



Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001

Document and Revision History

Document Details	
Title	Sustainability Management Plan
Project	SWM1, SWM2, SWM3
Client	Sydney Metro City & Southwest
Client reference no.	SMCSWSW8-JHL-WBK-SU-PLN-000001
JHLOR JV contract no.	K44

Revisions

Revision	Date	Revision Description	Prepared by	Reviewed by
0	03/05/2021	Draft Issued for Review	Vereine Masson	Tony Deacy
1	14/03/2022	Updated to include BEW and address Metro comments	Michelle Huang	Thiru Jallendran
2	16/06/2022	Updated to include BAC	Michelle Huang	Thiru Jallendran
3	14/10/2022	Updated BAC requirements	Michelle Huang	Nadia Barbov
4	05/05/2023	Updated to exclude BAC	Nadia Barbov	Sean Robertson
5	16/12/2023	Updated to include SWM1 SWM2 (SWMC, BEW, BAC)	Nadia Barbov	Akram Entezari
6	01/07/2024	Updated to reflect SM comments and additional SWM3 Scope	Lindsey Spiller	Joe Thompson
7	14/08/2024	Updated to reflect SM comments	Nikki Ge	Lindsey Spiller

Revision	Date	Revision Description	Prepared by	Reviewed by
8	16/12/2025	<p>Updated to exclude SWMC, BEW and BAC which are now closed. This plan continues to cover SWM1, SWM2 and SWM3.</p> <p>includes project scope descriptions as per design management plan.</p> <p>SWM3 management plans referenced.</p> <p>Previously undefined targets for total electricity consumption, total fuel consumption, total GHG emissions, total potable and total non-potable water use for SWM3 Contractor Activities defined.</p>	Alyssa Slaney	Jerome Cargnino

Controlled: NO Copy no.: Uncontrolled: YES

Terms of definitions

The following terms, abbreviations and definitions are used in this plan.

Terms	Explanation
AGJV	Aurecon GHD Joint Venture
BCA	Building Code of Australia
BEW	Bankstown Early Works
CBD	Central Business District
CEMF	Construction Environmental Management Framework
CERT	Carbon Estimate and Reporting Tool
CoA	Conditions of Approval
DPE	Department of Planning & Environment
ECMP	Energy and Carbon Management Plan
EIS	Environmental Impact Statement
GHG	Greenhouse Gas
FTE	Full Time Employee
ISC	Infrastructure Sustainability Council
IS	Infrastructure Sustainability
JH	John Holland Group Pty Limited
JHLOR	John Holland and Laing O'Rourke joint venture
Laing O'Rourke	Laing O'Rourke Australia Construction Pty Limited
Minister, the	NSW Minister for Planning
MMP	Materials Management Plan
MSDR	Monthly Sustainability Data Report
NCC	National Construction Code
ODS	ODS Track (web-based submission management framework)
SDGs v4.0	Transport for NSW Sustainability Design Guidelines v4.0
SLC	Sustainability Leadership Committee
SMCSW	Sydney Metro City and Southwest
SWMC	Southwest Metro Corridor works
SME's	Small and Medium sized Enterprises
SMP	Sustainability Management Plan
TfNSW	Transport for New South Wales
TTW	Taylor Thomson Whitting
QSR	Quarterly Sustainability Report
TfNSW	Transport for New South Wales
WMRP	Waste Management and Recycling Plan

Table 1: Terms and definitions in this plan

Contents

Terms of definitions	3
1. Overview	6
1.1 Introduction.....	6
1.2 Purpose and Application.....	6
1.3 Project Scope.....	6
1.3.1 Overview - SSJ Project Scope.....	8
1.3.2 Overview – SSC(EW) Project Scope.....	8
1.3.3 Overview – South West Metro Corridor (SWMC) Works (Third Amendment Deed).....	9
1.3.4 Overview- Bankstown Early Works (BEW) (Fourth Amendment Deed).....	13
1.3.5 Overview - Bankstown and Additional Corridor Works (BAC) (Seventh Amendment Deed)..	14
1.3.6 Overview - Southwest Metro Conversion Station Works- SWM3 Package.....	16
1.3.7 Project and Client Objectives.....	20
1.3.8 Structure and interface with other management plans.....	22
1.4 Needs and Expectations of Interested Parties.....	28
2. Leadership	28
2.1 Sustainability Leadership Committee.....	28
2.2 Sustainability Policy.....	29
2.3 Project Roles, Responsibilities and Authorities.....	29
3. Planning	32
3.1 Compliance Obligations.....	32
3.2 Objectives.....	32
3.3 Risks and Opportunities.....	40
3.3.1 Climate Change Risk Assessment.....	40
3.4 Planning Action.....	41
4. Sustainable Procurement	43
4.1 Evaluation of Subcontractors.....	44
4.2 Monitoring of Subcontractor Sustainability Performance.....	44
5. Sustainable construction	44
5.1 Construction water.....	44
5.2 Construction Carbon and Energy.....	45
5.3 Sustainable materials.....	45
5.3.1 Concrete.....	46
6. Community Benefits	47
7. Implementation	48
7.1 Resources.....	48
7.2 Competence and Awareness.....	48
7.3 Knowledge Sharing.....	48
7.4 Decision Making.....	49
8. Performance Evaluation	51
8.1 Monitoring Measurement and Analysis.....	51
8.2 Reporting.....	51
8.3 Sustainability Inspections.....	52
9. Improvement	53
9.1 Audit.....	53
9.2 Management Review.....	54

Appendix A Plan Compliance	55
Appendix B Policies	67
Appendix C Score cards	72
Appendix D MCA Template	73
Appendix E ISC Rating Tracker	74
Appendix F Water Balance Study Report.....	75
Appendix G S2B Environment and Sustainability Inspection.....	77
Appendix H Sustainability Assurance Framework	79

List of Tables

Table 1: Terms and definitions in this plan.....	3
Table 2: Scope of works summary of SWM3 Package.....	20
Table 3: Project requirement documentation for SWM3.....	20
Table 4: SWM3 interest parties' needs and expectations.....	28
Table 5: Critical roles and responsibilities within JHLOR	31
Table 6: Critical roles and responsibilities by personnel external to JHLOR	31
Table 7: Key Sustainability compliance obligation documents.....	32
Table 8: Primary Sustainability Objectives for SWM3	32
Table 9: Objectives and Targets Table	39
Table 10 Climate Change Risk Mitigation Targets	41
Table 11 Laing O'Rourke Minimum Concrete Carbon Limits.....	46
Table 12. Community Priorities	47
Table 13 Sustainability Performance Metrics	51
Table 14 Project reporting requirements.....	52

List of Figures

Figure 1: Sydney metro city and south west alignment station	7
Figure 2: South west corridor conversion enabling works	9
Figure 3 Site Layout (source: Sydney Metro City & Southwest - Sydenham to Bankstown - Submissions and Preferred Infrastructure Report, 2018)	11
Figure 4 Site Layout (source: Sydney Metro City & Southwest - Sydenham to Bankstown - Submissions and Preferred Infrastructure Report, 2018)	12
Figure 5 Bankstown Early Works scope (source: Metro T2M – Bankstown Station Design & precinct Plan – Sydney Metro Southwest Metro Design Services, 2021).....	14
Figure 6: Bankstown Station overview location.....	15
Figure 7 Southwest Metro alignment and stations	17
Figure 8 Sydney Metro's 6 guiding principles	22
Figure 9 Sydney Metro Sustainability Framework	23
Figure 10 Sydney Metro Sustainability themes and objectives (source: Sydney Metro City & Southwest Sustainability Strategy 2017 - 2024, 2019 update).....	25
Figure 11 Sydney Metro Sustainability themes and targets (source: Sydney Metro City & Southwest Sustainability Strategy 2017 - 2024, 2019 update).....	27
Figure 12 Laing O'Rourke Australia Concrete Carbon Limits.....	47
Figure 13: TfNSW and Sydney Metro's overarching Environment & Sustainability Policy	67
Figure 14: JHLOR JV Project Sustainability Policy	68
Figure 15: JHLOR JV Project Procurement Policy	69
Figure 16: Laing O'Rourke Group Modern Slavery Policy.....	71

1. Overview

1.1 Introduction

This Sustainability Management Plan (SMP) is an integral part of the John Holland and Laing O'Rourke Joint Venture's (JHLOR JV) project management system that outlines JHLOR JVs' approach to managing sustainability requirements during the construction of the SWM1, SWM2 and the Sydney Metro Conversion Station Works (SWM3) as part of the Sydney Metro City and Southwest program of work.

In conjunction with the SMP and other discipline-specific management plans, this plan is developed to satisfy the requirements of the SWM3 SWTC, while maintaining compliance with Laing O'Rourke's governance system and AS/NZS ISO 9001:2008 Quality Management Systems.

In accordance with Laing O'Rourke's continuous improvement strategy, the plan is to be monitored, reviewed and updated to address changes in the management process over the project's lifecycle.

1.2 Purpose and Application

The SMP provides a systematic and integrated methodology for planning and performing the construction works on SWM1, SWM2 and SWM3. The SMP provides guidance on the management processes that will facilitate the timely implementation of the works.

Specified sustainability requirements must be met in order to enhance the Project's sustainability performance. Consistent with the Project's Sustainability Policy, the intended outcomes of the SMP with regards to sustainability include:

- enhancement of sustainability performance; and
- fulfilment of compliance obligations; and,
- achievement of sustainability objectives and targets.

The SMP enables the Project to manage sustainability in a systematic manner, and is applicable to the Project, and all of the Project's activities, products and services that the Project determines it can either control or influence considering a life cycle perspective.

1.3 Project Scope

The Sydney Metro City & Southwest Project is a new 30-kilometre metro line that will extend the metro network from the end of the Metro Northwest Line at Chatswood, under Sydney Harbour, through the Sydney central business district (CBD) and south-west to Bankstown, as shown in Figure 1.

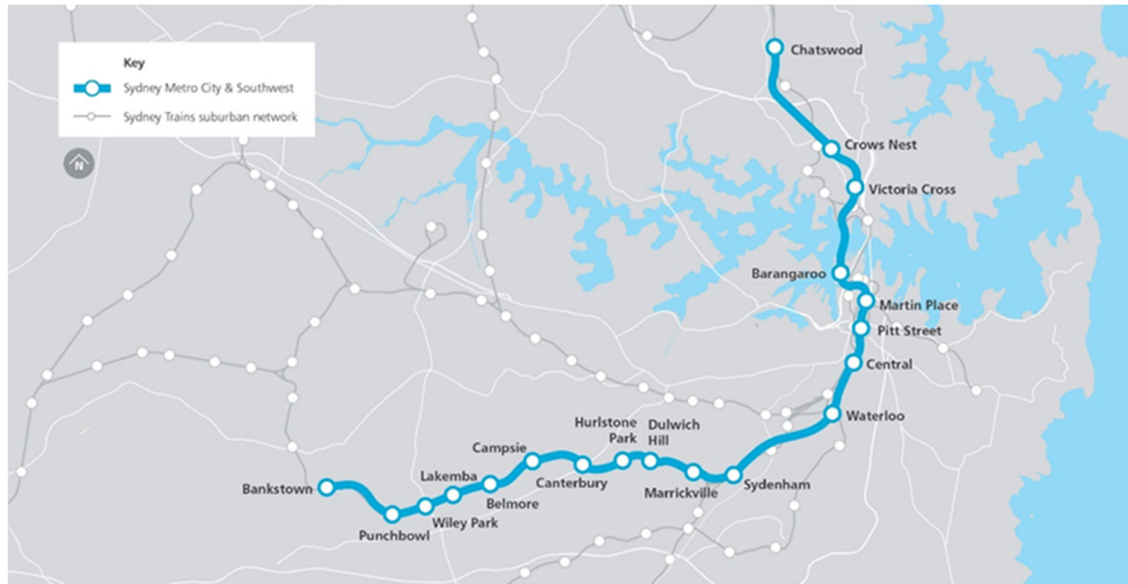


Figure 1: Sydney metro city and south west alignment station

The Project has the following two components:

- 1) Chatswood to Sydenham (the City section): a 17.1-kilometre extension, predominantly in tunnel, from Chatswood, under North Sydney, Sydney Harbour, Sydney CBD and Central station to Sydenham station. New stations will be delivered at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo, along with new underground platforms at Central Station; and
- 2) Sydenham to Bankstown metro conversion (Southwest Metro): a 13.4-kilometre extension, converting the existing T3 Bankstown Line from Sydenham Station to Bankstown Station to GoA4 metro operations.

Testing and commissioning of the new metro line is underway between Chatswood and Sydenham ahead of First Passenger Service in 2024, then onto Bankstown in 2025.

A critical focus is the timely and efficient procurement and delivery of the remaining scope for the Sydenham to Bankstown metro conversion, known as Southwest Metro.

Southwest Metro is the 13.4 kilometre metro conversion of the existing T3 Bankstown Line between Sydenham and Bankstown. Sydenham to Bankstown received planning approval on 12th December 2018. This component includes works associated with the SWMC, BEW, BAC and SWM3. SWMC, BEW, BAC and SWM3 will be referred to as “the Project” or “the works” in this document, or as abbreviated. The JHLOR JV has named the Project Sydenham to Bankstown (S2B) and will be refer to the Project in this way throughout the document.

Sydney Metro has developed a revised delivery strategy for the remaining scope to deliver Southwest Metro, which will be procured through five main packages, excluding those associated with the remaining Trains Systems Operations and Maintenance (**TSOM**) works.

1.3.1 [Overview - SSJ Project Scope](#)

Sydenham Station and Junction (SSJ) Project is a key component of Sydney Metro City & Southwest that is located at the interface between the tunnel from Chatswood to Sydenham and the Bankstown line conversion.

The SSJ scope involves remodelling of the existing Sydenham Station and Junction to allow for Sydney Metro City & Southwest operations. It includes a new aerial concourse constructed at the city end of the Sydenham Station to give access to all platforms and enable passenger interchange between train services, new platforms, new station buildings, station entries and forecourts, and new transport interchanges.

SSJ contract amendments were made for the SWMC and BAC works.

1.3.2 [Overview – SSC\(EW\) Project Scope](#)

The Southwest Corridor Conversion Enabling Works include the design and construction of:

- a new combined service route (CSR) for Sydney Metro City & Southwest systems from Sydney Metro City & Southwest chainage 6.740 to existing OHWS B12+043, excluding Marrickville, Dulwich Hill, Hurlstone Park, Canterbury and Campsie Station areas, and Dulwich Hill and Canterbury traction substation areas;
- partial connections from the CSR to Sydney Metro trackside equipment;
- relocation of Sydney Trains signal and communications services clear of the Campsie traction substation site; and
- All works required to enable the design and construction of the above items including all necessary investigations.
- Cooks River embankment stabilisation such as retaining walls.
- The Southwest Corridor Conversion Enabling Works are to be handed over to the Principal for incorporation into the operating Sydney Metro City & Southwest.

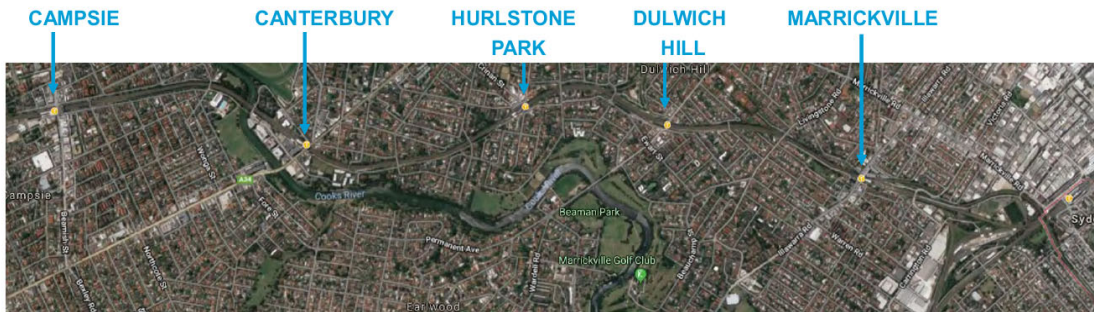


Figure 2: South west corridor conversion enabling works

1.3.3 Overview – South West Metro Corridor (SWMC) Works (Third Amendment Deed)

A brief overview is provided below for information only. The Southwest Metro Corridor works include the design and construction of:

- a new combined service route (CSR) for Sydney Metro City & Southwest systems between Sydenham and Bankstown, excluding areas installed under the Southwest Corridor Conversion Enabling Works and at each Station and Traction Substations
- Local route connections from the CSR to trackside equipment, including the installation of footings and foundation
- the replacement of 2 existing crossovers and the installation of 1 new crossover at Campsie, including all associated signalling systems and OHW adjustments
- adjustments to Overhead Wiring Structures (OHWS) within the Bankstown and ARTC corridors
- 3 no. of track hi-rail pads and associated access roads
- the relocation of existing Sydney Trains signalling and communications systems clear of affected Stations and Traction Substations
- Security and segregation fencing along the Bankstown Corridor
- various civils and enabling works, including retaining walls, ballast retention walls, local drainage and culvert refurbishment
- works to repair, refresh and update bridges including the addition or upgrade of vertical protection screens, safety screens, railings to the following overbridges;
 - Livingstone Road
 - Albermarle Street
 - Melford Street
 - Loch Street
 - Moreton Street
 - Stacey Street
- the following underbridges;
 - Meeks Road dive
 - Charlotte Avenue
 - Ness Avenue

- Foord Avenue
 - Charles Street
 - Wairoa Street
 - Belmore Oval
- and the following footbridges;
 - Church Street
 - Duke Street
- temporary site facilities required for design and construction of the Works;
- temporary arrangements for people and vehicles to safely access all property, including publicly accessible space affected by the Contractor's activities;
- temporary infrastructure, safety screens and ground support installed or erected to undertake design and construction of the works;
- temporary arrangements for Utility Services including water, electricity, stormwater, sewerage, gas and electronic communications;
- temporary works and measures required as a consequence of requirements arising from the stakeholder and community liaison process; and
- all other temporary works and measures required for the construction of the Works.

The Southwest Metro Corridor work location and site layout is highlighted in Figure 3 and 4 below.

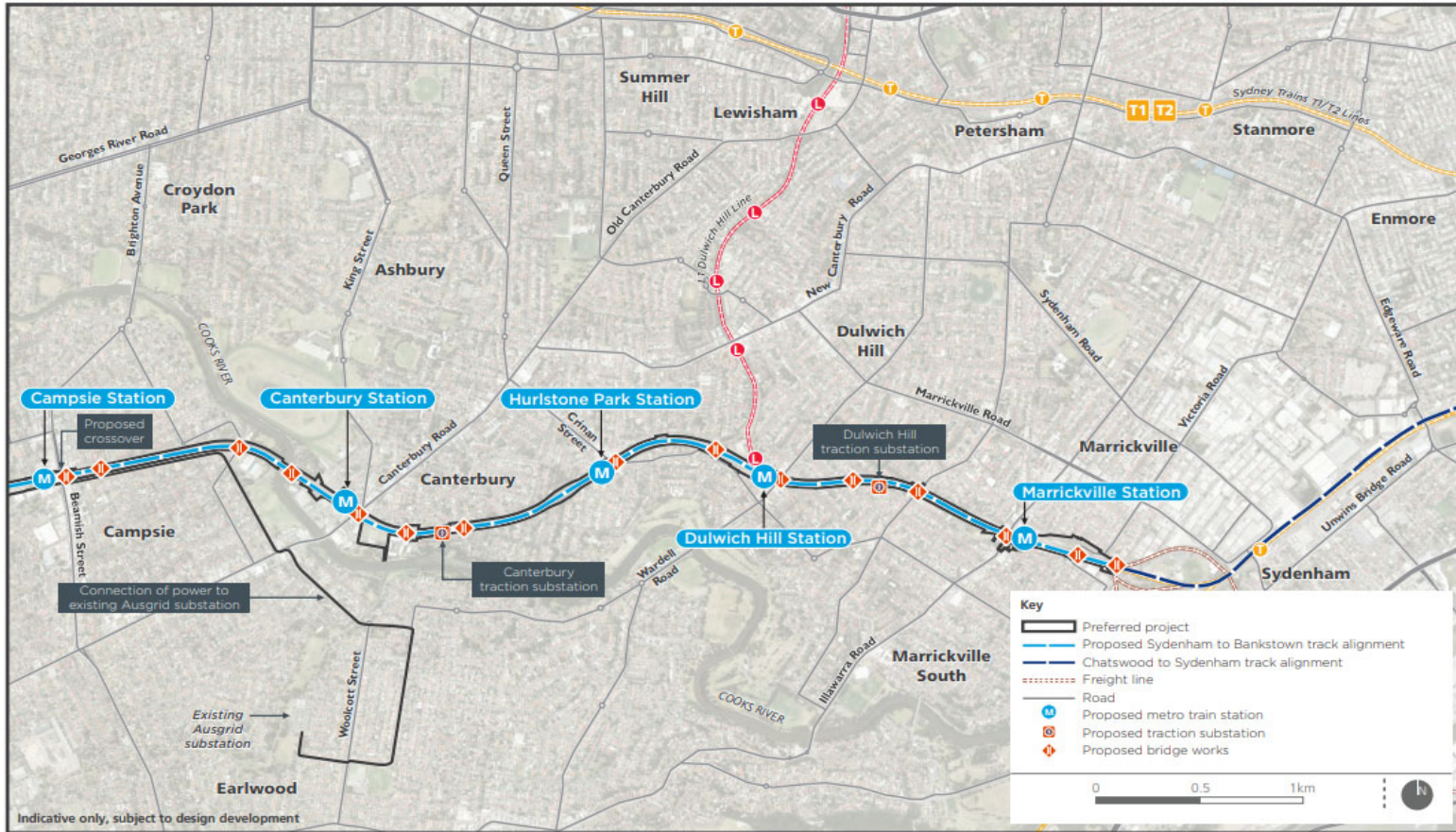


Figure 3 Site Layout (source: Sydney Metro City & Southwest - Sydenham to Bankstown - Submissions and Preferred Infrastructure Report, 2018)

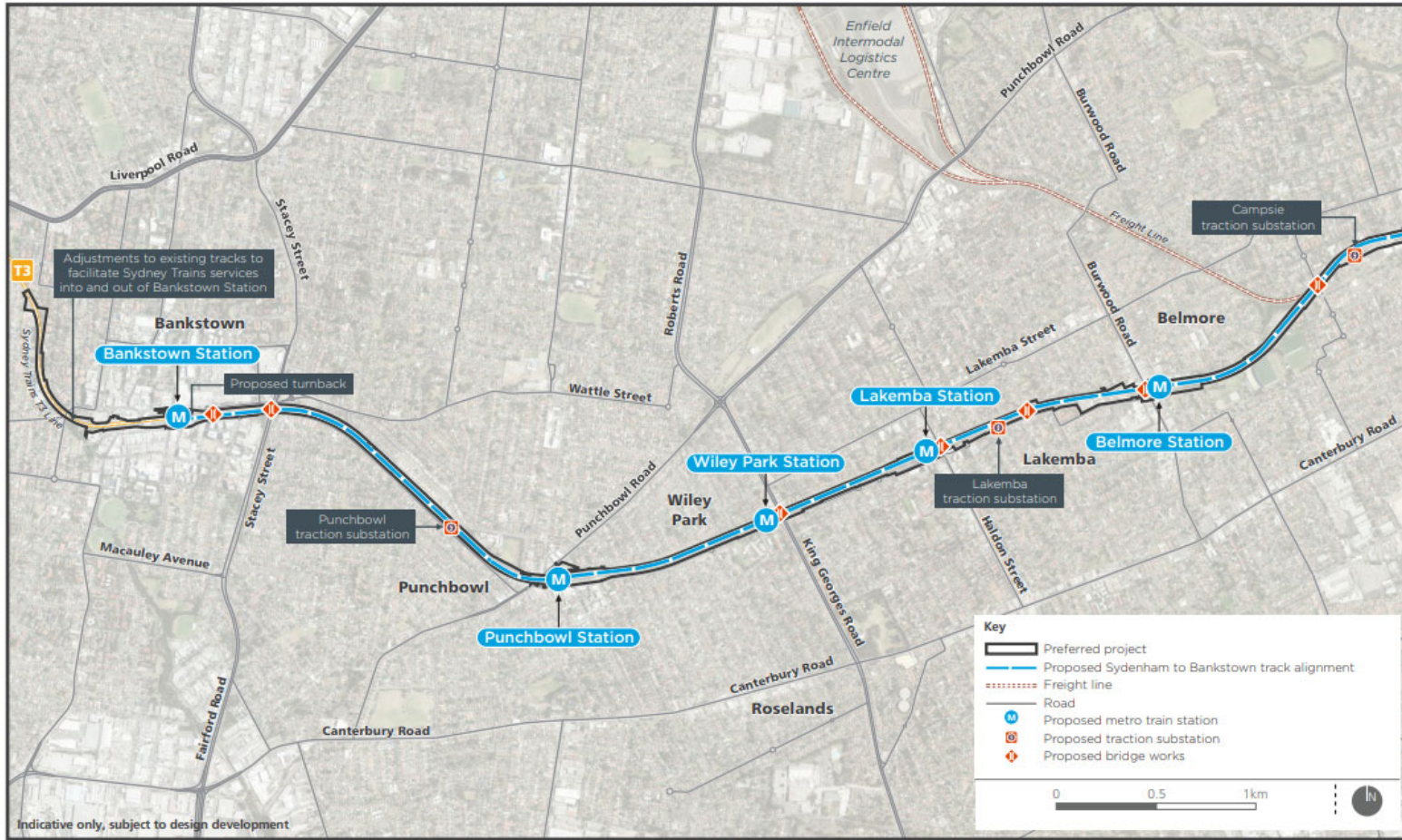


Figure 4 Site Layout (source: Sydney Metro City & Southwest - Sydenham to Bankstown - Submissions and Preferred Infrastructure Report, 2018)

1.3.4 [Overview- Bankstown Early Works \(BEW\) \(Fourth Amendment Deed\)](#)

The Bankstown Early Works (BEW) includes the following construct only scope at Bankstown Station:

- Construction of new Sydney Metro platforms (DOWN side only) to accommodate 6 car trains sets
- Installation of new Metro CSR (including GST and ULX)
- Bankstown Station Service Building construction, including MEP fitout
- OHW&S – install new and remove redundant assets
- Utilities relocation and protection works
- Civil, drainage, earthworks
- Excludes: Track slab, track realignment, architectural finishes and fixtures to Metro platform (i.e. structural elements only).
- SWM1 and SWM2 inclusions
 - Station brackets
 - ULX
 - Up Platform
 - Station security fencing
 - Station segregation fencing

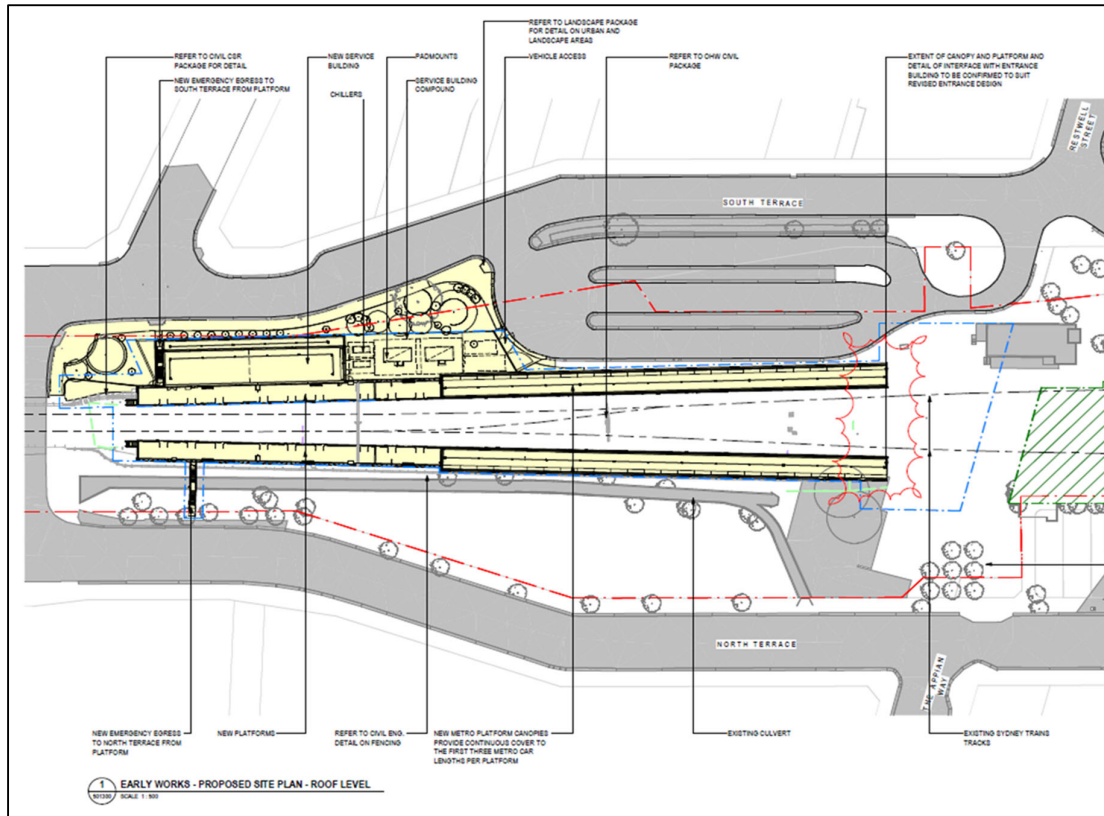


Figure 5 Bankstown Early Works scope (source: Metro T2M – Bankstown Station Design & precinct Plan – Sydney Metro Southwest Metro Design Services, 2021)

1.3.5 Overview - Bankstown and Additional Corridor Works (BAC) (Seventh Amendment Deed)

The Bankstown Station and Precinct Works comprise the following:

- Station and Precinct General: General requirements that are applicable to Bankstown Metro Works, Sydney Trains Bankstown Works and Bankstown Precinct Works including, demolition, station entrance requirements and signage and wayfinding.
- Bankstown Metro Works: New, and modification to existing, infrastructure and systems to facilitate Sydney Metro operations, including:
- Bankstown Metro Station Works: A new Bankstown Metro Station, new station building and entry, new platforms located adjacent to the existing rail alignment to the countryside of West Terrace Bridge, serving 6 cars (with safeguarding for 8 cars); provisions within and adjacent to Bankstown Metro Station for Interface Contractors including for Platform Screen Doors, Mechanical Gap Fillers, radio systems, central control systems,

communication and signalling systems; new Bankstown Metro Service Building and the general scope outlined in the SWTC.

- Bankstown Metro Corridor Works: New boundary security fencing; Sydney Metro combined service routes and associated lineside equipment; all civil and earthworks including retaining walls, drainage and noise walls; modifications to track alignment, new crossovers to facilitate the Bankstown Metro Station; new / adjusted OHW/S and OHW System 12 upgrades; and the general scope outlined in the SWTC.
- Sydney Trains Bankstown Works: New and modified infrastructure and systems required to allow for continued Sydney Trains operations at the existing Bankstown Station and new terminus operations at Bankstown Station following the commencement of Metro operations, including:
 - Bankstown Station Works: Modification of the existing Sydney Trains Bankstown Station including extension of the existing platforms further west to enable Sydney Trains 8 car; a new eastern entrance to Bankstown Station complete with Gate lines and back of house operational spaces, if required; and the general scope outlined in the SWTC.
 - Sydney Trains Corridor: New and modified infrastructure including track adjustments, new diamond crossing (or alternative equivalent), OHW/S and signalling and rail systems infrastructure to accommodate the modifications to Bankstown Station and continued operations between Bankstown and Yagoona stations and the general scope outlined in the SWTC.
 - Bankstown Precinct Works: New, and modification to existing, infrastructure and systems to facilitate a new cross-corridor plaza between The Appian Way (north of the rail corridor) and Restwell Street (south of rail corridor); retail facilities and station precinct and Public Domain improvements.

The scope includes the design and construction of these works for the interim and final configurations.

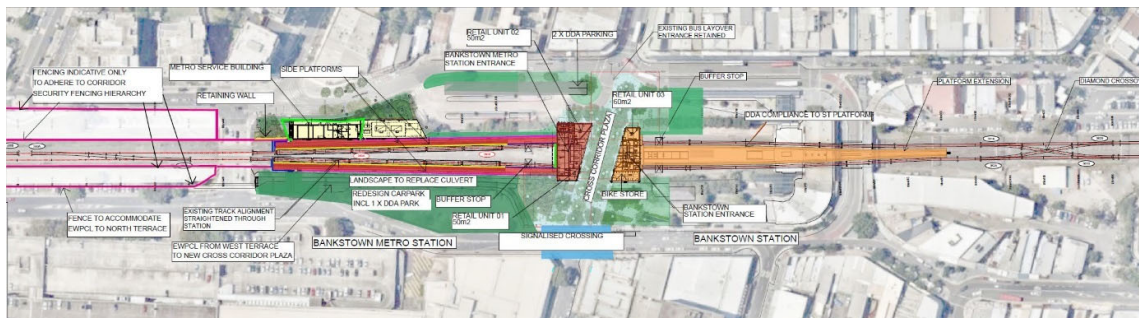


Figure 6: Bankstown Station overview location

1.3.6 [Overview - Southwest Metro Conversion Station Works- SWM3 Package](#)

The SWM3 Package is an additional piece of work that was awarded in March 2024 and was awarded under a new SWTC (Scope of Works Technical Criteria) Contract. The works are a continuation and construction of the original BAC works with the additional design and construction works. This includes the following works packages;

Bankstown Station (ST &SM) and Precinct Works

- New and modification to existing infrastructure and systems to facilitate Sydney Metro operations
- Cross-corridor plaza, retail facilities, station precinct and public domain improvements
- Bankstown Station CSR works, drainage, earthworks, platform works, platform extension, bridge works, plaza, station building and MEP, landscaping, trackside equipment, foundations and local CSR

Corridor Stations

- Platform finishes and configuration, repainting existing stations, landscaping, fire detection, supply and install of heritage interpretation, wayfinding and signage, building finishes, lighting and electrical upgrades, defect rectification, bird proofing.
- Full design and construction of equitable canopies, secondary egress routes, canterbury footbridge redecking, Marrickville shared path.
- Punchbowl demolition, building remediation, new roofing, underpass landscaping, precinct landscaping
- Lakemba bridge and anti throw screens
- Intersection works at Campsie.

1.3.6.1 [Overview - SWM3 Project Scope](#)

In April 2023, the NSW Government announced an independent review into Sydney Metro. As recommended by the interim review findings released in August 2023, the NSW Government announced its commitment to convert the T3 Bankstown Line to metro standards.

Completing the conversion ensures passengers on the Southwest receive the benefits offered by metro services, including a fast metro train every four minutes in the peak and fully accessible stations and services.

The conversion also delivers significant benefits across the broader transport network, reducing the rail bottleneck closer to the CBD, increasing reliability, and freeing up trains to use on other lines.

Southwest Metro will upgrade and convert all 11 stations on the existing T3 Bankstown Line between Sydenham and Bankstown to metro standards. All these stations will also be fully

accessible with lifts and level access between platforms and trains. The Southwest Metro alignment and stations is shown in Figure 7.

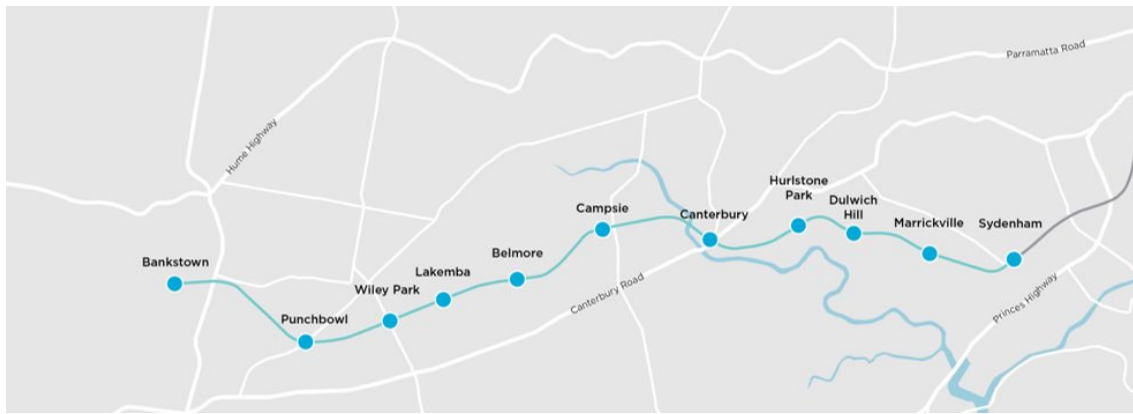


Figure 7 Southwest Metro alignment and stations

The new metro rail will become fully segregated from the existing Sydney Trains network at Bankstown Station. The T3 Bankstown Line beyond Bankstown will continue to be operated by Sydney Trains, serving stations between Liverpool, Lidcombe, and Bankstown.

Customers will benefit from new and fully air-conditioned Sydney Metro trains every four minutes in the peak in each direction with lifts, level platforms and platform screen doors for safety, accessibility, and increased security.

The Southwest Metro Conversion & Station Works (SWM3) project scope is divided into five separate components being delivered by the JHLOR JV:

1. Bankstown Station and Precinct Works.
2. Southwest Station Works
3. Southwest Corridor Works
4. Asset Upgrade Works, and
5. Final Conversion Works.

1.3.6.1.1 BANKSTOWN STATION AND PRECINCT WORKS

The Bankstown Station and Precinct Works comprise of the demolition of the existing facilities and the installation of new Bankstown Metro Station entrance, concourse area and entrance buildings with the works split into stages to allow First Passenger Service train operations, and the final stage for the completion of the Bankstown Metro Station. The precinct will comprise of new and modifications of the existing, infrastructure and systems to facilitate a new cross-corridor plaza between The Appian Way (north of the Rail Corridor) and Restwell Street (South of Rail Corridor), retail facilities, station precinct and Public Domain Improvements.

1.3.6.1.2 SOUTHWEST STATION WORKS

The Southwest Station works comprise of the completion of works to nine “other” Metro Stations (Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Wiley Park, Lakemba and Punchbowl) - these works cover a range of items to complete the station upgrades to the final Sydney Metro Specification, including: demolition; removal of redundant assets; repairs and upgrades to station buildings and structures; panting; secondary egress provisions at selected stations; fencing; re-roofing; wayfinding; bridge upgrades including hostile vehicle mitigation; heritage interpretation works and landscaping.

1.3.6.1.3 SOUTHWEST CORRIDOR WORKS

Works include the clearing and repair of corridor access stairs, new metal screens fixed to combined services routes on bridges, vegetation management, acoustic treatments and boundary fencing works. For the Bankstown Metro corridor works, there will be the installation of Sydney Metro combined services routes and associated lineside equipment, civil and earthworks including retaining walls, drainage, fencing and noise walls; modifications to track alignment; adjustment to OHW/S; installation of buffer stops.

There will be new and modified infra structure systems required to allow for continued Sydney Trains operations at the existing Sydney Trains operations at the existing Sydney Trains Bankstown Station and new terminus operations at Bankstown Station following the commencement of Metro operations; including:

- Modification of the existing Sydney Trains Bankstown Station to initially enable Sydney Trains 4 car train shuttle between Lidcombe and Bankstown, and then an extension of the existing platforms further west to enable Sydney Trains 8 car train operations; a new eastern entrance to Bankstown Station complete with Gate Lines and back of house operational spaces; and
- New and modified infrastructure including track adjustments, new diamond crossing, OHW/S and signalling and rail systems infrastructure to accommodate the modifications to Bankstown Station and continued operations between Bankstown and Yagoona stations.

1.3.6.1.4 ASSET UPGRADE WORKS

Works include removal of kinematic envelope infringements, track rectifications work, bridge upgrades and renewal works, and culvert, sewer, and drainage inspections.

1.3.6.1.5 FINAL CONVERSION WORKS

Works include the connection to the City section (Track and OHW); configuration works (remaining security and segregation fencing, wayfinding and signage, Building Management Control Systems (BMCS) and lift conversions, master keying and electrical configuration; alteration works (tree trimming, bonding of insulated rail joints, earthing and bonding works); clean-up works (final tamping and rail grinding and station refresh/ deep clean, station meal room alterations); removal of redundant assets in corridor; and fixed gap filler works.

1.3.6.1.6 SCOPE BY JHLOR JV

The SWM3 Works summarised in Table 2 and further detailed in the SWM3 Contract and SWTC.

Scope element	Description
Bankstown Metro Station Works	New Bankstown Metro Station entrance, concourse area and entrance buildings with the works split into stages to allow First Passenger Service train operations, and the final stage for the completion of the Bankstown Metro Station.
Bankstown Metro Corridor Works	Sydney Metro combined service routes and associate lineside equipment, civil and earthworks including retaining walls, drainage, fencing and noise walls; modifications to track alignment; adjustment to OHW/S; installation of buffer stops.
Sydney Trains Bankstown Station Works and Sydney Trains Bankstown Corridor Works	New and modified infrastructure and systems required to allow for continued Sydney Trains operations at the existing Sydney Trains Bankstown Station and new terminus operations at Bankstown Station following the commencement of Metro operations, including: <ul style="list-style-type: none"> modification of the existing Sydney Trains Bankstown Station to initially enable Sydney Trains 4 car train shuttle between Lidcombe and Bankstown, and then an extension of the existing platforms further west to enable Sydney Trains 8 car train operations; a new eastern entrance to Bankstown Station complete with Gate Lines and back of house operational spaces; and new and modified infrastructure including track adjustments, new diamond crossing, OHW/S and signalling and rail systems infrastructure to accommodate the modifications to Bankstown Station and continued operations between Bankstown and Yagoona stations.
Bankstown Precinct Works	New, and modification to the existing, infrastructure and systems to facilitate a new cross-corridor plaza between The Appian Way (north of the Rail Corridor) and Restwell Street (south of Rail Corridor), retail facilities, station precinct and Public Domain improvements.
Southwest Stations Works	Completion of works to nine other Metro Stations (Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Wiley Park, Lakemba and Punchbowl) – these works cover a range of items to complete the station upgrades to the final Sydney Metro specification, including: removal of redundant assets; repairs and upgrades to station buildings and structures;

Scope element	Description
	painting; secondary egress provisions at selected stations; fencing; wayfinding; landscaping.
Southwest Corridor Works	Works include the clearing and repair of corridor access stairs, new metal screens fixed to combined services routes on bridges, vegetation management, acoustic treatments, and boundary fencing works.
Asset Upgrade Works	Works include removal of kinematic envelope infringements, track rectification works, bridge upgrade and renewal works, and culvert, sewer and drainage inspections.
Final Conversion Works	Works include the connection to the City section (track and OHW); configuration works (remaining security and segregation fencing, wayfinding and signage, Building Management Control Systems (BMCS) and lift conversions, master keying and electrical configuration); alteration works (tree trimming, bonding of insulated rail joints, earthing and bonding works); clean-up works (final tamping and rail grind and station refresh/deep clean, station meal room alterations); removal of redundant assets in corridor; and fixed gap filler works.

Table 2: Scope of works summary of SWM3 Package

Further information on the coordination or works between the JHLOR JV and the Interface Contractors can be found in the Design Management Plan section 2.2.3 Scope by JHLOR JV, section 2.2.4 SWM3 Interfacing scope by others and section 5.2 Interface Management.

1.3.7 Project and Client Objectives

1.3.7.1 Project Requirements

This Plan specifically addresses the requirements detailed in the Construction Environmental Management Framework (CEMF) Clauses 3.2, the SWM3 Scope of Works and Technical Criteria (SWTC) Appendix B07, Appendix F08 and Schedule E3 – Project Planning Approvals and Conditions, Planning & Environment conditions of approvals (CoA) and Revised Environmental Mitigation Measures (REMMs) as seen in the Plan Compliance in Appendix A.

The table below specifies which documents are relevant to each portion of the works.

Project	CEMF	SWTC Appendix B07	SWTC Appendix F08 (MR-Sy)	Schedule D1 MR-Sy	Schedule E3	COA	REMMs
SWM3	Yes	Yes – Annexure B	Yes	N/A	Yes	Yes	Yes

Table 3: Project requirement documentation for SWM3

B07 and F08 (MR-Sy) detail specific requirements related to materials, energy use, carbon emissions, and waste management. The project will focus on sourcing sustainable materials during the procurement process, ensuring that all choices align with environmental and sustainability goals. Additionally, measures will be implemented to minimise carbon emissions and manage waste effectively throughout the project's lifecycle. For comprehensive information on these requirements, please consult the relevant sub-plans:

- Material Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000004) - Section 2.3
- Energy and Carbon Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000003) - Section 2.4
- Waste Management and Recycling Plan (SMCSWSW8-JHL-WBK-SU-PLN-000002) – Section 2.4

1.3.7.2 Understanding the Project's Context

The Project has determined external and internal issues that are relevant to its purpose and that affect its ability to achieve its intended sustainability outcomes. An overview of the key high-level issues that are relevant is provided below.

1.3.7.2.1 KEY HIGH-LEVEL ISSUES

Key external cultural, social, political, legal, regulatory, financial, technological, economic, natural and competitive circumstances are detailed in this section.

The client is Sydney Metro, a Transport for NSW project. Transport for NSW are a state government department whose role is to lead the development of a safe, efficient, integrated transport system in NSW. Their culture and values include;

- Customer focus – placing the customer at the centre of everything they do
- Collaboration – valuing each other and creating better outcomes by working together
- Integrity – taking responsibility and communicating openly
- Safety – prioritising safety for their people and customers
- Solutions – delivering sustainable and innovative solutions to meet NSW's transport needs

Subsequently, Sydney Metro's guiding principles embed sustainability commitments to the community, customers, and key partners (government and industry), these are seen in Figure below:



Figure 8 Sydney Metro's 6 guiding principles

- Sydney Metro’s Sustainability Strategy for Stage 2 states 'sustainability' means optimising environmental and social outcomes, transport service quality, and cost effectiveness.
- The client has budgeted approximately \$248M for the SWM3 and is scheduled for completion in January 2026.
- The Project is located on the T3 Bankstown line between Sydenham Station and Bankstown Station as detailed in Figures 2, 3, 4 and 5. Works will predominately occur within the rail corridor, with some stations including precinct works and all other stations requiring minor works. Of the stations with a smaller scope of works under S2B, the majority of the major station precinct works will be undertaken by other Principal Contractors.

1.3.8 Structure and interface with other management plans

The Sydney Metro Sustainability Framework illustrated in Figure 9 below shows how the project-wide Sustainability objectives, targets and initiatives were developed and how they interface with the SWM3 specific targets and initiatives, contract requirements and this Sustainability Management Plan and sub-plans.

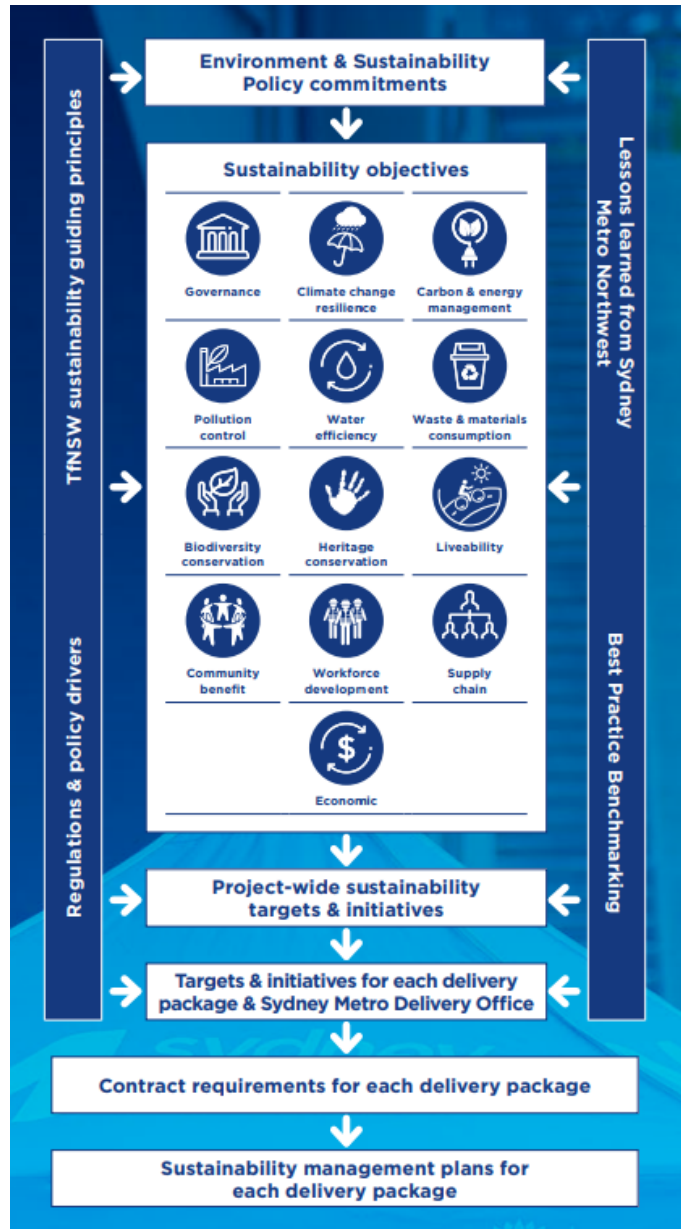


Figure 9 Sydney Metro Sustainability Framework

- Extracted from Sydney Metro’s Sustainability Strategy for Stage 2, the project-wide sustainability objectives can be seen in Figure below:

SUSTAINABILITY THEMES & OBJECTIVES	 <p>Governance</p>	<ul style="list-style-type: none"> › Demonstrate leadership by embedding sustainability objectives into decision making. › Demonstrate a high level of performance against objectives and appropriate benchmarks. › Be accountable and report publicly on performance.
	 <p>Carbon & energy management</p>	<ul style="list-style-type: none"> › Improve the shift toward lower carbon transport. › Reduce energy use and carbon emissions during construction. › Reduce energy use and carbon emissions during operations. › Support innovative and cost effective approaches to energy efficiency, low-carbon / renewable energy sources and energy procurement.
	 <p>Environmental performance</p>	<ul style="list-style-type: none"> › Reduce sources of pollution and optimise control at source to avoid environmental harm. › Comply with environmental obligations outlined in applicable project planning approvals.
	 <p>Climate change resilience</p>	<ul style="list-style-type: none"> › Infrastructure and operations will be resilient to the impacts of climate change.
	 <p>Resources - water efficiency</p>	<ul style="list-style-type: none"> › Minimise use of potable water. › Maximise opportunities for reuse of rainwater, stormwater, wastewater and groundwater.
	 <p>Resources - waste & materials</p>	<ul style="list-style-type: none"> › Minimise waste through the Project lifecycle. › Reduce materials consumption. › Consider embodied impacts in materials selection. › Maximise beneficial reuse of spoil.
	 <p>Biodiversity conservation</p>	<ul style="list-style-type: none"> › Protect and create biodiversity through appropriate planning, management and financial controls.



Figure 10 Sydney Metro Sustainability themes and objectives (source: Sydney Metro City & Southwest Sustainability Strategy 2017 - 2024, 2019 update)

Extracted from Sydney Metro’s Sustainability Strategy for Stage 2, the project-wide sustainability targets and initiatives can be seen in Figure below:

SUSTAINABILITY THEMES & TARGETS	 <p>Governance</p>	<ul style="list-style-type: none"> › A high level of attainment (minimum ISCA IS Rating of 65 'Excellent') for relevant infrastructure. › 5 Star Green Star ratings for relevant buildings. › Align with a high rating using the TfNSW Sustainable Design Guidelines.
	 <p>Carbon & energy management</p>	<ul style="list-style-type: none"> › Achieve at least a 20 per cent reduction in carbon emissions associated with construction, when compared to business as usual.* › Offset 25 per cent of the electricity needs for the construction phase of the project. › Achieve at least a 20 per cent reduction in carbon emissions associated with operations, when compared to business as usual.* › Maximise the capture and reuse of energy generated from braking trains. › Design buildings (stations and stabling buildings) to achieve at least a 15 per cent improvement over performance requirements set out in Section J of the National Construction Code. › Source 5-20 per cent of the low voltage electricity required at above ground stations from onsite renewable energy sources where feasible. › Offset 100 per cent of the electricity needs for the operational phase of the project.
	 <p>Environmental performance</p>	<ul style="list-style-type: none"> › Zero major pollution incidents. › New emission standards will be identified and applied to diesel equipment and vehicles during construction.
	 <p>Climate change resilience</p>	<ul style="list-style-type: none"> › Mitigate all extreme and high level risks. › Mitigate a minimum of 25 per cent of medium level risks (examples include increased flooding, increased temperatures, sea level rise, and increased storm events).
	 <p>Resources - water efficiency</p>	<ul style="list-style-type: none"> › Reduce water use by at least 10 per cent compared to business as usual.* › Source at least 33 per cent of the water used in construction from non-potable sources. › Source at least 33 per cent of the water used in operations from non-potable sources. › Implement rainwater harvesting and reuse systems at construction sites and feasible above ground stations.

SUSTAINABILITY THEMES & TARGETS	 <p>Resources - waste & materials</p>	<ul style="list-style-type: none"> › Reduce the environmental footprint of materials used on the project by at least 15 per cent compared to business as usual.* › Use concrete which has an average Portland cement replacement level of more than 25 per cent. › 100 per cent beneficial reuse of usable spoil. › Recycle or reuse 90 per cent of recyclable construction and demolition waste. › Recycle or reuse 60 per cent of office waste during the construction phase. › Recycle or reuse 80 per cent of the waste generated during operations. › Recycle or reuse 65 per cent of office waste during operations. › 60 per cent of reinforcing steel is produced using energy-reducing processes in its manufacture. › Source 100 per cent reused, recycled timber or responsibly sourced timber.
	 <p>Biodiversity conservation</p>	<ul style="list-style-type: none"> › Minimise vegetation clearing. › Native landscaping targets to be established.
	 <p>Heritage conservation</p>	<ul style="list-style-type: none"> › Prepare a Heritage Strategy, including stakeholder engagement with relevant stakeholders. › Implement the Heritage Strategy during design and delivery, to conserve and activate. › Maximise opportunities for archaeological research and future interpretation of archaeological finds. › Opportunities for heritage interpretation identified and implemented at appropriate station precincts.
	 <p>Liveability</p>	<ul style="list-style-type: none"> › Station interchanges designed in accordance with the Interchange Access Plans and modal hierarchy. › Stations and precincts designed in accordance with the Sydney Metro Design Guidelines. › Promote access by cycling, through provision of bicycle parking, and safeguard for future expansion of bicycle facilities.
	 <p>Community benefit</p>	<ul style="list-style-type: none"> › Implement initiatives which will provide tangible benefits to local community groups during the construction period. › Implement initiatives which will provide tangible benefits to the broader local community beyond the construction period. › Identify key drivers for affordable housing and work with other lead agencies to identify opportunities and develop an appropriate response.
	 <p>Supply chain</p>	<ul style="list-style-type: none"> › All principal contractors develop and implement sustainable procurement strategies.
	 <p>Workforce development</p>	<ul style="list-style-type: none"> › Refer to the Sydney Metro City & Southwest Workforce Development and Industry Participation Strategy, which is a separate document to be read in conjunction with this strategy and outlines priorities, objectives and targets to address workforce development.

* Note: 'Business as usual' (BAU) is defined as that which is used in the applicable rating scheme for the respective target (e.g. ISCA Rating Tool, Green Star and TfNSW CERT).

Figure 11 Sydney Metro Sustainability themes and targets (source: Sydney Metro City & Southwest Sustainability Strategy 2017 - 2024, 2019 update)

1.4 Needs and Expectations of Interested Parties

The Project has identified the relevant interested parties, assessed their needs and expectations, and determined which of these needs and expectations become its compliance obligations with regards to sustainability.

Substantial ongoing effort will be made to manage the Project's understanding of the needs and expectations of Interested Parties, further detail can be found in the Interface Management Plan (SMCSWSSJ-JHL-WSS-IF-PLN-000019) and the Community Communications Strategy (CCS) (SMCSWSW8-JHL-WBK-CL-PLN-000001). A high-level overview of the most relevant parties is provided in the table below.

Interested Party	Needs and Expectations
Transport for NSW	Environment and Sustainability Policy Environment and Sustainability Framework Sustainable Design Guidelines v4.0
Sydney Metro	Environment and Sustainability Policy Sustainability Strategy Contract documents
Parent Companies	Policies Systems Procedures
Infrastructure Sustainability Council of Australia (V1.2)	Technical Manual V1.2
Neighbours	Good neighbours
Travelling Public	Uninterrupted travel
Rail Operators	Defined within contract documents
Other Contractors	Defined within contract documents
Local Government and Utilities	Defined within contract documents

Table 4: SWM3 interest parties' needs and expectations.

2. Leadership

2.1 Sustainability Leadership Committee

A Sustainability Leadership Committee (SLC) will be established on the project. Membership will include Metro's Sustainability Leads, the Project Director, Project Leader, Commercial/Procurement Manager, Design Manager, Environmental Manager, Construction Manager, Community and Stakeholder Engagement Manager, Workforce Development Manager, and the Sustainability Manager.

The SLC will meet on a regular basis to demonstrate leadership and commitment with respect to sustainability by:

- Taking accountability for the effectiveness of the Project's approach to sustainability

- Ensuring that the sustainability policy and objectives are established and are compatible with the strategic direction and the context of the Project
- Ensuring the integration of sustainability requirements into the Project’s processes
- Identifying opportunities for best practice, and the mechanisms by which they can be delivered
- Ensuring that the resources needed for sustainability are available
- Communicating the importance of effective sustainability management and of conforming to the requirements
- Ensuring that the Project achieves its intended outcomes
- Directing and supporting persons to contribute to the effectiveness of sustainability efforts
- Promoting continual improvement; and,
- Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

2.2 Sustainability Policy

The Project Sustainability Policy is developed by Project management. It provides a framework for the objectives that have been set in this SMP and includes a commitment to go beyond mitigating negative impacts by undertaking restorative actions (i.e. net positive benefits for society and the environment) and to sustainable procurement.

The Project Sustainability Policy supports the Metro Environment and Sustainability Policy. For further information on both policies, see Appendix B.

The Project Sustainability Policy was updated to reflect new and current leadership for the SWM3 contract. The overarching objectives and targets remain the same.

2.3 Project Roles, Responsibilities and Authorities

Project management ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the Project.

Sustainable infrastructure cannot be delivered by one person or one discipline, it requires a multidisciplinary approach underpinned by collaboration. The following roles are critical to sustainability on the Project.

Role	Responsibility
Project Director	Overall responsibility and authority for; <ul style="list-style-type: none"> • ensuring that the management of sustainability conforms to the requirements of this SMP • reporting on the performance of the Project with regards to sustainability, to top management and interested parties

Sustainability Manager	<p>IS Assessor</p> <p>Day to day responsibility and authority for;</p> <ul style="list-style-type: none"> • ensuring that the management of sustainability conforms to the requirements of this SMP • reporting on the performance of the Project with regards to sustainability to project management <p>As per the applicable compliance obligations, the Sustainability Manager must;</p> <ul style="list-style-type: none"> • possess a recognised qualification relevant to the position and the SWM3 Contractor's Activities and have recent relevant experience in sustainability management on projects similar to the Project Works; • be an Infrastructure Sustainability Accredited Professional (ISAP) accredited by ISCA and maintain currency of this qualification throughout the period of the SMW3 Works; • have a recognised and demonstrated competence in sustainability management in the design and construction of sustainable infrastructure or buildings; • have at least five years' sustainability management experience in the design and construction of sustainable infrastructure or buildings; • be available as the Principal's Representative's primary contact with the SWM3 Contractor on sustainability matters; • be responsible for and have the authority to develop and implement the Sustainability Management Plan; and • be engaged throughout the execution of the SWM3 Contractor's Activities and be on or around the Site during the construction phase of the Project Works and Temporary Works with responsibilities limited to sustainability management of the SWM3 Contractor's Activities. • be employed on the project until Completion of the last Portion to achieve Completion and until the certification of the ISCA "as-built" rating is achieved, whichever occurs first.
Sustainability Advisor/Co-ordinator	<p>IS Assessor</p> <p>Dedicated to assisting the Sustainability Manager fulfil their duties, must;</p> <ul style="list-style-type: none"> • have at least two years' sustainability management experience in the design and construction of sustainable infrastructure or buildings
Commercial Manager	<p>Work collaboratively with the Sustainability Manager, and promote, encourage, and assist senior management and project teams in implementing effective commercial (contractual and financial) practices.</p>
Design Manager	<p>Work collaboratively with the Sustainability Manager, lead and manage the design delivery process, function and team within the project life cycle to maximise the winning of work and deliver successful project outcomes.</p>
Construction Manager	<p>Work collaboratively with the Sustainability Manager, control and coordinate all site-based construction activities to ensure that assigned construction works are completed to the client's satisfaction and to meet quality, time, and profit objectives.</p>
Environmental Manager	<p>Work collaboratively with the Sustainability Manager, identify and manage project environmental risk and ensure and execute the project environmental program and environmental deliverables.</p>
Community and Stakeholder Engagement Manager	<p>Work collaboratively with the Sustainability Manager, and lead and provide advice to the Project on communications, community relations and stakeholder relations. Develop and implement a communications program and stakeholder management plan which provides project support by projecting a strong and positive image of the Project to the community and key stakeholders and manages stakeholder issues.</p>

Workforce Development Manager	Work collaboratively with the Sustainability Manager, Support the human resources function for the project and ensure that all people management activities – including recruitment, on-boarding, training & development, performance management, remuneration, cultural diversity, employee relations and other HR matters – are conducted in accordance with legislative and policy frameworks and are consistent with business requirements.
--------------------------------------	---

Table 5: Critical roles and responsibilities within JHLOR

It is also noteworthy that critical roles are undertaken by personnel external to the JHLORJV. These individuals have been identified as key facilitators, and the Project will proactively seek to collaborate. Their roles are detailed in the table below.

Role	Responsibility
Metro Project Leaders	Overall responsibility and authority for; <ul style="list-style-type: none"> ensuring that the Project's management of sustainability conforms to Metro's requirements reporting on the performance of the Project with regards to sustainability, to Metro's top management and interested parties
Metro Sustainability Leads	Day to day responsibility and authority for; <ul style="list-style-type: none"> ensuring that the Project's management of sustainability conforms to Metro's requirements reporting on the performance of the Project with regards to sustainability, to Metro's top management and interested parties
Independent Certifier	Responsibility and authority for certifying compliance with all applicable sustainability compliance obligations
Metro Technical Specialists	Day to day responsibility and authority for; <ul style="list-style-type: none"> ensuring that the Project's management of sustainability (including in relation to their areas of expertise) conforms to the technical requirements of Metro (e.g. concrete structures)

Table 6: Critical roles and responsibilities by personnel external to JHLOR

3. Planning

3.1 Compliance Obligations

The Project has determined the compliance obligations related to sustainability, determined how these obligations apply, and taken these compliance obligations into account when establishing and updating this SMP.

The key project sustainability compliance obligations are derived from the following contract documents:

SWM3
Scope of Works and Technical Requirements (SWTC Appendix B07)
Management Requirements – Sustainability (MR-Sy)
Construction Environmental Management Framework (CEMF)
Revised Environmental Management Measures (REMMs)
Planning Approval – Conditions of Approval (CoA)
Environmental Protection License (EPL)

Table 7: Key Sustainability compliance obligation documents

Registers for compliance obligations are available on the Projects SharePoint and are available for both Project and Sydney Metro.

Appendix A includes Sustainability Management Plan compliance cross references.

3.2 Objectives

The Project has established sustainability objectives, considering risks and opportunities and compliance obligations. The primary sustainability objectives are detailed below:

Project	Primary Sustainability Objective
SWM3	Achieve an Excellent IS As-built rating score of at least 65 points

Table 8: Primary Sustainability Objectives for SWM3

The project will aspire to significantly exceed the minimum stipulated scores outlined in Table 6 above, or any equivalent level of performance using a demonstrated equivalent rating tool, as per Condition E42 of SSI 8256. These objectives and targets have been specifically linked with the obligations and targets specified in the Projects sustainability policy, the contractual requirements and the sections within the management plan. Additionally, the Project wants to show that we are committed to go beyond mitigating negative impacts to creating net positive benefits for society and the environment. Below is a detailed list of the key objectives and targets from the Projects contract with Sydney Metro and linked to our Policy, corresponding credit and management plans.

Sydenham to Bankstown Metro Project

Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001
Revision 8

JHLOR JV – Sustainability Policy commitments	Objective	Target	BAC	SWM3	Performance Indicators	Environmental	Social	Economic	ISC	Strategy Document and Reference
Implementing coordinated and transparent decision making, by engaging with stakeholders and suppliers, encouraging innovation and demonstrating sustainability leadership.	Sustainability performance is reported at least quarterly to senior leader.	Quarterly	✓	✓	Feedback and Review during Quarterly Senior Leadership Review	✓	✓	✓	Man-5	Section 9.2 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Revision 8
	Stakeholder participation credit audit to be undertaken annually	Annually	✓	✓	Stakeholder engagement strategy reviews		✓		Sta 1-4	Section 6 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Revision 8 Note: The Principal’s Community and Stakeholder representatives will be required to assist the SSJ Contractor in addressing the requirements of the ISCA V1.2 technical manual for the credits that relate to Stakeholder and Community Management.
Establishing robust sustainability objectives and targets and applying effective assurance processes to monitor performance.	Achieve an Excellent IS Design rating score of at least 65.	65+	✓	✗	Certified IS Ratings	✓	✓	✓	Entire Rating	Section 3.2 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Revision 8
	Achieve an Excellent IS As-Built rating score of at least 65.	65+	✗	✓	Certified IS Ratings	✓	✓	✓	Entire Rating	Section 3.2 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Revision 8 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 1)
	Recycle or reuse inert and non-hazardous construction and demolition waste (excluding spoil)	95%	✓	✓	Monthly sustainability report	✓			Was-2	Waste Management and Recycling Plan SMCSWSW8-JHL-WBK-SU-PLN-000002_Rev07, Section 2.4, Table 6 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 5)



Sydenham to Bankstown Metro Project

Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001
Revision 8

	Recycle or beneficially reuse office waste	60%	✓	✓	Monthly sustainability report	✓			Was-2	Waste Management and Recycling Plan SMCSWSW8-JHL-WBK-SU-PLN-000002_Rev07, Section 2.4, Table 6 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 7)
	Reduction in greenhouse gas emissions associated with the SSJ Contractors Activities.	20%	✓	✓	CERT tools	✓			Ene-1	Energy and Carbon Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000003_Rev06, Section 2.4, Table 3 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 4)
	maximum consumption of electricity during the SMW3 Contractor's Activities.	337,600 kWh	✗	✓	Monthly sustainability report	✓			Ene-1	October 2024 – October 2025 electricity + prediction up to May 2026 + 10% buffer (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 11)
	maximum consumption of fuel during the SMW3 Contractor's Activities.	655kL	✗	✓	Monthly sustainability report	✓			Ene-1	October 2024 – October 2025 fuel (including oil, grease) + prediction up to May 2026 + 10% buffer (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 12)
Requiring high standards from our designers, contractors and suppliers	Reduction in materials lifecycle impacts compared to a base case footprint	15%	✓	✓	CERT (Principals requested format)	✓			Mat-1	Section 5.3 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Greenhouse gas emissions must be less than the Carbon Emission Target during the SMW3 Contractor's Activities.	4725 tCO2e	✗	✓	Monthly sustainability report	✓			N/A	October 2024 – October 2025 GHG + prediction up to May 2026 + 10% buffer (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 10)
	Use a minimum 5% bio diesel mix for all diesel-powered plant and equipment wherever possible	5%	✓	✓	Monthly sustainability report	✓			Ene-2	Energy and Carbon Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000003_Rev06, Section 2.4, Table 3 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 2)

Sydenham to Bankstown Metro Project

Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001
Revision 8

	A minimum blended ethanol mix for all petrol-powered plant and equipment wherever possible	10%	✓	✓	Monthly sustainability report	✓			Ene-1	Energy and Carbon Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000003_Rev06, Section 2.4, Table 3 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 2)
	Portland cement to be reduced by an average of at least 50% through replacement by supplementary cementitious materials such as fly ash or slag.	50%	✘	✓	Monthly sustainability report	✓			Mat-1	Materials Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000004, Section 4.3 & 6.4.1 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 13) Note: Sustainability Strategy and BAC target is 25% Portland cement replacement LOR minimum standards for low carbon concrete in place
Adopting ethical and responsible procurement practices by incorporating environmental and social performance in subcontractor selection; adopting a preference for local industry participation and encouraging the supply chain to adopt sustainability practices.	Reusable spoil, including topsoil	100%	✓	✓	Monthly sustainability report	✓			Was-2	Waste Management and Recycling Plan SMCSWSW8-JHL-WBK-SU-PLN-000002_Rev07, Section 2.4, Table 6 (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 6)
	High impact Subcontractors and Suppliers will then be assessed for suitability using a combination of financial and non-financial scoring criteria (including sustainability and innovation) and the non-price component shall be no less than 20%	20%	✓	✓	Suppliers Evaluation Report	✓	✓	✓	Pro-2	Section 4.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Renewable energy sources substitution	40%	✓	✓	Monthly sustainability report	✓			Ene-2	Section 5.2 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Reduction in Water use compared to base case footprint	10%	✓	✓	Monthly sustainability report	✓			Wat-1	Section 5.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Revision 8

Sydenham to Bankstown Metro Project

Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001
Revision 8

	Replace potable water with non-potable water sources	33%	✓	✓	Monthly sustainability report	✓			Wat-2	Section 5.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Use a maximum total construction water consisting of water from potable sources	15.96ML	✗	✓	Monthly sustainability report	✓			Wat-1	SWM3 Stations Construction Water Balance Study – AGJV (November 2024) (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 8)
	Use a maximum total construction water consisting of water from non-potable sources.	See above	✗	✓	Monthly sustainability report	✓			Wat-2	SWM3 Stations Construction Water Balance Study – AGJV (November 2024) Base case assumes no non-potable water available. (aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 8)
	Materials/products by value have an ISCA approved environmental label	9%	✓	✓	ISC Mat-2 CSF	✓			Mat-2	Section 4.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Reinforcing steel has been produced using energy-reducing processes	60%	✓	✓	Materials Tracker	✓			Mat-1	Materials Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000004, Section 4.3
Developing effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity enhancement.	Implement measures to mitigate climate change risks classified as “medium”	25%	✓	✓	Climate Risk Register	✓	✓	✓	Cli-1	Section 3.3.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Implement measures to mitigate climate change risks classified as “extreme” and “high”	100%	✓	✓	Climate Risk Register	✓	✓	✓	Cli-1	Section 3.3.1 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
	Minimum of the total electricity being used in carrying out the SSJ Contractor’s Activities is being offset.	25%	✓	✗	Electricity Bills - GreenPower LGC purchase	✓			Ene-1	Energy and Carbon Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000003_Rev06, Section 2.4, Table 3 (MR-Sy 5c))
		100%	✗	✓	Electricity Bills - GreenPower LGC purchase	✓			Ene-1	Energy and Carbon Management Plan SMCSWSW8-JHL-WBK-SU-PLN-000003_Rev06, Section 2.4, Table 3

Sydenham to Bankstown Metro Project

Sustainability Management Plan

SMCSWSW8-JHL-WBK-SU-PLN-000001
Revision 8

										(aligns with SWM3 SWTC Appendix B07 Table 3 Target No. 3)
Assessing and managing all environmental risks.	Replacement of removed trees, where removal cannot be avoided	2:1	✓	✓	Offset Requirement	✓			Eco-1	Construction and Environmental Management Plan SMCSWSW8-JHL-WBK-EM-PLN-000001, Section 3.13.2
	Land used for the project is previously disturbed.	95%	✓	✓	Land survey	✓			Lan-1	Construction Environmental Management Plan SMCSWSW8-JHL-WBK-EM-PLN-000001
	Major pollution incidents	0%	✓	✓	Incident Report	✓			Dis-1	Construction Environmental Management Plan SMCSWSW8-JHL-WBK-EM-PLN-000001
Being socially responsible and delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.	Community feedback support as verified by independent review	80%+	✓	✓	Community Survey			✓	Sta-3	Section 6 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001
Creating desirable places, promoting liveability and cultural heritage, and optimising both community and economic benefit.	Provide demonstrable and tangible benefits to local community groups, during the construction period	5	x	✓	Number of benefit case	✓	✓	✓	Sta-1	Section 6 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001
Consolidating upon existing relationships with community and stakeholders to maximise opportunities to add value to local communities.	Provide demonstrable and tangible benefits to the broader local community beyond the construction period	5	x	✓	Number of benefit case	✓	✓	✓	Sta-1	Section 6 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001
Providing the appropriate training and resources necessary to meet our sustainability responsibilities.	Undertake sustainable procurement training for high impact suppliers.	At least once	✓	✓	Training record	✓	✓	✓	Pro-2	Section 7.2 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08

Undertaking public sustainability reporting.	Monthly sustainability reports are provided to contribute to the Sydney Metro Annual Sustainability Report	Monthly	✓	✓	Submission receipt	✓	✓	✓	Man-5	Section 9 of this plan SMCSWSW8-JHL-WBK-SU-PLN-000001_Rev08
--	--	---------	---	---	--------------------	---	---	---	-------	--

Table 9: Objectives and Targets Table

3.3 Risks and Opportunities

The Project Team have determined the sustainability risks and opportunities associated with its activities, products and services that it can control and those that it can influence, and their associated impacts, considering a life cycle perspective.

The Project has determined those aspects that have or can have a significant impact, by using established criteria. Comprehensive information has been consolidated within the Project's Risk and Opportunity Register prepared in accordance with the Risk Management Plan (SMCSWSSJ-JHL-WSS-RM-PLN-000010).

Sustainability opportunities are also documented within a stand-alone Sustainability Opportunities Register.

Effectively managing opportunities is central to achieving sustainable outcomes. It is typically the management of opportunities, rather than risks, that allow compliance benchmarks to be surpassed and best practice to be achieved. In order to do this, the Project has leveraged recent experience from other successful projects Laing O'Rourke and John Holland have been involved in. These relevant projects include:

- John Holland's NorthLink WA Southern Section project for Main Road Western Australia as part of the \$1.2bn NorthLink WA Program. This project achieved a Leading IS Design rating of 93 (version 1.2) and in doing so achieved a number of firsts, all of which stemmed from effectively and proactively managing sustainability opportunities:
- Laing O'Rourke Fulton Hogan and AECOM in an alliance with Public Transport Victoria, Metro Trains Melbourne and Vic Roads delivered the Bayswater Level Crossing Removal Project. The project received a 'Leading' IS Design Rating with an unprecedented score of 93.5 out of 110, and set a new industry benchmark in sustainable delivery.
- CPB Contractors John Holland Dragados Joint Venture for the \$1.15bn Sydney Metro Northwest Tunnel and Stations Civil Works project, which achieved a Leading IS As-Built Rating of 92 (version 1.2), the highest As-Built rating achieved to date.

3.3.1 [Climate Change Risk Assessment](#)

The Project has undertaken a preliminary climate change risk assessment in respect of the Works in accordance with the guidance and requirements included in the TfNSW Climate Risk Assessment Guidelines 2016, the Infrastructure Sustainability Council's IS Rating Tool Technical Manual V1.2 – Climate Change Adaptation chapter and TfNSW Sustainable Design Guidelines v4.0 – TfNSW Climate Risk Assessment Guideline SD-081. The risk assessment will be reviewed and updated throughout the design and is used as an input to inform the Design Work. Climate change risks and adaptation will be documented in the Design Documentation submitted to the Principal's Representative at Design Stages 1, 2 and 3.

The climate change projections and guidance used to underpin the climate change risk assessment is the most recent available and is consistent with industry best practice, including NWRLSRT-PBA-SRT-SU-REP-000022 Sydney Metro – City & Southwest Technical Services Climate Resilience Report. For BAC, risks identified are to be cross-referenced back to those identified as relevant within NWRLSRT-PBA-SRT-SU-REP-000022 to demonstrate consideration. For SWM3 Additional Stations (0280-CRT-REG-003-000 SWM3 CCRA Risk Register) the climate change risk assessment scope included primarily meal room upgrades, secondary egress from platforms and miscellaneous building services works. Much of the SWM3 scope has had climate change risk assessments completed under the T2M or BAC contracts. A gap assessment with design leads will confirm that all SWM3 scope is covered.

The Project has also identified and described in the Design Documentation, climate change initiatives which demonstrate that the Works have been designed to combat and be resilient to the effects of climate change during each Design Stage have included measures to mitigate:

SWM3

All climate change risks classified as "extreme" and "high"

At least 25% of all climate change risks classified as "medium"

Table 10 Climate Change Risk Mitigation Targets

See the Design Management Plan (SMCSWSW8-JHL-WBK-DM-PLN-000001) and T2M Draft Sustainability Design Report (Teambinder mail reference SMCSWSSJ-SMD-SSJ-SMD-GEN-000849) for more information.

3.4 Planning Action

The Project has planned to take actions to address sustainability risks and opportunities, its compliance obligations, and its objectives. The Project has determined what will be done, what resources will be required, who will be responsible, when it will be completed and how the results will be evaluated.

Actions to attend to objectives are being planned and documented within multiple trackers including:

- Sustainability Assurance Framework
- IS Rating Tracker

Actions to attend to compliance obligations have been planned and documented in a Sustainability Assurance Framework (structured based on the Requirements Analysis Allocation and Traceability Matrix (RVTM) for the project) the Sustainability Assurance Framework is a single integrated system used to log requirements from both contractual documents and the outputs of service or solution engineering activities (See Appendix H for an excerpt).

An IS Rating Pathway document was undertaken for BAC and SWM3 (see Appendix E for an excerpt) to describe the planned action which will be undertaken to achieve the targeted scores (see Appendix C). Following BAC Design IS Rating, the rating will continue into As Built under the SWM3 contract. The As Built rating under the SWM3 contract will include the project scope delivered in the Design IS Rating as agreed with ISC and Principals Representative.

The verified BAC Design IS Rating R2 score will be utilised by the SWM3 Contractor will identify the credits and levels to achieve for the SWM3 IS Rating and will be agreed with the Principals Representative which may differ from SWTC Appendix F08 Annexure B Part A.

These are excel-based documents for submission management and deliverables associated with the IS Rating and contract deliverables. These trackers have been designed to assist in the management of the large number of deliverables for the sustainability ratings and contract requirements. Review of these trackers will be undertaken on an ongoing basis and have been tailored to prompt actions from the Sustainability team or deliverables that must be requested from multiple parties and allows what, when, who and how to be defined for each deliverable (see Appendix E for an excerpt). These trackers are key items reviewed within regular sustainability leadership committee meetings and are also shared with the client when requested.

Note, all registers/trackers detailed within this section are live documents that are regularly reviewed and adapted as new information comes to hand. Where possible registers/trackers centralise information from multiple management plans, removing duplication and providing improved flexibility, increased efficiency, performance, and outcomes.

Supporting this is a Sustainability Action Plan which will be completed by all subcontractors within 4 weeks of subcontract award.

More detailed planning information is also provided in relation to materials, energy and waste in sub-plans;

- Material Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000004)
- Energy and Carbon Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000003)
- Waste Management and Recycling Plan (SMCSWSW8-JHL-WBK-SU-PLN-000002)

Similarly, applicable sustainability actions have also been integrated into the following Project plans;

- Project Execution Management Plan (SMCSWSW8-JHL-WBK-CT-PLN-000002)
- Contract Management Plan (SMCSWSSJ-JHL-WSS-CT-PLN-000008)
- Interface Management Plan (SMCSWSSJ-JHL-WSS-IF-PLN-000019)
- Risk Management Plan (SMCSWSSJ-JHL-WSS-RM-PLN-000010)
- Quality Management Plan (SMCSWSW8-JHL-WBK-QA-PLN-000001)
- Procurement Management Plan (SMCSWSW8-JHL-WBK-CO-PLN-000001)
- Engineering Management Plan (SMCSWSW8-JHL-WBK-EN-PLN-000003)
- Construction Environmental Management Plans (SMCSWSW8-JHL-WBK-EM-PLN-000001)
- Construction and Site Management Plan (SMCSWSW8-JHL-WBK-CM-PLN-000001)
- Community Communications Strategy (SMCSWSW8-JHL-WBK-CL-PLN-000001)
- Workforce Development Plan (SMCSWSW8-JHL-WBK-WD-PLN-000001)
- Design Management Plan (SMCSWSSJ-JHL-WSS-DM-PLN-000206)
- Construction Heritage Management Plan (SMCSWSW8-JHL-WBK-HE-PLN-000001)

4. Sustainable Procurement

Sustainable procurement will operate under the Social Procurement Policy, provided in Appendix B. The Sustainability Team will work closely with the Procurement Team to incorporate all sustainability conditions, opportunities, and forward commitments in the procurement management system to ensure subcontracts and suppliers meet minimum requirements, generate opportunities, and address Project challenges through innovation.

The Sustainability Team will be involved in high impact package grading prior to release to the market. They will also review packages upon their return and ensure all social procurement requirements are adhered to, including management of the suppliers and subcontractors throughout the duration of the works.

Procurement on the Project will comply with the requirements of ISO 20400:2017 Sustainable Procurement – Guidance. S2B will adopt and operate under a sustainable procurement framework to balance economic, environmental, and social considerations in the procurement process. The sustainable procurement framework will help identify and support a selection of sustainable products and services, educate our supply chain on sustainability objectives and targets, and develop a process that draws together the knowledge and technical advances our supply chain can offer to improve sustainable outcomes.

S2B will build several sustainability measures into the procurement process, including:

- Identifying key high impact packages in the procurement schedule
- Requiring suppliers and subcontractors to align with the sustainability expectations and requirements of S2B and Sydney Metro
- Integrating a sustainability section into all request for tender packages and scope of work documents
- Ensuring all tenderers complete and submit the tender questionnaire and that each submission includes adequate responses to all sustainability items
- Ensuring qualified representatives are involved in tender evaluations and any tender meetings with potential tenderers where sustainability has been identified as a requirement
- Mandating the provision of sustainability performance data by suppliers on a monthly basis during the delivery of contracted works
- Undertaking audits where required to ensure continuous improvement and adherence to policies
- Considering sustainability principles in making procurement decisions

S2B is committed to upholding the principles and requirements set out in the Modern Slavery Act 2018. In addition to the obligations placed on our sub-contractors, the Project adheres to the following commitments:

1. **Risk Assessment and Due Diligence:** The Project conducts regular risk assessments and due diligence processes to identify and mitigate risks related to modern slavery within our operations and supply chain.
2. **Supplier Code of Conduct:** All suppliers and sub-contractors are required to comply with our Supplier Code of Conduct, which includes strict provisions against forced labour, human trafficking, and other forms of modern slavery.
3. **Training and Awareness:** The Project provides ongoing training and resources to our employees and partners to raise awareness and ensure compliance with the Modern Slavery Act 2018.

Reporting and Remediation: The Project is committed to taking swift and effective action to address any identified issues.

In addition, the Laing O'Rourke Group Modern Slavery Policy has been provided to show best practice in Appendix B: Policies.

4.1 Evaluation of Subcontractors

As part of the evaluation of subcontractor tender responses, all Subcontractors will be requested to:

- Provide details of their Sustainability policy or comply with the S2B Sustainability policy and adhere the Projects objectives and targets.
- Provide details of how they will reduce the consumption of potable water, waste generation, materials use and energy applicable to their scope.
- Confirm their understanding of the Projects requirements that all Products are sustainably sourced or covered by an environmental label or EPD.
- Provide evidence of environmental, health and safety, quality management systems and policies and previous experience.
- Show an understanding and compliance with the obligations under Modern Slavery Act 2018.
- High impact Subcontractors and Suppliers will then be assessed for suitability using a combination of financial and non-financial scoring criteria (including sustainability and innovation) and the total non-price component shall be no less than 20%.

During pre-award and pre-start meetings, there will be discussion of the sustainability aspects of the scope of works and surety gained on the tenderer's ability to deliver that work. Sustainability reporting and requirements will form part of the executed contract.

4.2 Monitoring of Subcontractor Sustainability Performance

Subcontractor performance will be monitored throughout the duration of the contract. Successes will be celebrated, and lessons learned will be shared. When poor performance is identified, S2B will formally raise issues with the Subcontractor and/or Supplier and work together to remedy the situation.

5. Sustainable construction

5.1 Construction water

S2B is committed to minimising water use across the Project wherever feasible and reasonable. We will achieve this by prioritising construction practices and methodologies that remove the requirement for water, harvesting rainwater and reusing non-potable water. Below is a list of initiatives the Project will implement to reduce water.

- Minimising water demand: The project will fit office and facilities with water efficient controls and fixtures such as water efficient taps and toilets. Additionally, dust suppression utilising polymers and binding solutions will be prioritised over potable water dust suppression.
- Rainwater harvesting: The project is committed to harvesting and using rainwater and have therefore installed 5 x10,000L tanks at the Canterbury site compound which will be used for greywater washing in the site facilities and dust suppression across the Project sites.

- Water monitoring: All water consumption on site will be tracked either manually through water cart loads or through bills provided by Sydney Water. Additionally, the Project will install metering at all sites, rainwater tanks and taps to accurately calculate water consumption.

5.2 Construction Carbon and Energy

S2B will prioritise opportunities to use less carbon intensive solutions and methodologies across the construction phase. This will include the investigation of more energy efficient options, optimised construction scope and the use of renewable energy.

Additionally, the Project has made a commitment to purchase 100% green energy from our energy provider for scope 2 emissions. Concurrently the Project has installed 43 solar panels on the Canterbury station to reduce the requirement for purchase energy for construction.

The project has also mandated that subcontractors utilise B5 Biodiesel for all plant and equipment. The Project will be monitoring performance against the subcontractors through monthly sustainability reporting.

Additional opportunities the project is investigating to reduce carbon during the construction phase are:

- Solar powered lighting on site
- Hybrid pool vehicles
- Electric pool vehicles and onsite charging
- Electric plant and machinery

Further details of carbon and energy requirements can be found under Energy and Carbon Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000003).

5.3 Sustainable materials

During the delivery of the Project, S2B is committed to reducing the Projects scope 3 emissions through selecting materials for the Project that have an associated carbon reduction benefit.

Where applicable materials will be selected with accredited or certified with a relevant product stewardship or organisation. Environmental labels include the following but are not limited to;

- Good Environmental Choice Australia Ecolabel
- Green Building Council of Australia BEP
- Ecospecifier Green Tag
- ISEAL Alliance compliant whole supply chain Stewardship Scheme certification
- Environmental Product Declarations – product-specific
- Environmental Product Declarations – industry-wide

The key sustainable materials in the B07 and F08 are essential for meeting environmental and sustainability goals. This ensures the project adheres to best practices, reduces its ecological impact, and promotes responsible resource use. The key material requirements include:

- Utilising recycled materials and recycling materials from the Project,
- Utilising 100% Sustainable FSC or PEFC certified timber
- High SCM content concrete
- 15% reduction in the environmental footprint of materials

- Reductions in waste and opting for reuse on site wherever possible.
- Utilising steel sourced from Australia and manufactured with a lower carbon footprint
- Utilise recycled quarried materials wherever feasible and reasonable

For more detailed requirements and explanations, see Section 2.3 of the Material Management Plan (SMCSWSW8-JHL-WBK-SU-PLN-000004).

S2B will manage its impacts associated with Construction materials and will be applied in a systematic manner and determine its applicability to the Project. Additionally, the Project’s activities, products, and services that the Project determines it can either control or influence will also be considered from a life cycle perspective.

5.3.1 Concrete

The Project previously adopted Laing O’ Rourke’s minimum standards for carbon reduced or ‘green’ concrete across the project and worked with our subcontractors and materials suppliers to meet the standards at a minimum.

Below are the GWP (Global Warming Potential) limits:

	40MPa and Below	50 MPa	60-65 MPa	80 MPa
Concrete Maximum Carbon Tolerance	325	365	380	450
GWP Limit (kgCO ₂ e/m ³)				
Low Carbon Concrete Threshold	250	300	340	380
GWP Limit (kgCO ₂ e/m ³)				

Table 11 Laing O’Rourke Minimum Concrete Carbon Limits

In line with the latest research, Laing O’ Rourke have now updated their Concrete Carbon Limits (CCLs) aligning with the global rating system recently adopted by the Cement Concrete & Aggregates Australia (CCAA). This change retires the previous Maximum Tolerance and the Low Carbon Concrete Definition, simplifying how they apply and communicate concrete carbon limits.

In December 2025 CCAA launched the Australian adoption of the Global Cement and Concrete Association’s (GCCA) Global Ratings for Low Carbon and Near Zero Concrete, adding values for the lower and higher strength concretes used in Australia.

Laing O’Rourke and therefore S2B will move to benchmarking against the top of band D of the global rating system. Although the Concrete Carbon Limit has been lowered slightly for some strength grades, advancements in concrete technology that have occurred and the concretes available ensure it remains practical and achievable across our projects.

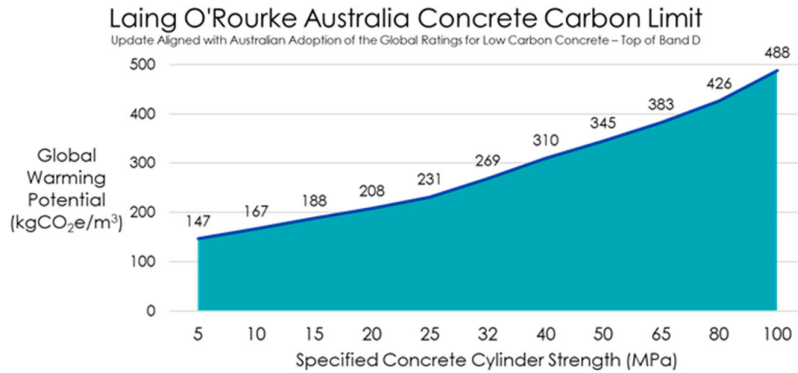


Figure 12 Laing O'Rourke Australia Concrete Carbon Limits

6. Community Benefits

S2B SWM3 will deliver at least five community benefit initiatives which provide will demonstrable tangible benefits to local community groups during the construction period and at least five initiatives which provide “legacy” benefits beyond the construction period of the Project. The BAC, SWM1 and SWM2 community benefit initiatives are complete.

Community benefits will be determined based on locality of the charity and initiative to the Projects location, for example within either the Canterbury and Bankstown council or the Inner West council.

The Inner West Community Strategic Plan ‘Our Inner West 2036’ and the Canterbury and Bankstown Council ‘CB2036 Community Strategic Plan’ identifies the following priorities.

Our Inner West 2036: Strategic Direction	CB2036 Community Strategic Plan: Seven Destinations
An ecologically sustainable Inner West	Safe & Strong
Unique, liveable, networked neighbourhoods	Clean & Green
Creative communities and a strong economy	Prosperous & Innovative
Caring, happy, healthy communities	Moving & Integrated
Progressive local leadership	Healthy & Active
	Liveable & Distinctive
	Leading & Engaged

Table 12. Community Priorities

The Project will endeavour to align our community benefit initiatives with the priority issues identified in the local council strategic plans.

7. Implementation

7.1 Resources

The Project has determined and made provision for the resources needed for the establishment, implementation, maintenance and continual improvement of the sustainability management system on the Project. Key human resources have been allocated as per Section 2.3 Roles, Responsibilities and Authorities.

7.2 Competence and Awareness

The Project:

- Use Training Needs Analysis to determine the necessary competence of persons doing work under its control that affects its materials performance and its ability to fulfil its compliance obligations;
- Obtain records of suitable education, training, experience and verification of competency to ensure that these persons are competent on the basis of appropriate education, training or experience;
- Determine any further training needs associated with sustainability;
- Where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

The Project ensures, via the Project Induction, Toolbox Talks and Pre-Start Meetings (or similar) that persons doing work under the Projects control are aware of the:

- Sustainability policy;
- The significant issues and related actual or potential impacts associated with their work in relation to sustainability;
- Their contribution to the effectiveness of sustainability management, including the benefits of enhanced sustainability performance;
- The implications of not conforming with the sustainability management requirements, including not fulfilling the organisation's compliance obligations.

7.3 Knowledge Sharing

Effective and ongoing sustainability knowledge sharing has occurred within the Project team and with the client, supply chain and parent organisations during the tender and target costing phases. Knowledge sharing continues post-award with these and other key stakeholders and wider industry.

Knowledge sharing takes many forms: informal and formal, spoken and written. It is always encouraged, and involves the sustainability leadership committee, facilitated workshops and regular meetings to foster mutually beneficial relationships with key stakeholders and subject matter experts.

Knowledge sharing is undertaken in a timely and targeted manner to enable enhanced outcomes to be achieved. While the knowledge sharing process is ongoing, critical junctures are identified below:

- Stakeholder engagement.
- Design management.
- Procurement.
- Construction planning.

See the Interface Management Plan (SMCSWSSJ-JHL-WSS-IF-PLN-000019) and the Community Communications Strategy (SMCSWSW8-JHL-WBK-CL-PLN-000001) for further information.

7.4 Decision Making

JHLOR ensures that decision making in relation to significant issues* is characterised by:

- A consideration of options including business-as-usual and other proven approaches taken in comparable situations.
- An evaluation of options that considers environmental, social and economic aspects through multi-criteria analysis or other scored means.
- An evaluation of options based on the useful forecast life of the infrastructure asset (i.e. 100-year design life).

*The most significant decisions have been made during earlier phases (i.e. planning and tendering and community engagement). These decisions had wide-ranging ramifications for many other economic, social and environmental issues, including those that were most commonly raised within submissions to the EIS, they are listed below in order of total number of issues raised:

- Traffic, Transport and Access
- Noise and Vibration
- Heritage
- Social Impact
- Business Impact
- Landscape and Visual Impact
- Hydrology, Flooding and Water Quality
- Biodiversity

During design, options were developed by Sydney Metro (TfNSW), AGJV, TTW and others. These options were reviewed by TfNSW and the preferred option has now been contracted for delivery. Where possible, TfNSW, AGJV and TTW will assist with the provision of evidence that these significant decisions were evaluated by considering environmental, social and economic aspects by incorporating their value into cost-benefit analysis.

During the delivery of the Project, significant design and construction issues will be identified. Significant issues are defined as issues that have an impact upon the following aspects:

- Departures from the design
- Cost efficiency
- Product performance
- Program efficiency
- Environmental outcomes
- Stakeholder impacts
- Social outcomes (community, workforce, diversity).
- Customer satisfaction.
- Reputation.
- Safety.

Once these significant issues have been identified, they will be analysed against other options as described above through the utilisation of an MCA (See Appendix D).

Generally, when determining what opportunities (derived from knowledge sharing activities) to include, the following question applies:

- Will undertaking the opportunity reduce capital expenditure and comply with applicable requirements?

Where the answer is 'yes', the opportunity will typically be included automatically. Other opportunities that may require additional expenditure, or modification/relaxation of applicable requirements are considered for inclusion based on the following questions (a consensus on the answers to these questions will generally be sought during SLC or other appropriate workshops):

- Will undertaking the opportunity reduce whole-of-life cost or impacts?
- Will undertaking the opportunity attend to a material risk or opportunity for the Project, the client or other stakeholders?

Accordingly, once decision making in relation to opportunities has occurred, the opportunities' status is updated in the Opportunity Register as either 'Included' or 'Abandoned'. If the answers to the relevant questions are unclear, the opportunity status will remain 'Under consideration' and further information will be sought.

8. Performance Evaluation

8.1 Monitoring Measurement and Analysis

The Project team shall monitor, measure, analyse and evaluate its sustainability performance. The Project undertakes weekly sustainability inspections during construction.

Additional monitoring (e.g. materials, energy, water and waste) is also undertaken in accordance with the applicable compliance requirements, including in relation to:

Performance Data	Data Source
Electricity consumption and generation, including any on-site renewable energy generation and any renewable energy sourced for the construction	Metering and bills
Quantity of greenhouse gas emissions associated with electricity consumption which have been offset, and method of offset	Metering and bills (GHG conversion achieved using latest NGERS approved Factors) Offset certificates.
Fuel consumption	Bills and monthly payment claims from subcontractors
Volume of potable mains water consumed for the contractor's activities	Metering and bills
Volume of non-potable water consumed for the contractor's activities, including details of the sources of non-potable water	Metering
Waste generation, recycling and disposal	Reports from Construction & Demolition Waste Contractors
The volume of spoil	
Reused within site	
Beneficially reused off-site	
Disposed offsite	
Paper & Carboard	Reports from Office Waste Contractors
General Waste	
Comingled	
Organics	
Coffee Cups	
Hand Paper Towels	
Soft Plastic	
Destinations for spoil which has been beneficially reused off-site or disposed of off-site.	Reports from spoil and waste contractor
Quantities of steel and concrete which have been used	Contractor reporting / procurement records
Volume weighted average percentage cementitious content in concrete used which has comprised of fly ash or slag	Report from concrete supplier

Table 13 Sustainability Performance Metrics

8.2 Reporting

The Project shall evaluate its sustainability performance. The Project communicates relevant sustainability performance information both internally and externally, as identified in its communication processes and as required by its compliance obligations. The Project evaluates and documents compliance within Project reports and takes action if needed, reports for each scope differ and include:

SWM3
Monthly Project Reports
Monthly Sustainability Data Report (MSDR)
Quarterly Sustainability Report (QSR)
Carbon Emissions Reporting Tool (CERT)
TfNSW Air Emission Data Collection Workbook 9TP-FT-439

Table 14 Project reporting requirements

8.3 Sustainability Inspections

S2B's Environmental and Sustainability Inspection Report Form Appendix G will be used to monitor site sustainability performance. The inspection will be completed by a member of the Environment and Sustainability team on a weekly basis.

Issues identified, and any associated actions raised and unable to be closed on the day, will be captured in Fieldview, the Project HSEQ digital management platform.

9. Improvement

When a nonconformity occurs, including in relation to sustainability, the Project shall:

- React to the nonconformity and, as applicable:
 - take action to control and correct it;
 - deal with the consequences, including mitigating adverse sustainability impacts;
 - notify all relevant stakeholders, including Sydney Metro.
- Evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
 - reviewing the nonconformity;
 - determining the causes of the nonconformity;
 - determining if similar nonconformities exist, or could potentially occur;
 - implement any action needed;
 - engage Sydney Metro experts for consultation if needed
 - review the effectiveness of any corrective action taken; and,
 - make changes to the SMP, if necessary.

Corrective actions shall be appropriate to the significance of the effects of the nonconformities encountered, including the sustainability outcomes(s).

The Project shall retain documented information as evidence of:

- the nature of the nonconformities and any subsequent actions taken; and,
- the results of any corrective action

The detailed report will be provided to Sydney Metro's designated contact.

9.1 Audit

The Project is required under the IS Rating framework to audit its management systems quarterly. The audits will begin three months from the commencement of construction. The audits will be a mixture of both ISP (Independent Sustainability Audits) and Internal audits. The Project audits are conducted separately for each JHLOR project rating, unless otherwise specified, and at planned intervals. The scope of the audit will include but is not limited to:

- Material environmental, social, and economic issues
- Sustainability training records
- Sustainability monitoring and inspection results

The Project has established, implemented and maintained an audit programme for the Project for each rating, including the frequency, methods, responsibilities, planning requirements and reporting of its audits.

The scope of the audits may vary but it is important that the most material issues are audited regularly during the rating period. Sustainability audits cover the most material environmental, social and economic issues. 'Regularly' needs to be described and justified for each project. The audit reports demonstrate that these requirements have been fulfilled.

9.2 Management Review

Project Management review the implementation of the SMP at Project level, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Reviews are performed by the Sustainability Leadership Committee.

The management review includes consideration of:

- the status of actions from previous management reviews;
- changes in:
 - external and internal issues that are relevant to sustainability;
 - the needs and expectations of interested parties, including compliance obligations;
 - risks and opportunities;
 - the extent to which sustainability objectives have been achieved;
- information on the Project's sustainability performance, including trends in:
 - nonconformities and corrective actions;
 - monitoring and measurement results;
 - fulfilment of its compliance obligations;
 - audit results;
 - adequacy of resources;
 - relevant communication(s) from interested parties, including the community; and,
 - opportunities for continual improvement.

The outputs of the management reviews include:

- conclusions on the continuing suitability, adequacy and effectiveness of the SMP;
- decisions related to continual improvement opportunities;
- decisions related to any need for changes to the SMP, including resources;
- actions, if needed, when sustainability objectives have not been achieved;
- opportunities to improve integration of the SMP with other Project processes, if needed; and,
- any implications for the strategic direction of the Project.

The Project shall retain documented information as evidence of the results of management reviews.

Appendix A Plan Compliance

Project	Document	Deed Clause	Description	Addressed in
All	S2B CEMF	3.2 (a)	Principal Contractors are required to prepare and implement a Sustainability Management Plan (SMP) relevant to the scale and nature of their scope of works. The SMP shall comprise of a main SMP document and issue-specific sub-plans.	This SMP
All	S2B CEMF	3.2 (b)	Depending on the scope and scale of the works, TfNSW may decide to streamline the SMP and sub-plan requirements. As a minimum the SMP will address and detail:	This SMP
All	S2B CEMF	3.2 (b)(i)	The requirements of the relevant planning approval documentation, any relevant conditions of all other permits and licences, the Contractor's corporate EMS, the sustainability provisions of the contract documentation, and this Construction Environmental Management Framework	Section 1.3.7
All	S2B CEMF	3.2 (b)(ii)	The sustainability management team structure, including key personnel authority and roles of key personnel, lines of responsibility and communication, minimum skill levels of each role and interfaces with the overall project organisation structure	Section 2.3, Table 5 and 6
All	S2B CEMF	3.2 (b)(iii)	A sustainability policy statement and strategies for adaptation to climate change, resource management (including energy, water and waste), workforce development, procurement and biodiversity enhancement	Appendix B
All	S2B CEMF	3.2 (b)(iv)	Sustainability initiatives to be implemented during the project	Section 3.2, Section 5, Appendix E and H
All	S2B CEMF	3.2 (b)(v)	How sustainability initiatives will be identified and implemented	Section 3.2, Appendix E and H
All	S2B CEMF	3.2 (b)(vi)	The processes and methodologies for assurance, monitoring, auditing, corrective action, continuous improvement and reporting on sustainability performance	Section 3, 7, 8 and 9
All	S2B CEMF	3.2 (b)(vii)	The processes and methodologies which will be used to achieve the required scores under rating systems identified in contract documents	Section 3.4
All	S2B CEMF	3.2 (b)(viii)	The processes and procedures for undertaking climate change risk assessments	Section 3.3.1
All	S2B CEMF	3.2 (b)(ix)	The processes and procedures for the identification and implementation of climate change adaptation measures	Section 3.3.1

All	S2B CEMF	All 3.2 (b)(x)	The approach to sustainable procurement including: <ul style="list-style-type: none"> - Processes and procedures that will be used to provide environmental and social improvement - The processes and environmental and social criteria that will be used for the selection of Subcontractors - The processes that will be used to ensure ethical sourcing of labour and materials - Where equipment, materials or labour are procured from locations outside Australia, the processes that will be used to ensure human rights impacts and risks are identified and mitigated; and - Interfaces with other Project Plans 	SMP and Procurement Management Plan
All	S2B CEMF	3.2 (c)	Depending on the scope of the works, the SMP will also include, as a separate sub plan: <ul style="list-style-type: none"> (ii) A Construction Carbon and Energy Management Plan (ECMP) (iii) A Materials Management Plan (MMP); and (iv) A Waste Management & Recycling Plan (WRMP) 	Section 3.4
All	S2B CEMF	13.1	Carbon and Energy Management Objectives	Section 3.4, Section 5.2, See ECMP
All	S2B CEMF	13.1 (a)	The following carbon and energy management objectives will apply to construction:	See ECMP
All	S2B CEMF	13.1 (a)(i)	Reduce energy use and carbon emissions during construction	See ECMP
All	S2B CEMF	13.1 (a)(ii)	Support innovative and cost effective approaches to energy efficiency, low carbon / renewable energy sources and energy procurement; and	See ECMP
All	S2B CEMF	13.1 (a)(iii)	Design to reduce energy use and carbon emissions during operations	See ECMP
All	S2B CEMF	13.2	Carbon and Energy Management Implementation	See ECMP
All	S2B CEMF	13.2 (a)	Principal Contractors will develop and implement a Carbon and Energy Management Plan that will include, as a minimum:	See ECMP
All	S2B CEMF	13.2 (a)(i)	The carbon and energy mitigation measures as detailed in the environmental approval documentation;	See ECMP
All	S2B CEMF	13.2 (a)(ii)	The relevant requirements of the Sydney Metro Environment and Sustainability Policy and the Sydney Metro Sustainability Strategy;	See ECMP
All	S2B CEMF	13.2 (a)(iii)	The responsibilities of key project personnel with respect to the implementation of the plan;	See ECMP

All	S2B CEMF	13.2 (a)(iv)	The low carbon strategies and initiatives that will be implemented to minimise the carbon emissions associated with construction;	See ECMP
All	S2B CEMF	13.2 (a)(v)	The energy efficiency strategies and initiatives that will be implemented to minimise energy use associated with construction;	See ECMP
All	S2B CEMF	13.2 (a)(vi)	Carbon emission estimates determined using a carbon footprint assessment undertaken in accordance with ISO 14064-1, ISO14064-2 and ISO14064-3 that incorporates direct and indirect emissions associated with construction; and	See ECMP
All	S2B CEMF	13.2 (a)(vii)	Compliance record generation and management.	See ECMP
All	S2B CEMF	13.2 (b)	Reporting of carbon and energy will be undertaken throughout the construction works in accordance with the National Greenhouse and Energy Reporting Act 2007.	See ECMP
All	S2B CEMF	13.2 (c)	The Contractors would be required to retain appropriate records and prepare carbon footprint assessments (inclusive of Scope 1, 2 and 3 emissions) at various stages of construction.	See ECMP
All	S2B CEMF	13.3	Carbon and Energy Mitigation	See ECMP
All	S2B CEMF	13.3 (a)	Examples of carbon and energy mitigation measures include:	See ECMP
All	S2B CEMF	13.3 (a)(i)	Equipment and material selection will have consideration of energy efficiencies;	See ECMP
All	S2B CEMF	13.3 (a)(ii)	Construction workers will be encouraged to use sustainable transport options and green travel plans will be developed;	See ECMP
All	S2B CEMF	13.3 (a)(iii)	Inclusion of renewable energy sources to power temporary facilities and equipment where feasible;	See ECMP
All	S2B CEMF	13.3 (a)(iv)	Designing and operating Site offices for energy efficiency;	See ECMP
All	S2B CEMF	13.3 (a)(v)	Offsetting a portion of construction greenhouse gas emissions; and	See ECMP
All	S2B CEMF	13.3 (a)(vi)	Efficient operation of vehicles and equipment.	See ECMP
All	S2B CEMF	14.1	Materials Management Objectives	Section 3.4, Section 5.3, See MMP
All	S2B CEMF	14.1 (a)	The following materials management objectives would apply to the construction of the project:	See MMP
All	S2B CEMF	14.1 (a)(i)	Reduce material use throughout the project life-cycle;	See MMP
All	S2B CEMF	14.1 (a)(ii)	Consider embodied impacts in materials selection;	See MMP
All	S2B CEMF	14.1 (a)(iii)	Use recycled materials;	See MMP
All	S2B CEMF	14.1 (a)(iv)	Recycle and reuse materials onsite; and	See MMP

All	S2B CEMF	14.1 (a)(v)	Influence subcontractors and materials suppliers to adopt sustainability objectives in their works and procurement.	See MMP
All	S2B CEMF	14.2	Materials Management Implementation	See MMP
All	S2B CEMF	14.2 (a)	Principal Contractors will be required to develop and implement a Sustainable Procurement Policy that will include as a minimum:	See MMP
All	S2B CEMF	14.2 (a)(i)	The materials mitigation measures as detailed in the environmental approval documentation-	See MMP
All	S2B CEMF	14.2 (a)(ii)	The relevant requirements of the City & Southwest Environment and Sustainability Policy and the City & Southwest Sustainability Strategy-	See MMP
All	S2B CEMF	14.2 (a)(iii)	The responsibilities of key project personnel with respect to the implementation of the policy-	See MMP
All	S2B CEMF	14.2 (a)(iv)	Compliance record generation and management-	See MMP
All	S2B CEMF	14.2 (a)(v)	Ethical sourcing of materials-DQG	See MMP
All	S2B CEMF	14.2 (a)(vi)	Local sourcing.	See MMP
All	S2B CEMF	14.2 (b)	The Contractors will be required to retain records detailing the consideration of sustainability in the procurement of all materials.	See MMP
All	S2B CEMF	14.3	Materials Mitigation	See MMP
All	S2B CEMF	14.3 (a)	Examples of materials mitigation measures include:	See MMP
All	S2B CEMF	14.3 (a)(i)	Consideration of quality and durability in the procurement of materials-	See MMP
All	S2B CEMF	14.3 (a)(ii)	Using recycled materials-	See MMP
All	S2B CEMF	14.3 (a)(iii)	Using materials with a lower embodied impact-	See MMP
All	S2B CEMF	14.3 (a)(iv)	Using recycled steel in concrete reinforcement-	See MMP
All	S2B CEMF	14.3 (a)(v)	Developing deconstruction plans to enable recycling and reuse at end-of-life-	See MMP
All	S2B CEMF	14.3 (a)(vi)	Using low-VOC, low emission materials-	See MMP
All	S2B CEMF	14.3 (a)(vii)	Using sustainably sourced timber and wood products-	See MMP
All	S2B CEMF	14.3 (a)(viii)	Low-carbon concrete-DQG	See MMP
All	S2B CEMF	14.3 (a)(ix)	Consideration of whole-of-life costs during procurement.	See MMP
All	S2B CEMF	17.1	Waste Objectives	Section 3.4, See WRMP
All	S2B CEMF	17.1 (a)	The following waste objectives will apply to construction:	See WRMP
All	S2B CEMF	17.1 (a)(i)	Minimise waste throughout the project lifecycle; and	See WRMP

All	S2B CEMF	17.1 (a)(ii)	Waste management strategies will be implemented in accordance with the Waste Avoidance and Resource Recovery Act 2001 management hierarchy as follows: <ul style="list-style-type: none"> Avoidance of unnecessary resource consumption; Resource recovery (including reuse, reprocessing, recycling and energy recovery); and Disposal.	See WRMP
All	S2B CEMF	17.1 (b)	Targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil will be provided by the Principal Contractor.	See WRMP
All	S2B CEMF	17.2	Waste Implementation	See WRMP
All	S2B CEMF	17.2 (a)	Principal Contractors will develop and implement a Waste Management and Recycling Plan which will include as a minimum:	See WRMP
All	S2B CEMF	17.2 (a)(i)	The waste management and recycling mitigation measures as detailed in the environmental approval documentation;	See WRMP
All	S2B CEMF	17.2 (a)(ii)	The responsibilities of key project personnel with respect to the implementation of the plan;	See WRMP
All	S2B CEMF	17.2 (a)(iii)	Waste management and recycling monitoring requirements;	See WRMP
All	S2B CEMF	17.2 (a)(iv)	A procedure for the assessment, classification, management and disposal of waste in accordance with the Waste Classification Guidelines (DECC, 2008); and	See WRMP
All	S2B CEMF	17.2 (a)(v)	Compliance record generation and management.	See WRMP
All	S2B CEMF	17.2 (b)	Principal Contractors will undertake the following waste monitoring as a minimum:	See WRMP
All	S2B CEMF	17.2 (b)(i)	Weekly inspections will include checking on the waste storage facilities on site; and	See WRMP
All	S2B CEMF	17.2 (b)(ii)	All waste removed from the site will be appropriately tracked from 'cradle to grave' using waste tracking dockets.	See WRMP
All	S2B CEMF	17.2 (c)	Principal Contractors will report all necessary waste and purchasing information to TfNSW as required for TfNSW to fulfil their WRAPP reporting requirements.	See WRMP
All	S2B CEMF	17.2 (d)	Compliance records will be retained by the Principal Contractors in relation to waste management including records of inspections and waste dockets for all waste removed from the site.	See WRMP
All	S2B CEMF	17.3	Waste Mitigation	See WRMP
All	S2B CEMF	17.3 (a)	Examples of waste management and recycling mitigation measures include:	See WRMP
All	S2B CEMF	17.3 (a)(i)	All waste materials removed from the sites will be directed to an appropriately licensed waste management facility;	See WRMP

All	S2B CEMF	17.3 (a)(ii)	The use of raw materials (noise hoarding, site fencing, etc...) will be reused or shared, between sites and between construction contractors where feasible and reasonable; and	See WRMP
All	S2B CEMF	17.3 (a)(iii)	Recyclable wastes, including paper at site offices, will be stored separately from other wastes.	See WRMP
SWM3	SWTC Appendix F02 Project Administration	Table 1 Required Project Plans	Sustainability Management Plan Project Plan submission date: 50 Business Days from the date of the Contract Update frequency: Annually until Construction Completion	The SMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 a)	The SWM3 Contractor must develop, maintain and implement a Sustainability Management Plan.	The SMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 b)	The SWM3 Contractor must submit a Sustainability Management Plan to the Principal for Review in accordance with Table 1.	The SMP Rev 6 and following revisions provided for review via TeamBinder
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	The Sustainability Management Plan must, as a minimum, address and detail: i) The sustainability management team structure, including: a. key personnel authority and roles of key personnel;; b. lines of responsibility and communication; c. minimum skill levels of each role; and d. interfaces with the overall project organisation structure;	Section 2.1 and 2.3
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	a sustainability policy statement;	Appendix B
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	how sustainability initiatives will be identified and implemented;	Section 3.2, Section 5, Appendix E and H
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the carbon and energy mitigation measures as detailed in the environmental approval documentation that are applicable in the design and construction of the SWM3 Works;	See above S2B CEMF references: Section 3.4, Section 5.2 and ECMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the low carbon strategies and initiatives that will be implemented to minimise the carbon emissions in the SMW3 Works;	Section 3.4, Section 5.2 and ECMP

SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the energy efficiency strategies and initiatives that will be incorporated into the SMW3 Works to minimise energy use;	Section 3.4, Section 5.2 and ECMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the strategies and initiatives that will be implemented to maximise the use of recycled materials;	Section 3.4, WMRP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the strategies and initiatives to prioritise the use of low volatile organic compound (VOC), low emission materials;	Section 3.4, Section 5.3 and MMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the use of sustainably sourced and certified timber and wood products;	Section 3.4, Section 5.3 and MMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the development of deconstruction plans to enable recycling and reuse at end-of-life;	Section 3.4, WMRP, MMP
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the strategies and initiatives that will be implemented to minimise overall water use, maximise the availability and use of non-potable water sources in the SMW3 Works;	Section 5.1, Appendix F
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	the strategies and initiatives that will be implemented to enhance the biodiversity;	Section 3.4, CEMP Biodiversity Offsets: CoA E3, E4, E6 Planting/Design: REMM LV4
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	ii) the processes and methodologies which will be used to achieve the required scores under rating systems identified in the sustainability requirements;	Section 3.2 & 3.4
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	iii) the strategy and methodology for incorporating climate change adaption in design and construction in response to the climate change risks and baseline adaptation measures allocated to the SMW3 Works;	Section 3.3.1
SWM3	SWTC Appendix F02 Project Administration	Section 2.9 c)	iv) the items identified in Section 3.2(a), (b), (c)(ii) and (c)(iii) of the Sydney Metro Construction Environmental Management Framework;	Refer to S2B CEMF items above

<p>SWM3</p>	<p>SWTC Appendix F02 Project Administration</p>	<p>Section 2.9 c)</p>	<p>v)</p> <ul style="list-style-type: none"> a. estimates of; <ul style="list-style-type: none"> the quantity of mains water which will be consumed during construction (Mains Water Consumption Target) b. the quantity of water from non-potable sources which will be consumed during construction; c. the portland cement reduction which will be achieved in concrete (averaged across all mixes), compared to a reference case; d. 'Scope 1', 'Scope 2', 'Scope 3' and total carbon emissions (Carbon Emission Targets) that incorporates direct and indirect emissions associated with electricity and fuel consumption, on-site process emissions and embodied emissions for all main materials used in SWM3 Contractor's Activities; e. fuel consumption (Fuel Consumption Target); and <p>electricity consumption (Electricity Consumption Target) for the SWM3 Contractor's Activities.</p>	<p>Table 9 Section 5 Appendix F MMP ECMP</p>
--------------------	---	---------------------------	---	--


<p>SWM3</p>	<p>SWTC Appendix F02 Project Administration</p>	<p>Section 2.9 c)</p>	<p>vi) the requirements identified in section 14 of the Sydney Metro Construction Environmental Management Framework including: a. a description of the processes for considering environmental and social aspects in the identification, engagement, evaluation and selection of suppliers and subcontractors; and a description of how the environmental and sustainability performance of subcontractors and suppliers will be monitored and managed during the delivery of supplies / SWM3 Contractor's Activities.</p>	<p>Refer to CEMF items above Section 3.4 Section 4 MMP PMP</p>
<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 2.1 b)</p>	<p>The SWM3 Contractor must ensure that sustainability is addressed throughout the performance of the SWM3 Contractor's Activities and that sustainability is embedded into the design and construction of the SWM3 Works and the Temporary Works.</p>	<p>Section 2.1, Section 2.3, Section 3.4, Section 7.3,</p>

SWM3	SWTC Appendix F08 Sustainability	Section 2.2	<p>2.2 Sustainability Manager</p> <p>(a) The SWM3 Contractor must provide a Sustainability Manager who must:</p> <ul style="list-style-type: none"> (i) possess a recognised qualification relevant to the position and the SWM3 Contractor's Activities and have recent relevant experience in sustainability management on projects similar to the SWM3 Works; (ii) be an Infrastructure Sustainability Accredited Professional (ISAP) accredited by ISCA and maintain currency of this qualification throughout the period of the SMW3 Works; (iii) have a recognised and demonstrated competence in sustainability management in the design and construction of sustainable infrastructure or buildings; (iv) be available as the Principal's Representative's primary contact with the SWM3 Contractor on sustainability matters; and (v) be responsible for and have the authority to develop and implement the Sustainability Management Plan; and (vi) be employed on the project until Completion of the last Portion to achieve Completion and until the certification of the ISCA "as-built" rating is achieved, whichever occurs first. 	Section 2.3
SWM3	SWTC Appendix F08 Sustainability	Section 3 a)	The SWM3 Contractor must allow for and address sustainability objectives and requirements in Project Plans for the delivery and management, of the SWM3 Contractor's Activities and site inductions.	Section 3.4, Section 7.2
SWM3	SWTC Appendix F08 Sustainability	Section 3 b)	The SWM3 Contractor must develop, implement and maintain governance structures, processes and systems that ensure integration and implementation of all sustainability considerations, initiatives and reporting.	The SMP, Section 3.4
SWM3	SWTC Appendix F08 Sustainability	Section 3 c)	For the SWM3 Contractor's Activities related to the SWM3 Works, the SWM3 Contractor must achieve an "as-built" Infrastructure Sustainability Council of Australia's (ISCA) Infrastructure Sustainability (IS) Rating Scheme (V1.2) rating of at least 65 for the constructed SWM3 Works.	Section 3.2


<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 3 d)</p>	<p>In relation to the IS Rating, the SWM3 Contractor must:</p> <ul style="list-style-type: none"> (i) achieve an “as built” rating score of at least 65 for the constructed SWM3 Works; (ii) accept the novation of the existing ISCA Ratings Agreement for completion of the ISCA “as-built” rating and agree any update to that with the ISCA Case Manager and Principal’s Representative; (iii) achieve the ISCA Rating Scheme credits and levels identified in Annexure B section A in alignment with the ISCA Design Stage assessment, and prior construction works undertaken by SWM1 and SWM2 contractors, unless otherwise agreed with the Principal’s Representative; (iv) utilise the evidence provided by the Principals Representative for the preceding SWM1 and SWM2 contractors where relevant to achieve the ISCA credits required in Annexure B and the ISCA “as-built” rating score required in section 3(c)(i) above ; (v) utilise the ISCA weightings assessment provided by the Principals Representative and agree any update to that with the ISCA Case Manager and Principal’s Representative; (vi) utilise the ISCA Base Case Assumptions provided by the Principals Representative and agree any update to that with the ISCA Case Manager and Principal’s Representative; and (vii) participate in monthly co-ordination meetings with the ISCA Case Manager 	<p>Section 3.2 & 3.4</p>
<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 3 e)</p>	<p>The rating scores under the IS Rating Scheme must be verified by Infrastructure Sustainability Council of Australia verifiers in accordance with the IS Rating Scheme process using the IS Rating Scheme tool version 1.2</p>	<p>Section 3.2 & 3.4</p>
<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 3 f)</p>	<p>The sustainability objectives and requirements described in Appendix B07 must be allowed for and addressed in Project Plans for the design, delivery and management, of the SWM3 Contractor’s Activities</p>	<p>The SMP and Section 3.4</p>

<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 3 g)</p>	<p>The SWM3 Contractor must also: (i) participate in sustainability forums, hosted by the Principal's Representative on a quarterly basis and must present progress updates, sustainability performance information and sustainability lessons learned and provide other information as requested; and (ii) develop, implement, maintain and submit to the Principal's Representative for review, a Sustainability Assurance Framework to identify and track compliance with the sustainability requirements defined in Appendix B07 and Appendix F08.</p>	<p>Section 3.4, Appendix H</p>
<p>SWM3</p>	<p>SWTC Appendix F08 Sustainability</p>	<p>Section 8 a)</p>	<p>The SMW3 Contractor must develop, implement and maintain a sustainable procurement policy and processes that are consistent with ISO 20400 Sustainable Procurement - guidance, and are documented in the Sustainability Management Plan.</p>	<p>Appendix B</p>

Appendix B Policies



Environment
& Sustainability
Policy



This Policy reflects a commitment in our delivery of the Sydney Metro program to:

- Align with, and support, Transport for NSW (TfNSW) Environment & Sustainability Policy.
- Optimise sustainability outcomes, transport service quality, and cost effectiveness.
- Develop effective and appropriate responses to the challenges of climate change, carbon management, resource and waste management, land use integration, customer and community expectation, and heritage and biodiversity conservation.
- Be environmentally responsible, by avoiding pollution, enhancing the natural environment and reducing the project ecological footprint, while complying with all applicable environmental laws, regulations and statutory obligations.
- Be socially responsible by delivering a workforce legacy which benefits individuals, communities, the project and industry, and is achieved through collaboration and partnerships.

To deliver on these commitments, the Sydney Metro team will:

Industry leadership

- Implement coordinated and transparent decision making, by engaging with stakeholders and suppliers, encouraging innovation and demonstrating sustainability leadership.
- Explore new benchmarks for the transport infrastructure sector by requiring high standards from our designers, contractors and suppliers, building on experience gained through development of Sydney Metro Northwest.

Community and customer

- Provide accessible, safe, pleasurable, and convenient access and transport service for all customers.
- Establish positive relationships with community and stakeholders to maximise opportunities to add value to local communities.

Land use integration and place making


- Create desirable places, promote liveability and cultural heritage, and optimise both community and economic benefit.
- Balance transit oriented development opportunities with stakeholder expectations.

Embedding environmental and social sustainability

- Establish robust sustainability objectives and targets.
- Maintain an environmental management system that is integrated into all our project activities.
- Ensure thorough and open environmental assessment processes are developed and maintained.
- Develop and maintain an environmental management framework to embed best practice pollution management and sustainable outcomes during construction.
- Apply effective assurance processes to monitor performance against the project environment and sustainability objectives and identify appropriate reward or corrective action, as required.
- Apply environment and sustainability specific processes to the procurement of delivery activities.

Accountability

- Undertake public sustainability reporting.
- Hold employees and contractors accountable for proactively meeting their environmental and social sustainability responsibilities.
- Provide appropriate training and resources necessary to meet our responsibilities.



Rodd Staples
 Program Director, Sydney Metro

© Sydney Metro 2016

SM ES-ST-209 Sydney Metro Environment and Sustainability Policy

Figure 13: TfNSW and Sydney Metro's overarching Environment & Sustainability Policy

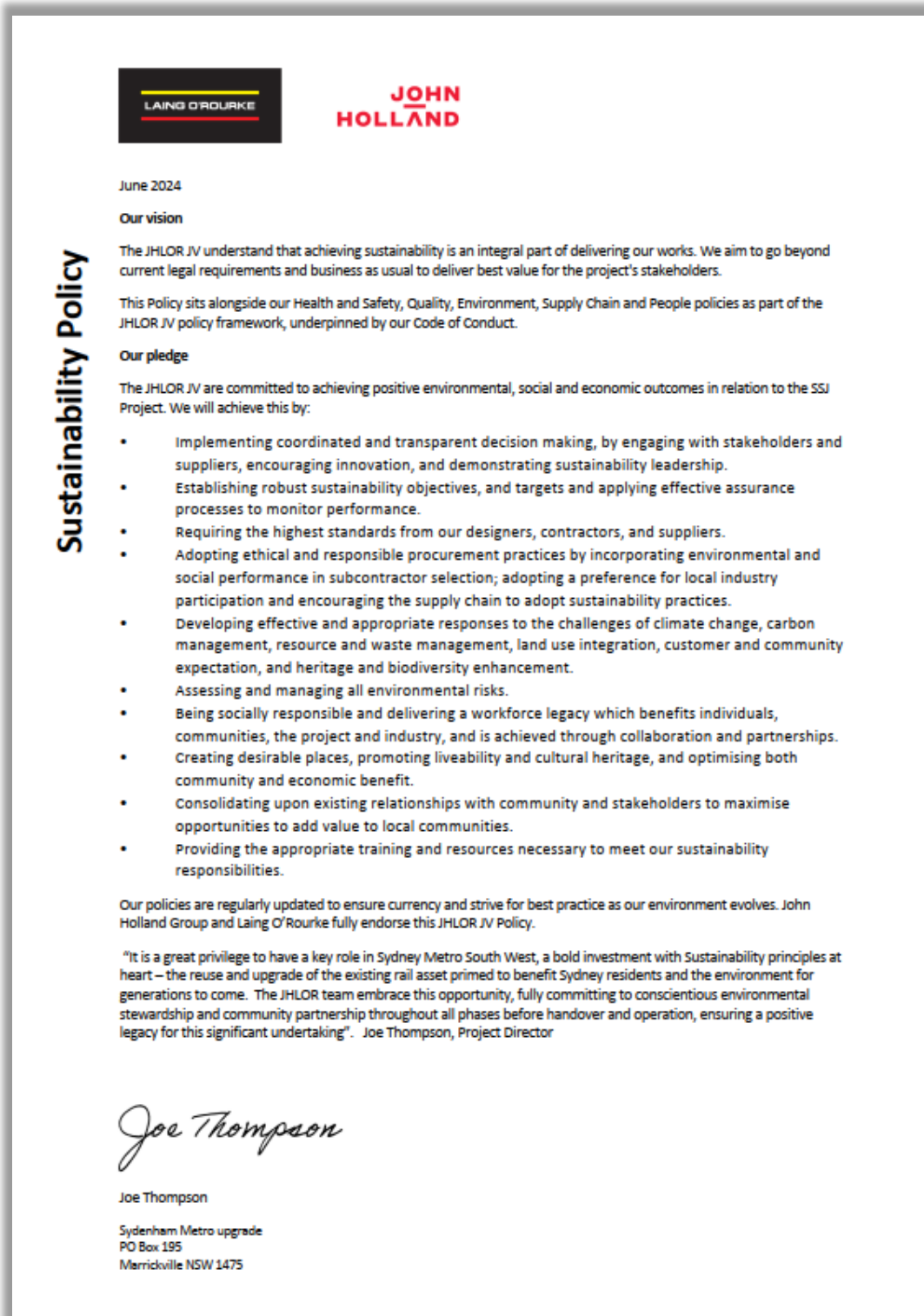


Figure 14: JHLOR JV Project Sustainability Policy

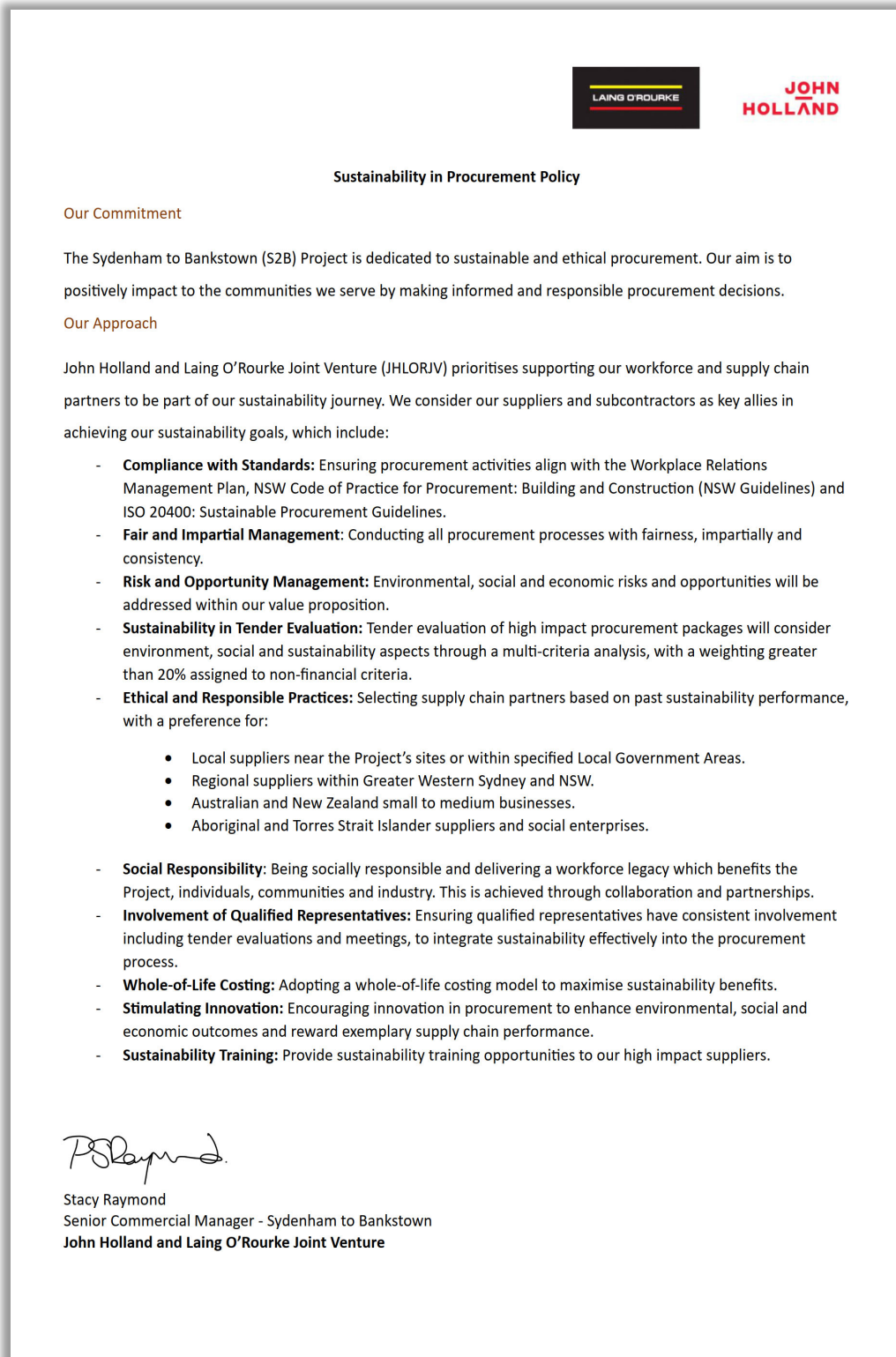
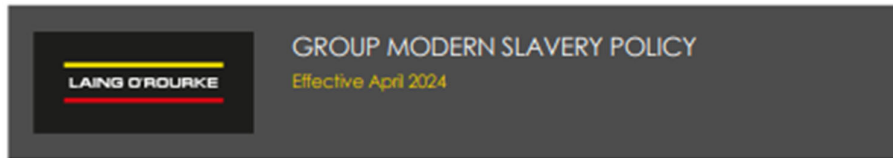


Figure 15: JHLOR JV Project Procurement Policy



Laing O'Rourke understands that the establishment of our business strategy and delivery of our business objectives can only be achieved by carrying out business openly, honestly and with integrity. We are accordingly committed to ensuring there is no modern slavery in our operations and supply chain.

Breaches of this policy may result in disciplinary action for staff and/or termination of employment or termination of our relationship with organisations with whom we do business.

This policy forms part of our global policy framework, underpinned by 'Doing the Right Thing' – our Global Code of Conduct, and will be realised by:

- Prohibiting modern slavery in all forms, including threats of violence, harassment, discrimination and intimidation within our operations and supply chain
- Ensuring that employees have freedom of movement, freedom of association and freedom to terminate employment, and communicating our expectation of the same from all of our contractors, suppliers and other business partners, including that they ensure the same from their own suppliers
- Prohibiting the use of worker-paid recruitment fees within our operations and supply chain
- Prohibiting compulsory overtime within our operations and supply chain
- Prohibiting child labour
- Prohibiting the confiscation of workers original identification documents and communicating our expectation of the same from all of our contractors, suppliers and other business partners, including that they ensure the same from their own suppliers
- Appropriately supporting victims of modern slavery in identifying access to remedy, compensation and justice
- Ensuring that we understand and comply with the labour/employment laws and laws against slavery applicable to Laing O'Rourke in the jurisdictions in which we operate
- Training employees to ensure they understand the standards expected of them
- Implementing effective due diligence procedures and other controls to ensure modern slavery is not taking place anywhere in our own business or in our supply chains and communicating our expectation of the same high standards from all of our contractors, suppliers and other business partners, that they will hold their own suppliers to the same high standards
- Ensuring that effective arrangements are in place to allow employees to report where they have concerns about modern slavery, and to ensure that such concerns are investigated and reported appropriately to the relevant authorities
- Ensuring that no one who uses our 'speak up' procedures is subject to victimisation as a result of reporting any suspicion of modern slavery
- Ensuring appropriate oversight of our modern slavery programme
- Reviewing this policy regularly to ensure its effectiveness

© Laing O'Rourke, all rights reserved.

Group Modern Slavery Policy
Effective April 2024

Modern slavery is a violation of fundamental human rights through the severe exploitation of otherpeople for personal or commercial advantage and includes securing services from children and persons vulnerable to modern slavery, slavery, servitude, forced or compulsory labour, human trafficking, debt bondage and deceptive recruiting for labour or services.

Laing O'Rourke expects compliance with this policy across its global operations. This policy applies to all employees and officers of Laing O'Rourke. It also applies to all persons working for us or on our behalf in any capacity, including all employees, directors, officers, agency workers, seconded workers, volunteers, interns, agents, contractors, external consultants, third-party representatives and business partners, and includes suppliers to Laing O'Rourke.

Overall responsibility for this policy rests with the Board of Directors of Laing O'Rourke.

The Board of Directors of Laing O'Rourke fully endorses this policy.



Sir John Parker
Chairman



Figure 16: Laing O'Rourke Group Modern Slavery Policy

Appendix C Score cards

BAC/ SWM3

Business



Infrastructure Sustainability Scorecard
Credit Summary

Project: Bankstown and Additional Corridor (BAC)
Location: Sydney/Bankstown
Rating Type: Design

Category	Credit	Materiality Score	Score Possible	Target Level	Target Score	Assessed R1 Level	Assessed R1 Score	Verified R1 Level	Verified R1 Score	Assessed R2 Level	Assessed R2 Score	Verified R2 Level	Verified R2 Score
Management Systems													
Man-1	Sustainability leadership and commitment	2	1.01	3/3	1.01	3/3	1.01	0/3	-	3/3	1.01	3/3	1.01
Man-2	Risk and opportunity management	2	1.01	2/2	1.01	2/2	1.01	0/2	-	2/2	1.01	0/2	-
Man-3	Organisational structure, roles and responsibilities	2	1.01	2/2	1.01	2/2	1.01	1/2	0.50	2/2	1.01	2/2	1.01
Man-4	Inspection and auditing	2	1.01	2/2	1.01	2/2	1.01	2/2	1.01	2/2	1.01	2/2	1.01
Man-5	Reporting and review	2	1.01	3/3	1.01	2/3	0.67	0/3	-	2/3	0.67	2/3	0.67
Man-6	Knowledge sharing	2	2.26	3/3	2.26	2/3	1.51	1/3	0.75	2/3	1.51	2/3	1.51
Man-7	Decision-making	2	3.27	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
	Sub-total		10.56		7.29		6.20		2.26		6.20		5.19
Procurement and Purchasing													
Pro-1	Commitment to sustainable procurement	2	1.26	3/3	1.26	3/3	1.26	3/3	1.26	3/3	1.26	3/3	1.26
Pro-2	Identification of suppliers	2	1.26	3/3	1.26	3/3	1.26	2/3	0.84	3/3	1.26	2/3	0.84
Pro-3	Supplier evaluation and contract award	2	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
Pro-4	Managing supplier performance	2	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
	Sub-total		2.51		2.51		2.51		2.09		2.51		2.09
Climate Change Adaptation													
Cl-1	Climate change risk assessment	4	5.03	2/3	3.35	3/3	5.03	2/3	3.35	3/3	5.03	3/3	5.03
Cl-2	Adaptation options	4	5.03	3/3	5.03	3/3	5.03	1/3	1.68	3/3	5.03	3/3	5.03
	Sub-total		10.06		8.38		10.06		5.03		10.06		10.06
Energy and Carbon													
Ene-1	Energy and carbon monitoring and reduction	3	13.57	3/3	13.57	3/3	13.57	3/3	13.57	3/3	13.57	3/3	13.57
Ene-2	Use of renewable energy	3	2.26	1.1/3	0.83	3/3	2.26	3/3	2.26	3/3	2.26	3/3	2.26
	Sub-total		15.83		14.40		15.83		15.83		15.83		15.83
Water													
Wat-1	Water use monitoring and reduction	2	4.52	1.3/3	1.96	3/3	4.52	3/3	4.52	3/3	4.52	3/3	4.52
Wat-2	Replace potable water	2	2.51	1/3	0.84	0.3/3	0.25	0.4/3	0.34	0.4/3	0.34	0.4/3	0.34
	Sub-total		7.04		2.80		4.77		4.86		4.86		4.86
Materials													
Mat-1	Materials footprint measurement and reduction	2	6.03	1.66/3	3.34	2.1/3/3	4.28	2.1/3/3	4.28	2.1/3/3	4.28	2.1/3/3	4.28
Mat-2	Environmentally labelled products and supply chains	2	-	3/3	-	0/3	-	0/3	-	0/3	-	0/3	-
	Sub-total		6.03		3.34		4.28		4.28		4.28		4.28
Discharges to Air, Land & Water													
Dis-1	Receiving water quality	2	2.39	1/3	0.80	2/3	1.59	0/3	-	2/3	1.59	2/3	1.59
Dis-2	Noise	3	3.58	3/3	3.58	3/3	3.58	3/3	3.58	3/3	3.58	3/3	3.58
Dis-3	Vibration	2	2.39	2/3	1.69	3/3	2.39	3/3	2.39	3/3	2.39	3/3	2.39
Dis-4	Air quality	1	1.19	2/3	0.80	3/3	1.19	0/3	-	3/3	1.19	1/3	0.40
Dis-5	Light pollution	3	1.51	1/1	1.51	1/1	1.51	1/1	1.51	1/1	1.51	1/1	1.51
	Sub-total		11.06		8.27		10.28		7.47		10.28		9.46
Land													
Lan-1	Previous land use	2	2.51	3/3	2.51	3/3	2.51	3/3	2.51	3/3	2.51	3/3	2.51
Lan-2	Conservation of on site resources	0	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
Lan-3	Contamination and remediation	2	2.01	2/3	1.34	3/3	2.01	0/3	-	3/3	2.01	3/3	2.01
Lan-4	Flooding design	2	1.51	1/2	0.75	1/2	0.75	0/2	-	1/2	0.75	0/2	-
	Sub-total		6.03		4.61		5.28		2.51		5.28		4.52
Waste													
Was-1	Waste management	2	2.01	1/2	1.01	2/2	2.01	1/2	1.01	2/2	2.01	2/2	2.01
Was-2	Diversion from landfill	2	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
Was-3	Deconstruction/ Disassembly/ Adaptability	2	1.51	2/3	1.01	3/3	1.51	3/3	1.51	3/3	1.51	3/3	1.51
	Sub-total		3.52		2.01		3.52		2.51		3.52		3.52
Ecology													
Eco-1	Ecological value	1	3.77	0/3	-	1/3	1.26	0/3	-	1/3	1.26	1/3	1.26
Eco-2	Habitat connectivity	0	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
	Sub-total		3.77		-		1.26		-		1.26		1.26
Community Health, Well-being and Safety													
Hea-1	Community health and well-being	2	2.51	3/3	2.51	3/3	2.51	1/3	0.84	3/3	2.51	1/3	0.84
Hea-2	Crime prevention	2	2.51	2/2	2.51	2/2	2.51	0/2	-	2/2	2.51	0/2	-
	Sub-total		5.03		5.03		5.03		0.84		5.03		0.84
Heritage													
Her-1	Heritage assessment and management	4	5.03	1/3	1.68	1/3	1.68	0/3	-	1/3	1.68	0/3	-
Her-2	Monitoring and management of heritage	4	-	0/3	-	0/3	-	0/3	-	0/3	-	0/3	-
	Sub-total		5.03		1.68		1.68		-		1.68		-
Stakeholder Participation													
Sta-1	Stakeholder engagement strategy	3	1.88	2/3	1.26	3/3	1.88	1/3	0.63	3/3	1.88	1/3	0.63
Sta-2	Level of engagement	3	1.88	2/3	1.26	2/3	1.26	0/3	-	2/3	1.26	0/3	-
Sta-3	Effective communication	3	1.88	2/2	1.88	2/2	1.88	0/2	-	2/2	1.88	2/2	1.88
Sta-4	Addressing community concerns	3	1.88	2/2	1.88	2/2	1.88	0/2	-	2/2	1.88	2/2	1.88
	Sub-total		7.54		6.28		6.91		0.63		6.91		4.40
Urban and Landscape Design													
Urb-1	Urban design	3	6.03	3/3	6.03	3/3	6.03	2/3	4.02	3/3	6.03	3/3	6.03
Urb-2	Implementation	3	-	0/2	-	0/2	-	0/2	-	0/2	-	0/2	-
	Sub-total		6.03		6.03		6.03		4.02		6.03		6.03
Innovation													
Inn-1	Innovation	2	10.00	1/10	1.00	10/10	10.00	9.75/10	9.75	10/10	10.00	10/10	10.00
	Sub-total		10.00		1.00		10.00		9.75		10.00		10.00
	Grand-total		110.00		73.6		93.59		62.08		93.7		82.33

Score	73.60	93.59	62.08	93.70	82.33
Rating	EXCELLENT	LEADING	EXCELLENT	LEADING	LEADING

Infrastructure Sustainability Rating Tool (Version 1.0)
18/12/2025

Appendix D MCA Template

Analysis				Scoring			
OPPORTUNITY 1							
Multicriteria Factors		Importance (%)	Option 1	Option 2	Weighting (%)	Option 1	Option 2
Description							
Economic	Initial costs	5			5%		
	Installation time and cost	5			7%		
	Maintenance Costs After Construction	5			7%		
Environmental	Installation energy	3			2%		
	Construction waste	3			5%		
	LCA (embodied carbon)	5			5%		
	Compliance with CEMP (ability to comply with noise, dust, vibration criteria)	2			2%		
	Ecolabel	1			2%		
Construction	Heritage	1			1%		
	Time/schedule	10			5%		
	Construction footprint	1			2%		
	Constructability (time and assembly), pre-fabrication of materials.	3			7%		
Technical	Human and plant Resources	5			1%		
	Durability (40 y design life)	10			8%		
	Compliance with SWTC (minimal interface with relevant parties)	5			2%		
	Simplicity of Maintenance	5			5%		
	Structural Integrity	10			10%		
	Security	4			2%		
Social	Construction safety	10			10%		
	Impacts on community	1			3%		
Safety	Impact on users	1			3%		
	Safety in design	3			3%		
SCORING					100%	0	0
WEIGHTED RANKING					#DIV/0!	#DIV/0!	#DIV/0!
		100					

negative = negative impact

0 = same as bau

positive = positive impact

=Option 1 total scoring / MAX(Option 1 total scoring, Option 2 total scoring)

=Option 2 total scoring / MAX(Option 1 total scoring, Option 2 total scoring)

Appendix E ISC Rating Tracker

The following is an excerpt from the ISC Rating tracker. This excerpt includes detail of the applicable deliverables. The tracker is a stand-alone tracker which shall remain live until project completion is achieved. Further detail shall be populated during the course of the Rating.

Tracker														
		KRA target (points)		65										
		Total points targeted												
		Points ready for submission		0										
		Percentage of points completed		0%										
		Number of documents required		3										
		Number of documents ready for		0										
		Percentage of documents ready		0%										
Credit No.	Link to Fold	Credit Title	RAG	level	Criteria	Must Statement	Evidence Description	Primary Responsibility	Secondary Responsibility	STATUS	Due Date	Closure Date	Notes	Verifier Comment
Cli-1		Climate change risk assessment		1	A readily available climate change projection is identified and adopted for the asset region over the forecast useful life of the									
Cli-1		Climate change risk assessment		1	Direct climate change risks to the asset over the forecast useful life are identified and									
Cli-1		Climate change risk assessment		2	The requirements of Level 1 are achieved									
Cli-1		Climate change risk assessment		2	A number of readily available climate change projections are identified and adopted for the asset region over the									
Cli-1		Climate change risk assessment		2	The climate change risk assessment also considered indirect climate change risks to the asset									
Cli-1		Climate change risk assessment		2	A multi-disciplinary team participated in identifying climate change risks and issues									
Cli-1		Climate change risk assessment		3	The requirements of Level 2 are achieved									

Appendix F Water Balance Study Report

Below is an excerpt from the **SWM3** Construction Water Balance Study.

SWM3 Water Balance Study

Introduction

- This document is a water balance study used to model water use across the infrastructure lifecycle, as required for the Wat-1 and Wat-2 IS Rating credits.
- Assumptions have been documented throughout this workbook.

Document Layout

- Refer to the 'SWM3 Summary' tab for a summary of results.
- Each tab has been described in further detail below.



Points of Contact:

Name	Job Title	Role	Email
Cait Roche	Graduate Engineer	v1 support	cait.roche@ghd.com
Liam Kleyrn	Sustainability Consultant	v1 author	liam.kleyrn@ghd.com
Nathan Alexander	Senior Consultant - Sustainability & Environment	Reviewer	nathan.alexander@ghd.com

Document Version History

Existing Versions	Date Shared
Version 1	4/11/2024
Review Date	4/11/2024

Workbook Tabs

Information Tab Name	Tab Function	Tab Number	Consultation with JHLOR Required?	Information Needed
SWM3 Summary	Summary of results including: project water footprint, estimated Wat-1 & Wat-2 credit scores, summary of water use qtys	N/A	N	None
1 - 10: Construction water use	Calculation of construction water use for each station	N/A	N	None
11 - 20: Operational water use	Calculation of operational water use for each station	N/A	N	None
Additional info (not used)	Waterfall chart, breakdown per water use activity	N/A	N	None

Water Saving Initiatives

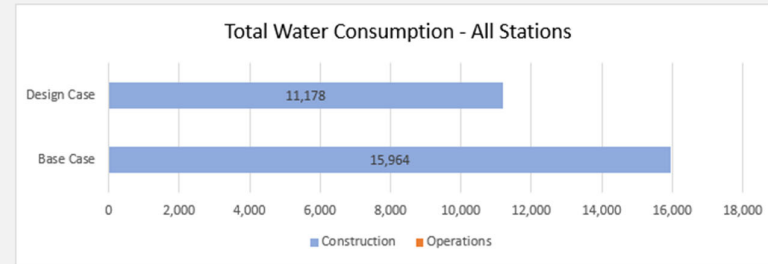
Saving Initiatives	Explanation	Tab Number	Consultation with JHLOR Required?	Information Needed	Are savings being attempted through this? (Y/N)
Non-potable water use	Replace potable water use with non-potable water e.g. landscape irrigation. Non-potable applications detailed in tabs.	N/A	N	None	Y
Reuseable concrete barriers	Reuse concrete barriers instead of water filled barriers	N/A	N	None	Y
Efficient Fixtures and fittings	Install efficient water-using appliances and fittings	N/A	N	None	Y
Irrigation	Drought resistant plant species selected, non-potable water used	N/A	N	None	Y
Concrete curing	Admix has been proposed for use during construction that negates any need to use water for concrete curing	N/A	N	None	Y

Supporting Information

Supporting Information	Explanation
IS Rating Base Case	Assumes 100% potable water used for all applications

SWM3 Water Footprint

Description	Unit	Base Case Value	Design Case Value
Total water use during construction	ML	15.96	11.18
Monthly water use during construction	ML/month	1.06	0.75
Annual operational water use	ML/year	0.00	0.00
Total water use over the project's lifecycle	ML	15.96	11.18
Project construction period	months	15	-
Project life	years	50	-
Number of stations	no.	10	-



IS Results

Description	IS Credit	Result	Level Achieved
Reduction in total water use	Wat-1	30.0%	3
Non-potable water replacing potable water	Wat-2	46.8%	1.4

Water Use Summary - all water sources

Summary of water use from all sources

Description	Base Case			Design Case		
	Potable (kL)	Non-potable (kL)	Total (kL)	Potable (kL)	Non-potable (kL)	Total (kL)
Construction	15,963.6	0.0	15,963.6	6,651.1	4,527.0	11,178.1
Operations	0.0	0.0	0.0	0.0	0.0	0.0
Total	15,963.6	0.0	15,963.6	6,651.1	4,527.0	11,178.1

Station Summary - all water sources

Summary of water use for each station, including all sources

Description	Base Case			Design Case		
	Potable (kL)	Non-potable (kL)	Total (kL)	Potable (kL)	Non-potable (kL)	Total (kL)
Construction total	15,963.6	0.0	15,963.6	6,651.1	4,527.0	11,178.1
1. Bankstown	1,245.1	0.0	1,245.1	620.4	207.0	827.4
2. Punchbowl	2,208.0	0.0	2,208.0	691.4	480.0	1,171.4
3. Wiley Park	1,322.8	0.0	1,322.8	671.0	480.0	1,151.0
4. Lakemba	1,421.5	0.0	1,421.5	682.8	480.0	1,162.8
5. Belmore	1,312.4	0.0	1,312.4	660.5	480.0	1,140.5
6. Campsie	2,006.9	0.0	2,006.9	659.6	480.0	1,139.6
7. Canterbury	1,464.5	0.0	1,464.5	664.3	480.0	1,144.3
8. Hurlstone Park	1,313.8	0.0	1,313.8	661.9	480.0	1,141.9
9. Dulwich Hill	1,329.5	0.0	1,329.5	677.6	480.0	1,157.6
10. Marrickville	2,339.0	0.0	2,339.0	661.5	480.0	1,141.5
Operations total	0.0	0.0	0.0	0.0	0.0	0.0
Total	15,963.6	0.0	15,963.6	6,651.1	4,527.0	11,178.1
Sum check	ok	ok	ok	ok	ok	ok

Appendix G S2B Environment and Sustainability Inspection

JV - (ENV / SUS) Weekly Environmental & Sustainability Inspection (WBK)	
Form Reference	
Owned By	
Date	
Status	
Project Name	
Project Reference	
Client Project Reference	
Location	
Form Location	
Details	
Inspection Date / Time	
Weather Conditions	
Current Works	
Location	
Area	
Attendees	
#	Full Name Organisation
1	
Energy	
Including plant selection; plant condition; operator behaviour; wasteful/inefficient practices; and metering/record keeping.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Water Use	
Including plant selection; plant condition; operator behaviour; wasteful/inefficient practices; and metering/record keeping.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Materials	
Including reuse of site won materials; reuse of surplus materials; material selection; material storage/stockpiling and handling; wasteful/inefficient practices; and record keeping.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Receiving Water Quality	
Including erosion and sedimentation controls; provision/quality of adequate drainage routes/basins; management of chemicals etc.; provision of spill kits; monitoring of water quality; and weather cond	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Noise	
Including working hours; permits; communication; construction methodology; plant selection; operator behavior; and monitoring.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Vibration	
Including working hours; permits; communication; construction methodology; plant selection; operator behavior; and monitoring.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	

F1.XXXXX: JV - (ENV / SUS) Weekly Environmental & Sustainability Inspection (WBK) (version 1)

Page 1 Of 3

Air Quality	
Including construction methodology; plant selection; operator behaviour; effectiveness of dust suppression (water cart, mulching, etc.); and monitoring.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Light Pollution	
Including working hours; communication; light selection and set-up; and operator behaviour.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Top soil, sub soil and mulch	
Including segregation; signage and stockpiling method; and record keeping.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Contamination	
Including provision for known contamination and acid sulfate soils (e.g. qualified subcontractor, removal/treatment method and record keeping); and provision for and awareness of potential unexpected	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Waste	
Including house keeping and litter; minimizing packaging; over ordering; reuse of site won material; reuse of surplus materials; waste facilities and signage (spoil, construction, office), and records	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Ecology	
Including clearing limits; protection of trees to be retained; weed seed and disease management measures; and provision for injured fauna.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Community Health and Wellbeing	
Including access to active transport; public transport; recreation facilities; services and facilities; sustainability awareness; school visits; volunteer programs and cultural activities.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Crime Prevention	
Including temporary construction diversions applying CPTED principles.	
If Yes, is there a positive observation?	
If No, is a Corrective Action required?	
Community Safety	

F1.XXXXX: JV - (ENV / SUS) Weekly Environmental & Sustainability Inspection (WBK) (version 1)

Page 2 Of 3

	Including access ways; fencing, segregation; and information.	
	If Yes, is there a positive observation?	
	If No, is a Corrective Action required?	
Heritage		
	Including disturbance limits; monitoring; record keeping; and provision for and awareness of potential unexpected finds.	
	If Yes, is there a positive observation?	
	If No, is a Corrective Action required?	
Community Concerns / Complaints		
	Are there any Community Concerns/ Complaints?	
	If No, is there a positive observation?	
	If Yes, is a Corrective Action required?	
Urban and Landscape Design		
	Including visual amenity during construction, e.g. graffiti, un-landscaped zones.	
	If Yes, is there a positive observation?	
	If No, is a Corrective Action required?	
Impacts to Local Business		
	Including access to local business; local business activity; local business complaints; local employment; and local skills.	
	If Yes, is there a positive observation?	
	If No, is a Corrective Action required?	
Sign Off		
	Inspection conducted by	

Appendix H Sustainability Assurance Framework

Order Number	ID	Category	Deed Clause	D or C	Contract wording	Explanation	Design	Construction Activities	Operational Asset	Comments from JHLOR	Evidence List	Discussion Point	Discussion Point requirement references	Headline requirement of SWS	Status (JHLOR)	JHLOR Status Date	Status Sydney Metro	Sydney Metro Status Date	Sydney Metro Comments	JHLOR Primary Responsibility	JHLOR Secondary Responsibility	BAC Sydney Metro Comments 2024	Counter
1	SM-CSW-SVM-SVM3-SVTC-	General	1											Heading		Heading							1
2	SM-CSW-SVM-SVM3-SVTC-	Introduction	1.1											Heading		Heading							1
3	SM-CSW-SVM-SVM3-SVTC-B07-3	Introduction	1.1 a)		This Appendix B07 contains the sustainability requirements that the SVM3 Contractor must comply with during the SVM3 Contractor's Activities. These requirements relate to the design and construction elements of the SVM3 Works and are in addition to the Management Requirements - Sustainability (Appendix F08) which describes requirements and processes in relation to the management of sustainability related aspects for the SVM3 Works and									Information		TBC							1
4	SM-CSW-SVM-SVM3-SVTC-	Scope	1.2	Scope										Heading		Heading							1
5	SM-CSW-SVM-SVM3-SVTC-	Scope	1.2 a)		The SVM3 Contractor must:									Context		Context							1
6	SM-CSW-SVM-SVM3-SVTC-	Scope	1.2(a)	-	(i) comply with the Sydney Metro Environment and Sustainability Policy (SMES-MN-102).		Y	Y	Y	Included in SMP	SMP Appendix A			on track	17/05/25	on track				Jerome Cagnano	Alyssa Stanley		1
7	SM-CSW-SVM-SVM3-SVTC-		1.2(a)ii)		implement relevant sustainability initiatives that deliver on the sustainability requirements across the key themes outlined in the Sydney Metro City & Southwest Sustainability Strategy (SMES-ST-218) including:									Context		Context							1