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VISUAL AMENITY MANAGEMENT PLAN Sydney Metro SWM4

Design and Construction of Errant and Hostile Vehicle Mitigation Treatments for the Southwest Metro Project CONTRACT NUMBER: CI-1136000 PROJECT DOCUMENT NUMBER:

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## **Terms and Definitions**

Terms	Definitions	
AARD	Archaeological Assessment and Research Design report	
AS	Australian Standard	
ASS	Acid Sulfate Soils	
BC Act	Biodiversity Conservation Act 2016 (NSW)	
CCS	Community Communication Strategy	
CEMF	Construction Environmental Management Framework	
CEMP	Construction Environmental Management Plan	
CNVIS	Construction Noise and Vibration Impact Statement	
СоА	Conditions of Approval	
CSR	Combined Services Route	
CSSI	Critical State Significant Infrastructure	
СТМР	Construction Traffic Management Plan	
CTR	Compliance Tracking Review	
Cwth	Commonwealth	
dB	Decibels	
DECC	NSW Department of Environment and Climate Change	
DPI	NSW Department of Primary Industries	
DPIE	Department of Planning, Industry and Environment	
EAP	Environmental Audit Program	
ECM	Environmental Control Map	
EESG	NSW Environment, Energy and Science Group (formerly OEH)	
EIN	Environmental Improvement Notice	
EIS	Environmental Impact Statement	
EMS	Environmental Management System	
EP&A Act	Environment Planning and Assessment Act 1979 (NSW)	
EPA	NSW Environment Protection Authority	
EPBC Act	Environment Protection and Conservation Act 1999 (Cwth)	



EPL	Environment Protection Licence under the POEO Act	
EPO	Environmental Performance Outcome	
ER	Environmental Representative	
ERP	Emergency Response Plan	
ESCP	Erosion and sediment control plan	
EWMS	Environmental Works Method Statement	
E&SMS	Environment and Sustainability Management System	
НМР	Heritage Management Plan	
ICNG	Interim Construction Noise Guideline	
IMS	Sydney Metro Integrated Management System	
ISO	International Standardization Organisation	
IWC	Inner West Council	
KPI	Key Performance Indicator	
LV	Low Voltage	
Minister, the	The Minister of New South Wales (NSW) Planning	
MMS	Martinus Management System	
NSW	New South Wales	
NVMP	Noise and Vibration Management Plan	
OCCS	Overarching Community Communication Strategy	
OEH	NSW Office of Environment and Heritage (formerly DECC)	
OOHW	Out-of-Hour Works	
PASS	Potential Acid Sulfate Soils	
POEO Act	Protection of the Environment Operations Act 1997 (NSW)	
Proponent	The person or organisation identified as the proponent in Schedule 1 of the planning approval. In this case Sydney Metro Authority	
REMM	Revised Environmental Mitigation Measure	
RMS	NSW Roads and Maritime Services	
ROL	Road Occupancy Licence	
SCO	Sydney Coordination Office	
Planning Secretary	The Secretary of the Department of Planning, Industry and Environment	
SM	Sydney Metro	



SMP	Sustainability Management Plan	
SPIR	Submissions and Preferred Infrastructure Report	
SSI	State Significant Infrastructure	
SWM	Southwest Metro	
SWMP	Soil and Water Management Plan	
SWMS	Safe Works Method Statement	
TfNSW	Transport for New South Wales	
UCM	Utilities Coordination Manager	
VAMP	Visual Amenity Management Plan	
WFDIP	Workforce Development and Industry Participation Plan	
WP	Work Packs	



# **1 INTRODUCTION**

# 1.1 Context and Scope of this Sub-plan

This Visual Amenity Management Plan (VAMP or Plan) forms part of the Construction Environmental Management Plan for Southwest Metro – Errant and Hostile Vehicle Mitigation Treatments for the Southwest Metro (the Project). The Project works will include the installation of anti-throw screens and concrete bollards within the intersections of 15 bridges along the southwest metro corridor as well as 60 individual locations along the corridor between Sydenham to Bankstown where safety improvements will be required.

The VAMP describes how Martinus will ensure risks associated with visual amenity management are considered and managed effectively during the construction of the Project. This Plan forms an integral part of the Martinus Management System (MMS) and activities that are anticipated to occur during the construction phase of the Project.

This VAMP has been prepared to address the requirements of the Conditions of Approval (CoA), the Revised Environmental Mitigation Measures (REMM) and the Sydney Metro Construction Environmental Management Framework (CEMF).

# **1.2 Project Background**

The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Environmental Impact Statement (EIS) (GHD/AECOM September 2017) assessed the landscape and visual amenity impacts of construction within Chapter 19 (Landscape character and visual amenity). The Sydney Metro City and Southwest - Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report (SPIR) (GHD/AECOM June 2018) was prepared in response to the submissions received during the EIS exhibition period. The SPIR revised the scope of the Sydenham to Bankstown Upgrade project.

Please refer to Section 1 of the CEMP for the Project Description.

# **1.3 Objectives and Targets**

This VAMP identifies management measures and monitoring requirements to reduce impacts to visual amenity during the construction phase of the Project. The following visual and landscape management objectives from Sydney Metro's CEMF will apply to construction:

- Minimise impacts on existing landscape features as far as feasible and reasonable;
- Ensure the successful implementation of the Landscape Design; and
- Reduce visual impact of construction to surrounding community.



Table	1:	<b>Objectives</b>	and T	argets
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Objective	Target	Management measure
<b>Place making and urban design</b> The project capitalises on opportunities to improve place, character and quality of the surrounding build and natural environment (including adjoining public spaces). The project contributes to the accessibility and connectivity of communities.	The project is designed to have regard to the surrounding landscape and visual environment and to minimise the potential for visual impacts. The project is visually integrated with its surroundings. The stations provide a sense of place and contribute positively to the surrounding urban environment. The design takes into account future planning for the Sydenham to Bankstown Corridor Urban Renewal Strategy. Vegetation providing screening to the rail corridor is retained where practicable.	Management to be undertaken in accordance with CEMF, CoAs and REMMS
Socioeconomic, land use and property The project minimises adverse social and economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	The project minimises impacts to the local community, community infrastructure, and businesses. Impacts to existing land use and properties are minimised. The project is appropriately integrated with adjoining land uses, and access to private properties is maintained.	Management will be undertaken in accordance with the REMMs and CoA's.

## **1.4 Requirements Addressed**

This VAMP is one of several environmental management plans (EMPs) required for the Project which are collectively covered by Sydney Metro's CEMF. The CEMF details management requirements for construction to be included in the VAMP.

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.



The CoA and REMM relevant to this VAMP are listed in Table 2 below. In accordance with CoA-C4, the relevant requirements of the CEMF have also been included in the table.

No.	Requirement	Reference	How addressed?
Conditio	ns of Approval		
C4	The CEMP Sub-plans must be prepared in accordance with the CEMF	This Table	This table demonstrates how this Plan has been prepared in accordance with the relevant requirements of the CEMF.
C6	Any of the CEMP Sub-plans may be submitted along with, or subsequent to, the submission of the CEMP but in any event, no later than one (1) month before Construction.	Refer to Section 1.2 of the CEMP	This Plan will be submitted for approval to DPIE along with or subsequent to the final submission of the CEMP for DPIE approval, and no later than one month prior to construction.
C7	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of Construction. Where Construction of the CSSI is staged, Construction of a stage must not commence until the CEMP and CEMP Sub-plans for that stage have been approved by the Planning Secretary.	Refer to Section 1.2 of the CEMP	Construction will not commence until the CEMP and all CEMP Sub-plans have been approved by DPIE. The CEMP and Sub-plans will be implemented for the duration of construction.
Constru	ction Environmental Managemen	t Framework	
12.1(a)	The following visual and landscape management objectives will apply to the construction of the project:	Section 5	Management measures are identified in Section 5.
i.	Minimise impacts on existing landscape features as far as feasible and reasonable;	Section 5	Impacts on existing landscape features will be minimised by implementing management measures identified in Section 5.
іі.	Ensure the successful implementation of the Landscape Design; and	Section 6.2	The landscape design of the project has been identified in Sydney Metro's approved Station Design and Precinct Plans which are considered in the Reinstatement Works as per Section 6.2.

#### **Table 2: VAMP Compliance Matrix**



No.	Requirement	Reference	How addressed?
iii.	Reduce visual impact of construction to surrounding community.	Section 5	Visual impacts of construction to surrounding community will be minimised by implementing management measures identified in Section 5.
12.2(a)	Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum:	-	This Plan
i.	The visual mitigation measures as detailed in the environmental approval documentation for construction;	Section 5 This Table	Visual Amenity management measures are identified in Section 5. Compliance to relevant documentation is as stated in this Table.
ii.	Input from an experienced Landscape or Urban Designer;	Section 6.2	Refer to comment above re: Section 6.2
iii.	The maintenance of outward facing elements of site hoarding or noise barriers, including the removal of graffiti and weeds;	Section 7.1	Any maintenance required shall be identified during inspections as per Section 7.1 and undertaken accordingly.
iv.	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;	Section 2.5	The Project must be carried out in accordance with the standards identified in Section 2.5.
V.	Identify the processes and procedures that will be used for the incorporation of the principles of Crime Prevention Through Environmental Design (CPTED) in the design and construction of any temporary site facilities;	Section 5	Processes and procedures to incorporate the principles of Crime Prevention Through Environmental Design (CPTED) in the design and construction of temporary site facilities is detailed in Section 5.
vi.	Compliance record generation and management.	Section 7	Compliance record generation and management will be undertaken in accordance with Section 7.



No.	Requirement	Reference	How addressed?
12.2(b)	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.	Section 5	Visual and landscape measures are detailed in Section 5.
12.2(c)	The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures.	Section 7.6	Compliance records will be managed in accordance with Section 7.6
12.3(a)	Examples of visual amenity mitigation measures include:	Section 5	Visual Amenity management measures are identified in Section 5.
i.	Wherever feasible and reasonable, vegetation around the perimeter of the construction sites will be maintained;	Section 5	Visual and landscape measures are detailed in Section 5.
ii.	Temporary construction works will be designed with consideration of urban design and visual amenity as per Section 4.4;	Section 5	Visual and landscape measures are detailed in Section 5.
iii.	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.	Section 2.5 Section 5	The Project must be carried out in accordance with the standards identified in Section 2.5. Visual and landscape measures are detailed in Section 5.



# 2 ENVIRONMENTAL MANAGEMENT FRAMEWORK

# 2.1 Environment and Sustainability Statement of Commitment

Sydney Metro has developed an Environment and Sustainability Statement of Commitment which applies to all people working for Sydney Metro and aligns with the cluster wide TfNSW Environment and Sustainability Policy. The Statement of Commitment is included in Appendix A.

Sydney Metro is committed to:

- Minimising our impacts and leaving a positive environmental and social legacy
- Delivering a resilient asset and service for our customers
- Collaborating with stakeholders to innovate and drive sustainable outcomes, and
- Embedding sustainability into our activities.

# 2.2 Environmental Management Approach

Sydney Metro's ongoing environmental management commitment and approach to environmental management and monitoring during construction involves:

- Project design measures incorporated in the design and construction planning to avoid and minimise impacts.
- Mitigation measures a consolidated list of measures relevant to visual amenity during construction is provided in the REMM.
- Environmental performance outcomes.
- Implementation of the following project specific construction environmental management frameworks/strategies:
  - Construction Environmental Management Framework
  - Construction Noise and Vibration Strategy
  - Temporary Transport Strategy
  - Utilities Management Framework.

#### 2.3 Construction Environmental Management Framework

Sydney Metro's CEMF details the approach to environmental management and monitoring during the construction life of the project. Compliance with relevant environmental legislation and project conditions occur through implementation of the CEMF.

Sydney Metro's CEMF also outlines requirements for project CEMPs and other supporting documentation (including this VAMP) which detail how environmental impacts are to be managed during construction.

## 2.4 Construction Environmental Management Plan

Martinus has prepared a CEMP MR-EHVMT-EE-01 for the Project to address relevant environmental and planning requirements.

## 2.5 Legal and Compliance Requirements

Legislation and compliance documents relevant to visual amenity includes:

- NSW Environmental Planning and Assessment Act 1979 (EP&A Act)
- NSW Department of Planning, 22 October 2020, Infrastructure Approval CSSI 8256 Mod 1 -Conditions of Approval (CoA)



- Sydney Metro City & Southwest Sydenham to Bankstown Environmental Impact Statement Volumes 1A-C and 2–6 (EIS, 2017)
- Sydney Metro City & Southwest Sydenham to Bankstown Submissions and Preferred Infrastructure Report Volumes 1, 2A-F and 3 G-J (SPIR)
- Sydney Metro City & Southwest Sydenham to Bankstown Submissions Report (SR)
- Revised Environmental Management Measures (REMM)
- Sydney Metro Construction Environmental Management Framework (CEMF)
- Martinus Construction Environmental Management Plan (CEMP)
- Sydney Metro City & Southwest Sydenham to Bankstown Upgrade Staging Report (Sydney Metro, 2019).

The Project must be carried out in accordance with the terms of the CoA granted under Division 5.2 of the EP&A Act, and generally in accordance with the description of the project in the EIS, SPIR and SR, and with the procedures, commitments, preventative actions, performance criteria and mitigation measures set out in the EIS, SPIR, SR and REMM. Visual amenity management requirements of these documents are provided in Section 5.

The following procedure and standards are also relevant to visual amenity during construction:

- Crime Prevention through Environmental Design (CPTED) principles
- AS 4282-1997 Control of the obtrusive effects of outdoor lighting
- AS 4970-2009 Protection of trees on development sites
- AS/NZS 1158 Lighting for Roads and Public Spaces
- Guidelines for landscape character and visual impact assessment, EIA-N04, Version 1.0 (RTA, March 2009).

## 2.6 Environmental Responsibilities

The key roles and responsibilities (in addition to responsibilities provided in the CEMP) relevant to implementation of this VAMP are shown in Table 3.

Role	Responsibility
Independent Environmental Representative (ER)	<ul> <li>Review and endorse the VAMP in accordance with planning approvals.</li> </ul>
Project Director (Project Leader)	<ul> <li>Responsible for implementing the requirements of the VAMP</li> <li>Responsible for maintenance of the VAMP</li> <li>Review and authorise proposed training and induction elements concerning visual amenity which are to be incorporated into the Project induction.</li> </ul>
Design Manager	<ul> <li>Manage the implementation of Precinct Plans</li> <li>Responsible for implementing temporary works in accordance with Sydney Metro approved design.</li> <li>Implement the Tree Management Strategy.</li> <li>Ensure relevant visual amenity management requirements including temporary works are addressed in design development</li> </ul>

Table	3:	Roles	and	Res	po	nsik	oilities
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Role	Responsibility			
	<ul> <li>Ensuring the VAMP is effectively implemented and maintained at the project level</li> </ul>			
	<ul> <li>Ensure compliance with relevant legislative requirements, the CoA, REMM and other visual amenity commitments</li> </ul>			
Project Environmental Manager	<ul> <li>Prepare induction material outlining key visual amenity issues and management measures so personnel understand, their obligations under this VAMP</li> </ul>			
	<ul> <li>Undertake periodic reviews to ensure measures are being effectively implemented</li> </ul>			
Utilities Coordinator	<ul> <li>Manage implementation of the approved Utilities Management Strategy</li> </ul>			
Heritage Specialist	<ul> <li>Manage implementation of measures to protect heritage items in accordance with the Heritage Plans.</li> </ul>			
Traffic Engineer	<ul> <li>Manage implementation of the construction traffic management plan</li> </ul>			
Community Manager	<ul> <li>Manage the complaints management system</li> </ul>			
	Comply with management measures for visual amenity			
Subcontractors and all	<ul> <li>Participate in visual amenity induction prior to initial commencement of work at the worksite</li> </ul>			
personnel	<ul> <li>Comply with site directions to prevent issues related to visual amenity arising</li> </ul>			
	<ul> <li>Report breeches related to visual amenity to the Construction Site Manager</li> </ul>			

# 2.7 Training and Awareness

Prior to commencement of work, all personnel and subcontractors must attend a site induction that includes:

- Awareness of the sensitivity of residents/community to visual amenity matters and the importance of compliance to reduce visual impacts during Construction.
- The role of all personnel in managing visual amenity (refer to Section 2.6)
- The location of sensitive receivers (refer to Section 3.4)
- Main risks to visual amenity during construction (refer to Section 4)
- Main visual amenity management measures (refer to Section 5)
- Visual amenity reporting requirements (refer to Section 7)

Visual amenity matters are also to be regularly included in toolbox talks to maintain personnel awareness of stakeholder sensitivities to visual impacts during construction, and of the main risks to visual amenity.



# **3 PROJECT DESCRIPTION**

# 3.1 **Project Overview**

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West (Stage 1) with a train every four minutes in the peak. Sydney Metro City & Southwest will extend the Sydney Metro system beyond Chatswood to Bankstown, delivering about 30 kilometres of additional metro rail, a new crossing beneath Sydney Harbour, new railway stations in the lower North Shore and Sydney central business district (CBD), and the upgrade of existing stations from Sydenham to Bankstown. Sydney Metro City & Southwest comprises two core components:

- Chatswood to Sydenham
- Sydenham to Bankstown upgrade (the subject of this sub-plan).

This VAMP addresses the construction of errant and hostile vehicle mitigation treatments at station bridges, non-station bridges and critical locations along the Southwest Metro corridor. Please refer to Section 1 of the CEMP for detailed Project Description.

## 3.2 Location of Work Sites

The construction area at each station is confined to the existing rail corridor and the nominated construction compound areas (inclusive of primary laydown areas). The general location of each work site and temporary construction facilities is described in Table 3.

Work Site	General Location of Work Site	General Location of Temporary Construction Facilities (inclusive of primary laydown areas)		
Illawarra Road Overbridge, Marrickville	Marrickville Station	Small laydown close to bridge at the end of Wooley Lane		
Livingston Road Overbridge, Marrickville	Between Marrickville Station and Dulwich Hill Station	Small laydown close to bridge at the end of Randall St		
Albermarle Street Overbridge, Marrickville	Between Marrickville Station and Dulwich Hill Station	Small laydown close to bridge at the end of Kays Ave or Down City side corner at intersection of Challis Av and Albemarle St		
Garnet Street Overbridge, Marrickville	Between Marrickville Station and Dulwich Hill Station	Small laydown close to bridge at the corner of Garnett St & The Parade		
Wardell Ro Overbridge, Dulwich Hill	Dulwich Hill Station	Small laydown close to bridge at Ewart Lane carpark Satellite office at Ewart Lane carpark		
Duntroon Street Overbridge, Hurlstone Park	Hurlstone Park Station	Small laydown close to bridge at bin area at the end of Floss St Satellite office at 42 Floss Street carpark area UP COUNTRY side		
Melford Street Overbridge, Hurlstone Park	Between Hurlstone Park Station and Canterbury Station	Small laydown area close to bridge on the DOWN CITY side corner off Hurlstone Ave and DOWN COUNTRY side off Hutton St		

#### Table 4: Location of Work Site and Construction Facilities



Work Site	General Location of Work Site	General Location of Temporary Construction Facilities (inclusive of primary laydown areas)		
Canterbury Road Overbridge, Canterbury		Small laydown area close to bridge Allocated space at JHLOR laydown or Charles St		
Loch Street Overbridge, Campsie	Campsie, between Canterbury Station and Belmore Station	Small laydown close to bridge in rail corridor at Lilian Ln DOWN COUNTRY side corner OR Belmore triangle		
Burwood Road Overbridge, Belmore	Belmore Station	Small laydown close to bridge in rail corridor at the end of Tobruk Ave commuter carpark on CITY side Main office location along Bridge Bd at the		
		end of Marie Ln		
Moreton Street Overbridge	Between Belmore Station and Lakemba Station	Small laydown close to bridge in rail corridor at the corner of Peel St and The Boulevarde and corner Railway Pde and Moreton St		
Haldon Road Overbridge,	Lakemba Station	Small laydown close to bridge in rail corridor at:		
Lakemba		- The corner of The Boulevarde and Dennis St DOWN CITY side		
		<ul> <li>The corner of Haldon St and The Boulevarde city &amp; country sides</li> </ul>		
		- The corner of Haldon St and Railway Pde city & country sides		
King Georges Road Overbridge, Wiley Park	Wiley Park Station	Small laydown close to bridge in rail corridor at the corner of The Boulevarde and Kathleen St, DOWN side		
Punchbowl Road Overbridge, Punchbowl	Punchbowl Station	Small laydown close to bridge in rail corridor at: - The corner of Urunga Pde and Dudley St OR at the corner of The Boulevarde and Dudley St		
		- Loder Lane, Punchbowl		
		Satellite office at the corner of Urunga Pde and Dudley St OR at the corner of The Boulevarde and Dudley St.		
Stacey Street Overbridge, Bankstown	Between Punchbowl Station and Bankstown Station	Small laydown close to bridge in rail corridor at South Terrace carpark area DOWN COUNTRY side or North Terrace UP COUNTRY side		
		Area in vicinity of bridge bearings		
		Satellite office at South Terrace carpark area DOWN COUNTRY side.		
Various sections along perimeter of southwest corridor	Between Marrickville Station and Bankstown Station			

# 3.3 Construction Scope of Works

The construction scope of works at each worksite most visible to external stakeholders includes the elements listed in

Table 6. The main risks to visual amenity associated with those construction activities are described in further detail within Section 4.

## **3.4 Sensitive Receivers**

Surrounding residences, recreation areas and public gathering points are locations of potential sensitivity to visual amenity impacts. Sensitive receivers near each work site include those listed in Table 4.

Table 5: Potentially Sensitive Locations Surrounding Each Work Site

Work Site	Locations of Potential Sensitivity
Illawarra Road Overbridge / Marrickville Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> <li>Retail shops along Illawarra Road</li> </ul>
Livingston Road Overbridge / Marrickville	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> <li>Retail shops along Livingston Road</li> </ul>
Albermarle Street Overbridge / Marrickville	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>
Wardell Road Overbridge / Dulwich Hill Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Retail shops along Wardell Road and Dudley Street</li> <li>Dulwich Hill light rail stop</li> <li>Pedestrian paths, including on the Wardell Road overbridge</li> </ul>
Garnet Street Overbridge / Hurlstone Park	<ul> <li>Dulwich Hill Childcare Centre and residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>
Duntroon Street Overbridge / Hurlstone Park Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Commercial/retail areas on Floss Street, Duntroon Street and Crinan Street</li> <li>Pedestrian paths, including on the Duntroon Street overbridge</li> </ul>
Melford Street Overbridge / Hurlstone Park	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>
Canterbury Road Overbridge / Canterbury Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>



Work Site	Locations of Potential Sensitivity			
	Commercial/retail areas on Canterbury Road			
Loch Street Overbridge / Campsie	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>			
Burwood Road Overbridge / Belmore Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> <li>Commercial/retail areas on Burwood Road, Bridge Road, Tobruk Avenue, and Redman Parade</li> </ul>			
Moreton Street Overbridge / Lakemba	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> </ul>			
Haldon Street Overbridge / Lakemba Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> <li>Commercial/retail areas on Haldon Street, The Boulevard and Railway Parade</li> </ul>			
King Georges Road Overbridge / Wiley Park Station	<ul> <li>Residents on surrounding streets with views of the construction area including Wiley Park Public School and Wiley Park Girls High School</li> <li>Residents and retail premises on King Georges Road</li> </ul>			
Punchbowl Road Overbridge / Punchbowl Station	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Retail premises on Punchbowl Road, The Boulevarde and Breust Place</li> <li>Pedestrian paths, including on the overbridge</li> </ul>			
Stacey Street Overbridge / Bankstown	<ul> <li>Residents on surrounding streets with views of the construction area</li> <li>Pedestrian paths, including on the overbridge</li> <li>Retail premises on Stacey Street, Wattle Street, North Terrace and South Terrace</li> </ul>			



# **4 MAIN RISKS TO VISUAL AMENITY**

Risks are associated with certain aspects of construction which could adversely impact visual amenity. Poor site management can result in physical effects on and offsite. Effects such as sediment laden runoff, erosion, construction rubbish, tracking of mud and dirt on public areas (roads, footpaths etc.), dust and fumes - all can reduce visual amenity. The main construction aspects that are a risk to visual amenity are described in Table 5. Potential impacts will be managed via implementation of management measures detailed in Section 5.

Aspect	Description/Potential impact
Vegetation	Trimming and tree removal will change local amenity removing screening and green, vegetated character within the rail corridor. In particular the loss of mature street trees that providing screening and amenity, particularly in the vicinity of stations. Minimising impact to trees is a key obligation incorporated into the construction contract.
Damage to heritage buildings	Adverse/unintended impacts to heritage buildings during the construction phase would adversely affect local visual amenity. Each worksite includes heritage buildings which contribute to local visual amenity. All six stations are listed on RailCorp's Section 170 Heritage and Conservation Register, and (with the exception of Dulwich Hill) are also identified as heritage items under local environmental plans (LEPs). The most significant heritage listing is Belmore Railway Station Group which is included on the State Heritage Register (SHR) for, amongst other matters, its aesthetic significance.
Traffic and Transport	There will be a visible increase in traffic during construction as vehicles access the worksite, increasing congestion on local roads.
Erosion and Sediment Control	Poor site management can lead to erosion of exposed soils within the worksite, runoff of sediment laden water offsite into local streets and drainage lines, and tracking of mud and dirt on to public areas (roads, footpaths, etc).
Dust and fumes	The generation of dust and exhaust emissions from construction equipment and vehicles (including haulage vehicles) reduces visual amenity.
Cluttered signage	Potentially, a large number of signs could be required to be installed during the construction phase. Increased and haphazard signage associated with construction can create visual clutter surrounding the worksite.
Lighting	Lighting of night works (in particular lighting towers), lighting from beacons, and lighting from construction vehicle headlights, would occur in close proximity to residential areas. Poorly installed and managed construction lighting could cause light spill which may adversely affect residents.
Temporary Structures	Poor siting of temporary compounds, amenities, fencing and hoarding can visually impact the surrounding area and affect sensitive sightlines. Poorly maintained external hoardings, fencing and fixtures can be unsightly.

#### **Table 6: Summary of Visual Amenity Aspects, Potential Impacts**



Stockpiles	The generation and storage of site materials can be unsightly if not appropriately managed.	
Weeds	Weeds result in a messy and unattractive façade to the worksite	
Litter/waste	Litter and waste generated within the worksite, if not appropriately collected and stored, can blow into public areas. Location of waste collection points is also a potential visual impact.	
Vandalism	Temporary hoardings, fencing and buildings can be vandalised	
Worksite untidiness	The construction worksite has the potential to become messy and unsightly through poor site management.	



# **5 VISUAL AMENITY MANAGEMENT MEASURES**

Impacts to visual amenity during construction will be managed through implementation of the commitments, conditions of approval and mitigation measures detailed in the SWM project compliance documents listed in Section 2.5. These commitments and the management measures to address them are listed in Table 6. The Proponent (Sydney Metro) have developed plans that have addressed several of these requirements. References to relevant plans, guidelines or standards that provide more detailed measures to be implemented during construction, are included in the table. The success of this VAMP is contingent on the successful implementation of all SWM Project plans and measures that affect visual amenity.

Table	7:	Mitigation	Measures
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Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
Timing and site	REMM LV10	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.	Project Manager, Environment Manager	Requirements to address site demobilisation and remediation are provided in Section 6.
finishing	REMM LV11	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.	Project Manager, Environment Manager	Implement visual mitigation measures as soon as feasible and reasonable after the commencement of construction and remain for the duration of the construction period. Following completion of construction works, site reinstatement must be progressively undertaken.
Tree management	CoA E5	The Proponent must commission an independent experienced and suitably qualified arborist, to prepare a comprehensive Tree Report(s) before removing any trees as detailed in the documents listed in Condition A1. The Tree Report may be prepared for the entire CSSI or separate reports may be prepared for individual areas where trees are required to be removed. The report(s) must identify the impacts of the CSSI on trees and vegetation within and adjacent to the Construction footprint. The report(s) must include:	Project Manager, Environment Manager	Implement Sydney Metro's approved Tree Report prepared in accordance with CoA E5.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		(a) assess compliance with the requirements of this approval		
		(b) a description of the conditions of the tree(s) and its amenity and visual value		
		(c) consideration of all options to avoid tree removal, including relocation of services, redesign or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and		
		(d) measures to avoid the removal of trees or minimise damage to existing trees and ensure the health and stability of those trees to be protected. This includes details of any proposed canopy or root pruning, root protection zone, excavation, site controls on waste disposal, vehicular access, storage of materials and protection of public utilities.		
		A copy of the report(s) must be submitted to the Planning Secretary before the removal or pruning of any trees, including those affected by site establishment Work. All recommendations of the report must be implemented by the Proponent, unless otherwise agreed by the Planning Secretary.		

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
	REMM LV4	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.	Design Manager, Project Manager, Environment Manager	Implement Sydney Metro's approved Tree Management Strategy.
	REMM LV12	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	Project Manager, Environment Manager	Implement protection of trees to be retained in accordance with Australian Standard AS4970- 2009 Protection of trees on development sites and Sydney Metro's approved Tree Management Strategy.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		by a tree report prepared by a qualified arborist.		
Site layout	CEMF 5.2 a ii	Site Layout a. Principal Contractors will consider the following in the layout of construction sites; ii The location of site access and egress points in relation to noise and light sensitive receivers, especially for site proposed to be utilised 24 hours per day	Project Manager, Environment Manager	Refer to potentially sensitive receivers in Table 3. Avoid sensitive receivers where feasible when locating site access and egress points
Temporary fencing, hoardings / boundary screening / noise barriers	CoA A20	Boundary screening must be erected around all ancillary facilities that are adjacent to sensitive receivers for the duration of construction of the CSSI unless otherwise agreed with relevant council(s), and affected residents, business operators or landowners.	Project Manager, Environment Manager	Implement the design of temporary construction facilities in accordance with Sydney Metro's detailed design selection, including colour, size and material. As a general principle, a colour that is recessive in comparison to the location background colours would reduce visual prominence. However, it may be the intent that temporary facilities are a feature and include public art work. The specifics for design are to be in general and with Sydney.
	CoA A21	Boundary screening required under Condition A20 of this approval must minimise visual noise and air quality impacts on adjacent sensitive receivers.	Project Manager, Environment Manager	
	REMM LV6	The selection of materials and colours for noise barriers and hoardings would aim to minimise their visual prominence.	Project Manager, Environment Manager	Metro's detailed design. The following general principles are provided to guide facility selection:
	REMM LV 7	The use of transparent panels in noise barriers would be considered where views to	Project Manager,	Boundary screening:

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		local landscape features and district views would be obstructed.	Environment Manager	<ul> <li>select print with heritage images of the station or images relevant to the locality (subject to approval by Sydney</li> </ul>
	CEMF 4.4 a	<ul> <li>a. Principal Contractors will ensure as a minimum:</li> <li>i. Temporary construction works including site hoardings and acoustic sheds consider urban design and visual impacts, including:</li> <li>Artwork, graphics and images to enhance the visual appearance of temporary works in high visibility locations;</li> <li>Project information to raise awareness on benefits, explain the proposed works at each site and provide updates on construction progress;</li> <li>Community information, including contact numbers for enquiries / complaints;</li> <li>Signage and information to mitigate impacts on local businesses which may be obscured by the construction site;</li> <li>Sydney Metro advertising / public awareness campaigns; and</li> <li>logos / branding, including Sydney Metro, NSW Government, and Contractor branding.</li> </ul>	Project Manager, Environment Manager	<ul> <li>locality (subject to approval by Sydney Metro)</li> <li>consult with council to incorporate digital images of local artworks onto boundary screening at entry points to stations or other highly visible locations (or in response to persistent graffiti as per REMM LV13)</li> <li>screening material to be of a good quality, in particular, near station entrances and residences.</li> <li>Fencing:         <ul> <li>Fences installed to be of a good quality, in particular, near station entrances and residences, and not be chipped or in need of repair.</li> <li>Remove graffiti associated with vandalism promptly from construction hoardings.</li> <li>If hoardings include signage, avoid placement of construction signs</li> </ul> </li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
	CEMF 4.4 b	The design of all temporary works will require TfNSW approval in relation to urban design and visual impacts.	Design Manager, Project Manager	<ul> <li>opposite sensitive receivers (residents) and retail premises if avoidable.</li> <li>Ensure that project information included in boundary screening and</li> </ul>
		The design and maintenance of construction compound hoardings would aim to minimise visual amenity and landscape character impacts. Graffiti would be removed promptly,	Project Manager, Environment Manager	fencing is located close to the station entrances at accessible points of public access. Project information may include:
		and public art opportunities would be considered.		<ul> <li>An explanation of the benefits of proposed works and updates on construction progress.</li> </ul>
	REMM LV13			<ul> <li>Community information, including contact numbers for enquiries / complaints.</li> </ul>
				<ul> <li>Sydney Metro advertising / public awareness campaigns</li> </ul>
				- Logos / branding, including Sydney Metro, NSW Government, and Contractor branding.
				<ul> <li>Ensure local businesses are not obscured by boundary screening or fencing (unless unavoidable). If obscured, provide signage and information for local businesses to direct customers to the business.</li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				<ul> <li>Ensure signage is visible to foot traffic and has been discussed and agreed with the local business.</li> </ul>
				General measures to avoid clutter of signage include:
				<ul> <li>Grouping messages on a single sign if possible and relevant, rather than installing multiple signs</li> </ul>
				- Grouping multiple signs in similar localities if possible and relevant, rather than spreading out over a wider area
				In addition, implement Crime Prevention Through Environmental Design (CPTED) actions regarding signage:
				- Install signage to clearly designate areas for no public access, as required
				- Clearly demarcate entrances to the construction site and ensure pedestrian routes do not mistakenly lead into the construction site or into unsafe areas without natural surveillance

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				<ul> <li>Install clear gate signage for heavy/light vehicle traffic.</li> </ul>
Temporary construction compounds	CoA A16	Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 can only be established and used in each case if: (a) they are located within the Construction boundary of the CSSI; and (b) they are not located next to a sensitive receiver (including access roads) (unless landowners and occupiers have accepted in writing the carrying out of the relevant facility in the proposed location); and (c) they have no impacts on heritage items (including areas of archaeological sensitivity), and threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and (d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.	Project Manager, Environment Manager	<ul> <li>Locate construction compounds in the approved locations or in locations meeting the criteria identified in CoA A16 and or approved in accordance with CoA A17 (noting the requirement for consultation with sensitive receivers as part of the assessment for both A16 and A17) including constructing ancillary facility access roads and providing utilities.</li> <li>Implement the principles of Crime Prevention Through Environmental Design (CPTED) in the design and construction of temporary site facilities:</li> <li>Ensure the temporary boundary fence or hoarding between the construction area and public areas, clearly demarcates the construction site and communicates to the public that the worksite is not for public access</li> <li>Orientate and locate temporary fences and hoarding so that natural sightlines within public spaces are not blocked and do not create pockets of poor visibility.</li> </ul>
	CoA A17	Ancillary facilities that are not identified by description and location in the documents listed in Condition A1 and do not meet the	Project Manager,	<ul> <li>Check users of the public space can see, and be seen by, others</li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		requirements of Condition A16, can only be established and used with the approval of the Planning Secretary except where they are located within the rail corridor, in which case they may be endorsed by the ER. A review of environmental impacts must be submitted with the request for Planning Secretary's approval or ER's endorsement.	Environment Manager	<ul> <li>Where solid hoarding is not required, install screening along boundary fences that allow filtered views in, and out, of the construction site.</li> </ul>
	CoA A19 (b)(ii)	Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1, can be established where they satisfy the following criteria: (b) have been assessed by the ER to have – (i) minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts,	Project Manager,	Provide a risk assessment and evidence of consultation with impacted sensitive receivers (as required) for approval by the ER of proposed locations of lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1. If assessed and approved by the ER to have minor amenity impacts, the facilities can be established.
	REMM LV14	The selection of materials and colours would aim to minimise their visual prominence.	Design Manager, Project Manager, Environment Manager	Implement the design of temporary construction facilities in accordance with Sydney Metro's detailed design selection, including colour, size and material. As a general principle, select a colour for that is recessive in comparison to the location

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				background colours. Dark colours, such as dark grey or green are usually appropriate.
	CEMF 12.2 a iii	<ul> <li>a, Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum:</li> <li>The maintenance of outward facing elements of site hoarding or noise barriers, including the removal of graffiti and weeds;</li> </ul>	Project Manager, Environment Manager	<ul> <li>Implement the following good housekeeping to keep the site orderly and tidy, and reduce potential visual amenity impacts;</li> <li>Ensure materials and equipment are stored within designated areas within the bounds of the construction site</li> <li>Remove litter, scrap materials and debris</li> </ul>
Maintenance	CEMF 4.4 c	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.	Project Manager, Environment Manager	<ul> <li>from around the construction site perimeter</li> <li>Locate waste collection points out of view of residents and behind screening elements within the construction site</li> <li>Remove graffiti as soon as practicably possible from time of reporting. For offensive graffiti, graffiti will be removed within four hours on a business day, and within eight hours on a non-business day .</li> <li>Replace boundary screening and hoarding if it becomes damaged, badly worn or discoloured or is otherwise unsightly.</li> <li>Remove weeds from the construction sites and compounds.</li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				Regular inspections of hoardings, scaffolding and acoustic sheds would be undertaken in accordance with details provided in Section 7.1.
Weeds	REMM B7	Priority weeds would be managed in accordance with the Biosecurity Act 2015. Weeds of national environmental significance would be managed in accordance with the Weeds of National Significance Weed Management Guide.	Project Manager, Environment Manager	<ul> <li>Remove weeds from the construction sites and compounds</li> <li>Remove priority weeds in accordance with the Biosecurity Act 2015.</li> <li>Remove weeds of national environmental significance in accordance with the Weeds of National Significance Weed Management Guide.</li> </ul>
CPTED	CEMF 4.4 d	The principles of Crime Prevention Through Environmental Design will be applied to all works, including temporary works, that have a public interface.	Project Manager, Environment Manager	Implement the principles of Crime Prevention Through Environmental Design (CPTED) throughout the design and construction of temporary and permanent facilities. Apply the following measures which reflect CPTED's
	CEMF 12.2 a v	A Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum: v. Identify the processes and procedures that will be used for the incorporation of the principles of Crime Prevention Through Environmental Design (CPTED) in the design and construction of any temporary site facilities	Project Manager, Environment Manager	<ul> <li>four key strategies:</li> <li>Territorial re-enforcement:         <ul> <li>Install and maintain a clearly visible temporary boundary fence or hoarding between the construction area and public areas to clearly demarcate the construction area and to communicate to people that the worksite is not for</li> </ul> </li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				public access - they should not enter the construction area.
				<ul> <li>Clearly define and designate areas with respect to their intended use, e.g. ensure clear signage for no public access</li> </ul>
				Surveillance
				<ul> <li>Orientate and locate temporary fences and hoarding so that natural sightlines within public spaces are not blocked and do not create pockets of poor visibility. Check users of the public space can see, and be seen by, others.</li> </ul>
				<ul> <li>Where solid hoarding is not required, install screening along boundary fences that allow filtered views in, and out, of the construction site</li> </ul>
				Access control
				<ul> <li>Ensure there are clear external routes for pedestrians to safety navigate around the construction site with good connection to existing pathways and good natural surveillance.</li> </ul>
				<ul> <li>Clearly demarcate entrances to the construction site and ensure</li> </ul>

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
				pedestrian routes do not mistakenly lead into the construction site or into unsafe areas without natural surveillance o Clear gate signage for heavy/light vehicle traffic
				<ul> <li>Check tree overhang and other potential climbing features around the construction site perimeter to reduce appeal of climbing over external fencing into the construction site.</li> </ul>
				Space/activity management
				<ul> <li>To show the worksite is actively managed and in use, undertake housekeeping measures around the construction perimeter (such as weed control and graffiti removal)</li> </ul>
Lighting	REMM LV15	Lighting of work areas, compounds and work sites would be oriented to minimise glare and light spill impact on adjacent receivers.	Project Manager, Environment Manager	Implement the principles of Australian Standard 4282-1997 Control of the obtrusive effects of outdoor lighting for temporary site lighting, for security purposes or night works.
	CEMF 12.2 a iv	A Principal Contractors will develop and implement a Visual Amenity Management Plan for temporary works which will include as a minimum:	Project Manager, Environment Manager	towards the work area to minimise light spill impacts onto adjacent sensitive receivers. Light only the object or area intended to avoid 'over' lighting.
		iv. Apply the principles of Australian Standard 4282-1997 Control of the obtrusive effects of		Switch lights off when not required.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		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		
	CoA E54	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	Design Manager, Project Manager, Environment Manager	
Utilities work	CoA E71	A Utilities Management Strategy must be prepared and implemented in line with the Utilities Management Framework, provided as Appendix H of the SPIR for all utility Work. The Strategy must identify how utility Work will be defined and managed.	Project Manager, Utilities Coordinator	Implement the approved Utilities Management Strategy to manage dust, traffic and lighting impacts associated with utility work.
		The Utilities Management Strategy must include:		
		consistent with the transport planning principles identified in the EIS;		

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		(f) the functions of the Utility Coordination Manager as required by Condition E72;		
		(g) a description of all utility Work to be undertaken; and		
		(h) management measures to be implemented to manage dust, noise, traffic, access and lighting impacts associated with utility Work.		
		The Utilities Management Strategy must be submitted to the Planning Secretary for approval at least one (1) month before the commencement of utility Work.		
Protection of heritage buildings	SPIR NAH16	All retained heritage buildings, structures, fabric and moveable heritage items would be protected to avoid damage during works in the vicinity of these items, including from vibration. Retained significant buildings or elements susceptible to damage would be protected by hoardings or screens.	Project Manager, Environment Manager, Heritage Specialist	Implement measures for protection of heritage items in accordance with the Heritage Plans. Ensure work is undertaken by skilled tradespeople with experience working on heritage sites, in consultation with an appropriately qualified conservation heritage architect.
	SPIR NAH20	All works to conserve, protect or remove significant heritage fabric would be undertaken by skilled tradespeople with experience working on heritage sites, in	Project Manager, Environment Manager,	

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		consultation with an appropriately qualified conservation heritage architect.	Heritage Specialist	
Dust and fumes	CoA E2	In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all reasonably practicable measures must be implemented to minimise the emission of dust and other air pollutants during the Construction and Operation of the CSSI.	Project Manager, Environment Manager	Implement the Air Quality Management Procedure* as detailed in the CEMP prepared in accordance with REMM AQ1. *In the case of EHVMT, an Air Quality Management Plan is not applicable.
	REMM AQ1	An air quality management plan would be prepared and implemented during construction, to define the measures to minimise air quality impacts during construction.	Project Manager, Environment Manager	
Traffic congestion	REMM TC8	<ul> <li>A construction traffic management plan would be prepared and implemented prior to construction. The plan would be prepared in accordance with the Construction Environmental Management Framework, and would detail, as a minimum:</li> <li>how traffic would be managed when construction works are being carried out</li> <li>the activities proposed and their impact on the road network and on road users</li> </ul>	Project Manager, Traffic Engineer, Environment Manager	Implement the construction traffic management plan prepared in accordance with REMM TC8.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		<ul> <li>how these impacts would be addressed</li> </ul>		
	REMM TC13	<ul> <li>Construction vehicles (including contractor staff vehicles) would be managed to:</li> <li>minimise parking or queuing on public roads</li> <li>minimise use of residential streets to gain access</li> <li>to work sites or compounds</li> <li>minimise vehicle movements near schools, particularly during school start and finish times.</li> </ul>	Project Manager, Traffic Engineer, Environment Manager	
	REMM TC15	Construction sites would be managed to minimise construction worker parking on surrounding streets. A worker car parking strategy would be developed in consultation with the relevant local council to identify measures to reduce the impact on the availability of on street and off-street parking. The strategy would identify potential mitigation measures including alternative parking locations. The strategy would encourage contractor staff to: • use public transport	Project Manager, Traffic Engineer, Environment Manager	Implement the worker car parking strategy prepared in accordance with REMM TC15.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		<ul> <li>car share</li> <li>park in a designated off-site area and access construction sites via shuttle bus.</li> </ul>		
Off-site evidence of erosion and run-off	CEMF 15.2a	<ul> <li>Principal Contractors will develop and implement a Soil and Water Management</li> <li>Plan for their scope of works. The Soil and Water Management Plan will include as a minimum:</li> <li>Management measures to be used to minimise surface and groundwater impacts, including identification of water treatment measures and discharge points, details of how spoil and fill material required by the SSI will be sourced, handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events</li> </ul>	Project Manager, Environment Manager	The preparation of Soil and Water Management Plan is out of scope for this Project. Groundwater and Waste & Spoil Procedures as detailed in Appendix E of the CEMP will be implemented as well as erosion and sediment control measures in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2A (DECC, 2008).
	CoA E38	All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise water pollution. When implementing such controls, any relevant guidance in the Managing Urban Stormwater series must be considered.	Project Manager, Environment Manager	

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
	REMM SC1	Erosion and sediment control measures would be implemented in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) and Managing Urban Stormwater: Soils and Construction Volume 2A (DECC, 2008). Measures would be designed as a minimum for the 80th percentile, five-day rainfall event.	Project Manager, Environment Manager	
Inspections	CEMF 12.2 b	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 site lighting.	Project Manager, Environment Manager	Refer to Section 7.1 for inspection requirements.
Complaints	CoA B5	A Complaints Management System must be prepared and implemented before the commencement of Work and maintained for the duration of Construction and for a minimum for 12 months following completion of Construction of the CSSI.	Project Manager, Community Manager	Complaints management is referred to at Section 7.4
Compliance records	CEMF 12.2 a vi	<ul> <li>Principal Contractors will develop and implement a Visual Amenity Management</li> <li>Plan for temporary works which will include as a minimum:</li> <li>Compliance record generation and management.</li> </ul>	Project Manager, Environment Manager	Refer to Section 7.6 for compliance records requirements.

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
	CEMF 12.2 c	The Contractor will retain compliance records of any inspections undertaken in relation to visual and landscape measures.	Project Manager, Environment Manager	
	REMM LV16	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.	Project Manager, Environment Manager	<ul> <li>Refer to Section 6 for site reinstatement and restoration requirements. As a minimum, reinstatement will include the following:</li> <li>The Principal Contractor will clear and clean all working areas and accesses at project completion</li> </ul>
Site finishing and stabilisation	REMM LU4	Temporary use areas, including public open space, would be restored to their preexisting condition (as a minimum) as soon as practicable following completion of construction. This would be undertaken in consultation with the relevant council and/or the landowner.	Project Manager, Environment Manager	<ul> <li>At the completion of Construction all plant, temporary buildings or vehicles not required for the subsequent stage of Construction will be removed from the site</li> <li>All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better, and</li> <li>Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of Construction.</li> </ul>
Tree replacement	CoA E7	The Proponent must submit to the Planning Secretary a report which details the type, size, number and location of replacement trees. The report must demonstrate how any	Project Manager, Environment Manager	Implement Sydney Metro's approved Tree Replacement Report prepared in accordance with CoA E7

Issue	Approval Condition	Visual Amenity Requirement	Responsibility	Compliance
		replacement plantings with a pot size less than 75 litres are consistent with the requirements of Condition E6.		
Landscaping	CoA E57	Station Design and Precinct Plans must be prepared by a suitably qualified and experienced person(s) in consultation with the relevant council(s), the community and affected landowners and businesses or a representative of the businesses. A station precinct is defined as an area within 200 metres radius of a station, or beyond for the purposes of connecting pedestrian and cycle paths from stations to existing or planned future pedestrian and cycle paths. The Station Design and Precinct Plans must include:  (c) Landscaping (i) areas of vegetation to be retained and proposed planting and seeding details, including the use of local indigenous species for revegetation activities, (ii) details of strategies to rehabilitate, regenerate or revegetate disturbed areas and successfully establish and maintain the resulting new landscape	Design Manager, Project Manager	Implement Sydney Metro's approved Precinct Plans prepared in accordance with CoA E57

# **6 SITE DEMOBILISATION**

## 6.1 Construction Removal and Stabilisation

Reinstatement and restoration of work areas would be undertaken progressively once works are complete in any locations, and disturbed areas would be left in an improved state. In accordance with Section 3.14 of the CEMP, on completion of the works, any areas disturbed by construction activities (such as areas for site compounds, material storage, access and haul roads and the provision of the Principal's Project accommodation) will be reinstated and restored in accordance with consultation with Sydney Metro, the community and stakeholders.

## 6.2 Reinstatement Works

Details of strategies to rehabilitate, regenerate or revegetate disturbed areas and successfully establish and maintain the resulting new landscape are provided in the landscape design of the project (prepared by a suitably qualified and experienced person) which was developed as part of the detailed design and identified in Sydney Metro's approved Station Design and Precinct Plans. The Station Design and Precinct Plans (prepared in accordance with CoA E57) were prepared by a suitably qualified and experienced person in consultation with the relevant council(s), community, affected landowners and businesses. The plans include:

- Detailed consideration of integration and continuity with urban design and landscape outcomes
- The design of landform and earthworks
- Visual screening requirements
- Areas of vegetation to be retained and proposed planting, detailing strategies to rehabilitate disturbed areas and successfully establish and maintain the resulting new landscape.

As a minimum, reinstatement will include the following:

- The Principal Contractor will clear and clean all working areas and accesses at project completion.
- At the completion of Construction all plant, temporary buildings or vehicles not required for the subsequent stage of Construction will be removed from the site.
- All land, including roadways, footpaths, loading facilities or other land having been occupied temporarily will be returned to their pre-existing condition or better, and
- Reinstatement of community spaces, infrastructure and services will occur as soon as possible after completion of Construction.

## 6.3 Landscape Maintenance and Remedial Actions

Detailed requirements for landscape maintenance, and timing for routine maintenance, would be in accordance with the Station Design and Precinct Plans. In general, the following would be required at a minimum:

- Checking the condition of grass, trees, and shrubs, while confirming presence of weeds
- Checking slope failure or erosion
- Undertake remedial actions as required, including replacing dead/dying plants, changing plant species if they are performing poorly, stabilising eroding surfaces and removing weeds.

# 7 MONITORING AND REPORTING

## 7.1 Inspections

A visual inspection of each work site is to be undertaken daily. The visual condition within, and immediately surrounding, the worksite is to be reported in the daily inspection sheet. If housekeeping or other visual amenity matters are sighted during the inspection, they must be recorded in the daily inspection sheet and addressed within the proceeding few hours. The daily inspection sheet must note when the matter has been closed out. Copies of the daily inspection sheet must be retained onsite. A visual inspection is also required of construction lighting daily prior to use, and during use, to ensure lighting controls are in place. Conduct weekly environmental site inspections as detailed in the CEMP.

## 7.2 Monitoring

Periodic tracking of compliance the management measures detailed in this VAMP is required at the following points (at a minimum):

- At the end of construction enabling works/prior to commencement of main construction works
- Prior to and immediately following extreme weather events (such as flooding or storms)
- At quarterly intervals during the main construction works
- Prior to completion of finishing works.

Periodic tracking of compliance is to include:

- Daily visual inspection reports (to ensure housekeeping matters are being addressed and closed out in a timely manner)
- Induction (to ensure visual amenity is included and being conducted).

## 7.3 Auditing

Audit EMPs, including this VAMP, as detailed in the CEMP.

## 7.4 Complaints

Handle complaints regarding visual amenity matters as detailed in the CEMP and the complaints management system prepared in accordance with CoA-B5 to B13.

## 7.5 Breaches and Incidents

Visual amenity non-conformances, or breaches of visual amenity management, must be promptly report to the Site Foreman and corrective action undertaken to address the nonconformance or breech must be undertaken in a timely manner. Report incidents as detailed in the CEMP.

#### 7.6 Records

Maintain environmental records, including records of visual amenity inspections (refer to Section 7.1), monitoring, auditing, complaints, breaches, and management measures implemented as a result of an adverse visual impact, in accordance with the CEMP.

#### 7.7 Review

This VAMP is a live document and may require updating over time through the Project continual improvement process. Undertake revision in accordance with the CEMP. Any update must remain consistent with the CoA, REMM and CEMF.





# APPENDIX A – Environmental and Sustainability Statement of Commitment



# Transport Environment and Sustainability Policy

Transport is a key enabler of economic and social activity. We are committed to delivering transport which contributes to economic prosperity and social inclusion in an environmentally responsible and sustainable manner, consistent with the Future Transport Strategy 2056.

Transport for NSW's activities cover the whole State and its infrastructure will last for generations to come. We have a duty to undertake our activities in the interest of the greater good, moving beyond compliance, and being a genuine leader in environment and sustainability performance.

#### We will work towards achieving this for NSW by:

- Leadership contributing to and influencing the strategic environment and sustainability agenda of the NSW Government
- Environmental protection being accountable for addressing and minimising the environmental impacts of our activities to satisfy the expectations and legislative requirements of the NSW Government and community
- Energy and carbon improving energy efficiency and working towards net zero carbon emissions
- Resilience embedding climate risk and resilience considerations in our activities
- Sustainable procurement procuring and delivering sustainable, efficient and cost effective transport options, including responsible supply chains
- Whole of life considering whole of life benefits and impacts from our activities across all life cycle stages - demand/need, plan, acquire, operate/maintain and disposal
- Social recognising the social impacts and benefits of our activities, and working for healthy liveable communities
- Awareness raising the awareness and capacity of our workforce to be accountable for implementing the Policy through their activities to achieve enhanced environmental outcomes and a culture of environmental responsibility
- Communication communicating openly, responsively and empathetically with our customers, partners and stakeholders on environmental matters and report on our performance

Rodd Staples Secretary 13 January 2020

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#### This Policy applies to the agencies listed below:

- Transport for NSW
- Department of Transport
- Sydney Trains
- NSW Trains
- RailCorp
- State Transit Authority
- Sydney Metro

This Policy applies to permanent, temporary and casual staff of the above agencies, staff seconded from another organisation and contingent workers including labour hire, professional services contractors and consultants.

