

## **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:	Laing O'Rourke						
Project:	Sydney Metro City and Southwest - Northern Corridor Works Project						
-	Syuney Metro City and Southwest - Northern Comuch Works Froject						
Application Title: (e.g. Smith St trenching works)	WE03 Possession Site Survey and Investigation Works – Portion 7a						
Application Number:	NCW-002						
Auglication Date:	Revision 1 – 13 <sup>th</sup> June 2017						
Application Date:	Revision 2 – 23 <sup>rd</sup> June 2017						
Planning Approval:	SSI 15_7400						
<ul> <li>Minor Works Categories:</li> <li>Highlight as applicable.</li> <li>If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative.</li> </ul>	<ol> <li>Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation).</li> <li>Treatment of contaminated sites.</li> <li>Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities.</li> <li>Operation of ancillary facilities that have minimal impact on the environment and community.</li> <li>Minor clearing and relocation of vegetation (including native).</li> <li>Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments.</li> <li>Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties.</li> <li>Utility relocation and connections.</li> <li>Maintenance of existing buildings and structures.</li> <li>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.</li> <li>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.</li> </ol>						
Planning Authority Determination:  Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological communities?	No. The proposed works do not have potential to impact on heritage items, threatened species, populations or endangered ecological communities.						



#### Part 2: Details The scope of work is to be carried out in the rail corridor between the south of Chatswood Station and to the north of Artarmon Station and will include: Describe the proposed Site Walk **Minor Works:** WE03 (15-16 July 2017) - plan for intermittent site access to complete survey works Including work methodologies, This work will require the following plant/equipment; site location(s) and site description(s) (e.g. landscape 0 Survey equipment (handheld) type, waterways, etc.). Dates and Time: 15 July 2017; Saturday 0600 to 0230 16 July 2017; Sunday 0600 to 2330 **Planned Commencement** 15th July 2017 Date: **Local Sensitivities:** Community - Residents on Brand St, Drake St, Hawkins St, and Hampden Rd have direct line of site to the works. Describe the presence (if any) of local sensitive environmental areas and community receptors.

#### Part 3: Environmental Risk Assessment and Management

Prepare an Environmental Risk Assessment (in accordance with the *Sydney Metro Risk Management Standard*) 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.).

- Sydney Metro Construction Environmental Management Framework
- Planning approval SSI 15\_7400

#### **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?

All workers will undertake NCW Project specific induction.

In addition, there will be a pre-start briefing undertaken by the worksite manager at the start of shift for all work groups. This will detail the environmental and community risks.

#### **Part 5: Community Consultation**

What community consultation has been undertaken already?	The works will be covered by the notification issued by Sydney Metro in conjunction with LOR.
What community consultation is planned to be undertaken?	Planned: - The works will be covered by the notification issued by Sydney Metro in conjunction with LOR

If drafted already, attach applicable Community Notification as Appendix 3.

Part 6: Contact Details									
Nominate contractor's project manager, environmental and communications contact(s).									
	Tony Deacy		Project Manager		0467 762 987				
Name:	Maulik Bapodara	Position:	Environmental Manager	Phone:	0433 494 595				
	Sugan Allton		Communications Manager		0/10 751 810				

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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:	Maulik Bapodara							
Signature:	Bopain	Date:	23/06/2017					



## **Determination Page**

# (TfNSW/Environmental Representative Use Only)

12. E	Endors	ement/Approval		
applic	ation an	res represent formal endorsement/a d the applicable planning approval re nay be required by the planning appro	equirements (subject to any determine	ks to commence in accordance with this nation from the applicable planning
		TfNSW Principal Manager, Communication & Engagement – Endorsement (required for all applications)	TfNSW Principal Manager, Sustainability, Environment & Planning – Approval (required for all applications)	Environmental Representative — Endorsement (required as necessary in accordance with the applicable planning approval, optional for all other circumstances)
Signa		Ø .	A STATE OF THE STA	
Name	:	Michael Hoyd obo Michael Frown 317/17	FIC CERONE	
Date:		3/7/17	3/7/17.	
Comn	nents:	Nil.		Supporting letter attached as Appendix 4 if necessary.
Condi	tions:	Mil.	(	Supporting letter attached as Appendix 4 if necessary.
	Approv	ved (by TfNSW)		
	Endors	sed (by Environmental Representativ	re)	
	Reject	ed		



## **Appendix 1: Environmental Risk Assessment and Environmental Control Map.**

Risk Assessment Rankings:

>17 = Extreme

10 - 16 = High

5 - 9 = Medium 1

1 - 4 = Low

Issues or activities that represent an Extreme risk after the application of control measures are not to be undertaken

		Initial Risk Rating Control Measures		Residual Risk Rating				
Aspect	Potential Environmental Impact	PΧ	С	Risk	Control Measures		С	Risk
Approvals and Licensing								
Not identifying appropriate approvals / licenses required or proceeding without them.	Works delayed, infringements, prosecution and reputational loss.	Р	3	М	Planning approval has been granted for the Sydney Metro - Chatswood to Sydenham works (SSD 15_7400).	U	3	М
					This minor works application is being completed to ensure appropriate documentation is completed to management environmental risk of the project.			
					Only investigative works are being undertaken. No permanent construction works are to be completed.			
Noise								
Noise from investigation activities.	Disturbance to residents or neighbouring businesses. Potential for complaints.	Р	3	M	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 (completed by Sydney Metro).  Site walks, survey and visual inspections will be inaudible at surrounding receivers.	U	3	M
Noise from investigation activities required to be undertaken out of standard working hours.	Disturbance to residents or neighbouring businesses with potential for complaints.	P	3	M	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 (completed by Sydney Metro in conjunction with LOR).  Site walks, survey and visual inspections will be inaudible at surrounding receivers.	U	3	M





					For investigative excavations, silenced lighting towers and battery-powered lights to be utilised.			
Vibration								
Vibration intensive activities undertaken on the site in proximity to sensitive heritage structures and community.	Damage to listed heritage items.  Disruption, annoyance and nuisance to residents. Potential damage to adjacent residential and commercial residences and structures.  Disruption to businesses as a result of vibration nuisance	U	4	М	Consult with potentially affected parties prior to commencement of works for any activities that may create vibration impacts caused by the works  No heritage structures within close proximity of proposed minor works.  No vibration intensive works to be undertaken.  Manual plate compactor only to be used to backfill investigative trenches, not in proximity to residents (greater than 20m away).	R	4	М
Water Quality, Erosion & Sedin	nentation							
Sediment laden runoff from investigation works leaving site.	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life. Fines for sediment escaping site.	U	3	М	Site walks, survey and visual inspections will not be impacting on soil/water.	R	3	L
Non-compliant water from investigation works discharged from site	Non-compliant water entering stormwater system waterways (i.e. polluting - not compliant with discharge criteria).	Р	3	M	No water discharge anticipated for minor works. If required, Environmental Manager/representative to approve all water discharges from site	U	3	М
Ground water	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination	U	2	L	Site walks, survey and visual inspections will not be impacting on soil/water.	R	2	L
Waste								
Waste disposal during works.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	Р	2	М	Site walks, survey and visual inspections are not expected to generate any waste.	U	2	L

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Contamination								
Potential for discovery of unexpected contaminated spoil during investigation works involving excavation and drilling.	Health effects resulting from airborne contamination, e.g. asbestos.  Complaints received from odours.	Р	3	М	If contaminated soil is encountered, all works are to stop in the vicinity of the find and investigations commence.  Induct personnel on location, type, nature, concentration of contaminants on site if found.	U	2	L
Hazardous Materials								
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.	U	3	М	No fuels or hazardous materials to be stored on site for minor works.  Spill kits to be onsite when using plant/equipment.  No major servicing of equipment to be undertaken onsite.  Pre-mobilisation checks on all plant/equipment to come to site, including check of fuel and hydraulic leaks.	R	3	L
Biodiversity								
Vegetation trimming / clearing required outside approved work area.	Unauthorised works / removal of vegetation outside defined work area, possibility of removing threatened species, fines incurred.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Clearing and grubbing of vegetation within work site.	Erosion of soils, uncontrolled runoff, sediment deposited into surrounding vegetated areas and watercourses, and invasion of weeds.  Wrong vegetation removed.  Potential for injury to native fauna.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Air Quality								
General works; investigative excavations	Dust activity in close proximity to residential and commercial	U	3	M	Site walks, survey and visual inspections will not be generating air quality issues.	R	3	L





	premises, complaints received.							
Exhaust from plant and equipment.	Emissions resulting in air pollution.	U	3	M	Well maintained plant/ equipment and pre-start checks and servicing.  Non-complaint vehicles removed from site / repaired.	R	3	L
Heritage								
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	Р	3	М	General inductions on heritage management 'stop- works' protocol. If suspected heritage item encountered. Works to stop immediately and Environment Manager contacted. Label any known heritage items on Environmental Control Maps.	U	3	М
Flora & Fauna								
Removal of flora without approval.	Failure to identify flora prior to removal.	R	3	L	No vegetation removal/trimming to be undertaken as part of the minor works.	R	1	L
Traffic								
Loss of on-street car parking in adjacent residential streets and commercial areas during investigation works.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	Р	3	M	Community notifications.  Site vehicles shall be parked within the rail corridor and not affect public parking area  No road/lane closures required.	U	3	L
Management of heavy vehicles / access routes.	Complaints from sensitive receivers due to increased level and frequency of noise.	P	4	М	Light vehicle to be parked in the rail corridor and switched off. Personnel on foot between Brand St and Albert Ave conducting site walk, and survey.  Community Notifications.  Pedestrian management with traffic controller in place where required.	U	4	L
Truck deliveries out of normal working hours (un-approved).	Noise impact to community / potential complaints.	Р	3	М	Induction on approved working hours for deliveries.	U	3	М





Resources and Energy Use					Communication of delivery times to suppliers.  Community Notifications on project activities occurring locally.  Approved traffic/access routes.  Planning and staging of works in approved hours as much as practical.			
Energy consumption by plant and equipment.	Inappropriate energy use, waste of energy recourses, energy wastage costs, increased greenhouse gas emissions.	U	2	L	No idling of plant equipment where possible onsite.  Equipment / plant equipment inspections must be undertaken prior to use on site.	R	2	L
Resource usage (e.g. building materials, water, fuels, packaging), waste generation and disposal	Depletion of resources due to wastage (e.g. wastage of water / no recycling, poor management of procurement, ineffective removal of off-cuts, waste, i.e. no recycling).	U	2	L	No materials are required to be imported for these works.	U	2	L

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 work practices.

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

Probability:				<u>Cor</u>	Consequence:					
5 = Certain 4 = Likely 3 = Possible 2 = Unlikely 1 = Rare				5 =	5 = Severe 4 = Major 3 = Moderate 2 = Minor 1= Incidental					
1-4 Acceptable 5-9 Acceptable with control measures 10-16 F			sures	10 - 16 Requi	ires the implementation of best practice 17 and Above = UNACCEPTABLE					
5	Certain	– C	Common or repeating occurrence	5	Severe	Major pollution incident causing significant and widespread damage or potential to health				





4	Likely	<ul> <li>expected to occur in life of Project.</li> <li>Known to have occurred / "has happened"</li> <li>Conditions may allow the consequence to occur on the Project during its lifetime</li> <li>The event has occurred within the Business Unit within the previous 5 years.</li> </ul>	4	Major	<ul> <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> <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	<ul> <li>Could occur / "heard of it happening"</li> <li>Exceptional conditions may allow consequences to occur on the Project, or has occurred nationally within the Australian Business.</li> </ul>	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	<ul> <li>Not likely to occur</li> <li>Reasonable to expect that the consequence will not occur on the Project.</li> <li>Has occurred in industry but not in Business Unit.</li> </ul>	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	<ul> <li>Practically impossible</li> <li>Not known to have occurred in industry or unheard of.</li> </ul>	1	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 complaints.</li> <li>Insignificant or trivial incident</li> </ul>

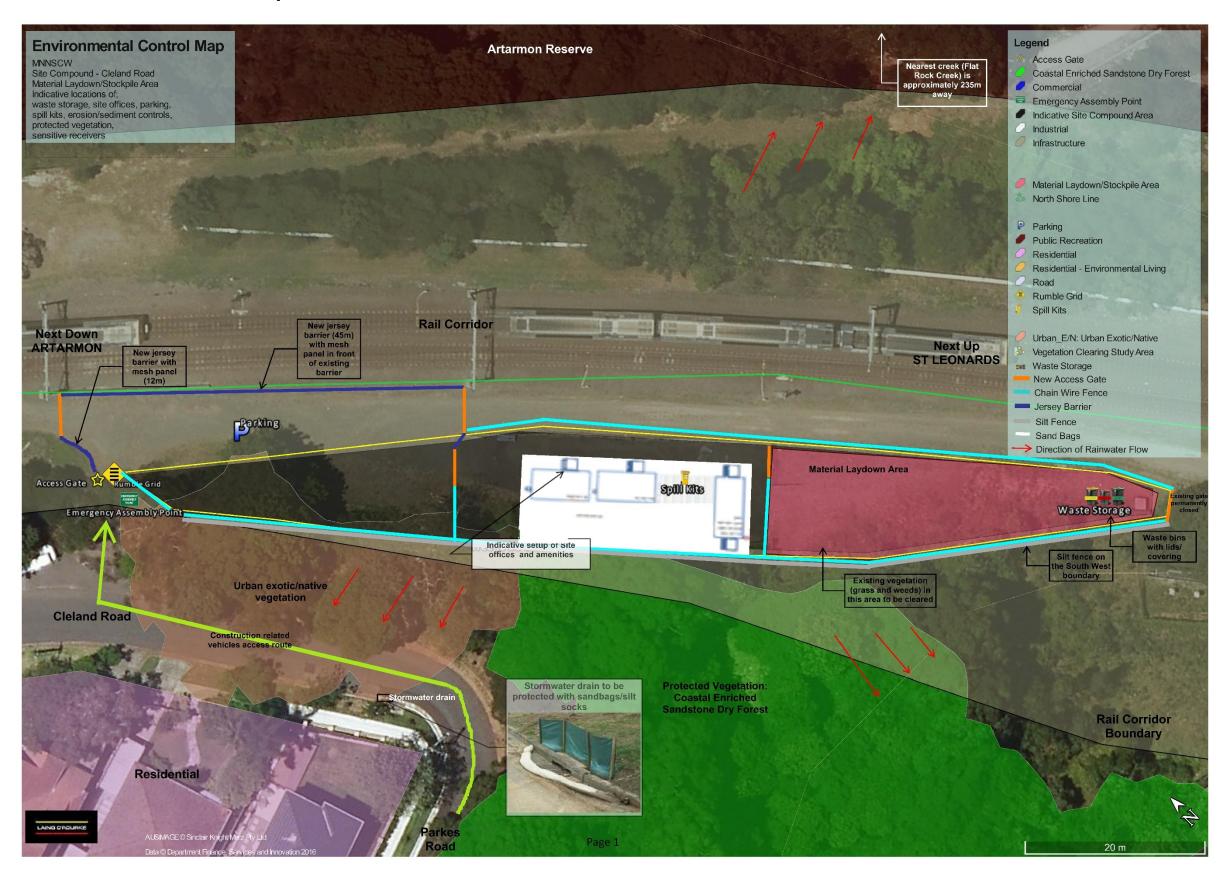




Probability ► ▼Consequence	CERTAIN 5	LIKELY 4	POSSIBLE 3	UNLIKELY 2	RARE 1
5 – Severe	25	20	15	10	5
4 – Major	20	16	12	8	4
3 – Moderate	15	12	9	6	3
2 – Minor	10	8	6	4	2
1 – Incidental	5	4	3	2	1



## **Environmental Control Map**







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Environmental Control Map					
ID	Environmental Aspect	Description			
1	Project	This ECM applies to Pre-Construction Minor Works for <b>Portion 7a</b> delivered under Northern Corridor Works (Enabling works for Sydney Metro City and Southwest, Chatswood to Sydenham).			
2	Site Access	Site access will be from Drake St and Hopetoun Ave rail corridor access gates.			
3	Program of works	<ul> <li>Refer Pre-Construction Minor Works Application 002 Section 2 "Occasions" for possession program.</li> </ul>			
4	General	<ul> <li>The team will be trained on this ECM, OOHW requirements, general environmental issues, and location of sensitive areas.</li> <li>Works will be subject to inspections by the ER, Sydney Metro Environment and Planning Manager and LOR Environmental Manager.</li> <li>This ECM will be displayed on site sheds.</li> </ul>			
5	Contamination	<ul> <li>Where unexpected contaminated material is encountered, works will be stopped, hygienist, asbestos removalists will be engaged, contaminated material will be segregated, classified and disposed of off-site accordingly.</li> </ul>			
6	Air Quality	No air quality related issues are expected to be encountered.			
7	Waste	No waste generated from site survey works.			
8	Soils and water	No plant usage onsite therefore no soil/water related issues.			
9	Heritage	<ul> <li>Unexpected finds of heritage items must be reported to LOR Environmental Manager and Sydney Metro.</li> </ul>			
10	Noise and Vibration	<ul> <li>Site survey works will be inaudible at all sensitive receivers.</li> <li>All works will be completed in compliance with Sydney Metro CEMF, SSD 15_7400 Planning Approval, Construction Noise Strategy and EPL 12208 requirements.</li> <li>All plant will have non-tonal alarms.</li> <li>Community notifications will be drafted and sent to Sydney Metro Community Liaison team separately.</li> </ul>			
11	Traffic and Transport	<ul> <li>Access to the site will be from existing access gates on Drake St and Hopetoun Ave.</li> <li>No additional traffic controls are required for the works.</li> </ul>			
12	Utilities	Any impacts to utilities will be reported to site HSE Manager, supervisors, Sydney Trains and Sydney Metro.			
13	Biodiversity	No vegetation to be removed     If fauna is encountered onsite – stop works and contact site supervisor			
14	Chemical, fuel storage and use	<ul> <li>No fuels and chemicals to be used onsite as part of these works. All plant and equipment will be checked daily to ensure there is no leaking oil, fuel or other liquids.</li> </ul>			
15	Imported materials	No materials to be imported for these works.			
16	No-go zones	<ul> <li>Construction activities will be restricted to the rail corridor. All construction activities outside the NCW site boundary will undergo a review for potential environmental impacts and require approval from Sydney Metro.</li> </ul>			

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Contact Information					
Position	Name	Phone			
LOR Regional Environmental Manager	Jason Ambler	0415 737 750			
LOR Project Leader	Tony Deacy	0467 762 987			
LOR Construction Manager	Susan Allton	0419 751 810			
LOR Environment Manager	Maulik Bapodara	0433 494 595			
LOR WHS Manager	Clive Hunter	0428 412 130			
ER	Alice Pryke	0451 084 390			
Sydney Metro Environmental Manager	Adam Koutsamanis	0404 071 860			
Sydney Metro City and Southwest Info Line		1800 019 989			
Sydney Trains Info Line		131 500			
Environmental Line / Pollution Incident Response Line		131 555			
Office of Environment & Heritage Pollution Line		131 555			
Emergency		000 or 112 (mobiles)			
WIRES		1300 094 737			

#### **Standard Working Hours**

Audible construction works unless otherwise approved by the Environmental Manager will be restricted to:

- 7:00AM to 6:00PM Monday to Friday
- 8:00AM to 1:00PM Saturdays
- No work on Sundays or public holidays

Any works outside of the hours above require OOHW and Sydney Metro and LOR Environmental Manager's Approval

As per Sydney Trains EPL,

"High noise impact works and activities must only be undertaken:

- a) between the hours of 8:00am to 6:00pm Monday to Friday;
- b) between the hours of 8:00am to 1:00pm Saturday; and
- c) in continuous blocks not exceeding 3 hours each with a minimum respite from those activities and works of not less than 1 hour between each block"

#### **Out of Hour Works**

15<sup>th</sup> July 2017, Saturday: 0600 – 0230 16<sup>th</sup> July 2017, Sunday: 0600 - 2330



# **Appendix 2: Cover Page**

Environmental Management Documentation- Not Used



# **Appendix 3: Cover Page**

Community Notification - Undertaken by Sydney Metro



# **Appendix 4: Cover Page**

Environmental Representative Supporting Letter - Refer to Section 12 Determination Page above