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:	Sydenham Station and Junction – Tranche 1B/1C
Application Title: (e.g. Smith St trenching works)	Belmore Site Compound
Application Number:	SSJT1B/1C-PCMW-015 Doc Number: SMCSWSSJ-JHL-WEC-EM-REC-000015
Application Date:	Rev00 – 27 May 2019 Rev00 – 30 May 2019
Planning Approval:	Sydney Metro City and Southwest – Sydenham to Bankstown – Environmental Impact Statement (EIS) Sydney Metro City and Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report (SPIR) Sydney Metro City and Southwest Infrastructure Approval SSI-8256
Minor Works Categories: • Highlight as applicable. • If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative.	1. Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation). 2. 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). 6. Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments. 7. Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties. 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. 11. 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. *It is noted that the site compound does not meet the definition of "Ancillary Facility" in accordance with the definitions under the SSI-8256 Instrument of Approval. The site compound has been assessed as "site establishment" in accordance with part (c) of the definition of Construction.
Planning Authority	*If 'Yes', this completed form must be endorsed by an Environmental Representative,*

Determination: Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological communities?	*approved by TfNSW and submitted to the applicable planning authority to determine that the works are not defined as 'construction'.* No – it is anticipated that there will be no impacts associated with the works that will affect State Heritage listed items, threatened species, populations or endangered ecological communities. Works will occur within an area of known or expected archaeological potential (the Belmore Archaeological Management Zone), however as the area is paved and there will be no excavation associated with the use of the area there will be no impact. In addition, JHLOR will implement the *Sydney Metro Unexpected Finds Procedure* V1.4.

Part 2: Details

Describe the proposed Minor Works:

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

Site Description Overview

This overview is based on information from the Environmental Impact Statement (EIS) and Submissions and Preferred Infrastructure Report (SPIR).

The Project area is within the rail corridor of the T3 Bankstown Line and is comprised of stations, overbridges, overhead wiring structures, track, services and ballast, extending from Sydenham Station to Bankstown Station.

A number of pre-existing buildings and a paved compound area within the rail corridor in the vicinity of Belmore Station will be used by JHLOR as a site compound and laydown. Access to the area is via existing access gates located opposite to 80 and 86 Bridge St, Belmore. The site compound will be used to support Tranche 1C and some Tranche 1B works.

T3 Bankstown Line Sydenham Station to Bankstown Station

The T3 line runs adjacent to a number of land zoning types between Sydenham Station and Bankstown Station 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 the survey area comprises exotic or planted native species on highly modified landforms. A number of threatened plant communities, threatened plant species and habitat trees are within the rail corridor and Southwest Metro project area.

Belmore Area

The proposed compound is located to the west of the Burwood Road overbridge. To the north lies the T3 Bankstown line and Railway Parade. To the south lies Bridge Road.

Properties surrounding Belmore Station (i.e. within 200m) include residential, commercial and recreational.

The nearby Belmore Railway Station Group is listed on the State Heritage Register (SHR) (01081), Canterbury Local Environment Plan (LEP) 2012 (I11) and RailCorp s.170 Heritage and Conservation Register (4801084). The site compound is located outside the State Heritage Register curtilage.

Vegetation on the site is highly modified and comprises exotic or planted native species.

Description of Works

Belmore Site Compound

JHLOR will utilise pre-existing buildings and laydown at Belmore as a site compound. The buildings were previously occupied by Sydney Trains and are now vacant. The compound will be used for office, crib and pre-start. Some laydown of construction plant, equipment and materials may also occur. A storage container may be set-up Site vehicle parking is also available within the compound area, use of this area by staff will be prioritised over street parking.

The compound will be used from the 3rd of June for 3 months during the Tranche 1C investigation works, with a possible extension until April 2020 (pending agreement with Sydney Metro).

The SPIR states "*The project area includes all areas required to construct the project. The majority of construction would be located within the rail corridor from west of Sydenham to west of Bankstown.*

Within the project area, a number of construction compounds would be required to support construction activities at stations, and at other key locations where civil works are required. In addition to the compounds, a number of work sites would also be used to facilitate construction of certain project elements e.g. bridge works."

Appendix B – Figure 2.1 of the SPIR identifies a number of pre-approved compound areas.

The Belmore site compound falls within one of these areas. As such the suitability of this location has been assessed and approved under the Planning Approval.

The site compound is located within the Belmore Archaeological Management Zone (AMZ). JHLOR has sought advice from a Heritage Consultant regarding use of the area as a site compound and laydown (refer to Appendix 4). As the area is already paved and there are not invasive activities associated with the operation of the pre-existing compound, there will be no impact to archaeology. No further consultation with Office of Environment and Heritage (OEH) or Department of Planning and Environment (DPE) is required.

The area is asphalted, mitigating the potential for erosion and sedimentation issues.

Several trees are adjacent to the area but will not be impacted by the works. There is sufficient space for vehicle access between the trees that are located on the verge adjacent to the compound access gates. Clearance between the trees and the driveways is sufficient enough as to not warrant demarcation or barriers. No trimming or tree removal will be required or is permitted under this PCMW.

The Sydney Metro City & Southwest Sydenham to Bankstown EIS Technical Paper 8 Hydrology, Flooding and Water Quality Assessment and other available flood information (LEP Flood maps) have been reviewed, indicating that the area is not prone to flooding during the 1% Average Event Probability (AEP) rainfall event. As such, no further considerations need be made under REMM FHW5.

The use of these buildings as a site compound had been ongoing for several years as a Sydney Trains operational facility. As such, noise associated with ongoing use is part of the existing noise environment. JHLOR will position any plant or equipment, such as lighting towers, to minimise noise impacts to nearby receivers.

The compound will be used outside of standard construction hours during possessions. Use of the compound will be included within any OOHW Approval.

Vehicles access to and from the compound has also been ongoing during the previous operation of the site compound by Sydney Trains. JHLOR will assess control requirements at the access gate on an ongoing basis, depending on works, to mitigate risks to pedestrian, cyclist and motorist safety.

Plant List

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

- Delivery truck
- Mobile crane
- Vacuum truck
- Site utes
- 2t tipper
- Portable lighting towers
- Road Sweeper
- Skip bins
- Multi-crane
- Telehandler
- Hiab
- Water cart/trailer

Working Hours

The use of the area would mainly occur during standard construction hours as identified within the planning approval. Any works to occur outside of standard construction hours, including deliveries, would occur under an Out of Hours Work Approval in accordance with the Sydney Metro City & Southwest Out of Hours Work Protocol.

It is noted that material will be left in these areas on a full-time basis.

General Notes

All plant would access site via existing Sydney Trains access gate.

Note that these activities are subject to change based on construction progress. The above list does not include activities approved under any other Pre-construction Minor Works Approval form.

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.

Planned Commencement Date:	The Belmore Site Compound is proposed for use from the 3rd of June for approximately 3 months. Any extension to this period would be undertaken in consultation with Sydney Trains and Sydney Metro.
Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors	Belmore Area • There are a number of residential properties located within close proximity to the site compound as can be seen within Appendix 1. Due to the proximity of these receivers, these properties may be sensitive to excessive noise, particularly during OOHW. Any potential impacts to these properties will be managed in accordance with the Construction Noise and Vibration Strategy, including relevant notifications. There are no vibratory activities associated with the works. Noise and vibration will also be managed in accordance with the following criteria; o Construction 'Noise affected' noise management levels established using the Interim Construction Noise Guideline (DECC, 2009); o Vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure); o (BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and o The vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage). • Preliminary environmental site assessment identified the potential risk of contamination within the Project area, with potential contamination sources being historical rail activities, and commercial and residential land use in surrounding areas. Potential contaminants identified in low to medium risk areas included: o Asbestos o Hydrocarbons o Heavy metals o Herbicides. Works are non-invasive and therefore risks associated with the disturbance of contamination are negligible. Workers will report any finds in accordance with the JHLOR unexpected finds procedure for contamination. • Contamination will be managed in accordance with the Unexpected Contamination Finds Procedure – refer to Appendix 2. • Works will occur within the Belmore archaeological investigation zone as defined in the AARD. In accordance with the Heritage Consultant Correspondence in Appendix 5, there will be no impacts to known or potential archaeological deposits associated with the work. The works will operate under the Sydney Metro Unexpected Finds Procedure. • A number of areas of Endangered Ecological Community (EEC) under the TSC Act have been identified within the Project area. There is no EEC within the vicinity of the site compound. • A number of habitat features are present within the Project area including; o Hollow bearing trees o Habitat for Grey-headed flying-fox o Habitat for Australian Ibis roosting The works will not include the removal or trimming of any vegetation, as such there will be no impact on these features. These features are not known to exist within the vicinity of the site compound. • Visual amenity – the visual aspects of the site compound is consistent with the industrial nature of the rail corridor. The site compound will be located within pre-existing buildings. Lighting towers will be pointed away from receivers to minimise the impacts of lighting spill. • Works may occur in the vicinity of local stormwater systems. Localised erosion and sediment controls will be in place at all locations where materials associated with the works may leave the corridor, including via stormwater drainage. • Appropriate approvals, including Road Occupancy Licences and Traffic Control Plans, must be in place where works on roadways are required. A Construction Traffic Management Plan has been deemed as "not required" by TTLG as per Low Impact Activities under Condition of Approval E47. A Traffic Management Proposal, providing basic information required for early works including access to these areas, has been approved by SCO. • Pedestrian access will be maintained in any area where works are occurring, noting that pedestrian access is not permitted within the rail corridor.

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.).	An Environmental Risk Assessment and an ECM for the proposed works are included in Appendix 1. JHLOR's unexpected finds procedure for contamination and acid sulphate soil is included in Appendix 2. Advice from JHLOR's Heritage Consultant is included in Appendix 4.

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 will be reviewed by the JHLOR Environmental Manager.

Part 5: Community Consultation	
What community consultation has been undertaken already?	Site establishment is included within the June 2019 Monthly Community Notice.
What community consultation is planned to be undertaken?	A subsequent detailed notification and door knock will also be distributed to the local area 100m from the site prior to the commencement of this activity. A draft copy is included in Appendix 3. Ongoing consultation will occur through the Monthly Community Notice. The community will be notified of any use of these areas outside of standard construction hours in accordance with the Additional Mitigation Measures specified in the Construction Noise and Vibration Strategy.
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:	Neal Barron	**Position:**	Project Director	**Phone:**	0409 291752
	Cameron Newling		Environmental Manager		0419 727 445
	Loretta Mihaljek		Communication and Stakeholder Manager		0412 129 064

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:	Cameron Newling

Signature:	Date: 27/05/2019 30/5/2019

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:	TIM GARRARD		FIL CERONE
Date:	30/05/2019		31/5/19.
Comments:			*Supporting letter attached as Appendix 5 if necessary.*
Conditions:			*Supporting letter attached as Appendix 5 if necessary.*

☑	Approved (by TfNSW)
☐	Endorsed (by Environmental Representative)
☐	Rejected

Appendix 1: Environmental Control Map and Environmental Risk Assessment


SMEW - ECM
Belmore Site Compound
Sun May 12 2019
Legend
AMS and Archaeological Monitoring Zone
Belmore Compound Area
Belmore Railway Station Group SHR Curtilage
Belmore Station
Project Boundary
Belmore Station
Railway Parade
Redman Parade
Wortley Ave
Dean Ave
Oxford St
Belmore Ave
Cleary Ave
Brande St
Burwood Rd
Station Rd
Bridge Rd
Bridge Ln
Peel St
Gladstone St
Marie St
Paragon Ln
Collins St
Tobruk Ave
Google Earth
100 m
N


SMEW - ECM
Belmore Site Compound
Sun May 12 2019
Legend
Belmore Compound Area
Belmore Station
Project Boundary
SPIR Compound
Station Rd
Oxford St
Belmore Ave
Geary Ave
Dean Ave
Rachel Ln
Redman Ln
Redman Parade
Wortley Ave
Brae St
Railway Parade
Burwood Rd
Belmore Station
Bridge Ln
Bridge Rd
Peel St
Gladstone St
Marie St
Collins St
Paragon Ln
Tobruk Ave
Google Earth
©2019 Google
100 m
N

Environmental Risk Assessment

The Risk Assessment has been undertaken in accordance with the requirements of the *Sydney Metro Risk Management Standard*.

Note; **C** = Consequence & **L** = Likelihood as per *Sydney Metro Risk Management System – Appendix A Sydney Metro Risk Matrix*

Aspect	Potential Environmental Impact	Initial Risk Rating			Control Measures	Residual Risk Rating		
		C x	L =	Risk		C x	L =	Risk
Belmore Site Compound								

Items of heritage significance uncovered during works	Damage to heritage items or archaeological deposits.	**C3**	**L5**	**Med**	• Induction to include heritage management requirements.
					• Implement Sydney Metro Unexpected Finds Procedure V1.4 during invasive investigation works.
					• If suspected materials are found, workers are to;
					  ○ Stop works in vicinity immediately
					  ○ Inform the Superintendent and Environmental Manager
					  ○ Delineate the area to prevent further access, where possible
					• No works to occur in SHR curtilages under this PCMW
						C3	**L6**	**Low**

Noise from plant and people	Noise from plant impacting on sensitive receivers. Noise impacts outside standard construction hours.	**C5**	**L3**	**Med**	• Induction to include noise mitigation and “good neighbour” approach. • Distance between noisy plant items and nearby noise sensitive receivers would be maximised and equipment orientated where possible to reduce noise. • Plant and equipment, such as lighting towers, would be positioned to take advantage of existing shielding. • The use of temporary noise barriers will be investigated where shielding from existing structures is not possible. In these cases, noise barriers will be implemented where reasonable and feasible. • Parking will primarily occur within the compound area and will be preference over street parking to mitigate noise impacts. • Laydown of materials to be organised to minimise reversing, where possible • Where possible, night works should be programmed to undertake noisy activities prior to 10pm. • All power driven work equipment used would have	**C5**	**L5**	**Low**

					efficient muffler design and be well maintained. • Mitigation measures to be implemented in accordance with the Sydney Metro City & Southwest Construction Noise Strategy, including appropriate notification.			
Chemical handling and storage	Poor storage and handling of chemicals causes spills	**C5**	**L4**	**Low**	• Any chemicals and fuels are to be stored within a bunded area with 110% of the capacity of the largest stored container. • Any chemical storage is to be located more than 20m from a drainage line or waterway. • Refuelling to occur more than 20m away from drainage lines or waterways • Spill kits to be located at chemical storage locations and work fronts. • Site induction includes spill response awareness.	**C5**	**L5**	**Low**
Erosion and sediment controls	Sediment laden runoff from laydown areas or site compound	**C4**	**L4**	**Med**	• Induction to include ERSED protection measures. • Produce an ESCP for relevant sites as activities progress.	**C4**	**L5**	**Low**
Water Management	Discharge of water that does not meet water quality parameters	**C4**	**L4**	**Med**	• Introduction to include water discharge requirements • A discharge permit is to be signed-off by the Environmental Manager (or delegate) prior to any discharge in accordance with the Sydney Metro *Water Discharge and Reuse Procedure SM ES-PW-309*	**C4**	**L5**	**Low**
Waste	Incorrect disposal of waste Contamination	**C3**	**L5**	**Med**	• Induction to include waste management practices. • Waste to be tested in accordance with the Waste Classification Guidelines (NSW EPA, 2014) prior to disposal. • The waste must be lawfully transported and disposed of to a licenced facility. • Unexpected Contamination Finds procedure to be enacted where contamination is found. • An occupational hygienist is to be on call to provide advice on management of any contaminated material (advice based on contamination type).	**C3**	**L6**	**Low**
Air quality	Dust generation	**C4**	**L4**	**Med**	• Induction to include air quality management practices. • Water cart or water trailer to be present to wet down paved surfaces where dust. • Monitor conditions and modify works where dusty conditions are observed.	**C4**	**L5**	**Low**

Vegetation	Removal or pruning of vegetation without approval	**C4**	**L4**	**Med**	• Induction to include biodiversity requirements – no removal or pruning of any plants without appropriate JHLOR permit. A JHLOR permit will not be provided unless a Tree Report has been submitted to DPE in accordance with CoA – E5.	**C4**	**L5**	**Low**
Traffic and Pedestrians	Disruption to road users and pedestrians	**C4**	**L4**	**Med**	• Induction to include traffic control requirements • Ongoing assessment of protection requirements at access gates to mitigate pedestrian, cyclist and motorist safety. • Traffic Control Plans and Road Occupancy Licences to be in place as required to redirect traffic and pedestrians. • Appropriate community notifications to be in place for road occupancy • Parking within rail corridor where possible • Observe time restrictions for parking areas • Prioritise community parking where possible • Maintain pedestrian access	**C4**	**L5**	**Low**
Visual Amenity	Impacts from light spill	**C5**	**L4**	**Low**	• Position lighting towers to minimise impacts to nearby receivers	**C4**	**L5**	**Low**

Sydney Metro Risk Matrix

A1 Consequence Table

Consequence Table						
Rating	C6	C5	C4	C3	C2	C1
Descriptor/ Impact Area	Insignificant	Minor	Moderate	Major	Severe	Catastrophic
Health and Safety (Injury and Disease)	Illness, first aid or injury not requiring medical treatment.	Illness or minor injuries requiring medical treatment.	Single recoverable lost time injury or illness, alternate/restricted duties injury, or short-term occupational illness.	1-10 major injuries requiring hospitalisation and numerous days lost, or medium-term occupational illness.	Single fatality and/or 10-20 major injuries/permanent disabilities/chronic diseases.	Multiple fatalities and/or >20 major injuries/permanent disabilities/chronic diseases.
Environment	No appreciable changes to environment and/or highly localised event.	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries.	Short-term and/or well-contained environmental effects. Minor remedial actions probably required.	Impacts external ecosystem and considerable remediation is required.	Long-term environmental impairment in neighbouring or valued eco . Extensive remediation required.	Irreversible large-scale environmental impact with loss of valued eco .
Customer Experience/ Operational Reliability	Short duration disruptions affecting part of one transport mode.	Minor disruptions affecting several parts of one transport mode.	Serious disruptions affecting operation of one complete transport mode.	Major disruptions affecting operations of one transport mode with network-wide effects on one or more other modes of transport.	Short duration shutdowns or substantial disruptions affecting multiple transport modes with sector-wide cascading effects.	Extensive shutdowns or extended disruptions with economy-wide effects.
Government/ Stakeholder / Public Trust/ Confidence	Negative article in local media. No discernible reaction/apprehension. Goodwill, confidence and trust retained.	Unease – Series of negative articles in local/state media. Confidence remains with some minor loss of goodwill or trust. Recoverable with little effort or cost. Some continuing scrutiny/attention.	Disappointment – Extended negative local/state media coverage. Confidence and trust dented but are quickly recoverable at modest cost within existing budget and resources.	Concern – Short-term negative state/national media coverage. Confidence and trust are diminished but are recoverable with time, staff effort and additional funding.	Displeasure – Extended negative state/national media coverage. Confidence and trust are damaged but recoverable at considerable cost, time and staff effort.	Outrage – Material change in the public perception of the organisation. Confidence and trust are severely damaged, possibly irreparably, and full recovery both questionable and costly.
Regulatory or Legal Breach	Low-level non-compliance with legal and/or regulatory requirement or duty by individuals or TfNSW.	Minor non-compliance with legal and/or regulatory requirement or duty. Investigation and/or report to authority.	Moderate non-compliance. Subject to comment and monitoring from applicable regulator. Small fine and no disruption to services.	Major breach resulting in enforcement action and/or prohibition notices. Substantial fine and no disruption to services.	Substantial breach resulting in prosecution, fines and/or litigation. Licence or accreditation restricted or conditional affecting ability to operate.	Prosecution leading to imprisonment of TfNSW executive. Loss of operating licence.
Management Effort/ Organisational Fatigue	An event, the impact of which can be absorbed as part of normal activity.	An event, the impact of which can be absorbed but some additional management effort is required.	An event, the impact of which can be absorbed but much broader management effort is required.	Major event which can be absorbed, but substantial management effort is required.	Severe event which requires extensive management effort but can be survived.	Catastrophic event with the clear potential to lead to the collapse of the organisation.
Benefit Realisation of Initiative, Program or Project	No time delay with initiative or project but it will incur a slight decrease in the benefits realised.	Minor delay with the initiative and/or a minor decrease in the benefits realised; or minor delay on the project or another project, with no public implications.	Several delays with the initiative and/or moderate decrease in benefits realised; or completion date missed for non-critical path project.	Major delays with the initiative and/or major decrease in benefits realised; or publicly announced portion/milestone missed or final completion date missed with demonstrable mitigating external circumstances.	Severe delays with initiative, which impacts across divisions and/or significant decrease in benefits realised; or publicly announced portion/milestone missed or final completion date missed on critical path project.	Failure to realise benefits of the initiative which adversely affects the enterprise-wide operations of TfNSW; or publicly announced portion/ milestone significantly missed or final completion date significantly missed on critical path project.
Budget, Costs or Revenue	< $100k	$100k – $1m	$1m – $10m	$10m – $50m	$50m – $100m	> $100m

A2 Likelihood Criteria

Likelihood						
Rating	**L6**	**L5**	**L4**	**L3**	**L2**	**L1**
Descriptor/ Definition	**Almost Unprecedented**	**Very Unlikely**	**Unlikely**	**Likely**	**Very Likely**	**Almost Certain**
Qualitative Expectation	Not expected to ever occur during time of activity or project	Not expected to occur during the time of activity or project	More likely not to occur than occur during time of activity or project	More likely to occur than not occur during time of activity or project	Expected to occur occasionally during time of activity or project	Expected to occur frequently during time of activity or project
Sydney Metro Probability Analysis	<10%	10-25%	25-50%	50-75%	75-90%	>90%
Quantitative Frequency	Less than once every 100 years	Once every 10 to 100 years	Once every 1 to 10 years	Once each year	1-10 times every year	10 times or more every year

A3 Risk Matrix

Risk Rating: Very High – A – 31-36 High – B – 22-30 Medium – C – 11-21 Low – D – 1-10			CONSEQUENCE					
			Insignificant	Minor	Moderate	Major	Severe	Catastrophic
			C6	C5	C4	C3	C2	C1
LIKELIHOOD	Almost certain	L1	20	22	29	32	34	36
	Very Likely	L2	14	18	23	28	31	35
	Likely	L3	9	12	16	24	27	33
	Unlikely	L4	6	7	11	17	25	30
	Very Unlikely	L5	3	4	8	13	19	26
	Almost Unprecedented	L6	1	2	5	10	15	21

Appendix 2: Environmental Management Documentation

Unexpected Contaminated Land Procedure and Asbestos Finds Procedure

INDUCTION/ TOOLBOX TALKS

All personnel are to receive Site Inductions and on-going training via Toolbox Talks

OBSERVATION OF SOIL DURING EXCAVATION WORKS

Observe soil during excavations to check for evidence of contamination.
Refer to second page of this procedure for examples of materials that could indicate presence of contamination.

Has evidence of contamination been observed?

YES

STOP WORKS

Notify the Site Supervisor and Environment Team and cordon off area
Do not touch or disturb the item/ material
Delineate the site of the find
Cover the contaminated material (may be stockpiled or in-situ)
The following detail should be provided to the Environment Team
– The location of the potential contamination
– Visual appearance
– Odour (if any)
– Depth
– Surround material and mode of discovering the material

NO

ADDITIONAL ASSESSMENT

If required, the Construction Manager is to obtain assistance from a suitably qualified environmental consultant in identifying the potential hazard to human health or the environment in accordance with legislative requirements. This may include sampling and laboratory analysis.

MANAGEMENT STRATEGY

- Develop a plan for managing and/ or remediating the suspect material. This may be a waste classification or remediation action plan
- Obtain any necessary futher approval(s)

STRATEGY IMPLEMENTATION

- Implement the approved management and/ or remediation. If the material is to be removed, refer to Waste Management Procedure (SMEW-EP-Waste Management Procedure) for classification and disposal.
- If required, The Environmental Consultant having input to the Management Strategy, will perform or oversee any monitoring required for the works (e.g. air quality monitoring, odours). Validation of the remediated area will also be undertaken as appropriate. The Environmental Consultant will also ensure that any contaminated material that has been removed or left in-situ is managed appropriately.
- Document compliance with the approved management and remediation and provide documentation to the owner or the owner's nominated representative, and the regulator (if required).

CONTINUE EARTHWORKS

Once the contamination find has been addressed the Construction Manager is to approve recommencement of works.

RESPONSIBILITY

- ENVIRONMENT TEAM
  CONSTRUCTION TEAM
- CONSTRUCTION TEAM
- CONSTRUCTION TEAM
  ENVIRONMENT TEAM
  SITE SUPERVISOR
- CONSTRUCTION MANAGER
  ENVIRONMENTAL
  CONSULTANT
- ENVIRONMENT TEAM
  ENVIRONMENTAL
  CONSULTANT
- ENVIRONMENT TEAM
  CONSTRUCTION TEAM
  ENVIRONMENTAL
  CONSULTANT
- CONSTRUCTION
  MANAGER

EVIDENCE OF CONTAMINATION

Example of materials that could indicate the presence of contamination include (but are not necessarily limited to):

- Asbestos cement fragments or other potentially asbestos containing materials
- Odorous or stained soil;
- Buried chemical drums or containers
- High proportion of waste materials or building debris
- Tarry or ashy material
- Brightly or unusually coloured material
- A yellow and/or red mottling in the soil profile indicates there may be Acid Sulfate Soils (ASS)

Asbestos
Asbestos finds are to be managed in accordance with the Project WHS Management Plan

Acid Sulfate Soils (ASS)
ASS are naturally occurring soils, sediments or organic substrates that are formed under waterlogged conditions in coastal areas. When exposed to air after being disturbed, soils containing iron sulfides produce sulfuric acid and often release toxic quantities of iron, aluminium and heavy metals.
If ASS is encountered, possible management strategies include:

- Modifying the works to avoid the area of ASS
- Delineation and removal to a suitably licenced facility
- Onsite treatment to neutralise the ASS, which could include the application of lime.

Note: The management of any ASS needs to include appropriate erosion and sedimentation controls to minimise the potential for pollution to waters. Refer to the Construction Spoil and Water Management Plan.

Management and Disposal of Contaminated Material
Specific approval may be required to implement management strategies and a Safe Work Methods Statement (SWMS) must be prepared prior to undertaking any remediation work, except in emergency situations.
Contaminated material will be disposed of in accordance with the Waste Management Procedure.

Appendix 3: Community Notification

Sydney Metro is Australia's biggest public transport project.

Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

Temporary site office and storage area – Bridge Road, Belmore

From **Monday 3 June** (for approximately 3 months), Sydney Metro will be establishing a temporary site office and storage area at the existing Sydney Trains facility on Bridge Road, Belmore. This site will be used to support upcoming early work activities for the Bankstown Line metro upgrade project.

Standard working hours

Work at this site will take place during standard construction hours unless otherwise notified. Standard construction hours are Monday to Friday, 7am–6pm and Saturday, 8am–6pm (8am to 1pm inside the corridor).

What to expect

- Access to the site will be via Bridge Road.
- Increased vehicle movements in the area during this period
- Access to buildings and driveways will be maintained at all times
- Some of this work may be noisy, however we will take every possible step to minimise noise such as switching off equipment when not in use and installing non-tonal reversing beepers on vehicles.

Keeping you informed

Properties close to the rail corridor will receive notifications when work is scheduled to occur. Sydney Trains will deliver notifications for work done during scheduled rail maintenance periods and Sydney Metro will keep you informed of all other work. If you'd prefer to receive updates by email, please contact us using the details below.

Thank you for your cooperation while we complete these essential works.

If you have any questions please contact **Mel** on **1800 171 386** (24 hour community information line) or sydneymetro@transport.nsw.gov.au

If you require the services of an interpreter, please contact the **Translating and Interpreting Service on 131 450** and ask them to call **Sydney Metro on 1800 171 386**. The interpreter will then assist you with translation.

Sydney Metro is Australia's biggest public transport project.

Services start in 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

The upgrade of the T3 Bankstown Line to metro standards received planning approval on 19 December 2018. Southwest metro early work is being delivered by John Holland Pty Ltd and Laing O'Rourke Australia Construction Pty Ltd, including station and bridge investigations and installation of electrical cabling within the rail corridor.

Southwest metro early work

Over the next month early work investigations will be carried out along the Bankstown line between Belmore and Bankstown (weather and site conditions permitting).

Day work

Project standard working hours are Monday to Friday 7am - 6pm and Saturday 8am - 6pm.

Location	Activities

Whole corridor (Belmore – Bankstown)	• Site establishment work within the rail corridor, including site preparation, installation of haul roads and temporary fencing
	• Locating and confirming underground services using hand held equipment, cameras and non-destructive digging throughout the rail corridor
	• Survey work in stations (Belmore to Punchbowl), in the rail corridor and nearby public areas
	• Geotechnical investigations in stations (Belmore to Punchbowl) and throughout the rail corridor including minor excavation or drilling, sampling and testing
	• Survey and inspections of rail bridges from the rail corridor and nearby public areas
	• Minor clearing and grubbing throughout the rail corridor
	• Set up temporary site compound inside the rail corridor via the rail access gate on Urunga Parade, Punchbowl
	• Equipment used for the above work will include vacuum suction trucks, dump trucks, excavators, drill rigs, crane trucks and lifting machinery, power and hand tools.
	• Delivery and removal of material and equipment using rail access gates
	  ○ Belmore: Tobruk Avenue, Hall Street, Loftus Street, Redman Parade, Acacia Lane and Railway Parade
	  ○ Lakemba: Railway Parade and The Boulevarde
	  ○ Wiley Park: Shadforth Street, Cornelia Street, Urunga Parade and The Boulevarde
	  ○ Punchbowl: Urunga Parade, The Boulevarde, South Terrace and Wattle Street

Sydneymetro.info
1800 171 386
sydneymetro@transport.nsw.gov.au

Out-of-hours work

Due to the nature of some activities and for the safety of workers, some work will occur outside standard construction hours when trains are not running. Some equipment will also be delivered outside standard construction hours in line with RMS requirements for transporting oversized vehicles. Out-of-hours work activities include:

Date/Time	Location/s	Activities
27 May to **30 June** between **6pm** and **6am**	• Belmore • Lakemba • Wiley Park • Punchbowl • Bankstown	• Overnight surveys, visual and structural inspections of the rail track • Hand held torches will be used during these works. Lights will be directed away from residential properties when in use • Access to the rail corridor will be via the existing rail corridor and pedestrian gates located between Belmore and Bankstown stations

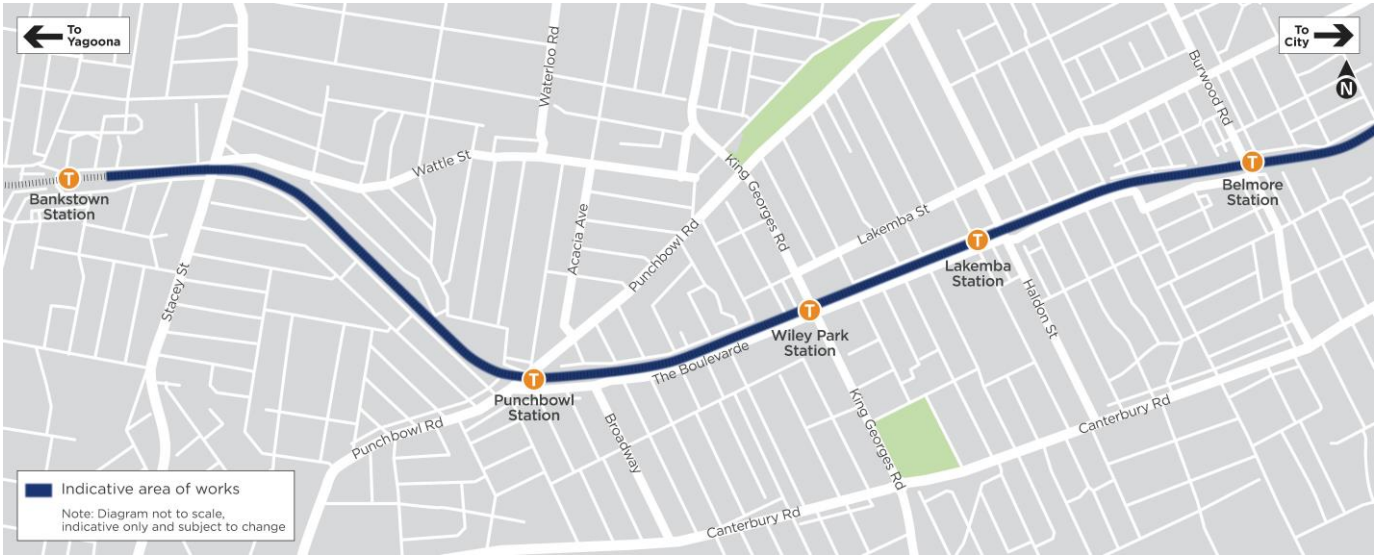
Access to buildings and driveways will be maintained at all times. Some of this work may be noisy, however we will take every possible step to minimise noise such as switching off equipment when not in use and installing non-tonal reversing beepers on vehicles.

Keeping you informed

Properties close to the rail corridor will receive notifications when work is scheduled to occur. Sydney Trains will deliver notifications for work done during scheduled rail maintenance periods and Sydney Metro will keep you informed of all other work. If you'd prefer to receive updates by email, please contact us using the details below.

Thank you for your cooperation while we complete this essential work.

If you have any questions please contact **Melanie** on **1800 171 386** (24 hour community information line) or SouthwestMetro@transport.nsw.gov.au



Appendix 4: Correspondence from Heritage Consultant

Keegan, Daniel

From: Sandra Wallace <Sandra.Wallace@artefact.net.au>
Sent: Thursday, 30 May 2019 12:17 PM
To: Keegan, Daniel
Subject: RE: SSJT1B/1C - JHLOR Compound establishment in pre-existing building within Belmore AMZ

Hi Dan,

I confirm the previous advice still stands in regard to this location.

Kind regards
Sandra

Dr Sandra Wallace
Managing Director

ARTEFACT
Telephone: 61 2 8570 1203 **Mobile:** 0403565086
Address: Level 4, Building B, 35 Saunders Street, Pyrmont NSW 2009
Web: www.artefact.net.au

Cultural Heritage Management | Archaeology | Heritage Interpretation

We acknowledge the Traditional Custodians of Country in which we live and work, and pay our respects to them, their culture and their Elders past, present and future

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From: Keegan, Daniel <Daniel.Keegan@jhlorjv.com.au>
Sent: Thursday, 30 May 2019 11:46 AM
To: Sandra Wallace <Sandra.Wallace@artefact.net.au>
Subject: RE: SSJT1B/1C - JHLOR Compound establishment in pre-existing building within Belmore AMZ

Hi Sandra,

We have been advised that the Belmore Site Compound will actually consistent of the buildings and paved area adjacent to the one that was assessed (see image below).

Can you please confirm that your advice still stands for the revised area.

Regards,

Dan Keegan
0435 859 160

From: Sandra Wallace <Sandra.Wallace@artefact.net.au>
Sent: Monday, 27 May 2019 8:21 AM
To: Keegan, Daniel <Daniel.Keegan@jhlorjv.com.au>
Subject: RE: SSJT1B/1C - JHLOR Compound establishment in pre-existing building within Belmore AMZ

Hi Dan,

As there would be no subsurface impacts there would be no archaeological impacts and therefore no mitigation is required. I also note that any visual impacts of the compound on the Belmore Station SHR item would be negligible due to its distance from the curtilage boundary and the existing structures that would screen the compound from the item. My understanding is that as there would be no archaeological impacts and its outside SHR curtilage OEH would not need to be consulted under the low impact works provisions for the SSI approval.

Let me know if you need any further information.

Regards
Sandra

Dr Sandra Wallace
Managing Director

ARTEFACT
Telephone: 61 2 8570 1203 **Mobile:** 0403565086
Address: Level 4, Building B, 35 Saunders Street, Pyrmont NSW 2009
Web: www.artefact.net.au

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From: Keegan, Daniel <Daniel.Keegan@jhlorjv.com.au>
Sent: Friday, 24 May 2019 4:23 PM
To: Sandra Wallace <Sandra.Wallace@artefact.net.au>
Subject: SSJT1B/1C - JHLOR Compound establishment in pre-existing building within Belmore AMZ

Hi Sandra,

We would like to use a pre-existing building and paved area within the Belmore AMZ for construction laydown. The building and paved area was previously used by Sydney Trains and has now become available for JHLOR to use.

The proposed area is shown in yellow below.

We would have no subsurface impacts as part of our works. In fact, as the area is fully paved we are not expecting there to be any subsurface impacts at all. The site would be used as office, crib, laydown and parking. A shipping container may also be used within the area, it would be placed on an existing paved area.

Can you please;

- Assess and confirm that the proposed use is appropriate and consistent with low impact works (in a heritage context)
- Advise us on whether further consultation with OEH/DPE would be necessary for the use of this area.

If the answer to the above is; yes, these are low impact works and no, further consultation with OEH/DPE would not be required, a reply email would suffice. We would attach te email to a Minor Works Application to Sydney Metro.


SMEW - ECM
Belmore Compound Area
Sun May 12 2019
Station Rd
Oxford St
Belmore Ave
Cleary Ave
Cleary Ln
Rachel Ln
Worley Ave
Railway Parade
Bridge Rd

Regards,

Daniel Keegan
Environmental Coordinator

Sydenham Metro upgrade project

John Holland Laing O'Rourke Joint Venture
100a Marrickville Road, Marrickville NSW 2204
PO Box 195, Marrickville NSW 1475

mobile: +61 435 859 160
email: daniel.keegan@jhlorjv.com.au