

Pre-Construction Minor Works Approval Form

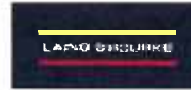
Minor Works are defined as any low impact activities that are undertaken prior to the commencement of 'construction' as defined in the project's applicable planning approval. However if Minor Works affect or potentially affect heritage items, threatened species, populations or endangered ecological communities, 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
Application Title: (e.g. Smith St trenching works)	Week-End 18 Night Site Survey – Portion 7b
Application Number:	NCW-004
Application Date:	Revision 1 – 6 th October 2017
Planning Approval:	SSI 15_7400
Minor Works Categories: <ul style="list-style-type: none"> Highlight as applicable. If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative. 	<ol style="list-style-type: none"> Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation). Treatment of contaminated sites. Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities. Operation of ancillary facilities that have minimal impact on the environment and community. Minor clearing and relocation of vegetation (including native). Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments. Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties. Utility relocation and connections. Maintenance of existing buildings and structures. 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?	No. The proposed works do not have potential to impact on heritage items, threatened species, populations or endangered ecological communities.



Part 2: Details

<p>Describe the proposed Minor Works: Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).</p>	<p>The scope of work is to be carried outside the rail corridor at Mowbray Road, Artarmon (Chainage 11.00) using survey equipment</p> <p>Survey of design points to inform permanent design works for portion 7b.</p> <ul style="list-style-type: none"> - Sunday, 29th October 2017: 20:00 to 00:00 - Monday, 30th October 2017: 0:00 to 03:00
<p>Planned Commencement Date:</p>	<p>29th October 2017</p>
<p>Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors.</p>	<p>Community – Residents on Mowbray Rd and Orchard Rd have direct line of site to the works.</p>

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.

<p>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.).</p>	<ul style="list-style-type: none"> - Sydney Metro Construction Environmental Management Framework - Sydney Metro City and Southwest, Chatswood to Sydenham, Planning approval SSI 15_7400
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Part 4: Workforce Notification

<p>How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce?</p>	<p>All workers will undertake NCW Project specific induction.</p> <p>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.</p>
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Part 5: Community Consultation

<p>What community consultation has been undertaken already?</p>	<p>The works will be covered by the notification issued by Sydney Metro.</p>
<p>What community consultation is planned to be undertaken?</p>	<p>Planned:</p> <ul style="list-style-type: none"> - The works will be covered by the notification issued by Sydney Metro.

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



Part 6: Contact Details

Nominate contractor's project manager, environmental and communications contact(s).

Name:	Tony Deacy	Position:	Project Manager	Phone:	0467 762 987
	Chris Standing		Environmental Manager		0431 338 578
	Michael Lloyd		Communications and Stakeholders Manager (Sydney Metro)		0466 545 168

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:	Chris Standing		
Signature:		Date:	06/10/2017



Determination Page

(TfNSW/Environmental Representative Use Only)

12. 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 (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)
Signature:			
Name:	Michael Lloyd.	FIL CERONE	
Date:	27/10/17	27/10/17	
Comments:	Nil	—	Supporting letter attached as Appendix 4 if necessary.
Conditions:	Nil.	—	Supporting letter attached as Appendix 4 if necessary.
<input checked="" type="checkbox"/> Approved (by TfNSW)			
<input type="checkbox"/> Endorsed (by Environmental Representative)			
<input type="checkbox"/> Rejected			

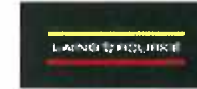


Appendix 1: Environmental Risk Assessment and Environmental Control Map.

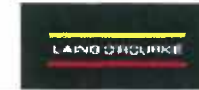
Risk Assessment Rankings: >17 = Extreme 10 - 16 = High 5 - 9 = Medium 1 - 4 = Low

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

Aspect	Potential Environmental Impact	Initial Risk Rating			Control Measures	Residual Risk Rating		
		P X	C =	Risk		P X	C =	Risk
Approvals and Licensing								
Not identifying appropriate approvals / licenses required or proceeding without them.	Works delayed, infringements, prosecution and reputational loss.	P	3	M	Planning approval has been granted for the Sydney Metro - Chatswood to Sydenham works (SSD 15_7400). 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.	U	1	L
Noise								
Noise from investigation activities.	Disturbance to residents or neighbouring businesses. 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). Survey works 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). Survey works will be inaudible at surrounding receivers.	U	3	M



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	M	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.	R	3	M
Water Quality, Erosion & Sedimentation								
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	M	No excavation work is proposed as part of these works.	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).	P	3	M	No water discharge anticipated for minor works.	U	2	L
Ground water	Ground water entering excavations Without appropriate safeguards onsite could lead to ground water contamination	U	2	L	Proposed works are visual inspections only and will not be affecting groundwater table.	R	1	L
Waste								
Waste disposal during works.	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	P	2	M	No excavations/soil movements are proposed as part of these works.	R	2	L
Contamination								
Potential for discovery of unexpected contaminated spoil during investigation works involving excavation and	Health effects resulting from airborne contamination, e.g. asbestos.	P	3	M	No excavations/soil movements are proposed as part of these works.	U	2	L



drilling.	Complaints received from odours.							
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	M	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 premises, complaints received.	U	3	M	No excavations are proposed as part of these works.	R	2	L
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	2	L
Heritage								



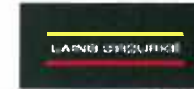
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	P	3	M	General inductions on heritage management 'stop-works' protocol. If suspected heritage item encountered. Works to stop immediately and Environmental Manager contacted. Label any known heritage items on Environmental Control Maps.	U	2	M
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.	P	3	M	Community notifications. Site vehicle shall be parked on Hampden Road in a 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	M	No deliveries of plant and materials to be undertaken during works. Site vehicle shall be parked on Hampden Road in a public parking area. Scheduled road movements shall be minimised where possible Community Notifications.	U	3	L
Truck deliveries out of normal working hours (un-approved).	Noise impact to community / potential complaints.	P	3	M	No deliveries to be undertaken during works. Site vehicle shall be parked on Hampden Road in a public parking area. Induction on approved working hours for deliveries. Communication of delivery times to suppliers. Community Notifications on project activities occurring locally.	U	3	M
Resources and Energy Use								



Energy consumption by plant and equipment.	Inappropriate energy use, waste of energy resources, 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 minor 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:			Consequence:		
5 = Certain 4 = Likely 3 = Possible 2 = Unlikely 1 = Rare			5 = Severe 4 = Major 3 = Moderate 2 = Minor 1 = Incidental		
1- 4 Acceptable			5 - 9 Acceptable with control measures		
			10 - 16 Requires the implementation of best practice		
			17 and Above = UNACCEPTABLE		
5	Certain	<ul style="list-style-type: none"> Common or repeating occurrence Consequence can reasonably be expected to occur in life of Project. 	5	Severe	<ul style="list-style-type: none"> Major pollution incident causing significant and widespread damage or potential to health or the environment Persistent reduction in ecosystem function and value. Ongoing disruption and loss of protected species. Major prosecution likely, outcome in excess of \$500,000
4	Likely	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Significant widespread and persistent changes to habitat, species or environmental media Significant pollution incident causing damage or potential damage to health or the environment external to the site. Potential for prosecution. Potential outcome between \$50,000 - \$500,000 Numerous substantial complaints Actual material environmental harm
3	Possible	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Localised irreversible habitat loss or effects on habitat, species or environmental media Reportable incident to the relevant environmental regulator or other authority. Demonstrated breach of legislative, licence or guideline requirements. Likely infringement notice or fine, potential for prosecution up to \$50,000. Will cause complaints.
2	Unlikely	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Localised degradation of habitat or short term impacts to habitat, species or environmental media. Pollution incident that marginally exceeds licence conditions or guidelines for acceptable pollution. Fine unlikely. Potential for complaints.



1	Rare	<ul style="list-style-type: none"> – Practically impossible – Not known to have occurred in industry or unheard of. 	1	Incidental	<ul style="list-style-type: none"> – Localised or short term effects on habitat, species or environmental media. – Fully contained on site and can be fully remediated. Little potential for fine or complaints. – Insignificant or trivial incident 	
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

Environmental Control Map



Environmental Control Map		
ID	Environmental Aspect	Description
1	Project	This ECM applies to Pre-Construction Minor Works for Portion 7b delivered under Northern Corridor Works (Enabling works for Sydney Metro City and Southwest, Chatswood to Sydenham).
2	Site Access	<ul style="list-style-type: none"> Site survey works will be on Mowbray Rd, access to rail corridor not required.
3	Program of works	<ul style="list-style-type: none"> Refer Pre-Construction Minor Works Application Section 2 "Occasions" for possession program.
4	General	<ul style="list-style-type: none"> The team will be trained on this ECM, OOHW requirements, general environmental issues, and location of sensitive areas. Works will be subject to inspections by the ER, Sydney Metro Environment and Planning Manager and LOR Environmental Manager. This ECM will be displayed on site sheds.
5	Contamination	<ul style="list-style-type: none"> Unexpected contamination finds will be managed onsite by occupational hygienist in attendance. All waste to be classified prior to disposal.
6	Air Quality	<ul style="list-style-type: none"> No air quality related issues are expected to be encountered.
7	Waste	<ul style="list-style-type: none"> No waste will be generated
8	Soils and water	<ul style="list-style-type: none"> No soil and water related issues are expected to be encountered.
9	Heritage	<ul style="list-style-type: none"> Unexpected finds of heritage items must be reported to LOR Environmental Manager and Sydney Metro.
10	Noise and Vibration	<ul style="list-style-type: none"> Noise monitoring is not triggered for this works, however will be undertaken in the event of any complaints. All works will be completed in compliance with Sydney Metro CEMF, SSD 15_7400 Planning Approval, Construction Noise Strategy All plant will have non-tonal alarms. Community notifications will be drafted and sent to Sydney Metro Community Liaison team separately.
11	Traffic and Transport	<ul style="list-style-type: none"> Access to the site will be from Mowbray Rd. No deliveries required during the works. No additional traffic controls are required for the works.
12	Utilities	<ul style="list-style-type: none"> Any impacts to utilities will be reported to site HSE Manager, supervisors, Sydney Trains and Sydney Metro.
13	Biodiversity	<ul style="list-style-type: none"> No vegetation is to be trimmed or removed. The works will not impact threatened flora or fauna species. No trenching or excavation is required for the works.
14	Chemical, fuel storage and use	<ul style="list-style-type: none"> No fuels and chemicals are expected to be brought to site as part of these works. All plant and equipment will be checked daily to ensure there is no leaking oil, fuel or other liquids.
15	Imported materials	<ul style="list-style-type: none"> No materials to be imported for these minor works.
16	No-go zones	<ul style="list-style-type: none"> All activities are to be completed outside the rail corridor.



Contact Information		
Position	Name	Phone
LOR Project Leader	Tony Deacy	0467 762 987
LOR Construction Manager	Martin O'Brian	0457 560 728
LOR/Sydney Metro Communications Manager	Michael Lloyd	0466 545 168
LOR Environment and Sustainability Manager	Chris Standing	0431 338 578
LOR WHS Manager	Clive Hunter	0428 412 130
ER	Alice Pryke	0451 084 390
Sydney Metro Environmental Manager	Adam Koustamanis	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:		
<ul style="list-style-type: none"> • 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:		
<ul style="list-style-type: none"> 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		
Sunday, 29th October 2017: 20:00 to 00:00		
Monday, 30th October 2017: 00:00 to 03:00		



Appendix 2: Cover Page

Environmental Management Documentation - Not Used



Appendix 3: Cover Page

Community Notification - Undertaken by Sydney Metro in conjunction with LOR. Combined letter to be issued which will cover MNNSCW Portion 6 and NCW Portion 7a works.



Appendix 4: Cover Page

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