Construction Environment Management Plan – Chatswood to Bankstown (C2B)

Line-wide Works Contract Sydney Metro City & Southwest.

Project number:	C600
Document number:	SMCSWLWC-SYC-1NL-PM-PLN-000033
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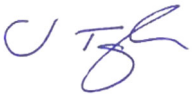
Document Approval

	Environment Manager	Project Director
Signature:		
26/06/2025	M Malcolm	Justin Taylor

Details of Revision Amendments

Document Control

The Project Director is responsible for ensuring that this plan is reviewed and approved. The Project Environment and Sustainability Manager is responsible for updating this plan to reflect changes to legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the Project Director and/or client before being distributed / implemented.

Revision Details

Revision	Date	Prepared by	Details
A	25/11/2019	V Tavares	Issued for review. This version of the Sub-Plan addresses compliance requirements under CSSI 7400 and CSSI 8256 Planning Approvals as per the Sydney Metro Staging reports.
B	17/12/2019	V Tavares	Updated to address comments from Sydney Metro, ER and stakeholder consultation.
0	13/02/2020	A Taylor	Updated to address comments from DPE review – For approval
1	29/10/2020	K Truscott	Scheduled review Updates to Section 2.3 Line-wide Scope of Works, Section 3.4 Environmental Protection License Requirements, Element 9: Incident Management, Element 10: Emergency Planning and Response, Element 12: Auditing, Review and Improvement, Appendix C6 MIRRA Schedule
2	30/09/2021	K Truscott	Scheduled review Update to Figure 5, updates to Appendix C5
3	12/08/2022	K Truscott	Scheduled review Update to Table 1 - Description of works for Portion 3 Updates to Section 3.4 Environmental Protection License Requirements, Section 6.2 Standard Construction Hours, Appendix C5 Indicative ESCP Update to Table 7 – Environment and Sustainability Manager - Key role and responsibilities Update to Table 18 - Environmental Aspects and associated Environmental Management requirements Update to Element 2 – Planning Update to Element 9 – Incident Management
4	02/06/2023	N Nasser	Scheduled review
5	20/09/2023	T McCormick	Updated to address Sydney Metro and ER comments Update to Section 2.2 – inclusion of reference to Blues Point Update to Section 2.3.1, 2.3.2 and 2.3.3 – timeframes updated Update to Section 3.2 – Staging reports section updated Update to Section 3.9 – replacement of 'quarterly' Update to Section 4.2 – environment manager role update Update to Section 4.4 – wording updated

			Update to Section 4.8 – removal of Industry from DPIE Update to Section 5.2.2 and Element 5 – wording updated Update to Element 3, 3.6 – updated to be in line with SM procedure Update to Element 8, 8.5 – Environment manager responsibility included Update to Table 5 – EPLs status updated and timing column removed Update to Table's 7, 8, 9, 10 & 11 – Secondary heading removed Update to Table 15 – additional hold points Spelling of "Manger" amended across the document.
6	26/06/2025	M Malcolm	The following sections updated to reflect the completion of works under CSSI 7400: Section 1.1 Section 1.4 Section 1.6 Section 2.2 Section 2.3 Section 3.2 Section 3.4 Section 4.2 Section 4.6 Section 4.9 Section 4.10 Table 15 Section 5.4 Section 6.2 Appendix C6

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CEMP Compliance Matrix

All construction works associated with CSSI 7400 have now been completed and are not triggered under this CEMP.

CSSI 7400 – C2S		
Condition	**Requirement**	**Reference**
C1	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the PIR and the Department's Guideline for the Preparation of Environmental Management Plans to detail how the performance outcomes, commitments and mitigation measures specified in Chapter 11 of the PIR, as amended by the documents listed in A1, will be implemented and achieved during construction.	This Plan
C2	The CEMP must provide:	Detail below:
C2 a.	a description of activities to be undertaken during construction (including the scheduling of construction);	Section 2.3
C2 b.	details of environmental policies, guidelines and principles to be followed in the construction of the CSSI;	Section 3 Element 3: Appendix C4
C2 c.	a schedule for compliance auditing;	Element 12:
C2 d.	a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI;	Element 4: Appendix C3
C2 e.	details of how the activities described in subsection (a) of this condition will be carried out to:	Refer to details below:
C2 e. i.	meet the performance outcomes stated in the EIS as amended by the documents listed in A1; and	Section 3.8
C2 e. ii.	manage the risks identified in the risk analysis undertaken in subsection (d) of this condition;	Section 5.2 Section 6 CEMP Sub-Plans
C2 f.	an inspection program detailing the activities to be inspected and frequency of inspections;	Appendix C6
C2 g.	a protocol for managing and reporting any:	Refer to details below:
C2 g. i.	incidents	Element 9:
C2 g. ii.	non-compliances with this approval and with statutory requirements	Element 2: Element 3:
C2 h.	procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;	Element 2: Element 3: Element 9: Element 12:
C2 i.	a list of all the CEMP sub-plans required in respect of construction, as set out in Condition C3. Where staged construction of the CSSI is proposed, the CEMP must also identify which CEMP sub-plan applies to each of the proposed stages of construction;	Section 5.4
C2 j.	a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;	Section 4

CSSI 7400 – C2S		
Condition	**Requirement**	**Reference**
C2 k.	for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval;	Element 7: Element 8:
C2 l.	for periodic review and update of the CEMP and all associated plans and programs.	Section 1.5 Element 12:
C7	The CEMP must be endorsed by the ER and then submitted to the Secretary for approval no later than one (1) month before the commencement of construction or within another timeframe agreed with the Secretary.	Section 1.4 Section 4.6

CSSI 8256 – S2B		
Condition	**Requirement**	**Reference**
C1	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in condition A1 to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in condition A1, will be implemented and achieved during construction.	Appendix C2
C2	The CEMP must be endorsed by the ER and submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction.	Section 1.4 Section 4.6

Department of Infrastructure, Planning and Natural Resources (DIPNR, 2004) Guideline for the Preparation of Environmental Management Plans EMP Content Checklist		
Does your EMP Contain	**YES**	**Reference**
Background (EMP Guideline Section 4.3.1)		
Introduction	✓	Section 1
Project Description	✓	Section 2 Appendix C6
EMP context	✓	Section 1.2
EMP objectives	✓	Section 3.8
Environmental Policy	✓	Appendix C4
Environmental Management (EMP Guideline Section 4.3.2)		
Environmental management structure and responsibility	✓	Section 5
Approval and licensing requirements	✓	Section 3 Appendix C2
Reporting	✓	Element 3: Element 11: Element 12:
Environmental training	✓	Element 7:
Emergency contacts and response	✓	Element 9: Element 10:

Department of Infrastructure, Planning and Natural Resources (DIPNR, 2004) Guideline for the Preparation of Environmental Management Plans EMP Content Checklist		
Does your EMP Contain	**YES**	**Reference**
Implementation (EMP Guideline Section 4.3.3)		
Risk Assessment	✓	Appendix C3
Environmental management activities and controls	✓	Section 6 Elements and Expectations Appendix C3 & Appendix C6
Environmental control plans or Maps	✓	Section 5.6 and Appendix C5
Environmental schedule	✓	Appendix C6
Monitoring and Review (EMP Guideline Section 4.3.4)		
Environmental monitoring	✓	Section 5.8 Appendix C6
Environmental Auditing	✓	Element 12:
Corrective Action	✓	Element 3:
EMP review	✓	Section 1.5 Element 12:

Sydney Metro City & Southwest Construction Environmental Management Framework		
Condition	**Requirement**	**Reference**
3.3 a	Principal Contractors are required to prepare and implement a Construction Environmental Management Plan (CEMP) relevant to the scale and nature of their scope of works. The CEMP shall comprise of a main CEMP document, issue specific sub plans, activity specific procedures and site based control maps. The CEMP shall illustrate the relationship between other plans required by the contract, in particular those that relate to design management.	This Plan and Sub-Plans Section 1.2 Section 5
3.3 c	The CEMP will cover the requirements of the relevant planning approval documentation, the conditions of all other permits and licences, the Principal Contractor's corporate EMS, the environmental provisions of the contract documentation and this Construction Environmental Management Framework.	Section 3 Appendix C2
3.3 d	As a minimum the CEMP will:	
3.3 d. i.	i. Include a contract specific environmental policy;	Appendix C4
3.3 d. ii.	ii. Include a description of activities to be undertaken during construction;	Section 2.3
3.3 d. iii.	iii. For each plan under the CEMP include a matrix of the relevant Conditions of Approval or Consent referencing where each requirement is addressed;	Refer to Element 4 of each CEMP Sub-Plan
3.3 d. iv.	iv. For each plan under the CEMP, set objectives and targets, and identify measurable key performance indicators in relation to these;	Section 3.8 Refer to Section 1 of each CEMP Sub-Plan
3.3 d. v.	v. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level	Section 4.2

Sydney Metro City & Southwest Construction Environmental Management Framework		
Condition	**Requirement**	**Reference**
	requirements and their interface with the overall project organisation structure;	
3.3 d. vi.	vi. Assign the responsibility for the implementation of the CEMP to the Environment and Sustainability Manager, who will have appropriate experience. The Principal Contractor's Project Director will be accountable for the implementation of the CEMP;	Section 4.2
3.3 d. vii.	vii. Identify communication requirements, including liaison with stakeholders and the community;	Section 6.5
3.3 d. viii.	viii. Include induction and training requirements and a summary of the Training Needs Analysis required in Section 3.9(b);	Element 7:
3.3 d. ix.	ix. Management strategies for environmental compliance and review of the performance of environmental controls;	Element 12:
3.3 d. x.	x. Processes and methodologies for surveillance and monitoring, auditing and review, and reporting on environmental performance including environmental compliance tracking;	Element 12: Appendix C6
3.3 d. xi.	xi. Include procedures for emergency and incident management, non-compliance management, and corrective and preventative action; and	Element 3: Element 9: Element 10:
3.3 d. xii.	xii. Include procedures for the control of environmental records.	Element 11:
3.3 e	The CEMP and associated sub-plans will be reviewed by TfNSW and/or an independent environmental representative (see Section 3.11) prior to any construction works commencing. Depending on the Conditions of Approval, the CEMP and certain sub-plans may also require the approval of the Department of Planning and Environment (DP&E).	Section 1.4 Section 3.3.2

Note: Additional relevant Project Planning Approval conditions, Revised Environmental Mitigation Measures and Construction Environmental Management Framework are referenced in Appendix C2 – LW compliance matrix.

Glossary / Abbreviations

Abbreviations/ Term	Definition
AA	Acoustic Advisor
Aboriginal	Within NSW, it is preferred to use the term Aboriginal as this reflects the overwhelming majority of the community residents in NSW, with no implied limitation on this applying to persons from the Torres Strait Islands.
Ancillary facility	Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area.
CCS	Community Communications Strategy
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CIMIC	Construction Infrastructure Mining & Concessions
CMS	Construction Management System
CNVMP	Construction Noise and Vibration Management Plan
Compliance audit	Verification of how implementation is proceeding with respect to a construction environmental management plan (CEMP) (which incorporates the relevant approval conditions).
CPB	CPB Contractors Pty Limited
CSSI 5931	Approval of Application SSI 5931 provided for construction and operation of The Rapid Transit Rail Facility, now known as the Sydney Metro Train Facility (SMTF)
CSSI 7400	Approval of application SSI 7400 provides for construction and operation of a metro line approximately 16.5 kilometers long (of which approximately 15.5 is in underground rail tunnels) between Chatswood and Sydenham (C2S) including construction of a tunnel under Sydney Harbour, links with the existing rail network, seven metro stations and associated ancillary infrastructure. The proposal is declared as Critical State Significant Infrastructure (CSSI)
CSSI 8256	Approval of application SSI 8256 provides for construction and operation of a metro line, approximately 13 kilometers long between Marrickville and Bankstown (S2B), including ten metro stations and associated infrastructure
CTMP	Construction Traffic Management Plans
DPI	Department of Primary Industries (including Agriculture NSW, Fisheries NSW and NSW Office of Water)
DPE	NSW Department of Planning & Environment
EIS	Environmental Impact Statement
EMS	Environmental Management System (integrated as part of the PMS)
Environment Policy	Statement by an organisation of its intention and principles for environmental and sustainability performance.
Environmental incident	An occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, and land) or an adverse environmental impact has occurred or is likely to have occurred.
Environmental Issue	An occurrence or set of circumstances where Environmental Harm or Non-compliance could occur if not rectified.

Abbreviations/ Term	Definition
Environmental Non-compliance	A breach of an Environmental Requirement originating from Planning Approvals, Environment Protection Licenses, lease agreements, and other requirements documented in environmental management plans.
Environmental objective	Defined by AS/NZS ISO 14001:2004 as an overall environmental goal, consistent with the Environment Policy, that an organisation sets Line-wide to achieve.
Environmental Representative (ER)	The environmental responsibilities of the Environmental Representative include (but are not limited to) the following: - evaluate and advise on compliance with environmental requirements - monitor the implementation of environmental management plans for the Project or related activities - approve/reject minor amendments to the Construction Environment Management Plan
Environmental target	Defined by AS/NZS ISO 14001:2004 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
Environmental team	Members of the Continuum Alliance's staff including sub-contractors authorised by the Environmental Manager to work on environmental issues related to the Project
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
ERP	Emergency Response Plan
ESCP	Erosion and Sediment Control Plan
Hold Point	Activities which are not to proceed without objective review and approval by the nominated authority.
IC	Independent Certifier
ISCA	Infrastructure Sustainability Council of Australia
ITP	Inspection and Test Plans
LDP	Land Disturbance Permit
LW	Line-wide (contract scope under ITC 0600)
MTS	Metro Trains Sydney (operator at SMTF)
NOW	(NSW) Office of Water
NRT	Northwest Rapid Transit
NSW Heritage Council	Heritage Council of NSW or its delegate.
OEH	(NSW) Office of Environment and Heritage
OOHW	Out of Hours Works
PMS	Project Management System
REMM	Revised Environmental Mitigation Measures
RMS	(NSW) Roads and Maritime Services
S2B	Sydenham to Bankstown - reference to works under CSSI 8256
SC Project Environmental Representative	Refers to Systems Connect Environment and Sustainability Manager or someone delegated by him to perform a task, release a hold point or approve a document

Abbreviations/ Term	Definition
SDS	Safety Data Sheets
SEP	Site Environment Plan
SH&E	Safety, Health & Environment
SM	Sydney Metro
SMCSW	Sydney Metro City & Southwest
SMNW	Sydney Metro North West
SMTF	Sydney Metro Train Facility (formerly known as Rapid Transit Rail Facility)
SMTF South	Sydney Metro Train Facility South
SWMS	Safe Work Method Statement
SWTC	Scope of works and technical criteria
TfNSW	Transport for New South Wales
UGL	UGL Engineering Pty Limited

PART A – OVERVIEW

1. Plan Overview

1.1 Purpose and Application

This Construction Environmental Management Plan (CEMP) defines environmental obligations and describes how Systems Connect will achieve environmental outcomes throughout the delivery of the Line-wide (LW) Works contract scope between Sydenham and Bankstown (S2B). Line-wide (LW), also referred to as the project, will be delivered by Systems Connect (a CPB Contractors Pty Limited and UGL Engineering Pty Limited joint venture). Environmental compliance will be achieved via the implementation of the project Environmental Management System (EMS).

The elements of the EMS, including this plan, have been developed in accordance with;

- Framework of AS/NZS ISO 14001:2016 EMS
- Systems Connect EMS which is accredited under ISO 14001:2015
- New South Wales Environmental Management Systems Guidelines (Edition 3)
- Sydney Metro Construction Environmental Management Framework (Version 3.2, August 2017)
- The Department of Infrastructure, Planning and Natural Resources (DIPNR, 2004) Guideline for the Preparation of Environmental Management Plans

Implementation of this Plan will:

- Identify the environmental obligations and the hazards and risks associated with LW
- Help prevent unauthorised environmental harm
- Fulfil Sydney Metro environmental requirements as detailed in LW Deed (ITCC 0600) and Scope of Works and Technical Criteria (SWTC)
- Ensure Systems Connect complies with the Minister for Planning's Project Planning Approvals
- Ensure Systems Connect obtains and complies with relevant Licences and other approvals, including the Environment Protection Licence (EPL) if required
- Comply with all relevant environmental legislation
- Minimise negative impacts on the community that relate to the environmental impacts of the LW
- Identify and implement feasible opportunities to reduce the environmental impact of the LW that are beyond contractual and compliance requirements.

This CEMP-S2B is an overarching project specific document that incorporates or references EMS, aspect and areas specific management documents. The CEMP-S2B is applicable to all staff and sub-contractors associated with the construction of the LW between Sydenham and Bankstown.

This document sets out how Systems Connect will specifically address compliance obligation as defined in the Sydney Metro Staging Reports for State Significant Infrastructure (SSI) Planning Approvals 8256. The CEMP-S2B, associated S2B Sub-Plans and Procedures apply to delivery of LW Portions 4. An overview of the Scope of Portion 4 is provided in Section 2.3.

Portion 1 of LW was delivered under CSSI 5931 and has now been completed. Portions 2 and 3 of LW was delivered under CSSI 7400 and has now been completed. This CEMP has been updated to reflect this change.

1.2 CEMP Context

The CEMP forms a part of the Integrated Management Plan framework for Systems Connect as described in the Contract Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000001), Appendix A. For the delivery phase, the Management Plan Hierarchy in Appendix A of the Contract Management Plan displays the integrated relationship between each project plan and the Systems Connect – Project Management Systems' (PMS) Procedures.

The relationship between the statutory requirements, this CEMP and the Environmental and Sustainability Management System is described in Figure 1. A detailed structure of the project Environmental Management Systems documentation is provided in Section 5.1.

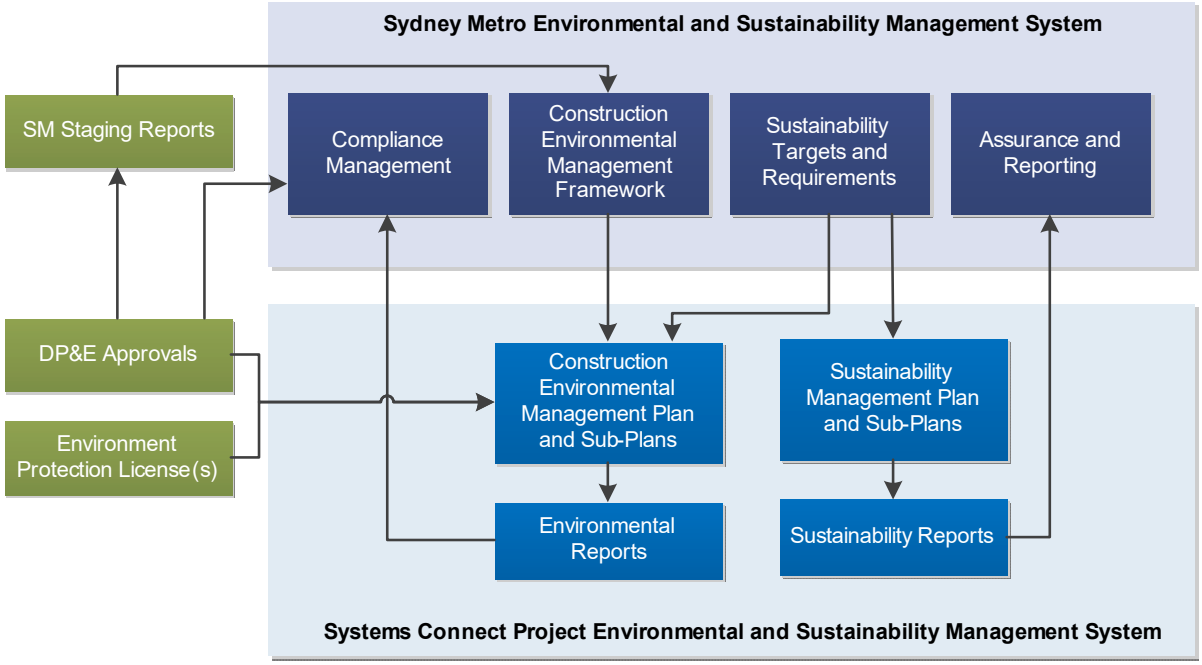

Figure 1 - CEMP Context

1.3 CEMP Structure

The structure of this CEMP is set out in Table 1, below.

Table 1 - CEMP structure

Plan Structure	Details
Part A: Overview	This Part defines: **Section 1** Purpose, Scope and application of the CEMP **Section 2** Project Description a summary of Line-wide Works, objectives targets and Key Performance Indicators **Section 3.** A summary of Compliance, legislative and contract requirements and the strategy for delivery of Planning Approval compliance **Section 4** Roles and responsibilities of Systems Connect environmental personnel, specialist consultants and contractors and our approach to working with Sydney Metro, the Environment Representative, Independent Certifier and other key stakeholders **Section 5**. An explanation of the structure and role of the Systems Connect Environmental Management System. **Section 6.** An overview of environmental aspects and impacts and Systems Connect approach staged management and mitigation measures
Part B: Implementation Plan	This section outlines in detail the key processes and systems to support implementation of environmental management outcomes for the project. • Expectations

	• How they will be met • Responsibilities • Associated deliverables
Part C: Appendices	This section provides systems information relevant to the CEMP including: C1 – Legal Requirements, C2 – Environmental Obligations Compliance Matrix C3 - Environmental Risk Register C4 - Environment Policy C5 - Site Environmental Plans C6 - Monitoring Inspection Reporting Review and Audit (MIRRA) Schedule C7 - Planning Approval Document Delivery Strategy C8 - CEMP Aspect Specific Procedures C9 - Consultation Records

1.4 Consultation

The *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004), states that:

"agency consultation undertaken during the preparation of the CEMP should be limited to that required by specific conditions"

To address this requirement the Line-wide Contractor has undertaken consultation in accordance with the requirements of CSSI 7400 and CSSI 8256 and the relevant Sydney Metro Staging Reports.

Consultation requirements for each document or aspect are defined within the *Chatswood to Sydenham Staging Report* (July 2019) and *Sydenham to Bankstown Upgrade Staging Report* (March 2019) developed by Sydney Metro and applicable to delivery of LW Portions 2, 3 & 4 under CSSI 7400 and CSSI 8256. Where the Staging Reports prescribe a procedure in place of a Sub-Plan, consultation with external stakeholders will occur at the discretion of Sydney Metro.

Consultation with the prescribed stakeholders is detailed in Table 2. Each revision of a document will also be issued to stakeholders for review, comment, approval and/or information in accordance with Planning Approvals Conditions or Staging Reports' requirements.

Section 3.3 and Appendix C7 Planning Approval Document Delivery Strategy, provides details of the process that will be followed to ensure that document development, consultation and approval occurs in accordance with the prescribed requirements. Appendix C7 also includes design documents that require consultation with external stakeholders to address Planning Approval obligations.

Portions 2 and 3 of LW which were delivered under CSSI 7400, have now been completed.

Table 2 - Summary of reviews, endorsements and approvals of plans.

Plan	SSI	Contractor's Internal Review & Approval	Sydney Metro Review	Government Agency / Stakeholder Consultation	ER Review & Endorsement prior to Implementation	ER Review & Endorsement prior to Secretary Submission	RMS Review & Approval	Secretary Review & Approval	ER Approval of Minor Amendments
CEMP	**7400**	✓	✓	•		✓		✓	✓

Plan	SSI	Contractor's Internal Review & Approval	Sydney Metro Review	Government Agency / Stakeholder Consultation	ER Review & Endorsement prior to Implementation	ER Review & Endorsement prior to Secretary Submission	RMS Review & Approval	Secretary Review & Approval	ER Approval of Minor Amendments
	8256	✓	✓	•		✓		✓	✓
Spoil Management Sub-Plan (integrated in Waste, Recycling and Spoil Management Sub-Plan)	7400	✓	✓	•	✓				✓
	8256	✓	✓	✓		✓		✓	✓
Groundwater Management Sub-Plan (integrated in Soil, Water and Groundwater Management Sub-Plan)	7400	✓	✓	✓		✓		✓	✓
	8256	✓	✓	•	✓				✓
Noise & Vibration Management Sub-Plan	7400	✓	✓	✓		✓		✓	✓
	8256	✓	✓	✓		✓		✓	✓
Heritage Management Sub-Plan	7400	✓	✓	✓		✓		✓	✓
	8256	✓	✓	✓		✓		✓	✓
Flora & Fauna / Biodiversity Management Sub-Plan * Staging report procedure only for Delivery of LW	7400	•	•	•	•	•	•	•	•
	8256	•	•	•	•	•	•	•	•
Visual Amenity Management Sub-Plan	7400	✓	✓	•	✓				✓
	8256	✓	✓	•	✓				✓
Soil & Water Management Sub-Plan (integrated in Soil, Water and Groundwater Management Sub-Plan)	7400	✓	✓	✓		✓		✓	✓
	8256	✓	✓	✓		✓		✓	✓
Air Quality Management Sub-Plan	7400	✓	✓	•		✓		✓	✓
	8256	✓	✓	•	✓				✓
Construction Traffic Management Plan	7400	✓	✓	✓		✓*	✓	Submit to Secretary for info only	
	8256	✓	✓	✓		•	N/A	Submit to Secretary for info only	
Waste and Recycling Management Sub-Plan (integrated in Waste, Recycling and Spoil Management Sub-Plan)	7400	✓	✓	•	•				✓
	8256	✓	✓	•	•				✓

Plan	SSI	Contractor' s Internal Review & Approval	Sydney Metro Review	Government Agency / Stakeholder Consultation	ER Review & Endorsement prior to Implementation	ER Review & Endorsement prior to Secretary Submission	RMS Review & Approval	Secretary Review & Approval	ER Approval of Minor Amendments
Ancillary Facility Management Sub-Plan	**7400**	✓	✓	✓**				Submit to Secretary & EPA for info only	✓

✓* *Construction Traffic Management plan is reviewed and endorsed by stakeholder members of the TTLG including relevant Council, RMS and the Sydney Coordination Office.*

✓** *Consultation with the EPA and the relevant council(s).*

• *At the discretion of Sydney Metro (i.e. not strictly a project requirement).*

Consultation with stakeholders includes desk top reviews of draft plans and meetings to discuss development of plans. Records of meetings, written correspondence and reviews are maintained by Systems Connect. The project team will address stakeholder comments and amend plans as required. Where required, evidence of consultation, endorsement and /or approval is included within documents annexures.

This CEMP and all CEMP Sub-Plans will be submitted to the Planning Secretary at least one month before commencement of construction, be approved prior to commencement of works and be implemented for the duration. Consultation with prescribed stakeholders will occur, as required, for the duration of delivery of the LW.

1.5 Revision and update of this CEMP

The review process ensures that EMS documents, including this CEMP, are updated as required to manage specific works that are occurring on site. The management review process described in Element 12 forms part of the EMS document review process.

Amendments would typically include those that:

- Are required to address compliance requirements prior to commencement of an activity;
- Are editorial in nature e.g. staff and agency/authority name changes;
- Do not increase the magnitude of impacts on the environment when considered individually or cumulatively;
- Do not compromise the ability of LW to meet approval or legislative requirements; and
- Do not result in new environmental impacts.

Details of CEMP, Sub-Plan and Procedure revisions that will occur to address Planning Approvals compliance requirements, across the delivery of all portions of LW, are provided in Section 3.3.

Minor amendments to the CEMP will be submitted to the Environmental Representative (ER) for review and approval. Minor amendments to the CEMP and associated environmental management system are those that:

- are editorial in nature (e.g. staff and agency/authority name changes);
- are in response to audit findings or periodic reviews;
- are not considered to contradict the project planning approval and associated conditions;
- do not significantly alter the outcomes of the project such that a planning modification would be required by the Department; and
- are not considered to carry significant environmental risk, in excess of those outlined in the project EIS; and will not impact surrounding communities"

Where the change will have the potential to result in an additional environmental or community impact that the ER cannot approve, then the plan would be submitted to DPE for review and approval.

Where necessary, amendments to this CEMP will also be provided to relevant stakeholders for review and comment and/or forwarded for approval. The project team will also be communicated of any relevant CEMP updates for their scope of works.

1.6 Distribution

The CEMP and associated Sub-Plans and Procedures are available to all Systems Connect personnel and contractors via the Systems Connect document control management system, Teambinder. The CEMP and relevant Planning Approval documentation will be accessible via the project website.

2. Project overview

2.1 Sydney Metro City & Southwest Project Scope and Delivery.

The Sydney Metro City & Southwest (SMCSW) project will extend Sydney Metro Northwest to the CBD and beyond to Bankstown. The project is being delivered through a suite of contracts for the tunnels, stations, Line-wide infrastructure and systems. Line-wide is a key component of the SMCSW, with works taking place over the full length of the project as described in Figure 2.

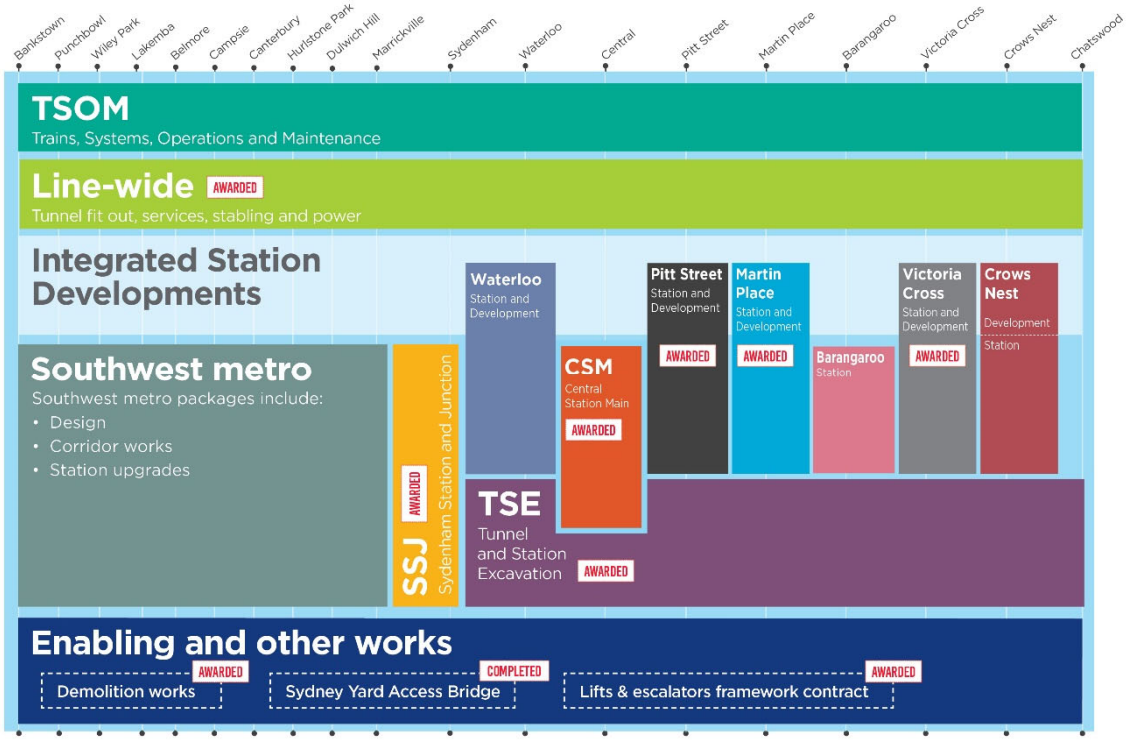

Figure 2 - SMCSW works packages

2.2 Line-wide Works project locations.

Figure 3 shows the locations of works to be delivered by Systems Connect under LW. As noted above, this CEMP has been updated to address LW construction activities occurring between Sydenham and Bankstown (S2B).

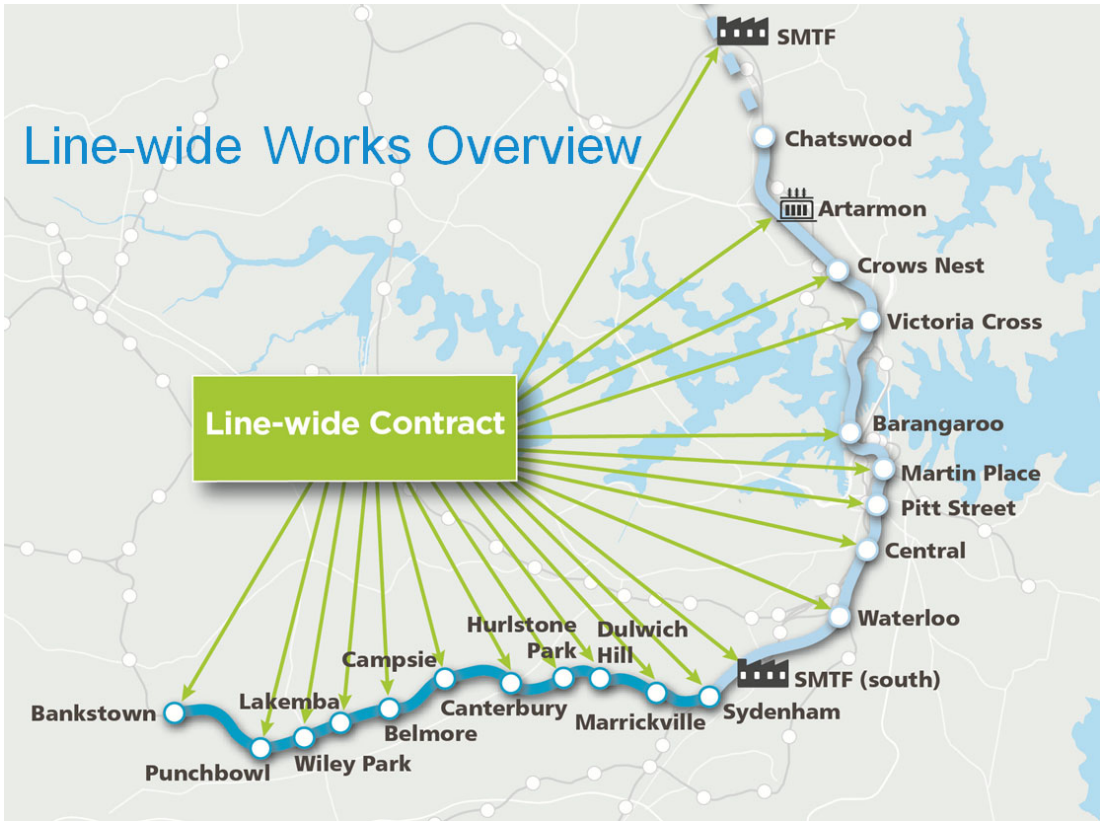

Figure 3 - LW Location

2.3 Line-wide Scope of Works

LW includes design and construction of permanent systems, services and building works within, adjacent, or required for rolling stock to travel through the SMCSW Tunnels and Trackway. The scope of work being delivered by Systems Connect is defined in Schedule C1 Scope of Works and Technical Criteria (SWTC) of ITCC 600 and summarized below:

- 31 kilometres of underground railway track to be laid in the twin railway tunnels from Chatswood to Sydenham;
- 31 kilometres of overhead power equipment and 11 new substations to power the metro from Chatswood to Bankstown;
- Installation of over 350km of high voltage, low voltage and tunnel services cables;
- The expansion of the Sydney Metro Trains Facility at Rouse Hill to accommodate 37 new six car Sydney Metro trains for Sydney Metro City & Southwest;
- The construction of the Sydney Metro Trains Facility South at Marrickville to provide stabling for 16 six car Sydney Metro trains;
- Installation of tunnel equipment such as track systems, overhead wiring, ventilation, drainage and emergency evacuation and monitoring equipment; as well as the fit out of the tunnel ventilation and high voltage equipment in the seven new underground stations.
- Delivery of bulk power feeds to meet the Sydney Metro City & Southwest high voltage reticulation and traction power requirements between Chatswood and Bankstown
- The open northern dive works to tie Sydney Metro City & Southwest into the Sydney Metro Northwest at Chatswood
- The Southern dive works at Sydenham

The above works will be delivered in 4 distinct Portions. Portions 1, 2 and 3 have now been completed, with a small scope of works remaining for Portion 4. This plan addresses environmental

management obligations associated with delivery of Portions 4. An overview of the scope of each Portion is provided in the below sections.

2.3.1 Portion 1 – SMTF North Works – Construction Completed

Portion 1 was delivered under CSS1 5931 and construction works have now been completed.

2.3.2 Portion 2 – SMTF South Works – Construction Completed

Portion 2 was delivered under CSSI 7400 and construction works were completed on 23 May 2025.

2.3.3 Portion 3 – Chatswood to Sydenham Tunnels and Stations Works – Construction Completed

Portion 3 was also delivered under CSSI 7400 and construction works were completed on 29 May 2024.

2.3.4 Portion 4 – Power Supply Works

Portion 4 is delivered under CSSI 8256. Portion 4 is also delivered under 2 sub-portions, the BPS works outside the rail corridor and construction of traction substations and power works within the rail corridor. Refer to Table 3 below for details and timings, noting that items greyed out have now been completed.

Table 3 - Description of works for Portion 4

LW worksite	Construction Activities	Indicative Timeframes*
Portion 4	**Power Supply Works**	**Q1 2020 to Q2 2026**
Campsie to Canterbury BPS Route Compound	• Site establishment • General worksite, car parking, storage, delivery & laydown area	May 2020 to Jul 2021
Campsie to Canterbury BPS Route	• Site establishment • Cable routes excavation, conduits installation, temporary surface reinstatement • Cable Installation and Jointing	May 2020 to Nov 2023
Modular Traction Substations	• Excavation for TSS footings and basement • FRP for basement slab and walls • Delivery of building on site • Fencing & precast panels • Commissioning and operational monitoring	Dec 2020 to Jun 2021 Feb 2021 to Sep 2021 Jul 2021 to Dec 2022 May 2021 to Sep 2023 January 2025 to June 2026
Rail corridor Power cables and ancillary works	• HV Cabling (Marrickville Dive to Campsie Traction Substation) • HV Cabling (Campsie to Bankstown) • 11kV Pad mount Substation Installation (Marrickville to Bankstown) • Power Control System (PCS) Integration works ongoing • Interim operator of overhead wiring	Feb 2021 to Jul 2023 Feb 2022 to Jul 2023 January 2025 to June 2026

**Timeframes are indicative and are subject to change as the program progresses.*

3. Compliance Requirements

Section 3 provides an overview of compliance requirements that Systems Connect must address during delivery of LW under the scope of this CEMP. This section also provides guidance on how Systems Connect will ensure regulatory and contract compliance.

3.1 Legislative requirements

Legislation relevant to delivery of LW is included in the register in Appendix C1. The register is reviewed at regular intervals using Systems Connect's online subscription to EnviroLaw and updated with any applicable changes (refer to Part B - Element 3: Legal and Compliance Requirements). Any changes made to the legal requirements register will be communicated to the wider team as required.

3.2 Project Planning Approval Requirements

The remaining Portion 4 LW works subject to this CEMP have been assessed and approved via the Environmental Planning and Assessment Act 1979 (EP&A Act) and are classified as Critical State Significant Infrastructure:

- CSSI 8256. Sydney Metro City & Southwest Sydenham to Bankstown.

Detailed environmental assessments have been carried out to gain the necessary planning approval. An overview of the Planning Approval listed above is provided in the following sections.

To create a framework that provides a link between the Planning Approval documentation and the construction environmental management documentation Sydney Metro developed a Construction Environmental Management Framework (CEMF). The CEMF sets out the environmental, stakeholder and community management requirements for construction and it is referenced in the EIS.

In accordance with CoA A12, Sydney Metro has developed a Staging Report, Sydenham to Bankstown Upgrade Staging Report (June 2023). The latest version of this Staging Report is available on the Sydney Metro Website Document Library.

Each Staging Report defines the Conditions of Approval (CoA), Revised Environmental Management Mitigation Measures (REMM's) and the Construction Environmental Management Framework (CEMF) requirements relevant to the Line-wide stage of works between Sydenham and Bankstown under CSSI 8256. The Line-wide contract deed allocates the responsibility of each of these requirements to Systems Connect, with some responsibility retained partially or fully by Sydney Metro. Staging Report compliance requirements are managed via the Project compliance tracking program.

Systems Connect's approach to compliance with Planning Approval conditions and other regulatory requirements is provided in Section 3.3, and summarised in Appendix C7.

3.2.1 CSSI 7400 - Sydney Metro City & Southwest Chatswood to Sydenham

Works that were being constructed under CSSI 7400 are now completed with:

- Portion 2 works achieving completion on 23 May 2025; and
- Portion 3 works achieving completion on 29 May 2024.

3.2.2 CSSI 8256 - Sydney Metro City & Southwest Sydenham to Bankstown

Approval of application CSSI 8256 provides for construction and operation of a metro line, approximately 13 kilometres long between Marrickville and Bankstown (S2B), including ten metro stations and associated infrastructure. The proposal is declared as CSSI and approval was granted on 12 December 2018.

The scope of works Systems Connect will deliver under CSSI 8256 is described in Section 2.3.4

Appendices A to C of the *Sydenham to Bankstown Upgrade Staging Report* detail applicability to LW of Planning Approval conditions and associated compliance requirements.

3.3 Planning Approvals Document Delivery Strategy

The Planning Approvals define construction activities and activities that are deemed Low Impact (that may be completed for site establishment or design investigations) and may occur without an approved CEMP in place. The definitions within the Planning Approval also allow for the staged delivery of project works and compliance obligations.

The Systems Connect planning approval delivery strategy has been developed to address both the staging of construction and Planning Approval obligations. The strategy for delivery of Planning Approval obligations, including document development, stakeholder consultation, document submission and approval, is outlined in Appendix C7. The strategy addresses:

- Planning Approval document development and ownership
- Stakeholder consultation, review and approval
- Timing for submissions

Element 3: in PART B of this plan provides details of documents and processes that will be used to address Planning Approval obligations during delivery of LW. The development of management documentation (e.g. plans and/or procedures) as a control for each environmental aspect will be based on the risk level and in line with the Staging Reports (as listed in section 3.2). A streamline approach has been adopted by Sydney Metro when defining the type of documentation required to manage each environmental aspect. This was based on the scope of works for LW C2B and the risks associated with environmental issues as clarified in the CEMF (further details provided in section 5.4).

As the project progresses through each portion, EMS documents will be reviewed and updated. Detailed risk levels and controls are outlined in Appendix C3 – Environmental Risk Register.

Appendix C2 contains segments of the project compliance matrix relevant to this CEMP. This includes Conditions of Approvals, associated compliance requirements, and controls and mitigation measures to be implemented. The matrix forms part of the project Compliance Tracking Program (CTP). The CTP is maintained by the Environmental and Sustainability Manager and will be reviewed prior to the commencement of construction and/or stages of construction and at regular intervals during construction. The CEMP, Sub-Plans and associated management systems documentation also include relevant reference to Conditions of Approval compliance requirements.

3.3.1 LW CEMP and EMS Documents for CSSI 7400 and CSSI 8256

As noted above the Staging Reports define LW obligations under each Planning Approval. Documents developed to address staged delivery of LW under each Planning Approval are defined in Section 5 - Table 15.

The structure of this CEMP, as described in section 1.3, and associated Sub-Plans has been developed to address the requirements of the C2B Staging Report. In line with the staging reports' requirements, separate Management Plans have been developed for Construction Traffic Management and Construction Noise and Vibration.

Plans and Sub-Plans developed to address CSSI 8256 have a format that is consistent with the CEMP:

- Part A includes details of overall scope, requirements, roles and responsibilities and a summary of aspects and impacts;
- Part B provides details of implementation of the EMS associated with the aspect;
- Part C the appendices include compliance requirements;

To support the CEMP and associated Sub-Plans, aspect specific flowchart Procedures have also been developed. The Procedures define responsibility, actions, monitoring and reporting requirements associated with management of each aspect at a site level.

Any Procedures developed will be retained within the EMS and updated to address Planning Approval and construction delivery as required. Where relevant these aspect specific Procedures will be included in the associated Plan and/or Sub-Plan.

3.3.2 Timing for Stakeholder Review and Approval

Stakeholder consultation and review of the CEMP and associated documents will occur as described in section 1.4. Systems Connect will always meet the minimum obligations for submission of documents for review and approval by stakeholders. Systems Connect will issue document for review as follows:

- To Sydney Metro, the ER and / or the AA for initial review
- To all external stakeholders for concurrent review
- To Sydney Metro for final review and to ER for endorsement as required
- To the Department of Planning and Environment for information and/or approval (as required)[1]

To meet contract and stakeholder expectations, Systems Connect allows for a minimum of 15 working days for external review, and additional 10 working days to confirm that any comments have been addressed by Systems Connect.

Systems Connect will meet Planning Approval obligations for submission of documents to DPE for review and approval prior to commencement of construction.

3.4 Environmental Protection License Requirements

Activities required to be undertaken under an Environmental Protection License (EPL) are defined under the *Protection of the Environment Operations Act 1997*. (POEO Act). Refer to Appendix C1 Legal Requirements. Reference to Licensing requirements are also included in the Planning Approvals (refer to Appendix C2 Compliance Matrix).

The Project requires a License for activities defined under Schedule 1 of the POEO Act as, "Railway Systems Activities". Systems Connect will procure and hold any new EPL required to facilitate LW, however Systems Connect may also complete LW under existing EPLs.

Systems Connect strategy for Licensing across LW is described in Table 4.

Table 4 - Line-wide EPL strategy

LW EPL Strategy			
LW scope	**License requirement**	**EPL holder**	**Status & strategy to address LW requirements**
Portion 2 – SMTF South	Required	Systems Connect (CPB)	Works under CPB License EPL 21423 – surrendered 24 July 2024
Portion 3 - Northern Connection	Required	Systems Connect (CPB)	Works under CPB License EPL 21423 – surrendered 24 July 2024
Portion 3 – Tunnels and stations	Required	Systems Connect (CPB)	LW scope within multiple EPLs for C2S: • EPL 21423 (CPB Licence) – surrendered 24 July 2024 • EPL 12208 (Sydney Trains) • EPL 21148 (Central station)
Portion 4 – Corridor traction power	Required	Sydney Trains	LW scope currently within premises of EPL 12208 held by Sydney Trains. Multiple license variations approved to accommodate C2S works. LW to use precedent.

[1] Documents developed by Systems Connect will be issued to the DPE by Sydney Metro.

LW EPL Strategy			
LW scope	**License requirement**	**EPL holder**	**Status & strategy to address LW requirements**
Portions 3 & 4 – Bulk Power Supply works	Not Required	N/A	Works outside rail corridor not a scheduled activity as advice from EPA (15/1/19).

The extent of the premises under an EPL required for delivery of LW will be defined via consultation and agreement between Systems Connect, EPA, Sydney Metro, interface Contractors and other EPL holders such as Sydney Trains. This consultation will occur as part of any License application or variation.

Works will only occur within a Portion, as described above, when;

- The EPA has approved an application or
- EPA has confirmed acceptance of any variation to a premise or
- EPL holder has agreed to delivery of LW scope under existing EPL.

Management of works by Interface Contractors working within the Project's licensed premises will be in accordance with the relevant license conditions. Where licensed premises overlap Systems Connect will consult with the EPA and Interface Contractors to ensure that EPL obligations are defined and communicated by Principal Contractors prior to any works commencing.

The EPA issued EPL 21423 to the Project on 31 July 2020 for the scheduled activity "Railway activities - railway infrastructure construction". This EPL was surrendered by CPB Contractors on 24 July 2024.

3.5 Roads and Maritime (RMS) and other Road Authority Compliance Requirements

Systems Connect will obtain the consent of the appropriate roads authority in accordance with the Roads Act 1993, to erect a structure, carry out work in, on or over a public road, or dig up or disturb the surface of a public road. Road occupancy permits will be sought in accordance with Construction Traffic Management Plan requirements.

3.6 Systems Connect Compliance Requirements.

The Systems Connect EMS documentation defines both project and individual obligations to manage compliance. Refer to Section 5 and Part B for details of the project EMS and associated compliance requirements.

3.7 Relevant Guidelines

This plan has been prepared in accordance with:

- ISO 14001 Environmental Management System – Requirements with Guidelines for Use
- Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning & Natural Resources, 2004)
- NWRL Construction Environmental Management Framework (2012);
- New South Wales Government Environmental Management System Guidelines (3rd Edition) (August 2013);
- Management and mitigation measures from ECRL Environmental Impact Assessment.

The above is in line with Section 2.4 of the SM Construction Environmental Management Framework that summarises the publications, guidelines, codes of practice and standards that are applicable to the LW.

Aspect specific publications, guidelines, codes of practice and standards are included in the relevant Sub-Plans.

3.8 Objectives and Targets

The key objective of this CEMP is to set in place an EMS for the Systems Connect LW C2B which addresses all relevant environmental and planning requirements. Key environmental objectives and targets for the project are provided in Table 5. The environmental performance outcomes identified in the EIS are addressed in the relevant sub-plans.

Table 5 - Environmental Objectives and Targets

Objective	Target	Measurement tool
Construction of the project in accordance with environmental approvals	Full compliance with statutory approvals.	Audits, construction compliance reporting, management view.
Compliance with all legal requirements, permits and licenses	No regulatory infringements.	No formal regulatory warning-audits, construction compliance reporting, management view.
Implement a rigorous and comprehensive EMS that meets the requirements of AS/NZS ISO 14001.	Address non-compliances and corrective actions within specific timeframes.	Audits, management reviews.
Continuously improve environmental performance through collaboration with SM, regulatory agencies and other key stakeholders	Develop and maintain a program of ongoing environmental training and consultation. Capture lessons learnt from environmental incidents to minimise repeat issues. Encourage and reward innovation and effort throughout the works force.	Construction compliance report, management review, endorsed induction program.

Lead key performance indicators of LW environmental performance are:

- Provision of comprehensive environmental training based on environmental risks and the qualifications and experience of the Systems Connect workforce
- 100% of scheduled inspections of environmental controls occur
- Minimum of two toolbox/pre-start meetings with an environmental focus per quarter (note this will apply following the commencement of construction in accordance with the Project Planning Approval)

Lag key performance indicators for LW environmental performance are:

- No Class 1 or 2 incidents.
- Score from quarterly survey with Environmental Representative, EPA official and Heritage Council (as applicable) to achieve an average of 95% or above;
- No major non-compliances identified in audits;
- All environmental observations and actions raised during inspections and audits are closed out within agreed timeframes;
- Evidence of attendance of senior leadership team at agreed inspections.

The performance indicators listed above are aligned with Schedule F6 of the Contract.

Aspect specific objectives and targets are defined in respective Plans and Sub-Plans.

Note: incident classifications are set out in the project Emergency Response Plan (SMCSWLWC-SYC-1NL-PM-PLN-000748).

4. Roles and Responsibilities

4.1 Collaboration and consultation with SM

Figure 4 describes the relationship between Systems Connect and the key Planning Approval delivery stakeholders: Sydney Metro, key regulatory stakeholders, the Environmental Representative (ER), Acoustics Advisor (AA), the Community Complaints Mediator (CCM) and the Independent Certifier (IC).

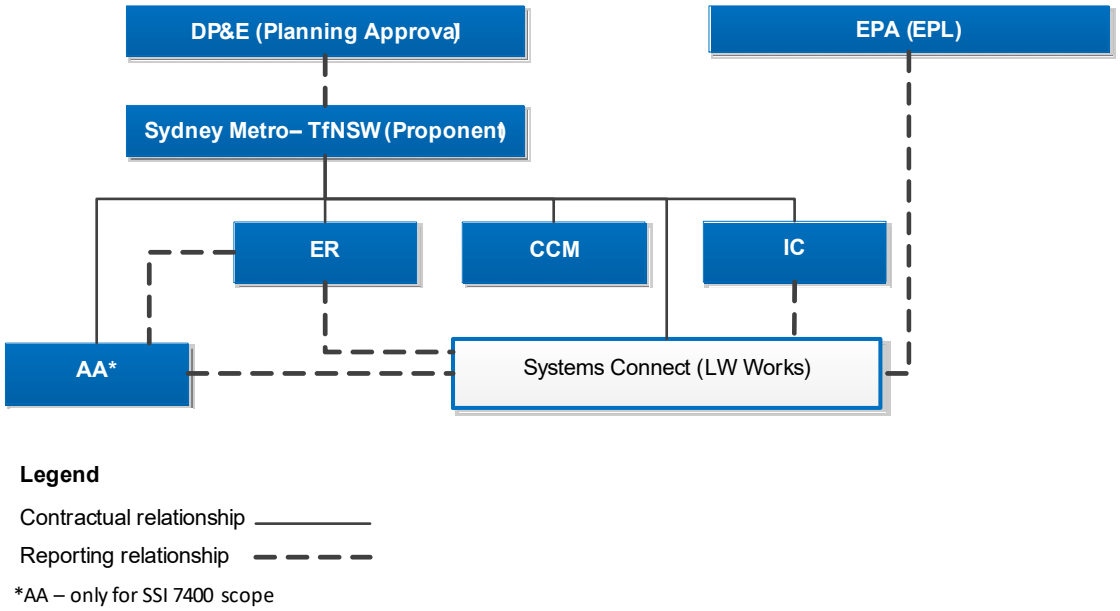

Figure 4 - Systems Connect Key Stakeholder Relationships

4.2 Systems Connect Environment and Sustainability teams

The Environment and Sustainability Manager or delegate will lead the overall delivery of environmental performance and compliance with planning approvals for the duration of the project. The Sustainability Manager will oversee the implementation of sustainability performance and objectives during the delivery of the design. These managers are supported by a team of environmental and sustainability advisors and coordinators across work areas. In addition, specialist environmental consultants are engaged to support the management of specific environmental aspects. The team will work with the design, construction, commercial, quality, safety, planning and community teams. The organisational structure of the environmental team is shown in Figure 5.

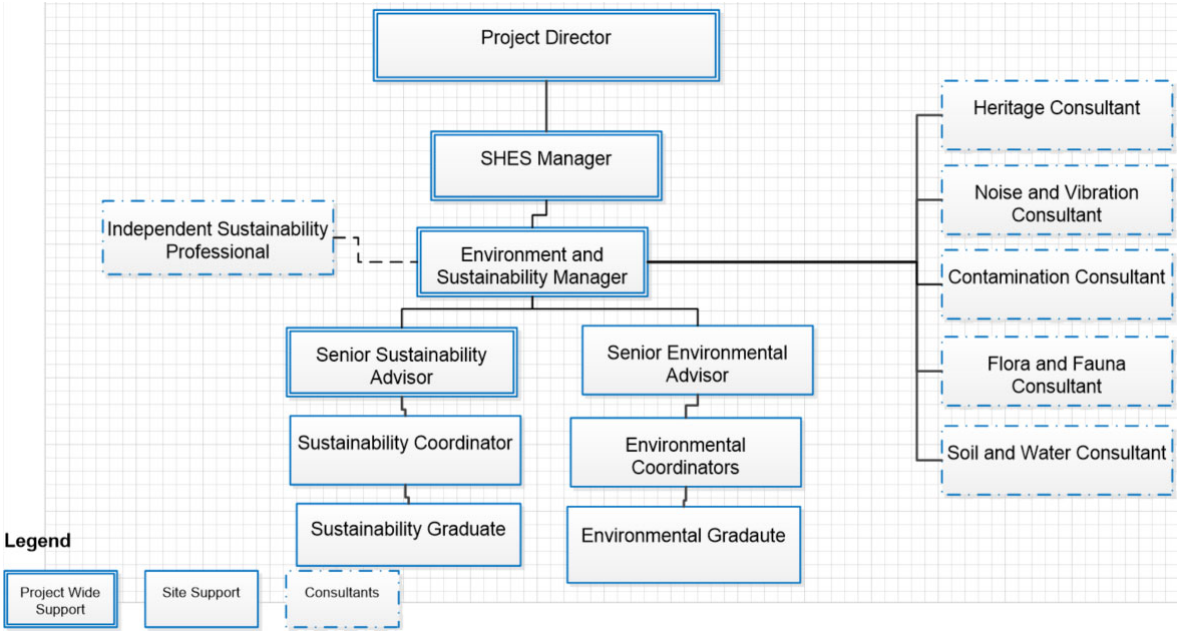

Figure 5 - Systems Connect Environment and Sustainability team

Note that currently the remaining scope of Portion 4 works is being supported by the CPB Contractors Environment Lead for NSW and ACT. The Project obtained As Built IS score rating of 82.67 on 30 September 2024 and the scope related to sustainability is now closed.

Key roles and responsibilities of environmental team personnel are provided in Table 6 to Table 10 below:

Table 6 – Environment and Sustainability Manager - Key role and responsibilities

Role	Accountable for managing all aspects of environmental management, sustainability and compliance across delivery of Line-wide Works
Responsibility	• Lead the creation of a consultative and proactive culture that ensures environmental compliance and "*One HSE Culture*" as a driver of work behaviors • Develop and manage a team of planning, environmental and sustainability personnel and specialist consultants that are able and capable of leading contemporary innovative approaches and practices • Effectively lead and manage the development and implementation of a risk based environmental and sustainability management system for the Line-wide Works, including review and continual improvement of this Plan • Ensure adequate environmental and sustainability participation at value engineering workshops • Provide strategy advice, manage and oversee the granting and implementation of all required environmental and planning approvals and Licences governing the Line-wide Works • Provide specialist environment, planning and sustainability advice to the Project Director and other functional managers to facilitate design and construction • Oversee the development, implementation, assessment and verification of sustainability measures for all Line-wide Works • Oversee proactive identification, assigning of responsibility, monitoring and review of environmental, sustainability and planning risks and performance expectations, goals and standards for managing all potential adverse impacts • Oversee the environmental management and sustainability induction and training program

	• Oversee the preparation of environmental assessments on design changes and obtain any necessary planning approvals • Oversee the environmental site monitoring, inspections and audits • Oversee investigation and close out of any environmental complaints • Oversee compliance tracking and reporting • In consultation with the Project Director, Construction Manager and where relevant the Lead Safety Manager manage, oversee investigation, corrective action and reporting of any environmental incidents.
Authority	• Appointed by the Project Director • Authorised to produce any correspondence and documentation necessary for approvals and environmental management • All correspondence and documentation that has legal, commercial or contractual impact must be viewed and agreed upon, by the Project Director • Authorised to require all reasonable steps to be taken to achieve environmental compliance
Lines of communication	• Reports to the Project SHES Manager • Principal's Representative's, Environmental Representative's, Acoustic • Advisor's, Community Complaints Mediator primary contact on environmental and sustainability matters • Primary government agency contacts for planning approvals, environmental management and sustainability.
Minimum skill level	• Tertiary qualification in environmental science and/or planning discipline or equivalent • Recent relevant experience in environmental management on project similar to the LW Contractor's Activities • At least 15 years environmental management experience, with extensive experience in the preparation and implementation of environmental management systems and plans • In depth knowledge of current and emerging environmental issues contemporary environmental management practices and processes • Understand whole-of-business issues as they apply to environmental and sustainability systems at all levels
Interface with Project organisational structure	• Member of the Systems Connect Senior leadership / Management Team • Attends environment, sustainability, design, safety, quality and construction meetings as required

Table 7 - Sustainability Manager - Key role and responsibilities

Role	Accountable for sustainability performance for all Line-wide Works
Responsibility	• Member of the project team that has central responsibility for managing sustainability • Report annually on the implementation of sustainability initiatives and policy to senior management • Respond to legislative changes • Establish program controls and reporting systems across project for performance monitoring against targets • Demonstrate continuous improvement to management systems as a result of senior management reviews • Ensure environmental, social and economic risks and opportunities are assessed and addressed • Ensure sustainability objectives, targets and/or indicators are reflected in project contracts • Report on compliance and assurance including independent peer reviews • Provide sustainability training for procurement team and participate in industry engagement: holding forums with key suppliers to discuss the sustainability targets and commitments for the project • Provide advice to the sustainability team on delivery method implications • Provide leadership and technical direction to design, construction, commercial and operational personnel in relation to sustainability issues

	• Develop and implement the Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024), including the Carbon and Energy and Materials Management Sub-Plans, so that it is consistent with other plans (e.g. the CEMP) • Develop and deliver the sustainability training program for relevant project personnel and contractors • Interface with, and report to, key project stakeholders in relation to sustainability issues, including Sydney Metro, Infrastructure Sustainability Council of Australia (ISCA) and the Green Building Council of Australia (GBCA) • Manage sustainability performance and reporting, including performance tracking against the ISCA IS Rating Tool, TfNSW Sustainable Design Guidelines and any other relevant sustainability rating tools • Drive the achievement of the project's Sustainability Objectives and Targets and associated Key Performance Indicators • Manage the development and implementation of the Sustainability Management Plan SMCSWLWC-SYC-1NL-PM-PLN-000024and associated sub-plans • Work collaboratively with procurement, design and construction leads to embed sustainability initiatives across the project•
Authority	Appointed by the Environment and Sustainability Manager
Lines of communication	• Reports to the Environment and Sustainability Manager • Primary contact for Principal's Sustainability Representatives • Environmental Representatives primary contact on sustainability matters • Primary government agency contact for sustainability • Coordinates with the Environment & Sustainability Manager and other functional managers to ensure the project's sustainability objectives and targets are achieved
Minimum skill level	• At least 5 years' sustainability management experience, with previous experience in the provision of sustainability advice on the design and construction of engineering • ISCA IS Accredited Professional • Previous experience applying the TfNSW Sustainable Design Guidelines to transport projects • Understanding of life cycle analysis, including life cycle costing • Previous experience applying the ISCA IS Rating tool to infrastructure projects • In depth knowledge of current and emerging sustainability issues, practices and processes • Understand whole-of-business issues as they apply to sustainability systems at all levels
Interface with Project organisational structure	Attends environment, sustainability, design and construction meetings as required

Table 8 - Environmental Advisor - Key role and responsibilities

Role	Assists the Environment and Sustainability Manager in the day to day environmental management of LW
Responsibility	• Accountable for implementation of all aspects of environmental management across LW • Functions as a key member of the construction team • Assist the Project Environment Manager in the development and implementation of site specific environmental documents and EPL applications and variations (where applicable). • Develop and manage the environmental coordinators and graduates • Assist the Project Environment Manager in implementing the environmental management induction program • Assist Systems Connect staff with environmental inquires • Assist in the implementation of site environmental controls • Undertake environmental monitoring and inspections

	• Assist the Project Environment Manager in audits • Assist the Project Environment Manager in the investigation and close out of environmental complaints
Authority	Appointed by the Environment and Sustainability Manager
Lines of communication	• Functional reporting to the Environment and Sustainability Manager • Line reporting to Construction Manager
Minimum skill level	• Possesses a relevant recognised qualification • At least 5 years' experience working on major infrastructure projects • Knowledge of current and emerging issues and practices
Interface with Project organisational structure	Attends environment, and construction meetings and client and stakeholder meetings as required

Table 9 - Environmental Coordinator - Key role and Responsibilities

Role	Assist the Environmental Advisors in the day to day management of LW
Responsibility	• Assist the Environmental Advisor in the development and implementation of site-specific EMS, Planning Approval and EPL requirements (where applicable) • Assist the Environment Advisor in implementing the environmental management induction program • Assist LW staff with environmental inquires • Assist in the implementation of site environmental controls • Undertake environmental monitoring and inspections • Assist the Environment Advisors in audits, investigations and close out of environmental complaints.
Authority	Appointed by the Environment and Sustainability Manager
Lines of communication	• Functional reporting to Environmental Advisor • Line reporting to Construction managers
Minimum skill level	• Possess a relevant recognised qualification • At least three years relevant experience • Familiarity with current and emerging environmental issues
Interface with Project organisational structure	Attends environment, and construction meetings as required

Table 10 - Environment and sustainability graduates - Role and responsibilities

Role	Assist the Environment and Sustainability Manager or Sustainability Manager in the delivery of LW
Responsibility	• Collection of environmental samples and monitoring and associated reporting • Organising monitoring equipment servicing • Co-ordinate periodic environment and sustainability reporting • Co-ordinate compliance tracking • Prepare meeting agendas, organise meetings and note taking. • Assist in document preparation (daily complaint reports, audit reports, plans, general reports, including reviews, formatting and updating management plans) • Assist the Project Sustainability Manager in preparing the IS design and as built submissions • Participate in environment and sustainability inspections and audits

	• Assists the Project Environment Manager and the Sustainability Manager in delivering the environment and sustainability section of the Project Induction
Authority	Appointed by the Environment and Sustainability Manager
Lines of communication	Reports to the Project Sustainability Manager or Environment and Sustainability Manager
Minimum skill level	University qualification in environmental science and/or sustainability or equivalent
Interface with Project organisational structure	Attends environment, sustainability, design and construction meetings, client and stakeholder meetings as required

The role, authority and responsibility of other key Systems Connect personnel with respect to Environment and sustainability are shown in Table 11.

Table 11 - Systems Connect Key personnel - Environmental Responsibility and Authority

Systems Connect Role	Responsibility and Authority
Project Director	• Managing the delivery of the Line-wide Works including overseeing Planning Approval and environmental management, including implementation of this CEMP • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts • Act as the Contractor's Representative.
Commercial Manager	• Ensure relevant sustainability requirements are considered in procuring materials and services
Engineering Manager	• Ensure relevant environmental and planning requirements are addressed in design development • Provide input to and review consistency of assessments on design changes
Integration and interface Manager	• Ensures that relevant Planning and contract requirements are addressed via the interface process
Project Controls Manager	• Ensures planning and systems required for delivery of Environmental and Sustainability obligations are developed and maintained
Traffic Engineer	• Ensure relevant environmental and Planning obligations are addressed during design and delivery
Safety Manager	• Ensure environmental and planning requirements are addressed in relevant safety documents • Collaborative incident management and reporting in the event of safety incidents with a potential to cause environmental impact.
Construction Manager	• Lead and manage the delivery of the construction process, in relation to environmental management across all sites in conjunction with the Environment and sustainability Managers • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts • Ensure enough resources are allocated to environmental and sustainability management.
Stakeholder and Community Relations Manager	• Assist the Environment and Sustainability Manager in consulting regulatory agencies • Communicate sustainability initiatives and potential environmental impacts to the surrounding community

Systems Connect Role	Responsibility and Authority
	• Work collaboratively with the Environment and Sustainability Manager and Project Environment and Sustainability Manager to resolve environmental complaints.
HR Manager	• Ensuring the provision of appropriate training in environment and sustainability aspects for relevant project personnel in consultation with the Environment and Sustainability Manager.
Construction (Area) Managers	• Manage construction in relation to environmental management for their work activity in conjunction with the Project Environment Manager, Environment Advisor and environment coordinators • Ensure compliance with this Plan, Sub Plans and Aspect Specific Management Plans and Procedures.
Site Superintendents	• Construction delivery in relation to environmental management and compliance in conjunction with the Environment Manager • Authority to direct personnel and/or subcontractors to carry out actions to avoid or minimise unintended environmental impacts.
Project Engineers **Site engineers** **Supervisors**	• Implement and monitor onsite environmental management and compliance measures across all sites in conjunction with environmental coordinators • Undertake site inspections, provide support to report on environmental performance.

Specialist consultants engaged to provide aspect specific support throughout delivery of LW are listed in Table 12. Where required to manage unexpected or emerging issues Systems Connect will seek advice from other specialists.

Table 12 - Specialist consultants - Scope and responsibility

Aspect	Scope
Contamination	Assist with management of unexpected finds of Potential and actual contamination. Preparation Contamination Investigations including required field sampling, analysis and reporting
Noise and Vibration	Assist in the preparation and implementation the Construction Noise and Vibration Management Plan.
Soil and Water	Assist in the preparation and implementation of the Construction Soil, Water and Groundwater Management documentation including providing expert advice in planning and implementing site water management strategies and training on soil and water management measures specific to the Line-wide Works.
Heritage	Provide support to the project team in the event of an unexpected heritage find. Prepare and implement the Construction Heritage Management documentation including any archival recording, archaeological investigations and excavations.
Flora and Fauna	Provide support to the delivery team in the event of an unexpected find of Flora or Fauna.

4.3 Sub-contractors

Environmental and sustainability requirements and responsibilities are specified to sub-contractors in the contract documentation. As part of the selection process, consideration is given to past environmental performance. Sub-contractors are required to work in accordance with the approved CEMP.

Sub-contractors are also required to attend Project and site inductions, where the requirements and obligations of the CEMP are communicated. A record of all sub-contractors inducted will be maintained as part of the Project induction and training register.

A standard monitoring form will be developed that will be used to assess;

- the sub-contractor's general work practices
- the effectiveness of the sub-contractor's environmental protection measures
- the sub-contractor's compliance with the requirements of this CEMP
- the maintenance of environmental measures.

4.4 Interface Contractors

Interface contractors are responsible for management of environmental aspects and impacts associated with their own scope of works. In line with the Interface Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000040) and relevant contract requirements, Systems Connect will facilitate interface meetings, at all levels within project delivery teams, to ensure that requirements for compliance with environmental obligations are understood, agreed, implemented, monitored and maintained by Interface contractors working within LW delivery areas. All subcontractors will work under Systems Connect EPL, CEMP and Sub Plans where applicable. Likewise, where Systems Connect are undertaking works in an area an interface contractor is Principal Contractor of, Systems Connect will work under the Principal Contractor's EPL, CEMP and Sub-Plans where applicable, while meeting all Conditions of Approval (CoAs) and Revised Environmental Management Mitigation Measures (REMM's) applicable to Systems Connect.

Systems Connect delivery teams will, when working in Interface Contractors delivery areas, maintain any processes or controls impacted by LW.

Key elements of interface agreement associated with environmental management include:

- Timing for handover of site and which contractor is principal over a given site.
- Requirements for interface contractors to work under Principal Contractor's management systems
- Requirements for working under existing EPLs
- Requirements for coordination and resolution of issues

Systems Connect will commence interface coordination meetings with interface contactors prior to access of any project site to determine the detailed requirements for coordination of environmental management associated with the site (or sites).

4.5 Transport for NSW (Sydney Metro)

Transport for NSW (TfNSW) is the Proponent under the EP&A Act with ultimate responsibility to DPE for compliance with the Project Planning Approvals. Personnel from Sydney Metro project delivery team will ensure compliance with the Project Planning Approvals and Revised Environmental Mitigation Measure and obligations held by TfNSW, as set out in Schedule E3 of the Contract.

Systems Connect will report to Sydney Metro as required to comply with regulatory approvals, statutory obligations and in accordance with the contract.

4.6 Environmental Representative

Environmental Representatives (ER) are engaged by the Proponent in accordance with Planning Approval requirement A26. The ER is an independent professional and represents the main point of contact regarding the Project's environmental performance. The relationship between Systems Connect, the ER and Sydney Metro is shown in Figure 4 - Systems Connect Key Stakeholder Relationships**.** Systems Connect's obligation to the ER are defined in Schedule E3 of the Contract.

To support the ER, Systems Connect will:

- Provide SM with all information, documents, details and data relating to the LW Contractor's Activities that could relate to the approved ER's functions and obligations
- Facilitate any actions necessary for the ER to carry out its functions and obligations
- Provide suitable company vehicles and staff for ER inspections
- Consider and potentially adopt any of the ER's recommendations or improvements.

4.7 Independent Certifier

The role of the Independent Certifier (IC) with respect to the environmental management of LW is set out in the Independent Certifier Deed. The IC will oversee implementation of environmental controls and monitoring in accordance with this Plan and relevant aspect specific management plans.

The IC will report concurrently to Systems Connect and Sydney Metro with respect to environmental monitoring.

The relationship between Systems Connect, the IC and Sydney Metro shown in Figure 4.

4.8 Department Planning and Environment

The Department of Planning and Environment (DPE, Major Infrastructure Assessments) is responsible for assessing compliance with the Project Planning Approvals and any documents which need the specific approval of a representative of the Department. As shown in Figure 4, communications with the DPE is managed through Sydney Metro as they are the representative of the Proponent under the EP&A Act.

Sydney Metro will keep Systems Connect informed about any communication with DPE regarding approvals and compliance with Project Planning Approval Conditions relevant to delivery of LW.

4.9 Environment Protection Authority

The Environment Protection Authority (EPA) is responsible for issuing Systems Connect (through CPB Contractors) with an Environment Protection License (EPL) for scheduled activities delivered under LW. The Project EPL (#21423) was surrendered by CPB Contractors on 24 July 2024.EPA will also monitor compliance with any applicable EPL.

Planning Approval documentation will be issued to the EPA for consultation and review as required by each Planning Approval and respective Staging Report.

5. Environment Management System and Documentation

5.1 Environmental Management System Overview

Systems Connect will deliver LW using the CPB Environmental Management System (EMS) which has been developed in accordance with the business and legislative requirements set out in the CPB Management System (CMS). The CPB EMS is certified to comply with AS/NZS ISO 14001:2015 Environmental Management Systems – Requirements with guidance for use. An overview of the Project EMS documents and their relationships is illustrated in Figure 6.

A Project Environment and Sustainability Policy has been developed to meet the project requirements and is attached in Appendix C4.

The EMS comprises the following components:

- **Environment and Sustainability Policy:** A statement of strategic intent and commitment. It defines the mandatory requirements expected at all levels of the organisation.
- **Management Plans.** The CEMP and associated Plans and Sub-Plans outline how the LW will be managed. Plans provide detail project requirements and of the process and procedure that make up the EMS that will be implemented throughout delivery of LW.
- **Procedures and Work Instructions**: Procedures and Work Instructions specify how to undertake and control specific activities by Systems Connect. They define roles and accountabilities and list the tools or knowledge documents to be used. Where required, procedures were adjusted to align with relevant Sydney Metro strategies and procedures.
- **Tools:** Tools are pre-formatted documents such as forms and templates that are required to be completed as part of a Procedure.
- **Knowledge documents**: Knowledge documents are reference material to provide context, additional information or guidance to a Policy or Procedure.
- **Business Applications:** Business Applications are the software tools used to manage and support delivery of LW.

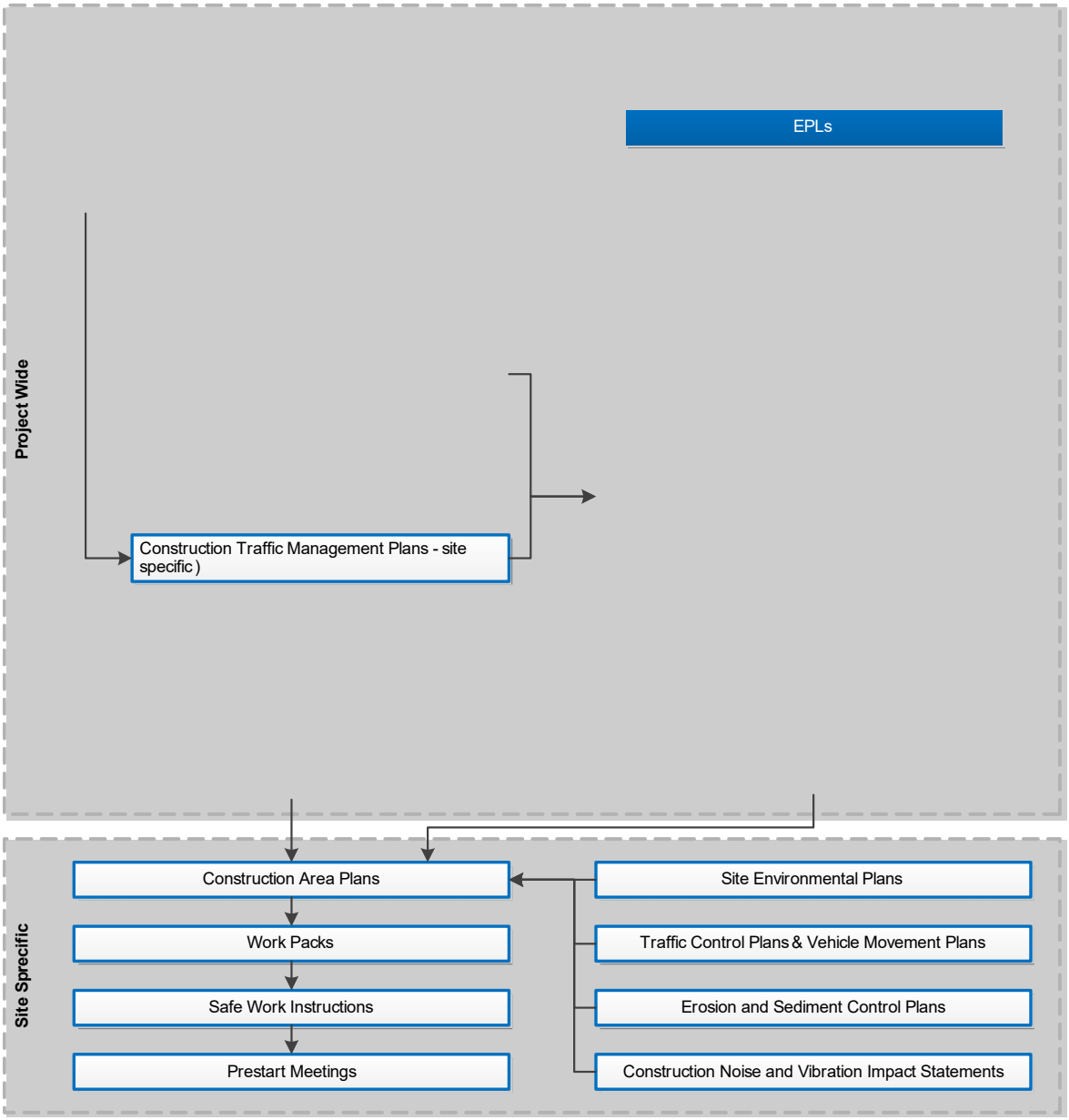

Figure 6 - Overview of environmental management system documents

5.2 Environmental Risk Management

5.2.1 Project Environmental Risk Assessment

The objectives of risk assessments are to:

- identify activities, events or outcomes that have the potential to adversely affect the local
- environment and/or human health/property
- qualitatively evaluate and categorize each risk item
- assess whether risk issues can be managed by environmental protection measures
- Qualitatively evaluate residual risk with implementation of measures.

Project risk assessment outcomes are included in the PMS documentation.

A Project Preliminary Environmental risk assessment has been undertaken to identify key risks, mitigation measures and primary controls, including this CEMP, Sub-Plans, Procedures and site

investigations and is included as Appendix C3. Key Environmental Aspects and impacts (risks) are also outlined in Section 6.1.

The Project Preliminary Environmental Risk Assessment is based on a review of the EIS; associated technical studies completed as part of the Planning Approvals process and construction methodology and timing.

Environmental risks assessments are completed at each stage of project planning and during delivery. This staging ensures that controls are identified that will prevent or mitigate harm to the community and environment. Each level of risk assessment is periodically reviewed. The procedures that govern environmental risk assessment include processes to ensure that the requirements for implementation are understood by project personnel and to confirm that controls are established and maintained.

Risk and Opportunity Management, in Element 4 - Part B, provides a complete overview of environmental risk assessment procedures that will be implemented on the project.

5.2.2 Ongoing Environmental Risk Identification and Management in Construction

Risk identification and management processes are a key focus in developing and implementing all EMS documentation. The objective of these processes is to confirm that the LW are designed and constructed within acceptable limits of risk to personnel and the environment. Ongoing environmental risk and opportunities identification are a key consideration during all project risk assessments as per the Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021), including:

- The Principal Risk Assessment conducted at tender stage for major tangible risks
- Value Engineering Workshops conducted throughout the delivery of the LW
- Project Risk Register
- Construction Area Plan (CAP) Risk Assessments
- Work Pack Risk Assessments
- Safe Work Method Statements (SWMS), which also address environmental risks
- Pre-start Meetings

As noted in Section 5.2.1, to assist in the initial risk identification, a Project Preliminary Risk Assessment has been undertaken and is contained in Appendix C3. This Preliminary Risk Assessment has been utilised to inform the preparation of this CEMP, and associated Plans and Sub-Plans, and input to the Project Risk Register developed in accordance with the Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021). The Project Risk Register is a dynamic document that will be reviewed and updated as design and construction planning progress.

The risk assessment and planning documents detailed in Table 13 will be prepared to ensure the LW will be constructed safely, minimise environmental impacts, and will comply fully with the requirements of the Deed, SWTC and Project Planning Approval. Our robust process includes cross functional review and sign off at key stages.

Table 13 - Key Planning documents for SWMS development

Key Planning Document	Description
Construction Area Plan (CAP)	The planning document for construction precinct is a Construction Area Plan. The CAP includes overall construction approach and methodology, CAP risk assessment (CAPRA), constructability reviews and associated Work Pack listing.
Work Pack (WPK)	A Work Pack (WPK) is a document containing all the information required to manage an activity. There will be multiple WPKs referenced in each CAP. Each WPK includes a step by step breakdown of the activity to be undertaken, work method statement, sequencing, inspection and test plans (ITPs), Safe Work Method Statements (SWMS), relevant drawings, and environmental controls.

Key Planning Document	Description
	Work Packs will be developed to provide an integrated approach to the management of safety, quality and environmental risks as set out in the Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021). During construction planning for each work area work methods will be reviewed, the risks identified during the design phase will be re-assessed and new risks identified and recorded in the Work Pack for communication to field staff. All controls necessary to ensure compliance will be included in the Work Packs which will reference the relevant SEPs, procedures, checklists and forms. Work Packs may identify the need for amendment to an existing SEP or preparation of a new SEP. The Work Packs will be approved by the Project Environment and Sustainability Manager or delegate prior to the commencement of works described in their scope. The relevance and adequacy of environmental controls identified in the Work Packs will be reviewed and where required updated.
Safe Work Method Statement	Safe Work Method Statements (SWMSs) description of the methodology required to complete the activity. It describes the prescriptive sequence of tasks to be undertaken. Depending on the complexity of the activity or, if the same activity is being repeated elsewhere, the work method statement may be a separate document included in the Work Pack. A SWMS will be conducted and formally recorded for relevant activities prior to their commencement. It will include environmental hazards and their mitigation for that task. The purpose of communicating task methodology in detail to the workplace personnel who are completing the task. Field staff will review and sign onto the SWMS, including the risk assessment and safe work systems, as part of a pre-start briefing. SWMS task-specific information includes work steps (in sequence) with work step precautions, associated hazard(s) and hazard control(s), specific personal protective equipment, equipment available onsite, responsibilities, competencies and where applicable permit conditions. The environmental context of a SWMS is included to prompt consideration in the task steps, to address the positive actions of environmental care, i.e. dust control, erosion prevention, waste recycling, and address negative actions that may introduce an environmental impact, i.e. contamination, pollution.
Prestart	A pre-start meeting is a review of work progress and activities planned for the incoming shift focused on creating a positive environment, safety and quality culture and continually improving work habits, generating greater workforce involvement and increasing accountability. It will: Identify any changes that are to be made to the work or work environment including impacts of nearby or interfacing work. Include of any environment or safety hazards reported and incidents that where reported on previous shifts. The Senior Project Managers and Area Manager will ensure that Site Supervisors conduct daily pre-start meetings with all members of the work team prior to commencement of work for each shift. These meetings will typically be conducted by a supervisor or his/her approved delegate with individual work crews. Attendance at the pre-start meeting will be mandatory. The content of the pre-start meeting is to be recorded including any issues raised as well as attendance at those meetings. Pre-start meetings are held to ensure all workers are informed about hazards in their work area prior to the start of the work. It is used in conjunction with the SWMS document to ensure current on-site conditions (and hazards) are considered with those identified in the SWMS document, particularly looking for what conditions have changed (e.g. new workers, weather, changed materials etc.) since the work was previously undertaken i.e. the day or shift before.

Key Planning Document	Description
	The pre-start meeting contributes to implementing a safe work habit of checking the immediate surroundings and workplace conditions before starting, including consideration of potential environmental impacts.

The Project Environment and Sustainability Manager or delegate has approval authority for all risk assessment types (except for SWMS and Pre-start Meetings – these must be signed by Supervisors) to ensure environmental risks and opportunities are adequately raised and addressed. All works that are subject to variation will be assessed for environmental impacts and any required environmental controls will be determined. In addition, the Sub-Plans include a section which identifies key aspects and potential environmental impacts, which has also been utilised to inform the development of specific management strategies to be applied across LW. Environmental risks, controls and accountabilities identified will be communicated to all relevant personnel through the preparation and communication of the Environmental Procedures, Site Environment Plans, CAPs, Work Packs, SWMS, toolbox talks, and prestart meetings.

5.3 Hold Points

The activities below are not to proceed without objective review and approval by the nominated authority and are considered hold points. Table 14 lists the hold points relevant to environmental management for the Project.

Table 14 - Environmental hold points

Hold Point Details	Responsibility	Timing
Air Quality management		
Stop work immediately if visible dust is leaving site. Dust must be minimised to the greatest extent practicable. Refer to the Air Quality and Dust Management Procedure (SMCSWLWC-SYC-1NL-EM-PRO 00392)	Site Supervisor Environmental Coordinator	During Works
Heritage management		
Stop work immediately if unexpected heritage finds, including human remains, are discovered. Contact site Supervisor immediately and install temporary exclusion fencing. Project Director is to notify SM. Refer to Unexpected Finds Heritage and Human Remains Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000389)	Site Supervisor Environmental Coordinator Project Director	During Works
Noise and Vibration Management		
Any work to be undertaken outside of Standard Construction Hours will require the completion of an Out of Hours Work Approval form. This requires approval from the Construction Manager, Stakeholder and Community Relations Manager, Environment and Sustainability Manager and might require endorsement by the ER based on the criteria detailed in the Noise and Vibration Management Sub-Plan. Also refer to the Out of Hours Work Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000807). Where the works are predicted to potentially generate significant impacts, then a Noise and Vibration Impact Statement may be required to be completed and approved by the EPA and ER.	Project Engineer Environmental Coordinator Construction Manager Stakeholder and Community Relations Manager Acoustic Advisor Environmental Representative	Prior and during works
Spoil and Waste management		

Hold Point Details	Responsibility	Timing
Materials brought onto site require certificates/testing results to be provided to the Environmental Team to determine material meets EPA requirements. All waste must be assessed, classified and managed and disposed of in accordance with the NSW Waste Classification Guidelines. All waste taken off-site must be taken to an appropriately licensed facility and for natural material, may require a waste classification. Refer to the Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399) and Spoil Classification, Reuse and Recycling Procedure (SMCSWLWC-SYC1NL-EM-PRO-000461)	Project Engineer Environmental Coordinator	During Works
Spills management		
Spills must be contained and cleaned-up immediately. All spills must be reported to the environment team regardless of quantity or location. Refer to the Spill Management Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000387)	Site Supervisor Environmental Coordinator	During Works
Soil and Water management		
Detailed, staged Erosion and Sediment Control Plans (ESCPs), including details of temporary stockpiles locations and management, must be developed and implemented prior to commencement of ground disturbance. Refer to the Erosion and Sediment Control Procedure SMCSWLWC-SYC-1NL-EM-PRO-000390)	Environmental Coordinator Project Engineer Site Supervisor	Prior and During Works
Dewatering to be undertaken in accordance with the Water Management Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000384) No water will be discharged from the site without written approval of the Environment Manager (or delegate). All water will be tested (and treated if required) prior to discharge from the site to ensure compliance.	Environment Manager	Before discharge
Stop work if presence of potential contamination is discovered. Prevent further activity in the area. Notify the Site Supervisor and Environment Coordinator and cordon off area (to be marked on the SEP). Refer to the Unexpected Finds Soil Contamination and Asbestos Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000388)	Site Supervisor Environmental Coordinator	During Works
Flora and Fauna Management		
A Pre-clearing inspection must be conducted by a qualified ecologist. A Pre-clearing Checklist must be completed prior to clearing any vegetation and signed off by the Environmental Team and Construction Team. Clearance area are to be delineated. Vegetation on site identified for retention, e.g. for screening purposes will be delineated, and removal of such vegetation requires approval from the Project Environment and Sustainability Manager. An Erosion and Sediment Control Plan must be completed as per Erosion and Sediment Control Procedure (SMCSWLWC-SYC-1NL-EMPRO-000390). If any unexpected Flora and Fauna finds are encountered refer to the Flora and Fauna Unexpected	Environmental Coordinator Project Engineer Site Supervisor	Prior to and during works

Hold Point Details	Responsibility	Timing
Finds Procedure (SMCSWLWC-SYC1NL-EM-PRO-000386).		
Ancillary Facilities		
Establishment of new ancillary facilities not identified in the planning approval documents require the following acceptance criteria: • S2B – CSSI 8256: – Preparation of a review of environmental impacts and approval by DPE or ER endorsement (if located within the rail corridor) as per CoA A17 – Endorsement by the ER for minor ancillary facilities in accordance with CoA A19	DPE ER AA	Prior to establishment of Ancillary Facilities
Building Condition Surveys		
Before commencement of construction, all property owners of buildings identified as being at risk of damage must be offered a building condition survey. Where an offer is accepted a structural engineer must undertake the survey. The results of the surveys must be documented in a Building Condition Survey Report for each building surveyed. Copies of Building Condition Survey Reports must be provided to the owners of the buildings surveyed, and if agreed by the owner, the Relevant Council within three (3) weeks of completing the Survey Report and no later than one (1) month before the commencement of construction.	Environmental Coordinator Project Engineer	Prior to works
Road Dilapidation Reports		
A Road Dilapidation Report must be prepared for local roads proposed to be used by heavy vehicles for the purposes of the CSSI before the commencement of use by such vehicles. Copies of the Road Dilapidation Report must be provided to the Relevant Council within three (3) weeks of completing the surveys and no later than one (1) month before the use of local roads by heavy vehicles.	Environmental Coordinator Project Engineer	Prior to works

Additional hold points may be developed as required during delivery of the LW. Hold Points are also identified in the flowchart Procedures and SEPs (where required).

5.4 CEMP and Sub-Plans

This CEMP and Sub-Plans provide the system to manage and control the environmental aspects of the project during pre-construction and construction. They identify all requirements applicable to activities described in Section 2, as well as associated controls based on the risk register in Appendix C3.

The strategies defined in the CEMP and associated documents have been developed to address legislative requirements, Planning Approval obligations under CSSI 8256, Revised Mitigation Measures (REMM) and the LW Contract as described in Section 3. This CEMP establishes the system for implementation, monitoring and continuous improvement to minimize environmental impacts from the LW in C2B.

The relationship between the Planning Approval obligations and the environmental Plans and Sub-Plans is described in Appendix C7.

Table 15 identifies the documents required to manage environmental aspects associated with delivery of LW Portion 4 (S2B), according with Sydney Metro's Staging Report. The right column of Table 15 identifies the list of documents developed by SC to address the Staging Report requirements.

Table 15 - Key EMS Documents for Staged Delivery of LW.

Environmental Management Category	C2S (CSSI 7400) Staging Requirement	S2B CSSI 8256 Staging Requirement	LW Compliance Document Second Submission
CEMP	CEMP	CEMP	CEMP
Spoil	CEMP Sub-Plan	CEMP or SPM	Waste, Recycling and Spoil Management Sub-Plan
Groundwater	CEMP	CEMP Procedure	Soil, Water and Groundwater Management Sub-Plan
Traffic	Construction Traffic Management Plan	Construction Traffic Management Plan	Construction Traffic Management Plan
Noise & Vibration	CEMP Sub-Plan	CEMP Sub-Plan	Noise and Vibration Management Sub-Plan
Heritage	CEMP Sub-Plan	CEMP Sub-Plan	Heritage Management Sub-Plan
Flora & Fauna / Biodiversity	CEMP Procedure	CEMP Procedure	Flora, Fauna and Biodiversity Management Sub-Plan
Visual Amenity	CEMP Sub-Plan	CEMP Sub-Plan	Visual Amenity Management Sub-Plan
Soil & Water	CEMP Sub-Plan	CEMP Sub-Plan	Soil, Water and Groundwater Management Sub-Plan
Air Quality	CEMP Sub-Plan	CEMP Procedure	Air Quality Management Sub-Plan
Waste (and Recycling)	SMP Sub-plan	CEMP or SMP Sub-Plan	Waste, Recycling and Spoil Management Sub-Plan
Ancillary Facility	Ancillary Facilities Management Plan		Ancillary Facility Management Plan

[1]*CEMP Sub-Plan – To be addressed in a standalone Sub-Plan of the CEMP.*

[2]*CEMP Procedure – Can be addressed in a Procedure included in the CEMP.*

[3]*CEMP – Can be addressed in a section of the CEMP.*

5.5 Aspect Specific Procedures

Aspect specific flowchart Procedures have been developed to guide implementation of risk management processes identified in the CEMP, Plans and Sub-Plans.

These procedures have been developed for use on site by the construction workforce and provide step by step instruction for management and mitigation of potential environmental impacts, including:

- Flowchart diagrams for any required processes or steps to be undertaken and provide an easy reference point for all site personnel;
- Detail the ‘how to’, ‘dos’ and ‘don’ts’ and hold points for the implementation of controls;
- Define management and mitigation measures;
- Define monitoring and reporting requirements;
- Reference to relevant checklists and forms which are fully electronic to reduce reliance on paper systems and ensure data capture.

They provide a comprehensive and informative means of communicating environmental management requirements to site personnel.

The Project Environment and Sustainability Manager will review internal hold points identified in the Procedures and if required develop forms for the release of hold points. The Procedures will be revised and updated as construction progresses and in response to any issues identified during implementation.

Additional Procedures may be developed as required during delivery of the LW. Details of initial procedures developed are provided in Table 16.

Table 16 - Aspect Specific Environmental Procedures

Document Number	Procedure title
SMCSWLWC-SYC-1NL-EM-PRO-000807	Out of Hours Work
SMCSWLWC-SYC-1NL-EM-PRO-000384	Water Management
SMCSWLWC-SYC-1NL-EM-PRO-000386	Flora and Fauna Management
SMCSWLWC-SYC-1NL-EM-PRO-000387	Spill Management
SMCSWLWC-SYC-1NL-EM-PRO-000388	Unexpected Finds Soil Contamination and Asbestos
SMCSWLWC-SYC-1NL-EM-PRO-002656-00	Aboriginal and Historic Heritage Unexpected Finds Protocol C2B
SMCSWLWC-SYC-1NL-EM-PRO-000390	Erosion and Sediment Control Management
SMCSWLWC-SYC-1NL-EM-PRO-000392	Air Quality and Dust Management
SMCSWLWC-SYC-1NL-EM-PRO-000398	Contingency Groundwater Monitoring and Management
SMCSWLWC-SYC-1NL-EM-PRO-000399	Waste Management and Recycling
SMCSWLWC-SYC-1NL-EM-PRO-000461	Spoil Classification, Reuse and Recycling
SMCSWLWC-SYC-1NL-EM-PRO-000460	New Ancillary Facility or Construction Compound Location
SMCSWLWC-SYC-1NL-TF-PRO-000511	Traffic Management Approval Procedure

5.6 Environment Management Tools

5.6.1 Site Environment Plans

Site Environment Plans (SEPs) are prepared using Systems Connect Geographic Information System (GIS). SEPs provide site-specific detail and draw the relevant and specific information from the plans, studies and procedures discussed above. The Site Environment Plans will be developed as LW progress and before the start of construction activities on a particular site. SEPs highlight environmental constraints at a worksite, and detail key elements of the site set-up including environmental controls.

SEPs are progressively updated to provide clear and practical mitigation and management measures for each specific construction worksite as works progress. Each SEP will define site boundaries and include illustrative and descriptive management and control measures, e.g. haulage routes and sensitive receivers etc., and reference relevant Procedures that provide the

comprehensive details into certain management controls/ measures in a clear step-by-step process.

Site-specific Erosion and Sedimentation Control Plans (ESCPs) and Construction Noise and Vibration Impact Statements (CNVIS) will also inform SEPs and set out additional management and control measures to be applied for activities with the potential to result in high noise generation or pollution of waters.

Indicative SEPs are provided in Appendix C5 as a reference. Additional SEPs are currently being developed for the remaining sites as details of site handovers and interface stages are obtained by Systems Connect. Indicative SEPs will not be updated in further revisions of the CEMP.

5.6.2 Environment Checklist and Forms

In addition to the Management Plans, Sub-Plans and Procedures, checklists and forms (tools) will continually be developed and implemented to assist the monitoring and record keeping requirements of the CEMP. A list of initial forms and checklists is provided below:

- Environmental Inspection Checklist
- Permit to Dewater
- Daily Site Report (Daily Diary)
- Vegetation Clearance Checklist
- Permit to Clear Land or Vegetation
- New Ancillary Facility Checklist
- Materials Tracking Form
- Unexpected Finds Record Form
- Permit to Excavate and Penetrate
- Out of Hours Works Application Form
- Noise Monitoring Form
- Permit to Enter Protected or No-Go Areas

Tools are used during construction to ensure compliance with environmental obligations and commitments. Checklists and forms are tailored specifically to the requirements of Line-wide Works. Forms are referenced in the Environmental Procedures and on the Site Environmental Plans (SEP). Tools are developed in a specific format required for the appropriate recording of monitoring data.

5.7 Integration of the EMS with Project Systems and Documentation

The EMS forms a part of the Project Management System (PMS). As such this CEMP is part of an integrated set of project management plans.

The CEMP has been developed in line with the Contract Management Plan (CMP) (SMCSWLWC-SYC-1NL-PM-PLN-000001) which is established in accordance with Systems Connect's "One HSE Culture" framework and is the key document that integrates Systems Connect Policy requirements and Client requirements.

The management Plans (including the CEMP) used on the project have been developed to meet the requirements of the Contract and specifically Schedule C1, SWTC, Appendix F2 – Project Administration and those used across CPB Contractors and UGL Engineering. The CMP provides an overview of the project and the management system. The structure of the plans required for this project is shown in Appendix A of the Contract Management Plan. The specific linkages that exist between the Project Management Plans are also addressed in Section 3.4 of the CMP.

5.8 Environmental Monitoring

The Monitoring, Inspections, Reporting, Review and Audit Schedule (MIRRA) in Appendix C6 MIRRA Schedule provides an overview of actions that will be taken to monitor and review environmental performance. This will be implemented as detailed in Element 3: and Element 12:.

Details of Construction Monitoring Programs and aspect specific monitoring are also included within each relevant Plan and Sub-Plan and associated aspect specific Procedures.

The results of any monitoring undertaken by Systems Connect as a requirement of an EPL will be published on the project website in line with the Community Communications Strategy (SMCSWLWC-SYC-1NL-CL-PLN-000027).

5.9 Environment, Sustainability and the Design Development Process

Workshops were held during tender development with the design and construction teams to ensure that environmental and sustainability requirements were identified, considered and fully integrated into the tender design and construction methodology.

Technical studies will inform design development and the LW Environment and Sustainability team will provide input into requirements and environmental risk identification and design development at all phases.

Value Engineering Workshops will be attended by representatives from the LW Environment and Sustainability team and will include consideration of environment and sustainability requirements. Initiatives will be incorporated into the design where practicable. Any additional initiatives and compliance with environment and sustainability requirements will be documented within the Design Reports.

An Improvements and Innovation Register has been developed for LW project to capture innovation ideas. A Continual Improvement Working Group (CIWG) has been created, including representatives from Sydney Metro. Regular meetings are scheduled to review and progress innovation ideas to implementation. There is also a monthly ‘Da Vinci Award’ to recognise the best the best idea each month.

5.10 Consideration of Environment and Sustainability in procurement

As set out in Part B – Element 8, Subcontractors will be provided with the Subcontractor Requirements which will address environmental and sustainability targets and requirements including:

- An overview of Systems Connect EMS for the LW including Environment and Sustainability Policies and documentation
- Key environmental risk identification methodology
- Sustainability initiatives
- Systems Connect and subcontractor roles and responsibilities including the requirement for all subcontractors to work under Systems Connect EMS
- Reporting requirements, including the requirement to immediately report any incidents to Systems Connect and monthly reporting of environment and sustainability data, including National Greenhouse and Energy Reporting (NGER) data.

Further detail on environment and sustainability consideration in procurement is provided in Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024).

6. Environmental Aspect and Impact Management

6.1 Key Environmental Aspects and Impacts

As outlined in sections 3.3, delivery of LW will occur in a staged manner. This Section of the CEMP has been developed to ensure that:

- All key environmental aspects are identified, and potential impacts are addressed across the staging of delivery in accordance with the staging reports.
- That there is a clear linkage between the aspects and impacts and the EMS documents used to manage and mitigate potential and actual harm to the environment and the community during delivery of LW.
- Address other requirements not covered under the key environmental aspects management.

Appropriate management measures have been identified through the review and analysis of Compliance documentation including; Planning Approval documents, contractual documents, community and legal compliance requirements relating to the project, the Project Preliminary Environmental Risk Assessment and professional experience.

Table 17 provides a summary of key environmental aspects and risks associated with LW Works between C2B, and links the primary EMS documents, which outline how SC will manage each aspect. In addition to the primary EMS documents identified below, the Preliminary Risk Assessment within Appendix C3 evaluates all potential risks associated with each environmental aspect in detail.

Table 17 - Environmental Aspects and associated Environmental Management requirements

Environmental Hazards (Aspect)	Associated Significant Environmental Impact (Risk)	EMS Document (Control /Mitigation measure)
Air Quality	Dust and air pollution affecting public health, property, native species and visibility on surrounding roads.	Air Quality Management Sub-Plan • Air Quality and Dust Management Procedure
Soil and Water	Soil contamination; Pollution of water.	Soil, Water and Groundwater Management Sub-Plan • Erosion and Sediment Control Management Procedure • Water Management Procedure • Unexpected Finds Soil Contamination and Asbestos Procedure • Spill Management Procedure
Groundwater	Damage to groundwater dependent ecosystems; Contamination of Groundwater.	Soil, Water and Groundwater Management Sub-Plan • Contingency Groundwater Monitoring and Management Procedure
Heritage and Aboriginal Heritage	Loss or damage to Heritage items or areas	Heritage Management Sub-Plan • Unexpected Finds Heritage and Human Remains Procedure AMS – for works in Heritage precinct
Noise and Vibration	Reduced wellbeing in surrounding receivers; Impacting surrounding commercial activities causing loss of business. Damage to buildings or other structures.	Noise and Vibration Management Sub-Plan • Out of Hours Works Procedure
Flora, Fauna and Biodiversity	Loss of or harm to flora or fauna and habitats.	Flora, Fauna and Biodiversity Management Sub-Plan

Environmental Hazards (Aspect)	Associated Significant Environmental Impact (Risk)	EMS Document (Control /Mitigation measure)
		• Flora and Fauna Unexpected Finds Procedure
Waste and Recycling	Inadequate waste processing and disposal causing environmental harm and potential harm to public health; Depletion of raw materials.	Waste, Recycling and Spoil Management Sub-Plan • Waste Management and Recycling Procedure
Spoil	Spoil generation; Air, water and land pollution.	Waste, Recycling and Spoil Management Sub-Plan • Spoil Classification, Reuse and Recycling Procedure
Traffic Management	Disruption to public roads traffic; Damage to property, structures or members of the public getting injured.	Construction Traffic Management Plan
Visual Amenity	Light spill affecting surrounding receivers; Visual sensitivity.	Visual Amenity Management Sub-Plan
Ancillary Facility	Affecting land use in the surroundings; Harm to flora and fauna; Damage to heritage.	Ancillary Facility Management Plan • New Ancillary Facility or Construction Compound Location Procedure

6.2 Standard Construction Hours

Construction activities, as defined in the Planning Approval, are to be undertaken during the following standard construction hours:

Table 18 - Standard construction hours

Planning Approval	Standard Construction Hours
CSSI 8256 (S2B)	• 7:00am to 6:00pm Mondays to Fridays • 8:00am to 6:00pm Saturdays • at no time on Sundays or public holidays

High noise intensive works under CSSI 8256 (S2B), are only allowed between the following periods (except as permitted by an EPL):

- 8:00am – 6:00pm Monday to Friday;
- 8:00am – 1:00pm Saturdays;
- In continuous blocks not exceeding 3 hours each with minimum respite from those activities and Works of not less than one (1) hour between each block.

Any work required outside of the standard construction hours must have an Out of Hours Work (OOHW) Approval. Further details about management of OOHW are provided in the Noise and Vibration Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032).

Works outside of standard construction hours might also be approved by the EPA where an EPL is in place.

6.3 Impacts on Property

The environmental aspects and impacts associated with the LW between C2B, as set out in Table 17, have the potential to impact private or public property. All aspects and impacts will be managed

in accordance with the control / mitigation measures summarised in Table 17 in order to eliminate or minimise any potential impacts on property and to prevent any damage.

Section 7.1 of the CNVMP also outlines standard noise and vibration mitigation measures. Pre-construction condition surveys of vibration sensitive buildings may be required where there is a potential for construction activities to cause cosmetic or structural damage. At locations where there are high-risk receptors, such as the heritage buildings listed in Appendix A of the CNVMP, vibration monitoring should be conducted during the activities causing vibration.

Minimum working distances for vibration intensive activities are outlined in Section 7.3 of the CNVMP. If vibration intensive activities do become necessary within the minimum working distances, then investigation of alternative construction methodologies will be undertaken. If an alternative methodology is not feasible, then a dilapidation survey of sensitive structures within the minimum working distance will be undertaken.

Road Dilapidation Reports will be submitted, where necessary, in accordance with Condition E90 of the Construction Traffic Management Framework (CTMF).

6.4 Damage or Disruption to Utilities and Services

Construction activities have the potential to impact upon existing utilities, services and other infrastructure assets. Within and around the worksites these may include in-ground services such as water, electricity, telecommunications and drainage services, and railway infrastructure.

Systems Connect has in place a suite of management procedures, plans and tools for managing and controlling activities which have potential to damage, disrupt or otherwise impact upon utilities, services and similar assets. These are aimed at protecting both assets and people, and include:

- Procedures for managing work on or around services
- Procedures for working in and around mobile plant
- Construction Area Plans
- Work Packs
- Permit to Excavate or Penetrate
- Safe Work Method Statements

The above management documents and tools incorporate processes for:

- Identifying and documenting utilities, services and other potentially affected infrastructure
- Contacting and consulting with the owner or provider of any such assets that may be affected
- Determining and implementing all requirements for safely accessing, diverting and/or protecting such assets as applicable

The cost of all arrangement and tasks associated with identifying, accessing, diverting, protecting and safely working on and around all utilities, services and other infrastructure assets will be borne by Systems Connect.

If any disruptions to services become necessary, then Systems Connect will ensure that any disruption is minimised and will advise any affected local residents and businesses in advance of any planned disruption.

Any excavations adjacent to RMS road infrastructure will meet the requirements of RMS Technical Direction (GTD 2012/0001) Excavation adjacent to RMS infrastructure.

Management of Utilities is addressed further in the project Utilities Management Strategy (SMCSWLWC-SYC-1NL-UT-MST-000402), developed to address CSSI 8256 CoA E71.

6.5 Stakeholder and Community Consultation

The Community Communications Strategy (SMCSWLWC-SYC-1NL-CL-PLN-000027) provides an overview of stakeholder communications and liaison. Generally, it covers the following aspects:

- Procedures, processes and strategies for the management of community liaison issues and dealing with stakeholders;

- Community liaison reporting and process;
- Development and implementation of community and consultation tools;
- Community and stakeholder consultation and the procedures, processes and timeframes for undertaking consultation;
- Processes for the management of enquiries and complaints;
- Processes for crisis management.

This strategy sits under the Sydney Metro Overarching Community Communications Strategy (SMCSWLWC-SMD-1NL-CL-PLN-000362).

The Environment team will work closely with the Community and Stakeholder Relations Manager to assist with the following:

- Responding to environmental complaints;
- Inform whenever construction activities (e.g. OOH, high noise, traffic changes, etc.) might affect properties, residences and business requiring previous consultation and notification;
- Identify measures to minimise potential impacts on sensitive receivers near the construction area, within the scope of this CEMP and associated Plans and Sub-Plans.

6.6 Reinstatement

Upon completion of LW, the worksites will be handed over to Sydney Metro to allow for operation stage of SMCSW. Details about site restoration and handover are provided in the Visual Amenity Management Sub-Plan (SCLWW-SYC-1NL-PM-PLN-000376).

If trees are required to be removed for the scope of LW, a Tree Report will be prepared by a suitably qualified arborist and appropriate mitigation measures and tree replacement will be implemented as defined in the relevant Planning Approval requirements. Further details relating to the management and removal of trees are provided in the Flora, Fauna and Biodiversity Management Sub-Plan (SMCSWLWC-SYC-CSW-EM-PLN-002579).

PART B - IMPLEMENTATION

Elements and Expectations

Part B of this Plan explains how the Systems Connect EMS will be implemented. It is based on a set of 12 Elements that describe the requirements for environmental management in accordance with IS 14001:2015. Compliance with all elements of the EMS will minimise the likelihood of causing unauthorised environmental harm and maximise the uptake of opportunities to reduce environmental impact in delivering LW.

Part B contains the following:

Environmental Elements and Expectations: These describe what is required of Systems Connect to implement the objectives of the Environment and Sustainability Policy Statement:

- **Element** Key aspects for managing this function in delivering the LW
- **Expectation** The outcomes achieved as part of each Element.

Requirements: These are the specific actions required to demonstrate compliance with the Elements and Expectations.

Responsibility and Key Contributor: Designation of responsibility for achieving compliance with the stated Expectation. Key contributors assist/contribute to achieving compliance.

Deliverables: Tangible outcomes produced to demonstrate compliance with the environmental Elements and Expectations.

Element 1: Leadership, Accountability and Culture

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
1.1 Environmental accountabilities, roles and responsibilities for managers, staff, employees and subcontractors are clearly defined, documented and communicated	**Roles and Responsibilities** Environmental responsibilities are included in all Position Descriptions. Roles that carry specific environmental accountabilities (e.g. those that supervise or manage work with specific environmental risks) are included in Section 4. The environmental responsibilities contained in Position Descriptions are communicated to each person by their immediate supervisor upon commencing in their role.	**Project Director** **HR Manager** Environment and Sustainability Manager Relevant functional managers	Position Descriptions
1.2 Environmental leadership and commitment is demonstrated through measurable participation in environmental management	**Participation and Measurement** All personnel in leadership roles on the project participate in environmental management activities, including observations, incident reviews and HSE committee meetings. In addition, project management will: • Regularly review environmental performance against project KPIs and raise corrective actions to maintain or improve environmental performance as necessary; • Address pertinent environmental matters at communication forums.	**Project Director** Functional managers Supervisory staff Environment Manager	Measurement system output to include: Observation records, Incident reviews, HSE Committee meeting attendance (minutes), delivering toolbox talks
1.3 Environmental expectations are clearly defined with appropriate reward and disciplinary processes in place.	**Environmental Policy** The Systems Connect Environmental and Sustainability Policy (Appendix C4) will be communicated in project inductions and prominently displayed at the Project Office. The Project Director and all personnel in leadership roles will participate in environmental management activities, including toolbox talks, and raising any environmental issues observed during inspections and incident reviews.	**Project Director** Environment and Sustainability Manager Sustainability Manager Construction Manager Senior Project Managers Relevant functional managers	Environmental policy displayed and communicated in site inductions Observation records Incident reviews Delivering toolbox talks

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	Project Environmental Procedures Environmental Procedures are as detailed in Section 5.5. The procedures will be communicated to the Systems Connect workforce and will be reviewed as set out in this CEMP and the relevant Plans and Sub-Plans. Any person who fails to undertake works in accordance with the procedures will be managed in accordance with Systems Connect requirements for counselling, discipline and, if needed, termination.	**All personnel**	Environmental procedures
	Managing Personal Performance Environmental performance objectives will be set for individuals with environmental leadership roles during the performance and development review process. Performance and development reviews will be undertaken every six months and include an assessment of performance against any individual environmental goals in addition to project environmental objectives and targets.	**Human Resources (HR) Manager** Environment and Sustainability Manager	Performance Reviews
	Performance Targets and objectives Environmental performance targets for the project have been identified in Section 3.8 of this document and in relevant Procedures, Sub-Plans and Plans.	**Project Director** Environment and Sustainability Manager	Targets and Objectives communicated in site inductions Monthly reports
	Managing Personal Performance Environmental performance goals will be set and reviewed for individuals with environmental leadership roles (refer to Element 1.1 above) during the performance and development review process.	**Human Resources Manager** **Environment and Sustainability Manager** Functional Managers	Performance and development reviews

Element 2: Planning

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
2.1 Adequate resources are provided to effectively implement the EMP	**Resources** The project budget includes sufficient allowances to implement the CEMP, including people, technical environmental expertise, equipment, materials, training, plant, and infrastructure. The Environment and Sustainability Manager is consulted in setting and revising (forecasting) the project budget. Sufficient people are appointed to the project to implement the CEMP.	**Project Director** Commercial Manager Environment and Sustainability Manager HR Manager	Project budget Project forecasts Organisational structure Training matrix
	Environmental Monitoring The Environment Manager is accountable for developing the Environmental Monitoring Schedule(s) (MIRRA) prior to any works commencing on the project. The Environment and Sustainability Manager will identify all equipment, equipment maintenance (including calibration) and personnel required to implement the schedule and ensure necessary allowances in the project budget and forecasts. All environmental monitoring on the project is planned according to the requirements of the Knowledge document Environmental Monitoring and is defined where relevant in the Environmental Sub-Plans and within Appendix C6 of this Plan.	**Environment and Sustainability Manager**	Environmental Monitoring Schedule(s) Environmental Sub-Plans Environmental input into Project budget Project forecasts
2.2 Systems are defined and established	**Define and set up IT Systems** Applications required to management environment on the project are defined and established prior to works commencing. Systems to be used include: • **Synergy** - Reporting and recording all environmental incidents, environmental issues, non-compliances, audit results and corrective actions • **Synergy** - To schedule all inspections and environmental monitoring activities and track completion of scheduled activities • **SHE Risk Register** – To manage environmental risk registers • **JD Edwards** (NGER module) to capture energy use and emissions, and water and waste data • **Environmental Monitoring Spreadsheets**– To capture and analyze all environmental monitoring data. • **Teambinder -** Project Document Management System	**SHES Manager Environment and Sustainability Manager**	Applicable business systems

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
2.3	Environmental Planning is managed to meet with project delivery timeframes	**Identify Significant Environmental Hazards (SEH)** Significant environmental hazards (aspects and Impacts) relating to the projects activities have been identified through the review and analysis of environmental reports, contractual documents, and community and legal compliance requirements relating to the project and supported by professional experience of the assessor. The project SEH list in Section 6 is reviewed by the Environment and Sustainability Manager at a minimum of 6 monthly intervals. The review should be supported by the current environmental risk and opportunities identification and analysis assessment and project environmental performance.	**Environment and Sustainability Manager**	Significant Environmental Hazards and Environmental Sub-Plans listed in Part A CEMP Sub-Plans
		Environmental Sub-Plans and Procedures Environmental Sub-Plans and Procedures are reviewed for on-going relevance and accuracy by the Environment and Sustainability Manager. The frequency of review is triggered by incident history, changes to the project, including contract variations, and management review requirements. Reviews are documented, and records retained in the project document management system.	**Environment Manager**	Reviews of Sub-Plans, Plans and Procedures
		Approvals delivery Strategy The Systems Connect Planning Approval Delivery Strategy has been developed to address both the staging of construction and Planning Approval obligations. This CEMP, Plans, Sub-Plans, environmental Procedures and tools address the minimum requirements of the staging report. This CEMP will be updated as required to support delivery of LW Portions by Systems Connect. Appendix C7 Planning Approval Document Delivery Strategy details the planned delivery strategy.	**Environment Manager**	Reviews and updates of CEMP, environmental Sub-Plans and Procedures
2.4	2.4 Appropriate management forums specific to environment, planning and sustainability are established	**Environment and Planning Co-ordination Meetings** Environment and Planning Co-ordination meetings attended by representatives from the Systems Connect Approvals, Environment and Sustainability Team, ER, IC and representatives from Sydney Metro will be held fortnightly (unless otherwise agreed) to discuss: • Environment Planning Approval documentation and approvals progress • Any observations, issues and trends arising from the ER Inspections (refer to Element 3.5) • The management of any environmental complaints	**Environment and Sustainability Manager** *Project Environment and Sustainability Manager* *Project Sustainability Manager* *Environmental Representative*	Meeting Minutes

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	• Any non-compliance notices (refer to Element 3.5) • Upcoming works. This meeting is to be an 'open' forum for discussions of environment and planning related items. Comments made by SM are for information only. Only the Principal's Representative or the ER can give directions and any directions are to be provided in writing in accordance with the D&C Deed. **Working Groups** Systems Connect will also hold separate forums on the management review timeframes. These forums will be held on a needs basis in planning and delivering the LW. of key environmental issues such as contamination, heritage and construction noise and vibration. Systems Connect will invite SM, the ER, IC and Systems Connect's specialist environmental consultants to attend these forums. The purpose of these forums is to provide a proactive and comprehensive understanding of issues.	Representatives from SM	

Element 3: Legal and Compliance Requirements

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
3.1 Relevant legal, contractual and other requirements are identified and maintained	**Identifying Environmental Obligations** Requirements are identified in Section 3 of the CEMP, Plans and Sub-Plans and Procedures. A Compliance Matrix is included in each plan. The compliance matrix identifies where requirements are addressed.	Environment and Sustainability Manager Project Director	CEMP Plans & Sub-Plans
3.2 All necessary environmental approvals are obtained prior to commencing relevant works and surrendered on completion	**Environment and Planning Approvals Delivery Strategy** Strategy for efficient and effective delivery of required approvals is detailed in Section 3.	Environment and Sustainability Manager Engineers Project Director	Environmental approvals in program
3.3 Work is planned and executed to ensure compliance	**Planning for Compliance** The Environment and Sustainability Manager (or delegate) is consulted upon commencement of development of all Construction Area Plans (CAPs) and Work Packs, and throughout their development. All controls necessary to ensure compliance are included in the CAPs and Work Packs and in the Environmental Sub-Plans and Procedures. CAP's and Work Packs should include SEPs that clearly show the controls to be implemented. The project program is updated to include new approvals determined to be necessary following the review of work plans. CAPs and Work Packs are reviewed by the Environment and Sustainability Manager (or delegate) prior to the commencement of works described in their scope. Section 5 provides further details on how environmental management requirements are imbedded into construction management documentation.	**Construction Manager** **Senior Project Managers** Supervisors Engineers Environment and Sustainability Manager Engineering Manager	Reviewed WAPs and Work Packs by Project Environmental Rep Update project program
3.4 Environment and sustainability Monitoring is performed to establish baseline data	**Environmental and Sustainability Monitoring** Environmental and sustainability monitoring is carried out to establish pre-construction benchmarks, confirm compliance with the conditions of environmental approvals and laws, and to provide early indication of potential adverse impacts to the environment or community. The Project Environment and Sustainability Manager is accountable for managing	**Project Environment and Sustainability Manager** **Project Sustainability Manager**	Environmental Monitoring Schedule Monitoring records Calibration records Corrective actions

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	and to ensure compliance is maintained	environmental monitoring as required under this Plan, Sub-Plans and the environmental Procedures. Results of environmental and sustainability monitoring will be used for: • The evaluation of performance relative to legal, regulatory, contract, permit, licence and other commitments • The prompt identification and correction of incidents or possible incidents • Providing feedback on this CEMP and associated plans, including progress against targets • Providing the basis of internal and external reporting. An indicative summary of environmental and sustainability monitoring to be carried out for the LW is included in Appendix C6 MIRRA Schedule. All monitoring is planned and conducted according to the requirements of the procedure Environmental Monitoring and as detailed in the respective Plans and Sub-Plans. Environmental monitoring results are interpreted to identify actual and potential non-compliances and events that may result in nuisance, environmental harm, and unacceptable loss of amenity or community complaints. Corrective actions are taken immediately or are raised and managed using Synergy.	**Environmental Coordinators**	
3.5	Inspections, observations and monitoring are performed to ensure compliance is maintained	**Implementing Controls** Controls required to achieve compliance, as detailed in the CAPs and Work Packs, will be implemented before relevant works commence. **Hold Points** SEPs and Procedures will clearly identify all 'Hold Points' established to ensure all required approvals, management and mitigation are in place and where relevant sign-off is required prior to works/ actions commencing or recommencing. The Environmental compliance matrix contains an explanation, or link to EMS documents or an explanation of how compliance with each listed requirement is to be achieved and how the project will regularly demonstrate compliance with the requirement (if relevant).	**Supervisors** Engineers Environment and Sustainability Manager	Engineered (physical) and administrative controls (e.g. procedures, forms, training) in place

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	The following activities will be undertaken to monitor compliance throughout the project: • Inspections and Observations • Daily inspections • Weekly inspections • Start up and shout down inspections • ER inspections • EPA and DPE inspections Controls are to be inspected regularly to ensure their ongoing suitability and effectiveness. Inspections and observations are planned and conducted according to the requirements of the Workplace Hazard Inspections and Observations Procedures. Inspections and observations are scheduled using Synergy and detailed in Appendix C6. The outcomes of inspections are captured on the inspection checklists. Corrective actions are raised, tracked and closed out in the Synergy – Action Plan Module or through the inspection records for all controls found to be inadequate.	**Supervisors** Engineers Environment and Sustainability Manager Inspection attendees	Observation records Inspection schedules Inspection checklists Corrective actions in Synergy – Action Plan Module or inspection records
3.6 Non-compliance Reporting	**Environmental or sustainability non-compliance** An environmental or sustainability non-compliance can generally be defined as a failure to comply with: • Relevant environmental legislation • Project Planning Approval • Environment Protection Licence (where applicable) • Deed • Relevant Environmental Management Plans/Sub-Plans All non-compliances are to be reported as per the Sydney Metro Environment Incident and Non-compliance Reporting Procedure. Where a non-compliance is raised as part of an audit, incident or complaint investigation, a separate non-compliance report is still required.. **Corrective and Preventative Actions** Corrective actions will be identified as follows:	**Systems and Safety Assurance Manager** **Environment and Sustainability Manager** All personnel	Inspection records Audit reports Non-compliance reports Incident reports

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	• Where an issue is identified and raised, the Environment and Sustainability Manager or delegate will liaise with the appropriate Systems Connect personnel or qualified person(s) to determine the most appropriate corrective action to implement. • Where assessed by Environment and Sustainability Manager to be appropriate, the corrective action will be actioned through Synergy as an Event. Preventive actions will be identified as follows: – Relevant incidents, complaints, audit findings, environmental issues and non-compliances are discussed at the Environment and Sustainability Coordination Meetings (see Element 2.4). – Trends relating to environmental incidents and non-compliance findings are reviewed at these meetings to identify any reoccurring issues that are indicative of the need to take preventative action. Any member of the Systems Connect team, including subcontractors can contribute and provide suggestion to any required or appropriate preventative action. • Where assessed by Environment and Sustainability Manager as necessary, a preventive action will be raised and action undertaken through Synergy as an Event. **Actions for any Environmental Event must:** • Limit impacts as far as is reasonably practicable; • Eliminate risk where practicable; • Where it is not practicable to eliminate the risk, follow the hierarchy of controls; • Address root causes and contributing factors; • Be prioritised based on risk. Actions are allocated to a person who will take accountability for ensuring it is carried out within a timely manner and completed by the due date. Non-compliance and incident events are considered open if any of the associated actions are open.		
	Reporting Non-Compliances Non-compliances will be recorded and reported. This includes events involving an action being taken against the project by a Regulator raised as the result of an identified issue from an environmental inspection, complaint investigation or audit. If a Non-compliance is identified then it must be raised using the SM-17-00000105 Environmental Incident and Non-compliance Notification Report Form within 48 hours by the party responsible for the breach.	**Environment and Sustainability Manager** **Quality Manager** Superintendent Site supervisors Engineers	Event reports Incident reports

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	Where considered appropriate, by agreement of Systems Connect, ER, IC and SM representatives, Environmental Issues identified during an environment inspection, complaint or incident investigation or audit will be closed out as part of the inspection, investigation or audit reporting process. Non-compliances will be documented as an Event in Synergy, which details the following information: • Date raised and by whom • Description of the system deficiency (non-compliance) • Cause and proposed remedy and action to prevent recurrence • Reinspection information • Date closed and by whom Details included in non-compliance reports will be specific to the event that has taken place. In the event that repetitive observations are made i.e. if non-corrected low risk site improvement actions are not corrected within the agreed timing for actions (for more than a month in most cases) the Environment and Sustainability Manager and/or ER will request that an Environmental Issue or Non-compliance to be raised. In the event that the ER requested Environmental Issue/Non-compliance is disputed, the ER may raise a Correct Action Request (CAR) for action by Systems Connect. Environmental related non-compliances are raised with the Environment and Sustainability Manager to determine appropriate actions and dates. On completion of agreed actions, the Environment and Sustainability Manager shall sign-off the Event Report to signify close-out and provide a copy to SM. Any changes to operations or practices resulting from actions are to be communicated to employees and sub-constructors as required. **SM Raised Non-compliance, Corrective Action and Preventative Action** SM may raise an Environmental Non-compliance or CAR, however before formal issue Systems Connect and SM will meet and discuss the issue, whereby Systems Connect can elect to address the proposed issue. Upon issue, Systems Connect must address the non-compliance or corrective action under its own system.	ER	
3.7 All energy and greenhouse data are collected and entered into JDE	**Greenhouse and Energy** All subcontractor fuel use to be collated and entered into the JDE NGER Module at the site level.	**Environment and Sustainability Manager** Commercial Manager	NGER subcontractor register NGER data checklist

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
		Projects will track subcontractor energy reporting. All relevant records relating to the reporting of NGER data will be retained with project records for seven years. Any NGER data to be reported to the Client will be extracted from JDE using the Business Intelligence Tool. All energy (fuels, oils, greases, gases, electricity, solvents) purchased by Systems Connect and processed through JDE are captured centrally at the Group level.	Project Director	Completed NGER subcontractor records Monthly HSE Statistical reports
3.8	Personnel on the site have access to current versions of relevant legislation, standards and codes of practice	**Updates to Legislation, Standards and Codes of Practice** Access to all relevant legislation will be available to personnel via EnviroLaw or other online resources (e.g. state or Commonwealth government websites or www.austlii.edu.au). Updates to legislation, standards and codes of practice will be reviewed to determine relevance. Work practices, the environmental Plans and Sub-Plans, and Environmental Obligations Register will be altered where appropriate to ensure compliance and all affected personnel informed in a timely manner. Regulatory approvals will be obtained or amended as necessary, work practices altered to ensure compliance and all affected personnel informed in a timely manner.	**Business Unit** **Environmental Representative** **Environment and Sustainability Manager**	Updates distributed
3.9	Compliance tracking and reporting is performed as per contract requirements	**Compliance Tracking and Reporting** Tracking of compliance against planning, licensing and permit conditions held by Systems Connect will be undertaken in accordance with SM's Compliance requirements. Sydney Metro has developed a Compliance Tracking Report to incorporate the LW under CSSI 7400 and CSSI 8256. Compliance reporting will entail population (by Systems Connect) of SM's Compliance Tracking Report template each reporting period in accordance with Sydney Metro Compliance Tracking Program / Environmental Audit Program. This completed template will be forwarded to the ER for endorsement (and submission to the Director General) through the project Document Management System. In accordance with the contract requirements, LW will provide the SM with: (A) all the information, documents, details and data relating to the LW's Activities to enable the SM to comply with CoA A30 (CSSI 7400) and A32 (CSSI 8256); (B) participate in any activities necessary under the Compliance Tracking Program.	**Environment and Sustainability Manager**	Compliance Tracking Report Pre-Construction Compliance Report

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	A Pre-Construction Compliance Report will be populated and submitted to Sydney Metro for submission to the Secretary at least one month before construction. This report will provide details about how the CoA that must be addressed before commencement of construction have been complied with as well as the construction commencement start date. Construction is not to commence until the Pre-Construction Compliance Report has been submitted to the Secretary.		

Element 4: Risk and Opportunity Management

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
4.1 Systematic processes are defined and implemented for identifying environmental risks and opportunities at all stages of the Project	**Identifying Environmental Risks** The risk management process is outlined in Section 5.2. Environmental risks associated with activities, products and services of the project are identified, recorded and tracked in the Project Principal Risk register. The Risk Register is maintained as part of the EMS. Environmental risks are considered during all subsequent project risk assessments as per the Contract Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000001). This includes: • Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021) • The Principal Risk Assessment conducted at bid stage for major tangible risks; • Safety/Environment-in-Design workshops conducted throughout the project; • Construction Area Plan (CAP) risk assessments; • Work Pack risk assessments; • Project Prestart Meeting. **Sub-Plans and Aspect Specific Management Plans and Procedures** Sub-Plans and/or Aspect Specific Management Plans and Procedures have been prepared to address the project environmental impacts as detailed in Sections 5.4 and 5.5. These Plans and procedures have been developed based on the Initial Environmental Risk Assessment attached in Appendix C3 Environmental Risk Register, and to address requirements of the Staging Reports developed for delivery under the Planning Approval **Construction Area Plans, Work Packs and SWMS** Environmental risks and controls associated with a work areas or activity are drawn down from Plans and Procedures in the CAPS, WPKs and SWMS and reviewed prior to implementation. Environmental risks and opportunities are considered during all subsequent project risk assessments as detailed in Section 5.2.	**Project Director** **Risk and Opportunities Manager (R&O)** Environment Manager Engineering Manager Engineers Supervisors	Environmental Risk and Opportunity Register Construction Area Plan Risk Assessments Work Pack risk assessments Project Prestart Meeting
4.2 Identified risks and opportunities are analysed and evaluated according to agreed criteria	**Analysing Environmental Risks** Each environmental risk and opportunity will be evaluated and assigned a rating which is determined using the consequence and likelihood criteria in the Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021). The influence of existing controls is considered in determining the risk rating. For each environmental risk: • An owner is assigned by the Project Director,	**Project Director** **Risk and Opportunities Manager (R&O)** Risk owners	Environmental Risk and Opportunity Register Work Area Plan risk assessments Project Prestart Meeting

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	and recorded in a risk register	• Existing controls are recorded, including the owner of that control, and • The residual risk will be evaluated. Advice is sought from the Environment and Sustainability Manager as necessary by the project team to ensure CAP, Work Pack and SEP risk assessments are as informed and accurate as possible.	Environment and Sustainability Manager Engineers	
4.3	Environmental controls appropriate to the level of risk are identified, documented and implemented	**Identifying Adequate Controls** If the risk rating returns a result of 'medium' or above, then additional controls sufficient to reduce the risk rating to 'low' or an alternative acceptable level using cost effective designs and engineering and/or administrative controls are to be utilised. Residual risks with a high or extreme risk rating will be considered 'significant' and must be controlled using appropriate systems of work, including Environmental Sub-Plans and project work procedure, along with available "hard controls". Approval to proceed is required prior to commencing. Accountability for the implementation of each control is assigned in the respective Sub-Plan, Procedure and SEPs. Timing is set for its implementation as appropriate. Controls are selected in consultation with the Environment and Sustainability Manager to achieve the following, in order of preference: • Eliminate the risk by not performing the relevant activity • Substitute by performing the relevant activity in a way that presents a lower risk • Implement physical (engineered) controls (e.g. sediment basins, check dams) • Implement administrative controls (e.g. procedures, training, inspections).	**Risk and Opportunities Manager (R&O)** **Risk owners** Environment and Sustainability Manager Project Director Project Engineers	Controls agreed (engineered or administrative)
		Implementing Controls Controls are implemented by the accountable person as specified in the Sub-Plan, Procedure or SEP by the due date. No activity is commenced until all relevant controls are implemented.	**Risk owners**	Controls in place (engineered or administrative)
4.4	Feasible opportunities are implemented	**Implementing Opportunities** Opportunities identified and for which a business case has been developed, are submitted to the appropriate member of the project leadership team for approval. Once approved, accountability for implementation of the opportunity is assigned and the opportunity is implemented. Environmental and cost benefits are recorded and reported in monthly reporting.	**Project Director** **Risk and Opportunities Manager (R&O)** Opportunity Owner	Monthly reports Case studies
4.5	Identified environmental risks and controls are	**Communications in line with Construction Planning** The environmental risks, controls and accountabilities identified are communicated to all relevant personnel. This is achieved through the preparation and communication of the	**Project Director** Engineers Environment and Sustainability Manager	Toolbox talk content and attendee records Pre-start meeting content

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	communicated to all relevant personnel	construction methodology, CAPs, Work Packs, SEPs, the conduct of Safety/Environment-in-Design workshops.		Records of communications and meetings
		HSE Communications Environmental risks, controls and accountabilities are also communicated through delivery of HSE communications, including HSE Committee meetings, toolbox talks and pre-start meetings.	**Engineers** Supervisors Environment and Sustainability Manager Project Director Safety Manager	Site induction content Toolbox talk content and attendee records Pre-start meeting content Records of communications and meetings
		Communication through Training Nominated administrative controls, including procedures and training, will be communicated through the delivery of training in their requirements. The planning and delivery of this training is provided according to the requirements of Workforce Development and Industry Participation Plan (SMCSWLWC-SYC-1NL-PM-PLN-000028).	**Environment and Sustainability Manager** HR Manager	Training schedule Training matrix Training records
4.6	Regular inspections and monitoring are conducted to check effectiveness of controls	**Inspections, Observations and Monitoring** The processes for inspections, observations and monitoring are described in Section 3, the relevant Sub-Plans and detailed in Appendix C6.	**Environment and Sustainability Manager** Project Director Engineers Supervisors	Observation records Inspection schedules Inspection checklists Corrective actions in Synergy
4.7	Environmental risks and controls are regularly reviewed.	**Risk Review** The relevance and adequacy of environmental risks and controls identified in this CEMP, the Principal Risk Assessment, CAP and Work Pack risk assessments are reviewed and updated according to Contract Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000001).	**Project Director** **Risk and Opportunities Manager (R&O)** Environment and Sustainability Manager Engineers	Environmental Risk Register Updated risk registers in ARM, CAPs and Work Packs

Element 5: Change Management

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
5.1 Changes to the design re assessed	**Design Changes** Scope changes might occur during the delivery of LW. This section has been prepared to address this additional scope of work without the need for additional updates. During delivery, Systems Connect will assess the consistency of design and or construction methodology changes with the Project Planning Approval in accordance with: • Section 115ZI of the EP&A Act in consultation with SM and the ER. • Applicable Planning Approval conditions for the scope of works at each stage. **Consistency Assessments** will be prepared in accordance with Sydney Metro Planning Approval Consistency Assessment. Once Consistency Assessments are complete, they will be submitted to SM for ER review under Project Planning. SM will provide copies of approved assessments to the ER and Systems Connect. If required, this Plan or other relevant environmental and planning documents will be revised to incorporate additional commitments or mitigation measures and the ER will review and endorse these changes in accordance with the project. A register of all design changes approved for implementation on the LW will be maintained by SM with input from Systems Connect. SM is responsible for assessing and obtaining any necessary approvals for changes it instigates unless otherwise specified in the Modifications.	**Engineering Manager** **Design Team Manager** **Environment and Sustainability Manager** Sustainability Manager Construction Manager ER SM	Consistency Assessment
5.2 Changes to planned operations that have potential environmental consequences are identified	**Identifying Change** Personnel promptly report any ‘medium’ or ‘major’ changes that could affect the environment and/or community A ‘medium’ or ‘major’ change could result from a change to design, plant (fixed and mobile), systems, personnel and work methods such that the absence of a considered review could compromise the project’s ability to comply with its obligations and/or result in an inadequate range of controls which could lead to an incident or result in community nuisance. A ‘medium’ change is one which includes permanent changes to Work Pack methodology or work conditions. A ‘major’ change is one which is site-wide or requires a revision of CAP’s. Personnel have received appropriate training to identify changes and apply change management processes. This includes all supervisory staff being informed of the need to have changes approved prior to commencing relevant works.	**Project Director** Environment and Sustainability Manager Engineering Manager Engineers Supervisors	Change Requests Training matrix Training records

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
5.3 Risks associated with identified changes are assessed and controlled before changes are implemented	**Risks Associated with Change** All proposed changes are documented, including the assessment of risks relating to the change. Key personnel affected by the change are involved in the risk assessment. All changes are requested or sponsored by a supervisor or manager, who then becomes the change owner. Input from environmental personnel is sought as necessary. The approach to risk assessment and the implementation of controls will follow the requirements of Element 4 of the EMP. All works that are subject to variation will be assessed for environmental impacts and any required environmental controls will be determined.	**Project Director** Modifications Manager Supervisors Environment and Sustainability Manager	Change Requests Revised risk assessments
5.4 All changes with environmental consequences are authorised before they are implemented	**Approvals of Change** All change requests are approved by the supervisor or manager of the change owner, or as otherwise required by the project delegations, before any relevant work commences and a record is maintained. This must include any approvals associated with revised CAPs and Work Packs by the Environment and Sustainability Manager (or delegate).	**Project Director** Construction Manager Engineering Manager Environment and Sustainability Manager	Change Requests
5.5 Controls associated with change are communicated to all affected personnel	**Communication of Change** Affected personnel will be consulted and understand the effects of change before the relevant works commence. This is achieved through toolbox talks, daily pre-start meeting, HSE committees or forums arranged to specifically address changes.	**Modifications Manager** Supervisors	Toolbox talk material Pre-start meetings Attendance records Meeting minutes

Element 6: Communication and Consultation

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
6.1 Internal Culture of Collaboration	The Systems Connect Environment and Sustainability Team will work collaboratively with the commercial, design, construction and communication teams to formulate integrated management strategies. Interdisciplinary meetings will be held on key multidisciplinary issues.	**Project Director** **Environment and Sustainability Manager** Stakeholder and Community Relations Manager Commercial Manager Design Manager Construction Manager	Integrated Management Strategies
6.2 External environmental stakeholders are identified	**Identifying External Stakeholders** A comprehensive stakeholder analysis will be performed to identify external stakeholders and their interests in the environmental management of the project. This will include community members and others who could be affected by the project works, as well as government and environmental lobby groups. The Environment Representative will be involved in the analysis process.	**Community & Stakeholder Relations Manager** Environment and Sustainability Manager	Stakeholder register or database Stakeholder Analysis
6.3 Relationships with external stakeholders are effectively managed	**Managing Relationships** Activities performed to effectively manage relationships with external stakeholders include: • Identifying environmental risks that relate to stakeholder interests by considering the impacts to stakeholders (documented in Environmental Risk Register) • Determining suitable controls and activities to mitigate risks (general controls and activities documented in Environmental Risk Register, details in Environmental Sub-Plans, CAPs, and WPKs). • Performing inspections, audits, stakeholder engagement and monitoring activities to assess the effectiveness of controls Actively engaging stakeholders through open communication and involvement.	**Environment and Sustainability Manager** Community & Stakeholder Relations Manager Project Director	Preliminary Environmental Risk Register Risk assessments in CAPs, Work Packs, Environmental Sub-Plans and Procedures Audit reports Monitoring results Communications material Forums and opportunities for stakeholder engagement
	Consultative Forums	**Project Director**	Minutes of meetings

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
6.4	Internal consultative forums are established with regular meetings scheduled, conducted, documented and communicated	A schedule of communication forums will be developed which includes: • Managers' meetings that are to address environmental matters at least monthly; • Regular Environmental Toolbox Talks; • Pre-start meetings prior to commencing a shift; The Project Director will establish appropriate environmental interfaces with the Client and regulatory bodies. Records will be kept of all HSE communication activities (e.g. attendance records). The effectiveness of the meeting outcomes will be reviewed as required.	Environment and Sustainability Manager Safety Manager	Toolbox Talks Pre-Start meetings Attendance records
		Actions from Consultative Forums Actions arising from consultative forums are assigned and communicated to a responsible person and confirmed as being completed. The project will identify, track and complete environmental related actions using Synergy – Action Plans Module.	**Community & Stakeholder Relations** Environment and Sustainability Manager	Synergy – Action Plans Module
		HSE Signs and Notice Boards Dedicated HSE notice boards will be prominently located and maintained with current environmental information.	**Environment and Sustainability Manager** Environment Coordinators	Signs and notice boards installed with current environmental content
6.5	Environmental complaints and enquiries are recorded and responded to appropriately	**Responding to Complaints and Enquiries** All environmental related complaints will be classified according to the Incident Classification Matrix and recorded in Synergy. Complaints are treated as an incident and managed according to Element 9 of the CEMP. Corrective actions are agreed and implemented, with accountabilities and time frames assigned. The complainant or enquirer is notified of the intended project response once approved by the Project Director.	**Community & Stakeholder Relations Manager** Environment and Sustainability Manager Project Director	Incident records Records of communications
		Changes to Environmental Monitoring Environmental monitoring programs will be reviewed to address matters raised through valid complaints and consultations with stakeholders. Amendments to the monitoring program will be adequate to allow early identification of conditions that are likely to result in further complaints and/or exceedances. Data will be analysed to identify actual and potential impacts to the community, and corrective actions implemented.	**Environment and Sustainability Manager** Community & Stakeholder Relations Manager	Monitoring schedule Monitoring records Corrective actions in Synergy

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	Client and Internal Notifications The Business Unit Environment and Approvals Manager and Corporate Communications Manager are notified of complaints that have or are likely to generate media interest. The Client is notified according to the conditions outlined in the Contract.	**Project Director**	Record of communication
6.6 The effectiveness of internal and external stakeholder engagement is evaluated and improved.	**Evaluation of Internal and External Communications** The effectiveness of internal communication and consultation activities will be formally reviewed as required. The effectiveness of external communication and consultation activities will be formally reviewed as required. The Environment and Sustainability Manager participates in both of these reviews, which are led by the Project Director and include the Community and Stakeholder Manager and Safety Manager. The Environment and Sustainability Manager will also regularly attend and review the effectiveness of forums and recommend changes to the scheduling or style of forum.	**Project Director** Community & Stakeholder Relations Manager Environment and Sustainability Manager Safety Manager	Meeting minutes
6.7 Share knowledge	**Knowledge sharing** Systems Connect will ensure knowledge sharing, internally to the LW, and where considered necessary, with parent companies and key stakeholders and the wider infrastructure industry in order to ensure that lessons learnt are implemented across the LW worksites, contribute to knowledge and capacity building and assist in a larger market.	Project Sustainability Manager	Environmental alerts Meeting minutes Conference presentations

Element 7: Training and Competency

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
7.1 All personnel have completed an induction containing relevant environmental information before they are authorised to work on the Project	**Inductions** All personnel, subcontractors and visitors will undergo an induction before commencing work on-the project. The induction addresses general and project-specific environmental issues, including: • Systems Connect's environmental policy; • How the CEMP will be implemented on-site; • High-risk environmental activities on the project and their controls; • What to do in the event of an environmental incident. An assessment will be conducted upon completion of the induction. Induction materials are reviewed at least annually and amended to reflect changes to project environmental risks, the status of community relations and the occurrence of incidents. There are a number of induction types as listed below: • Project Office Induction • Site inductions and toolbox • Visitor inductions In line with the CEMF requirements site inductions will also include: • Training purpose, objectives and key issues • Systems Connect key performance indicators • Due diligence, duty of care and responsibilities • Relevant conditions of any environmental licence and the relevant conditions of approval • Site specific issues and controls including those described in the environmental procedures • Reporting procedure for environmental hazards and incidents • Communication protocols	**Environment and Sustainability Manager** HR Manager Safety Manager	Induction materials Training attendance records Completed induction assessments
7.2 A training plan is developed and documented	**Identifying Training Needs** Relevant environmental training needs (including specialist training) required to deliver this CEMP are identified and documented within the project's training matrix. In	**Environment and Sustainability Manager**	Training matrix

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
7.3 Personnel are trained and assessed according to the training plan	populating the training matrix, the environmental training requirements for each role are addressed, including competency, needs and capability. The Environment and Sustainability Manager will contribute to the development of the training matrix. The performance and development management process provides an opportunity to identify and plan the delivery of training needs not provided in the training matrix, or that are necessary to aid in the development of the individual. Subcontractor training and competency responsibilities will be included in subcontractor agreements.	HR Manager	Performance and Development management plans Subcontractor agreements Subcontractor Start-Up Meeting minutes
	Scheduling Training Needs A project training schedule will be developed to plan the delivery of training needs identified in the training matrix. Refresher training intervals will also be defined where applicable.	**HR Manager** Environment and Sustainability Manager	Training schedule Training records
	Provide Training Resources All resources for delivering the training schedule, including personnel, equipment, funding and materials, will be allowed for in the project budget.	**Project Director** Environment and Sustainability Manager	Project budget
	Delivery of Training All training identified in the training matrix will be delivered according to the training schedule. Training and development needs identified through the performance and development process will be achieved as per time frames nominated in individual plans. Personnel delivering environmental training must be deemed competent by the Environment and Sustainability Manager or Business Unit Environment and Approvals Manager. Where specialist training is required, the appropriate training course or qualified persons will be sourced to deliver the training.	**Project Director** HR Manager Environment and Sustainability Manager	Training records
	Training Evaluation and Review Training assessments and evaluation forms will be used to assess the effectiveness of training. Training evaluation and feedback will be reviewed and used to improve the quality of environmental training delivered on the project.	**HR Manager** Environment and Sustainability Manager	Training evaluation forms Training matrix

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	The training matrix and schedule will be completely reviewed at least annually or prior to the commencement of major new tasks.		
7.4 Regular toolbox talks and pre-starts will be delivered	**Toolbox Talks** Toolbox talks will be held on a regular basis in order to provide a project or site wide update and refresh environmental awareness including: • Key or recurring environmental issues • Following a relevant incident • Relevant site procedures • Following relevant changes on the CEMP and associated documents. Relevant changes include any that might impact the way environmental aspects are to be managed on site **Pre-Starts** Pre-start meetings will be held on site on a regular basis in order to discuss key risks and controls for the activities being undertaken, ensure all personnel understands their responsibilities and who to report any issues during the works.	**Environment and Sustainability Manager**	Toolbox records
7.5 Training records are maintained and accessible to relevant personnel.	**Training Records** Records of all training activities, including inductions, will be maintained. Records will include the name and role of the attendee, the name of the course and, where applicable, reference to the document controlled version of the material presented, and a copy of the assessment completed. Internal training records will be signed off by the attendee.	**HR Manager** Environment and Sustainability Manager	Training records

Element 8: Subcontractor Relationships

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
8.1 Selection processes ensure that subcontractors meet Systems Connect's minimum environmental requirements	**Subcontractor Selection and Engagement** Subcontractors engaged on the project are required to undergo a thorough assessment prior to selection. The Environment and Sustainability Manager will be consulted on environmental requirements of subcontracts and the adequacy of proposed conditions. Subcontractors will be made aware of Systems Connect's environmental requirements during the tender process and Start-Up meetings.	Commercial Manager **Engineers** Environment and Sustainability Manager	Subcontractor Agreements
8.2 Planning requirements of all subcontractor work scopes are completed and communicated prior to commencing work	**Identify, Complete and Communicate Planning Requirements and Documentation** The scope of work to be performed by each subcontractor is reviewed to determine whether it includes works for which project planning and environmental risk assessments have been completed. If so, the subcontractor is formally informed of all relevant risks and existing project documents, systems and procedures to be followed prior to commencing works (in addition to having been informed of these during the tendering process). These may include the contents of the construction methodology, CAPs, Work Packs, SEPs, Environmental Sub-Plans, and this CEMP. If the scope of works includes activities not already addressed in project planning and risk assessment, then an appropriate risk assessment is performed and either existing documentation is revised or new documentation produced. The Environment and Sustainability Manager should review this new documentation to ensure it meets project requirements. In either case, the subcontractor must be formally informed of all requirements prior to commencing works.	**Engineers** Environment and Sustainability Manager Commercial Manager	Construction Area Plans (CAPs) Work Packs SEPs Records of subcontractor notification
8.3 Compliance requirements for high risk environmental activities are identified and enforced	**Compliance requirements** For high risk environmental activities, the Environment and Sustainability Manager will review the subcontractor's scope of works with the supervising Engineer and: • Identify any new issues relevant to the subcontractor's scope of works; • Identify any additional compliance requirement not captured; • Identify necessary approvals not already in place and obtain those approvals prior to any works commencing; • Update the relevant Environmental Plans and Sub-Plans, SEPs, and Environmental Obligations Register with details, new approvals and their conditions.	**Engineers** Environment and Sustainability Manager Commercial Manager	Records of subcontractor notification

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	The Environment and Sustainability Manager will review the CAP and Work Packs, for high risk environmental issues. The subcontractor will be informed of all relevant environmental issues/risks and controls, procedures and documents to be followed and implemented in order to achieve compliance during the tendering process. This will be reinforced during the Start-Up meeting. The subcontractor will be informed of the requirement to provide all relevant data relating to their works as per the National Greenhouse and Energy Reporting Act 2007 (Cth).		
8.4 Subcontractor documentation is submitted and reviewed to meet Project requirements	**Documentation Preparation and Review** The subcontractor will provide Systems Connect with all required environmental documentation prior to commencing work on the project as described in the executed agreement, including any requirement to produce an Environment Management Plan. Any further requirements will be agreed by the Commercial Manager and the Environment and Sustainability Manager.	Environment and Sustainability Manager **Engineers** Commercial Manager	Subcontractor environmental documentation
8.5 Changes to the scope of work are managed as a Project change	**Manage Changes/Variations** Changes and variations to subcontractor scopes of work will be assessed as a change according to the requirements of Element 5 of the CEMP. Documentation will be amended accordingly.	Commercial Manager Environment Manager **Engineers**	Change Requests
8.6 Subcontractors actively participate in environmental management and training on the Project	**Subcontractor Environmental Participation** Subcontractors will participate in HSE communication forums and monitoring activities, as a minimum, including: • Project induction; • Scheduled HSE management meetings, toolbox talks, pre-start meetings, HSE committees (as required); • HSE observations, inspections and audits; • Incident investigations (as required); • Development or review of safe work systems and SEPs (as required).	**Commercial Manager** Environment and Sustainability Manager Subcontractors Engineers	Attendance records Monitoring records
	Subcontractor Training Subcontractors will undergo all necessary environmental training including any required by the project. The required training will be determined by reviewing the training matrix relative to the scope of work and roles being filled or supplied by the	**Subcontractor** Environment and Sustainability Manager	Subcontractor training records

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	subcontractor. The delivery and management of training will be as per Element 7 of the CEMP.	HR Manager	
8.7 Subcontractors are reviewed to assess their performance and compliance with our minimum environmental requirements.	**Subcontractor Audits and Reviews** Subcontractors will be regularly inspected and observed for environmental performance as per Element 3.4 of this CEMP.	Environment and Sustainability Manager **Engineers** Supervisors	Audit reports Inspection and monitoring records

Element 9: Incident Management

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
9.1 All incidents are followed by appropriate response and notification	**Incident Response** Environmental incidents and emergencies will be managed in accordance with the Systems Connect EMS Procedure *Manage and Report SHE Incidents* (MSID-1518045957-53) and the *Sydney Metro Environmental Incident and Non-Compliance Procedure* (SM-17-00000096). The immediate response to all incidents is to make the area safe and undertake measures to prevent further environmental harm. An assessment will be made in consultation with the Environment and Sustainability Manager to ensure that responses do not result in further harm. **Initial Internal Incident Notification** The Project Director, Construction Manager and Environment and Sustainability Manager are to be notified immediately of the following incidents: • All Level 1 and Level 2 environmental incidents, and PL1 and PL2. • The Environment and Sustainability Manager is also to be notified of any actual Class 3 environmental incident, procedural or legal breach. • For Level 1 and Level 2 incidents and PL1 and PL2, the Project Director will immediately notify the Business Unit General Manager and the Business Unit Environment and Approvals Manager. The Project Director will also notify the Business Unit General Manager of the need to activate the Project's Emergency Response Procedure and the Group Crisis Management Plan if necessary. **Interface Contactor Incident Notification** Where an event occurs within the LW Contractor's area or a shared area, that has the potential to impact on Interface Contractors works, the LW Contactor E&S Manager or delegate will immediately notify the Interface Contractor Environment Manager or delegate.	**Project Director** **Construction Manager** **Environment and Sustainability Manager** Community & Stakeholder Relations Manager Engineers Supervisors	Records of incident notifications\ Emergency Response Plan

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	Where an event occurs in an Interface Contractor area, or shared area, that has the potential to impact on LW Works the Interface Contractor Environment Manager or delegate will immediately notify the LW Contactor E&S Manager or delegate. **Initial External Incident Notification** Sydney Metro will be notified of all environmental incidents as per the agreed contractual arrangements, which requires implementation and compliance with the Sydney Metro Environmental Incident Classification and Reporting Procedure. The ER will be notified within the stipulated timeframes, noting that the ER is to review the notification in accordance with CoA A41 (CSSI 7400). Any incidents will be notified to the Secretary in accordance with the applicable Planning Approval requirements – CoA A41-A44 (CSSI 7400) & A36-A37, Appendix A (CSSI 8256). As per CSSI 8256 Appendix A, the Incident Report must include: (a) a summary of the incident; (b) outcomes of an incident investigation, including identification of the cause of the incident; (c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and (d) details of any communication with other stakeholders regarding the incident. Sydney Metro will undertake the notification to DPE based on information from Systems Connect. Environmental Incident as defined in the glossary, is aligned with *Sydney Metro Environmental Incident and Non-Compliance Procedure* (SM-17-00000096). The EPA must be notified immediately of all pollution incidents that cause or threaten material harm to the environment. Harm to the environment is “material” if the effect (or potential effect) from an incident on the health or safety of humans or ecosystems is not trivial and or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000. Environmental incidents will also be reported to regulators in accordance with the requirements of local, state and federal government regulations, also refer to the Emergency Response Plan (ERP) (SMCSWLWC-SYC-1NL-PM-PLN-000748). The		

Expectations		How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
		ERP will address obligations to draft and implement a Pollution Incident Response Plan in accordance with any project EPL. **Preserve the Incident Scene** Scenes of environmental Level 1 and 2 incidents and PL1's are to be preserved until the incident investigation team has collected relevant data and evidence (see below).		
9.2	All incidents are entered and managed in Synergy	**Incident Classification and Reporting** Environmental incidents will be classified using the Incident Classification Matrix by the Environment and Sustainability Manager in consultation with the Project Director. All environmental incidents, including community complaints, will be reported using the Synergy within three calendar days. Root causes will be identified and recorded in Synergy for all Class 1, 2 incidents and HPIs (and optionally for Class 3 incidents). All statutory notices received from regulators, including penalty notices and fines, will be entered as Environmental Legal Issue incidents upon receipt.	**Environment and Sustainability Manager** Project Director	Incident records Root cause coding
9.3	Incident investigations are conducted appropriate to the type of incident	**Project Incident Investigations** All incidents will be investigated according to company procedures. The level of investigation needed will depend on the incident classification. Corrective actions, including those required to help prevent future incident occurrences, are a key outcome of incident investigations. Incident investigation reports are to be uploaded to Synergy. **Statutory Authority Investigations** Before any staff member is questioned by officers of a statutory authority they will endeavor to consult the Project Director to determine whether Legal Counsel is needed. Regulatory inspectors must be given appropriate assistance during their own investigations.	Project Director Environment and Sustainability Manager Environment Advisor Supervisors Engineers	Incident investigation reports
9.4	All personnel conducting incident investigations are trained to competently perform the task	**Incident Investigation Teams Competent and Trained** The selection of the investigation team will be up to the Project Director and will depend upon the severity of the incident, and the availability of experienced personnel. However, the investigation team does need to have a mix of both Operational and HSE Staff.	**Project Director** HR Manager	

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
9.5 Corrective and preventive actions are taken after incidents and lessons are shared with other projects	The following should be considered when selecting an investigation team: • Statutory requirements; • Systems Connect Corporate requirements; • Technical specialists with an understanding of the work process; • Administrative Support; • Mix of skills and experience; • Potential conflict of interest for any proposed member.		
	Corrective & Preventive Actions Following an incident, corrective and preventive actions will be identified, assigned to the appropriate person/s and closed out according to set time frames. Time frames are set to ensure damage incurred is rectified and any chance of recurrence is eliminated as soon as practicable. Corrective actions will also address requirements set by DPE following a reported incident. Synergy will be used to assign and track corrective actions. All corrective actions will include reference to the relevant incident record for ease of tracking.	**Project Director** Environment and Sustainability Manager	Corrective action records on Synergy
	HSE Alerts HSE Alerts will be submitted for all Class 1 and 2 incidents and HPIs to the Project Director and Business Unit Environment and Approvals Manager for distribution outside of the project team. HSE Alerts will also be raised for all other incident types at the discretion of the Environment and Sustainability Manager, Project Director or Business Unit Environment and Approvals Manager.	**Environment and Sustainability Manager** Project Director	HSE Alerts
9.6 High potential and repeat incidents are regularly reviewed by the project management team	Each month the Environment and Sustainability Manager will, as a minimum, identify trends in incidents (as a minimum, all Class 1 and 2 incidents and HPIs) and trends in root causes to suggest the nature of preventative actions which are warranted. The Project Director will approve actions to address incident occurrences and incident and root cause trends. Actions will be managed using the Synergy.	**Environment and Sustainability Manager** **Construction Manager** **Project Director**	Monthly project reports Corrective actions

Element 10: Emergency Planning and Response

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
10.1 Potential emergencies are identified using a formal risk assessment process	**Identifying Potential Emergencies** Risk assessments conducted in accordance with Element 4 of the CEMP are used to identify potential emergencies on the project. Activities found to have an environmental consequence of 4 or 5 as per the definitions for environmental consequence contained within the Systems Connect Risk Management Protocol will be considered potential emergencies.	**Project Director** Environment and Sustainability Manager R&O Manager	Environmental Risk Register Principal Risk Assessment
10.2 Emergency response plans and procedures are developed and regularly reviewed	**Emergency Response Plan** An Emergency Response Plan (SMCSWLWC-SYC-1NL-PM-PLN-000748) that addresses all identified potential environmental emergencies with specific emergency procedures for each different potential emergency has been developed. The plan will address or include the following: • Nominated and trained emergency coordinator and emergency wardens; • Explanation of communications to be performed during an emergency; • Categories of environmental emergencies and incidents; • Explanation of what a crisis is as compared to an emergency and what to do in the event of a crisis; • The details of emergency services contacts; • Emergency assembly locations; • A detailed location map showing the site in relation to local public roads; • A detailed site layout diagram; • Information about personnel and facilities available to help emergency services; • Specific emergency procedures for each potential emergency identified that aim to protect human health and environmental values, including assessment of resources required to respond to that emergency; • Notification protocols; • Post-emergency actions. The ERP will be updated at least annually or when there are significant changes to project activities or in response to revised and new risk assessments. The Emergency Response Plan should be read in conjunction with the Project Pollution Incident Response Management Plan (PIRMP) SMCSWLWC-SYC-1NL-PM-PLN-000463. Drafted to address amendments to the Protection of the Environment Legislation Amendment Act 2011 as set out in Part 5.7A of the Protection of the	**Project Director** Construction Manager Environment and Sustainability Manager Safety Manager	Emergency Response Plan and procedures ERP

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	Environment Operations Act 1997 (POEO Act), the PIRMP covers works delivered under the Project Environmental Protection License (EPL) and provides a guide for the operations, actions and notifications to be carried out in the event of a pollution incident and/or emergency as applicable.		
10.3 Adequate resources are provided to effectively implement emergency response plans and procedures	**Emergency Response Plans Adequately Resourced** Resources required to implement the Emergency Response Plan will be available on the project and be maintained. Necessary resources include but are not limited to: • An emergency coordinator and emergency wardens; • Spill response kits; • Firefighting equipment; • Barricading; • Vehicles.	**Project Director** **Construction Manager** Environment and Sustainability Manager Safety Manager	Project resources for Emergency Response Plan and procedures
10.4 Environmental emergency response drills are conducted	**Environmental Emergency Response Drills** Environmental emergency response drills will be conducted at least every six months. The emergency scenario of the drills will be rotated to avoid repetition and be relevant to the activities occurring at the time. Records will be kept of the results for all drills. Where testing and evaluation shows a deficiency in either emergency preparations or the Emergency Response Plan, appropriate corrective and preventive actions are taken and raised and managed using Synergy.	**Project Director** Construction Manager Environment and Sustainability Manager Safety Manager	Emergency response drill records Corrective action records in Synergy
10.5 Employees, contractors and visitors are given appropriate emergency response training.	**Emergency Training** Emergency coordinators and wardens are trained to implement the emergency response plans. Specific training requirements will be identified and captured within the training matrix and will be delivered according to company procedures. Visitors are informed of requirements during the visitors' induction. **General Workforce Training and Awareness** All personnel and subcontractors will receive training to inform them of their roles and responsibilities in the event of an emergency. This training and awareness will be provided during project induction.	**HR Manager** Environment and Sustainability Manager Safety Manager	Training matrix Training schedule Training and induction records

Element 11: Document and Record Management

Expectations	How we will meet the Expectations (minimum requirements)	Responsibilities Key Contributor	Deliverables
11.1 Current versions of all relevant documents and records are available and controlled.	The project must ensure that all documents and records referred to and required to implement the CEMP, including this plan are controlled and maintained according to Systems Connect requirements. This includes but is not limited to all: • Management Plans & Procedures • Knowledge and Tools • Templates (e.g. audit template, training matrix) • All electronic records saved in electronic databases such as Teambinder, Synergy, ChemAlert etc. **Document Types** The types of records to be generated on the project that are to be stored and maintained include: • Environmental monitoring results - 30 years from the date of any incident or completion of the project, whichever is later • Complaints and enquiries received - 7 years from completion of the project • Notifications received by regulators - 30 years after the completion of the project • Audit reports - 7 years from completion of the project • Completed inspections and observations - 30 years from the creation of the record • Waste tracking certificates - 7 years from the creation of the record • Training records - 7 years from the end of the employee's employment • Incident reports - 30 years from the creation of the record • Calibration records for monitoring equipment • Monthly reports and Meeting minutes - 7 years from completion of the project or from the date on which work was last performed on the project • Records as required under the National Greenhouse and Energy Reporting Act 2007 - 7 years from the creation of the record • HSE Alerts Any editing and access restrictions to environmental documents and records and who has authority to dispose of nominated documents and records comprise: • Environment and Sustainability Manager to authorise the disposal of any environmental documents or records.	**Environment and Sustainability Manager** Project Director	Controlled and maintained documents and records
11.2 Relevant documents and records will be maintained using	Relevant environmental documents and records generated on the project will be stored and managed using Teambinder with the following exceptions: • Environmental monitoring data will be managed and stored using the project drive	**Project Director** **Document Control Manager**	Controlled and maintained documents and records

Expectations	How we will meet the Expectations (minimum requirements)	Responsibilities Key Contributor	Deliverables
corporate business applications and systems	• Systems Connect environmental performance data will be managed and stored in JDE or Synergy, including Water, Waste and Energy and Greenhouse Gases • Incident reports and corrective actions will be stored and managed using Synergy • Risk registers will be retained in excel spreadsheet.		

Element 12: Auditing, Review and Improvement

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
12.1 Environmental performance trends are identified and corrective actions are implemented as required	**Performance Trends** Environmental performance will be reviewed and reported at least monthly to identify trends. Performance will be assessed against both lead and lag measures and relative to specific targets agreed as per Section 3.9 of the CEMP, in the associated Plans and Sub-Plans. Action plans will be developed to improve performance as required, corrective and preventative actions will be managed using the Synergy – Action Plan Module.	**Project Director** Environment and Sustainability Manager	Monthly reports Corrective & Preventative actions in Synergy – Action Plan Module
12.2 A monthly environmental report is produced and distributed	**Monthly Reporting** A monthly environment report will be prepared for the Project Director for inclusion in the monthly project report. This report will include the following: • Analysis of performance against project, business unit and corporate environmental targets as per Section 3.8 of this CEMP • Analysis of performance against targets set in the Environmental Plans and Sub-Plans, including monitoring results • Details of each environmental incident on the project for that period including actions taken and outstanding • Confirmation that the CEMP is compliant with the Systems Connect EMS by referring to the number and results of inspections, audits, observations and monitoring • Confirmation that the NGER procedure has been implemented during the month • Any environmental innovations implemented on the project	**Environment and Sustainability Manager**	Monthly environment report
	The Monthly HSE Statistical Report in Synergy will be completed and approved by the Project Director. This includes reporting on the currency of the CEMP, compliance with the CEMP and issues and initiatives arising during the period.	**Project Director**	Monthly HSE Statistical Report
12.3 Regular management reviews are conducted to determine the continuing suitability, adequacy and effectiveness of the Environmental Management System	**Annual EMS Review** The project must conduct formal management reviews to assess the adequacy of the Environmental Management System as part of its annual management system reviews. The outputs of the review will be incorporated into the CEMP and supporting documents. That review must take into account the results of: • Audits undertaken	**Project Director** Project Leadership Group **Environment and Sustainability Manager**	Management review report Actions in Synergy

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
	• Communication, participation and consultation • Relevant communication including complaints from external stakeholders • The performance of the project • The extent to which the objectives and targets have been met • The outcomes of incident investigations and any corrective actions • Changes to legislation • Actions from previous management reviews and recommendations for improvement **Continual EMS Review and Improvement** The EMS will be continually reviewed and improved throughout the year as required. Generally, this will occur in response to: • Issues raised during environmental surveillance and monitoring • Expanded scope of works • Environmental incidents • Environmental non-conformances		
12.4 Audits are undertaken to ensure compliance with the requirements of the EMP	**Compliance with Environmental Management Plan** Regular audits and reviews will be conducted to confirm compliance with the CEMP and associated Obligations. A schedule of audits and reviews will be developed and maintained, and may include: • Project planning/Start Up reviews (conducted by Business Unit HSE Manager or delegate) • Project mobilisation audits (conducted by Business Unit HSE Manager or delegate) • Subcontractor audits (for subcontractors performing high risk activities) • High-risk activity audits • Environmental Management Plan audits (conducted by Business Unit Environment and Approvals Manager or delegate) • Compliance and Legislative audits (conducted by BUEM or competent 3rd party). Action plans will be developed to improve performance as required. Necessary corrective actions will be managed using Synergy. The Environmental Audit Program required by CSSI 7400 CoA A37 to A40 and CSSI 8256 CoA A33 to A35 will be managed by Sydney Metro. Systems Connect will participate in these audits as required by the audit schedule. The audits undertaken in accordance with conditions A37 to A40 will be undertaken on an annual basis.	**Project Director** Business Unit Environmental Management Representative Business Unit HSE Manager	Audit reports Corrective actions in Synergy

Expectations	How we will meet the Expectations (minimum requirements)	Responsible Key Contributor	Deliverables
12.5 Waste auditing to final destination must be undertaken six-monthly during construction	**Waste Tracking Audit** In order to achieve ISCA credit Was-1 Waste Management, auditing to final destination must be undertaken at least six-monthly for construction. Final destination means at least to a waste facility where the waste is transformed into another product or material or into landfill. The audit should: • Include physical/visual verification of waste destinations • Focus on the significant waste streams only • Each audit may cover only one significant waste stream as long as the full set is covered over the construction rating period • 'Significant' waste streams are to be justified taking into account the volume and nature of the wastes.	**Environment and Sustainability Manager**	Six-monthly audit reports from the start of construction
12.6 All audits are undertaken by suitably qualified and experienced personnel	**Auditor Competency** Persons conducting audits and reviews will be suitably experienced and qualified. There are two levels of internal auditor that can be obtained, these being Auditor and Lead Auditor. A mix of general education, specific auditor training and work experience are considered in determining the level of auditor. Auditors must be approved by the Business Unit Environment and Approvals Manager.	**Business Unit Environmental Management Representative**	Training records

PART C - APPENDICES

Appendix C1 Legal Requirements

Legislation	Key requirements	Relevance to LW
Commonwealth Requirements		
Environment Protection and Biodiversity Conservation Act, 1999	National environment law that provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the Act as matters of national environmental significance.	The project would not impact on any matters of NES or Commonwealth land
National Greenhouse and Energy Reporting (NGER)Act 2007 (Cth)	emissions and energy consumption and production and: Inform policy-making and the Australian public Meet Australia's international reporting obligations, and Provide a single national reporting framework for energy and emissions reporting.	Systems Connect will undertake reporting of the LW greenhouse gas emission and energy production and consumption under the NGER Act, inclusive of 'material' Subcontractors.
NSW Requirements		
Biosecurity Act, 2015	Under the Biosecurity Act 2015, public authorities are required to control noxious weeds which are likely to spread to adjoining land. Four Weeds of National Significance were recorded in the project site.	Appropriate management methods would be implemented during construction – refer to Part D and Appendix C8 Flora, Fauna and Weed Management
Contaminated Land Management Act, 1997	The main objective of the Contaminated Land Management Act is to establish a process for notifying, investigating and remediating land Section 60 of the Act outlines the circumstances in which notification of the Environment Protection Authority (EPA) is required in relation to the contamination of land.	If contaminated land is uncovered during delivery of LW, it must be assessed and managed in accordance with the Contaminated Land Management Act 1997. The Construction, Soil Water and Groundwater Management Procedure in Part D of this CEMP identifies areas of potential contamination and mitigation measures.
Environmental Planning and Assessment Act, 1979	Planning Approval granted under Part 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act). Approval of reports, studies and plans as required by the Project Planning Approvals.	Approval granted for works (under CSSI 7400) within Multiple properties and land comprised in Willoughby, Lane Cove, North Sydney, City of Sydney and Inner West Council. Approval granted for works (under CSSI 8256) within multiple properties and land comprised in the Inner West and Canterbury Bankstown Council areas.

Legislation	Key requirements	Relevance to LW
Fisheries Management Act 1994	The relevant objectives of this Act are to conserve threatened species, populations and ecological communities and promote sustainable development. Section 199 of the Act requires a public authority to notify the Minister prior to carrying out dredging or reclamation (defined by section 198A).	Works Assessed under Part 5.1 of EP&A Act therefore permits not required. Systems Connect contract scope (under CSSI 8256) does not include dredging or reclamation works
Heritage Act, 1977	The Heritage Act makes provisions for the conservation of NSW's non Aboriginal environmental heritage. Section 146 requires that the Heritage Council be notified if a relic is uncovered, where it is reasonable to believe that the Heritage Council is unaware of the location of the relic	Heritage impact in accordance with the Heritage Act 1977 is assessed under Part 5.1 of the EP&A Act, therefore permits are not required. Part A Section 6, Part D and Appendix C8 of the CEMP identifies areas of potential impact and mitigation measures. The Heritage Council would be notified in writing (by SM) of relics uncovered during construction, in accordance with the requirements of section 146.
National Parks and Wildlife Act, 1974	The National Parks and Wildlife Act provides for the protection of Aboriginal objects (sites, objectives and cultural material) and Aboriginal places. Aboriginal Heritage sites are managed under this Act by the Office of Environment and Heritage (OEH). Unexpected finds of Heritage require stop work proceedings and approval through OEH to disturb site.	Assessed under Part 5.1 of the EP&A Act, therefore permits are not required. Permit would be required for works under Part 5 of the EP&A Act for any unexpected finds.
Biodiversity Conservation Act 2016	For the purposes of the EP&A Act, the Minister for Planning and Infrastructure is the consent authority for any development application made under that Act for any clearing of native vegetation that requires development consent because of this Act. Requires any threatened plant or animal species, populations or ecological communities associated with a proposed development to be identified and that acceptable recovery and management strategies are implemented if a likely significant impact would occur	Impacts on native vegetation have been assessed under Part 5.1 of the EP&A Act and Part A Section 6, Part D and Appendix C8 of the CEMP identifies areas of potential impact and mitigation measures associated with management of Flora and Fauna. No impacts on threatened plant or animal species, populations or ecological communities are identified in the EIS (as relevant to LW contract scope).
Protection of the Environment Administration Act 1991	Outlines principles of Ecologically Sustainable Development	The project and all associated activities must be consistent with the principles of Ecologically Sustainable Development – refer to Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024)
Protection of the Environment Operations Act, 1997 (PoEO Act)	Activities as defined under Schedule 1 of the Protection of the Environment Operations Act, 1997 require and Environmental Protection Licence.	Requirements for an Environment Protection Licence (EPL) for scheduled activities have been assessed against the scope of works at SMTF and an EPL is not required.

Legislation	Key requirements	Relevance to LW
Roads Act 1993	Section 138 requires approval from the relevant roads authority to impact, or carry out work on or over, a public road. Clause 5(1) of Schedule 2 to the Roads Act exempts public authorities from this requirement, except in relation to works on or over classified and Crown roads	Systems Connect will obtain the consent of the appropriate roads authority under section 138 of the Act. As required, road occupancy permits will be sought in accordance with the Construction Traffic Management Plans.
Sydney Water Act 1994	Approval to discharge wastewater to sewer under a Trade Waste Agreement	Systems Connect will obtain approval to connect to sewer for any construction site.
Transport Administration Act 1988	This Act created TfNSW and defines its principal role. TfNSW is the proponent of the project under the EP&A Act.	TfNSW (Sydney Metro) is the proponent of the project.
Waste Avoidance and Recovery Act, 2001	The Waste Avoidance and Recovery Act promotes waste avoidance and resource recovery.	A project-specific Waste Management Procedure in Part D and Appendix C8 of the CEMP.
Water Management Act 2000 and Water Act, 1912	The Water Management Act 2000 (WM Act) provides for the sustainable and integrated management of water resources. Aquifer interference approval requirements under the WM Act have not yet commenced, and regulation is managed under Part 5 of the Water Act 1912.	Groundwater is unlikely to be encountered during the works, and the works are therefore unlikely to impact upon water resources. A licence would be sought under Part 5 of the Water Act if extraction of more than three megalitres of groundwater per year is required to construct the project. Part A Section 6, Part D and Appendix C8 of the CEMP addresses management of interaction with ground water

Appendix C2 LW Compliance Matrix

C2.1. CSSI 8256 - LW Applicable Condition of Approval requirements

CoA			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
A17			Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 and do not meet the requirements of Condition A16, can only be established and used with the approval of the Planning Secretary except where they are located within the rail corridor, in which case they may be endorsed by the ER. A review of environmental impacts must be submitted with the request for Planning Secretary's approval or ER's endorsement.	A	Section 5.3
A18			The use of an ancillary facility for Construction must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C3 and relevant Construction Monitoring Programs required by Condition C8 have been approved by the Planning Secretary.	A	Section 5.3
A19			Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1, can be established where they satisfy the following criteria:	A	Section 5.3
A19	a		are located within the Construction boundary; and	A	
A19	b		have been assessed by the ER to have:	A	
A19	b	i	minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and	A	
A19	b	ii	minor environmental impact with respect to waste management and flooding, and	A	
A19	b	iii	no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.	A	
A22			Works must not commence until an ER has been approved by the planning secretary and engaged by the proponent.	A	ER has been appointed by Sydney Metro
A23			The Planning Secretary's approval of an ER must be sought no later than one (1) month before the commencement of work.	A	ER has been appointed by Sydney Metro

CoA			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
A24			The proposed ER must be suitably qualified and experienced person who was not involved in the preparation of the EIS, SPIR or submission report and is independent from the design and the construction personnel for the CSSI and those involved in the delivery of it.	A	Section 4.6
A25			the proponent may engage more than one ER for the CSSI, in which case the functions to be exercised by an ER under the terms of this approval may be carried out by an ER that is approved by the Planning Secretary for the purpose of the CSSI	A	Section 4.6
A26			For the duration of the works until the commencement of operation, or as agreed with the Planning Secretary, the approved ER must;	A	Section 4.6
A26	(a)		(a) receive and respond to communications from the Planning Secretary in relation to the environmental performance of the CSSI;	A	
A26	(b)		(b) consider and inform the Planning Secretary on matters specified in the terms of this approval;	A	
A26	(c)		(c) consider and recommend to the Proponent improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;	A	
A26	(d)		"(d) review all documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary to ensure they are consistent with the requirements in or under this approval and if so;	A	
A26	(d)	i	make written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary) or	A	
A26	(d)	ii	make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary)	A	
A26	(e)		(e) regularly monitor the implementation of the documents listed in C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval;	A	
A26	(f)		as may be requested by the Planning Secretary, help plan, attend or undertake audits of the development commissioned by the Department including scoping Audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A34 of this approval	A	

CoA			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
A26	(g)		as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints	A	
A26	(h)		assess the impact of minor ancillary facilities as required by Condition A19 of this approval	A	
A26	(i)		consider any minor amendments to be made to the documents listed in Condition C1, C3 and C8 and any documents that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modification to the terms of this approval; and	A	
A26	(j)		prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, a monthly Environmental Representative Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI	A	
A27			The Proponent must provide the ER with all documentation requested by the ER in order for the ER to perform their functions specified in Condition A26 (including preparation of the ER monthly report), as well as:	A	Section 4.6
A27	a		any complaints received (to be provided on a daily basis); and	A	
A27	b		a copy of any assessment carried out by the Proponent of whether proposed Work is consistent with the approval (which must be provided to the ER before the commencement of the subject Work).	A	
A29			Before the commencement of Construction, a Compliance Monitoring and Reporting Program must be prepared, endorsed by the ER and submitted to the Planning Secretary for information.	A	Element 3.9
A30			Compliance reports of the CSSI must be carried out for the duration of Construction and for a minimum of one (1) year following commencement of Operation. The Department must be notified of the commencement dates of Construction and Operation of the CSSI in the pre- Construction and pre-Operational compliance reports (respectively)	A	Element 3.9

CoA			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
A31			The Construction Compliance Report must provide details of any review of, and minor amendments made to, the CEMP (which must be approved by the ER), resulting from Construction carried out during the reporting period.	A	Element 3.9
A32			The Compliance Monitoring and Reporting Program in the form required under Condition A29 of this approval must be implemented for the duration of Construction and for a minimum of one (1) year following commencement of Operation, or for a longer period as determined by the Planning Secretary based on the outcomes of independent audits, Environmental Representative Reports and regular compliance reviews submitted through Compliance Reports. If staged Operation is proposed, or Operation is commenced of part of the CSSI, the Compliance Monitoring and Reporting Program must be implemented for the relevant period of each stage or part of the CSSI.	A	Element 3.9
A33			No later than one (1) month before the commencement of Construction an Independent Audit Program prepared in accordance with AS/NZS ISO 19011:2014 – Guidelines for Auditing Management Systems must be submitted to the Planning Secretary.	A	Element 12.4
A34			Independent audits of the CSSI must be carried out in accordance with:	A	Element 12.4
A34	a		the Independent Audit Program submitted to the Planning Secretary under Condition A33 of this approval and Independent Audit Reports prepared.	A	
A35			The Proponent must:	A	Element 12.4
A35	a		review and respond to each Independent Audit Report prepared under Condition A34 of this approval; and	A	
A35	b		submit the response to the Planning Secretary within six (6) weeks of completing the audit	A	
A36			The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the CSSI (including the application number and the name of the CSSI if it has one) and set out the location and nature of the incident	A	Element 9.1
A37			Subsequent notification must be given, and reports submitted in accordance with the requirements set out in Appendix A.	A	Element 9.1

CoA			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
C7			Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary.	A	Section 1.4
C8			The following Construction Monitoring Programs must be prepared in consultation with the relevant government agencies identified for each to compare actual performance of Construction of the CSSI against the predicted performance.		Section 5.8 Refer to the relevant CEMP Sub-Plan for details of Construction Monitoring Programs and compliance with associated CoA, as below:
C8	(a)		Noise and Vibration		CNVMP (SMCSWLWC-SYC-1NL-PM-PLN-000032)
C8	(b)		Water Quality		SWGMSP (SMCSWLWC-SYC-1NL-PM-PLN-000372)

C2.5. LW Applicable Construction Environmental Management Framework

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
2.1			Table 1.1 below identifies key NSW environmental legislative requirements and their application to SM C&SW construction works, current as at the date of this document. TfNSW and its Contractors should regularly review their legislative requirements. Table 1.2 identifies key Commonwealth environmental legislative requirements and their application to SM C&SW construction works, current as at the date of this document. TfNSW and its Contractors should regularly review their legislative requirements.	A	Section 3.1 Appendix C1 Legal Requirements
2.2			(…) Sydney Metro City and Southwest is also classified as Critical State Significant Infrastructure and requires approval from a consent authority under the requirements of the Environmental Protection and Assessment Act 1997 (Section 115W). Two separate approvals are sought: • Sydney Metro City and Southwest – Chatswood to Sydenham (Approved January 2017) • Sydney Metro City and Southwest - Sydenham to Bankstown The requirements of the approval are required to be complied with by TfNSW. Responsibility for implementing mitigation measures and conditions of approval will be allocated between TfNSW and Principal Contractors as appropriate. Typically, TfNSW will produce a Staging Report which sets out the applicability and allocation of approval requirements within the project's program of works	A	Section 3.2 Section 3.3
2.3			Sydney Metro projects often meet the definition of a number of scheduled activities under Schedule 1 of the Protection of the Environmental Operation Act 1997 (POEO Act) and as such our contractors may be required to obtain an Environment Protection Licence (EPL) or work under the existing EPL held by Sydney Trains. Where required, Sydney Metro Principal Contractors will:	A	Section 3.4
2.3	a		Apply for and be granted an EPL from the EPA.	A	Section 3.4
2.3	b		Hold an EPL which covers their scope of works as necessary under the POEO Act.	A	Section 3.4

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
2.3	c		Undertake their scope of works in accordance with the conditions of the applicable EPLs as issued by the EPA.	A	Section 3.4
2.3	d		Work under the existing Sydney Trains EPL.	A	Section 3.4
2.4			Numerous environmental publications, standards, codes of practice and guidelines are relevant to TfNSW construction and are referenced throughout this Construction Environmental Management Framework. A summary of these applicable standards and guidelines is provided in Table 1.3.	A	Section 3.7
3.1	a		Principal Contractors are required to have a corporate Environmental Management System certified under AS/NZS ISO 14001:2004 and to have transitioned this accreditation into AS/NZS ISO 14001:2015 by September 2018.	A	Section 3.6 Section 5.1
3.1	b		Principal Contractors are required to develop a project based Environment and Sustainability Management System (E&SMS). The E&SMS will:	A	Section 5.1
3.1	b	i	i. Be consistent with the Principal Contractors corporate Environmental Management System and AS/NZS ISO 14001:2004 or 2015;	A	Section 5.1
3.1	b	ii	ii. Be supported by a process for identifying and responding to changing legislative or other requirements;	A	Section 3.1 Element 3:
3.1	b	iii	iii. Include processes for assessing design or construction methodology changes for consistency against the planning approvals;	A	Element 5:
3.1	b	iv	iv. Include processes for tracking and reporting performance against sustainability and compliance targets;	A	Element 12:
3.1	b	v	v. Include a procedure for the identification and management of project specific environmental risks and appropriate control measures; and	A	Element 4:
3.1	b	vi	vi. Be consistent with the SM C&SW Sustainability Strategy and Sydney Metro Environment and Sustainability Policy.	A	Appendix C4
3.1	c		All sub-contractors engaged by the Principal Contractor will be required to work under the Principal Contractor's E&SMS.	A	Section 4.3 Element 8:

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.1	d		The relationship between key documents within the Sydney Metro Environment and Sustainability Management System and the Principal Contractor's Environment and Sustainability Management System is shown in Figure 2.	A	Section 1.2
3.1	e		The Principal Contractors Sustainability Plan and its sub plans will capture governance and design requirements as well as social sustainability initiatives as required by the Sydney Metro Sustainability Strategies.	A	Section 1.2
3.1	f		These plans vary in scope across different delivery packages.	A	Section 1.2
3.3	f		Where a corresponding systems document exists within the Sydney Metro Integrated Management System, the Principal Contractor's procedures will be required to be consistent with any requirements in those documents.	A	Section 1.1 Section 5.1
3.4	a		Subject to Section 3.3(b) and Section 3.2(b) the Principal Contractor will prepare issue specific environmental sub plans to the CEMP and SMP which address each of the relevant environmental impacts at a particular site or stage of the project. Issue specific sub plans will include:	Partial – in line with the staging reports	Section 5.4
3.4	a	i	i. Spoil management;		
3.4	a	ii	ii. Groundwater management;		
3.4	a	iii	iii. Traffic and transport management;		
3.4	a	iv	iv. Noise and vibration management;		
3.4	a	v	v. Heritage management;		
3.4	a	vi	vi. Flora and fauna management;		
3.4	a	vii	vii. Visual amenity management;		
3.4	a	viii	viii. Carbon and energy management;		

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.4	a	ix	ix. Materials management;		
3.4	a	x	x. Soil and water management;		
3.4	a	xi	xi. Air quality management; and		
3.4	a	xii	xii. Waste management and recycling		
3.4	b		Additional detail on the minimum requirements for these sub plans is provided in Sections 6-17 of this CEMF.	Partial – in line with the staging reports	Refer to each CEMP Sub-Plan
3.5	a		The Principal Contractor will prepare and implement activity specific environmental procedures. These procedures should supplement environmental management sub plans, but may substitute for sub plans in agreement with TfNSW if a reasonable risk based justification can be made and the sub plan is not a requirement of any approval.	Partial – in line with the staging reports	Section 5.5 Relevant procedures included in the appendices for each Sub-Plan
3.5	b		The procedures will include:		
3.5	b	i	i. A breakdown of the work tasks relevant to the specific activity and indicate responsibility for each task;		
3.5	b	ii	ii. Potential impacts associated with each task;		
3.5	b	iii	iii. A risk rating for each of the identified potential impacts;		
3.5	b	iv	iv. Mitigation measures relevant to each of the work tasks; and		
3.5	b	v	v. Responsibility to ensure the implementation of the mitigation measures.		
3.5	c		The Principal Contractor will prepare and implement site based progressive Environmental Control Maps (ECM's) which as a minimum:	A	Section 5.6.1
3.5	c	i	i. Is a progressive document depicting a current representation of the site;	A	

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.5	c	ii	ii. Indicates which environmental procedures, environmental approvals, or licences are applicable;	A	
3.5	c	iii	iii. Illustrates the site showing significant structures, work areas and boundaries;	A	
3.5	c	iv	iv. Illustrates environmental control measures and environmentally sensitive receivers;	A	
3.5	c	v	v. Is endorsed by the Principal Contractors Environmental Manager or delegate; and	A	
3.5	c	vi	vi. Relevant workers will be trained in the requirements of and will sign off the procedures prior to commencing works on the specific site and / or activity.	A	
3.6	a		Where the requirement for an additional environmental assessment is identified, this will be undertaken prior to undertaking any physical works. The environmental assessment will include:	A	
3.6	a	i	i. A description of the existing surrounding environment;	A	
3.6	a	ii	ii. Details of the ancillary works and construction activities required to be carried out including the hours of works;	A	
3.6	a	iii	iii. An assessment of the environmental impacts of the works, including, but not necessarily limited to, traffic, noise and vibration, air quality, soil and water, ecology and heritage;	A	Element 5:
3.6	a	iv	iv. Details of mitigation measures and monitoring specific to the works that would be implemented to minimise environmental impacts; and	A	
3.6	a	v	v. Identification of the timing for completion of the construction works, and how the sites would be reinstated (including any necessary rehabilitation).	A	
3.7	a		Prior to the commencement of construction the Principal Contractors will offer Pre-construction Building Condition Surveys, in writing, to the owners of buildings where there is a potential for construction activities to cause cosmetic or structural damage. If accepted, the principal Contractor will produce a comprehensive written and photographic condition report produced by an appropriate professional prior to relevant works commencing.	A	Section 6.3
3.7	b		Prior to the commencement of construction the Principal Contractor will prepare a Road Dilapidation Report for all local public roads proposed to be used by heavy vehicles.	A	Section 6.3

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.8	a		Principal Contractors will identify hold points, beyond which approval is required to proceed with a certain activity. Example activities include vegetation removal and water discharge. Hold points will be documented in relevant CEMPs.	A	Section 5.3
3.8	b		Table 1.4 provides the structure for the register of hold points as well as a preliminary list of hold points which will be implemented.	A	Section 5.3
3.9	a		Principal Contractors will be responsible for determining the training needs of their personnel. As a minimum this will include site induction, regular toolbox talks and topic specific environmental training as follows:	A	Element 7:
3.9	a	i	i. The site induction will be provided to all site personnel and will include, as a minimum: • Training purpose, objectives and key issues; • Contractor's environmental policy and key performance indicators; • Due diligence, duty of care and responsibilities; • Relevant conditions of any environmental licence and/or the relevant conditions of approval; • Site specific issues and controls including those described in the environmental procedures; • Reporting procedure for environmental hazards and incidents; and • Communication protocols.	A	
3.9	a	ii	ii. Toolbox talks will be held on a regular basis in order to provide a project or site wide update, including any key or recurring environmental issues; and	A	
3.9	a	iii	iii. Topic specific environmental training should be based upon, but is not limited to, Issue specific sub-plans required under Section 3.4 (a) (i-xi).	A	
3.9	b		Principal Contractors will conduct a Training Needs Analysis which:	A	Element 7:
3.9	b	i	i. Identifies that all staff are to receive an environmental induction and undertake environmental incident management training;	A	
3.9	b	ii	ii. Identifies the competency requirements of staff that hold environmental roles and responsibilities documented within the Construction Environmental Management Plan and sub-plans;	A	
3.9	b	iii	iii. Identifies appropriate training courses/events and the frequency of training to achieve and/or maintain these competency requirements; and	A	

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.9	b	iv	iv. Implements and documents as part of the CEMP a training schedule that plans attendance at environmental training events, provides mechanisms to notify staff of their training requirements, and identifies staff who do not attend scheduled training events or who have overdue training requirements.	A	
3.10	a		Principal Contractors will develop and implement a Pollution Incident Response Management Plan, in accordance with the requirements of the POEO Act. Contractors' emergency and incident response procedures will also be consistent with any relevant SMDO procedures and will include:	A	Element 9:
3.10	a	i	i. Categories for environmental emergencies and incidents;	A	
3.10	a	ii	ii. Notification protocols for each category of environmental emergency or incident, including notification of TfNSW and notification to owners / occupiers in the vicinity of the incident. This is to include relevant contact details;	A	
3.10	a	iii	iii. Identification of personnel who have the authority to take immediate action to shut down any activity, or to affect any environmental control measure (including as directed by an authorised officer of the EPA);	A	
3.10	a	iv	iv. A process for undertaking appropriate levels of investigation for all incidents and the identification, implementation and assessment of corrective and preventative actions; and	A	
3.10	a	v	v. Notification protocols of incidents to the EPA, DP&E or OEH that are made by the Contractor or TfNSW.	A	
3.10	b		The Contractor will make all personnel aware of the plan and their responsibilities.	A	
3.11	a		TfNSW will engage Independent Environmental Representatives (ERs) to undertake the following, along with any additional roles as required:	A	Section 4.6
3.11	a	i	i. Review, provide comment on and endorse (where required) any relevant environmental documentation to verify it is prepared in accordance with relevant environmental legislation, planning approval conditions, Environment Protection Licences, relevant standards and this CEMF;	A	
3.11	a	ii	ii. Monitor and report on the implementation and performance of the above mentioned documentation and other relevant documentation;	A	
3.11	a	iii	iii. Provide independent guidance and advice to TfNSW and the Contractors in relation to environmental compliance issues and the interpretation of planning approval conditions;	A	

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.11	a	iv	iv. Be the principal point of advice for the DP&E in relation to all questions and complaints concerning the environmental performance of the project;	A	
3.11	a	v	v. Ensure that environmental auditing is undertaken in accordance with all relevant project requirements; and	A	
3.11	a	vi	vi. Recommend reasonable steps, including 'stop works', to be taken to avoid or minimise adverse environmental impacts.	A	
3.12	a		In relation to Roles and Responsibilities the CEMP will:	A	Details bellow:
3.12	a	i	i. Describe the relationship between the Principal Contractor, TfNSW, key regulatory stakeholders, the independent environmental representative and the independent certifier;	A	Section 4.1
3.12	a	ii	ii. For each role that has environmental accountabilities or responsibilities, including key personnel, provide a tabulated description of the authority and roles of key personnel, lines of responsibility and communication, minimum skill level requirements and their interface with the overall project organisation structure;	A	Section 4.2
3.12	a	iii	iii. Provide details of each specialist environment, sustainability or planning consultant who is employed by the Principal Contractor including the scope of their work; and	A	Section 4.2
3.12	a	iv	iv. Provide an overview of the role and responsibilities of the Independent Environmental Representative, the Independent Certifier and other regulatory stakeholders.	A	Sections 4.6 to 4.9
3.12	b		All sub-contractors engaged by the Principal Contractor will be required to operate within the EMS documentation of that Principal Contractor.	A	Section 4.3
3.13	a		Issue specific environmental monitoring will be undertaken as required or as additionally required by any approval, permit or licence conditions.	A	Section 5.8
3.13	b		The results of any monitoring undertaken as a requirement of the EPL will be published on the Principal Contractor's, or a project specific, website within 14 days of obtaining the results.	A	Section 5.8
3.13	c		Environmental inspections will include:	A	Element 3:
3.13	c	i	i. Surveillance of environmental mitigation measures by the Site Foreman; and	A	

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.13	c	ii	ii. Periodic inspections by the Principal Contractor's Environmental Manager (or delegate) to verify the adequacy of all environmental mitigation measures. This will be documented in a formal inspection record.	A	
3.13	d		Regular site inspections by the ERs and TfNSW representatives at a frequency to be agreed with the Principal Contractor.	A	Element 3:
3.13	e		Principal Contractors must undertake internal environmental audits. The scope will include:	A	Element 12:
3.13	e	i	i. Compliance with any approval, permit or licence conditions;	A	
3.13	e	ii	ii. Compliance with the E&SMS, CEMP, SMP, sub-plans and procedures;	A	
3.13	e	iii	iii. Community consultation and complaint response;	A	
3.13	e	iv	iv. Environmental training records; and	A	
3.13	e	v	v. Environmental monitoring and inspection results.	A	
3.13	f		TfNSW (or an independent environmental auditor) will also undertake periodic audits of the Principal Contractor's E&SMS and compliance with the environmental aspects of contract documentation, including this Construction Environmental Management Framework.	A	Appendix C6
3.14	a		Principal Contractors will document and detail any non-compliances arising out of the above monitoring, inspections and audits. TfNSW will be made aware of all non-compliances in a timely manner.	A	Element 3:
3.14	b		Principal Contractors will develop and implement corrective actions to rectify the noncompliances and preventative actions in order to prevent a re-occurrence of the noncompliance. Contractors will also maintain a register of non compliances, corrective actions and preventative actions.	A	Element 3:
3.14	c		TfNSW or the Environmental Representative may raise non-compliances against environmental requirements.	A	Element 3:
3.15	a		Principal Contractors will maintain appropriate records of the following:	A	Element 11:

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
3.15	a	i	i. Site inspections, audits, monitoring, reviews or remedial actions;	A	Element 11:
3.15	a	ii	ii. Documentation as required by performance conditions, approvals, licences and legislation;	A	Element 11:
3.15	a	iii	iii. Modifications to site environmental documentation (eg CEMP, sub-plans and procedures); and	A	Element 11:
3.15	a	iv	iv. Other records as required by this Construction Environmental Management Framework.	A	Element 11:
3.15	b		Records will be retained onsite for the duration of works.	A	Element 11:
3.15	c		Additionally records will be retained by the Principal Contractor for a period of no less than 7 years. Records will be made available in a timely manner to TfNSW (or their representative) upon request.	A	Element 11:
3.15	d		Compliance reports detailing the outcome of any environmental surveillance activity including internal and external audits (refer to Section 3.13) will be produced by the Principal Contractors Environmental Manager or delegate. These reports will be submitted to TfNSW at an agreed frequency.	A	Element 11:
3.16	a		Principal Contractors will ensure the continual review and improvement of the E&SMS. This will generally occur in response to:	A	Section 1.5
3.16	a	i	i. Issues raised during environmental surveillance and monitoring;	A	
3.16	a	ii	ii. Expanded scope of works;	A	
3.16	a	iii	iii. Environmental incidents; and	A	
3.16	a	iv	iv. Environmental non-conformances.	A	
3.16	b		A formal review of the E&SMS by the Principal Contractor's Senior Management Team will also occur on an annual basis, as a minimum. This review shall generate actions for the continual improvement of the E&SMS and supporting management plans.	A	Element 12: Appendix C6
5.1	a		Standard working hours are between 7am – 6pm on weekdays and 8am – 1pm on Saturdays	A (C2S) Partial (S2B) – standard	Section 6.2

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
				construction hours as per applicable planning approval conditions	
5.1	b		Works which can be undertaken outside of standard construction hours without any further approval include:	A (C2S) Partial (S2B) – standard construction hours as per applicable planning approval conditions	Section 6.2 Refer to CNVMP
5.1	b	i	i. Those which have been described in respective environmental assessments as being required to take place 24/7. For example, tunnelling and underground excavations and supporting activities will be required 24/7;		
5.1	b	ii	ii. Works which are determined to comply with the relevant Noise Management Level at sensitive receivers;		
5.1	b	iii	iii. The delivery of materials outside of approved hours as required by the Police or other authorities (including RMS) for safety reasons;		
5.1	b	iv	iv. Where it is required to avoid the loss of lives, property and / or to prevent environmental harm in an emergency; and		
5.1	b	v	v. Where written agreement is reached with all affected receivers.		
5.1	c		Principal Contractors may apply for EPA approval to undertake works outside of normal working hours under their respective Environment Protection Licences.	A (C2S) Partial (S2B) – standard construction hours as per applicable planning approval conditions	Section 6.2
5.2	a		Principal Contractors will consider the following in the layout of construction sites:	A	Section 5.6.1 CNVMP
5.2	a	i	i. The location of noise intensive works and 24 hour activities in relation to noise sensitive receivers;	A	

CEMF			Requirement	Staging Report Applicability	Reference
Clause ID	Clause Letter	Clause Sub-Letter			
5.2	a	ii	ii. The location of site access and egress points in relation to noise and light sensitive receivers, especially for sites proposed to be utilised 24 hours per day;	A	
5.2	a	iii	iii. The use of site buildings to shield noisy activities from receivers;	A	
5.2	a	iv	iv. The use of noise barriers and / or acoustic sheds where feasible and reasonable for sites proposed to be regularly used outside of daytime hours; and	A	
5.2	a	v	v. Aim to minimise the requirement for reversing, especially of heavy vehicles.	A	
5.3	a		Mitigation measures for reinstatement will be produced in consultation with TfNSW, the community and stakeholders.	A	Section 6.6
5.3	b		Mitigation measures required for reinstatement will be incorporated into the CEMP and will include as a minimum:	A	
5.3	b	i	i. Principal Contractors will clear and clean all working areas and accesses at project completion;	A	
5.3	b	ii	ii. At the completion of construction all plant, temporary buildings or vehicles not required for the subsequent stage of construction will be removed from the site;	A	
5.3	b	iii	iii. All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better; and	A	
5.3	b	iv	iv. Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of construction.	A	

Appendix C3 Environmental Risk Register

Risk assessment criteria

The risk assessment criteria has been developed as per the Risk Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000021). Qualitative measures are used to estimate the consequence or impact of an event, along with the estimate of likelihood, to produce consistent risk rankings across the identified risks. These values are described in Table 19 and Table 20 below.

Table 19 Likelihood criteria

Risk Likelihood Table						
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 the 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
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

Table 20 Consequence criteria

Consequence Table		
Rating	**Descriptor**	**Environment Consequence**
C6	**Insignificant**	No appreciable changes to environment and/or highly localised event
C5	**Minor**	Change from normal conditions within environmental regulatory limits and environmental effects are within site boundaries
C4	**Moderate**	Short term and/or well contained environmental effects. Minor remedial actions probably required
C3	**Major**	Impacts external ecosystem and considerable remediation is required
C2	**Severe**	Long-term environmental impairment in neighboring or valued ecosystems. Extensive remediation required.
C1	**Catastrophic**	Irreversible large-scale environmental impact with loss of valued ecosystems.

A Risk Matrix (Table 21) is used to evaluate the severity of the risk for each environmental aspect. As shown, the matrix axis are those of likelihood and consequence using the measures given above. A scale of consequences from A to D is used to indicate decreasing severity. The consequences are potential outcomes as a result of a hazard occurring.

Table 21 Risk matrix

Risk Matrix Evaluation Table								
Risk Ratings A = Very High (31 – 36) B = High (22 – 30) C = Medium (11 – 21) D = Low (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

A preliminary environmental risk assessment has been undertaken for the Project. This assessment is provided in the following page.

Appendix C3 Environmental Aspects and Impacts - Preliminary Risk Assessment

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E1	**Environment**	Planning Approvals and Licences	Non-Compliance with Regulatory instruments or Legislation (inc. Planning Approval conditions)	• Inadequate management practices; • Lack of competency/knowledge; • Contractor management gaps	• Regulatory action (prosecution, pins). Delay to subsequent approval requests, (delay to program) Contractual Breach Reputation Damage Non-compliance with sustainability certification	• Implementation of CEMP • Induction includes summary of regulatory obligations • Supplier contracts included details of regulatory obligations • Suitably qualified environment representative in delivery team	7 (Low)
E2	**Environment**	Planning Approvals and Licences	Commencing work without required approvals	• Inadequate planning	• Regulatory action (prosecution, pins). Delay to subsequent approval requests, (delay to program) Contractual Breach	• Approvals on master program • Low impact / early works approval Procedure • Change Management Procedure • Suitably qualified environment representative in delivery team	7 (Low)
E3	**Environment**	Planning Approvals and Licences	New approvals requirements due to scope change	• New approvals requirements due to scope change	• Regulatory action (prosecution, pins). Delay to subsequent approval requests, (delay to program) Contractual Breach	• Approvals on master program • Low impact / early works approval Procedure • Change Management Procedure • Suitably qualified environment representative in delivery team (in design review)	7 (Low)
E4	**Environment**	Biodiversity and Ecology	Clearing without a permit and/or pre-clearance survey	• Inadequate management of environmental aspects; • Lack of competency/knowledge	• Regulatory action (prosecution, pins); Contractual Breach; Non-compliance with sustainability certification; Impact to	• Flora, Fauna and Biodiversity Management Sub-Plan (SMCSWLWC-SYC-CSW-EM-PLN-002579) • Flora and Fauna Unexpected Finds Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000386)	7 (Low)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
					existing flora and fauna communities	• Inductions include details of flora and fauna management requirements • Toolbox training on management of flora and fauna during construction • Site Environment Plans (SEP) • Suitably qualified environment representative in delivery team • Specialist consultant for Flora/ Fauna Management	
E5	**Environment**	Biodiversity and Ecology	Weed management	• Poor site delineation • Not complying with weed management strategy • Incorrect topsoil used or incorrect wash down techniques/ areas • Incorrect disposal of weeds	• Additional weed management required • Unusable topsoil and mulch • Damage to EEC	• Defined wash down area on SEP • Pre-clearing checklist and survey • Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399) includes source segregation • Weed management within Flora, Fauna and Biodiversity Management Sub-Plan (SMCSWLWC-SYC-CSW-EM-PLN-002579) • Inductions include details of flora and fauna management requirements • Toolbox training on management of flora and fauna during construction	7 (Low)
E6	**Environment**	Biodiversity and Ecology	Damage to existing flora and fauna (including threatened populations)	• Construction activities impacting existing vegetation due to poorly demarcated site	• Regulatory action (prosecution, PINs) • Breach of deed requirements • Reputation • Non-compliance with sustainability certification • Impact to existing flora and fauna communities	• No-go fencing is to be installed and clearly defined on SEP • Flora, Fauna and Biodiversity Management Sub-Plan (SMCSWLWC-SYC-CSW-EM-PLN-002579) • Inductions included details of flora and fauna management requirements • Toolbox training on management of flora and fauna during construction	11 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E7	**Environment**	Biodiversity and Ecology	Grass fire	• Hot works conducted without required controls or permits in place	• Damage to existing environment	• Emergency Response Plan / PIRMP • Construction Safety Management Plan • Hot work restrictions • TOBAN exemption Procedure • Induction and Training	8 (Low)
E8	**Environment**	Biodiversity and Ecology	Unexpected flora and fauna finds (including aquatic species)	• Pre-clearance checks not undertaken • Inadequate site delineation • Inadequate erosion and sediment controls	• Impact to flora and fauna communities	• Flora, Fauna and Biodiversity Management Sub-Plan (SMCSWLWC-SYC-CSW-EM-PLN-002579) • Flora and Fauna Unexpected Finds Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000386) • Inductions included details of flora and fauna management requirements • Toolbox training on management of flora and fauna during construction	7 (Low)
E9	**Environment**	Transport and Traffic	Changed traffic conditions in the neighbourhood or increased traffic	• Traffic entering/leaving construction sites and compounds	• Increased local traffic • Impacts on local traffic conditions • Air quality impacts • Increased noise due to traffic	• Construction Traffic Management Plan and TCP's • Community Communications Strategy • Project induction included Traffic management obligations • Site Inductions and Truck Driver training included site specific requirements • Road Act Approvals • Air Quality Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373) • Construction Noise and Vibration Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032)	11 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E10	**Environment**	Transport and Traffic	Increased heavy vehicles traffic	• Haulage	• Increased local traffic • Changes to local traffic conditions • Air quality impacts • Increased noise due to heavy vehicle traffic	• Construction Traffic Management Plan • TCP's and VMPs • Community Communications Strategy • Road Act Approvals • Air Quality Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373) • Construction Noise and Vibration Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032) • Site Inductions and Truck Driver training included site specific haulage routes	11 (Medium)
E11	**Environment**	Transport and Traffic	Road closure - for heavy delivery	• Heavy deliveries	• Changes to local traffic conditions • Increased local traffic • Community complaints	• Construction Traffic Management Plan • Community Communications Strategy • Site Induction and tool box training included any requirements for road closure	7 (Low)
E12	**Environment**	Noise and Vibration	Unapproved works outside hours	• Inadequate planning • Not complying with the out of hours approval process and requirements	• Regulatory action (prosecution, pins). • Contractual Breach • Reputation • Community complaints	• Out of Hours Works on delivery program • Construction Noise and Vibration Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032) • OOHW Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000807) • OOHW Form (SM-17-00000115) approved before works • Induction included reference to obligations for management of OOHW • Toolbox training on management of OOHW • Suitably qualified environment representative in delivery team to assess	4 (Low)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
						and monitor	
E13	**Environment**	Noise and Vibration	Cumulative / daytime construction noise	• Construction activities not allowing for respite periods • Inadequate planning and consultation • Not complying with the noise management requirements	• Community complaints • Reputation	• Out of Hours Works on delivery program • Construction Noise and Vibration Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032) • OOHW Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000807) • Induction included reference to obligations for management of noisy activities, standard working times and OOHW. • Tool box training on management of noise and vibration • Suitably qualified environment representative in delivery team to assess and monitor • Community Communications Strategy	12 (Medium)
E14	**Environment**	Noise and Vibration	Vibration impacts of heavy plant	• Heavy plant movements and activities	• Community complaints • Damage to existing infrastructure	• Construction Noise and Vibration Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000032) • Induction included reference to obligations for vibration management • Tool box training on management of vibration	7 (Low)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
						• Suitably qualified environment representative in delivery team to assess and monitor vibration • Community Communications Strategy	
E15	**Environment**	Heritage and Archaeology	Unexpected archaeological finds	• Unexpected find(s) • Inadequate demarcation of site • Location of known site(s) not referenced in site plans and communicated to personnel. • Not following unexpected finds protocol	• Delay to program • Damage to relics	• Heritage Management Sub-Plan (SCLW-SYC-1NL-PM-PLN-000375) • Unexpected Finds Heritage and Human Remains Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000389) • Inductions included reference to obligations with regards to unexpected finds • Tool box training on management of unexpected finds • Specialist consultant to manage heritage unexpected finds	7 (Low)
E16	**Environment**	Soil and Water	Sediment run-off	• Inadequate sediment control • Not complying with sediment control plans	• Pollution of water • Impact on aquatic ecology • Sedimentation of waterways • Regulatory action • Delay to program • Community impacts	• Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) and associated Procedures • Site specific Erosion and Sediment Control Plans • Induction includes reference to obligations associated with management of spoil and water during construction • Toolbox training on management of ERSED and de-watering • Suitably qualified environment representative in delivery team • Specialist consultant for ERSED development and review as required	13 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E17	**Environment**	Soil and Water	Unapproved discharge of water from site	• Poor planning of construction activity • Not obtaining or working in accordance with an issued water discharge permit (as per de-watering procedure)	• Pollution of water • Impact on aquatic ecology • Sedimentation of waterways • Regulatory action • Delay to program • Community impacts	• Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) and associated Procedures • Site specific Erosion and Sediment Control Plans • Permit to dewater in place • Water monitoring and testing prior to discharging off site • Induction includes reference to obligations associated with management water during construction • Toolbox training on management of ERSED and de-watering • Suitably qualified environment representative in delivery team • Specialist consultant for ERSED development and review as required • Relevant EPL in place (where required)	13 (Medium)
E18	**Environment**	Soil and Water	Unexpected finds of contaminated soil or hazardous materials	• Unexpected finds during construction activities • Not following unexpected finds protocol	• Additional cost for assessment and disposal Program delay • Soil contamination from inadequate disposal	• Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) • Unexpected Finds Soil Contamination and Asbestos Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000388) • Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399) • Induction includes reference to obligations associated with management of waste, unexpected finds, contamination and hazardous materials • Toolbox training on management of contamination and unexpected finds	12 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
						• Suitably qualified environment representative in delivery team • Specialist consultant for contamination management	
E19	**Environment**	Soil and Water	Chemical / hazardous materials storage and use	• Unapproved use of materials on-site • Inappropriate use or storage • Inadequate storage and containment controls	• Pollution of water • Contamination of soil	• Construction Safety Management Plan • Emergency Response Plan/PIRMP • Site Environment Plans include designated storage areas • Refuelling procedures • Tool box training substance storage and management • Induction reference substance storage obligations • Spill Management Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000387) • Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) includes provisions for the management of chemicals.	11 (Medium)
E20	**Environment**	Soil and Water	Interception of ground water	• Not following requirements defined in management plans • Insufficient geotechnical data	• Pollution of waters • Delay to program • Salinity impacts on infrastructure	• Soil, Water and Groundwater Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000372) and associated Procedures • Induction included reference to groundwater management obligations • Toolbox training delivered included management of groundwater during construction	12 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E21	**Environment**	Visual Amenity	Visual impacts	• Not cordoning off the worksite with fencing, shade cloth in accordance with contract requirements • Inadequate lighting • Poor housekeeping • Inadequate visual screening • Removal of vegetation	• Light pollution/spill • Temporary structures changing visual amenity • Vandalised surfaces • Graffiti	• Visual Amenity Management Sub-Plan (SCLW-SYC-1NL-PM-PLN-000376) • Community Communications Strategy • Induction included reference to visual amenity requirements and housekeeping practices • Toolbox training delivered included management of visual amenity	12 (Medium)
E22	**Environment**	Social and Economic Impacts	Local economy	• Construction activities impacting local businesses	• Impact on businesses • Local employment	• Sustainability Management Plan (SMCSWLWC-SYC-1NL-PM-PLN-000024) • Sustainable Workforce Target	7 (Low)
E23	**Environment**	Greenhouse Gas and Climate Change	Increased energy usage	• Poor planning of construction activity • Not following greenhouse gas management plans	• Increased costs • Increased GHG emissions • Contributing to climate change	• Carbon and Energy Management Sub-Plan • Materials Management Sub-Plans • Construction programming	7 (Low)
E24	**Environment**	Air Quality	Dust generation	• Poor planning of construction activity • Not complying with the air quality requirements • Working in windy conditions • Not covering loads • Delays in stabilisation of disturbed land	• Community impacts • Regulatory action • Air pollution	• Air Quality Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373) • Air Quality and Dust Management Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000392) • Induction includes air quality management requirements	12 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
						• Toolbox Training of workforce on management of air quality during construction	
E25	**Environment**	Air Quality	Exhaust emissions	• Poor planning of construction activity • Not complying with the air quality management requirements; • Inadequate plant management	• Community impacts • Regulatory action • Air pollution	• Air Quality Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000373) • Induction included air quality management requirements • Toolbox Training of workforce on management of air quality during construction;	12 (Medium)
E26	**Environment**	Waste	Incorrect disposal of waste	• Poor planning of construction activity • Not following waste management requirements	• Regulatory action (prosecution, PINs) • Soil and water pollution • Contamination of other waste streams	• Waste, Recycling and Spoil Management Sub-Plan (SMCSWLWC-SYC-1NL-PM-PLN-000374) • Waste Management and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000399) • Spoil Classification Reuse and Recycling Procedure (SMCSWLWC-SYC-1NL-EM-PRO-000461) • Induction included waste management requirements • Toolbox training of workforce on waste management	11 (Medium)

Risk ID	Category	Aspect	Hazard / Activity	Cause	Consequence /Impact	Current Controls	Risk Score
E27	**Environment**	Waste	Excess waste generation	• Poor planning of construction activity • Not following waste management principles	• Non-compliance with sustainability certification • Resource depletion	• Waste, Recycling and Spoil Management Sub-Plan (SMCSWLWC-SYC-1NL-EM-PRO-000399) • Induction included waste management requirements • Toolbox training of workforce on waste management • Waste reduction initiatives implemented in line with the Sustainability Management Plan	11 (Medium)

Appendix C4 Environment Policy

Systems Connect

Environment and Sustainability Policy

Systems Connect will work collaboratively with Sydney Metro to ensure sustainable outcomes through integration of environmental, social and governance factors into everything we do.

Employees, subcontractors, suppliers and consultants will strive together to identify and implement excellence and innovation throughout design, procurement and construction of Line-wide Works.

Systems Connect will:

- Demonstrate leadership through visible commitment to and active participation in implementation of project environment and sustainability objectives.
- Promote a culture of accountability for sustainability outcomes and improve the sustainability knowledge and skills of employees.
- Investigate sustainability initiatives that meet or exceed client expectations, provide value for money, and leave net positive legacies for users, the environment and communities.
- Drive the efficient use of energy, water and materials in the delivery of the project to meet or exceed the projects objectives and targets.
- Minimise waste generation, reduce pollution and enhance the natural environment.
- Place value on cultural heritage and respect traditional land owners.
- Enhance the projects resilience to climate change.
- Engage with stakeholders, the community and traditional land owners to consider impacts and identify opportunities in the decision-making process.
- Integrate environmentally, socially and economically responsible sourcing and governance factors into the projects operating and procurement processes.
- Embed procurement and supply chain principles and objectives outlined in the City & Southwest Sustainability Strategy into procurement processes through the development of a Sustainability Procurement Policy.
- Where possible procure services and materials locally to reduce transport emissions, support local businesses and provide jobs and upskilling of local labour forces.
- Regularly monitor, review, audit and report on the performance of the environment and sustainability management systems to ensure targets and objectives are on track and to identify areas for improvement.
- Ensure that all personnel understand their legal obligations with regard to the prevention of harm to the environment.
- Recognise and reward initiatives and innovations that achieve the best outcomes and drive positive change.
- Investigate any environmental events to identify contributing factors and preventative actions.
- Seek opportunities to collaborate with the supply chain to drive innovation and create mutual value.

15th May 2019

Mathew Billings	Julian Sharp	James Logie
Environment Manager	Project Director	Sustainability Manager

Sydney Metro City & Southwest Line-wide Works

Environment and Sustainability Policy - SMCSWLWC-SYC-1NL-SU-PLN-000062

Appendix C5 Site Environment Plans

Appendix C6 MIRRA Schedule

The remainer of Portion 4 works are limited in nature and low impact. Schedules detailed in this appendix will not apply to remaining works. SC will keep the ER and SM Representative up to date with the remaining works to understand any change in the risk or nature of the works.

Name	Detail	Frequency	By Whom	Resources
MONITORING				
Noise and vibration monitoring	As per Construction Noise and Vibration Management Plan (CNVMP)	As per CNVMP	Environment Coordinator Specialist consultant	Noise and Vibration Specialist
Traffic and access monitoring	As per Construction Traffic Management Plan (CTMP)	As per CTMP	Environment Coordinator	Specialist consultant
Biodiversity monitoring	As per Flora, Fauna and Biodiversity Management Sub-Plan	Daily	Environment coordinator Site supervisor	Specialist consultant
Air quality monitoring	As per Air Quality Management Sub-Plan	Daily	Environment Coordinator Site supervisor	Specialist consultant
Soil and water monitoring	As per Soil, Water and Groundwater Management Sub-Plan	Daily	Environment Coordinator Site supervisor	Specialist consultant
Waste and resources monitoring	As per Waste, Recycling and Spoil Management Sub-Plan	Daily	Environment Coordinator Site supervisor	Specialist consultant
Visual Amenity	As per Visual Amenity Management Sub-Plan	Weekly	Environment Coordinator	Specialist consultant
INSPECTIONS				
Pre-start Inspections	An inspection will be carried out and will include a check of relevant environmental controls and resources required to ensure effective operation and maintenance. Works are not to commence unless inspections are found to be satisfactory.	Prior to the commencement of works on each shift	Site Supervisor	Foreman
Environment and Sustainability Site Inspections	Inspect all relevant environmental aspects and evaluate the effectiveness of associated environmental controls. Environment and Sustainability Manager will record inspection findings on an inspection checklist form. If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded on the checklist form. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.	Weekly Prior to and following rainfall event	Environmental Coordinator	Environment and Sustainability Manager
ER inspection	Monitor the implementation of Environmental Management Plans and	Fortnightly	ER	Alternate

Name	Detail	Frequency	By Whom	Resources
	monitoring programs required under CSSI 7400 & CSSI 8256 and advise the Proponent upon the achievement of these plans / programs.	(Frequency may increase or decrease depending on the nature of activities being undertaken and their associated environmental risks)		
AA inspection	Monitor construction noise and vibration planning, management and mitigation in accordance with the CoA for activities under CSSI 7400.	Monthly (should the Secretary make a request, or when responding to noise complaints, additional inspections may be conducted)	AA	Alternate
REPORTING				
Monthly environmental report	Environmental statistics (i.e. incidents, regulatory action, complaints on environmental issues), regulatory and authority considerations, monitoring program performance and key environmental issues	Monthly	Environment team	Environment and Sustainability Manager
Daily Complaints Reports	A report to SM that provides details of all complaints received in relation to construction activities regulated by the licence on the telephone complaints line.	As soon as practical, (within 24 hours)	Community Consultation Manager / Place Manager	Stakeholder and Community Relations Manager
Environmental risk assessment	Assessment of risks conducted for each possession	Prior to each possession	Engineers	Environment and Sustainability Manager, Construction Manager
Monitoring results	Report on monitoring data recorded and potential exceedances against criteria.	As required	Environmental coordinators and advisor	Environment and Sustainability Manager
Incident reports	Environmental Incident reports will be provided to SM's Representative and the Environmental Representative within 24 hours of the incident occurring.	Within 24 hours of the incident occurring	Project Director	Environment and Sustainability Manager, Environmental Coordinator (s)
REVIEW				
Management reviews	▪ Identification of areas of opportunity for improved environmental performance ▪ Analysis of the causes of non-compliances and deficiencies ▪ Environment inspections and audits ▪ Verification of the effectiveness of corrective and preventative actions	Quarterly	Management team	The review is initiated by the Environment and Sustainability Manager and includes relevant Project team members review environmental management issues for the Project.

Name	Detail	Frequency	By Whom	Resources
	▪ Highlighting any changes in procedures resulting from process improvement.			
CEMP formal review	▪ Full review of CEMP and Sub-plans ▪ Update CEMP and Sub-Plans based on relevant changes, issues, incidents or non-compliances.	Annually	Management Team	Environment and Sustainability Manager
Executive Review	▪ Effectiveness of environmental management documentation implementation. ▪ Management effectiveness ▪ Potential improvements to the environmental management documentation ▪ Adequacy of resources ▪ Findings of audits ▪ Environmental objectives and targets ▪ Environmental performance ▪ Compliance with legal and other requirements ▪ Critical non-compliance or repeated non-compliances ▪ Organisation changes ▪ Effectiveness of training and inductions	Annually	CPB/ UGL Business Unit	Management team
AUDIT				
Internal audit	Review of CEMP compliance to Systems Connect EMS/ ISO14001. Verify compliance with approval and legal requirements and construction documentation, where required.	The first audit within three months of the commencement of construction and then annually. The final submitted within five working days of contract completion date.	Internal EMS Auditors	Environment and Sustainability Manager/SHEQ Team
Waste Tracking Audit	To achieve ISCA credit Was-1 Waste Management, auditing to final destination must be undertaken at least six-monthly for construction. Final destination means at least to a waste facility where the waste is transformed into another product or material or into landfill. The audit should: ▪ Include physical/visual verification of waste destinations	Six-monthly from the start of construction	Sustainability team	Environment and Sustainability Manager

Name	Detail	Frequency	By Whom	Resources
	▪ Focus on the significant waste streams only ▪ Each audit may cover only one significant waste stream as long as the full set is covered over the construction rating period ▪ 'Significant' waste streams are to be justified taking into account the volume and nature of the wastes.			
External independent audit	Verify compliance with approval and legal requirements, construction documentation and any other commitments.	Annually	External Auditor	TBC

Appendix C7 Planning Approval Document Delivery Strategy

LWW -Planning Approval Document delivery strategy																																						
	MCOA				Consultation/Review																										Approval									
Document Title	C25 SSI 7400	S2B 8256	Responsibility		Sydney Metro/TFNSW	Urban Growth NSW	EPA	DPE	DEP Land Release	Chamber of Commerce	OEH	Heritge Council	DPI	NOW	BCC	Relevant Councils	RMS	TTLG	Sydney Coordination Office	SES	NSW fire and rescue	Community	Registered Aboriginal Parties/Stk	Acoustic Advisor	Independent Property IAP	ER	Submit/Approved by to Sec of DPIE	Endorsed by IDRP	Publicaly available	Timing	
Staging Report	A12	A12		SM																						EE					1MPtoC
Storm Water and Flood Management Plan																																						
Soil Salinity Report																																						
Design and landscape Plan																																						
Community Conmmunications Strategy **	B1-4	B1-4	LWW	LWW	R																								A			1MPtoC	1MPtoC
Community and Stakeholder Involvement Plan																																						
Complaints Management System and Enquiries procedure	B6	B5	SM	SM																													BCC	BCC
Project Website- (Provision of Electronic information)	B15	B14	LWW	LWW																													BCC	BCC
Compliance Monitoring (Tracking) and reporting Program#	A28	A29	SM	SM																						EE	A	I			BCC	BCC
Environmental Independent Audit Program#	A37	A33	SM	SM																						E	I	I			1MPtoC	
Land Use Survey		E18		LWW																														BCC
Road Dilapidation Reports	E90	E49	LWW	LWW												I*																	BU	BUU
Building Condition Survey Reports	E59		LWW													C						C			E							BCC	
Construction Environmental Management Plan	C1	C1	LWW	LWW																						EE	AA				1MPtoC	1MPtoC
Construction Compound and Ancillary Facilities Management Plan	A17		LWW	LWW			C									C										E	A				1MPtoI	
Construction Noise and Vibration Strategy	E32		SM																								A				1MPtoC	
Construction Noise and Vibration Management Plan	C3(a)	C3(a)	LWW	LWW												CC								E		RR	A				1MPtoC	1MPtoC
Construction Noise and Vibration Impact Statement	E33	E27	LWW																			C		E									
Out Of Hours Work Protocol	E47	E25*#	SM	SM																							A						
Construction Traffic management Framework	E81		SM																														
Construction Traffic Management PlanS (for each site or low impact activity)	E82	E47	LWW	LWW													AA	C	E C								II				BCC	BCC
Temporary Transport Management Plan		E48		LWW																														1MPtoIm
Construction Soil and Water Management Plan	C3(d)	C3(b)	LWW	LWW							CC		CC		C	C				C	C					EE	AA				1MPtoC	1MPtoC
Construction Waste and Spoil management Plan	CEMF	C3c		LWW												C										E	A					1MPtoC
unexpected Contaminated land and Asbestos finds procedure	E70	E39	LWW	LWW																						E					BCC	BCC
Construction heritage Management Plan	C3(g)	C3 d	LWW	LWW								CC				CC										EE	AA				1MPtoC	1MPtoC
Unexpected Heritage Finds and human remains Procedure	E19	E15	SM	LWW								C															I					1MPtoC
Heritage Interpretation Strategy		E13		SM								C															I					BCC
Heritage Interpretation Plan	E21	E14	LWW	SM								CC				C										E	II				BCC	BCC
Heritage Archival Recording Report	E13	E10	SM	LWW																		C											FC
Excavation Directors Report		E11		SM																														FC
Exhumation Management Plan	E27		SM																							E	I				BCC	
Construction Flora and Fauna Management Plan																											I						
Construction Air quality Management Plan	C3(c)		LWW																							E	A						
Biodiversity Management Sub Plan	C3(b)		LWW								C				C											E	A						
Station Design and Precinct Plan	E101	E56	LWW	IWW		C		C		C						CC						CC					A	R			BCPAW	
CEMP	CEMF																																
Ecological Monitoring program																																	
Construction Water Quality Monitoring Program	C9(c)	C8(b)	LWW	LWW			C									CC										EE	AA				1MPtoC	1MPtoC
Construction Noise and VibrationMonitoring Program	C9(a)	C8(a)	LWW	LWW			C									CC										EE	AA				1MPtoC	1MPtoC
Tree Report	E64	E5	LWW	LWW												CC										EE	AI				PtoR	PtoR
Business Management Plan	E64	E37	LWW	LWW																						E					BCC	BCC
Utilities Management Strategy		E71		LWW																							A					1MPtoC

KEY
Document Type
S - strategy
P - Management Plan
SP - Management Plan Sub-Plan
R - Report
MoP - Monitoring Program
PRO - Procedure
Planning Approval Requirement
CSSI 5931 SMTF
CSSI 7400 Chatswood to Sydenham
CSSI 8256 Sydenham To Bankstown
SM- Sydney Metro to provide to Systems connect
Consultation review and approval requirements
A- Submitted for Approval
I- Submitted for Information
C/R-Issued for consultation and/or review
E - Endorsed or verification
* issue to relevant authority
** SM to draft overarching document. LW to draft project specific Version
# LW to provide information to SM
*# documents as approved under CSSI 7400
Timing for delivery
BU copies provide to RC within 3 weeks of completion and no later than one month before use of local road
BUU Copies provided to RC within 4 weeks of completion and at least 2 week before the road is used by HV
BCC before construction commences/ prior to commencement of Construction
BCPAW- before commencement of permanent aboveground work
W6M- within 6 months of the date of the approval
1MPtoC. Submitted to director/secretary one month prior to construction
1MPtoI Submitted for approval one month prior to installation
1MPtoIm One month prior to implementation
PtoR Submitted before removal
FC Following Completion of the work