



Integrated Management System

# Planning Approval Consistency Assessment Form

SM ES-FT-414

Sydney Metro Integrated Management System (IMS)

<b>Assessment Name:</b>	The Bays Circulating Water System CCTV investigation
<b>Prepared by:</b>	AFJV Environmental Advisor
<b>Prepared for:</b>	Sydney Metro
<b>Assessment number:</b>	AFJV06
<b>Status:</b>	Draft for SM approval
<b>Version:</b>	01
<b>Planning approval:</b>	CSSI 10038 Sydney Metro West Concept and Stage 1
<b>Date required:</b>	March 2022
<b>iCentral number</b>	SM-22-00018304

Form information – do not alter

<b>Form number</b>	SM ES-FT-414
<b>Applicable to:</b>	Sydney Metro
<b>Document Owner:</b>	Principal Manager, Sustainability, Environment & Planning
<b>System Owner:</b>	Executive Director, Safety, Sustainability & Environment
<b>Status:</b>	Final
<b>Version:</b>	2.0
<b>Date of issue:</b>	27 April 2018
<b>Review date:</b>	27 April 2019

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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)):**

- CSSI 10038 Sydney Metro West Concept and Stage 1 (11 March 2021)
- Administrative Modification 1 (28 July 2021)
- SWM Stage 1 – The Bays Station construction site boundary Consistency Assessment (27 August 2021).
- AFJV-03 (Rev02) – The Bays Construction Site Boundary (approved – 20 January 2022)

**Date of determination:**

11 March 2021

**Type of planning approval:**

CSSI, Critical State Significant Infrastructure

**Description of existing approved project you are assessing for consistency:**

**Sydney Metro West (the Concept)**

Sydney Metro West (the Concept) would involve the construction and operation of a metro rail line around 24 kilometres long between Westmead and Hunter Street in the Sydney CBD. The key components are expected to include (as described in Chapter 6 of the Environmental Impact Statement (EIS)):

- Construction and operation of new passenger rail infrastructure between Westmead and the central business district of Sydney, including:
  - Tunnels, stations (including surrounding areas) and associated rail facilities
  - Stabling and maintenance facilities (including associated underground and overground connections to tunnels)
- Modification of existing rail infrastructure (including stations and surrounding areas)
- Ancillary development.

**Sydney Metro West - all major civil construction works between Westmead and The Bays (the approved project)**

The Sydney Metro West Project Concept; and all major civil construction works between Westmead and The Bays, including station excavation and tunnelling was determined on 11 March 2021. The scope of Stage 1 of the planning approval process for Sydney Metro West (the approved project) is described in Chapter 9 of the EIS, with the key features including:

- Tunnel excavation including tunnel support activities between Westmead and The Bays
- Station excavation for new metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays
- Shaft excavation for services facilities
- Civil work for the stabling and maintenance facility at Clyde.

To construct the above, the Sydney Metro West Stage 1 is divided into multiple packages, each with their own design and construction scope. The package relevant to this Consistency Assessment is the Central Tunnel Package (CTP) which has an overall design and construction timeframe of approximately three years, from July 2021 to Q4 2024.

This consistency assessment relates to proposed changes at The Bays construction site. The construction site would be used to:

- Carry out the excavation of The Bays Station
- Launch and support two tunnel boring machines for the drive west to the Sydney Olympic Park metro station construction site.

This construction site would include tunnel boring machine support services including high voltage power supply, spoil storage and removal, fresh air ventilation, work train, grout batching plant, water supply, water treatment and disposal, material storage as well as office facilities, worker amenities and parking, and storage and installation of precast concrete lining elements.

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

- Sydney Metro West Concept and Stage 1, Environment Impact Statement, April 2020
- Sydney Metro West Concept and Stage 1, Amendment Report, November 2020
- Sydney Metro West Concept and Stage 1, Submissions Report, November 2020
- Sydney Metro West Concept and Stage 1 - Assessment Report (SSI 10038), March 2021
- Sydney Metro West Concept and Stage 1, Conditions of Approval (CoA), released on 11 March 2021 and updated on 28 July 2021.

## 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.**

This consistency assessment relates to the carrying out of a CCTV investigation of part of the White Bay Power Station Water Circulating System. The investigation is required to ascertain the existing condition of the Outlet Conduit which runs from the Northern Penstock to White Bay. The only access to the Outlet Conduit is via the Northern Penstock, which sits just outside The Bays site construction footprint. Access to the Northern Penstock would require the removal of a wire mesh fence panel and existing vegetation shown in Figure 1. The area outside the construction footprint which is under assessment (refer to Figure 1) would temporarily form part of the construction footprint during the operation of the CCTV investigation.

Vegetation would be removed by hand tools such as whipper snippers and chainsaws. Roots would be left in situ to minimise ground disturbance.

Once access has been obtained, a CCTV remotely operated vehicle (ROV) would be lowered into the penstock and then conduct the investigation. Once complete the robot would be retrieved, the site demobilised and the fencing panel would be replaced. All waste material will be removed and the ground restabilised if required, prior to the finishing of works. Site and boundary fencing would be re-established to its previous standard to ensure safety and security is maintained.

The proposal would assist with demonstrating that CoA D26 has been complied with.

The proposal does not involve any changes to The Bays Station construction site indicative construction program, outlined in Figure 9-31 of the Stage 1 EIS and there are no impacts to any program or construction periods.

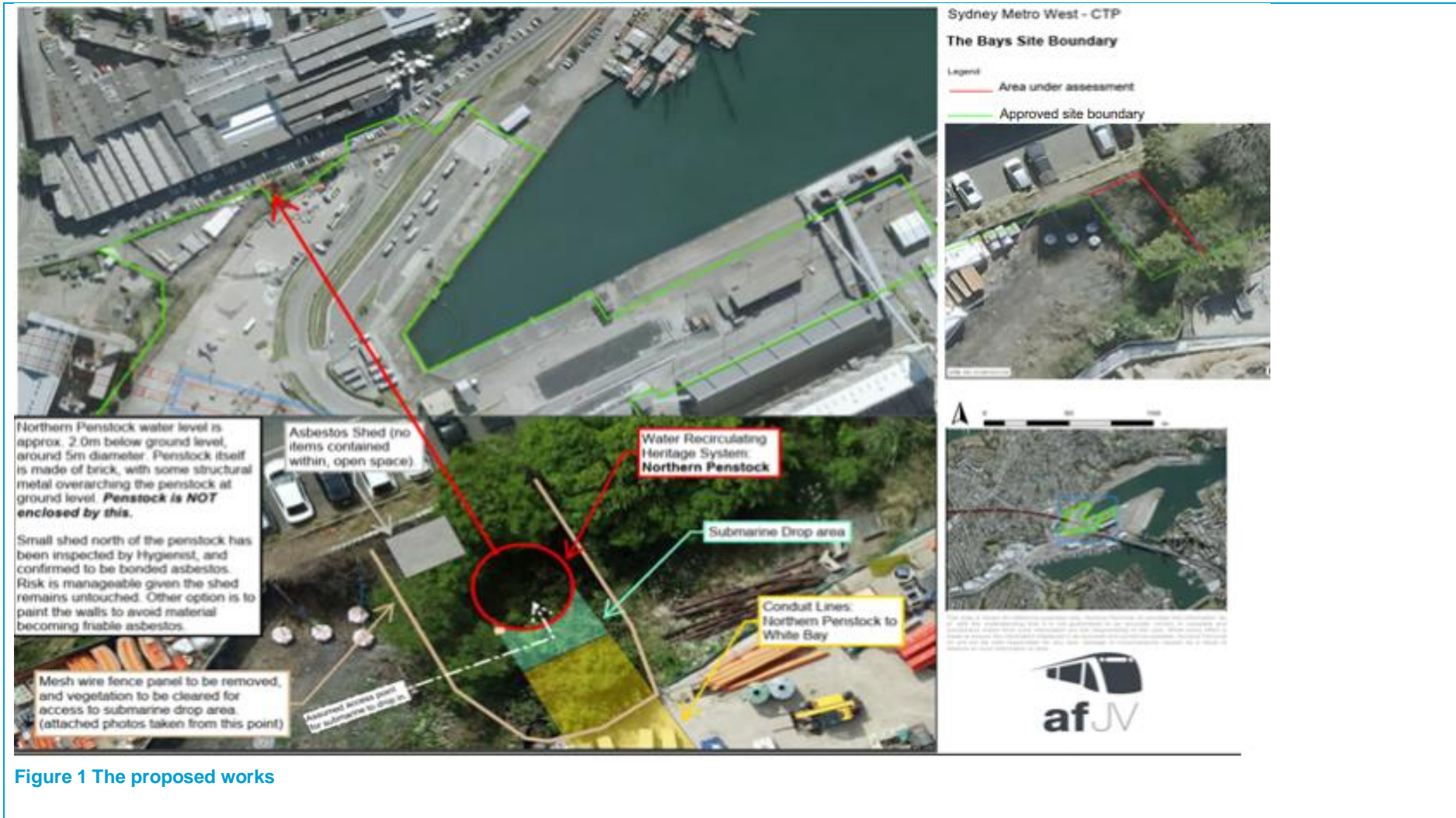


Figure 1 The proposed works

### 3.0 Timeframe

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

The proposed change would take place in March 2022 and would take about one week. No change is proposed to the indicative construction program as outlined in Figure 9-31 of the Stage 1 EIS.

### 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.**

The Bays Station construction site is located in front of the former White Bay Power Station and on the foreshore of White Bay (refer to Figure 1). The site was previously used for industrial and wharf operations which is detailed extensively in the revised Archaeological Research and Design Excavation Methodology (ARDEM).

### 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 existing environmental characteristics of The Bays Station construction site and surrounding areas proposed to be included as shown in Figure 1, is included in the Stage 1 EIS and a summary is as follows:

- The site is located on the foreshore of White Bay
- White Bay has been heavily modified for port purposes and is unlikely to contain significant aquatic habitat
- Previous land uses of the site include Port and Employment and land zonings include IN2 – Light Industrial and W1 – Maritime Waters
- There is no naturally occurring native vegetation on the site. The site is almost devoid of vegetation except for opportunistic weed species. The land directly adjacent (to the south, west and north) contains a mix of planted vegetation and weeds
- Soils and groundwater have a moderate potential contamination risk associated with current and historic activities
- There is one registered Aboriginal heritage site within The Bays construction site (located within the footprint of the EIS construction site boundary (note; this site was listed in the Aboriginal Heritage Information Management System (AHIMS) after the EIS was prepared).

The historical heritage site characteristics are described in Table 1. No new impacts are proposed because of the proposed works, however in any case archaeological management of The Bays Station construction site would be conducted under the revised (ARDEM) as required by CoA D25 and D26.

**Table 1 Historical heritage items at The Bays**

Item and listing	Significance	Proximity to The Bays Station construction site
White Bay Power Station SHR (01015), Urban Development Corporation s170 (4500460) and SREP No. 26 City West Part 3 No. 11	State	The construction site falls partially within the curtilage of the White Bay Power Station. This item is subject to the CCTV investigation.
The Valley Heritage Conservation Area Leichhardt LEP 2013 (C7)	Local	Located to the north and north-west of the construction site.
White Bay Power Station (outlet) Canal / Circulating Water Conduit Ports Authority of NSW s170 (4560026)	Local	Located within the approved construction site, and the study area of the approved construction site.
White Bay Power Station (inlet) Canal Ports Authority s170 (4560062)	Local	Located within the approved construction site, and the study area of the construction site, and extending west under the White Bay Power Station to Rozelle Bay south of the approved construction site.
Beattie Street Stormwater Channel No. 15 Sydney Water s170 (4570329)	Local	Partially located within the northern part of the study area of the construction site.
Glebe Island Silos Ports Authority of NSW s170 (4560016) and SREP No. 26 City West Part No. 1	Local	Located to the south-east of the construction site, and the western end is partially within the study area.



## 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 required to suitably determine the existing condition of the White Bay Power Station Water Circulating System prior to works that have the potential to impact. The only alternative would be to not conduct the investigation. This would not be appropriate as it would result in a condition assessment that is not adequate.

The proposal would also assist with compliance with respect to CoA D26.

## 7.0 Environmental Benefit

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

It is not anticipated that the proposed change would result in an environmental benefit.

## 8.0 Control Measures

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

The works will be managed under the project CEMP (Construction Environment Management Plan). Appropriate control measures are already identified in the CEMP that will accommodate the changes proposed in this assessment. In any case, updates to each document would be completed where required as a result of approval of the proposed works, prior to the works being undertaken.

A heritage assessment of the proposed works has been undertaken (Appendix A) and includes the following additional measures:

- In order to avoid inadvertent impact is it proposed that an archaeologist be present during the vegetation removal monitor the work and avoid impacts to heritage listed fabric.
- Survey in the location of the Penstock and any other archaeological remains that the clearing reveals so that these are well documented in terms of the location and condition of fabric.
- An archaeologist would need to monitor the process of launching and removing the underwater drone as the drone team may not be aware of the need to avoid impact to the fabric of the northern penstock.
- The results of the underwater survey should be forwarded to the Excavation Director

- Results of this inspection would be combined with the results of implementing AMS-07 in order to demonstrate that Condition D26 of the CoA has been complied with.

## 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 effects of climate change on the Sydney Metro West Stage 1 project was discussed in the EIS Chapter 26. The proposed change is expected to result in a negligible change to that assessed in the EIS.

## 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	<p>Biodiversity impacts were assessed in Chapter 22 of the Stage 1 EIS. It was identified that the site contains opportunistic weed species, and adjoining land contains a mix of planted vegetation and weeds.</p> <p>The proposed works are in adjoining land. The removal of a small extent of planted native vegetation and/or weeds would be required. The clearing of any planted native vegetation will be minimised in accordance with CoA D2 and D9. The site would also be inspected by the Project Ecologist prior to works commencing in accordance with the pre-clearing procedure. Any trees to be removed would be recorded in AFJV's tree removal register and be replaced by Sydney Metro in accordance with CoA C-B8 and REMM LV13.</p> <p>No additional impacts beyond those identified in the EIS are therefore anticipated.</p>	No additional measures	Y	Y	
Water	<p>No change from the Approved Project. Any potential temporary additional water quality impact will be managed in accordance with the CoA and Revised Environmental Management Measures (REMMs) relating to erosion and sediment controls.</p>	No additional measures	Y	Y	

(Uncontrolled when printed)

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
Air quality	The proposed works apply a minor additional piece of land negligible ground disturbance would occur.	No additional measures	Y	Y	
Noise vibration	<p>Construction noise and vibration was assessed in Chapter 11 of the Stage 1 EIS. The extent of noise and vibration impacts of the proposed change are expected to be similar to the Approved Project, as there is no proposed intensification of the use of site, the extent of additional land is minor in extent and works would be conducted during standard construction hours.</p> <p>Potential noise and vibration impacts will continue to be managed in accordance with the CoAs and REMMs, including the measures contained within the Construction Noise and Vibration Management Sub-Plan.</p>	No additional measures	Y	Y	
Aboriginal heritage	<p>Chapter 13 of the Stage 1 EIS assessed Aboriginal heritage impacts from the Approved Project. An Aboriginal Potential Archaeological Deposit (PAD) at The Bays has been listed in the Aboriginal Heritage Information Management System (AHIMS) as item 45-6-3826. The proposed works are about 200m north of this area. The next closest recorded Aboriginal site is AHIMS ID 45-6-2278, a potential archaeological deposit (PAD) site located approximately 650 metres to the east.</p> <p>The proposed works in the additional areas would be managed in accordance with CoAs and REMMs, the Heritage Management Plan and the Unexpected Finds Protocol.</p>	No additional measures	Y	Y	

(Uncontrolled when printed)

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
	As such, the potential Aboriginal heritage impact would be consistent with the Approved Project.				
Historical heritage	<p>The proposed works involve an investigation of the Outlet Conduit which form part of the White Bay Power Station (outlet) Canal / Circulating Water Conduit – Ports Authority of NSW s170 (4560026) heritage item. The access location is also within the White Bay Power Station (SHR (01015)).</p> <p>With regard to White Bay Power Station (SHR (01015)), potential impacts would be limited to the removal of vegetation. Given that the White Bay Power Station’s statement of significance does not mention vegetation, it is considered unlikely that the minor vegetation removal would have any impact on the heritage significance of the item</p> <p>With regard to the White Bay Power Station (outlet) Canal / Circulating Water Conduit (Ports Authority of NSW s170 (4560026)), the CCTV assessment would be passive in nature and does not propose any actual works or impacts to the item. As such it is unlikely that the item would be impacted by the investigation. Further, AFJV have consulted with the project’s Excavation Director about the proposed investigation. A memo from the Excavation Director is included in <b>Appendix A</b>. The Excavation Director supports the CCTV investigation as it is passive in nature and it is unlikely to impact the item. Further, the investigation will assist in informing the archaeological investigations into the item as required by the ARDEM.</p>	An archaeologist would supervise the vegetation removal and the lowering of the CCTV ROV into the penstock and its extraction from the penstock.	Y	Y	

(Uncontrolled when printed)

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
	The potential historical heritage impacts resulting from the proposal are considered consistent with that assessed in the EIS. Overall, there is no change in the magnitude of the historical heritage impacts assessed in the EIS. The proposal would be undertaken in accordance with the relevant CoAs and REMMs, including the revised ARDEM and CoA D46 which requires vibration testing where there is potential to impact heritage items. No additional impacts are anticipated on any elements of heritage significance as a result of the proposal relative to the Approved Project.				
Community and stakeholder	No change from the approved project. Future community and stakeholder notifications would include reference to the area of land required for temporary access if required.	No additional measures	Y	Y	
Traffic	No change from the approved project. Access to the additional areas would be via the routes outlined in the site Construction Traffic Management Plan (CTMP). It is therefore not anticipated that there would be any additional traffic impacts as a result of the proposed change.	No additional measures	Y	Y	
Waste	The proposed change would result in green waste due to vegetation removal. Waste will be managed in accordance with existing CoAs and REMMs including the CEMF. As such, the potential spoil and waste impacts would be consistent with the Approved Project.	No additional measures	Y	Y	
Social	No change from the approved project.	No additional measures	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
Economic	No change from the approved project.	No additional measures	Y	Y	
Visual	The proposal would result in a minor level of vegetation removal. It is not expected that this would result in additional visual impacts as the vegetation removal is minor and there are no changes proposed to the types of activities occurring within the construction site. As such, landscape character and visual impacts are considered to be consistent with that assessed in the Stage 1 EIS.	No additional measures	Y	Y	
Urban design	No change from the approved project.	No additional measures	Y	Y	
Geotechnical	No change from the approved project.	No additional measures	Y	Y	
Land use	No change from the approved project.	No additional measures	Y	Y	
Climate Change	No change from the approved project.	No additional measures	Y	Y	
Risk	No change from the approved project.	No additional measures	Y	Y	
Other	No change from the approved project.	No additional measures	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures	Y	Y	

## 11.0 Impact Assessment – Operation

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

Stage 1 of the planning application for Sydney Metro West (subject of this Consistency Assessment) is for major civil construction work for Sydney Metro West between Westmead and The Bays. At this stage, measures to avoid or minimise impacts have been developed only for major civil construction work for Sydney Metro West between Westmead and The Bays – which involves construction only. Impacts applicable to the operational aspects of Sydney Metro West including operation stage environmental mitigation measures would be developed when planning approval applications are made for future stages. As such, operational impacts of the proposal are not applicable, and therefore there are no changes from the approved project are anticipated.

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	Y	Y	
Water	No change from the approved project.	No additional measures	Y	Y	
Air quality	No change from the approved project.	No additional measures	Y	Y	
Noise vibration	No change from the approved project.	No additional measures	Y	Y	
Indigenous heritage	No change from the approved project.	No additional measures	Y	Y	
Non-indigenous heritage	No change from the approved project.	No additional measures	Y	Y	
Community and stakeholder	No change from the approved project.	No additional measures	Y	Y	
Traffic	No change from the approved project.	No additional measures	Y	Y	
Waste	No change from the approved project.	No additional measures	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	Y	Y	
Economic	No change from the approved project.	No additional measures	Y	Y	
Visual	No change from the approved project.	No additional measures	Y	Y	
Urban design	No change from the approved project.	No additional measures	Y	Y	
Geotechnical	No change from the approved project.	No additional measures	Y	Y	
Land use	No change from the approved project.	No additional measures	Y	Y	
Climate Change	No change from the approved project.	No additional measures	Y	Y	
Risk	No change from the approved project.	No additional measures	Y	Y	
Other	No change from the approved project.	No additional measures	Y	Y	
Management and mitigation measures	No change from the approved project.	No additional measures	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. The proposed change would not transform the project. The project would continue to provide a metro rail line between Westmead and The Bays as part of the Approved Project.</p>
<p>Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?</p>	<p>Yes. The proposed change would be consistent with the objectives and functions of the Approved Project as a whole.</p>
<p>Is the project as modified consistent with the objectives and functions of elements of the Approved Project?</p>	<p>Yes. The proposed change would still deliver a construction site for the excavation of The Bays Station, and for launch and support of tunnel boring machines. Therefore, the project as modified is consistent with the objectives and functions of The Bays Station construction site and the Approved project.</p>
<p>Are there any new environmental impacts as a result of the proposed works/modifications?</p>	<p>No. There are no new environmental impacts. All risks identified for the approved project and the proposed change would be adequately addressed through the application of the mitigation measures provided in the Environmental Impact Statement, Submissions Report, Amendment Report and the conditions of approval.</p>
<p>Is the project as modified consistent with the conditions of approval?</p>	<p>Yes. The proposed change is 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 proposed change 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 proposal are understood and will be accounted for by implementing the existing mitigation measures provided in the Environmental Impact Statement, Submissions Report, Amendment Report and the Instrument of Approval for the approved project.</p>


## 13.0 Other Environmental Approvals

Identify all other approvals required for the project:


Nil. No additional environmental approvals are required.

## Author certification

To be completed by person preparing checklist.

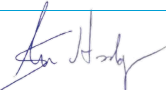
I certify that to the best of my knowledge this Consistency Checklist:			
<ul style="list-style-type: none"> <li>Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and</li> <li>Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information.</li> </ul>			
Name:	Gregor Wilson	Signature:	
Title:	Environmental Advisor		
Company:	AFJV	Date:	11/3/2022

This section is for Sydney Metro only.

Application supported and submitted by			
Name:	Yvette Buchli	Date:	23/03/2022
Title:	Associate 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:	S Hodgson	Date:	23/03/2022
Title:	Director Environment, Sustainability & Planning, West	Comments:	
Signature:			

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## Appendix A – Excavation Director memo

<b>Project:</b> Archaeological Work Methods for the insertion of a submersible drone into the Outlet Conduit (1954)	<b>Date:</b> 18 <sup>th</sup> February 2022
<b>Project site:</b> The Bays	<b>Author:</b> Dr Iain Stuart (Excavation Director) D
<b>Client:</b> AFJV	<b>Contact:</b> Erran Woodward

## 1.1 Background

The AFJV utilities team are planning a condition assessment of the WBPS water cooling system outlet conduit (1954).

The history of the conduit has been discussed in Archaeological Management Statement (AMS) -07 Section 1.1 and need not be further discussed here.

The general plan is to do undertake an internal inspection of the fabric via a submersible CCTV remotely operated vehicle (ROV). Access to the conduit would be via the Northern Penstock (access via White Bay has been determined as not practical due to the gates at the end of the conduit).

In general, this approach is consistent with the aims of the ARDEM and Condition 26 of the Conditions of Approval for the Bays project. Condition D26 of the CoA states that "The revised Archaeological Research Design and Excavation Methodology(s) must include provision for early physical investigation of areas of impact identified as likely to contain State significant archaeology or subterranean Heritage items in the research design to inform excavation in these areas. This must include the Parramatta and The Bays metro station sites, including Parramatta Convict Drain, Parramatta Sand Body, White Bay Power Station (inlet) Canal and Beattie Street Stormwater Channel".

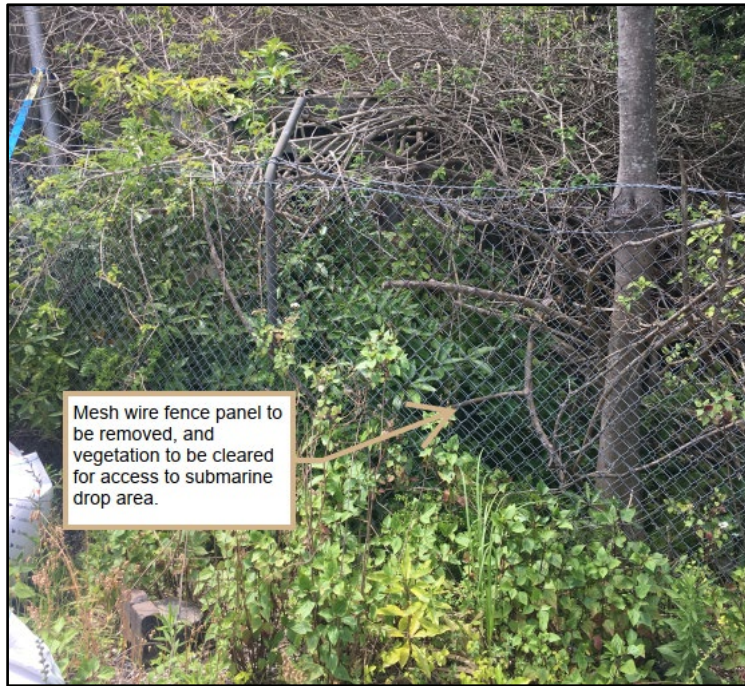
An AMS has not been prepared in this case as the work is not impacting archaeology.

## 1.2 Access to the Conduit

The key potential impact is access to the Northern Penstock. This area is heavily vegetated, and access is difficult.

The proposed access methodology is as follows.

1. Remove a section of existing fencing to access the Northern Penstock (Figure 1)



**Figure 1 The Northern Penstock area**

## 2. Clearing the Vegetation

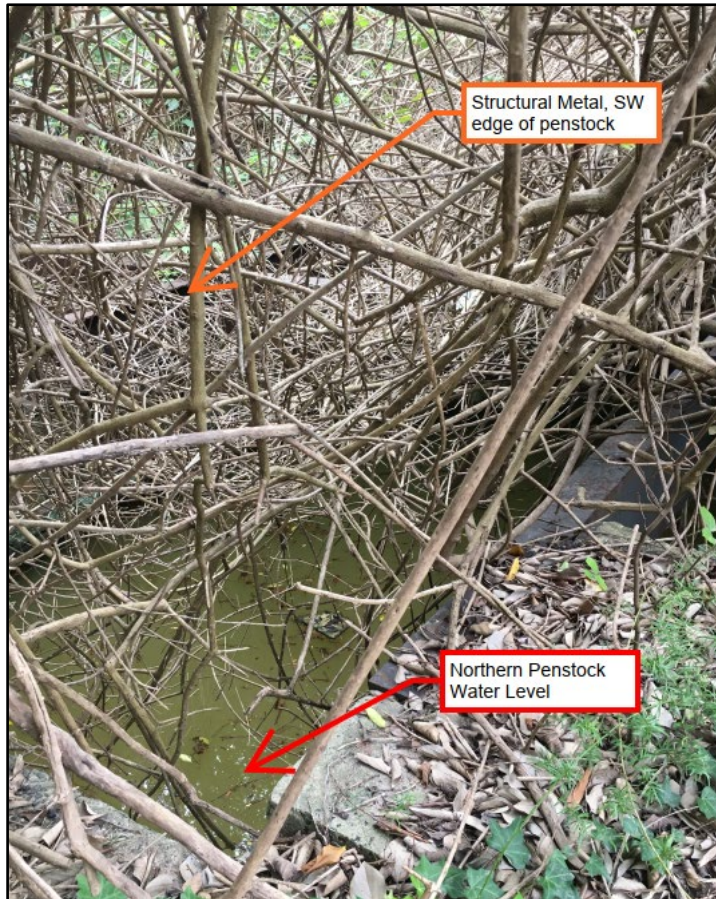
Prior to clearing the area would be inspected by the Project Ecologist in accordance with the Project's Pre-clearing Procedure

Clear the existing vegetation/weeds to establish a working area. Example of overgrown area is shown below.

The vegetation would be cleared using a combination of hand tools, whipper snippers and chainsaws.

Vegetation would be removed progressively.

All removed vegetation would be mulched at The Bays site. The waste will be taken offsite and disposed of at an appropriately licensed waste facility. All roots would be left in situ and no ground disturbance is being proposed. The clearing is simply to facilitate access



**Figure 2 The overgrown Northern Penstock area**

### 3. Inserting the Drone

Once a working area is cleared the drone will be inserted by lowering the CCTV ROV into penstock and into the conduit. The drone would enter the conduit and record its condition as far along as it can get. Once the recording is complete CCTV ROV would be removed via penstock.

## 1.3 Potential archaeological impacts

The Northern Penstock is within the State Heritage Register curtilage of the White Bay Power Station. In order for this work to be undertaken without further permitting it must not impact the Northern Penstock nor should it impact the Outlet Conduit (1954).

The main area of inadvertent impact would be in the clearing of the vegetation around the Northern Penstock.

## 1.4 Archaeological management

The proposed clearing work would be allowable under AMS 01 1.3.5 Grubbing in so far as it is within the project boundary.

In order to avoid inadvertent impact it is proposed that an archaeologist be present during the vegetation removal monitor the work and avoid impacts to heritage listed fabric.



It would be important to survey in the location of the Penstock and any other archaeological remains that the clearing reveals so that these are well documented in terms of the location and condition of fabric.

An archaeologist would need to monitor the process of launching and removing the underwater drone as the drone team may not be aware of the need to avoid impact to the fabric of the northern penstock

The results of the underwater survey should be forwarded to the Excavation Director so the results can be reviewed and their implication for the condition of the culvert assessed. Ultimately the results of this inspection would be combined with the results of implementing AMS-07 in order to demonstrate that Condition D26 of the CoA has been complied with.