Visual Amenity Management Plan

SMCSWSSJ-JHL-WEC-EM-PLN-000014

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Terms and definitions

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

Terms	Explanation
AHD	Australian Heritage Database
CEMF	Construction Environmental Management Framework
CEMP	Construction Environmental Management Plan
CoCB	City of Canterbury Bankstown (Council)
CoA	Conditions of Approval
CSSI	Critical State Significance Infrastructure
DPIE	Department of Planning, Industry & Environment
DPIE EESG	Department of Planning, Industry & Environment: Environment Energy and Science Group
EIS	Environmental Impact Statement
EPL	Environment Protection Licence
ER	Environmental Representative
GLT	Ground Level Troughing
GST	Galvanised Service Trough
HSEMS	Health Safety and Environment Management System
HV	High Voltage
IWC	Inner West Council
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
RTS	Response to Submissions
SMCSW	Sydney Metro City and Southwest
SMC	Southwest Metro Corridor
VAMP	Visual Amenity Management Plan

1. Introduction

1.1 Purpose

The purpose of this Visual Amenity Management Plan (this Plan) is to describe how John Holland Laing O'Rourke JV (JHLOR) will minimise and manage impacts on visual amenity during the Design and Construction (D&C) of the Southwest Metro Corridor (SMC) of the Sydney Metro City & Southwest Sydenham to Bankstown Upgrade (the Project).

This Plan has been prepared to address the requirements of relevant Planning Approval Conditions, applicable legislation, the Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Environmental Impact Statement (EIS), the Revised Environmental Mitigation Measures (REMMs), and contractual requirements.

1.2 Background and Scope

This Plan is based on the comprehensive assessment and analysis undertaken for the EIS. The SMC Works could include elements that may be visibly intrusive including temporary elements such as hoardings, workshops, stores, site offices, delivery and laydown areas, cranes, traffic management controls and task lighting.

Generally, the most visually prominent components of the sites would be those that rise above the hoarding and lighting.

Lighting of sites would typically be designed to assist with site legibility at night and provide safe access routes for both pedestrians and vehicles. Light spill, shadowing or glare during construction will be minimised where practicable, so as not to cause danger to drivers or cyclists, or nuisance to local residents and surrounding land uses.

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 compromised of two components;

- Chatswood to Sydenham Project

- Sydenham to Bankstown Upgrade

The SMC, 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 Sydenham and Stacey Street, Bankstown NSW.

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

This VAMP has been developed in compliance with Sydney Metro's (the Client) requirements and Laing O'Rourke's Health Safety and Environmental Management System (HSEMS). It identifies visual amenity related measures that will be implemented to achieve objectives outlined within Section 1.5 of this plan including processes and measures that will be used to incorporate

principles of crime prevention through environmental design in the design and construction of temporary site facilities.

1.3 SMC Scope of Works

1.3.1 Permanent Works

The permanent works include:

- 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 and hi-rail access pads),
- Overhead wire works
- Demolition of redundant infrastructure

1.3.2 Temporary Works

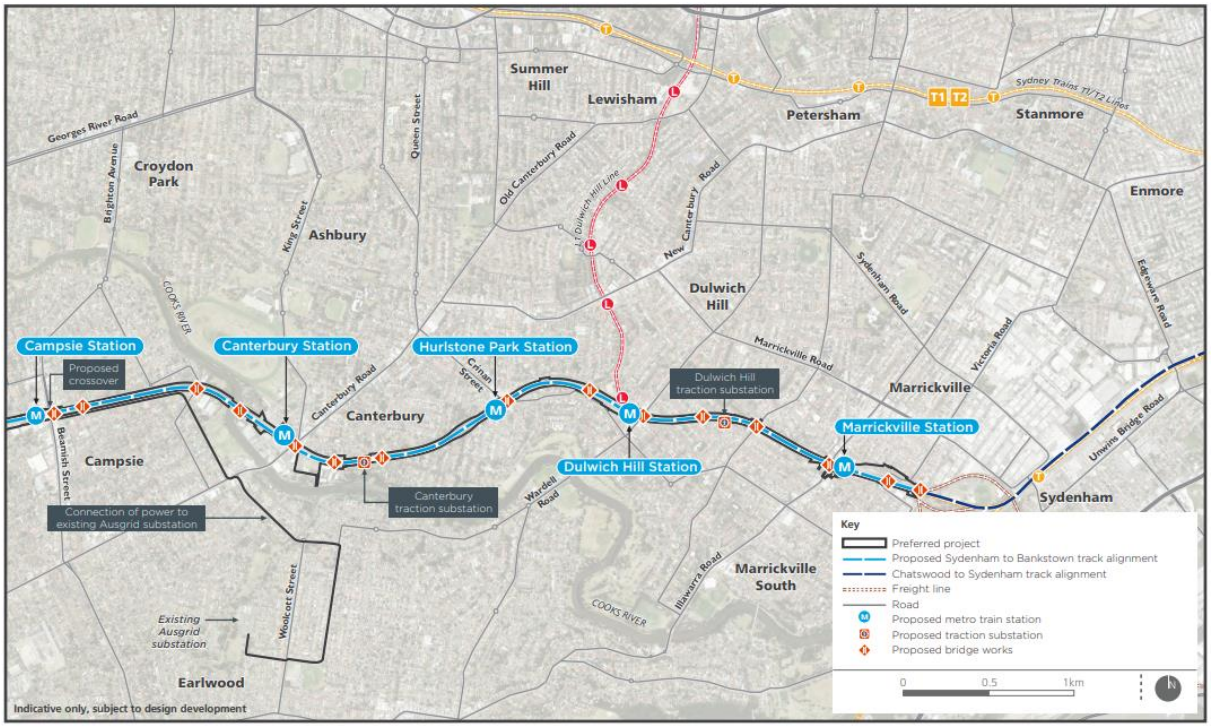
The SMC temporary works include:

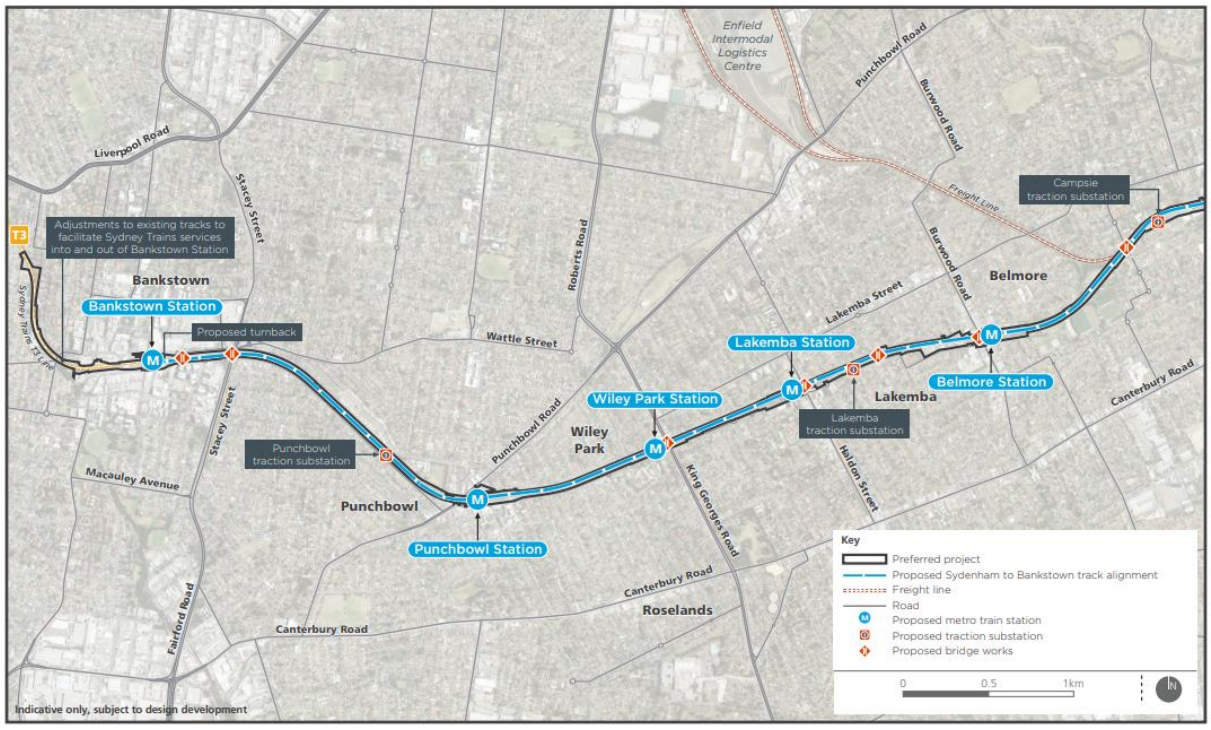
- Temporary arrangements to divert and control pedestrians, public transport users, cyclists, public transport and traffic and to provide public access, amenity, security and safety during all stages of design and construction of the Works;
- Temporary arrangements for people and vehicles to safely access 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);
- 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
- Investigation works including in the vicinity of Bankstown Station (if required)
- 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.

1.4 Works Location and Site Layout

The SMC 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 facilities Environmental Control Map (ECM).

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





1.5 Objectives and Targets

The objectives of the VAMP are as follows:

- Minimise impacts on surrounding receivers, as far as practicable
- Design worksite layouts with visual amenity impacts taken into consideration
- Retain existing screening vegetation around worksites where reasonable and feasible
- Install worksite lighting to minimise glare and light spill impacts on surrounding receivers
- Design and maintain worksite hoardings to minimise impacts on visual amenity during construction
- Ensure the successful implementation of the Landscape Design.
- Reduce visual impact of construction to the surrounding community

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

The Environmental Performance Outcomes as stated within the Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Submissions and Preferred Infrastructure Report, states that:

- The preferred project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts.
- The preferred project is visually integrated with its surroundings.
- Vegetation providing screening of the rail corridor is retained where practicable

The Compliance Matrix in Appendix A provides a comprehensive list of compliance requirements, environmental documents and the contract documents

1.6 Interactions with other management plans

The associated and supporting documents to the VAMP are listed below:

- The Security Management Plan sets out the security and crime management processes and procedures to be implemented for the SMC works
- The Sustainability Management Plan sets out the sustainability strategy for the SMC works, including visual amenity objectives and landscape design.
- The Biodiversity (Flora and Fauna Management) Procedure (ERAP 1) addresses the retention of vegetation, where feasible and reasonable, and weed management strategies, as means of mitigating impacts on visual amenity.
- The Construction Heritage Management Plan (SMCSWSSJ-JHL-WEC-EM-PLN-000013) provides and overview of how JHLOR will provide input to Sydney Metro's temporary and permanent heritage interpretation.
- The Construction Soil and Water Management Plan (SMCSWSSJ-JHL-WEC-EM-PLN-000010) details management strategies for soil, water and groundwater aspects of the works, including erosion and sediment control.

The VAMP is a sub-plan to the CEMP.

2. Legal and Other Requirements

The main legislation relevant to visual amenity management is the *Environmental Planning and Assessment Act 1979* and *Commonwealth Copyright Act 1968.*

Refer to the Construction Environmental Management Plan (SMCSWSSJ-JHL-WEC-EM-PLN-000011) for further details of relevant legislation.

Table 1 below details the legislation and relevance to the VAMP.

Table 1 Legislation and Planning Instruments

Legislation	Description	Relevance to this VAMP
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 VAMP.
Commonwealth Copyright Act 1968	This Act establishes the notification process in relation to moral rights for public art and architecture under Commonwealth Copyright Act 1968	The notification process for public art.

Relevant planning requirements are summarised in the Compliance Matrix (Appendix A), The following compliance documents include visual amenity management requirements for the project:

- 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 (Sydney Metro, 2019).
- The Sydney Metro Construction Environmental Management Framework v3.2 (CEMF);
- The Sydenham Station and Junction Project Deed

2.1 Guidelines and Standards

Additional guidelines and standards relating to the management of visual amenity include:

- Crime Prevention through Environmental Design (CPTED) principles
- Sydney Metro Brand Style Guidelines
- AS4970 the Australian Standard for Protection of Trees on Development Sites and Adjoining Properties
- AS 4282-1997 Control of the Obtrusive Effects of Outdoor Lighting; and

- AS/NZ 1158 - Lighting for Roads and Public Spaces (where relevant Australian Standards are applicable to SMC works)

3. Roles and Responsibilities

The roles and responsibilities of key SMC Personnel with respect to visual amenity are as follows:

Table 2 Roles and Responsibilities

Project Director	Managing the delivery of the SMC Works including overseeing implementation of visual amenity management measures Act as Contractor's Representative
Environment Manager	Oversee the implementation of all visual amenity management initiatives Responsible for managing ongoing compliance with the CoA and environmental document requirements
Commercial Manager	Ensure that relevant visual amenity management requirements are considered in procuring materials and services
Construction Managers **Site Superintendent**	Manage the delivery of the construction process, in relation to visual amenity management across all sites in conjunction with the Environment Manager
Sustainability Manager	Track and report visual amenity elements against sustainability targets
Environment Coordinator	Manage the on-ground application of visual amenity management measures during construction
Project Engineer	Implement visual amenity management activities during construction works
Independent Environment Representative	• Receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI; • Consider and inform the Planning Secretary on matters specified in the terms of this approval; • Consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community; • Review documents identified in Conditions C1, C3 and C8 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: (i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary), or (ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary for information or are not required to be submitted to the Secretary); • Regularly monitor the implementation of the documents listed in Conditions C1, C3 and C8 to ensure implementation is being carried out in accordance with the document and the terms of this approval; • As may be requested by the Planning Secretary, assist the Department in the resolution of community complaints; • Consider any minor amendments to be made to the documents listed in Conditions C1, C3 and C8 and any document that requires the approval of the Planning Secretary that comprise updating or are of an administrative or minor nature and are consistent with the terms of this approval and the documents listed in Conditions C1, C3 and C8 or other documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and

	• Prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report detailing the ER's actions and decisions on matters for which the ER was responsible in the preceding month. The Environmental Representative Monthly Report must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI. Must complete Project induction covering LORs' HSEMS.

4. Existing Environment

The SMC project area extends through a typical cross section of south western Sydney, with a mix of low and medium density residential areas, rail side industry and local commercial town centres built around the stations.

The topography is undulating, resulting in a series of rail embankments and cuttings, with several points of exposed sandstone rock face and shale rock embankments along the rail corridor, providing local visual features.

Vegetation within and adjacent to the existing rail corridor boundary is mature and dense in several locations, screening views from adjacent residential and commercial properties, streets and parkland.

Summaries of the existing conditions of the project area are described in Table 3. For the purposes of this plan the rail corridor has been split into ten sections. The descriptions have been taken from the EIS Technical Paper 7.

Table 3 Description of SMC Sites

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
Marrickville Station to Dulwich Hill Station	McNeilly Park is located west of Marrickville Station on Warburton Street, adjoining the southern boundary of the metro corridor. This park includes a playground, picnic shelters and large formal lawn areas. The rail corridor is generally at the same level as the park in this area, however, mature vegetation within the park largely filers views to the corridor. Further west along the corridor, in the vicinity of Marrickville Avenue, the rail corridor is in cutting with a mix of vegetated banks and stone cuttings. In areas where the permanent way is in cutting, the overhead lines and support structures are set low and sit mainly below the line of view. Most properties back on to the corridor in this section, so that vegetation in private backyards and fences filter views to the corridor. Street trees and vegetation within this corridor also filter views to the corridor along this section. Mature street trees provide an avenue setting to Randall Street and are near the location of the proposed substation and southern rail corridor boundary. Further west at the Albermarle Street overbridge, the rail corridor is in cutting with the exposed sandstone rock face along the northern rail corridor boundary providing a local visual feature, visible from the bridge. Mature trees line the adjacent streets and corridor, further filtering views and include mature Casuarina trees and large Eucalypt trees along Challis Avenue. These trees are near the rail corridor and provide local amenity and filtering of views to the rail	Temporary fencing and hoarding Combined Service Route works on bridges and under road crossings – including lane or full road closures Removal of some corridor vegetation Installation of Combined Service Route Installation of corridor boundary fencing and security fencing	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	corridor. To the south of the corridor, between Albermarle Street and Kays Avenue East, a narrow linear park runs parallel to the rail corridor. It includes feature planting and a pathway linking west from the overbridge.		
Dulwich Hill Station to Hurlstone Park Station	Jack Shanahan Park is located on rail corridor land to the north of the project area and west of the Dulwich Hill Light Rail Stop. The permanent way is elevated through this section and views to the embankments of the corridor can be seen through mature vegetation within the park. Further to the west, somewhat open views are available from residential properties along The Parade, which runs along the northern boundary of the rail corridor. Properties on Ewart, Floss and Hampton streets back on to the corridor in this section, so that vegetation in private backyards and fences filer views to the corridor. The corridor is set within some shallow cutting through much of this area. These views are further filtered by existing mature trees.	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing	Surrounding residents and businesses
Hurlstone Park to Canterbury Station	This section of the study area is characterised by elevated residential areas, with a number of pocket parks offering views across the surrounding landscape towards the Cooks River. In some sections, deep sandstone cuttings and mature vegetation along the corridor create local visual interest and allow the corridor to be visually absorbed into the surrounding landscape. There are numerous properties which back onto the corridor in this section, so that vegetation in private backyards and fences filter views to the rail infrastructure. Sawyer Reserve, on Dunstafenage Street is a small local park with children's playground, adjoining the northern boundary of the rail corridor. This park offers elevated south-easterly views over the corridor and Foord Avenue rail underbridge (local heritage asset) towards the Cooks River. The park includes several mature trees (mostly Eucalyptus) within the park at the top of the rail cutting, in close proximity to the rail corridor boundary. Similarly, the Warwick Reserve is located at the intersection of Church and Canberra streets, adjoining the northern boundary of the rail corridor. There are several mature trees (mostly Eucalyptus) within the park at the top of the rail cutting, near the rail corridor boundary. From this vantage point, glimpses to the (former) Canterbury Sugar Mill (State heritage asset) can be seen, as can parkland along the Cooks River. A pedestrian bridge between Church and	Temporary fencing and hording Removal of some corridor vegetation. Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	Huton streets provides north-south access between this park and parkland along the Cooks River. The rail corridor at this point is in a deep cutting, with the exposed sandstone rock face along the northern rail corridor boundary providing a local visual feature seen particularly from the pedestrian bridge. The northern side of the rail corridor is also adjacent to the Electrical substation no.275 building (State heritage listed) at the end of Church Street, which adds to the historic character of this area.		
Canterbury Station to Campsie Station	West of Canterbury Station, the corridor crosses the Cooks River with a historic bridge built in 1916 (Canterbury Underbridge). The corridor passes through Tasker Park on embankments extending from the Cooks River Bridge. A pedestrian bridge is aligned parallel to the rail bridge and connects Tasker Park on the northern banks of the River with Charles Street, in the south. The bridge is visually prominent from the river and Tasker Park, with the embankments mainly vegetated within this area and reducing the visual prominence of the rail corridor itself. Further to the west, from residential properties along North and South Parade, there are open views across the rail corridor. The corridor is on a small cut and fill though much of this area and some mature trees are scattered along the adjacent streets and surface parking areas. A pedestrian bridge provides access between North and South Parades, near Campsie Station.	Temporary fencing and hording Temporary construction compound Removal of some corridor vegetation. Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses
Campsie Station to Belmore Station	West of Campsie station the rail corridor splits. The northern branch contains the Metropolitan Goods Line and continues to the Enfield Intermodal Logistics Centre, while the southern branch contains the T3 Bankstown Line and continues to Belmore station. West of Campsie Station the T3 Bankstown Line rail corridor descends into cutting, with mainly sloping grassed embankments. From Wilfred Avenue and Lane in the north and Lilian Avenue and Lane to the south, there are unobstructed views across the corridor filtered in places by shrubs and trees. Further west, the corridor is raised up on an embankment as it passes alongside the Peter Moore Fields and Belmore Sportsground (Canterbury-Bankstown Bulldogs Rugby League Club) and the Terry Lamb Reserve. Club facilities obstruct views to the rail corridor from surrounding residential areas and open space, whilst scattered trees along the corridor and within the park offer some filtering of views, which are more	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
	prominent due to the elevated nature of the corridor. Residential properties to the north of the corridor, on Redman Parade, similarly have open views to the corridor, which is elevated in this section, increasing its visual prominence. The Belmore Sports Ground and Terry Lamb Reserve are located to the south of the rail corridor, east of the station and are connected to the station via a linear park located along the rail corridor.		
Belmore Station to Lakemba Station	West of Belmore Station, the rail corridor becomes slightly elevated above the surrounding residential areas. Views from esplanade roads including Railway Parade to the north of corridor and the Boulevarde and Peel Street to the south of the corridor are filtered by scattered mature trees within the rail corridor and the adjacent road reserve. At the Moreton Street overbridge, views to the corridor open up as the corridor descends again into a shallow curring and there is less filtering due to fewer adjacent street trees. Mature street trees provide an avenue setting to The Boulevarde and are near the proposed location of the substation and southern rail corridor boundary.	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses
Lakemba Station to Wiley Park Station	Through this short section of the alignment, the corridor is mainly set within densely vegetated cuttings and embankments. This vegetation, which includes numerous mature trees, filters and screens views to the corridor from residential areas along both Railway Parade in the north and The boulevard to the south. Uniquely along the alignment, Lakemba Station can be seen in views from Wiley Park Station and vice versa,	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses
Wiley Park Station to Punchbowl Station	To the west of Wiley Park Station, the corridor continues in shallow cuttings and embankments and becoming generally level with the surrounding residential areas at Punchbowl Station. The corridor has sections where the embankments are densely vegetated, however, most of the corridor is open to views from surrounding areas. This vegetation, which includes numerous mature trees, filters and screens views to the corridor from residential areas along both Urunga Parade in the north and The Boulevarde to the south and is located both within the rail corridor and the adjacent road reserve.	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing	Surrounding residents and businesses

Construction Site	Site character from EIS/SPIR	Visual elements during construction	Potentially Sensitive Receivers
		Power line and power pole refurbishment and temporary works.	
Punchbowl Station to Bankstown Station	In this area, the corridor continues on a shallow embankment, becoming level with surrounding residential areas in some places. The corridor runs along the back of residential properties and the Punchbowl Boys High School, reducing the visibility of the corridor. To the south, the corridor runs parallel to South Terrace, which is a residential esplanade road, extending essentially along the length of the corridor in this area. Views from South Terrace are filtered by mature trees scattered along the rail corridor and within the road reserve. From a slightly elevated position, residential properties along Stansfield Avenue back onto the rail corridor, and have views filtered through garden trees and over rear fences. Approaching Bankstown there are substantial dense urban activities along the corridor which limit views of the corridor from local streets. The Bankstown Central shopping centre to the north of North Terrace in particular, presents a blank facade and carparking structures.	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses
Areas to the West of Bankstown Station[1]	West of Bankstown, the corridor rises to a bridge at Marion Street and is elevated above the surrounding development as it passes Bankstown Arts Centre on Olympic Parade and the adjacent linear parkland on the southern boundary of the rail corridor. In particular, the four mature Fig trees located within the linear park provide a visual and recreational setting for the adjacent Bankstown Arts Centre and a visual buffer to the elevated rail corridor. In this section, there are substantial dense urban activities along the corridor which limit views of the corridor from local streets. As the corridor turns north, it is set within a lightly vegetated corridor, at the rear of both residential areas and passing alongside a park at Brancourt Avenue. Views to this corridor are mainly filtered through these existing trees. A small park and an existing substation are located to the southwest of the corridor, on Brancourt Avenue. Between Melanie Street and Weigand Avenue, there are a number of medium density residential units, overlooking the rail corridor.	Temporary fencing and hoarding Removal of some corridor vegetation Installation of Combined Service Route Combined Service Route works on bridges and under road crossings – including lane or full road closures Installation of corridor boundary fencing and security fencing Power line and power pole refurbishment and temporary works.	Surrounding residents and businesses

Note 1: The area to the west of Stacey Street Bankstown would be limited to compounds and laydown areas.

5. Crime Prevention Through Environmental Design Principles

The principles of *Crime Prevention Through Environmental Design* (CPTED) will be incorporated throughout the design and construction of temporary and permanent facilities. The key principles adopted in relation to the public realm at the Project site include:

- Increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture.
- Increasing the effort required to commit crime by increasing the time, energy of resources which need to be expended.
- Reducing the potential rewards of crime minimising by removing or concealing “crime benefits”.
- Removing conditions that create confusion about required norms of behaviour.

Table 4 outlines how the CPTED principles will be incorporated into the design of the SMC Worksites. It should be noted that some CPTED requirements, such as the pruning or removal of trees, may conflict with the indicative visual mitigation strategy. Such conflicts will be resolved during detailed construction planning.

Table 4 – CPTED Principles

CPTED Principle	Theory	Application to SMC Works
Surveillance and monitoring	The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical.	Technological and/or personnel based surveillance and monitoring systems will be used at Worksites, including: Closed-circuit and Internet Protocol Cameras (Thermographic, Night etc) Human intelligence collection (uniformed and plain-clothes security patrols; staff reporting) Environmental and other sensory equipment (motion detectors; access control logging) Emerging and trial technologies (e.g. unmanned aerial vehicles) Jagged edges of hoarding will be avoided, where practicable, to maximise natural surveillance. Good levels of lighting will be provided around the worksites to increase visibility at night where this does not impact on surrounding residents.
Access control	Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. They minimise opportunities for crime and increase the effort required to commit crime.	• Worksites will be protected by industry standard physical barriers (i.e. hoarding and fencing) and deterrents (e.g. clear property boundaries). • Fencing/hoarding is to be set back from fixed infrastructure where possible, so that the fencing cannot be used to climb onto buildings or structures. Potential pruning of vegetation adjacent to the worksites will be assessed to reduce risk of climbing over hoarding. • Access to each worksite will be determined through a risk assessment. The access control measures to be used are: - Foot and vehicle traffic access point regulation (i.e. physical barriers, gates, doors, locks) - Personnel based access control (e.g. ID checkpoints, peer-checking, Photo ID card verification)

CPTED Principle	Theory	Application to SMC Works
		- Technological access point regulation and locating (e.g. radio-frequency identification (RFID) and GPS locating systems, RFID 'key' systems, mobile device tracking)
Territorial reinforcement	Community ownership of public space sends positive signals. People often feel comfortable in, and are more likely to visit, places which feel owned and cared for. Well used places also reduce opportunities for crime and increase risk to criminals.	• JHLOR will actively engage with the communities surrounding the worksites, providing regular updates and notifications about the works. • Clear signage will be installed around the worksites prohibiting public access to site and providing information about the works.
Space and activity management	Popular public space is often attractive, well maintained and well used space. Linked to the principle of territorial reinforcement, space management ensures that space is appropriately utilised and well cared for.	• Worksites will be designed to minimise disruptions to community activities by maintaining movement around construction sites wherever practicable. • Works will be undertaken transparently (where this does not create a new risk or threat through ongoing community consultation and engagement, and site viewing points through hoarding/fencing • Areas surrounding worksites will be maintained in a clean and tidy manner, including timely removal of graffiti • Horizontal surfaces to be avoided or as minimum sloped to prevent loitering or the placing of unwanted/unattended objects.

Access control minimise opportunities for crime and increase the effort required to commit crime. By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property. Fence and barriers are required to be secure however not create a hostile environment. It is noted that the majority of the SMC works will be undertaken within the existing rail corridor that is not accessible to the general public.

Natural surveillance increases the threat of apprehension by taking steps to increase the perception that people can be seen. Natural surveillance occurs by designing the placement of physical features, activities and people in such a way as to maximize visibility and foster positive social interaction among legitimate users of private and public space. Potential offenders feel increased scrutiny and limitations on their escape routes.

Territorial reinforcement promotes social control through increased definition of space and improved proprietary concern. By using fences, pavement, signs, lighting and landscape to express ownership and define public, semi-public and private space, natural territorial reinforcement occurs. Territorial reinforcement measures make the normal user feel safe and make the potential offender aware of a substantial risk of apprehension or scrutiny. Display security system signage at access points.

More detail is contained in the Security Management Plan.

6. Aspects and Potential Impacts

The key aspects and potential impacts associated with the management of visual amenity during the delivery of Southwest Metro Corridor Works are listed in Table 5.

These identified impacts and opportunities have been taken into account in the development of the Visual Amenity management strategy and site-specific procedures for the works.

Table 5: Summary of Overall Aspects and Potential Impacts

Aspects	Potential impacts/opportunities
Litter	• Potential for waste to not be placed in appropriate bins and result in litter around the construction worksites • Increase security/surveillance may reduce illegal dumping
Graffiti	• Potential for site hoardings or other exposed surfaces to be vandalised.
Lighting	• Potential for site lighting to affect the amenity of surrounding land uses
Traffic and transport	• Potential for required traffic control signage to increase visual clutter surrounding construction sites
Landscaping	• Potential for landscaping not being implemented as per design • Potential for landscaping features to conceal people or funnel them into an area • Potential for privacy impacts if vegetation is removed adjacent to residential properties
Fencing/Hoarding/Temporary Site Sheds	• Potential to create visual impacts and graffiti space
Building Materials	• Potential for building materials to be left on-site in unkempt manner • Potential for building material selection to create visual impacts
Stockpiles	• Potential for stockpiles to create visual impacts, block views
Temporary construction compounds and structures	• Potential for construction compounds and containers to create visual impacts • Potential for the construction of temporary structures to impact visual amenity for surrounding receivers
Plant and equipment movement	• Potential for plant and equipment movement to create visual impacts
Erosion and Sediment Control	• Potential for tracking of mud and other debris onto public roads

Visual amenity related risks are assessed within Appendix 3 of the Construction Environmental management Plan (CEMP).

7. Visual Amenity Management

7.1 Visual Amenity Mitigation Measures

Table lists the visual amenity mitigation measures to be implemented during the works.

Table 6 Visual Amenity Mitigation Measures

Item	CoA/REMM Reference	Responsibility
General		
Visual amenity mitigation measures will be implemented as soon as feasible and practicable and remain in place during the construction period.	REMM LV11	Construction Manager Superintendent All All
Good housekeeping to be maintained to ensure visual impacts from building materials are minimised	REMM LV13	Construction Manager Superintendent
Loose items and rubbish will be removed from site in a timely manner	REMM LV13	Construction Manager Superintendent
Site sheds will be located to minimise visual impact and existing buildings will be used (where practical) and maintained to a high standard.	REMM LV8 and LV10	Construction Manager Superintendent
Stockpiles and construction containers to be covered and positioned to mitigate visual impacts (behind trees).	REMM LV8 and LV10	Construction Manager Superintendent Environmental Manager
Plant and equipment to be moved internally within the project site where possible to mitigate visual impacts. Plant and equipment to be stored out of sight from public, where possible.	REMM LV8 and LV10	Construction Manager Superintendent
Service Buildings would be located away from station entrances and where possible, set into the existing rail embankment to minimise visual impact.	REMM LV8	Construction Manager Superintendent
Environmental inspections will review visual amenity items including; the health of retained vegetation, the condition of any site hoarding and the position and direction of any sight lighting.	REMM LV11	Environment Manager Project Engineer Site Superintendent
Dust would be removed from public areas as soon as possible	REMM LV11	Site Superintendent
No materials will be deposited within Sydney Trains track drainage	-	Site Superintendent
Records would be retained of any inspections undertaken in relation to visual and landscape measures.	REMM LV10	Environmental Manager Environmental Coordinator
Biodiversity and Vegetation Management		
Tree management (including tree removal and pruning) will be managed via the Tree Report.	REMM LV4/ LV12	Design Manager Construction Manager Environmental Manager
Opportunities for the retention and protection of existing trees, landscaping and vegetation will be identified during detailed	REMM LV4/ LV12	Design Manager Construction Manager

construction planning. Wherever practicable, vegetation around the perimeter of the construction sites will be maintained.		Environmental Manager
Existing trees to be retained (within the Project Footprint) will be protected with suitable tree protection measures prior to the commencement of construction (refer AS 4970 the *Australian Standard for Protection of trees on Development Sites and Adjoining Properties*)	REMM LV12	Environment Manager Project Engineer Site Superintendent
Planting will be used to mitigate the visual impact of retaining structures, noise barriers and service facilities (where practicable). Plant species would be selected which are appropriate to local conditions and relate to the character of the urban context.	REMM LV4	Design Manager Construction Manager Environmental Manager
Cuttings and embankments would be designed to exhibit a 'natural fit' within the landscape setting wherever possible. Where high strength rock is available, natural rock cuttings would be used. Embankments would be stabilised by planting with a native planting mix.	REMM LV4	Design Manager Construction Manager Environmental Manager
Re-instatement of site should occur as works progress, where possible	REMM LV10 and LV16	Construction Manager Environmental Manager
Any land impacted by works, including extra land outside the Construction site, will be reinstated	REMM LV10 and LV16	Construction Manager Environmental Manager
Temporary Works		
Temporary construction works including site hoardings and acoustic sheds will consider urban design and visual impacts.	REMM LV8	Design Manager Construction Manager Environmental Manager
Temporary Works to be designed and constructed in accordance with the CPTED principles, including the use of Exterior surfaces and finishes with a high level of vandal resistance (graffiti shield)	REMM LV13	Construction Manager Design Manager
Temporary impacts to public open space would be rehabilitated in consultation with the relevant local council and /or landowner	REMM LV16	Construction Manager Project Engineer Environmental Manager
Temporary site facilities will satisfy the sustainability requirements of C1 - SWTC Appendix B7.0 - Sustainability Requirements.	-	Construction Manager Sustainability Manager
Lighting		
Temporary site lighting, for security purposes or night works will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting. JHLOR's scope does not include installation of operational lighting.	REMM LV5	Construction Manager Project Engineer Environmental Manager
Lighting of will be oriented and directional lighting will be used to minimise glare and light spill impact on adjacent receivers..	CoA E54 and REMM LV15	Superintendent Project Engineer Environmental Manager
Security and warning lighting will be installed so that the light is not directed or reflected onto neighbouring properties.	CoA E54 and REMM LV15	Superintendent Project Engineer

		Environmental Manager
Hoarding Banners, Fencing and Signs		
Temporary hoardings, fencing and/or walls will be installed around worksites and compounds as necessary prior to the commencement of works and within 30 days of site establishment to provide safety and security.	REMM LV7	Construction Manager Project Engineer Site Superintendent
Installation plans for all hoardings or fencing banners will be submitted to and approved by Sydney Metro prior to being erected.	-	Project Engineer Environment Manager
Hoardings and fencing will be made from as-new materials, maintained in a neat and tidy condition. This will include the prompt removal of graffiti and investigation into public art opportunities.	REMM LV13	Site Superintendent Project Engineer Communications and Community Liaison Manager
Hoarding banners will include: • Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress; • Community information, including contact numbers for enquiries / complaints; • Signage and information to mitigate impacts on local business which may be obscured by the construction site; • Way finding signage to direct pedestrians, commuters and vehicles around the site • Sydney metro advertising / public awareness campaigns; and, • Logos / branding, including Sydney Metro, NSW Government, and Contractor branding The hoarding and fencing banners will be in full colour and comply with the hoarding requirements of the Sydney Metro Brand Style Guidelines.	REMM LV7 and LV14	Construction Manager Project Engineer Communications and Community Liaison Manager
Site hoarding and fencing banners will be replaced every 12 months to ensure they remain clean, free from graffiti and advertisement, and appropriate for the intended use	REMM LV13	Construction Manager Project Engineer Site Superintendent
Fencing, walls, and hoarding will be designed and implemented to increase natural surveillance with straight runs and be sympathetic with the surroundings (where feasible).	REMM LV7	Design Manager Communications and Community Liaison Manager Project Engineer
Signage will be utilised to clearly define and designate areas with respect to their intended use to the public and construction workers on access.	-	Superintendent Project Engineer Communications and Community Liaison Manager
Galvanised steel mesh anti-throw barrier fencing will be installed on overbridges and integrated with the bridge parapet	-	Construction Manager Project Engineer Site Superintendent
Artwork, graphics and images will be used to enhance the visual appearance of fencing and hoarding in high visibility areas.	REMM LV8	Project Engineer Communications and Community Liaison Manager

Barriers, Walls and Buildings		
The selection of materials and colours for noise barriers, walls and retaining walls would aim to minimise their visual prominence.	REMM LV6	Design Manager Construction Manager Project Engineer
Retaining walls would transition into battered landscape slopes, avoiding abrupt joints. Fencing, including precast concrete panels with a smooth, non-textured concrete finish would be used to create a high quality finish.	REMM LV8	Design Manager Construction Manager Project Engineer
Noise barriers will compromise of a consistent palette of materials, colour and texture. Noise barriers will be treated as a landscape element, with simple and resolved detailing that integrates and provides gradual transition to the adjacent landscape.	-	Design Manager Construction Manager Project Engineer
Graffiti		
Graffiti will be monitored and removed within the following timeframes: • Offensive graffiti must be removed or covered within 24 hours • Highly visible yet non-offensive graffiti to be cleaned or covered within one week; • Graffiti that is neither offensive nor highly visible to be cleaned or covered during normal operations within one month; and • Any advertising material including bill posters to be removed or covered within 24 hours.	REMM LV13	Construction Manager Project Engineer Site Superintendent Communications and Community Liaison Manager
Construction hoardings, scaffolding and acoustic sheds will be regularly inspected and kept clean and free of dust build up.	REMM LV13	Project Engineer Site Superintendent

8. Training

All personnel working on the site will undertake a site induction, which will provide initial training on various environmental aspects including visual amenity.

Additional training will be provided to the workforce during toolbox talk, which will explain the visual amenity requirements related to issues such as

- Hoarding
- Graffiti removal
- Lighting direction
- Vegetation planted/retained for screening purposes.

9. Monitoring, Auditing and Reporting

All temporary site facilities (including hoardings) will be maintained in excellent condition and must remain fit for their intended purpose.

All worksites (and areas impacted by construction activities) will be kept clean and tidy and free of refuse.

9.1 Site Inspections

Weekly Environmental Site inspections will be undertaken by the Environmental Manager / Coordinator, Site Supervisor and nominated Site and Project Engineers. The visual inspections will target:

- Rubbish
- Litter
- Graffiti
- Surplus Material

Daily inspections by Site Supervisors, including inspection of the following:

- Construction site hoarding and perimeter site areas
- Scaffolding, and other site structures
- Lighting structures

Periodic Joint Environment Inspections attended by representatives of the Environment and Sustainability Team, Environment Representative, and representatives from Sydney Metro. This will include inspection of the following:

- Health of retained vegetation around site boundaries
- The condition of any site hoarding and fencing
- Position and direction of any site lighting
- Landscaping works.

Inspection reports will be prepared following site inspections to document any relevant observations made and identify any issues to be rectified in relation to visual amenity and timing for rectification.

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.

10. Review and Improvement

The VAMP will be reviewed and updated at least annually. JHLOR will undertake the ongoing development, amendment and updating of the VAMP 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

10.1 Review of Mitigation Measures

Where a review of visual amenity performance, based on inspection and audit results, indicates that current mitigation measures are not effective (i.e. they are not meeting the Planning Approval or Contractual requirements), the Environmental Manager will consult with the construction team in regards to additional mitigation measures. These additional mitigation measures may include additional controls or changed work practices.

10.2 Records

Records associated with this management plan and monitoring programme will be maintained in accordance with Section 13 of the CEMP.

11. 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 SMC Community Consultation Strategy and the CEMP.

Appendix A - Visual Amenity Management Measures and Compliance Matrix

No.	Measure	Timing	Requirement	Responsibility	Reference
	Project Approval – Specific Management Plan Requirements				
1.	The Proponent must construct and operate the CSSI with the objective of minimising light spillage to surrounding properties. All lighting associated with the Construction and Operation of the CSSI must be consistent with the requirements of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces.	During Construction	S2B SSI 8256 COA – E54	Environment Manager Project Engineer Site Superintendent Sydney Metro (operational)	Section 7
	SPIR Environmental Management Measures				
2.	The management of trees during detailed design and construction planning would be guided by the project's Tree Management Strategy, which would be developed in consultation with councils and include consideration of relevant local plans and strategies. Where removal cannot be avoided, trees would be replaced in accordance with the Tree Management Strategy, including replacement of removed trees in a two for one ratio. Opportunities to retain and protect existing trees would be defined during detailed design and construction planning, in accordance with the project's Tree Management Strategy. The design would aim to reduce tree removal to the extent practicable, particularly where they contribute to screening vegetation or landscape character.	Prior to and During Construction	S2B SPIR REMM LV4	Environment Manager Project Engineer Design Manager/Project Design Team Site Superintendent Sydney Metro (develop Tree Management Strategy)	Section 7
3.	Lighting would be designed in accordance with AS 4282 Control of the Obtrusive Effects of Outdoor Lighting. Lighting would be designed to minimise light spill and glare into adjoining areas.	Prior to and During Construction	S2B SPIR REMM LV5	Environment Manager Design Manager/Project Design Team Site Superintendent Sydney Metro (operational)	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
4.	The selection of materials and colours for noise barriers and hoardings would aim to minimise their visual prominence.	Prior to construction	S2B SPIR REMM – LV6	Design Manager/Project Design Team	Section 7
5.	The use of transparent panels in noise barriers would be considered where views to local landscape features and district views would be obstructed.	Prior to construction	S2B SPIR REMM - LV7	Design Manager/Project Design Team	Not relevant to scope of works
6.	Fencing would be designed to be of a high quality urban finish near stations.	Prior to Construction	S2B SPIR REMM - LV8	Design Manager/Project Design Team	Not relevant to scope of works
7.	A visual amenity management plan would be prepared and implemented during construction, to define the measures to minimise visual impacts during construction. The plan would include requirements in relation to construction site remediation.	During Construction	S2B SPIR REMM – LV10	Environment Manager Project Engineer Site Superintendent	This Plan
8.	Mitigation measures for landscape and visual impacts would be implemented as soon as feasible and reasonable after the commencement of construction, and remain for the duration of the construction period.	During Construction	S2B SPIR REMM – LV11	Environment Manager Project Engineer Site Superintendent	Section 7
9.	Trees to be retained would be protected prior to the commencement of construction in accordance with AS4970-2009 Protection of trees on development sites and the project's Tree Management Strategy. Any tree pruning would be undertaken in accordance with the project's Tree Management Strategy, guided by a tree report prepared by a qualified arborist.	During Construction	S2B SPIR REMM – LV12	Environment Manager Site Superintendent Project Engineer	Section 7
10.	The design and maintenance of construction compound hoardings would aim to minimise visual amenity and landscape character impacts. Graffiti would be removed promptly, and public art opportunities would be considered.	During Construction	S2B SPIR REMM – LV13	Environment Coordinator Project Engineer Construction Manager	Section 7
11.	The selection of materials and colours would aim to minimise their visual prominence.	During Construction	S2B SPIR REMM - LV14	Design Manager/Project Design Team	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
12.	Lighting of work areas, compounds and work sites would be oriented to minimise glare and light spill impact on adjacent receivers.	During Construction	S2B SPIR REMM - LV15	Environment Manager Project Engineer Site Superintendent	Section 7
13.	Following completion of construction, site restoration would be undertaken in accordance with the visual amenity management plan. Temporary impacts to public open space would be rehabilitated in consultation with the relevant local council and/or landowner.	During Construction	S2B SPIR REMM - LV16	Environment Manager Project Engineer Site Superintendent	Section 7
*	**SPIR Environmental Performance Outcomes**				
14.	The preferred project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts. The preferred project is visually integrated with its surroundings. Vegetation providing screening of the rail corridor is retained where practicable	During Construction	S2B SPIR EPO – Landscape character and visual amenity	Design Manager Environment Manager Project Engineer	Section 1.5
*	**Contractual Requirements**				
15.	In carrying out the SSJ Contractor's Activities, the SSJ Contractor must: (a) keep the Construction Site, Extra Land and the Project Works clean and tidy and free of refuse; (b) regularly remove rubbish, litter, graffiti and surplus material from the Construction Site and Extra Land; and as a condition precedent to Construction Completion of a Portion, remove all rubbish, surplus materials, Construction Plant and Temporary Works from the Construction Site and Extra Land or the part of the Construction Site or Extra Land relevant to the Project Works or the Portion, except where the retention of any of these are required for the correction of Defects during the Defects Correction Period and this is approved in writing by the Principal's Representative.	During Construction	General Conditions – 3.10	Environment Manager Project Engineer Site Superintendent	Section 7
16.	The SSJ Contractor must: iv) construct hoardings and fencing from new materials sympathetic with the surroundings. Hoardings must be clean, painted, free of snagging or sharp protrusions on both the Construction Site side and the public side and also comply with the relevant hoarding standards v) maintain hoardings, installed by the SSJ Contractor, in a neat and tidy condition;	During Construction	SMC SWTC – 5.10 Hoarding and Temporary Fencing	Project Engineer Site Superintendent Environment Manager	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
	vi) maintain hoardings, fencing or walls, installed by the SSJ Contractor, on the Construction Site free of graffiti and any advertising material not authorised by the Principal's Representative until the Date of Construction Completion of the last Portion to achieve Construction Completion				
17.	The SSJ Contractor must: ii) not dispose of any rubbish, including dust or dirty water into the track drainage system or the Sydney Trains bins iii) ensure that all infrastructure, facilities and amenities in the areas being maintained are at all times fit for their intended purpose, clean and tidy and in a condition which satisfies the requirements of the Contract; v) maintain existing landscaping and ground vegetation within the Construction Site; vi) not store rubbish or loose items on the Construction Site for any extended period (rubbish must be removed on a weekly basis); vii) keep clean any public and Back of House areas of the existing Bankstown Line Stations affected by the SSJ Contractor's Activities; ix) ensure that any dust created by the SSJ Contractor's Activities falling in public areas is removed. Dust entering public areas or areas where it is likely to interfere with operating equipment must be removed at the end of each shift. Every effort must be made to reduce dust emanation from the SSJ Contractor's Activities; and x) ensure any rubbish, dust, or residue from dirty work boots deposited in public areas or egress areas is removed within 30 minutes.	During Construction	SMC SWTC – 5.11 Maintenance	Project Engineer Site Superintendent Environment Manager	Section 7
18.	The SSJ Contractor must: (ii) reinstate the Construction Site progressively as each part of the SWM Corridor Works and Temporary Works is completed; (iii) reinstate all land outside the Construction Site (including the Extra Land) which has been in any way affected by the SSJ Contractor's Activities, to a condition at least equivalent to that existing before that occupation or use; (iv) reinstate the Construction Site, including the removal of all temporary infrastructure, reinstating all built and natural surfaces, features, landscaping and the natural environment to a condition not less than that existing immediately prior to the SSJ Contractor obtaining access to the Construction Site	During Construction	SMC SWTC – 5.14 Site Restoration	Project Engineer Site Superintendent Environment Manager	Section 7
19.	The Contractor must arrange for the production and installation of any site hoarding and fencing banners including vinyl (on solid hoarding), shade cloth or other material on the external face of any hoarding or fence within 30 days of Site establishment.	During Construction	Schedule Part D – MR-C -12.1a)	Construction Manager Project Engineer Site Superintendent	Section 7

No.	Measure	Timing	Requirement	Responsibility	Reference
20.	Site hoarding and fencing banners must be replaced every 12 months to ensure they remain clean and appropriate for their intended use.	During Construction	Schedule Part D – MR-C -12.1b)	Construction Manager Project Engineer Site Superintendent	Section 7
21.	All banner artwork print proofs must be must be submitted to and approved by the Principal's Representative prior to being used by the Contractor in the production of banner artwork. The Principal's Representative must be given a minimum of five Business Days to review the banner artwork print proofs. The Contractor must address all the Principal's comments on the print proofs to the satisfaction of the Principal's Representative, prior to being approved.	During Construction	Schedule Part D – MR-C -12.1c)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMC Community Communication Strategy
22.	The Principal's Representative's approval of banner artwork print proofs is a Hold Point.	During Construction	Schedule Part D – MR-C -12.1d)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMC Community Communication Strategy
23.	Installation plans for all hoardings or fencing banners, including shade cloth or other material on the external face of any hoarding or fence, must be submitted to and approved by the Principal's Representative prior to being erected by the Contractor. The Principal's Representative must be given a minimum of 10 Business Days to review and comment on banner installation plans. The Contractor must address the Principal's comments on the submitted Documents to the satisfaction of the Principal's Representative, prior to them being approved.	During Construction	Schedule Part D – MR-C -12.1e)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer to SMC Community Communication Strategy
24.	The Principal's Representative's approval of banner installation plans is a Hold Point.	During Construction	Schedule Part D – MR-C -12.1f)	Project Engineer Construction Manager Communications and Community Liaison Manager	Section 7 and also refer SMC Community Communication Strategy * (Section 7.4 and Appendix A for

No.	Measure	Timing	Requirement	Responsibility	Reference
					Approvals Process)
25.	Viewing holes and transparent panels must be provided in the hoardings at various locations, to be determined by the Principal's Representative in consultation with the Contractor.	During Construction	Schedule Part D – MR-C -12.1g)	Sydney Metro in consultation with the Project Engineer / Communications and Community Liaison Manager	Section 7
26.	Hoardings, site sheds, fencing, acoustic walls around the perimeter of the Site and any other structures built as part of the Works and Temporary Works must be maintained free of graffiti and any advertising not authorised by the Principal.	During Construction	Schedule Part D – MR-C -12.2a)	Site Supervisor	Section 7
27.	The Contractor must carry out daily inspections for graffiti and unauthorised advertising and must remove or cover any such graffiti or unauthorised advertising identified within the following timeframes: (i) offensive graffiti must be cleaned or covered within 24 hours; (ii) highly visible yet non-offensive graffiti must be cleaned or covered within one week; (iii) graffiti that is neither offensive nor highly visible must be cleaned or covered during normal operations within one month; and (iv) any advertising material including bill posters must be removed or covered within 24 hours.	During Construction	Schedule Part D – MR-C -12.2b)	Site Supervisor	Section 7
28.	12.1 Visual Amenity Management Objectives 12.2 Visual Amenity Management Implementation 12.3 Visual Amenity Mitigation	During Construction	Schedule Part D – MR-E	Environment Manager Project Engineer	This Plan
Construction Environmental Management Framework					
29.	Principal Contractors will ensure as a minimum: Temporary construction works consider urban design and visual impacts, including: • Artwork, graphics and images to enhance the visual appearance of temporary works in high visibility locations; • Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress; • Community information, including contact numbers for enquiries/complaints; • Signage and information to mitigate impacts on local businesses which may be obscured by the construction site;	During Construction	CEMF Section 4.4a)	Environment Manager Project Engineer Communications and Community Liaison Manager	This Plan Section 7 Section 4 of the Community Communication Strategy

No.	Measure	Timing	Requirement	Responsibility	Reference
	• Sydney Metro advertising/public awareness campaigns; and • Logos/branding, including Sydney Metro, NSW Government, and Contractor branding. The design of all temporary works will require Sydney Metro approval in relation to urban design and visual impacts and Sydney Metro will stipulate the design of hoarding artwork, including: • Sydney Metro advertising/public awareness campaigns; and • Logos/branding, including Sydney Metro, NSW Government and Contractor branding. •				
30.	Construction hoardings, scaffolding and acoustic sheds will be regularly inspected and kept clean and free of dust build up. Graffiti on construction hoardings, scaffolding or acoustic sheds will be removed or painted over promptly.	During Construction	CEMF Section 4.4b)	Environment Manager Design Manager Communications and Community Liaison Manager Project Engineer	Noted and also refer SMC Community Communication Strategy (Appendix A for Approvals Process)
31.	The principles of Crime Prevention Through Environmental Design will be applied to all works, including temporary works, that have a public interface.	During Construction	CEMF Section 4.4c)	Environment Manager Project Engineer Site Superintendent	Section 7
32.	The following visual and landscape management objectives will apply to the construction of the project: • Minimise impacts on existing landscape features as far as feasible and reasonable. • Ensure the successful implementation of the Landscape Design. • Reduce visual impact of construction to surrounding community.	During Construction	CEMF Section 12.1		Section 1.5
33.	Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum: • The visual mitigation measures as detailed in the environmental approval documentation for construction. • Input from an experienced Landscape or Urban Designer. • The maintenance of outward facing elements of site hoarding or noise barriers, including the removal of graffiti and weeds.	During Construction	CEMF Section 12.2a)	Environment Manager	i) This Plan ii) Not relevant to the scope of works. To be reassessed

No.	Measure	Timing	Requirement	Responsibility	Reference
	• Apply the principles of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting and relevant safety design requirements and detail mitigation measures to minimise lighting impacts on sensitive receivers for all permanent, temporary and mobile light sources. • Apply the principals of the NSW Government Crime Prevention through Environmental Design guidelines. • Monitoring requirements. • Compliance record generation and management.				if scope changes require temporary works in prominent area iii) Section 7 iv) Section 7 v) Section 5 vi) Section 9 vii) Section 9
34.	Visual and landscape measures will be incorporated into the Principal Contractor's regular inspections including checking the health of retained vegetation around site boundaries, checking the condition of any site hoarding and acoustic sheds, and checking the position and direction of any sight lighting.	During Construction	CEMF Section 12.2b)	Environment Manager Project Engineer Site Superintendent	Section 7
35.	The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures.	During Construction	CEMF Section 12.2c)	Environment Manager	Section 7
36	Examples of visual amenity mitigation measures include: • Wherever feasible and reasonable, vegetation around the perimeter of the construction sites will be maintained. • Temporary construction works will be designed with consideration of urban design and visual amenity as per Section 4.4. • Temporary site lighting, for security purposes or night works will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting.	During Construction	CEMF Section 12.3	Environment Manager	Section 7