Spoil Management Plan

SMCSWSSJ-JHL-WSS-EM-PLN-000031

Document and Revision History

Document Details	
Title	Spoil Management Plan
Client	Sydney Metro City & Southwest
Client reference no.	SMCSWSSJ-JHL-WSS-EM-PLN-000031
JHLOR JV contract no.	K44

Revisions

Revision	Date	Description	Prepared by	Reviewed by
1	5/12/2017	100% Submission	Cameron Newling	Neil Ivison
2	1/3/2018	Updated to address comments from Sydney Metro	Cameron Newling	Neil Ivison
3	7/5/2018	Updated to address comments from Sydney Metro and the ER	Cameron Newling	Neil Ivison
4	14/02/2019	Periodic Review	Sonia Chand	Cameron Newling
5	28/01/2020	Periodic Review	Cameron Newling	Malachy Breslin
6	2/09/2020	Periodic Review, Updated for Audit comments	Dan Keegan	Malachy Breslin
7	8/10/2020	Updated for ER and SM Comments	Ryan Dunne	Malachy Breslin
8	4/11/2021	Draft Review, Updated for new spoil facilities, AEPR 1997 and full extent of works under EPL	Ryan Dunne	Dan Keegan
9	29/11/2021	Updated for ER and Sydney Metro comments	Ryan Dunne	Dan Keegan
10	18/12/2021	Updated for Sydney Metro comments	Ryan Dunne	Dan Keegan
11	21/06/2022	Updated to Include BAC	David Parkinson	Chris McCallum
12	28/06/2022	Updated for ER and Sydney Metro comments	David Parkinson	Chris McCallum

Controlled:	NO	Copy no.:	Uncontrolled:	YES

Table of Contents

Terms and definitions

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

Table 1 - Glossary

Terms	Explanation
BAC	Bankstown Station and Additional Corridor Works
BEW	Bankstown Early Works
BOM	Bureau of Meteorology
CoA	Condition of Approval
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CSSI	Critical State Significant Infrastructure
DP ESS	Department of Planning and Environment, Energy & Science (EES)
ECM	Environmental Control Map
EIS	Environmental Impact Statement
EMS	Environmental Management System
ENM	Excavated Natural Material
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	Environment Protection Authority
EPL	Environment Protection Licence
GSW	General Solid Waste
HSEMS	Health Safety Environmental Management System
HSW	Hazardous Solid Waste
JHLOR	John Holland Laing O'Rourke
OEH	Office of Environment and Heritage
PFAS	Per-and poly-fluoroalkyl substances
POEO Act	*Protection of the Environment Operations Act 1997*
RSW	Restricted Solid Waste
SES	State Emergency Service
SMCSW	Sydney Metro City and Southwest
SMC	Southwest Metro Corridor
SMu	Sydney Metro upgrade (formerly SSJ)
SpMP	Spoil Management Plan
SSJ	Sydenham Station and Junction
TfNSW	Transport for New South Wales
VENM	Virgin Excavated Natural Material

1. Introduction

1.1 Purpose

This Spoil Management Sub-plan (SpMP) outlines the Southwest Metro Corridor (SMC) and Bankstown and Additional Corridor (BAC) Project's approach to implementing spoil related measures to achieve planning, environmental protection licence (EPL) and contractual requirements.

1.2 Background and Scope

Sydney Metro City & Southwest is a new 30km Metro line extending Metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney. The Sydney Metro City & Southwest is comprised of two components;

- Chatswood to Sydenham Project
- Sydenham to Bankstown Upgrade

The SMC & BAC works, referred to as "the Project" or 'the works" in this document, will be undertaken in accordance with the Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Instrument of Approval (SSI_8256). The Project site is located on the T3 Bankstown line between approximately 800 metres west of Sydenham Station in Marrickville, to approximately one kilometre west of Bankstown Station in Bankstown.

The works will be undertaken by a John Holland Group Pty Limited (John Holland) and Laing O'Rourke Construction Pty Limited (Laing O'Rourke) joint venture referred to as JHLOR JV. Laing O'Rourke has been nominated as the Principal Contractor and as such the works will occur under Laing O'Rourke's Health Safety and Environmental Management System (HSEMS).

This SpMP has been developed for the Construction phase of the project, in compliance with the Client's requirements, Laing O'Rourke's HSEMS, the JHLOR EPL 21147 and the Minister's Conditions of Approval (CoA) and Revised Environmental Mitigation Measures (REMMs).

1.3 Overview of the SMC and BAC Project

Sydney Metro City & Southwest is a new 30km metro line extending metro rail from the end of Sydney Metro Northwest at Chatswood under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney. The SMC and BAC project is located on the T3 Bankstown line between approximately 800 metres west of Sydenham Station in Marrickville, to approximately one kilometre west of Bankstown Station in Bankstown.

The Sydenham Metro upgrade at Sydenham Station and Junction C (SSJ) were not assessed under the planning approval for the Sydney City Metro Chatswood to Sydenham that was approved by the Minister on 9 January 2017 under Part 5.1 of the *Environmental Assessment & Planning Act 1979*. The Sydenham to Bankstown State Significant Infrastructure Application Report identified an opportunity to accelerate the phased opening of the Chatswood to Sydenham Metro Service, through to Sydenham Station if Sydenham Metro upgrade works commence earlier under a separate planning approval. As such, the works have been assessed as a modification to the Sydney City Metro Chatswood to Sydenham Environmental Impact Statement to allow the phased opening of the Metro services from Chatswood to Sydenham Station. This portion of the works was undertaken under SSI-740. The completion of works for this section was subsequently combined with CSSI 8256 approval in conjunction with the BAC works.

The Southwest Metro (SWM) Project was assessed as SSI 8256 before being modified through Mod-1 to Critical State Significance Infrastructure (CSSI 8256) by the Minister for Planning and Environment under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project determination was made on the 12th of December 2018 and Mod-1 was determined on the 22nd October 2020. The Southwest Metro Corridor Works (SMC) (a package of SWM) was awarded to the John Holland Laing O'Rourke (JHLORJV) in Q4 2020. In Q3 2021, the SMC Stage was expanded to include the Bankstown Station Early Works (BEW) scope. In Q2 2022 the SMC Stage Is being expanded to include the Bankstown Station and Additional Corridor Works (BAC).. Low impact activities associated with the Bankstown Station early works were undertaken in Q3 2021 until construction commenced in Q4 2021 This SpMP has been prepared to comply with the requirements of the planning approval CSSI 8256 , contract requirements for environmental management, relevant environmental legislation and other environmental obligations associated with the project.

1.4 SMC and BAC Scope of Works

1.4.1 Permanent Works

The works include all permanent new infrastructure and modifications to existing infrastructure, which must be constructed to enable the construction of SMC & BAC. The permanent new infrastructure and modifications to existing infrastructure to be constructed includes;

- Installation and commissioning of Combined Service Route (GST, GLT, pit & pipe)
- Signalling, communications and HV diversions
- Rail embankment stabilisation including retaining walls
- Installation of drainage
- Installation of security and segregation fencing
- Civil enabling works for traction substations
- Vegetation clearing
- Access road upgrades/establishment
- Utility diversions
- Bridge remedial works, including installation of crash barriers and throw screens
- Modifications to the existing rail track (including crossovers diamond crossings, hi rail ramps, buffer stops, and hi-rail access pads and earthworks)
- Overhead wire works (including structure and footings installation/removal)
- Demolition of redundant infrastructure.
- Bankstown Service Building works inclusive of:
    - Installation of contiguous piled retaining wall
    - Form Reo Pour for ground slab and first floor slab
    - erection of structural steel frame,
    - installation of precast walls,
    - internal fit out of building inclusive of LV reticulation, HVAC systems, Hydraulic services, fire suppressant services and architectural finishings
    - external finishing inclusive of masonry brickwork and architectural cladding

Works at Bankstown Station inclusive of:

- Southern (down) platform inclusive of
    - piling,
    - FRP ground beams and slab
    - installation of structural steel sub frame,
    - installation of precast platform decks and cast in-situ capping slab
    - installation of modular platform canopies
- Northern (Up) Sydney Metro platform construction inclusive of

  - piling,
  - FRP ground beams and slab
  - installation of structural steel sub frame,
  - installation of precast platform decks and cast in-situ capping slab
  - installation of modular platform canopies
  - fitout of services inclusive of LV reticulation, hydraulic services, fire suppressant services, security services.
  - Architectural fitouts including roofing, cladding and glazed panels.
  - Platform paving, installation of platform furniture, fixings, fencing.
- Existing Sydney Trains platform extension works inclusive of
  - Foundation preparation
  - Precast culvert and edge beam installation
  - Drainage and services installation
  - Insitu concrete topping slabs
  - Platform regrading and asphalt resurfacing
  - Relocation of station fixings and furniture
  - Relocation of existing Chapel St bridge pier (including piling, FRP pilecap and structural steel supports)
- Installation of new track slabs across 8 x Sydney Metro stations
  - Located at Marrickville, Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Lakemba and Punchbowl
- Demolition of redundant infrastructure including
  - Existing Sydney Trains Bankstown platform (partial)
  - Existing heritage parcel office building on South Terrace
  - Existing toilet block on North Terrace
- Construction of new Sydney Trains and Sydney Metro station entrances inclusive of:
  - Piled foundations
  - Form Reo Pour for ground slab and first floor slab
  - Erection of structural steel frame
  - Vegetation Removal
  - Installation of precast walls,
  - Fit out of building services inclusive of LV reticulation, HVAC systems, Hydraulic services, fire suppressant services, security, lighting and architectural finishings
  - External finishings inclusive of masonry brickwork, architectural cladding, roofing and glazing
  - Paving, installation of platform furniture, fixings and gatelines.
  - Internal fitout of station buildings including bathrooms, offices, retail spaces and equipment rooms including modification to existing Bankstown Station rooms.
- Construction of a new cross-corridor plaza and surrounding urban landscaping including
  - Earthworks
  - Installation of drainage and CSR services
  - Paving, footpaths, timber decking
  - Modification to existing kerb lines, DDA and kiss & ride parking
  - Landscaping including trees and planting
  - Installation of furniture, fixings, wayfinding and signage.
- Station refresh and deep clean of all stations along the alignment during the Final Conversion period.

1.4.2 Temporary Works

The SMC & BAC temporary works include:

- Temporary arrangements to divert and control pedestrians, public transport users, cyclists, public transport and traffic and to provide public access, amenity, security and safety during all stages of 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 arrangements for people and vehicles to safely access the Site;
- Temporary access stairs, walkways and platforms within the Site;
- Temporary construction hoardings, fencing, noise walls, access gates, barriers and signage on and around the Site;
- All environmental safeguards and measures necessary to mitigate environmental effects which may arise during the design and construction of the Works;
- Cleaning, maintenance, repair, replacement and reinstatement, as required, of all areas occupied by the Contractor during design and construction of the Works;
- Temporary site facilities/compounds required for design and construction of the Works (i.e. Canterbury Bowls Club), including set-up and operation;
- 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 power for stations
- 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.
- Investigation works including services searching and geotechnical investigations in the vicinity of Bankstown Station for BAC and BEW along the full alignment from Sydenham to Bankstown.

In addition to the above works, JHLOR will continue to use the main compound area at the Canterbury Bowls Club site, Close Street, Canterbury. This main compound site will be used by the SMC & BAC Project, TSOM Project and other Sydney Metro City and Southwest Sydenham to Bankstown projects as directed by Sydney Metro. The area has been leased by Sydney Metro from City of Canterbury Bankstown. JHLOR will comply with the terms of the lease.

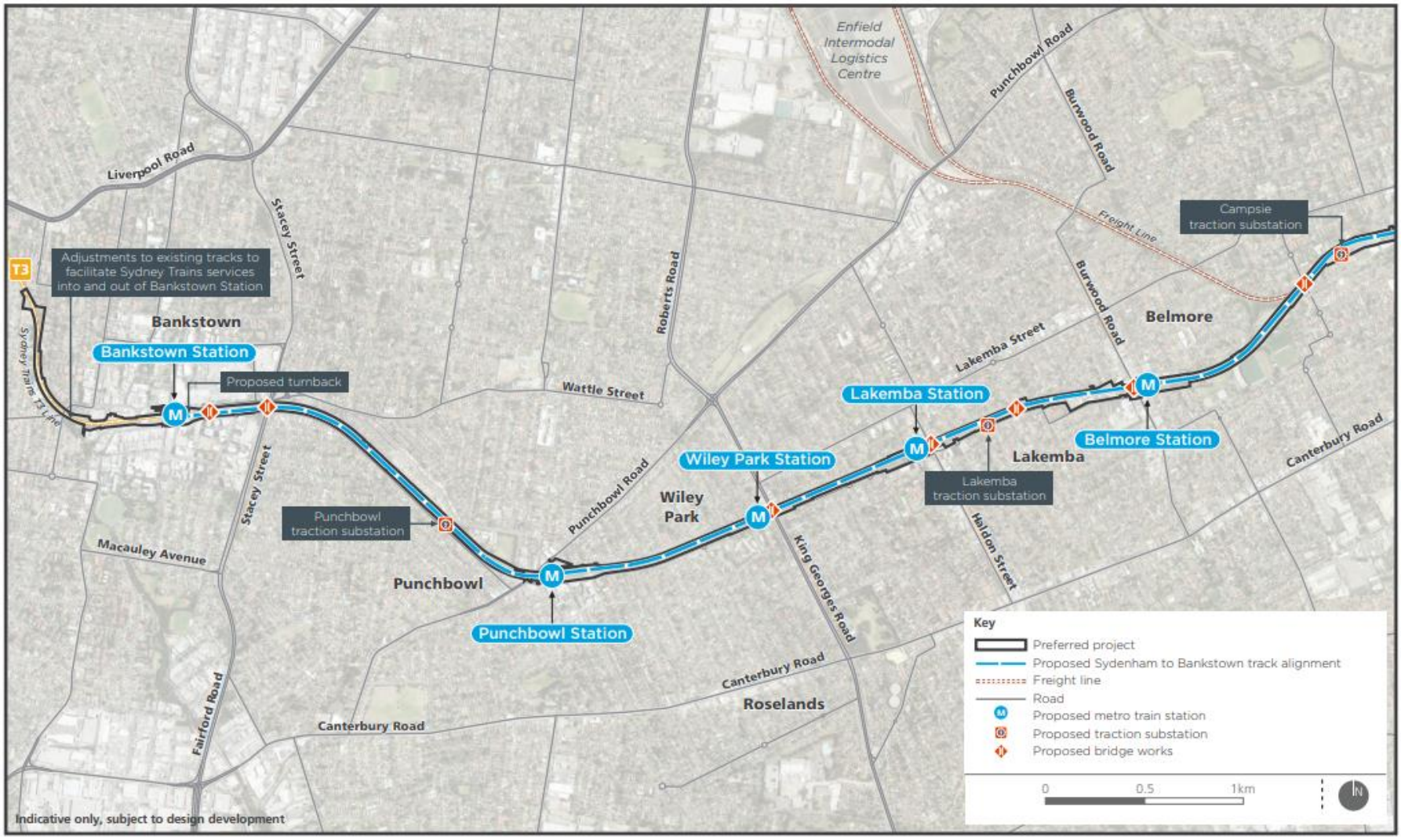
The compound set-up included;

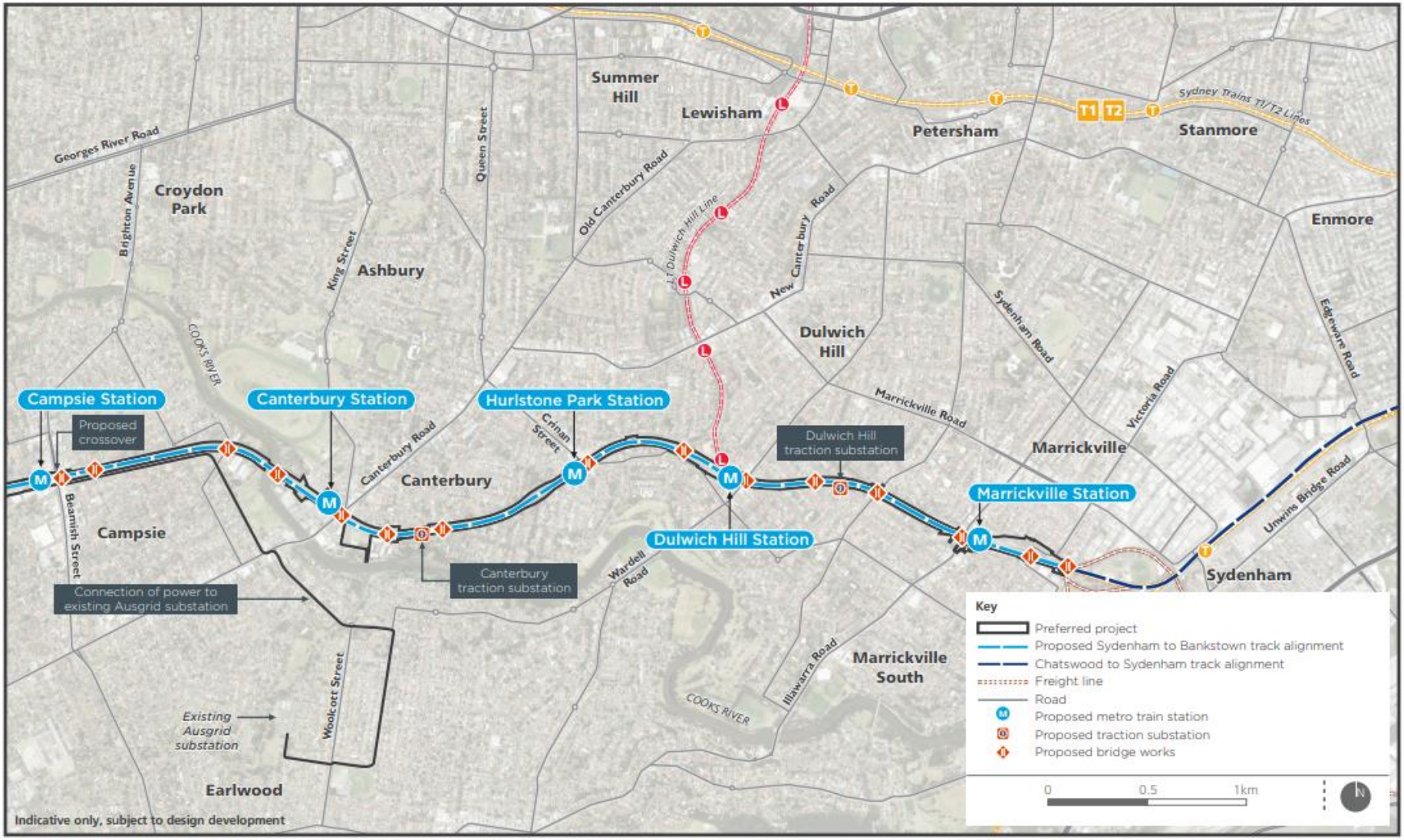
- Archaeological investigations
- Geotechnical and service investigations
- Fencing
- Tree trimming and removal
- Installation of hard stand, haul roads and ramps
- Demolition of an existing structure
- Installation of utilities and services for the compound
- Installation of buildings, containers and structures
- Supporting activities required to establish the compound (i.e. road sweeping, dust suppression)

1.5 Works Location and Site Layout

The SMC & BAC work location and site layout is highlighted in Figure 1 below. The layout and components of specific compounds and temporary site facilities is presented in each facility's Environmental Control Map (ECM) which are presented in the CEMP.

Figure 1: Site Layout (source: Sydney Metro City & Southwest - Sydenham to Bankstown - Submissions and Preferred Infrastructure Report, 2018)




Summer Hill
Lewisham
Petersham
Stanmore
Sydney Trains T1/T2 Lines
T1
T2
Georges River Road
Croydon Park
Brighton Avenue
King Street
Ashbury
Queen Street
Old Canterbury Road
Dulwich Hill Line
New Canterbury Road
Enmore
Edgeware Road
Sydenham Road
Dulwich Hill
Marrickville Road
Victoria Road
Marrickville
COOKS RIVER
Campsie Station
Proposed crossover
Canterbury Station
Hurlstone Park Station
Crinan Street
Canterbury Road
Canterbury
Dulwich Hill traction substation
Marrickville Station
Unwins Bridge Road
Sydenham
Beamish Street
Campsie
Dulwich Hill Station
Canterbury traction substation
Wardell Road
Connection of power to existing Ausgrid substation
Illawarra Road
Marrickville South
Existing Ausgrid substation
Woolcott Street
Earlwood
Indicative only, subject to design development
Key
Preferred project
Proposed Sydenham to Bankstown track alignment
Chatswood to Sydenham track alignment
Freight line
Road
Proposed metro train station
Proposed traction substation
Proposed bridge works
0
0.5
1km
N

1.6 Objectives and Targets

This SpMP provides the basis for the management of spoil issues and to minimise risk of impact during works. The objectives and targets of spoil management and mitigation are outlined below:

Objective	Target
Minimise spoil generation where possible	The project will mandate 100% reuse or recycling (on or off-site) of usable spoil
Spoil will be managed with consideration to minimising adverse traffic and transport related issues.	No complaints with respect to spoil haulage
Spoil will be managed to avoid contamination of land or water.	No contamination of land and water from spoil
Spoil will be managed with consideration of the impacts on residents and other sensitive receivers.	No dust complaints from Spoil Haulage
Site contamination will be effectively managed to limit the potential risk to human health and the environment.	Unexpected finds procedure implemented if contamination is found

These objectives conform to Sydney Metro objectives as described in the Construction Environmental Management Framework (CEMF).

1.7 Consultation

A summary of consultation undertaken as per Conditions of Approval (CoAs) C3(c) for the preparation of this CSpMP is provided in Table 1. The CSpMP will be updated further following receipt of comments, as required. Records of consultation will be contained in a separate document to this plan for the information of the Department of Planning and Environment (DPE)as required.

Table 1 Summary of Consultation

CoA SSI-8256	Agency Consultation	Requirements and date submitted	Key issues raised
3(c)	City of Canterbury-Bankstown	Plan for BAC submitted 15/07/2022. Comments received 08/08/2022	“Had a review of the Spoil Management Plan. Nothing major to comment on it, overall looks satisfactory and suitable for its purpose.”
	Inner West Council	Revised Plan for BAC submitted 15/07/2022. Comments received 09/08/2022	No comment.

1.8 Approval

This Sub-plan will be reviewed and endorsed by the Independent Environmental Representative (ER) in accordance with CoA-A26. Sydney Metro will also review the Plan in accordance with condition 3.3e) of the Construction Environmental Management Framework (CEMF).

In accordance with CoA-C6 the Sub-plan must be submitted to the Secretary one month prior to the commencement of Construction. Construction must not commence until the Secretary has approved the Sub-plan in accordance with CoA-C7.

2. Legal and Other Requirements

The SpMP addresses the following requirements;

- The Sydney Metro City & Southwest – Sydenham to Bankstown – State Significant Infrastructure Assessment (SSI 8256), dated 12 December 2018
- The Sydney Metro City and Southwest – Sydenham to Bankstown – State Significant Infrastructure Assessment (SSI 8256) MOD 1, dated 22 October 2020
- The Sydney Metro City & Southwest – Sydenham to Bankstown - Environmental Impact Statement (EIS), dated 7 September 2017;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report (SPIR), June 2018;
- The Sydney Metro City & Southwest – Sydenham to Bankstown – Instrument of Approval (CoA), dated 12 December 2018
- Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Staging Report (V6) (Sydney Metro, August 2021).
- The Sydney Metro Construction Environmental Management Framework v3.2 (CEMF);
- The Sydenham Station and Junction Project Deed
- The Sydney Metro – Sydenham to Bankstown – Bankstown Station Modification Report May 2020
- The Sydney Metro – Sydenham to Bankstown – Modification of Infrastructure Approval, dated 22 October 2020
- Applicable Legislative Obligations.
- Sydney Metro City & Southwest Sustainability Strategy

The Compliance Matrix in Appendix A provides a comprehensive list of compliance requirements, environmental documents and the contract documents, including specific conditions outlined in the following:

- Project Approval SSI 8256- Specific Management Plan Requirements
- Revised Environmental Mitigation Measures SSI-8256
- Construction Environmental Management Framework (SSI-8256)
- Environment Protection Licence (21147)

Table 2 below details the legislation and planning instruments considered during development of this Plan.

Table 2 - Legislation and Planning Instruments

Legislation	Description	Relevance to this SPMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	The approval conditions and obligations are incorporated into this SpMP.
Protection of the Environment Operations Act 1997 (POEO Act)	The object of the Act is to achieve the protection, restoration and enhancement of the quality of the NSW environment	All works must be in accordance with relevant sections of the Act
Protection of the Environment Operations (Waste) Regulation 2014	Regulates obligations applying to waste managers, consigners, transporters and receivers managing waste from the Project. The main provisions relate to the payment of a waste levy by a licensed receivers, the requirements to track the transportation and disposal of certain types of waste, and specific requirements regarding the transportation and management of asbestos waste.	All works must be in accordance with relevant sections of the Regulations. All waste transporters, receiving facilities and waste managers responsible for record keeping are subject to the provisions of these Regulations.

Waste Avoidance and Resource Recovery Act 2001	This Act promotes waste avoidance and resource recovery to achieve a continual reduction in waste generation. The Act provides for the development of a state-wide Waste Strategy and introduces a scheme to promote extended producer responsibility for the life-cycle of a product	Spoil reuse will be managed in accordance with relevant sections of the Act
Roads Act 1993	Regulates the carrying out of various activities on public roads.	Transport of spoil must be managed in accordance with the Act
Contaminated Land Management Act 1997	This Act enables the EPA to respond to contamination that it has reason to believe is significant enough to warrant regulation	Contamination must be managed in accordance with the Act
Airports Act 1996	The Airports Act 1996 establishes the regulatory arrangements which apply to the airports formerly owned and operated on behalf of the Commonwealth by the Federal Airports Corporation, and Sydney West Airport. The Act is the parent legislation of the *Airports (Environment Protection) Regulations* 1997 amongst other regulations.	Part 6 of the Act sets out the regulatory provisions for environmental management and standards at airports to which the importation of soil for use on commonwealth land applies.
Airports (Environment Protection) Regulations 1997	This regulation relates to requirements for environmental protections at Australian Airports. The regulation is Federal legislation	Schedule 3 relates to soil pollution accepted limits, relevant to import of material to the Sydney Gateway road project

2.1 Guidelines

Additional guidelines and standards relating to the management of spoil include:

- Waste Classification Guidelines, Part 1: Classifying Waste (EPA, November 2014)
- Waste Classification Guidelines, Part 4: Acid Sulfate Soils (DECC August 2009)
- Australian and New Zealand Guidelines for Assessment and Management of Contaminated Sites (ANZECC/NHMRC 1992)
- Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (EPA 1998)
- Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (EPA 1997a)
- Contaminated Sites: Sampling Design Guidelines (EPA 1995b)
- Acid Sulfate Soil Manual (NSW Acid Sulfate Soil Management Advisory Committee 1998)
- Draft Protocol for managing asbestos during resource recovery of construction and demolition waste (NSW EPA 2014)
- The National Environment Protection (Assessment of Site Contamination) Measure (2013)
- PFAS National Environmental Management Plan 2.0, National Chemicals Working Group of the Heads of EPAs Australia and New Zealand (2020)

2.2 Roles and Responsibilities

The roles and responsibilities of key JHLOR Personnel with respect to spoil management are as follows in Table 3:

Table 3 - Roles and Responsibilities

ROLES	RESPONSIBILITIES
Project Leader	Managing the delivery of the works including overseeing implementation of spoil management as Contractor's Representative

ROLES	RESPONSIBILITIES
Environment Manager	Oversee the implementation of all spoil management initiatives Responsible for managing ongoing compliance with the CoA and environmental document requirements
Construction Supervisors Subcontractors	Manage the delivery of the construction process, in relation to spoil management across all sites in conjunction with the Environment Manager Implement spoil management activities during construction works
Environmental Coordinator	Manage the on-ground application of spoil management measures during construction Monitor and report on spoil management during construction
Sustainability Manager	Track and report spoil reuse against sustainability targets
Commercial Manager	Ensure that relevant spoil management requirements are considered in procuring materials and services
Specialist Consultant	Specialist consultants will be engaged to undertake investigations and respond to unexpected finds
Environmental Representative	Endorse this plan prior to the commencement of construction Conduct site inspections and monitor the compliance of this plan and its implementation
Engineers	Organise for stockpile waste classification testing where spoil is to be removed from site as waste Maintain the Waste Spoil Register on the Project Drive, including verifying spoil dockets Where contamination is encountered, ensure materials are disposed of appropriately.

3. Aspects and Impacts

Impacts directly related to construction works are described in Table 4. Management measures to address these impacts are contained in Sections 5 to 7. Refer to Section 8 of the CEMP for details of the risk assessment process.

Table 4 – Spoil – Aspects and Impacts

Aspects	Potential Impacts
Air quality	Dust from stockpiles, haul trucks and access roads may reduce air quality
Community	Cumulative impacts of aspects associated with spoil management generate complaint
Contamination	Previously unidentified contaminated spoil may impact on construction activities or environmentally sensitive areas
Design specifications	Limitations on opportunities to minimise spoil generation Limited ability to reuse material due to design requirements
Erosion	Increased erosion potential as a result of spoil excavation and management
Land use	Licensing and approval requirements may impact on availability of potential beneficial reuse sites
Noise	Disturbance of sensitive receivers as a result of noise associated with spoil management
Sedimentation	Potential for sediment-laden site runoff from spoil stockpiles
Sustainability	Availability of suitable reuse sites decreases volume for beneficial reuse Distance to beneficial reuse or disposal sites increases the carbon footprint
Weed management	Potential for spread of weeds during spoil movement

4. Spoil Generation

The forecast generation of spoil for the SMC and BAC works is currently being revised in the detailed design of BAC. An estimate for spoil generation will be provided at completion of design and this plan will be updated. The majority of spoil will be generated from excavation works associated with track formation, station platform works and drainage works.

The estimated quantities of spoil to be generated (subject to detailed design) are detailed below in Table 5. The quantities will be reviewed during periodical reviews of this plan. Disposal of spoil will be tracked and reported as required.

Table 5 – Estimated Spoil Quantities

Location	Approximate Quantities (m3)
Rail Corridor	28,915
Junction Works	5,500
Station Platform	4,000
Drainage Works	6,300
Total	**44,715**

5. Spoil Types

It is expected that the spoil material on the project will predominantly be a mixture of VENM (Virgin Excavated Natural Material), ENM (Excavated Natural Material) and GSW (General Solid Waste). The project has also encountered acid sulfate soils to a depth of four metres below ground level.

5.1 Classification

Topsoil and spoil, other than VENM will be sampled, analysed and characterised in accordance with the Waste Classification Guidelines: Part 1 Classifying Waste (EPA 2014). Sampling may occur either in-situ or from a stockpile. It is also noted that testing may occur in accordance with the NSW EPA Resource Recovery Orders.

5.2 VENM

Virgin excavated natural material means natural material (such as clay, gravel, sand, soil or rock fines) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities. VENM does not contain sulfidic ores or soils, or any other waste, and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved from time to time by a public notice published in the NSW Government Gazette.

JHLOR as the generator of the VENM, or its Environmental Consultant will consider the following four questions when classifying material as VENM:

1. Are manufactured chemicals or process residues present?
2. Are sulfidic ores or soil present?
3. Are naturally occurring asbestos soils present?
4. Is there any other waste present?

If material meets the definition of VENM it can be reused on or offsite without prior testing. However, if there is any doubt as to whether the material is VENM, JHLOR will sample and test the material as per the excavated natural material resource recovery exemption to confirm that the material is free of contaminants.

5.3 ENM

If spoil is unable to be classified as VENM it will be sampled, and tested to determine whether it meets the excavated natural material (ENM) classification criteria in accordance with the *Protection of the Environment Operations (Waste) Regulation 2014* (the Regulation) current general resource recovery exemption, the excavated natural material exemption 2014.

Excavated natural material (ENM) means naturally occurring rock or soil (including but not limited to materials such as sandstone, shale, clay and soil) that has:

(a) Been excavated from the ground, and

(b) Contains at least 98% by weight natural material, and

(c) Does not meet the definition of Virgin Excavated Natural Material in the Act

ENM does not include material that has been processed or contains acid sulphate soils or potentially acid sulphate soils.

5.4 GSW

Spoil not classified as either VENM or ENM due to contamination from either construction material or other sources shall be characterised in accordance with the Waste Classification Guidelines: Part 1 Classifying Waste (EPA 2014). General Solid Waste (Non putrescible) is any waste that is not classified as special waste, liquid waste, hazardous waste, restricted solid waste or general solid waste (putrescible).

5.5 Special Waste

Special Waste is a class of waste that has unique regulatory requirements. The potential environmental impacts of special waste need to be managed to minimise the risk or harm to the environment or human health.

Special waste means any of the following:

- Clinical and related waste
- Asbestos waste
- Waste tyres
- Anything classified as special waste under an EPA gazettal notice.

5.6 Restricted Solid Waste

If either the Specific Contamination Concentration (SCC) or Toxicity Characteristics Leaching Procedure (TCLP) values exceed threshold guidelines for GSW, the waste must be classified as Restricted Solid Waste.

5.7 Hazardous Waste

The following waste types (other than special waste or liquid waste) have been pre-classified by the EPA as 'hazardous waste':

- Containers, having previously contained a substance of Class 1, 3, 4, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or a substance to which Division 6.1 of the Transport of Dangerous Goods Code applies, from which residues have not been removed by washing or vacuuming,
- Coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising of more than 1% (by weight) of coal tar or coal tar pitch waste,
- Lead-acid or nickel-cadmium batteries (being waste generated or separately collected by activities carried out for business, commercial or community services purposes)

If the values exceed those for RSW, then the spoil would also be classed as hazardous waste.

5.8 Acid Sulfate Soils

Acid Sulfate Soils and Potential Acid Sulfate Soils will be managed and tested in accordance the Construction Soil and Water Management Plan.

5.9 Resource Recovery Exemptions

The *Protection of the Environment Operations (Waste) Regulation 2014* enables the EPA to issue 'resource recovery exemptions' which allow for the beneficial reuse of wastes via land application or for use as a fuel. These exemptions enable a project to comply with the principle of 'wastes to resources for beneficial reuse' (where the wastes are fit for beneficial reuse). During the project, materials may be encountered that do not meet the VENM or ENM classification but

are also not contaminated material. In these circumstances the Project will check for existing resource recovery exemptions such as:

- The excavated public road material exemption 2014 (EPA);
- The reclaimed asphalt pavement exemption 2014 (EPA);
- The recovered aggregate exemption 2014 (EPA); and
- Raw mulch material exemption 2014 (EPA).

Should the existing resource recovery exemptions not be appropriate, the Project will consider application for a site specific exemption established through consultation with the EPA.

5.10 National Environment Protection (Assessment of Site Contamination) Measure– Industrial Land Use Type

Site wide contamination testing has indicated that spoil on site meets the criteria for application to industrial land in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (NEPM). Where contamination has been observed within stockpiles, additional NEPM testing has occurred.

It is noted that the industrial land type criteria allows for spoil to be reused on sites with low levels of bonded asbestos materials within the spoil, subject to conditions of the NEPM.

Above the NEPM levels, asbestos may remain on site subject to a Remediation Action Plan (RAP) and Operational Environmental Management Plan (OEMP).

6. Spoil Reuse

The spoil reuse hierarchy adopted for the works is consistent with the preferred hierarchy identified in Chapter 24 of the EIS. The target for spoil recycling or reuse for the project is 100%.

The hierarchy is listed below in Table 6:

Table 6 – Spoil Reuse Hierarchy

Priority	Re-use Options	Possible Reuse Options
1	Within the project	• Re-use spoil in the project for fill embankments and mounds within a short haulage distance of the source • Re-use spoil to restore any pre-existing contaminated sites within the project boundary • Re-use spoil as a feed product in construction materials).
2	Environmental work	• Re-use spoil for coastal protection, such as beach nourishment and land raising • Re-use spoil in flood mitigation projects
3	Other development projects (including other Sydney Metro projects)	• Re-use spoil for fill embankments and mounds on projects within a financially feasible transport distance of the site • Re-use spoil for land reclamation or remediation projects • Re-use sand for manufacturing concrete and shale for manufacturing bricks and tiles. • Reuse on airport land under the *Airports (Environment Protection) Regulations 1997*
4	Land restoration	• Re-use spoil to fill disused facilities (for example mines and quarries) to enable either future development or site rehabilitation
5	Landfill management	• Re-use spoil to cap completed landfill cells • Re-use spoil in daily covering of landfill waste

6.1 Reuse Opportunities

There are currently limited opportunities for on-site reuse of spoil material due to;

- Limited requirements for backfilling with general fill within the works (i.e. suitability from a geotechnical perspective);
- available storage space and timing of works

All other opportunities for spoil reuse will be investigated as the project progresses and this plan updated as required..

Once all material has been classified, opportunities for offsite reuse will be investigated if the material is suitable ad not contaminated. Offsite reuse opportunities have also been identified primarily for spoil meeting the site specific criteria in the *Airport (Environment Protection) Regulations 1997* on Commonwealth land on the Sydney Gateway road project. It is noted that the Sydney Gateway Road Project has limited capacity to receive spoil.

Re-use may also occur off-site by the recycling of GSW, where the appropriate criteria within the EPL of the Waste Facility is met.

The table below provides an overview of the current reuse options. The quantities will be updated following completion of detailed design of BAC.

Table 7 - Spoil reuse Options

Location	Approximate Quantities Generated (m3)	On site reuse	Offsite reuse or disposal
Rail Corridor	28,915	8,715	20,200
Junction Works	5,500	1000	4,500
Station Platform	4,000		4,000
Drainage Works	6,300		6,300
Total	**44,715**	**7,100**	**35,000**

6.2 Reducing Spoil During Design Development General Principles

The design process has been used to:

- Carry out site investigations to identify ground conditions and aid in informing decisions about reducing the amount of geotechnically unsuitable material that may need removal
- Minimise the quantity of material requiring excavation to accommodate the design footprints
- Identify the location of spoil suitable for reuse on site
- Identify opportunities to maximise reuse of site-won spoil
- Maximise the quantity of spoil available for reuse on site
- Identify areas of contamination that may be avoided or require additional management measures

7. Spoil Management

All spoil movements will be managed through the project Spoil Waste Register, including export of spoil to approved disposal and recycling facilities. A Spoil Permit Form will also be used to cover:

- Importing spoil to site (such as VENM, ENM, Roadbase etc)
- Exporting material off the project site to new facilities and developments (to landfill, other developments etc)

This process will ensure the following documentation is obtained:

- Waste Classification, VENM reports etc
- EPL of the licenced facilities
- Appropriate development consents of receiving developments
- Any EPA exemptions of receiving developments
- Section 143 certificates
- EPA exemption compliance assessment
- Conformance check with the *Airports (Environment Protection) Regulations 1997* spoil criteria

7.1 General Management

- All waste would be assessed, classified, managed and disposed of in accordance with the NSW Waste Classification Guidelines.
- Spoil suitable for reuse on Airport land will be assessed, classified, managed and disposed of in accordance with the *Airports (Environment Protection) Regulations 1997*
- 100 per cent of spoil that can be reused would be beneficially reused in accordance with the project spoil reuse hierarchy
- Reduce as far as practicable the total volume of spoil generated by minimising clearing for work sites, haul road and access tracks, and maximising topsoil reuse on-site
- Implementation of the spoil re-use hierarchy
- Handling spoil to minimise potential for air or water pollution
- Minimise traffic impacts associated with spoil removal
- Ensure that temporary spoil stockpiles are not within or in close proximity to sensitive areas identified in ECM's, or within flood prone areas
- Manage temporary spoil stockpiles in accordance with the Construction Soil & Water Management Plan and Air Quality Plan
- Undertake haulage of spoil off-site in accordance with the Construction Traffic Management Plan (including relevant work site specific sub-plans) which includes haulage roads, hours of work, and queuing
- Implement measures in the Air Quality Plan and Construction Soil and Water Management Plan to prevent the tracking of spoil mud onto roads and the generation of both wheel and load generated dust, for trucks transporting spoil off-site
- Ensure all trucks transporting spoil off-site are appropriately licenced to carry the materials to appropriately licenced waste facilities
- Maintain all waste sampling and classification results and waste transfer dockets/ receipts for the life of the project in the spoil waste register

- Any stockpiles containing weeds that will be reused on site will be appropriately treated to prevent weeds being spread
- No waste generated outside the premise is to be received at the premise, except for recycled materials from Sydney Trains rail corridor (EPL 12208) or Sydney Trains recycling facility (EPL 7515) or materials that meet the EPA's Resource Recovery Exemptions for engineered fill purposes, except as permitted in Condition O4.3 of the EPL.

7.2 Onsite Spoil Management

Where spoil isn't immediately cut to fill, it will be stockpiled and classified for reuse (either on or offsite) or offsite disposal. Different types of spoil will be segregated as far as practicable and stored separately to prevent mixing and cross-contamination.

All stockpiles will be managed in accordance with the requirements of the 'Blue Book' to prevent erosion and minimise the potential for pollution. Water based organic polymers will be used for short term control of risks associated with erosion and pollution.

Stockpiles would be located away from sensitive receivers, where feasible and reasonable, and protected from the elements through barriers, covering or establishing a cover crop.

Spoil that is to be stockpiled for an extended period will be managed to prevent erosion and minimise the potential for pollution. Typically water based polymers, vegetation cover or geofabric will be used to stabilise stockpiles. Stockpiles must not be placed in drainage lines, channels or paths.

Stockpiling locations for each worksite will be selected and developed and shown on Environmental Control Maps (ECM) and the Erosion and Sediment Control Plans (ESCP)s. Stockpiles located on land outside the Construction Site are subject to the land owner's and occupier's written consent, compliance with the law, consent of relevant Authorities and compliance with the Project Approval.

7.3 Offsite Reuse or Disposal

All material will be classified in accordance with the classifications in Section 5.

Material that can be reused off site includes:

- VENM
- ENM
- GSW (if it meets contaminant thresholds for waste processing as stated within the EPL of the receiving facility)

Spoil meeting these waste classifications is to be reused unless;

- Spoil does not meet the criteria for reuse on an industrial/commercial site in accordance with National Environmental Protection (Assessment of Site Contamination) Measure (NEPM)
- The development consents of receiving developments does not permit the classification of the subject spoil
- The spoil does not meet NSW EPA Resource Recovery Exemptions for export to other sites
- The spoil does not meet the Airports (Environment Protection) Regulations 1997 and therefore cannot be accepted by the Sydney Gateway road Project
- Geotechnical properties of the spoil do not meet the requirements for reuse as fill. It is noted that a geotechnical report is not always required to assess spoil for reuse. A geotechnical engineer or experienced civil engineer can undertake a visual assessment to determine whether certain properties of the spoil or impurities, such as organics, make the spoil suitable for reuse

- A suitable re-use location is not available

Offsite disposal would occur for the below:

- GSW (that does not meet the contaminant threshold for waste processing as stated within the EPL of the relevant receiving facilities)
- RSW
- Special or Hazardous Waste
- Acid Sulfate Soils

7.3.1 Spoil Disposal and Reuse Locations

Potential spoil offsite disposal and reuse locations will be identified by the Construction Manager and construction teams. A register of currently approved disposal and reuse facilities is contained in Appendix B and will be progressively updated as works progress. The following will be completed:

- Check that appropriate approvals are in place for the receiving site,
- If applicable for reuse, check that a s143 Notice has been completed by the reuse location owner and / or site operator
- Gain acceptance from the Sydney Gateway road Project Spoil Manager for any spoil transferred to that particular project in accordance with Airports (Environment Protection) Regulations 1997
- Agree to commercial terms with the site operator and / or owner, and
- Ensure that relevant CoA, environmental, community and traffic impacts are managed under the approved CEMP and sub plans, and the Construction Traffic Management Plan (CTMP) including approved haulage routes.

Where spoil offsite reuse locations have the potential to receive a significant volume of material, the Construction Manager will generally complete a site inspection of the reuse location to confirm:

- The site has suitable access, e.g. wet weather access with exit controls if the site is proposed to be used during or following periods of rain
- The site has capacity to receive the volume of spoil indicated by the site owner or manager
- The type and number of spoil trucks which can access the site hourly / daily, and
- Appropriate management measures are in place.

Spoil disposal and reuse sites are required to have an appropriate planning approval in place to lawfully receive the material from the project. Such planning approvals (issued under the relevant part of the *Environmental Planning and Assessment Act 1979* or as relevant to the Sydney Gateway road Project the *Airports Act 1996 (Commonwealth)*) will be obtained by the operators of the sites, and be in place prior to spoil being deposited at a specific location.

Where the development application for a spoil disposal and reuse site is pending, the Project will not place spoil at the location until evidence of an approved development application has been provided to the Project Environment Manager. The Project will ensure that relevant requirements of the receiving site approval are communicated to construction teams and spoil haulage drivers, including hours of operation and roads to be used to access the site.

Spoil to be taken to the Sydney Gateway road Project will only be removed from site once Spoil Characterisation Reports are reviewed by the Gateway Spoil Manager and confirmation has been received that they are acceptable.

Once these checks have been completed and it has been confirmed that approved haulage routes (refer to CTMP) can be used to access the reuse location, approval will be sought from the Project Environmental Manager for the project to use this reuse location.

If the proposed reuse location cannot by accessed using the approved haulage routes (refer to CTMP), the project will update the CTMP and haulage routes and seek approval, either from Secretary or the project Environmental Representative in accordance with the Construction Environmental Management Plan. The Project Environmental Representative will not provide approval for the project to the reuse location until the revised haulage routes have been approved.

If the checks have been completed and the reuse does not have appropriate approvals or an s143 Notice, this reuse location would not be used by the project.

JHLOR will maintain records of waste disposal and spoil transfers.

Disposal of material to licensed facilities is costly due to the waste disposal levy. The Project will reuse 100% of reusable spoil, both onsite and offsite, to limit the amount of material that is disposed of at licensed facilities.

Spoil reuse as opposed to spoil disposal is not only positive from an environmental perspective it is also positive commercially and saves the public money.

7.4 Spoil Haulage

It is proposed wherever possible to use trains for the removal of spoil. This would be completed predominantly during rail possessions where spoil would be transported to the Sydney Trains Ballast Recycling Centre in Chullora. This facility is licenced to receive spoil from the rail corridor. Where trains are not available or practical to use, spoil movements would be via truck. Haulage routes associated with the movement of spoil are described in the Construction Traffic Management Plan. Typical controls would be as follows:

- The public would be notified of proposed traffic changes by newspaper, radio, project web site and other forms of community liaison.
- Access to existing properties and buildings will be maintained
- Where schools occur in the immediate vicinity of the construction sites, heavy vehicle movement would be minimised (where reasonable and feasible), between 08:00-09:30 and 14:30 – 16:00 Monday to Friday (on School Days)
- Planning to allow sufficient space for truck layover. Truck queuing can be wholly accommodated on site with minimal risk of truck parking/queuing on surrounding roads.

According to Condition E20(c) of SSI8256 (SMC), notwithstanding Condition E19 of the project approval and subject to Condition E24 haulage and delivery of spoil and materials may be undertaken 24 hours per day, seven (7) days per week subject to any EPL requirements.

Excavated material suitable for re-use within the premises, may be transported from one part of the premises or the Sydney Trains rail corridor or Sydney Trains recycling facility to another part of the premises by road. The key principle for spoil haulage by road is to select the most appropriate route which will minimise impact and facilitate efficient access to arterial roads. The following conditions apply to haulage:

- The body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to minimise any spill or escape of any dust, waste, or spoil from the vehicle or trailer

- Mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the premises, is removed to the greatest extent practicable before the vehicle, trailer or motorised plant leaves the premises
- Road surfaces subject to the tracking of material by vehicles leaving the premises are effectively cleaned at the end of each workday

8. Training, Reporting and Review

8.1 Training

Personnel will receive training appropriate to their role in spoil management on the project. Ongoing toolbox talks covering the requirements for management of spoil will be used to raise awareness to the wider project team.

Responsibility for management of spoil will rest with the Construction Team, supported by the Environment and Sustainability Team.

Personnel within the Construction Team will be responsible for the day to day management of environmental and social aspects associated with spoil excavation, reuse and transfer, including:

- Identifying opportunities to minimise spoil quantities and maximise reuse
- Identifying contamination and implementing appropriate management processes and procedures
- Tracking of spoil quantities and spoil transfer
- Managing traffic impacts associated with spoil transfer
- Implementing environmental controls required to mitigate impacts associated with spoil excavation and transfer.

The site induction will be utilised to train all staff in the general requirements of spoil management.

Specific training relating to aspects associated with the management of spoil will be provided to JHLOR staff as identified in the CEMP and training plan, or as otherwise deemed necessary to address an event or to manage risk.

8.2 Monitoring, Compliance and Reporting

Spoil management measures will be included in weekly site inspections by the Environment Team. The Inspections would typically cover the following:

- Stockpile locations, volume, effectiveness of ERSED controls and classification
- Compliance with haul routes and gates
- Checking that loads are covered
- Exit controls and mud tracking on roads

Compliance records will be retained and will include:

- Spoil Disposal Permit where waste will go to a waste receiving facility that is not pre-Approved under Appendix B of this Plan
- Records of inspections in relation to spoil management
- Records detailing the beneficial re-use of spoil either within the project or at off-site locations.
- Waste dockets for any spoil disposed of to landfill sites.
- Results and outcomes of inspections, monitoring and auditing will be reported internally on a monthly basis.

- Six-monthly construction compliance reports will be prepared to report on compliance with the Project Approval.

8.3 Review and Improvement

Construction must not commence until the CEMP and all CEMP sub-plans have been approved by the Secretary. This plan will be submitted to the DPE for information only. Construction will not commence until this plan is reviewed by Sydney Metro and endorsed by the ER.

This SpMP will be reviewed and updated at least annually. JHLOR will undertake the ongoing development, amendment and updating of the SpMP to ensure it remains consistent with Project priorities, risk management, client requirements and Project objectives, taking into account:

- The status and progress of JHLOR's activities
- Changes in the design, delivery and operations processes and conditions
- Lessons learnt during delivery and operations
- Changes in other related Project Plans
- Requirements and matters not covered by the existing Project Plans
- Changes to Project Plans as directed by Sydney Metro's Representative under the Deed.
- Where deemed appropriate in relation to items raised within inspections or audits

ER Endorsement is required for minor amendments to the SpMP in accordance with the Staging Report.

9. Enquiries, Complaints and Incident Management

Environmental incidents and complaints are to be investigated, reported, documented, actioned and closed out as per the details provided in the Community Consultation Strategy and the CEMP.

Appendix A – Compliance Matrix

No.	Measure	Timing	Requirement	Responsibility	Reference
Project Approval SSI 8256- Specific Management Plan Requirements					
	A Construction Environmental Management Plan (CEMP) must be prepared in accordance with the Construction Environmental Management Framework (CEMF) included in the documents listed in Condition A1 to detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during Construction.	Before Construction	C1	Environment Manager	Refer to SMCSWSSJ-JHL-WEC-EM-PLN-000011 – Construction Environment Management Plan
	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the Protection of the Environment Operations Act 1997, under the Protection of the Environment Operations (Waste) Regulation 2014, and orders or exemptions made under the regulation.	During Construction	E74	Construction Manager Environment Manager	Section 7
	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste.	During Construction	E75	Construction Manager Environment Manager	Section 7
	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	During Construction	E76	Construction Manager Environment Manager	Section 7
Revised Environmental Mitigation Measures SSI-8256					
	Spoil would be managed in accordance with the spoil management hierarchy	During Construction	WM3	Construction Manager Environment Manager	Refer to Appendix 4 within SMCSWSSJ-JHL-WEC-EM-PLN-000011 – Construction Environment Management Plan
	Target 100 per cent reuse of reusable spoil	During Construction	WM4	Construction Manager Environment Manager Sustainability Manager	Section 6 Section 7

	All waste would be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (EPA, 2014).	During Construction	WM6		Section 5 Section 7
Construction Environmental Management Framework (for SSI-7400 & SSI-8256)					
	The following spoil management objectives will apply to the construction of the project: • Minimise spoil generation where possible • The project will mandate 100% reuse or recycling (on or off-site) of usable spoil. • Spoil will be managed with consideration to minimising adverse traffic and transport related issues. • Spoil will be managed to avoid contamination of land or water. • Spoil will be managed with consideration of the impacts on residents and other sensitive receivers. • Site contamination will be effectively managed to limit the potential risk to human health and the environment.	During Construction	6.1(a)	Environment Manager	Section 1.6
	Spoil Management Implementation Principal Contractors will develop and implement a Spoil Management Plan for their scope of works. The Spoil Management Plan will include as a minimum: • The spoil mitigation measures as detailed in the environmental approval documentation. • A link or reference to where traffic movements in relation to spoil are described. • A register of spoil receipt sites that includes the site or project name, location, capacity, site owner and which tier the site is classified as under the spoil reuse hierarchy. • The responsibilities of key project personnel with respect to the implementation of the plan. • How spoil generation is minimised through the design development process. • Procedures for the testing, classification, handling and reuse of spoil. • Spoil management monitoring requirements.	During Construction	6.2(a)	Environment Manager	This Plan This Table Section 7.4 Appendix Section 2.2 Section 6.2 Section 6, 7

	• Compliance record generation and management.			
	Spoil management measures will be included in regular inspections undertaken by the Contractor, and compliance records will be retained. These will include: • Records detailing the beneficial re-use of spoil either within the project or at off-site locations. • Waste dockets for any spoil disposed of to landfill sites.	6.2(b)	Environment Manager Project Engineer	Section 8.2
	Spoil Mitigation Examples of spoil mitigation measures include: • Implementing the spoil re-use hierarchy. • Handling spoil to minimise potential for air or water pollution. • Minimise traffic impacts associated with spoil removal.	6.3(a)	Project Engineer	 Section 6 Section 7.2 Section 7.4
Environment Protection Licence (21147)				
	The licensee must assess, classify and manage any waste generated at the premises in accordance with the *Waste Classification Guidelines Part 1: Classifying Waste, November 2014* prior to taking the waste off the premises.	O4.1	Project Engineer	Section 7.1
	The licensee must not cause, permit or allow any waste generated: (a) Outside the premises to be received at the premises, except for recycled materials from Sydney Trains rail corridor (EPL 12208) or Sydney Trains recycling facility (EPL 7515) or materials that meet the EPA's Resource Recovery Exemptions for engineered fill purposes; (b) At the premises to be land applied at the premises, except as permitted in Condition O4.3.	O4.2	Project Engineer Environment Manager	Section 7.1
	Excavated material suitable for re-use within the premises, may be transported from one part of the premises or the Sydney Trains rail corridor or Sydney Trains recycling facility to another part of the premises by road.	O4.3	Project Engineer	Section 7.4

Appendix B - Spoil Receipt Sites

This will be progressively updated as sites become available and further classification is completed.

Site Name	Location	Capacity	Site Owner
Breen Recycling Facility	Captain Cook Drive Kurnell NSW 2231	1,450,000 tonnes	Breen Resources Pty Ltd
Genesis Facility	Honeycomb Drive Eastern Creek NSW 2766	700,000 tonnes	Dial-a-dump (ED) Pty Ltd
Bingo Recycling Centre Banksmeadow	38 McPherson Street Banksmeadow NSW 2019	20,000 tonnes	McPherson Recycling Pty Ltd
Bingo Resource Recovery Centre Patons Lane	123-129 Patons Lane Orchard Hills NSW 2748	140,000 tonnes	SRC Operations Pty Ltd
MET Recycling Pty Ltd	134 Newtown Street Silverwater NSW 2128	20,000 tonnes	MET Recycling Pty Ltd
Sydney Recycling Park	16-23 Clifton Avenue Kemps Creek NSW 2178	147,000 cubic meters	Sydney Recycling Park Pty Ltd
Elizabeth Drive Landfill Facility	1725 Elizabeth Drive Kemps Creek NSW 2178	Tyre stockpile- 50 tonnes Other stockpiles- 4,000 cubic meters	Suez Recycling and Recovery Pty Ltd
Environmental Treatment Solutions Blayney	79 Marshalls Lane Blayney NSW 2799	300 tonnes	Environmental Treatment Solutions Pty Ltd
Sydney Gateway Project	Sydney Airport Kingsford Smith Mascot NSW 2020	>10,000 tonnes	Commonwealth Government John Holland/ Seymore White
Waste and Resources Kemps Creek	Lot 90 Elizabeth Drive Kemps Creek NSW 2178	500,000 tonnes	Brandown Pty Ltd
Hi-Quality Waste Management St Marys	37 Lee Holm Street St Marys NSW 2760	110,500 tonnes	Hi-Quality Waste Management Pty Ltd