approved project. The additional areas are subject to construction activities already.	No additional measures required.	Y	Y	
Urban design	No change from the approved project.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	The temporary occupation of additional area to enable the proposed works is aligned with the current use of this site.	The impact is temporary and aligns with the current land use.	Y	Y	
Climate Change	No change from the approved project.	No additional measures required.	Y	Y	
Risk	No change from the approved project.	No additional measures required.	Y	Y	
Other	No change from the approved project.	No additional measures required.	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures required.	Y	Y	

11.0 Impact Assessment – Operation

Attach supporting evidence in the Appendix if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from the approved project.	No additional measures required.	Y	Y	
Water	No change from the approved project.	No additional measures required.	Y	Y	
Air quality	No change from the approved project.	No additional measures required.	Y	Y	
Noise vibration	No change from the approved project.	No additional measures required.	Y	Y	
Indigenous heritage	No change from the approved project. SDPP includes an area of bushtucker planting.	No additional measures required.	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures required.	Y	Y	
Community and stakeholder	No change from the approved project. The areas will continue to be handed over to iNSW, prior to eventual return to City of Sydney for ongoing management.	No additional measures required.	Y	Y	
Traffic	Positive impact - The design of the proposed works along Hickson Road includes all the original commitments for accessibility including pedestrian access, kiss-and-ride, bicycle pathway, bus/ coach parking.	No additional measures required.	Y	Y	
Waste	No change from the approved project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Social	No change from the approved project.	No additional measures required.	Y	Y	
Economic	No change from the approved project.	No additional measures required.	Y	Y	
Visual	No change from the approved project.	No additional measures required.	Y	Y	
Urban design	Positive impact - through optimising integration and continuity of the Barangaroo development.	No additional measures required.	Y	Y	
Geotechnical	No change from the approved project.	No additional measures required.	Y	Y	
Land use	No change from the approved project.	No additional measures required.	Y	Y	
Climate Change	No change from the approved project.	No additional measures required.	Y	Y	
Risk	Positive impact - flood immunity for Probable Maximum Flood events will be improved for most of the Barangaroo precinct with the exception of two properties who are assessed as having a high flood hazard rating.	No additional measures required.	Y	Y	
Other	No change from the approved project.	No additional measures required.	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures required.	Y	Y	

12.0 Consistency with the Approved Project

<p>Based on a review and understanding of the existing Approved Project and the proposed modifications, is there is a transformation of the Project?</p>	<p>No. Occupation of the additional areas is for the purposes of installing the improvement works is consistent with the Barangaroo Central Master and the precinct plans. The project would continue to provide a new metro rail line between Chatswood and Sydenham.</p>
<p>Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?</p>	<p>Yes. Occupation of the additional areas is for the purposes of installing the proposed improvement works and is consistent with the objectives and functions of the approved project.</p>
<p>Is the project as modified consistent with the objectives and functions of elements of the Approved Project?</p>	<p>Yes. Occupation of the additional areas is for the purposes of installing the proposed improvement works and is consistent with the objectives and functions of the approved project.</p>
<p>Are there any new environmental impacts as a result of the proposed works/modifications?</p>	<p>No new environmental impacts are anticipated as a result of occupation of the additional areas for the purposes of installing the proposed improvement works.</p>
<p>Is the project as modified consistent with the conditions of approval?</p>	<p>Yes. The proposed works in the Barangaroo precinct are consistent with the conditions of approval.</p>
<p>Are the impacts of the proposed activity/works known and understood?</p>	<p>Yes. The impacts of the occupation of the additional areas for the purposes of installing the proposed improvement works are understood.</p>
<p>Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?</p>	<p>Yes. The impacts of the proposed works in the Barangaroo precinct can be managed so as to avoid an adverse impact.</p>

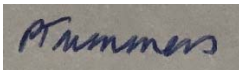
13.0 Other Environmental Approvals

Identify all other approvals required for the project:

N/A


Author certification

To be completed by person preparing checklist.

<p>I certify that to the best of my knowledge this Consistency Checklist:</p> <ul style="list-style-type: none"> Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information. 			
Name:	Pam Tummers	Signature:	
Title:	Environment & Sustainability Manager		
Company:	Sydney Metro	Date:	07-September-2020

Environmental Representative Review

(Additional step for City & Southwest projects only – if this is a CA against a Northwest Project or REF delete this table)

<p>As an approved ER for the Sydney Metro City & Southwest project, I have reviewed the information provided in this assessment. I am satisfied that mitigation measures are adequate to minimise the impact of the proposed work.</p>			
Name:	Michael Woolley	Signature:	
Title:	Environment Representative	Date:	8 September 2020


This section is for Sydney Metro only.

<p>Application supported and submitted by</p>			
Name:	Yvette Buchli	Date:	9/9/2020
Title:	Assoc Director Planning Approvals	Comments:	
Signature:			

Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

- Yes The proposed activity/works are consistent and no further assessment is required.
- No The proposed works/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.



Endorsed by			
Name:	Fil Cerone	Date:	10 September 2020
Title:	Principal Manager City & Southwest, Sustainability, Environment & Planning	Comments:	
Signature:			

Appendix A – Construction Footprints

1. The construction footprint for Barangaroo Station shown in Figure 7-13 of the EIS
2. Developed construction footprint for Barangaroo Station shown in Figure 3-8 of the SPIR.
3. Additional land was also added to the construction footprint, and site layouts amended via Consistency Assessments:
 - a. TfNSW 7,
 - b. TfNSW 23, and
 - c. TfNSW 25.
4. TfNSW20 also approved construction, operation and decommissioning of a shaft and shed in the northern laydown area, where decommissioning involves the reinstatement of Hickson Road.
5. Utilities and Power Supply Routes (PSR):
 - a. Figure 7-26 of the EIS indicating the route along Hickson Road,
 - b. PSR augmented by TfNSW 10

Construction footprint for Barangaroo station shown in Figure 7-13 of the EIS

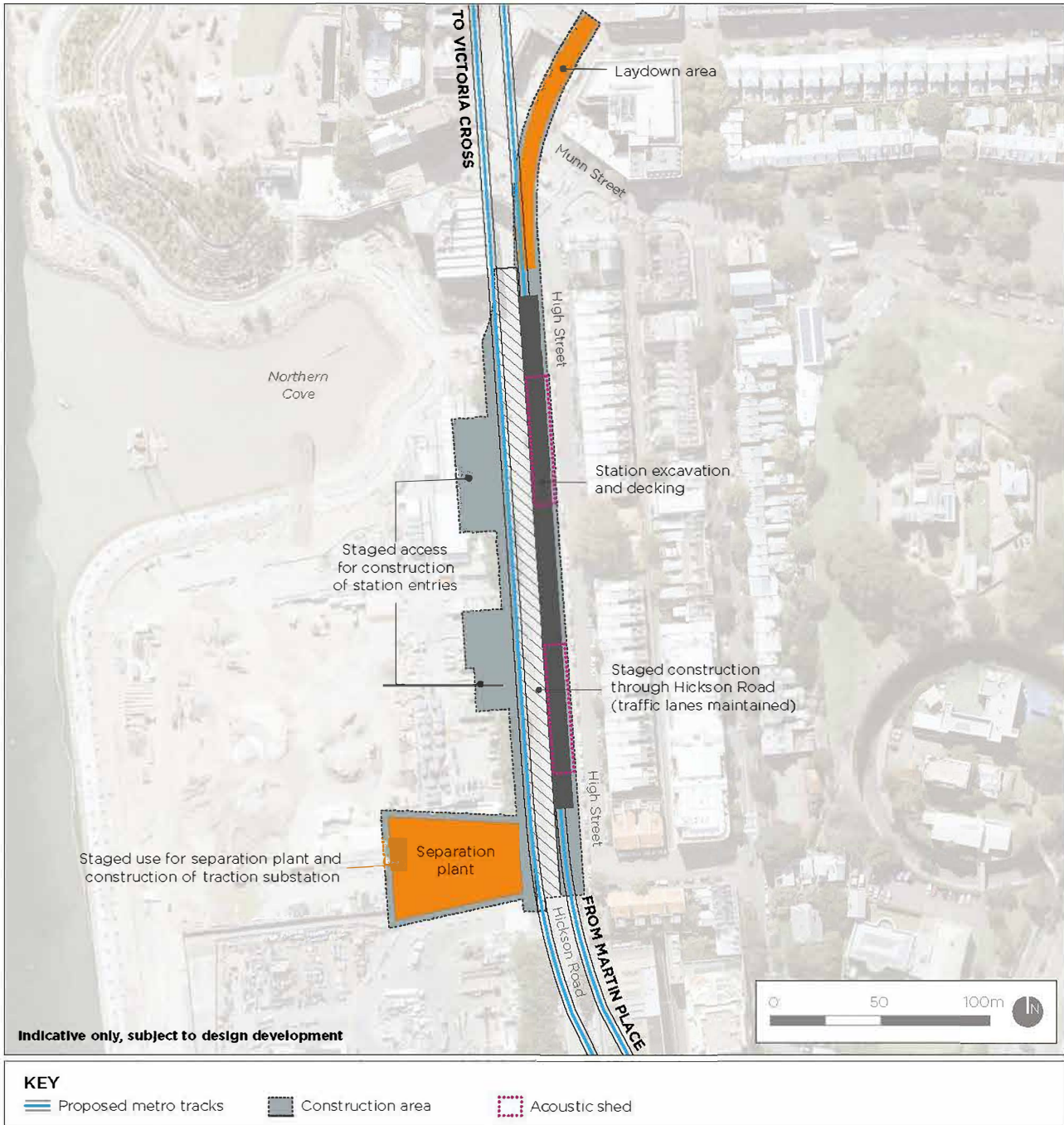


Figure 7-13 Barangaroo Station construction site indicative layout

Developed construction footprint for Barangaroo station shown in Figure 3-8 of the SPIR

It is expected that the barging area would operate after hours. This would require lighting on the barges to facilitate a safe working platform while berthed, and lighting within the adjacent construction sites.

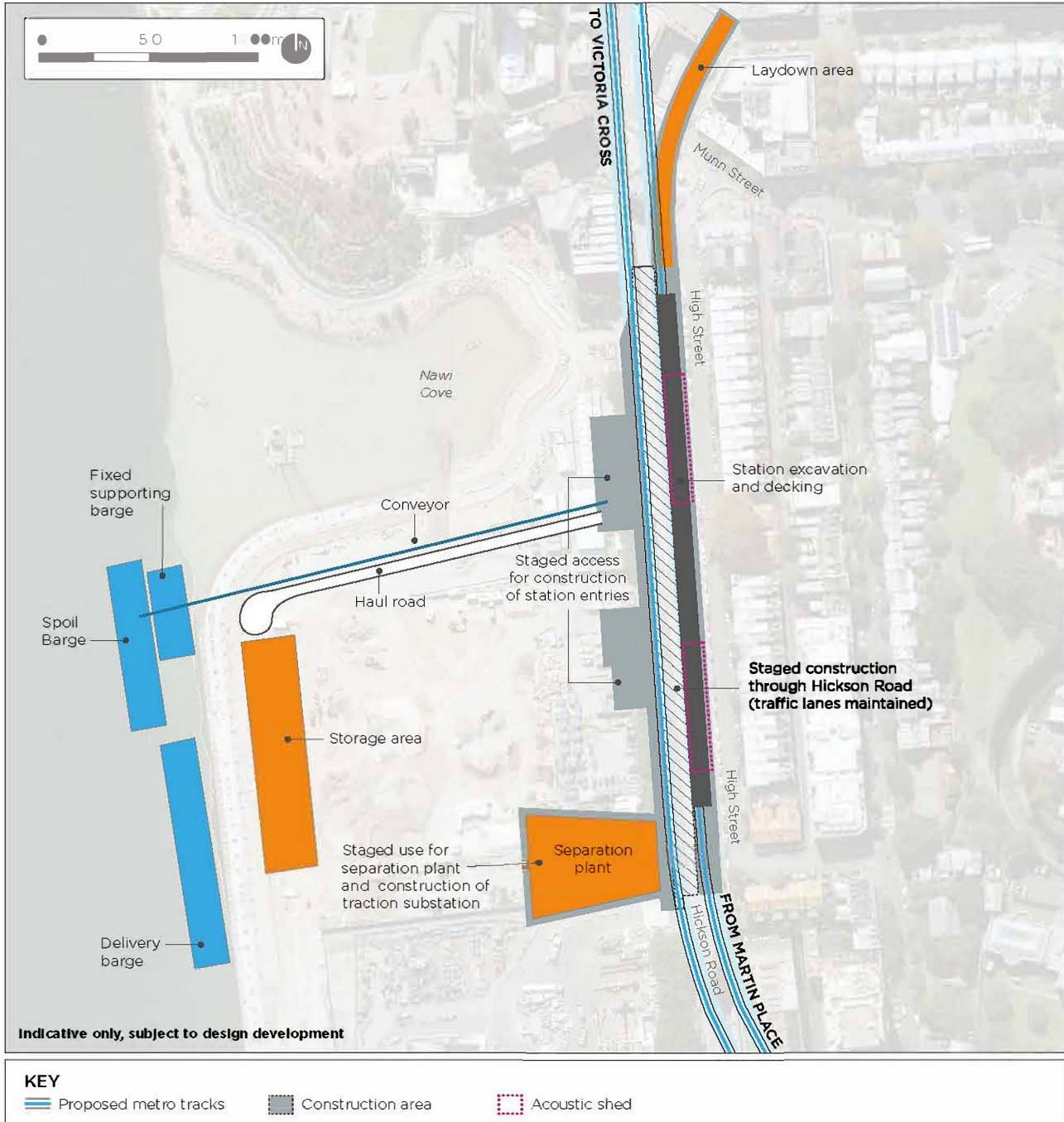
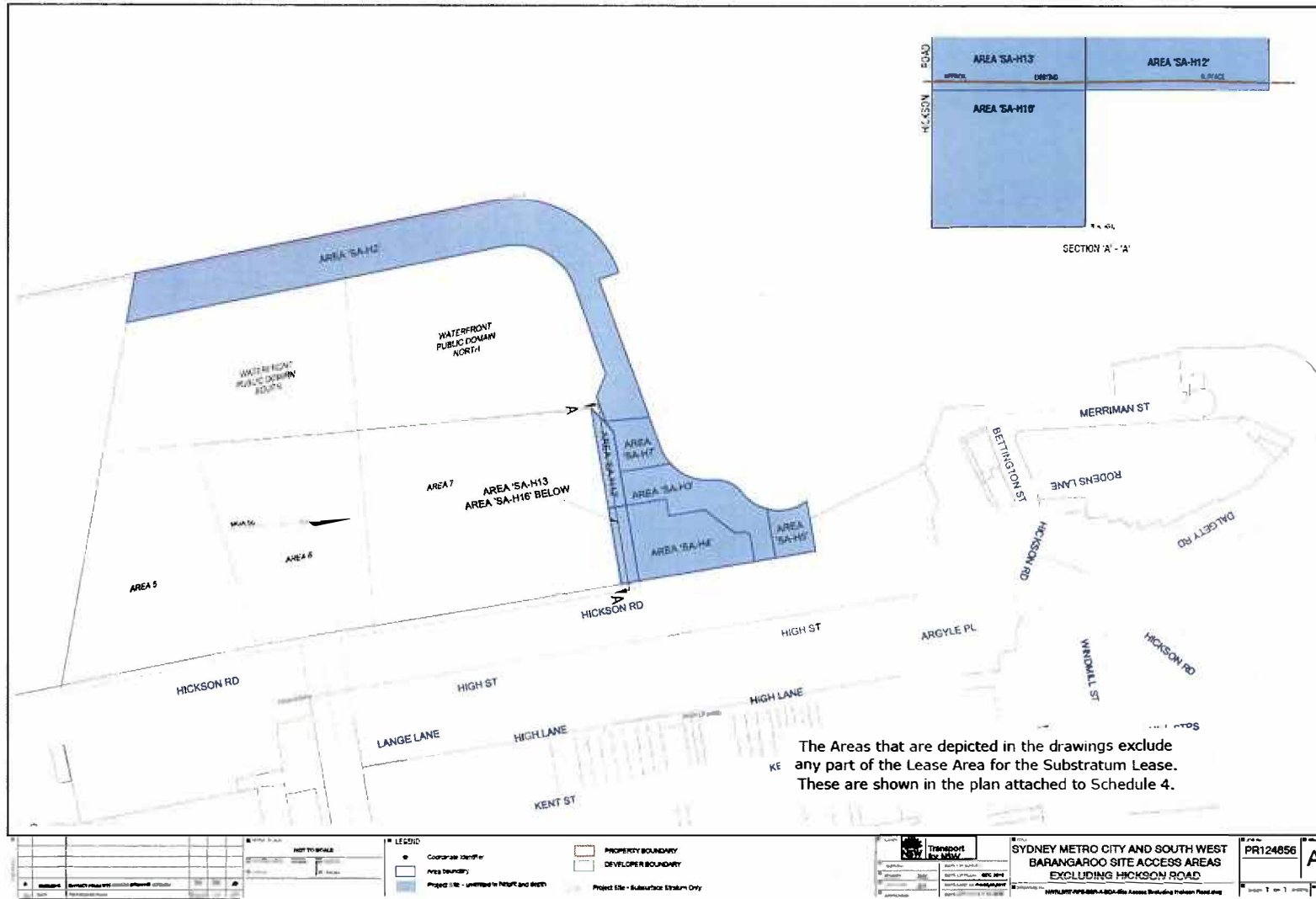


Figure 3-8 Barangaroo Station - location and layout of barging infrastructure

Figure 2: Revised indicative layout of the Barangaroo Station construction site for north entry and barging activities



Curve Table

Curve ID	Chord Bearing	Chord Length	Arc Length	Radius
1	215°12'45"	72.25	78.67	55.51
2	189°00'15"	48.08	48.43	117.38
3	196°16'05"	75.89	76.52	172.37
4	38°27'10"	14.83	15.13	21.88
5	354°02'22"	20.22	20.93	23.05
6	208°44'55"	16.17	16.91	16.42
7	26°31'25"	22.33	23.15	25.00
8	64°26'30"	9.88	9.94	25.00
9	213°31'45"	40.26	43.68	31.50

Area	Lot	Dp Number
Area 'SA-H1'	PT101	DP1204946
	1	DP863319
	2	DP869022
Area 'SA-H2'	PT101	DP1204946
	PT101	DP1204946
Area 'SA-H3'	PT101	DP1204946
Area 'SA-H4'	PT101	DP1204946
Area 'SA-H5'	PT101	DP1204946



REVISIONS	No.	DATE	REVISION DETAILS	DRAWN	CHK	APP
H	14.08.2017	ADDITIONAL AREAS	ZHY	ZHY	DW	
G	20.06.2017	VARIOUS AMENDMENTS	ZHY	ZHY	DW	
F	10.03.2017	VARIOUS AMENDMENTS	ZHY	ZHY	MGL	
E	20.12.2016	ALTERNATE SUBSTATION SITE - ARTARMON	ZHY	ZHY	ZHY	
D	10.11.2016	VARIOUS AMENDMENTS	ZHY	MGL	MGL	

LEGEND

- Coordinate identifier
- Area boundary
- AREA SUBJECT TO THIS ASSESSMENT
- PREVIOUSLY APPROVED ADDITIONAL LAND (CONSISTENCY ASSESSMENT)
- ORIGINAL EIS

NOT TO SCALE

COORDINATES: MGA DATUM: ORIGIN: ORIGIN:

CLIENT: **NSW Transport for NSW**

SURVEY: DATE OF SURVEY: DATE OF PLAN: 14.09.2017

DRAWN: ZHY DATE LAST SAVED: 14.09.2017

CHECKED: ZHY

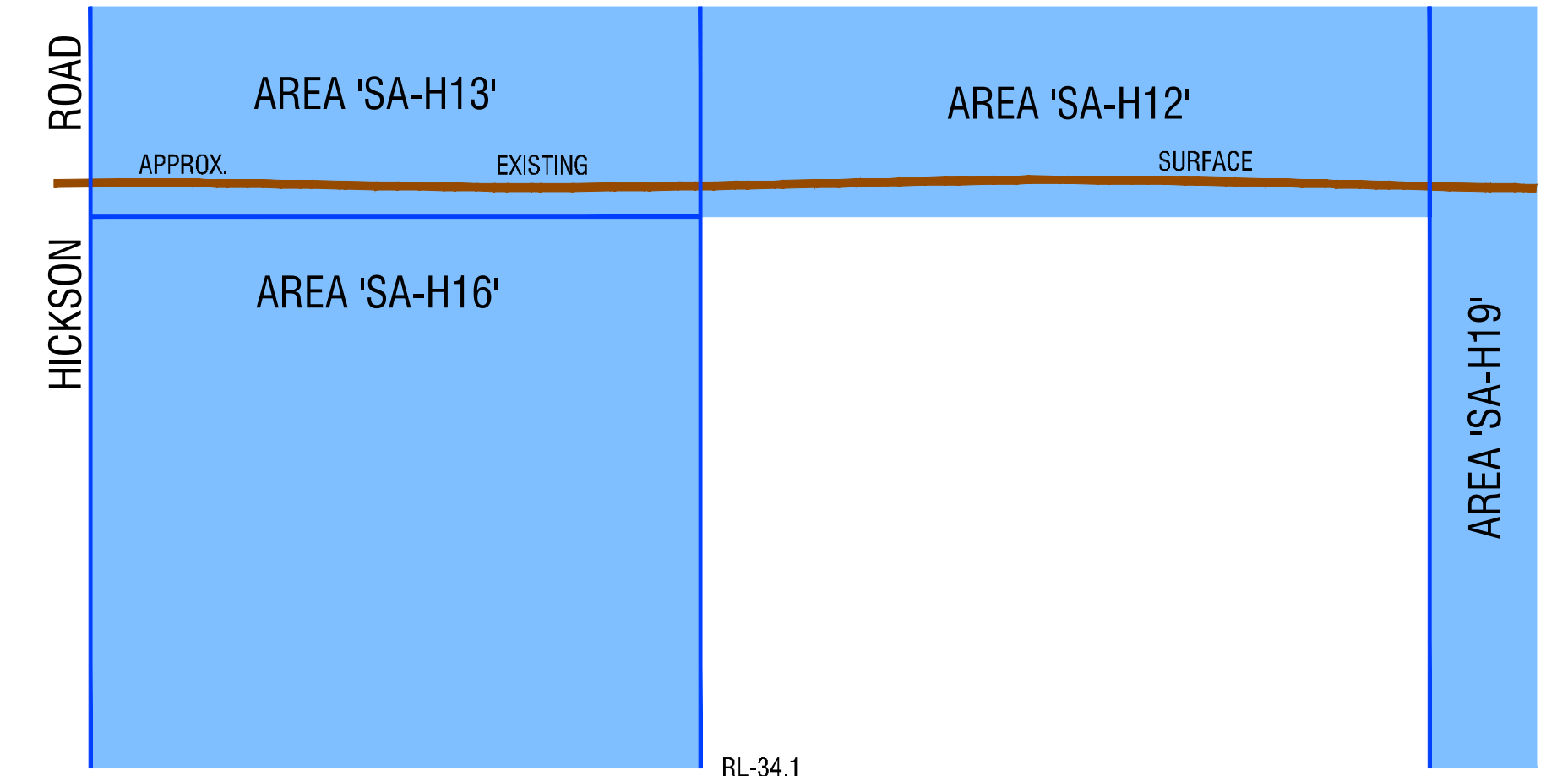
APPROVED: DATE APPROVED:

TITLE: **SYDNEY METRO CITY AND SOUTH WEST CONSISTENCY ASSESSMENT BARANGAROO STATION**

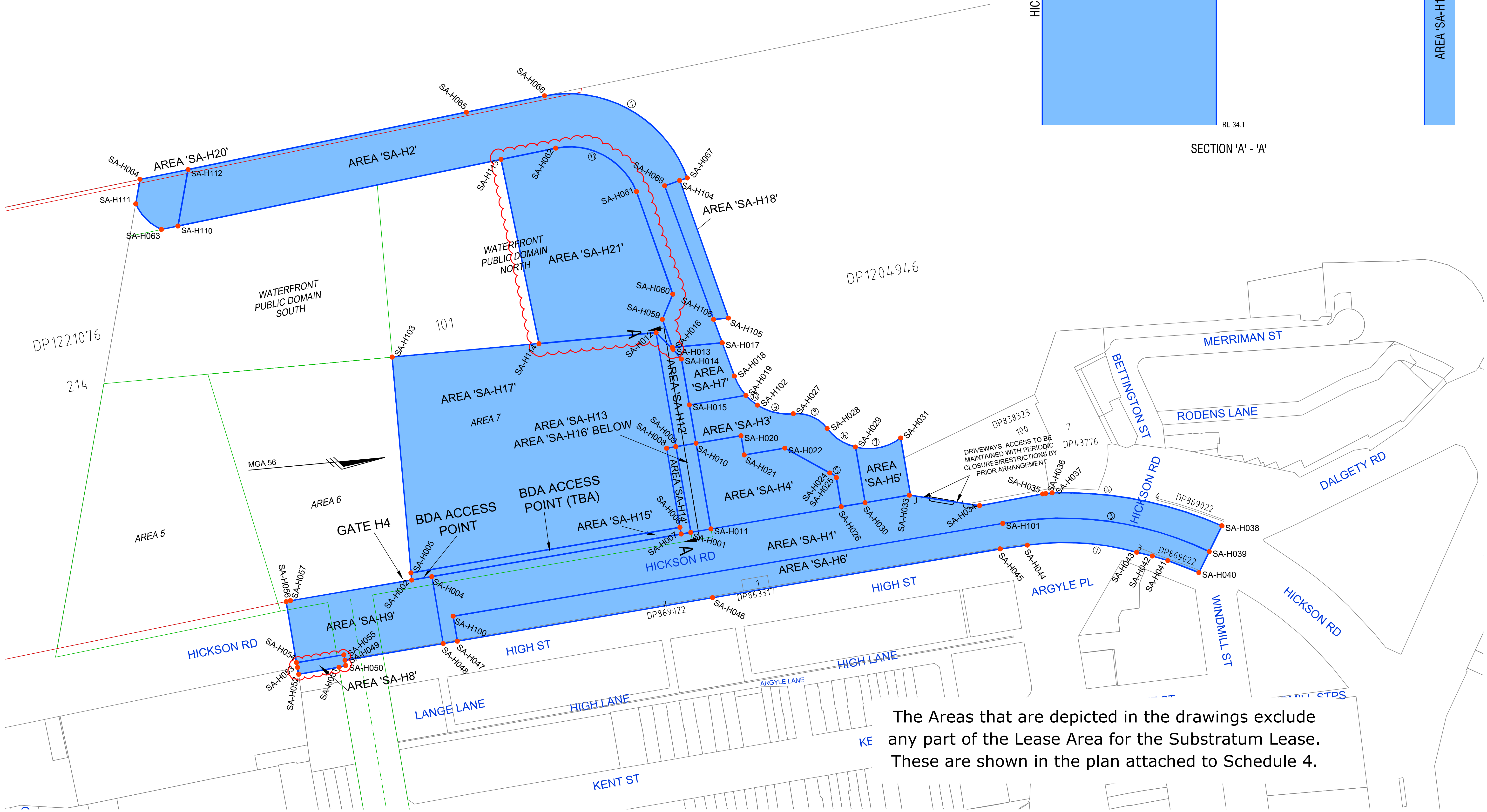
JOB No: **PR124856** ISSUE: **A**

DRAWING No: **NWLSRT-RPS-SBR-SR-DWG-000015-A-Barangaroo Consistency Assessment.dwg**

SHEET 1 OF 1 SHEETS SIZE: **A1**



SECTION 'A' - 'A'



The Areas that are depicted in the drawings exclude any part of the Lease Area for the Substratum Lease. These are shown in the plan attached to Schedule 4.

NO.	DATE	REVISION DETAILS	DRAWN	CHK	APP
P	13.06.2018	Area H19 at Barangaroo	SAS	MGL	MGL
O	23.05.2018	Minor amendment	SAS	MGL	MGL
M	2.03.2018	Amendment on SA-H18	SAS	MGL	MGL
L	25.09.2017	Reduce size of SA-H2	ZHY	ZHY	SG
K	07.09.2017	Reduce size of SA-H18	ZHY	ZHY	SG

NOT TO SCALE	
COORDINATES: MGA	DATUM:
ORIGIN:	ORIGIN:

LEGEND	
●	Coordinate identifier
	Area boundary
	Project Site - unlimited in height and depth

	PROPERTY BOUNDARY
	DEVELOPER BOUNDARY

NOTES:
THE DRAFT COORDINATES AS DESIGNATED ON THIS PLAN ARE BASED ON UNREGISTERED PLANS OF SURVEY PREPARED BY RPS. COORDINATES ARE SUBJECT TO PLAN EXAMINATION AND REGISTRATION AT LAND TITLE OFFICES

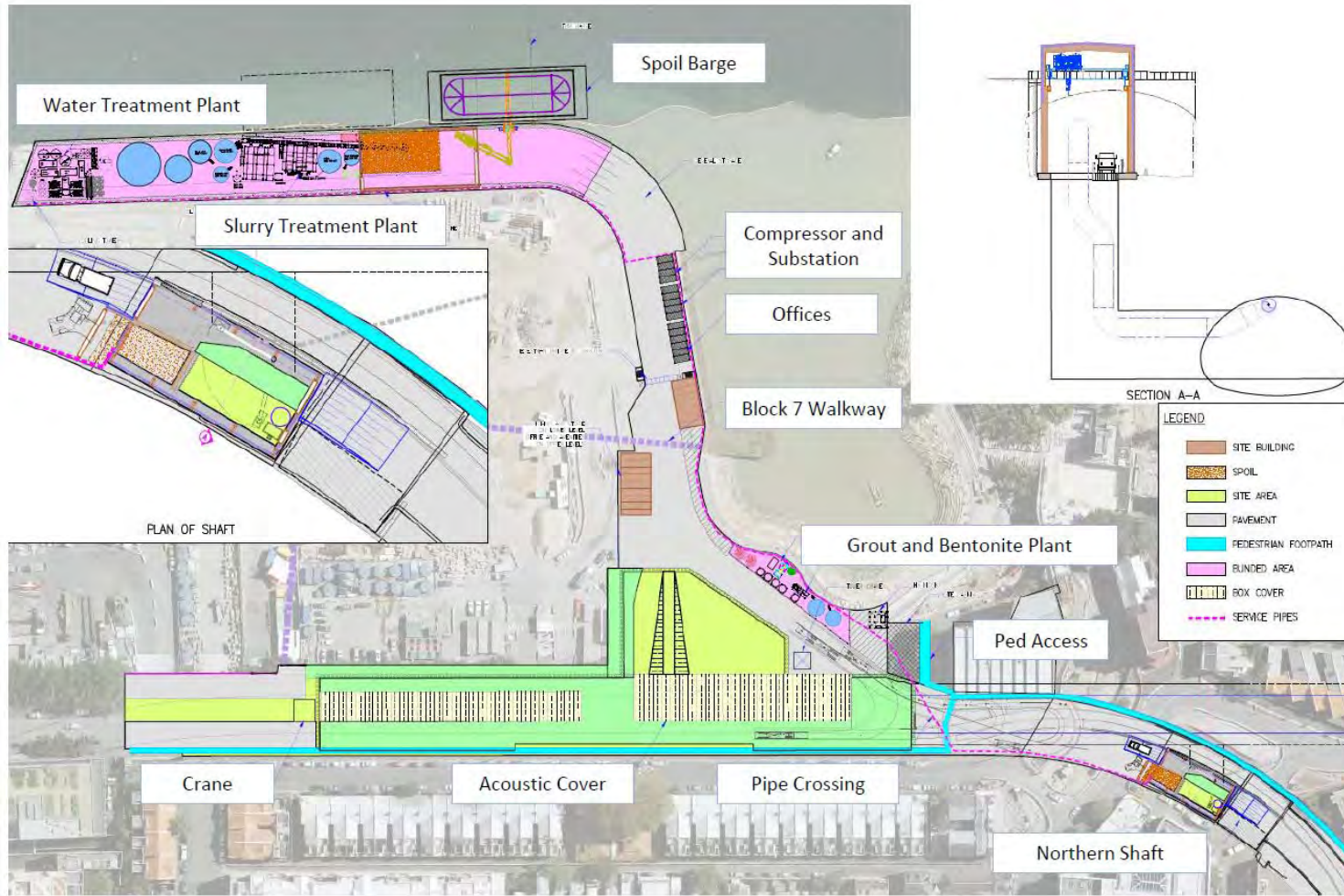
CLIENT:	Transport for NSW
SURVEY:	
DRAWN:	ZHY
CHECKED:	ZHY
APPROVED:	
DATE OF SURVEY:	
DATE OF PLAN:	DEC 2016
DATE LAST SAVED:	14.06.2018
DATE APPROVED:	1.12.2016

TITLE:	SYDNEY METRO CITY AND SOUTH WEST BARANGAROO SITE ACCESS AREAS
DRAWING No:	NWRLSRT-RPS-SBR-SR-DWG-000003-P.1-BDA-Site Access.dwg

JOB No:	PR124856
ISSUE:	P1
SHEET 1 OF 2 SHEETS	SIZE A1

TfNSW 20 - Northern Shaft Shed

Appendix B Map showing proposed temporary shaft construction layout



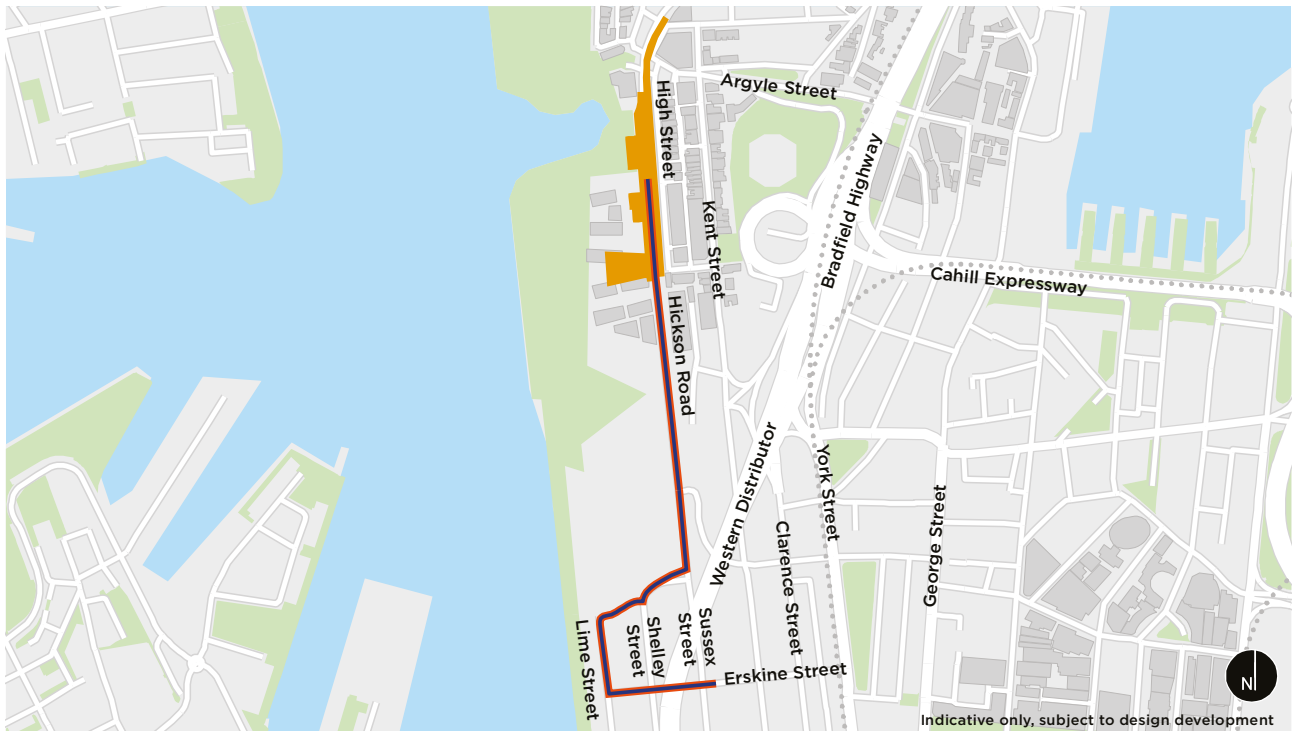
Utilities and Power Supply Route from EIS Figure 7-26



KEY

- Proposed construction site area
- Power supply route

Figure 7-25 Victoria Cross Station - power supply route



KEY

- Proposed construction site area
- Power supply route
- Existing suburban rail

Figure 7-26 Barangaroo Station - power supply route

TfNSW10 ■■■■■ Augmented Power Supply Route



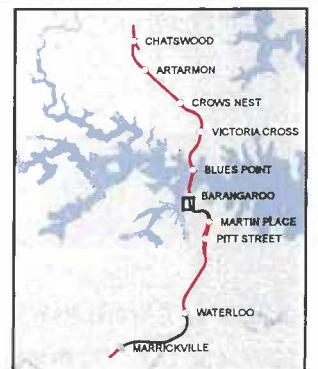
Legend



- Indicative Site Boundary
- Trenching

- Communication Route
- HV/LV Power Supply Route EIS Remaining
- HV/LV Power Supply Route Relocation
- Stormwater Adjustment
- Sewer Relocation

SYDNEY METRO CITY & SOUTHWEST -TSE WORKS
Utility Works- Consistency Assessment
 Barangaroo



Appendix B



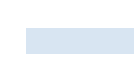
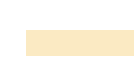


3 Context and Form

3.3 Built, natural and community context







LEGEND

-  Project boundary
-  200m radius from proposed station
-  Historic sandstone wall - Hickson Road
-  State heritage buildings - Milsons Point
-  Heritage foreshore

LAND USE

-  General residential
-  Metropolitan centre
-  Low to medium density commercial
-  Community facility
-  Recreation
-  Mixed use

HERITAGE LIST

-  01 Bridge over Hickson Road
-  02 Palisade fence and high steps
-  03 Warehouses/Dalgety's bond store
-  04 Shops 6, 8 Argyle Place
-  05 Shops and residences
-  06 Duplexes High Street, Millers Point

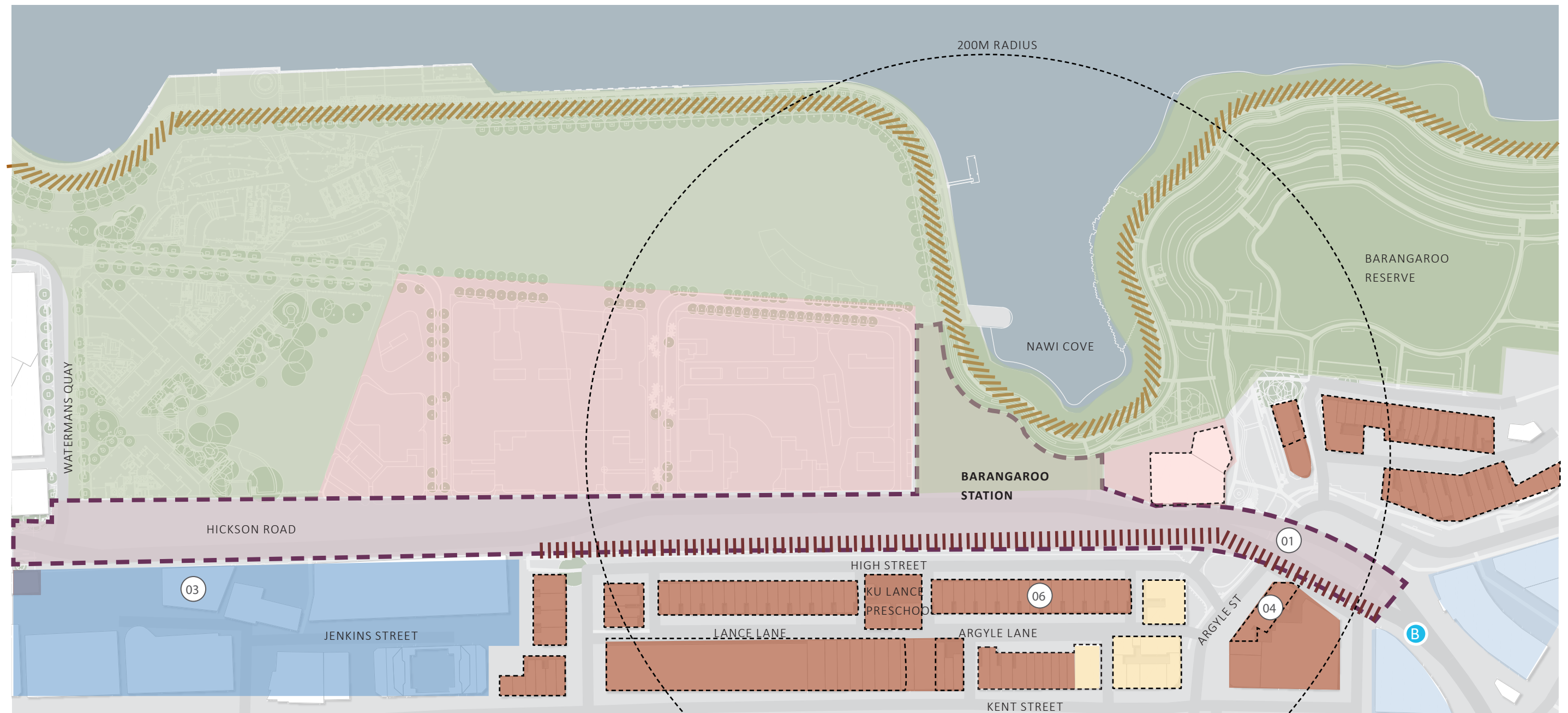


Figure 3.9 Precinct built form, land use and heritage
 Source: Arcadia Landscape Architecture

1:2000 @ A3 0 10 20 40 60 80m

3 Context and Form

3.3 Built, natural and community context

DRAFT

3.3.4 Landscape, vegetation and topography

The previous vegetation of the site was removed during the construction process. It consisted of planted street trees within a highly modified urban context and occasional exotic landscape plantings. On the western side of Hickson Road was a row of planted *Ficus microcarpa* var. *hillii* (Hills Weeping Fig).

The Barangaroo Reserve is located in close proximity to the new Barangaroo station site to the north where it meets Millers Point. This area is a six-hectare harbour foreshore park, and has been designed as a contemporary interpretation of the pre-1836 headland, with bush walks, grassed areas, lookouts, walking and cycling paths. A plaza has been created at North Cove, marking a southern entry to the Reserve at Hickson Road.

Hickson Road is located at the base of a distinctive cliff wall which rises approximately four storeys high. This cliff forms a distinctive local visual feature, with its exposed sandstone rock face and masonry, heritage railings and staircase cut into the stone. This cliff also creates a strong spatial 'edge' to the Barangaroo peninsular between Munn Street and the High Street stairs in the south, and a physical barrier to east-west movement.

South of the High street stairs, there are a mixture of contemporary and heritage buildings which align with the line of the wall, addressing the road with a mix of commercial, offices and service entries.

In this area, there is a second staircase, providing access to the upper levels of the peninsula along Kent Street.

(EIS C2S - Tech Paper 6: Landscape and visual Impact Assessment)

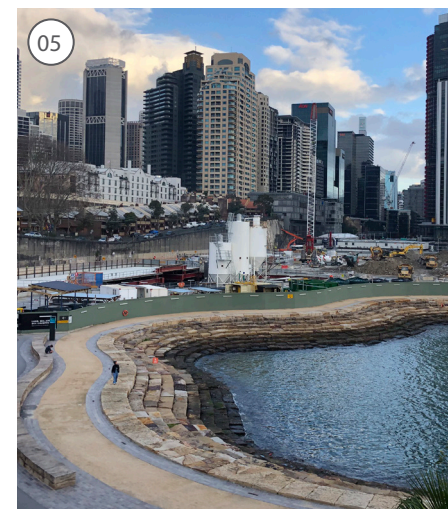


Figure 3.10 Site images

Source (figure 1-5): Arcadia Landscape Architecture; Source (figure 6): <https://postcardsydney.com/wp-content/uploads/2015/11/Barangaroo-Reserve-Sydney.jpg>