

Carolyn Riley
Director Environment, Sustainability and Planning
Sydney Metro
Transport for NSW
PO Box K659
HAYMARKET NSW 1240

16 May 2020

170801-SM-Apr 2020

Dear Carolyn

RE: Sydney Metro City & South West ER Project Management Status Report - April 2020

In accordance with:

- Condition A24 (l) of the Sydney Metro City & South West Chatswood to Sydenham CSSI 15_7400 Approval (9 January 2017) and associated modifications (MOD1_Victoria Cross and Artarmon (18 October 2017), MOD2_Central Walk (21 December 2017), MOD4_Sydenham Station and Metro Facility South (13 December 2017), MOD 3_ Martin Place Metro Station (22 March 2018), MOD 5_Blues Point Acoustic Shed (2 November 2018) and MOD 6_ Administrative Changes (21 February 2019);
- Condition A26(j) of the Sydney Metro Sydenham to Bankstown Upgrade SSI_8256 Approval (12 December 2018); and
- PROFESSIONAL SERVICES CONTRACT PSC No.00013/10897 Independent Environmental Representative City & Southwest between Transport for NSW and Healthy Buildings International Pty Ltd (HBI) (18 January 2017).

This report provides a summary of key assurance activities undertaken by HBI as ER for Sydney Metro – City and South West for the month of April 2020 (Attachment A). Please refer to A.1 for the Core Focus Area review conducted at the end of the reporting period. This summary highlights aspects of each work package that we believe require action to mitigate an actual or potential risk of non compliance with the Conditions of Approval.

Please refer to A.2 for a Summary of Key Construction Activities conducted during this period. This should be read in conjunction with the ER summary to provide context.

It is recommended that any items marked as OPEN in the Core Focus Area Review summary be reviewed by Sydney Metro and actioned as appropriate.

Yours sincerely



Jo Robertson
Project Director

Cc. SM: Hugh Chapman, Matt Marrinan, Ben Armstrong, Fil Cerone, Andrew Hendy, Chris Berg, Pam Tummers, Ann Paterson ERs: Michael Woolley, Jo Heltborg, Peter Hatton. IEA: Larry Weiss, Julie Dickson

Attachment A: Key Compliance Assurance Activities

Summary of Contract Packages	Environmental Representative/s	
Tunnel and Station Excavation (TSE)	Michael Woolley	Jo Robertson
Martin Place Unsolicited Proposal (USP) Macquarie Bank/Lendlease	Michael Woolley	Jo Robertson
Sydenham Station Junction (SSJ) (Early Works and Main works)	Jo Heltborg	Jo Robertson
Northern Corridor (NCW) (Early Works package)	Peter Hatton	Jo Robertson
Central Station (Early Works and Main Works)	Michael Woolley	Jo Robertson
SSC – Southwest Metro Enabling Works (SMEW was S2B)	Jo Robertson	Jo Heltborg
SSC – Line Wide	Peter Hatton	Jo Robertson

ER Compliance Assurance Activities	
Site Inspections	
TSE (including Clyde Barging Facility)	<p>Prior to the scheduled ER Inspection on 24 March, JHCPBG informed the ER that site access was no longer going to be provided for the ER due to risk management measures in relation to COVID-19. On this basis no on site inspections were performed by the ER during April. In the place of each weekly ER inspection, JHCPBG conducted a site inspection and prepared an inspection report. The reports were issued to the ER and Sydney Metro as a Draft. A virtual conference meeting between JHCPBG, Sydney Metro and the ER was held weekly to go through the report, with JHCPBG environmental personnel providing details on the status of works; environmental risks and actions identified during the inspection; and responded to questions and enquiries from the ER and Sydney Metro. JHCPBG then updated the report following the feedback and a final report was issued to the ER in the week of the inspection. The report covered the close out of pre-existing ER and JHCPBG Actions (where agreed to by the ER based on evidence provided and discussed during the video conference).</p> <p>Further to this, the ER conducted an inspection of the majority of sites from outside the project boundary on 27 April. Issues identified through this process were communicated to JHCPBG and Sydney Metro. No formal report was generated by this inspection process.</p> <p>Actions identified during the inspections covered issues such as ERSED management; management of tracking onto roads at exits; dust management; and bunding of fuels and chemicals.</p>
USP/ISD Martin Place	Lendlease restricted ER access to the Martin Place North site in response to risks related to COVID-19. In the place of the ER Inspections, Lendlease has provided internal inspection reports. These contain photos of the worksite; commentary on work activities and a checklist of aspects covered during the inspection. During regular meetings with Lendlease and Sydney Metro, a description of site works and activities was provided. No new actions were defined for the reporting period.
VC-ISD	Nil Inspections conducted.
CN-ISD	Nil Inspections conducted.
WL-ISD	Nil Inspections conducted.
SSJ	<p>There were three inspections conducted by the ER in April 2020. The key issues identified during the inspections were:</p> <ul style="list-style-type: none"> ▪ CRS Works Area – Minor ERSED issue ▪ Confluence Area – The risk of sediment-laden runoff from this area was heightened due to the lining coming loose from batters, exposing bare earth. Runoff from this area would be uncontrolled into Sydenham Pit. ▪ Geotech Area – Incorrect packaged fuel storage (jerry cans) ▪ Burrows Ave – Sediment and building debris were observed in the gutters. ▪ Railway Pde – Debris and litter, including cigarette butts had accumulated at a small stormwater diversion pipe in the gutter adjacent to Platform 1. ▪ Hogan Ave – Damage to the roots of a tree on the corner of Hogan Ave and Burrows Ave was observed, likely to have occurred during recent Ausgrid trenching works. ▪ Ongoing issues were identified at Garden Street and 11 Sydenham Rd. <ul style="list-style-type: none"> ○ Garden Street: The bitumen surface at the lower end of Garden St had become unstable from heavy vehicle movements, presenting an increased risk of sediment-laden runoff

	<p>offsite, and tracking onto public roads. Water pooling on site has been contributing to this issue. JHLOR have engaged an ERSED specialist to provide options for implementation in this area.</p> <ul style="list-style-type: none"> ○ 11 Sydenham Rd: Stockpiles remain uncovered. JHLOR are waiting for the right conditions to apply soil binder.
Central Station	<p>There were two ER inspections conducted in April 2020. The key issues discussed at these inspections were:</p> <ul style="list-style-type: none"> ▪ Street sweeper in metro box not fitted with squawker reversing beeper. Contractor to ensure it conforms to Section 8 of the CNVMP ▪ Sydney Yard: Internal sediment protection curtain on stormwater drain has become dislodged
NCW	There were no ER inspections conducted in April 2020
Line Wide	There were two inspections in April 2020 for SMTF. The key issues discussed at these inspections were: Waste management and segregation, temporary use of Tallawong Metro Station commuter car park by construction worker vehicles, sediment basin management, dust control, change from fortnightly to monthly inspection regime at SMTF. No other Line Wide area inspections in April.
TSOM	No inspections during the reporting period.
S2B (SMEW)	There were two ER inspections conducted in April 2020. Issues identified were related to minor ERSED controls and investigation of an out of hour's noise complaint. The site is being well managed.
Meetings	
ER/ DPIE Interface	<p>The following meetings with DPIE were attended by the ER:</p> <ul style="list-style-type: none"> ▪ 30/04/20
ER/Others Interface	<p>The following project meetings were attended by the ERs:</p> <ul style="list-style-type: none"> ▪ Sydney Metro – Nil ▪ TSE – 08/04/20; 28/04/20; 30/04/20 ▪ MP ISD – 24/04/20; 29/04/20 ▪ VIC ISD – 24/04/20 ▪ WL ISD – 14/04/20; 22/04/20; 28/04/20 ▪ NCW – 06/04/20 ▪ Central – 08/04/20; 15/04/20; 22/04/20 ▪ SSJ – 02/04/20; 16/04/20; 30/04/20 ▪ SMEW – 07/04/20; 14/04/20; 21/04/20; 28/04/20 ▪ Line Wide – 08/04/20
Documents Prepared, Reviewed or Endorsed	
Sydney Metro	<ul style="list-style-type: none"> ▪ OOHW Strategy Protocol R5.0 ER endorsement 160420 (and associated AA endorsement)
TSE (including Clyde Barging Facility)	<ul style="list-style-type: none"> ▪ Extension to the Pitt Street and Martin Place Out of Hours permit for sewer investigations
USP/ ISD- Martin Place	<ul style="list-style-type: none"> ▪ OOH 32 Hoardings and site sheds ▪ OOH 34 Extension of Hoardings work ▪ OOH 35 Hoarding work ▪ OOH 36 Prism Monitoring Installation ▪ MP-ISD EHS Plan (to replace CEMP)
VIC ISD	<ul style="list-style-type: none"> ▪ VC-ISD Heritage Management Plan Rev A
CN ISD Crows Nest	<ul style="list-style-type: none"> ▪ Site Establishment MWA ▪ Crane Installation MWA (Revision No 2) ▪ Site Establishment EWA - Revised following comment ▪ Crane Installation MWA Revised
WL ISD	<ul style="list-style-type: none"> ▪ No endorsed plans - various draft sub plans under review
SSJ	<ul style="list-style-type: none"> ▪ Construction Environmental Management Plan Rev 10 ▪ Construction Heritage Management Plan Rev 7 ▪ Air Quality Management Plan Rev 8 ▪ Construction Soil and Water Management Plan Rev 8
Central	<ul style="list-style-type: none"> ▪ CTR for Q4 2019

Station	<ul style="list-style-type: none"> Central Walk RAP
NCW	<ul style="list-style-type: none"> Nil this reporting period
Line Wide	<ul style="list-style-type: none"> SMCSW SH2W Construction Noise and Vibration Impact Statement 2 Rev0 SMCSW CA BPS Routes to Artarmon and Waterloo SS Rev1.2 CSW SHBPS CNVIS r6 Rev1 CSW ASBPS CNVIS r3 Rev0 CSW CNVIS SHBPS R3 Rev0 CSW SH2W CNVIS R5 Rev0 CSW NCW CNVIS 5 Rev0 CSW SMTF CTMP 3 Rev0 CSW SH2W CNVIS 2 Rev0 AFA-001_SS18256_S2B Ancillary Facility _Approved-ER Endorse Rev1 CSW NCWAFMP A Rev0
TSOM	<ul style="list-style-type: none"> Minor Works Approval
S2B (SMEW)	<ul style="list-style-type: none"> SMEW Visual Amenity Management Plan R3 and R4 SMEW - Construction Monitoring Report Aug-Jan (Rev 1, 2 and 3) MWA007 (Utility and Sanitary Pipe Investigations at Belmore, Marrickville and Lakemba stations precinct) ER approved SWM OOH 6 - Sanitary Pipe Investigations at Hurlstone Park, Campsie and Belmore stations Metron T2M Vegetation Trimming Minor Works Approval (SMDS CMW08_Final_Rev.00_01.04.2020) Metron T2M, Design clash review: Threatened Ecological Communities and Native Plant Communities, Sydney Metro Southwest Metro Design Services
Compliance Tracking Program Reporting	
Sydney Metro	<ul style="list-style-type: none"> Review of Notifications issued on 15-4-20
TSE	<ul style="list-style-type: none"> Nil activity
MP ISD	<ul style="list-style-type: none"> Nil activity
CN ISD	<ul style="list-style-type: none"> Nil activity
VIC ISD	<ul style="list-style-type: none"> Nil activity
SSJ	<ul style="list-style-type: none"> SSJ CTR Q1 2020 - verification of evidence CTR Review process, including team meeting Focus on sustainability REMMs (SUS1-SUS9)
Central Station	<ul style="list-style-type: none"> Contractor response to CTR requests from MCW Review of re-issued CTR for Q4 2019 Discussion with SM on obtaining documents from CSMW; development of list of documents required. Challenges getting information from Central PC for CTR Issue comments back to SM on CTR Spreadsheet issued 8-4-20
NCW	<ul style="list-style-type: none"> Review Q1 2020 CTR Spreadsheet
Line Wide	<ul style="list-style-type: none"> Review PCCR for C2S and S2B Review Q1 2020 CTR Spreadsheet
S2B (SMEW)	<ul style="list-style-type: none"> SSJT1B - CTR Q1 Initial issue
Complaints/ Incidents / Non-compliances	
Sydney Metro	<p>Complaints received for Sydney Metro works are included in complaint summaries provided to DPIE daily.</p> <p>There were no incidents reported by Sydney Metro for Sydney Metro conducted works as defined by the project approval definition for incidents reported to DPIE under condition A41.</p>
TSE (including Clyde Barging Facility)	<p>It is understood that Sydney Metro has been providing summaries of complaints to DPIE daily. Responses to each complaint have been noted in each complaint report provided to the ER, with follow up actions often defined in revised reports.</p> <p>Two minor hydraulic oil spills were reported by JHCPBG during the period. JHCPBG reported one instance of emergency works required at Northern Corridor works on 15 April to enable completion of the concrete pour for a pile. Works were completed by 6:45pm and no complaints were reported from the works.</p> <p>There were no incidents reported by JHCPBG as defined by the project approval definition for incidents under condition A41.</p>

USP/ISD Martin Place	No complaints were reported to the ER that related to the MP-ISD project. There were no incidents reported by Lend Lease as defined by the project approval definition for incidents under condition A41. On Saturday 18 April 2020 and Tuesday 21 April, Lendlease advised there were exceedances of the 7.5mm/s vibration screening criteria for works adjacent to 50 Martin Place. In both instances Lendlease reported that they ceased works; reviewed the methodology; and proceeded using alternative methods.
VC-ISD	No complaints, incidents or non compliances were reported to the ER during the reporting period.
CN-ISD	No complaints, incidents or non compliances were reported to the ER during the reporting period.
WL-ISD	No complaints, incidents or non compliances were reported to the ER during the reporting period.
SSJ	There were no incidents for SSJ reported to the ER under conditions A41 to A44 of SSI 7400. There were no non-compliances raised for SSJ during April 2020: One complaint was received for SSJ during the reporting period. The complaint related to noise during out of hours works during installation of a beam on Platform 5, Sydenham Station. JHLOR confirmed noise levels were within the range predicted during modelling.
Central Station	Complaint aspects for this site during the period included noise from day works and available respite, use of haulage routes, and light from out of hours works. The complaint relating to spoil trucks was investigated by LOR and haul trucks were found to have used local roads not approved as haulage routes in the CTMP for Central Station. LOR issued a Non Conformance Report for this event. There were no incidents for SSJ reported to the ER under conditions A41 to A44 of SSI 7400.
NCW	Complaints received during this period related to noise and flashing lights during possession works, and the street parking of site vehicles in Brand Street associated with track work during possession and associated respite. The ER is not aware of any non compliances. There were no incidents reported to the ER under conditions A41 to A44 of SSI 7400.
Line Wide	Complaints received during this period related to noisy night work on Albion St (Surry Hills 33kv) There was a minor fuel spill from a jerry can. The ER is not aware of any non compliances.
TSOM	No complaints, incidents or non-compliances
S2B (SMEW)	A complaint received during this period for noise and vibration was investigated with the source found to be from the complainants building. A property damage complaint is under investigation. There were no incidents reported to the ER under conditions A36 of SSI 8256. The ER is not aware of any non compliances.
Audits	
Sydney Metro	As per below.
TSE, ISD Martin Place, ISD Victoria Cross	No ER involvement in audit activity including Independent Environmental Audits (IEA program).
SSJ	No ER involvement in audit activity including Independent Environmental Audits (IEA program).
Central Station	An Independent Environmental Audit is planned for 2nd and 8th May 2020 to cover Monitoring Programs and Controls. The briefing documents have been issued to the ER for information.
NCW	No ER involvement in audit activity including Independent Environmental Audits (IEA program).
Line Wide	No ER involvement in audit activity including Independent Environmental Audits (IEA program).
TSOM	No audit proposed
SMEW	No ER involvement in audit activity including Independent Environmental Audits (IEA program).
Looking Forward	
Core Focus Areas reported to DPIE for this month:	
Sydney Metro	<ul style="list-style-type: none"> ▪ Update to the Out of Hours Works Protocol to align with changes to the POEO Act ▪ Impact of extended working hours ▪ Construction Compliance Report
TSE	<ul style="list-style-type: none"> ▪ Increased daytime impacts on residents working from home due to COVID-19 ▪ Tracking of dirt onto roads at sites with disturbed ground
Martin Place ISD	<ul style="list-style-type: none"> ▪ Management of noise, vibration and dust during bulk excavation activities
Victoria ISD	<ul style="list-style-type: none"> ▪ Nil



Crows Nest ISD	<ul style="list-style-type: none">▪ Nil
WL-ISD	<ul style="list-style-type: none">▪ Review of draft CEMP, Procedures, Sub-plans, and Low Impact works
SSJ	<ul style="list-style-type: none">▪ The potential to encounter groundwater during excavations for an underbore from 11 Sydenham Road to Hogan Ave.▪ Potential environmental impacts from culvert tie-in works at the triangle area.▪ Management of ERSED controls generally, including stockpile management at 11 Sydenham Rd, and damage to surfaces and tracking at Garden Street.▪ The compliant storage of hazardous chemicals, including fuel.▪ Completion of station structures and noise impacts during OOHW.▪ Compliance review Q1 2020.
Central Station	<ul style="list-style-type: none">▪ Compliance reviews to be completed▪ Noise and vibration management at the Eastern Entrance▪ Finalisation of compliance review Q4 2019
NCW	<ul style="list-style-type: none">▪ LORAC contract completes 30 June. Ensure site rehabilitation activities completed to required standard.
Line Wide	<ul style="list-style-type: none">▪ SMTF (North) construction site works, especially dust management▪ Surry Hills to Waterloo 33 kV works▪ Cumulative impacts from adjacent projects▪ Noise and vibration management during OOHW for construction of portal between Chatswood and Artarmon▪ Stakeholder engagement during transition/ handover between construction contractors▪ Noise and vibration management during construction of 33 kV BPS from Campsie to Canterbury as well as resident access disruption and traffic management▪ Compliance review Q1 2020
TSOM	<ul style="list-style-type: none">▪ Compliance with LWW Construction Traffic Management Plan
S2B (SMEW)	<ul style="list-style-type: none">▪ Environmental controls associated with saw nailing soon to commence in proximity to Cooks River▪ Temporary road closure works▪ Compliance review Q1, 2020

Please refer to A.1 for the Core Focus Area Review conducted during this period.

Please refer to A.2 for a Summary of Key Construction Activities conducted during this period.



A.1: Core Focus Area Review Summary

	A	B	C	D	E	F	G	H	I	J
	Date Raised	Project	Site or Work Package	Core Focus Area	Approval	Applicable Condition / REMM	Background/Minimum requirement	Compliance Status	Risk/Recommendations	Issues Status
1	May-20	Sydney Metro	ALL	Utilities Mgt Strategy	SSI 17_8256	A26	The approval requires specific documents must be endorsed by the ER prior to submission to the DPIE Secretary for approval.	Non Compliant	It have been identified that the LWW UMS was submitted to the Secretary without ER review, comment or endorsement. This is a non compliance. The document has been approved by DPIE however. Investigations into this indicated that the Staging Report is also currently incorrect in relation to E71 (UMS condition).	Open
2	May-20	CSW	SSJ	Water Management	SSI 15_7400	E107	The CSSI must be constructed and operated so as to maintain the NSW Water Quality Objectives where they are being achieved as at the date of this approval, and contribute towards achievement of the NSW Water Quality Objectives over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the NSW Water Quality Objectives, in which case those requirements must be complied with.	On-going	Hydrostatic testing for the aqueduct over Sydenham Pit is proposed, likely to be conducted in conjunction with the planned outage on 24 June 2020. Water from the pit is proposed to be reused to fill the aqueduct (~4.3ML). This will involve turning the pit pumps off for ~5 days; testing for TSS, pH & oil/grease prior to pumping into the aqueduct, and prior to pumping back into the pit. Environmental risks associated with this activity include (but are not limited to): potential health impacts from the reuse of water from within the pit; uncontrolled release of a large volume of water; and water quality discharge parameters unable to be achieved. Consultation with the EPA has commenced.	Open
3	May-20	CSW	SSJ	Water Management	SSI 15_7400	E107	The CSSI must be constructed and operated so as to maintain the NSW Water Quality Objectives where they are being achieved as at the date of this approval, and contribute towards achievement of the NSW Water Quality Objectives over time where they are not being achieved as at the date of this approval, unless an EPL in force in respect of the CSSI contains different requirements in relation to the NSW Water Quality Objectives, in which case those requirements must be complied with.	On-going	Excavation and stockpiling in preparation for construction of a temporary upstream connection/diversion from the Eastern Channel to the confluence area has commenced. This connection will divert water from the existing channel to the confluence structure temporarily during tie-in works of the new culverts to the existing stormwater system at the Sydenham triangle area. Works at the temporary upstream connection interface with the TSE project site, and some works are being conducted within the TSE site. JHLOR are in communication with CPBHG to ensure ERSED controls are in place in this area to reduce uncontrolled runoff from the TSE site into the confluence structure. Potential issues also exist with the premise map boundaries between the two sites, responsibilities etc., which are being confirmed and discussed between the contractors.	Open
4	May-20	CSW	SSJ	Trees	SSI 15_7400	E6	The CSSI must be designed to retain as many trees as possible and provide replacement trees such that there is a net increase in the number of trees. The Proponent must commission an independent, experienced and suitably qualified arborist to prepare a comprehensive Tree Report before removing any trees as detailed in the EIS, as amended by the documents listed in A1. The Tree Report must include: (a) a description of the conditions of the tree(s) and its amenity and visual value; (b) consideration of all options to avoid tree removal, including relocation of services, redesign or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and (c) measures to avoid tree removal, minimise damage to, and ensure the health and stability of those trees to be retained and protected. This includes details of any proposed canopy or root pruning, root protection zone, excavation, site controls on waste disposal, vehicular access, materials storage and protection of public utilities. In the event that tree removal cannot be avoided, then replacement trees are to be planted within, or in close proximity to the CSSI or other location in consultation with the Relevant Councils and agreed by the Secretary. The size of the replacement trees will be determined in consultation with the relevant Council. A copy of the Tree Report must be submitted to the Secretary before the removal, damage and/or pruning of any trees, including those affected by the site establishment works. All recommendations of the Tree Report must be implemented by the Proponent, unless otherwise agreed by the Secretary. The Tree Report may be prepared for the entire CSSI or separate reports may be prepared for individual areas where tree removal and/or pruning is proposed.	On-going	There is a risk that negotiations between JHLORJV / Sydney Metro and the Inner West Council (IWC) may not result in an agreement that complies with the requirements of Condition E6. There has been no resolution received from IWC or the matter of suitable tree replacement locations and methods since late 2019.	Open
5	May-20	CSW	SSJ	Flooding	SSI 15_7400	E8 E9	Measures identified in Chapter 11 of the PIR to maintain or improve flood characteristics, as amended by the documents listed in A1, must be incorporated into the detailed design of the CSSI. The incorporation of these measures into the detailed design, including modelling, must be reviewed and endorsed by a suitably qualified and experienced person in consultation with directly affected landowners and businesses, Sydney Water, DPI Water, OEH, NSW State Emergency Services (SES) and Relevant Councils. Flood information including flood reports, models and geographic information system outputs, and work as executed information from a registered surveyor certifying finished ground levels and the dimensions and finished levels of all structures within the flood prone land, must be provided to the relevant Councils, Sydney Water, OEH and the SES. The Relevant Councils, Sydney Water, OEH and the SES must be notified in writing that the information is available no later than one month following the completion of construction and be provided with that information. Information requested by the relevant Council, Sydney Water, OEH and the SES must be provided no later than six months following the completion of construction or within another timeframe agreed with the Relevant Council(s), Sydney Water, OEH and the SES.	On-going On-going	The Flood model is to inform the SSJ design parameters for flooding infrastructure that originate outside of the corridor into Sydney Water culverts or the Sydenham Pit. The SSJ design has been iteratively developed in line with the Sydney Metro flood model, and the final flood model will be finalised and reported as part of Design Package 200. Flood modelling is still under development. While consultation has been completed, IWC have still not addressed and closed comments. The revised report has not been issued, which has been ongoing since late 2019.	Open
6	May-20	CSW	SSJ	Air Quality Management Soils	SSI 15_7400	E5 AQ4 / AQ7 E65 / SCW3	In addition to the performance outcomes, commitments and mitigation measures specified in PIR, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the construction and operation of the CSSI. Hard surfaces would be installed on long term haul routes and regularly cleaned / Stockpiles would be managed to minimise dust generation. All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise any water pollution. When implementing such controls, and relevant guidance in the Managing Urban Stormwater Series must be considered.	On-going On-going	Ongoing issues have been identified with the stabilisation of the Garden Street access (to 11 Sydenham Rd). The bitumen surface at the lower end of Garden St was becoming unstable from heavy vehicle movements. The majority of the area forms an exposed surface, presenting an increased risk of sediment-laden runoff offsite. Recommendations by an ERSED consultant included stabilisation with lime, alternatively pre-stabilised DBG could be used. Stockpiles at 11 Sydenham Rd have remained uncovered for several months, pending suitable conditions for the application of available soil binder. There is a risk that stockpile management will be non-compliant with AQ7, though it is noted that the stockpiles have not been observed as a major source of dust during ER inspections to date. The implementation of actions in this area is dependent on the work schedule (i.e. how long works will be active in this area), and on the final design, which is currently unknown. It is noted that ERSED controls have been replaced as recommended during ER inspections, though a more suitable solution for the stabilisation of this area is pending.	Open
7	May-20	CSW	TSE	ERSED	SSI_15_7400	C9	Works are being undertaken in the wharf area of Barangaroo to demobilise the foreshore area currently containing the Slurry Treatment Plant; acoustic shed; Water Treatment Plant and large area of concrete slabs. Due to the proximity to the harbour this is higher than normal risk for such works.	On-going	Ongoing surveillance of works is required, however very difficult due to restriction of ER's to go on site. There is high reliance on JHCPBG to report on the controls in the area under new inspection regime.	Open
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	A	B	C	D	E	F	G	H	I	J
9	May-20	CSW	TSE	Noise and Vibration	SSI_15_7400	C9	Noise and Vibration Management Plan	On-going	Piles are soon to be demolished at the NCW adjacent the Chatswood site and close to houses. This is a sensitive area and hammering comes after significant piling works.	Open
10	May-20	CSW	TSE	Noise and Vibration	SSI_15_7400	C9	Noise and Vibration Management Plan	On-going	Works have commenced to remove the piles for the wharf at Blues Point. These works will be largely completed at night and may have some noise impacts to local residents.	Open
11	Mar-20	CSW	ALL	ER Inspections	All	A24	A number of contractors have introduced measures to limit inspections due to COVID 19. This potentially means that the proponent (and its contractors) are not compliant with the ER inspection requirements.	On-going	SM, ER's and Contractors need to work together to determine alternatives to the ER Site Inspections so as to verify implementation compliance on sites, and remain compliant with DPIEs expectations of the ER. Update: 21-4-20: Inspections are continuing on work packages however the approach has been modified to reflect COVID 19 requirements. The approach take varies slightly from site to site to reflect the ability of the inspection team to maintain safe working distances, and the position of the Principal Contractors with respect to the duty of care at each site. I will be important to re-establish pre Covid processes when safe to do so to maintain compliance with approved CEMPs, the Compliance Tracking Program, etc.	Open
13	Mar-20	CSW	LWW	Traffic and Transport	SSI_8256	E51	During construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access must be provided, and opportunities for parking arrangements must be investigated in consultation with affected businesses/properties and implemented before the disruption. Adequate signage and directions to businesses/properties must be provided before, and for the duration of, any disruption.	On-going	There is a risk that requirements of the MCoA may not be complied with during construction of the C2C BPS. Communication problems in this section will be exacerbated by the significant numbers of non-English speaking residents of affected properties. The ER will carefully monitor community complaints and response by the Contractor	Open
14	Mar-20	CSW	LWW	Design -Tree Removal and Replacement	SSI_8256	E4	The CSSI must be designed to retain as many trees as possible. Where trees are to be removed, the Proponent must provide a 2:1 ratio replacement of trees. Replacement trees must be planted within the project boundary or on public land up to 500 metres from the project boundary. Replacement tree plantings can be undertaken beyond 500 metres on public land within the local government areas to which the CSSI approval applies if requested by the relevant council(s) or where no more practicable land for planting can be found within and up to 500 metres from the CSSI boundary. The location of replacement trees must be determined in consultation with the relevant council(s).	On-going	There is a risk that negotiations between the Contractor and relevant local councils may not result in an agreement that complies with the requirements of the MCoA. This applies particularly to the C2C BPS construction	Open
15	Mar-20	CSW	LWW	Design -Tree Removal and Replacement	SSI_8256	E6	Replacement trees are to have a minimum pot size of 75 litres except where the plantings are consistent with the pot sizes specified in a relevant council's plans / programs / strategies for vegetation management, street planting, or open space landscaping, or as agreed by the relevant council. In areas not subject to council plans / programs / strategies, pot sizes should be informed through consultation with the relevant council(s).	On-going	There is a risk that negotiations between the Contractor and relevant local councils may not result in an agreement that complies with the requirements of the MCoA This applies particularly to the C2C BPS construction	Open
16	Mar-20	CSW	SSJ	Groundwater	SSI_15_7400	GWG1	If groundwater is encountered during the project, it must be managed in accordance with the requirements of the Department of Primary Industries (Water).	On-going	Update May 2020- Investigations in the traffic triangle area between 11 Sydenham Road and Sydenham Station Platforms 1 and 2 have now confirmed groundwater is unlikely to be impacted by proposed excavation and culvert connection works. An underbore is also proposed down-gradient of this location, near the entrance to 11 Sydenham Road. The underbore will extend under the rail corridor to Hogan Ave. Approximate depth 5.5mbgl. It is possible that groundwater will be encountered in this location. Further investigations are required in this area, likely to be conducted by ADE in the coming months. If investigations conclude that groundwater is likely to be encountered during underbore works, consultation with DPI (Water) may be required, and currently inactive groundwater REMMs for the project site may be required to be switched on. This would also trigger an update to the Staging Report.	Open



Attachment A.2: Summary of Key Construction Activities

Summary of Key Construction Activities	
TSE	<p>Chatswood:</p> <ul style="list-style-type: none"> ▪ Works in the dive continuing including wall construction for future plank installation ▪ Water treatment plant operation <p>Chatswood NCW:</p> <ul style="list-style-type: none"> ▪ Road access in use for JHCPBG and Line Wide Contractors to the north of Mowbray Bridge. ▪ Ongoing construction of a piling pad using a vibratory roller adjacent Nelson Street in the rail corridor. Piling works ongoing in the same area <p>Crows Nest site:</p> <ul style="list-style-type: none"> ▪ Cross passage construction support and other works in the station box <p>Victoria Cross North site:</p> <ul style="list-style-type: none"> ▪ Ongoing works in the cavern including concrete lining and formwork ▪ Hammering of base of shaft ▪ Stockpiling and load out of spoil by trucks ongoing ▪ Water treatment plant operation. Concrete deliveries for concrete pours <p>Victoria Cross South site:</p> <ul style="list-style-type: none"> ▪ Piling works ▪ Excavation of sandstone using rock hammers ▪ Support activities <p>Blues Point Temporary:</p> <ul style="list-style-type: none"> ▪ Ongoing removal of Sydney Harbour TBM <p>Barangaroo Station:</p> <ul style="list-style-type: none"> ▪ Slurry and grout plant demobilisation ▪ Lining of station box ongoing, and laying of concrete base <p>Martin Place Station-South:</p> <ul style="list-style-type: none"> ▪ Ongoing excavation of the pedestrian adit pillar supports; removal of spoil using kibble and crane. Installation of concrete for wall and roof support ▪ Excavation of shaft to the ESR using small roadheader (24/7 operation) with scrubber unit ▪ Excavation of southern portion of site and removal of spoil <p>Pitt Street North:</p> <ul style="list-style-type: none"> ▪ Ongoing excavation of sandstone and installation of wall supports. Spoil removal via Bligh Street ▪ Tunnel lining support. ▪ Ongoing hoarding installation ▪ Installation of scaffolding around the acoustic shed. Commencement of demolition of the shed <p>Pitt Street South:</p> <ul style="list-style-type: none"> ▪ Ongoing excavation of sandstone and wall support. Spoil removal using Metro deck ▪ Construction of shear wall ongoing <p>Waterloo</p> <ul style="list-style-type: none"> ▪ Cross passage works ongoing and supported from Waterloo including concrete deliveries ▪ Excavation of the concrete base and removal of waste concrete <p>Marrickville dive site:</p> <ul style="list-style-type: none"> ▪ Ongoing excavation in the dive ▪ WTP operational ▪ Spoil generation, stockpiling and load-out ▪ Ongoing Transgrid works. <p>Marrickville stabling yard</p> <ul style="list-style-type: none"> ▪ Concrete slab removal ongoing ▪ Piling along the side of the culvert ongoing ▪ Bulk earthworks for stabling yard and culvert construction ▪ Pouring of base slab for culvert
MP – USP/ ISD	<ul style="list-style-type: none"> ▪ Ongoing excavation of sandstone and removal via Bligh Street ▪ Underpinning works under 50 Martin Place ▪ Hoarding and site shed installation



VIC-ISD	<ul style="list-style-type: none"> No works reported to the ER as having been undertaken
CN-ISD	<ul style="list-style-type: none"> No works reported to the ER as having been undertaken
WL-ISD	<ul style="list-style-type: none"> No works undertaken
SSJ	<ul style="list-style-type: none"> Geotechnical Area - Retaining wall construction in the rail corridor ongoing Burrows Ave/ Platform 6 - Demolition of the Platform 6 building including salvage of heritage items Concourse and Platforms 4, 5 & 6 - Installation of roof flashing, balustrades, canopies and glazing beams; requiring lane closure along Burrows Ave between Hogan & Gleeson Ave Bolton St / Hogan Ave – Ausgrid service / trenching works were undertaken over two nights the week of 13-17 April and 2 nights the week of 27-30 April Platforms 1&2 – Northern end of Platforms 1 & 2 demolished (asbestos contamination in soil). Excavation, levelling and piling works for new Sydney Metro platforms and lifts shafts was ongoing 11 Sydenham Rd – Backfilling and joining of precast lower culvert cells. Construction of new temporary haul road through the centre of the site complete and in use. New pedestrian crossing and traffic light work on Sydenham Rd (limited to pram ramps and footpath restoration). Construction of retaining wall adjacent to Sydenham Pit ongoing; Sewer installation works 11 Sydenham Rd traffic triangle area –Demolition of wall between mid-culverts and triangle and commencement of excavation of the triangle area in preparation for culvert tie-in (scheduled end May 2020). Under bore planned from entrance to 11 Sydenham Rd extending under the rail corridor to Hogan Ave (Sep-Oct 2020); potential to encounter groundwater remains and is to be confirmed during proposed investigation works Sydenham Pit and Pumping Station – Works continuing on the aqueduct including formwork, reo, strip scaffold and sand pours. Installation of precast on top of the aqueduct Confluence Area – Construction of walls and overflow structure, including concrete pours and erection/stripping of formwork
CSMW	<ul style="list-style-type: none"> Spoil trucks and other vehicles using SYAB Metro Box (north of and including the exposed Y pedestrian tunnel) - Truck movements; spoil excavation; air treatment; sweeping of haul road. Ongoing excavation and construction activities. Tower crane installation Metro Box and Sydney Yard (south of the exposed Y pedestrian tunnel) Water Treatment Plant Operation; truck access; laydown. Crushing and stockpile of excavated material Northern Concourse - Column mould and treehead installation, treehead propping installation on NS concourse, column reinforcement installation, general site clean up Platform 16 to 23 - Recent possession works. Various canopy load transfer; tracks slab and other works Eastern Entrance - Removal of pile mat, load out, excavation around piles and ground support, pile coring, binding concrete, welding for temporary deck Ongoing support for CSR works including stockpiling of spoil; laydown for equipment; crib shed. Some use of area by Sydney Trains Ongoing GST construction along Darling Harbour Goods line Excavation under SYAB (eastern buttress) ongoing. Sheet piles installed and excavation of soils to approx. 3m so as to access existing access tunnel. Concrete pits installed. No additional heritage finds reported
NCW	<ul style="list-style-type: none"> Installation of permanent survey plaques Inspection and examination of rail wear and condition, ballast and sleepers Demobilisation from Brand Street to Chatswood and Valetta Lane laydown area
LW	<p>SMTF</p> <ul style="list-style-type: none"> Potholing outside maintenance building CSR works near Tallawong Rd On-going construction of SER building On-going work on construction of the test track / capping preparation On-going emplacement of sleepers and rail in SMTF expansion areas Lining fence around drainage pits Clearing batter for rock breaking. Removal of old CSR Wayside footings CSR pit investigation in various areas



	<ul style="list-style-type: none">▪ Batter detail near Tallawong Rd▪ Construction of access platforms▪ Works in HV RT and cable pull▪ RTF #38 relocation
TSOM	<ul style="list-style-type: none">▪ Commencement of building modification works at the Operational Control Centre (OCC) at Tallawong
SMEW	<ul style="list-style-type: none">▪ Commencement of earth embankment at Retaining Wall 1 (RW1) involving some minor excavation and removal of material to Broughton Street▪ Piling cutting works at Retaining Wall 2. Temporary ERSED controls in place due to delay of temporary design of the piling pad for the saw nail works