

## **Pre-Construction Minor Works Approval Form**

Minor Works are defined as any low impact activities that are undertaken prior to the commencement of 'construction' as defined in the project's applicable planning approval. However if Minor Works affect or potentially affect heritage items, threatened species, populations or endangered ecological communities, these works are defined as 'construction' unless otherwise determined by the applicable planning authority.

Minor Works approvals do not remove any obligation to comply with the project's applicable planning approval conditions (including requirements prior to 'any works' commencing) or obtain any other applicable permits, licenses or approvals as necessary.

This application and all supporting information must be submitted to TfNSW/the Environmental Representative as one (1) PDF file at least 10 business days prior to the commencement of the proposed Minor Works.

Part 1: Application									
Contractor:	John Holland & Laing O'Rourke Joint Venture (JHLOR)								
Project:	Southwest Metro Corridor (SMC) Bankstown Station & Additional Corridor Works (BAC)								
Application Title: (e.g. Smith St trenching works)	Pre-construction Minor Works – Enabling Works (WE38-45, including midweek work)								
Application Number:	BAC-PCMW-001 Document number: SMCSWSSJ-JHL-WBK-EM-REC-000002								
Application Date:	Rev03 - 16/03/22								
	The Sydney Metro City & Southwest – Sydenham to Bankstown - Environmental Impact Statement , dated 7th September 2017;								
Planning Approval:	The Sydney Metro City & Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report June 2018;								
	The Sydney Metro City & Southwest – Sydenham to Bankstown – Instrument of Approval, dated 12th December 2018, superseded by CSSI 8256 MOD 1 determined 22nd October 2020								
	<ol> <li>Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation).</li> </ol>								
	Treatment of contaminated sites.								
	3. Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities.								
	4. Operation of ancillary facilities that have minimal impact on the environment and community.								
	5. Minor clearing and relocation of vegetation (including native).								
Minor Works Categories: Highlight as applicable.	Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments.								
If Items 4, 8 or 11 are applicable, this form must be endorsed by an	<ol> <li>Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties.</li> </ol>								
Environmental Representative.	8. Utility relocation and connections.								
	9. Maintenance of existing buildings and structures.								
	10. Archaeological testing under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010) or archaeological monitoring undertaken in association with other Minor Works to ensure there is no impact on heritage items.								
	Any other activities that have minimal environmental impact, including construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.								



## Planning Authority Determination:

Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological communities? If 'Yes', this completed form must be endorsed by an Environmental Representative, approved by TfNSW and submitted to the applicable planning authority to determine that the works are not defined as 'construction'.

Yes – The works have the potential to affect State Heritage listed items, areas of known or expected archaeological potential as ground penetration is required. The works will be conducted under the CSSI 8256 Archaeological Assessment Research Design (AARD) and Archaeological Method Statement (AMS). Archaeological Monitoring will occur at Marrickville under the Excavation Directors instruction and JHLOR will implement the Sydney Metro Unexpected Heritage Finds Procedure V2.0 at Bankstown and Punchbowl.

It is anticipated that there will be no impacts associated with the works that will affect threatened species, populations or endangered ecological communities.

### Part 2: Details

### **Description of Works**

Site investigation works are required to determine site conditions from a geotechnical, service and utility perspective. A number of activities will be undertaken as part of these works. Works are itemised as per the Minor Works Categories in Part 1 of this document. Refer to Appendix 2 for extent and location.

### Item 1 (refer to the minor works categories above)

### Sydenham to Bankstown Corridor- OHW Visual Inspection and Survey

WE38 (19-20 March 2022), WE39 (26-27 March 2022) and WE45 (7-8 May 2022) 0600-1800.

Site inspection

survey equipment, soil conductivity rods, elevated work platform some hand tools

### **Geotech Investigation**

Locations: Bankstown, Punchbowl and Marrickville station precincts only
Plant: Hi-Rail 8T Excavator, Hi-Rail Vac/NDD truck and borehole rig at Bankstown
only.

## Describe the proposed Minor Works:

Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).

### **Locations**

### **Bankstown Station precinct**

Standard Construction Hours between WE38 to WE45 19 March- 8 May 2022 And WE45 (7-8 May 2022) 0700-1800

About 24 boreholes and test pits. Boreholes 150mm-200mm diameter, 5m depth unless rock encountered earlier. Test pits (300-600mm wide bucket, 2m below bottom of ballast- Pit likely 1m x 1m x 2m (depth).

Plant and equipment: Borehole rig, Hi-rail Excavator truck and Hi-rail Vac Truck. AARD- unexpected finds protocol.

### **Punchbowl Station precinct**

WE45 (7-8 May 2022) 0600-1800

1x hirail 8t exc, hi rail NDD truck- three test pits (300-600mm wide bucket, 2m below bottom of ballast- Pit likely 1m x 1m x 2m (depth).

AARD- unexpected finds protocol.

### Marrickville Station precinct

WE45 (7-8 May 2022) 0600-1800

1x hirail 8t exc, NDD truck- three test pits

(300-600mm wide bucket, 2m below bottom of ballast- 1m x 1m x 2m (depth).

2x pits in AMS Marrickville Zone 1: archaeological monitoring/salvage.

1x pit in AMS Marrickville Zone 2: AMS and archaeological investigation.



### Description of Works

Site investigation works are required as part of the design staging process for the Bankstown Station & Additional Corridor Works (BAC).

The proposed works are outlined below. The Project extents at Marrickville, Punchbowl and Bankstown, including "No-go" areas are included within Appendix 2. Over head wire (OHW) inspection and survey is proposed to occur across the alignment, however the predicted impacts do not trigger further assessment. The works are predicted to be <5dBA above rating background level (RBL).

It is the intention of this PCMW to gain approval for the activities listed to occur around three stations; Marrickville, Punchbowl and Bankstown, except where the constraints listed within the description and risk assessment prevent this (i.e. approval of this PCMW does not remove the requirement for external approvals such as Road Occupancy Licences or relevant items under the Planning Approval such as the Tree Report, Archaeological Method Statements etc.).

#### <u>"No-go" Areas</u>

The below represents a list of areas where works will not occur (with the exception of nil impact works such as inspections and survey scanning)

It is noted that all activities listed below will occur outside of any archaeological investigation zones as identified within the Archaeological Assessment and Research Design Report (AARD) and Archaeological Method Statement, except at Marrickville.

Marrickville railway station is located within the Project area and is listed within the State heritage Register curtilage (SHR). Survey & Inspections, contamination and geotechnical testing is proposed to occur within these areas. Works will not impact upon any heritage fabric- buildings, structures or landscaping. Surfaces will be reinstated to the pre-existing condition after works. Works will be conducted under the direction of the Excavation Director and in accordance with the Archaeological Method Statement

Bankstown and Punchbowl railway stations are located within the Project area and are listed within LEPs and on the RailCorp S170 register. Survey & Inspections, contamination and geotechnical testing is proposed to occur within these areas. Works will not impact upon any heritage fabric- buildings, structures or landscaping. Surfaces will be re-instated to the pre-existing condition after works.

Works will not occur within the extents of Potential Archaeological Deposits (PADs) for indigenous archaeology, as identified within the Aboriginal Cultural Heritage Assessment Report (ACHAR).

Works will not occur within areas of threatened species, populations or endangered ecological communities.

No works will occur within known contaminated areas.

There will be no removal or pruning of trees or vegetation (with the exception of grasses and weeds) as part of the works. Any removal or pruning of trees will be subject to a separate PCMW. Trees will be delineated with flagging and bollards in areas where JHLOR is conducting works in the vicinity, for the duration of those works. Restrictions on removing vegetation and trees will be briefed to those involved with the works.

### "No-go" and Restricted Activities

Any works on local roads associated with the below will only occur with the appropriate approvals (Road Occupancy Licenses, standing plant permit etc.) from the appropriate road authority.

## Geotechnical and Contamination Testing

Additional boreholes and test pits will be undertaken within the project boundary. The exact locations of the test pits and boreholes will be developed as the design progresses. The indicative locations are provided in Appendix 2. No boreholes or test pits to be undertaken in 'no-go zones', as identified on the ECMs. Note that the indicative locations are sufficiently accurate for the noise impact assessment process.

The Southwest Metro Corridor Construction Noise & Vibration Impact Statement (CNVIS), Rev 04, October 2021 is being used to complete the out of hours work assessment (OOHWA). Based on plant and equipment, the proposed investigative works at Marrickville (NCA01) and Punchbowl (NCA10) are similar to Scenario SC\_04, Combined Service route site wide and for Bankstown (NCA12 & 11) is similar to



Scenario B\_03 Combined Service Route east of Bankstown Station. The predictions of the CNVIS will be refined, the mitigation measures will be implemented accordingly and validated during the possession. The OOHWA will be approved under the EPL 21147 OOHWA process.

Test pits will be excavated and backfilled with an excavator. A whacker packer will be used to compact any backfill material. A drill rig will be used to construct boreholes. Boreholes and excavations that are to be backfilled will be backfilled with the excavated fill if no obvious contamination is present or with clean sand. If the excavation or borehole is within an area of known contamination, the associated waste classification report will be reviewed to determine if the spoil can be used as back fill. The surface will be "made-good" to a standard that represents the original condition. All waste will be managed in accordance with the SMC CEMP and sub plans. The spoil will be stockpiled and tested in accordance with the NSW EPA Waste Classification Guidelines, 2014 prior to disposal to an appropriately licenced waste facility.

The preliminary OOHWA predicts that the excavation of test pits and boreholes will generate a low level of noise at the Bankstown sensitive receivers, a moderate level of noise at the Punchbowl sensitive receivers and a high level of noise at the Marrickville nearby properties. These works are expected to be transient, occurring for short periods of time in a location before moving into a new area. As such, impacts from noise associated with this activity are expected to be high for short durations at Marrickville, however low overall. Once the OOHWA has been finalised and approved, respite and other additional mitigation measures will be implemented in accordance with the Sydney Metro Construction Noise and Vibration Strategy (CNVS).

#### Soil Conductivity Tests

It is noted that soil conductivity testing would occur in the area surrounding the project site. This activity involves inserting three metal rods with an approximate diameter of 15mm into the ground to a depth of approximately 300mm. The rods are typically driven in by hand or pre-drilled using a large battery powered drill. A device is then used to measure the conductivity/resistivity of the soil. This is a low noise impact activity (<5dBA above background) that would not be specifically mentioned within the EIS or SPIR however the activity is consistent with investigation activities as described within the EIS.

### Survey and Inspections

Survey activities (including, visual inspections of overhead wire structures, geographical survey, scanning, dilapidation surveys, ground penetrating radar) will occur across the project and project surrounds as required. Survey will occur using hand tools and site utes. Survey activities that do not include any physical impacts such as installation of survey control points, would occur throughout the corridor including within state heritage curtilages, Archaeological Management Zones, EECs (e.g. scanning, dilapidation surveys)

Inspections will occur within the Project site and surrounds. Bridge inspections will occur at bridges within the Project footprint. An Elevated Work Platform and hand tools would be used as part of the inspections.

### Service Searching and CCTV Investigations

CCTV inspections of services would occur throughout the Project. A small remote-controlled camera would be inserted into services. There is no noise associated with this activity.

### **Erosion and Sediment Controls**

Erosion and sediment controls will be installed as required for the excavation test pits and boreholes. This scope does not trigger an extensive Erosion and Sediment Control Plan (ESCP), however the following ersed materials will be on hand as part of a Erosion and Sediment Controls Spot List. Controls that would be on hand include;

- Sediment fence
- Coir logs/silt socks
- Sandbags
- Geofabric
- Drain guards
- Drainage rock/ballast for surface stabilisation



- Delineation and flagging

#### **Vegetation Protection**

Delineation and signage will be installed around areas of vegetation to be protected. Delineation would occur via bollards and flagging or temporary fencing as appropriate.

A small truck will be used to deliver fencing panels and barriers. Bollards, panels and flagging will be installed by hand.

#### Laydown

To support the above activities laydown areas within the rail corridor, as identified within the EIS & SPIR will be used. Any laydown area within an environmentally sensitive area (e.g. 'no go' areas or vegetation) will be included in a separate PCMW Approval. Laydown will be used to store materials such as temporary fence components, Vortok fencing, erosion and sediment control materials, etc.

The establishment of compounds will be the subject of a different PCMW (and any other ancillary facility assessment) as required.

Storage of material will be ongoing in laydown areas however access to these area will only occur during standard construction hours unless otherwise approved within an OOHWA.

Some intermittent noise would be generated at the laydown areas, however as the areas will be used minimally, noise impacts are expected to be low overall.

### Activity support

A street sweeper will be used to maintain the site and surrounding roads if required.

A water cart or trailer will be used to mitigate the effects of dust if required.

Site utes will be used to access site.

Noise associated with this work will be transient and is expected to be low impact overall

The spoil will be stockpiled and tested in accordance with the NSW EPA Waste Classification Guidelines, 2014 prior to disposal to an appropriately licenced waste facility.

### Plant List

Plant and equipment anticipated to be used during the investigative works include:

- Elevated Work Platform/Scissor Lift
- · Whacker packer
- Excavators (5t-13t)
- Drill rig
- Vacuum truck
- Site utes
- 2t tipper
- · Portable lighting towers
- Road Sweeper
- 13t Bogie Trucks
- · Handheld compactor/whacker packer
- Hand tools
- Geofabric (to place around boreholes and test pits)
- Skip bins for spoil
- Whipper snipper (electric)
- Telehandler
- Hiab
- · Materials for borehole/test pit reinstatement.
- Water cart/trailer



### Working Hours The inspection works are proposed to be undertaken during weekend possessions as identified within the planning approval. All listed activities would need to occur on or adjacent to the existing rail line. Works of such nature can only be undertaken during a rail possession, for worker safety reasons. All activities listed above that are proposed to occur in day time OOH (Saturday 1300-1800 and Sunday 0600-1800) during the weekend possession would be undertaken as part of the Out of Hours Works process as required. The works would be undertaken in accordance with the conditions within Laing O'Rourke EPL 21147. In accordance with CoA-E20c) work may be undertaken outside of standard construction hours "where different construction hours are permitted or required under an EPL in force in respect of the CSSI". As the EPL has been granted to Laing O'Rourke, JHLOR are the authorised to assess, approve and undertake works in accordance with the conditions of EPL. A copy of the JHLOR OOHWA Permit will be completed prior to any works outside of standard construction hours. A copy of any OOHWA Permit produced for Pre-Construction works will be provided to the ER for written confirmation that any works undertaken outside of standard construction hours are low impact and are consistent with the terms of this PCMWA JHLOR will mitigate impacts by applying the additional mitigation measures within the Sydney Metro Construction Noise and Vibration Strategy. **General Notes** All plant would access site via existing Sydney Trains access gates. Ballast and foam ramps will be constructed for the possession works along the corridor, however no additional ballast or foam ramps are proposed for the investigation works, but may be utilised. Note that these activities are subject to change based on construction progress, any changes would be subject to revision and approval of this PCMWA. The above list does not include activities approved under any other Pre-construction Minor Works Approval form. These works will not include adjustment to third party utilities, as such the Utility Management Strategy document will not be required to proceed with these works. JHLOR is responsible for the actions of its employees, workers and subcontractors. JHLOR is not responsible for the actions of other parties including but not limited to Sydney Trains and utility owners. WE38, 19th March 2022. **Planned Commencement Date:** Possession works will continue WE39 (26th March) and WE45 (7th May) The investigation works are proposed to occur within the T3 rail corridor at Marrickville, Punchbowl and Bankstown. The T3 line runs adjacent to a number of land zoning types including industrial, business and community, infrastructure, residential and recreational. Roads cross the T3 line in a number of places, both by overbridges and underpasses. A number of footbridges also cross the T3 line along the length of its alignment. The T3 Line crosses the Cooks River in one location between Sydenham and Bankstown. Other local waterways such as channels, culverts and stormwater systems are present along the alignment. The majority of vegetation in investigation area comprises exotic or planted native species on highly modified landforms. There are a number of areas of Sydney **Local Sensitivities:** Turpentine - Ironbark Forest and Broad-leaved Iron Bark - Grey Box that meet the definition of an Endangered Ecological Community under the Threatened Species Describe the presence (if any) of local sensitive environmental areas Conservation Act 1995 (enforced at the time of assessment under the EIS). There are and community receptors also a number of threatened species (Acacia pubescens) and known habitat resources (hollow bearing trees, White Ibis roosting colonies, Grey-headed flying fox habitat) within the rail corridor and surrounds. Marrickville Station is surrounded by low density residential housing to the south, high density residential apartments to the north with commercial and light industrial areas throughout. Punchbowl Station is surrounded by medium density residential commercial and light industrial areas and park land to the north.



Bankstown Station is surrounded by high density residential apartments to the south, and mostly commercial to the north.

### Part 3: Environmental Risk Assessment and Management

Prepare an Environmental Risk Assessment (in accordance with the <u>Sydney Metro Risk Management Standard</u>) and an Environmental Control Map for the proposed Minor Works and attach as Appendix 1.

If an Environmental Risk Assessment and/or an Environmental Control Map for the proposed Minor Works is/are already contained in existing documentation, attach the relevant section(s) as Appendix 1.

#### **Documentation:**

List any existing documents (including those referenced above) that the proposed Minor Works will be undertaken in accordance with and attach as Appendix 2 (e.g. plans, procedures, procedures, etc.).

- Appendix 1: Environmental Risk Assessment
- Appendix 2: ECM for the proposed works
- Appendix 3: EPL 21147 OOHWA Approval
- Appendix 4: Community Notifications
- Appendix 5: Environmental Representative Supporting Letter.

### **Part 4: Workforce Notification**

How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce? A site induction will be provided to all personnel working on the project site. The induction will include relevant environmental aspects and risks associated with works on the project site.

Works will be undertaken in accordance with a SWMS or JSEA (depending on whether work meets the definition of High Risk Construction Works in accordance with Clause 291 WHS Regulation). SWMS and/or JSEAs will include the identification and assessment of environmental risks as related to the specific scope of works. SWMS will be reviewed by the JHLOR Environmental Manager or a competent person.

## Noted to be low risk activities, plans approved for SMS

ation						
No community consultation has occurred to date regarding the investigation works.						
Any works to occur outside of standard construction hours will be notified in accordance with the Additional Mitigation Measure requirements specified in the Sydney Metro Construction Noise and Vibration Strategy. Note that the OOHWA is the most up-to-date information for 8256 approvals. The CNVS was written for 7400. Refer to Appendix 3.						
No works will occur unless it is included within a notification.						
The community and stakeholders will be advised of these activities or impacts no later than 7 days prior to commencement of works as per the Overarching Community Communications Strategy. Any notification will be prepared and approved by Sydney Metro based on information from JHLOR.						
JHLOR will consult with sensitive receivers regarding OOHWA in accordance with CoA- E23. Sensitive receivers as identified within the EIS, will be consulted prior to works, including out of hours works.						

Part 6: Contact Details										
Nominate contractor's project manager, environmental and communications contact(s).										
	Yuga Balakrishna		Project Leader	Phone:	0438 656 587					
Name:	Lucas Dobrolot	Position:	Environmental Manager		0422 417 385					
	Andie Pitsiatari		Community Place Manager		0429 378 336					



Part 7: Signature									
This signature acknowledges that the proposed Minor Works will be undertaken in accordance with this application, have minimal environmental impact and are not defined as 'construction' in accordance with the applicable planning approval.									
Name:	Lucas Dobrolot								
Signature:	Dux	Date:	15/03/2022						



## **Determination Page**

## (TfNSW/Environmental Representative Use Only)

## **Endorsement/Approval**

These signatures represent formal endorsement/approval for the proposed Minor Works to commence in accordance with this application and the applicable planning approval requirements (subject to any determination from the applicable planning authority as may be required by the planning approval conditions).

		TfNSW Principal Manager, Communication & Engagement – Endorsement	TfNSW Principal Manager, Sustainability, Environment & Planning – Approval	Environmental Representative  – Endorsement (required as necessary in accordance
		required for all applications)	(required for all applications)	with the applicable planning approval, optional for all other circumstances)
Signa	ture:		Â,	B.M. Cenn
Name	:		Fil Cerone	Brett McLennan
Date:			17 March 2022	17 MArch 2022
Comn	nents:			Noted to be low risk works consistent with the minor works definition.
	itions:			PCMA approved for survey works only. The PCMA shall be reassessed prior to WE45 and to include updated community notification and OOHWA
		ved (by TfNSW)		
	Endors	sed (by Environmental Representat	ive)	

(Uncontrolled when printed)



	Rejected		
Ш	Rejected		

# **Appendix 1: Environmental Risk Assessment**



### **Environmental Risk Assessment**

All environmental issues have been assessed in accordance with the table below:

Risk Assessment Rankings: >17 = Extreme 10 - 16 = High 5 - 9 = Medium 1 - 4 = Low

Environmental issues which have an initial risk ranking of Medium or High will require the development and implementation of Environmental Risk Action Plans. Issues which have an initial Extreme risk will require the development and implementation of an issue specific Sub-plan. The risks must be reassessed following the consideration of control measures. An owner for the implementation of the management measures must be nominated. Issues or activities that represent an Extreme risk after the application of control measures are not to be undertaken.

Aspect	Potential Environmental Impact		tial ating	Risk	Control Measures	Res Rat	idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Approvals and Licensing									
Not identifying appropriate approvals, licenses or permits required and proceeding without them.	Works delayed, infringements, prosecution, poor community relations and reputational loss.	2	4	8	<ul> <li>Review the project EIS, modification and statutory documentation for requirements relevant to the BAC works. Identify and implement approval requirements within the SMC CEMP, Sub-plans and ERAPs until project plans are approved.</li> <li>Check contract documentation. Identify and implement requirements from the Contract.</li> <li>Establish a register of approvals, licenses, permits.</li> <li>Pre-construction Compliance Report</li> </ul>	1	4	4	Maintain Compliance Risk Matrix Undertake environmental audits as per Section 14 of this plan



Aspect	Potential Environmental Impact		tial ating	Risk	Control Measures	Res Rat	sidual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Noise Noted to be lo	w risk activities, plans a	ppr	ove	d for S	MS are				
Noise from general construction activities resulting in impact to residents.	Disturbance to residents or neighbouring businesses. Potential for complaints.	4	2	8	<ul> <li>Control measures as per SMC CNVMP and CNVIS are to be implemented.</li> <li>Respond to community enquiries and complaints in accordance with Sydney Metro requirements and Community &amp; Stakeholder Manager (Sydney Metro), control measures as per Community Consultation Strategy (CCS) are to be implemented. Consult with the community in relation to upcoming activities that may result in concern.</li> <li>Monitor noise for compliance as the works progress at receiver locations.</li> <li>Provide periods of respite for high noise generating activities (1 hour off for every 3 hours on).</li> <li>Apply noise mitigation measures during entire project.</li> <li>Noise efficient equipment to be used on site.</li> </ul>	3	2	Φ	Noise performance will be continually monitored as per the requirements of the Construction Noise and Vibration Management Plan. Where high impact noise is required, it will be restricted to the conditions of EPL 21147 with respite periods implemented.
Noise during works required to be undertaken out of standard construction hours.	Disturbance to residents or neighbouring businesses with potential for complaints.	4	2	8	<ul> <li>Implement noise mitigation strategies for out of standard hours work.</li> <li>Monitor noise for compliance to project goals.</li> <li>Control Measures as per the SMC CNVMP and CNVIS are to be</li> </ul>	3	2	6	Noise performance will be continually monitored as per the requirements of the Construction Noise and Vibration Management Plan. Where high impact noise is required, it will be restricted



					implemented such as only conducting works OOHWA if the works cannot be conducted in standard hours				to the conditions of EPL 21147 with respite periods implemented.
Aspect	Potential Environmental Impact		tial ating	Risk	Control Measures	Res Rat	sidual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Water Quality, Erosion & Sed	limentation								
Sediment laden runoff from construction works leaving site.	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	2	3	6	<ul> <li>Control Measures as per Soil and Water Management Plan and any Erosion and Sediment Control Plan to be implemented.</li> <li>Install stormwater drainage protection within the project area.</li> <li>Ensure measures are inspected and maintained as the works progress and also prior to and post rainfall events.</li> <li>Provide training and awareness on the need to prevent pollution.</li> <li>Relevant people to undertake Erosion and Sediment Control training.</li> </ul>	1	3	ര	Undertake regular inspections (including prerainfall inspections) of work areas pre, during and after works to ensure controls are in good condition.
Non-compliant water from construction works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	2	3	6	<ul> <li>Environmental Manager (or delegate) to approve all water discharges from site.</li> <li>Induction and toolbox talks</li> <li>Toolbox training on site procedures for water discharge and the Sydney Metro dewatering procedure</li> </ul>	1	3	3	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.



			Educate site staff on licence conditions and consequences of prosecution			
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Aspect	Potential Environmental Impact		tial ating	Risk	Control Measures	Res Rat	idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Works with the potential to intercept Ground water table	Ground water entering excavations Without appropriate safeguards onsite runoff could lead to ground water contamination	2	3	6	<ul> <li>Induction and toolbox talks including ERSED controls</li> <li>Toolbox training on site procedures for water discharge</li> <li>Educate site staff on licence conditions, potential for groundwater drawdown and consequences of prosecution</li> <li>Environmental Manager (or delegate) to approve all water discharges from site.</li> </ul>	1	3	3	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
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Aspect	Potential Environmental Impact	Init Ra	tial iting	Risk	Control Measures	Res Rati	idual ng	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Waste									
Waste disposal during construction.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	3	2	6	<ul> <li>Identify opportunities to incorporate recovered materials into the permanent works.</li> <li>Provide facilities on site for source separation and recycling.</li> <li>Ensure accurate waste records are retained.</li> <li>Removal of wastes from the site would only be undertaken by a licensed contractor as required by the POEO Act and with appropriate approvals, if required, for contaminated materials, etc.</li> <li>All material that requires off-site disposal to be appropriately tested and classified against the Waste Classification Guidelines (NSW EPA, 2014) including Resource Recovery Exemptions.</li> </ul>	2	2	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.  Monitor and ensure reporting of all movements of waste from the worksite are recorded in the Waste and Spoil Register.  Maintain copies of all disposal dockets and consignment authorisations



				Implement unexpected finds procedures.				
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Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rat	sidual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Earthworks excavation.	Incorrect classification of waste (spoil) resulting in incorrect / illegal disposal/re-use. Contamination of soil/water Failure to beneficially reuse waste materials	3	2	6	<ul> <li>Inductions, toolbox talks and training on recycling facilities and waste segregation practices.</li> <li>Separation of waste on site.</li> <li>Tracking of disposal processes.</li> <li>All contamination hotspots would be clearly marked in the field (where possible). Hot spots will be shown within contamination mapping and will be included in the Permit to Disturb process.</li> <li>All material to be recovered off-site to be appropriately tested and classified and sent to a facility that can legally accept the waste classification.</li> </ul>	2	2	4	Regular inspections of work areas  Monitor and ensure reporting of all movements of waste form the worksite



Aspect	Potential Environmental Impact	Ini Ra	tial ıting	Risk	Control Measures	Res Rati	idual ing	Risk	Management of Residual Risk
		P X	О =	Risk		P X	C =	Risk	

Aspect	Potential Environmental Impact		Initial Risk Rating		Control Measures		Residual Risk Rating		Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Potential for discovery of unexpected, contaminated material during construction / piling.	Health effects resulting from airborne contamination, e.g. asbestos. Complaints received from odours released during excavations. Classification of spoil is changed and disposal options altered, costs incurred associated with	2	3	6	<ul> <li>If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence.</li> <li>Induct personnel on location, type, nature, concentration of contaminants on site if found.</li> <li>Monitor piling spoil for unexpected contamination in accordance with the Unexpected Finds Procedure and separate as required.</li> </ul>	1	3	3	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.  Complete regular toolbox talks on how to manage unexpected finds.



	disposal of higher classification of waste.								
Encountering asbestos / contaminated material on site.	Inappropriate storage, transfer or disposal of materials causing further contamination.	3	3	9	<ul> <li>Inspections of excavated and filled surfaces would be made during construction to determine the presence of visible asbestos.</li> <li>Conduct further site investigations to determine the presence and extent of contamination prior to construction works commencing</li> <li>Contaminated soils would not be stockpiled on the structural fill layer or formation layers to avoid cross contamination.</li> <li>Implementation of the Unexpected Finds Procedure</li> <li>Monitor piling spoil for unexpected contamination in accordance with the Unexpected Finds Procedure and separate as required.</li> </ul>	2	3	6	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.  Complete regular toolbox talks on how to manage unexpected finds.
Aspect	Potential Environmental		tial ating	Risk	Control Measures	Res	sidual ing	Risk	Management of Residual Risk
	'	P X	C =	Risk		P X	C =	Risk	
Hazardous Chemicals and Da	ngerous Goods (Hazardous	Sub	stan	ces)				•	
Inappropriate storage of hazardous substances, leaking plant and equipment and spillage from refuelling.	Localised ground contamination / pollution of stormwater and requiring clean-up and/or receiving fines. Risk of igniting volatile substances.	3	3	9	<ul> <li>Induction, toolbox talks and training on appropriate handling and storage of liquids.</li> <li>All storm water drains should be identified prior to works and protection installed.</li> </ul>	1	3	3	Regular inspections of storage areas.



	Unauthorised access to site / potential vandalism/damage leading to pollution.				<ul> <li>Storage areas to be away from identified sensitive areas and appropriately bunded.</li> <li>SDS approved prior to bringing hazardous substances on site including risk assessment.</li> <li>Plans showing storage locations and associated controls e.g. spill kits, etc. (Environmental Control Maps).</li> <li>Training in use of spill kits.</li> <li>Contingency plans would be developed to deal with any spills which might occur during construction.</li> <li>Clearly label containers.</li> <li>Regular auditing and inspection of storage areas and materials.</li> <li>Make storage areas restricted access areas.</li> <li>Reduce/eliminate need for hazardous substances.</li> </ul>				
Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rat		Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Ris k	
					<ul> <li>Ensure all work sites are secure before leaving the site.</li> <li>All liquids i.e. paint etc. are to be securely locked away at the end of each day.</li> </ul>				
Fuel contaminated runoff from construction works leaving site	Fuel contaminated runoff entering stormwater or waterways (i.e. polluting -	3	3	9	All storm water drains should be identified prior to works and controls implemented.	1	3	3	Regular inspections of works site to ensure all controls are in good health and working.



	not compliant with discharge criteria).				<ul> <li>Appropriate bunding/storage of substances.</li> <li>Toolbox on site procedures for sediment controls and chemical storage.</li> <li>Educate site staff on project conditions and consequences of prosecution.</li> </ul>				
Vegetation trimming / clearing required outside approved work area.	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	2	3	6	<ul> <li>Induction and toolbox training on clearance zones and required protection measures</li> <li>If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment would be undertaken, and approval sought from Sydney Metro prior to trimming or removal.</li> <li>Inspections during clearing activities.</li> </ul>	1	3	3	Implement Vegetation Removal Permit. Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
Aspect	Potential Environmental		tial	Risk	Control Measures	Res Rati	idual	Risk	Management of Residual
	·	P X	C =	Risk		P X	C =	Risk	
					<ul> <li>Fencing in place/ clear marking of trees to be retained and cleared / demarcation areas / plans showing clearing areas.</li> <li>Preclearing checklist to be completed before any clearing of vegetation.</li> </ul>				
Clearing and grubbing of vegetation within work site.	Erosion of soils, uncontrolled runoff, sediment deposited into	3	2	6	Inductions and toolbox training on erosion and sediment controls.	2	2	4	Undertake regular inspections of work areas pre, during and after works



surrounding vegetated areas and water courses, and invasion of weeds. Wrong vegetation removed. Potential for injury to native fauna.	If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment would be undertaken, and approval sought from Sydney Metro prior to trimming or removal. A Tree Report is to be prepared for each tree to be removed or pruned. The Tree Report is to be submitted to DPE before the removal or trimming of trees.      Consider impacts to visual amenity relating to vegetation removal.      Approved ESCPs in place prior to starting works.	controls are in dition.
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Aspect	Potential Environmental Impact		Initial Risk Rating				idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
					Where applicable, mature trees and other native vegetation to be retained would be clearly delineated (and protected with fencing or other methods approved by and Arborist), with all construction activities excluded from these areas.  Preclearing checklist to be completed before any clearing of vegetation.				



Weeds	Weeds are not contained or are spread on or off-site	3	3	9	<ul> <li>Regular inspections of worksite for weeds</li> <li>Segregate and weed impacted waste material and dispose of to a licenced facility</li> </ul>	1	3	3	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
					<ul> <li>Inspect plant and machinery before entering and leaving worksite to ensure no dirt remains as it may cause weeds to spread.</li> </ul>				
					<ul> <li>Educate work force on common weeds within Bankstown rail corridor.</li> </ul>				
Excavation near protected trees/vegetation	Damage to roots/root structures	3	3	9	Site inspections to include review of protected tree/vegetation species during excavation works	2	2	4	Undertake regular inspections during excavation or trenching
					Toolbox talks/training to include details of nearby protected species				works.
					Prior to commencing, trenching or excavation to be investigated if in the vicinity of protected species. Where possible excavation works will be modified to avoid damage to routes				
Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rati	idual ng	Risk	Management of Residual Risk

Aspect Potential Environmental Impact		Initial Risk Rating			Control Measures	Residual Risk Rating			Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Air Quality						•			
Excavations, potholing	Dust activity near residential and commercial premises, complaints received.	3	2	6	<ul> <li>Implement the controls within the Air Quality ERAP (#4)</li> <li>Toolbox training on Dust and Air Quality Management.</li> </ul>		2	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.





					Provide dust mitigation measures through water sprays/misting as required.				
					<ul> <li>Cover stockpiles that are not to be worked on for a period of greater than 10 days.</li> </ul>				
					<ul> <li>ESCPs approved before works commence. Controls are then reviewed for maintenance.</li> </ul>				
Exhaust from plant and equipment.	Emissions resulting in air pollution.	3	2	6	<ul> <li>Inductions and toolbox training on Dust and Air Quality Management.</li> <li>Well maintained plant/ equipment and pre-start checks and servicing.</li> </ul>	2	2	4	Review plant check list prior to operating on site. Undertake verification checks a required.
					<ul> <li>Non-complaint vehicles removed from site / repaired.</li> </ul>				
Abrasive Blasting Activities	Uncontrolled/uncontained airborne fines from abrasive blasting process resulting in air pollution	3	3	9	<ul> <li>Inductions and toolbox training on Dust and Air Quality Management.</li> <li>Encapsulation on abrasive blasting activities</li> </ul>	2	2	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in
					Monitoring and inspections of encapsulation				good condition.

	Aspect	Potential Environmental Impact	Initi Rat		Risk	Control Measures	Res Rati	idual ing	Risk	Management of Residual Risk
			P X	C =	Risk		P X	C =	Risk	
•	Heritage									



Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	3	3	9	<ul> <li>Implement the controls within the CHCP and AMS</li> <li>General inductions toolbox training on heritage management protocols.</li> <li>Label any known heritage items on Environmental Control Maps.</li> <li>If suspected heritage item encountered. Works to stop immediately and Environment Manager contacted.</li> <li>Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during prestart briefs, inductions and toolbox talks.</li> </ul>	2	3	6	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.  Provide frequent toolbox talks on Unexpected Finds Procedure
Impact to Heritage Structures	Damage to station fabric and other heritage items by works and construction traffic.  Visual impacts.  Impacts to potential Archaeological items	3	3	9	<ul> <li>General inductions toolbox training on heritage management protocols.</li> <li>Label any known heritage items on Environmental Control Maps.</li> <li>Work within the safe working distances nominated in the SMC CNVMP and CNVIS.</li> <li>Undertake vibration compliance monitoring as per the SMC CNVMP.</li> <li>Work under the direction of the Excavation Director in accordance with the AMS</li> </ul>	2	3	6	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.  Provide frequent toolbox talks on managing change

Aspect Potential Environmental Initial Risk Impact Rating	Control Measures	Residual Risk Rating	Management of Residual Risk
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		Р	С	Risk		Р	С	Risk	
		Х	=			Χ	=		
					<ul> <li>Clearly highlight no-go zones on the ECM and communicate requirements to construction personnel during prestart briefs, inductions and toolbox talks.</li> <li>Demarcation of worksites and communicate it clearly with all construction personnel.</li> </ul>				
					The method for the demolition of existing buildings and / or structures at the Project Site would be developed to minimise direct and indirect impacts to adjacent and / or adjoining heritage items.				
Acid Sulfate Soils									
Disturbance of Potential Acid Sulfate soils and Actual Acid Sulfate Soils during excavations.	Mobilisation of metals within runoff to levels toxic to natural systems. Release of acidic runoff.	2	2	4	<ul> <li>Assess risk for acid sulfate soils (ASS), and if the risk is determined to be high then implement the Acid Sulfate Soils Procedure.</li> <li>Awareness training in the identification and management of</li> </ul>	1	2	2	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
					ASS.     Provide containment and treatment facility on site.				
					Ensure Potential ASS material is left under the water table if possible, or actual ASS is disposed off-site or appropriately treated in a bunded area with sump.				



Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rati	idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Salinity									
	Mobilisation of saline groundwater and soils during construction to sensitive ecosystems	2	2	4	Management measures in accordance with the Site Investigations for Urban Salinity (DLWC, 2002) will be incorporated into the works     Minimise water infiltration     Retention (where practicable) of deep-rooted vegetation	1	2	2	<ul> <li>BAC works within saline areas considered to have limited impacts on soil</li> <li>Spoil to be stockpiled and disposed to a licenced waste facility</li> </ul>
					Minimising soil disturbance such as compaction, cut and fill     Inclusion of saline and sodic soils within ERSED Plans				
Flora and Fauna									
Loss, damage or injury to endangered or threatened species.	Removal, death, damage or injury to endangered or threatened species by plant and equipment	2	4	8	<ul> <li>Implement the controls within ERAP 1         <ul> <li>Biodiversity.</li> </ul> </li> <li>All personnel attending site will be advised of controls and management during the onsite induction.</li> <li>A Toolbox talk will be carried out prior to ground disturbance /site clearing works to ensure onsite personnel are made aware of potential loss of endangered species</li> <li>If vegetation, other than grass and weeds, needs to be trimmed or removed, further assessment would be undertaken in accordance with the Vegetation Removal Permit System.</li> </ul>	1	4	4	Implement Vegetation Removal Permit System. Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.



Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rati	idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
					<ul> <li>If threatened flora or fauna species are identified on site, work in the vicinity of these species would stop immediately. spotter/catcher/botanist would be engaged to survey the site and advise on species management.</li> </ul>				
Traffic									
Loss of on-streetcar parking in adjacent residential streets and commercial areas during construction.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	3	2	6	<ul> <li>Community notifications in accordance with Sydney Metro Community Consultation Strategy.</li> <li>Site vehicles shall be parked within the rail corridor and not affect public parking area where possible</li> <li>Develop Traffic Management Plan including Traffic control procedures.</li> </ul>	2	2	4	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets. Supervisor and traffic controller to enforce traffic management requirements
General construction traffic disturbing public access between local roads.	Disturbance to local residents resulting in complaints being made, limited access, potential for delays at local road access points resulting in complaints.	3	2	6	<ul> <li>Deliveries of plant and materials shall be undertaken outside of peak periods where possible</li> <li>Site vehicles shall be parked within the rail corridor and not affect public parking areas</li> <li>Scheduled road movements shall be minimised where possible</li> <li>Oversized deliveries would be undertaken in accordance with the requirements of NSW Police or Roads and Maritime Services.</li> </ul>	2	2	4	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets.



Aspect	Potential Environmental Impact		tial iting	Risk	Control Measures	Res Rati	idual ing	Risk	Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Management of heavy vehicles / access routes.	Complaints from sensitive receivers due to increased level and frequency of	3	2	6	Deliveries of plant and materials shall be undertaken outside of peak periods where possible	2	2	4	Complete regular toolbox talks on how to minimise impacts in relation to traffic.
	noise.				Site vehicles shall be parked within the rail corridor and not affect public parking areas				Permits from local council and/or RMS
					Scheduled road movements shall be minimised where possible				
					<ul> <li>Designated access routes.</li> </ul>				
					Community Notifications.				
					Pedestrian management with traffic controller in place where required.				

Impact Rating Rating Rating Risk	Aspect	Potential Environmental Impact	Initial Rating	Risk	Control Measures	Residual Rating	Risk	Management of Residual Risk
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		P X	C =	Risk		P X	C =	Risk	
Truck deliveries out of normal working hours	Un-approved deliveries resulting in non-conformance with project requirements.  Noise impact to community / potential complaints.	3	2	6	<ul> <li>Personnel training of noise awareness to community included in induction and toolboxes.</li> <li>Induction on Construction Hours for deliveries.</li> <li>Communication of delivery times to suppliers.</li> <li>Community Notifications on project activities occurring locally.</li> <li>Code of conduct / selection criteria in place for subcontractors.</li> <li>Out of hours works approval where required</li> <li>Approved traffic/access routes.</li> <li>Planning and staging of works in approved hours as much as practical.</li> </ul>	2	2	4	Delivery drivers provided with haulage routes prior to travelling to site and delivery times.  Complete regular toolbox talks on how to minimise impacts in relation to traffic.
Pedestrian/Cyclist access	Loss or disruption of pedestrian and/or cyclist access around the project site	3	2	6	<ul> <li>SMC Construction Traffic Management Plan to be in place</li> <li>Traffic Control Plans to be in place</li> <li>Clear signage</li> <li>Appropriate barriers, fencing or other to direct pedestrians and cyclists</li> </ul>	2	2	4	Regular inspections of work fronts

Aspect Potential Environmental Initial Risk Control Measures Residu Rating		Management of Residual Risk
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Visual Amenity		P X	C =	Risk		P X	C =	Risk	
Site investigation activity	Surrounding aesthetic temporary (or permanently) altered during construction Lighting towers used during out of hours works may spill on nearby residents Impacts to residents in properties adjacent to rail corridor	2	3	6	The work area shall be maintained in an orderly manner  Lighting required during night works shall be directed towards the work area and are from adjacent sensitive receivers  Refer to Visual Amenity Management Plan  Shade cloth  Screening on double stack buildings where possible and in consultation with impacted residents.	1	3	3	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.



Aspect	Potential Environmental Impact	Initial Risk Rating		Risk	Control Measures		Residual Risk Rating		Management of Residual Risk
		P X	C =	Risk		P X	C =	Risk	
Utilities									
Utility management	Service strike leading to environmental degradation	3	3	9	SMC Utilities Management Strategy in accordance with the Utilities Management Framework to be in place     Engage a Utilities Coordination Manager (UCM) to oversee the coordination of utility works across the project and with third part service providers. The UCM will collaborate with the Community and Stakeholder Manager, the Place Manager and, where required, the Community Complaint Mediator to mitigate impacts to the local community during utility works and to resolve any community complaints relating to utility works.  Implement a Permit to Disturb Induction and toolbox talks Detailed Site Survey to be managed by an appropriately qualified surveyor.	1	4	4	Permit to Disturb Service searching Detailed Site Survey management





## **Environmental Risk Assessment Rankings**

This table may be used as a guide in determining the level of risk for each environmental issue. For each identified issue, consider the 'maximum credible' (not absolute worst case) risk that could result with **minimal or no controls** other than existing and using normal construction practices.

Note: Any one of the listed consequences must result in the use of the applicable consequence grading.

Probability:					Consequence:					
5 = Certain 4 = Likely 3 = Possible 2 = Unlikely 1 = Rare					5 = Severe 4 = Major 3 = Moderate 2 = Minor 1= Incidental					
1-4	1- 4 Acceptable 5 - 9 Acceptable with control measures 10 - 16 Requires the implementation of best practice 17 and Above = UNACCEPTABLE									
				Consequence (Outcome or Severity of Occurrence)						
5	Certain	Common or repeating occurrence Consequence can reasonably be expected to occur in life of Project.	5	Severe	<ul> <li>Major pollution incident causing significant and widespread damage or potential to health or the environment</li> <li>Persistent reduction in ecosystem function and value.</li> <li>Ongoing disruption and loss of protected species.</li> <li>Major prosecution likely, outcome in excess of \$500,000</li> </ul>					
4	Likely	Known to have occurred / "has happened"  Conditions may allow the consequence to occur on the Project during its lifetime The event has occurred within the Business Unit within the previous 5 years.	4	Major	<ul> <li>Significant widespread and persistent changes to habitat, species or environmental media</li> <li>Significant pollution incident causing damage or potential damage to health or the environment external to the site.</li> <li>Potential for prosecution. Potential outcome between \$50,000 - \$500,000</li> <li>Numerous substantial complaints</li> <li>Actual material environmental harm</li> </ul>					
3	Possible	Could occur / "heard of it happening" Exceptional conditions may allow consequences to occur on the Project, or has occurred nationally within the Australian Business.	3	Moderate	<ul> <li>Localised irreversible habitat loss or effects on habitat, species or environmental media</li> <li>Reportable incident to the relevant environmental regulator or other authority.</li> <li>Demonstrated breach of legislative, licence or guideline requirements.</li> <li>Likely infringement notice or fine, potential for prosecution up to \$50,000.</li> <li>Will cause complaints.</li> </ul>					



2	Unlikely	Not likely to occur  Reasonable to expect that the consequence will not occur on the Project.  Has occurred in industry but not in Business Unit.	2	Minor	<ul> <li>Localised degradation of habitat or short term impacts to habitat, species or environmental media.</li> <li>Pollution incident that marginally exceeds licence conditions or guidelines for acceptable pollution.</li> <li>Fine unlikely.</li> <li>Potential for complaints.</li> </ul>			
1	Rare Practically impossible 1 Incidental Not known to have occurred in industry or unheard of.		Incidental	<ul> <li>Localised or short term effects on habitat, species or environmental media.</li> <li>Fully contained on site and can be fully remediated. Little potential for fine or complaint</li> <li>Insignificant or trivial incident</li> </ul>				

Probability ►	CERTAIN	LIKELY	POSSIBLE	UNLIKELY	RARE
▼Consequence	5	4	3	2	1
5 – Severe	25	20	15	10	5
4 – Major	20	16	12	8	4
3 – Moderate	15	12	9	6	3
2 – Minor	10	8	6	4	2
1 – Incidental	5	4	3	2	1



## **Appendix 2: Environmental Control Map**



# **Appendix 3: EPL 21147 OOHWA Approval**



# **Appendix 4: Community Notification.**

