

## Pre-Construction Minor Works Approval Form

Minor Works are defined as any low impact activities that are undertaken prior to the commencement of ‘construction’ as defined in the project’s applicable planning approval. However, if Minor Works affect or potentially affect heritage items, threatened species, populations or endangered ecological communities, these works are defined as ‘construction’ unless otherwise determined by the applicable planning authority.

Minor Works approvals do not remove any obligation to comply with the project’s applicable planning approval conditions (including requirements prior to ‘any works’ commencing) or obtain any other applicable permits, licenses or approvals as necessary.

This application and all supporting information must be submitted to Sydney Metro/the Environmental Representative as one (1) PDF file at least 10 business days prior to the commencement of the proposed Minor Works.

Part 1: Application	
<b>Contractor:</b>	Martinus
<b>Project:</b>	Southwest Metro
<b>Application Title:</b> (e.g. Smith St trenching works)	Corridor Intrusion Risk Assessment (CIRA) – Canterbury Road overbridge
<b>Application Number:</b>	MWA-MR-008
<b>Application Date:</b>	DRAFT: 24/09/2024 REV A: 25/09/2024
<b>Planning Approval:</b>	The following Planning Approvals apply: <ul style="list-style-type: none"> <li>Sydney Metro City and Southwest Infrastructure Approval SSI-8256 (inclusive of CSSI 8256 MOD 1 determined 22 October 2020 and accompanying updated REMM’s modification report)</li> <li>Sydney Metro City and Southwest – Sydenham to Bankstown – Environmental Impact Statement (EIS)</li> <li>Sydney Metro City and Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report (SPIR) (inclusive of Revised Mitigation Measures: REMM)</li> </ul>
<b>Minor Works Categories:</b> <ul style="list-style-type: none"> <li>Highlight as applicable.</li> <li>If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative.</li> </ul>	<ol style="list-style-type: none"> <li>Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation).</li> <li>Treatment of contaminated sites.</li> <li>Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities.</li> <li>Operation of ancillary facilities that have minimal impact on the environment and community.</li> <li><b>Minor clearing and relocation of vegetation (including native).</b></li> <li>Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments.</li> <li>Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties.</li> <li>Utility relocation and connections.</li> <li>Maintenance of existing buildings and structures.</li> <li>Archaeological testing under the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010) or archaeological monitoring undertaken in association with other Minor Works to ensure there is no impact on heritage items.</li> <li>Any other activities that have minimal environmental impact, including construction of minor access roads, temporary relocation of pedestrian and cycle paths and the provision of property access.</li> </ol>

<p><b>Planning Authority Determination:</b></p> <p>Will the proposed works affect or have the potential to affect heritage items, threatened species, populations or endangered ecological communities?</p>	<p><i>If 'Yes', this completed form must be endorsed by an Environmental Representative, approved by Sydney Metro and submitted to the applicable planning authority to determine that the works are not defined as 'construction'.</i></p> <p>This minor works project involves geotechnical investigations and service location activities, including:</p> <ul style="list-style-type: none"> <li>• Minor clearing of vegetation.</li> </ul> <p>The minor works are considered 'Low Impact Activities' in accordance with Condition A1 of SSI 8256 and minor works category 5. The minor works proposed would have no adverse effects on State Heritage-listed items, areas of potential archaeological significance, threatened species, populations of, or endangered ecological communities. There will be no disturbance or impact on movable heritage items during any phase of the planned works outlined in this application. All environmental constraints have been identified in Environmental Control Maps with associated avoidance and mitigation conditions to ensure the category of Low Impact Activities is adhered to and the environmental, social and economic features and values are protected, retained and conserved.</p> <p>Furthermore, Martinus will adhere to the Sydney Metro Unexpected Heritage Finds Procedure v5.0 and the Sydney Metro Unexpected Finds Contamination and Asbestos Procedure. These protocols will be implemented diligently across all minor works associated with this application, ensuring rigorous environmental and safety controls are in place. A comprehensive summary of compliance measures for corresponding minor works categories is provided below.</p> <p><b>Item 5 – Minor clearing and relocation of vegetation (including native)</b></p> <p>Desktop assessment using aerial imagery and ecological surveys were undertaken to determine impacts to vegetation within the context of the minor works development footprints.</p> <p>As part of the scope of works, three (3) <i>Corymbia maculata</i> (Spotted Gum) saplings will be temporarily removed in order to facilitate the temporary relocation of a bus stop adjacent to Canterbury Station to support the Temporary Transport Management Plan - Sydenham to Bankstown Line 2024 to 2025 Shutdown and associated Planning Approval Consistency Assessment #72 Sydenham to Bankstown – Staging of the Bankstown Station works and extension of the final possession</p> <p>The removal of the three saplings will follow the advice of the our arborist Marc Fisher from ArborScan, of which an advice memo is included within Appendix 3. This advice memo acts as a Tree Report, which has been prepared in accordance with Condition E5 to support this application and will be submitted to the Planning Secretary prior to the temporary relocation.</p> <p>The cavities from the sapling removal will be backfilled with asphalt and hand compacted. Tactiles will then be installed to facilitate the temporary bus stop.</p> <p>Traffic and pedestrian management would have minimal environmental impacts. These temporary impacts and would be managed as per the Traffic Guidance Scheme presented in Appendix 4.</p> <p>The works would involve the redirection of pedestrian paths and temporary traffic management for access and egress through the work site.</p> <p>The scope of works are anticipated to be completed during OOH, and will be subject to an OOHW application due to ROL conditions (Appendix 4). Noise generated from activities to remove trees have been predicted to be below 5dB. The duration of the works is expected to be approximately 1.5 hours.</p>
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**Part 2: Details**

<p><b>Describe the proposed Minor Works:</b> Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).</p>	<p><b>Site Location and Descriptions:</b> In accordance with the Environmental Impact Statement (EIS) approved as part of CSSI 8256 under the Environmental Planning &amp; Assessment Act 1979 and associated Conditions of Approval, the Project area is situated on the footpath on Canterbury Road, adjacent to the southern elevation of No. 2 Charles Street. This building is a mixed-use residential building, with businesses located on ground floor and residential units located above. Canterbury Road is a busy four lane road. The site is also located approximately 45m west of Canterbury Station.</p> <p>This area of Canterbury is a heavily urbanised area and is subject to significant disturbance due to anthropogenic factors. Vegetation is very sparse in this area and primarily is made up of other street trees.</p> <p><b>Heritage</b> The works are located approximately 30m southwest of Canterbury Station (curtilage), which is a State Heritage Listed Item. The works will not affect heritage significant fabric of Canterbury Station (including the overbridge) as the works are located well outside the station's curtilage and there will be no vibration impacts (use of hand tools only). The temporary relocation of the street trees will not cause any visual impacts to Canterbury Station. Trees will be re-planted at the conclusion of the temporary transport arrangements.</p> <p><b>Work methodologies, site location &amp; Heritage Impact Assessment</b> The proposed tree sapling removal, asphalt backfill and installation of tactiles are located within areas outside of the mapped heritage area along the Canterbury Station overbridge. Considering the scope of works is located outside of the mapped area and constitute less of an impact than utility locating, the works are considered to have no 'physical impact' to the heritage curtilage of the Canterbury Road overbridge.</p> <p>Tree sapling excavation would occur to existing paved pedestrian areas which have been historically excavated and resurfaced.</p> <p>In accordance with the definition of Low Works Impact (from SSI8256 Planning Approval), the works would have no 'physical impact' as there would be no altering of the fabric of heritage significance.</p> <p><b>Mitigating Measures</b></p> <ul style="list-style-type: none"> <li>Identified heritage items and areas of archaeological potential should be shown on Environmental Control Maps that are made available on site to inform site contractors.</li> </ul> <p><b>Noise &amp; Vibration</b> CoA E19 defines standard Sydenham to Bankstown hours of work as:</p> <ul style="list-style-type: none"> <li>Monday to Friday 7am to 6pm and Saturdays 8am to 6pm.</li> </ul> <p>The works associated with this Minor Works Approval would all be undertaken outside of construction hours as per CoA E19. Any works planned to occur outside standard work hours must be assessed and approved in advance in accordance with Sydney Metro's approved City and Southwest Out of Hours Works Strategy/Protocol with supporting noise and vibration assessment. An OOHW application has been prepared to support this application.</p> <p><b>Methodologies &amp; Item</b></p> <p><b>Item 5 – Minor clearing and relocation of vegetation (including native)</b></p> <ul style="list-style-type: none"> <li>Only the three <i>Corymbia maculata</i> (Spotted Gum) saplings pictured within the ECM are to be removed.</li> <li>Work crews to be brief and constantly reminded throughout the work shift exactly which trees are being removed.</li> </ul> <p>Traffic and pedestrian management would have minimal environmental impacts. These temporary impacts and would be managed as per the Traffic Guidance Scheme presented in Appendix 4.</p> <p>The works would involve the redirection of pedestrian paths and temporary traffic management for access and egress through the work site.</p>
<p><b>Planned Commencement Date:</b></p>	<p>The minor works scope items planned to commence during OOHW (CoA E20) on the 25<sup>th</sup> of September 2024 between 2030 and 2200.</p>

<p><b>Local Sensitivities:</b> Describe the presence (if any) of local sensitive environmental areas and community receptors</p>	<p>There are a number of residential and commercial properties located within close proximity to the Project site as can be seen within Appendix 1. Due to the proximity of these receivers to the works, these properties may be sensitive to excessive noise.</p> <p>The works specific to this application shall be conducted during OOW between 8:30PM and 10:00PM. Any potential impacts to these properties would be managed in accordance with the Construction Noise and Vibration Strategy, including relevant notifications. There are no vibratory activities associated with the works. Noise is predicted to be less than 5dB for the duration of the works, as only hand tools are permitted to be used. The proposed works would implement the standard construction noise and vibration mitigation measures required on all Sydney Metro projects and delivered via relevant procedures, systems, environmental assessment, and all relevant contract documentation.</p> <p>No areas within the works area potentially contain aboriginal archaeology, known as PADs (Potential Archaeological Deposit) which are located within the EIS study area.</p> <p>Works may occur in the vicinity of local stormwater systems. Localised erosion and sediment controls will be in place at all locations where materials associated with the works may leave the corridor, including via stormwater drainage.</p> <p>Appropriate approvals such as Traffic Guidance Schemes (Appendix 4), must be in place where works on roadways are required.</p> <p>Pedestrian access will be maintained in any area where works are occurring.</p>
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**Part 3: Environmental Risk Assessment and Management**

Prepare an Environmental Risk Assessment (in accordance with the [Sydney Metro Risk Management Standard](#)) and an Environmental Control Map for the proposed Minor Works and attach as Appendix 1.  
If an Environmental Risk Assessment and/or an Environmental Control Map for the proposed Minor Works is/are already contained in existing documentation, attach the relevant section(s) as Appendix 1.

<p><b>Documentation:</b> List any existing documents (including those referenced above) that the proposed Minor Works will be undertaken in accordance with and attach as Appendix 2 (e.g. plans, procedures, etc.).</p>	<ul style="list-style-type: none"> <li>• An Environmental Risk Assessment and ECMs for the proposed works are included in Appendix 1</li> <li>• Community Notifications in Appendix 2</li> <li>• Tree Impact Memo in Appendix 3</li> <li>• Traffic Guidance Schemes in Appendix 4.</li> </ul>
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**Part 4: Workforce Notification**

<p><b>How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce?</b></p>	<p>Prior to any minor works a site induction will be provided to all personnel working on the project site. The induction will include relevant environmental aspects and risks associated with works on the project site.</p>
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**Part 5: Community Consultation**

<p><b>What community consultation has been undertaken already?</b></p>	<p>The Southwest Metro project has been ongoing since 2021 and substantial community consultation has taken place about project activities.</p>
<p><b>What community consultation is planned to be undertaken?</b></p>	<p>Ongoing consultation will occur through the Monthly Community Notice with the addition of the installation of signage to advise the community of any impacts to any parking. The community will be notified of any use of these areas outside of standard construction hours in accordance with the Additional Mitigation Measures specified in the Construction Noise and Vibration Strategy.</p>



If drafted already, attach applicable Community Notification as Appendix 2.

**Part 6: Contact Details**

Nominate contractor's project manager, environmental and communications contact(s).

<b>Name:</b>	[Redacted]	<b>Position:</b>	Project Manger	<b>Phone:</b>	[Redacted]
	[Redacted]		Environment Manager		[Redacted]
	[Redacted]		Communications Manager		[Redacted]

**Part 7: Signature**

This signature acknowledges that the proposed Minor Works will be undertaken in accordance with this application, have minimal environmental impact and are not defined as 'construction' in accordance with the applicable planning approval.

<b>Name:</b>	[Redacted]		
<b>Signature:</b>	[Redacted]	<b>Date:</b>	24/09/2024

## Determination Page

### (Sydney Metro/Environmental Representative Use Only)

12. Endorsement/Approval			
These signatures represent formal endorsement/approval for the proposed Minor Works to commence in accordance with this application and the applicable planning approval requirements (subject to any determination from the applicable planning authority as may be required by the planning approval conditions).			
	Director Project Communications – Endorsement (required for all applications)	Director Environment, Sustainability & Planning – Approval (required for all applications)	Environmental Representative – Endorsement (required as necessary in accordance with the applicable planning approval, optional for all other circumstances)
Signature:			
Name:			
Date:	25/9/2024	25 September 2024	
Comments:	Note that Council's preference to retain the trees is not feasible due to passenger and busing requirements during the Metro shutdown.		<i>Supporting letter attached as Appendix 4 if necessary.</i>
Conditions:	Impacted saplings to be retained and installed at end of project.		<i>Supporting letter attached as Appendix 4 if necessary.</i>
<input checked="" type="checkbox"/>	Approved (by Sydney Metro)		
<input type="checkbox"/>	Endorsed (by Environmental Representative)		
<input type="checkbox"/>	Rejected		

**OFFICIAL**

Metro Body of Knowledge (MBoK)

(Uncontrolled when printed)



## Appendix 1: Environmental Risk Assessment and Environmental Control Maps

<h2>ECM – 8 Canterbury Station</h2>		PCBU / COMPANY DETAILS: Martinus	
		Address: 23 – 27 Waratah St, Kirrawee NSW 2232	
		ABN: 87 155 894 894	Phone no.: 87 155 894 894
PROJECT: Sydenham to Bankstown Corridor Intrusion Risk Assessment		CLIENT / PC DETAILS Name:	
Address: Canterbury Station, Canterbury Rd, Canterbury NSW 2193, Australia	Start date: 25/09/2024	Contact: Luis Barroso	Phone no. 0434 370 740
Document date: 25/09/2024			
Commencement date: 01/05/2024	Completion date: 03/05/2024		
Reviewed by: Phil Matevski			
<b>Work Activity</b>			
<p>The objective of this project is to conduct utility locating activities, including slit trenching and utility scope investigations as well as to perform out-of-hours work as necessary to minimise disruptions and ensure project efficiency.</p>			
<b>SCOPE OF WORK COVERED BY ECM</b>			
<p>This Environmental Control Map (ECM) &amp; document provides instruction relating to environmental requirements for geotechnical investigations. This document incorporates environmental legislative requirements, approval conditions and proponent commitments made during the environmental approvals process as well as sound industry practice.</p> <p>The scope of works includes:</p> <ul style="list-style-type: none"> <li>Removal of three (3) tree saplings and backfilling with asphalt material, making way for a bus stop relocation</li> </ul> <p>The ECM must be updated to reflect any proposed amendments to project approvals, clearing methodology or implemented control measures following risk review. This must then be updated in the relevant work pack and all personnel must resign on to and agree to the changes.</p>			
<b>TIMING</b>			
<p>Works would be carried out during out of hours works.</p> <p>All OOHW would occur in accordance with Sydney Metro CNVS, the Noise and Vibration Construction Management Plan and Heritage Assessment.</p>			
<b>RELEVANT APPROVALS &amp; LICENCES</b>			
<p>The approvals and licences relevant to this ECM include:</p> <ul style="list-style-type: none"> <li>Approved SSI 8256 under the <i>Environmental Planning &amp; Assessment Act 1979</i></li> <li>Minor Works, Pre-construction Minor Works Approval.</li> <li>Sydney Metro Out of hours Works application</li> <li>Canterbury Bankstown Council Road Occupancy Licence</li> </ul>			
<b>PERMITS/NOTIFICATIONS</b>			
<input checked="" type="checkbox"/> Traffic <input checked="" type="checkbox"/> Other: Specify: Minor Works, Pre-construction minor works approval			



**ENVIRONMENTAL CONTROL MAP**
**INSTRUCTION FOR ECM**

Prior to commencing construction, all staff must be inducted as to the requirements of this ECM and all construction activities must adhere to the environmental control measures outlined herein. The ECM must be retained and accessible for the duration of construction works including revised versions. Works will be subject to inspections and approval by Sydney Metro NER/ER and Martinus Environmental Team.

**Environmental high-risk activities (Check any that are applicable to this job)**










	Impacts to soil resources due to soil erosion or contamination from spill or hydrocarbons or other chemicals.		Impacts to <b>water</b> resources (surface and groundwater) due to contamination or excessive water use for construction work		Introduction of <b>invasive plants</b> or <b>animals</b> to the construction site
	Damage to <b>protected vegetation, threatened flora/fauna</b> and their supporting habitat or other ecological values		Damage to sites of <b>cultural heritage</b> significance		<b>Increased traffic</b> in local area due to light and heavy vehicle movements to and from the site
	Environmental harm caused due to poor <b>waste management</b> practices		Nuisance to sensitive receptors and nearby work camps due to <b>emissions</b> from the track construction works		Adverse impact to surrounding environment because of an <b>environmental emergency</b>
	Communications with <b>external parties</b> during construction works		Other: Specify:		

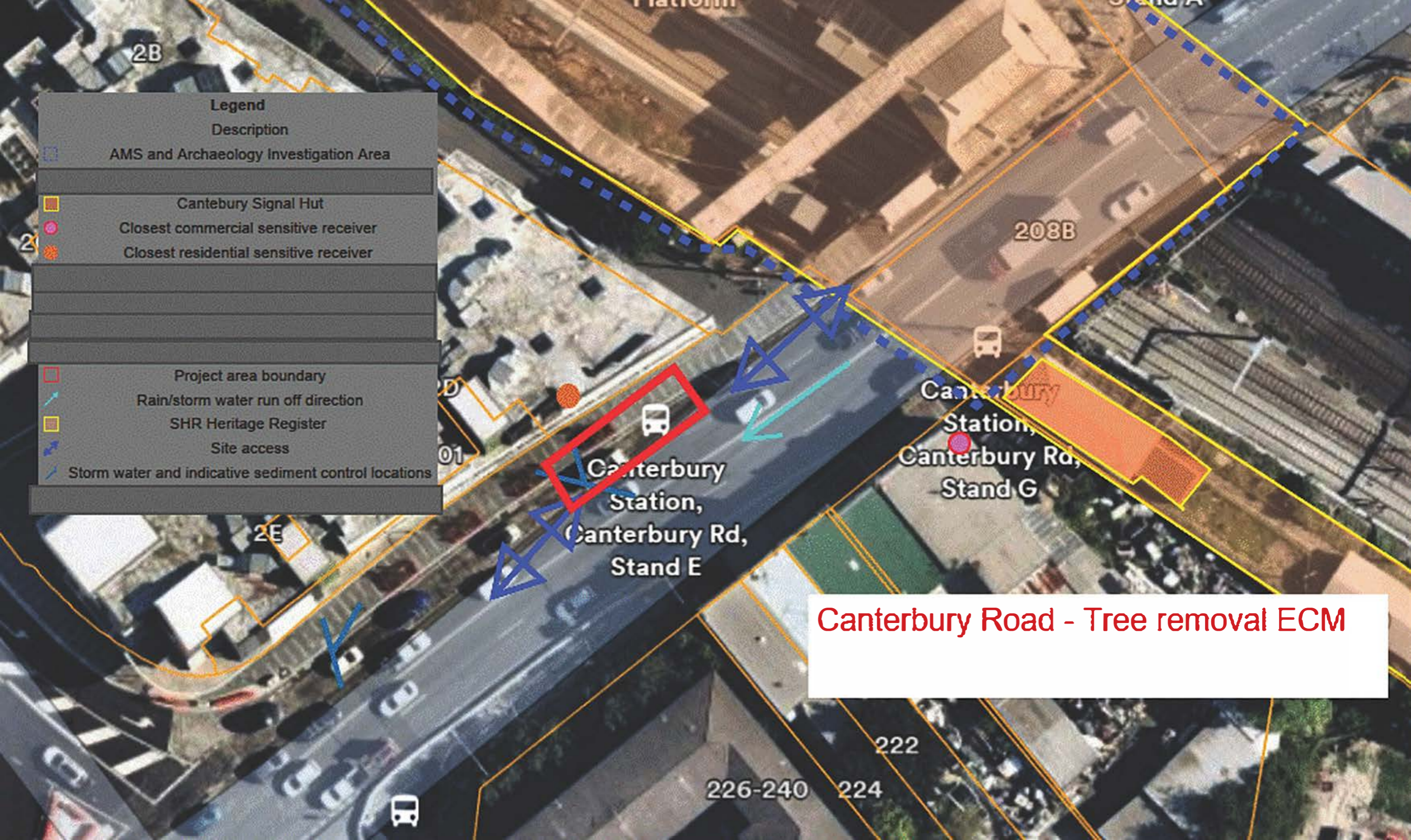
# Environmental Control Map

Revised: 20/03/2024	Authorised By: Arianna Jones	Page 3 of 8
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**Legend**

**Description**

-  AMS and Archaeology Investigation Area
-  Canterbury Signal Hut
-  Closest commercial sensitive receiver
-  Closest residential sensitive receiver
-  Project area boundary
-  Rain/storm water run off direction
-  SHR Heritage Register
-  Site access
-  Storm water and indicative sediment control locations



**Canterbury Road - Tree removal ECM**

ENVIRONMENTAL CONTROL MEASURES					
Key Environmental Risks	Environmental Controls	Timing	Responsibilities	Check	
<b>General</b>	All site personnel to be inducted as to the requirements of this ECM including but not limited to the key environmental risks: <ul style="list-style-type: none"> <li>Heritage</li> <li>Noise and vibration and nearest sensitive receivers</li> <li>Unexpected finds procedure for sensitive areas.</li> </ul>	Minor Works, Pre-construction and during construction	Site Manager, Project Manager, Environmental Manager		
	Pre-start register and toolbox attendance register signed by all site personnel.	Minor Works, Pre-construction	Site Manager, Project Manager, Environmental Manager and all inducted staff		
	Clearly ID and segregate work zones from public as required ensuring no works outside approved project boundary as per SSI 8256 and associated approvals.	During construction	Site Manager		
	Working areas would be maintained, kept free of rubbish and cleaned up at the end of works.	Minor Works, Pre-construction and during construction	Site Manager		
<b>Soil and Water (CoA E8, E9, E38 – E41)</b>	In the event of a pollution incident, cease working in the immediate vicinity and report all spills to the SM. SM is to notify the Environmental Manager, who would then notify NER/ER.	Minor Works, Pre-construction, during construction and post construction	Site Manager, Project Manager, Environmental Manager and all inducted staff		
<b>Erosion and Sediment Controls (CoA E8, E9, E38 – E41)</b>	All erosion and sediment controls will be conducted in accordance with the Blue Book. The following measures are to be implemented:	During construction	Site manager, Environmental Manager and all inducted staff		
	Minimise the disturbance footprint.				
	Minimise the duration of the disturbance, backfill or cover in timely manner.				
	Implement an effective monitoring and maintenance program for the site that includes periodic checks & inspections of all environmental controls.				
	Heavy rainfall controls: <ul style="list-style-type: none"> <li>Monitor the weather forecast for heavy rainfall events</li> </ul>		Site manager		

	<ul style="list-style-type: none"> <li>Undertake risk assessments based on the forecast and site conditions</li> <li>Where appropriate, works will be rescheduled to avoid heavy rain</li> <li>During heavy rain events, exposed areas will be protected to prevent erosion.</li> </ul>			
<b>Heritage (CoA E10 – E17)</b>	All relevant personnel and contractors involved in the Project will be advised of the relevant heritage considerations, legislative requirements and mitigation measures.	Minor Works, Pre-construction and during construction	Site manager, Environmental Manager and Project manager	
	Any heritage items or relics that are uncovered as part of the works will be reported to Sydney Metro as required. Implement Sydney Metro Unexpected Finds Procedure (SM-18-00105232).			
	If unanticipated archaeological deposits are identified within the project site during construction: <ul style="list-style-type: none"> <li>Stop work immediately</li> <li>Notify EM, SM and PM</li> <li>Notify the Heritage Advisor</li> <li>Notify Sydney Metro</li> <li>Do not recommence work without explicit approval to do so.</li> </ul> If unforeseen Aboriginal objects are uncovered during construction: <ul style="list-style-type: none"> <li>Stop work immediately</li> <li>Notify EM, SM and PM</li> <li>Notify the Heritage Advisor</li> <li>Notify Sydney Metro</li> <li>Do not recommence work without explicit approval to do so.</li> </ul>			
	In the event human remains are found, work would cease, the site would be secured and the NSW Police and Heritage NSW would be notified. Where required, further archaeological investigations and an Aboriginal Heritage Impact Permit would be obtained prior to works recommencing at the location.			
<b>Noise and Vibration (CoA E18 – E37)</b>	Staff are to be inducted as to the requirements outlined in the respective OOHW approval for this scope of works (CIRA – OOHW #9).	Minor Works, Pre-construction	Site manager, Environmental Manager and Project manager	
	Staff are expected to: <ul style="list-style-type: none"> <li>Respect neighbours by refraining from swearing or shouting</li> <li>Minimise noise by using appropriate equipment in good condition</li> <li>Limit engine idling to the necessary minimum</li> <li>Turn off plant when not in active use.</li> </ul>	During construction	All inducted staff	

	Non-tonal reversing/movement alarms such as broadband (nontonal) alarms or ambient noise sensing alarms would be used for all plant used regularly onsite (greater than one day), and for any OOHW.		Site manager, Project manager and all inducted staff	
	Any OOHW would be subject to OOHW approval and will need to be undertaken in accordance with the Approval Conditions.	Minor Works, Pre-construction, during construction and post construction (V monitoring)	Site manager, Environmental Manager and all staff	
<b>Traffic and Pedestrian Management (CoA E46 – E53, E54)</b>	Traffic and pedestrians are to be management in accordance with the Traffic Management Plan (TMP) and/or Traffic Guidance Scheme (TGS).	Minor Works, Pre-construction and during construction	Site manager and Project manager	
	Pedestrians and vehicle movements are to be managed in accordance with approved Project TGS.		Site manager and all inducted staff	
	<u>Parking</u> <ul style="list-style-type: none"> <li>Legal street parking is available within the surrounding locality</li> <li>Construction personnel to utilise legal street parking available within the surrounding locality</li> <li>Plant and machinery is not to be left idling.</li> </ul>		Site manager and all inducted staff	
<b>Air Quality (CoA E2)</b>	Air quality will be periodically monitored (qualitative) for dust leaving the site. If required, additional dust controls will involve scheduling works to avoid high wind events, wetting down of works areas, covering any materials or stockpiles.	During construction	Site manager, Environmental Manager and all inducted staff	

PROJECT CONTACTS		
Position	Name	Contact
Site Manger	Andrew Osborn	0438 977 274
Project Manger	Saves Onal	0400 667 024
Environmental Manager	Phil Matevski	0420 353 980
Sydney Metro Manager	Robel Chowdhury	0481 059 128
Sydney Metro Environmental Manager	Emmanuel Smith	0488 310 438
Construction Response Team	-	1800 755 465
Transport Projects Delivery Office Infoline	-	1800 684 490
Heritage Advisor	Sandra Wallace	(02) 9518 8411
Community Manager	Veronica Smith	0432 021 579
EPA/OEH Pollution Hotline	-	131 555
WIRES	-	1300 094 73
Emergency	-	000

**EMPLOYEE'S ACCEPTANCE**

*We, the undersigned, confirm that we have been consulted on the development and given opportunity to provide inclusions of the ECM nominated above and the details have been explained and clearly understood. We also confirm that our required qualifications to undertake this activity are current. We also clearly understand that the controls in this ECM must be applied as documented, otherwise work is to cease immediately.*

<b>WORKER CONSULTATION, INSTRUCTION AND SIGN OFF</b>			
<b>Date</b>	<b>Name</b>	<b>Employer</b>	<b>Signature</b>



## Environmental risk assessment

This appendix includes a risk assessment for the Project. All relevant environmental issues have been assessed in accordance with the table below:

Risk Assessment Rankings:

- >31 Very High;
- 22 to 30 High;
- 11 to 21 Medium; and
- 1 to 10 Low.

Issues or activities that represent a Very High risk after the application of control measures are not to be undertaken.

### Sydney Metro Consequence Criteria

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

### Sydney Metro Likelihood Criteria and Risk Matrix

	One off event How likely?	Repeated How often?	Likelihood		Consequences										
					C6	C5	C4	C3	C2	C1					
					Insignificant	Minor	Moderate	Major	Severe	Catastrophic Transformational for opportunities					
Probability	Frequency	Expected to occur frequently during time of activity or project. Greater than a 90% chance of occurring.	10 times or more every year	Almost certain	L1	20	22	29	32	34	36				
						Expected to occur occasionally during time of activity or project. A 75-90% chance of occurring.	1-10 times every year	Very Likely	L2	14	18	23	28	31	35
						More likely to occur than not occur during time of activity or project. A 50-75% chance of occurring.	Once each year	Likely	L3	9	12	16	24	27	33
						More likely not to occur than occur during time of activity or project. A 25-50% chance of occurring.	Once every 1 to 10 years	Unlikely	L4	6	7	11	17	25	30
						Not expected to occur during the time of activity or project. A 10-25% chance of occurring.	Once every 10 to 100 years	Very Unlikely	L5	3	4	8	13	19	26
						Not expected to ever occur during time of activity or project. Less than 10% chance of occurring.	Less than once every 100 years	Almost Unprecedented	L6	1	2	5	10	15	21

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
<b>Approvals and Licensing</b>									
Not identifying appropriate approvals, licenses or permits required and proceeding without them	Works delayed, infringements, prosecution, poor community relations and reputational loss.	L4	C4	12	Review the project planning approval and statutory documentation for requirements relevant to the Project. Follow the advice of Subject Matter Experts providing advice to the Minor Works Approval. Check contract documentation. Identify and implement requirements from the Contract. Establish a register of approvals, licenses and permits.	L5	C4	8	Maintain Compliance Risk Matrix
<b>Noise</b>									
Noise from general construction activities resulting in impact to residents	Disturbance to residents or neighbouring businesses. Potential for complaints.	L3	C5	12	Respond to community enquiries and complaints in accordance with Sydney Metro requirements and implement the OCCS. Demobilisation would not occur simultaneously with site clean-up which would use non-powered hand tools.	L5	C5	4	Noise performance will be continually monitored as per the mitigation measures of the Construction Noise and Vibration Impact Statement (CNVIS) for this Minor Works Approval.  The Sydney Metro Construction Noise and Vibration Strategy (CNVS) is to be implemented.  Works would be undertaken during standard construction hours. If scope of works change and OOHW is required, the respective OOHW approval will be applied for separately.
Noise during works required to be undertaken out of standard construction hours	Disturbance to residents or neighbouring businesses with potential for complaints.	L4	C5	7	Carry out works in accordance with OOHW application	L5	C4	7	Works would be undertaken during standard construction hours. If scope of works change and OOHW is required, the respective OOHW approval will be applied for separately.
<b>Water Quality, Erosion and Sedimentation</b>									
Sediment laden runoff from construction works leaving site	Degradation of local watercourses. Increased turbidity in local water ways resulting in impact on aquatic life.	L5	C4	8	Install erosion and sediment controls within the project area to ensure stormwater drains are protected. Ensure measures are inspected and maintained and also prior to and post rainfall events.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
	Fines for sediment escaping site.				Provide training and awareness on the need to prevent pollution. Relevant people to undertake Erosion and Sediment Control training.				
<b>Waste</b>									
Waste disposal during site investigations	Incorrect disposal of waste, further costs incurred for classifications and disposal, fines may be issued.	L3	C5	12	Provide facilities on site for source separation and recycling. Ensure accurate waste records are retained. Removal of wastes from the site would only be undertaken by a licensed contractor as required by the POEO Act and with appropriate approvals, if required, for contaminated materials, etc. All material to be recovered off-site to be appropriately classified in accordance with the Resource Recovery Exemptions. All material that requires off-site disposal to be appropriately tested and classified against the Waste Classification Guidelines (NSW EPA, 2014)	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Monitor and ensure reporting of all movements of waste from the worksite.
<b>Heritage</b>									
Unexpected heritage items encountered.	Work delays, additional studies, approvals required, damage to heritage item.	L4	C4	12	General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps. If suspected heritage item encountered. Works to stop immediately and implement the Sydney Metro Unexpected Heritage Finds Procedure (within this Minor Works Approval).	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Provide frequent toolbox talks on Unexpected Heritage Finds Procedure
Impact to Heritage Items	Damage to heritage fabric of heritage items by Project works	L4	C4	12	General inductions toolbox training on heritage management protocols. Label any known heritage items on Environmental Control Maps.	L5	C4	8	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. Provide frequent toolbox talks on managing change.
<b>Biodiversity</b>									

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
Loss, damage or injury to endangered or threatened species or localised trees within compounds.	Removal, death, damage or injury to endangered or threatened species by plant and equipment	L5	C4	8	Implement the controls within the ECMs within Appendix 1 of this Minor Works Approval. All personnel attending site will be advised of controls and management during the onsite induction. Toolbox talks will be carried out prior to ground disturbance /site clearing works to ensure onsite personnel are made aware of potential loss of endangered species. If threatened flora or fauna species are identified on site, work in the vicinity of these species would stop immediately. (for the purposes of this application this specifically relates to the identified presence of the Ibis and potential habitat trees) spotter/catcher/botanist/ ecologist to be present during fauna removal works in accordance with ecologist advice and mitigation measures.	L5	C5	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition. No native vegetation would be impacted as a result of the works.
Loss, damage or injury to endangered or threatened species.	Removal, death, damage or injury to endangered or threatened species by plant and equipment	L5	C4	8	Implement the controls within the ECMs within Appendix 1 of this Minor Works Approval. All personnel attending site will be advised of controls and management during the onsite induction. Toolbox talks will be carried out prior to ground disturbance /site clearing works to ensure onsite personnel are made aware of potential loss of endangered species. If threatened flora or fauna species are identified on site, work in the vicinity of these species would stop immediately. spotter/catcher/botanist would be engaged to survey the	L5	C5	4	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.
<b>Air Quality</b>									
General Construction works; site establishment	Dust activity in close proximity to residential and	L4	C5	7	Toolbox training on dust and air quality Management.	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

Aspect	Potential Environmental Impact	Initial Rating		Risk	Control Measures	Residual Rating		Risk	Management of Residual Risk
		L x	C			L x	C		
	commercial premises, complaints received.				Provide dust mitigation measures through water sprays/misting as required.				
Exhaust from plant and equipment.	Emissions resulting in air pollution.	L4	C5	7	Inductions and toolbox training on dust and air quality management. Well maintained plant/ equipment and prestart checks and servicing. Non-compliant vehicles removed from site / repaired.	L4	C5	7	Review plant check list prior to operating on site. Undertake verification checks as required.
<b>Traffic</b>									
Loss of on-street car parking in adjacent residential streets and commercial areas / existing station carparks during construction.	Loss of parking availability to adjacent residential and commercial properties could result in community complaints.	L3	C5	12	Community notifications via monthly notifications and VMS boards / signage and consultation with adjacent businesses (localised cafes for example) in accordance with the OCCS. Follow and implement the TGS within Appendix 4 of this Minor Works Approval.	L4	C5	7	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets. Supervisor and traffic controller to enforce traffic management requirements
General construction traffic disturbing public access between local roads.	Disturbance to local residents resulting in complaints being made, limited access, potential for delays at local road access points resulting in complaints.	L3	C5	12	Following the TGS in Appendix 4 of this Minor Works Approval. Scheduled road movements shall be minimised where possible.	L4	C5	7	Complete regular toolbox talks on how to minimise impacts in relation to traffic. Undertake regular inspections of worksite and adjacent streets.
<b>Visual Amenity</b>									
Plant and equipment movement, Lighting and Mobile Crib	Surrounding aesthetic temporary altered during construction Lighting towers used during out of hours works may spill on nearby residents	L3	C5	12	The work area shall be maintained in an orderly manner Lighting required during night works shall be directed towards the work area and away from adjacent sensitive receivers	L4	C5	7	Undertake regular inspections of work areas pre, during and after works to ensure controls are in good condition.

# RE: Urgent Approval Request for Sapling Relocation



Phillip Matevski

To [Imran Khan](#); [Robel Chowdhury](#); [Metro](#); [Ryan Kane](#); [Emmanuel Smith](#); [Luis Barroso](#)  
Cc [Graeme Kyle](#); [Evan Johnston](#); [Wassim Habbouche](#); [David Luong](#)

Reply Reply All Forward

Tue 24/09/2024 3:49 PM

This message is part of a tracked conversation. [Click here to find all related messages or to open the original flagged message.](#)

Hi Imran,

We will be temporarily storing the trees within our site compound at 1 Bridge Road, Belmore (opposite 74 Bridge Road, Belmore), within large bulka bags filled with soil, being watered regularly. We are exploring other options for tree storage longer term until they are able to be replanted in their original location.

In the case the trees are not able to be replanted, we commit to replacing the *Corymbia maculata* (Spotted Gum) like-for-like from an advanced tree nursery when the bus stop is able to be relocated to its original location toward Canterbury Station.

Any questions, please let me know.

Kind regards,

**Phil Matevski | Environment and Sustainability Manager**

**M** 0420 353 980 | **W** [www.martinusrail.com.au](http://www.martinusrail.com.au)



---

**From:** Imran Khan <[Imran.Khan@cbc.city.nsw.gov.au](mailto:Imran.Khan@cbc.city.nsw.gov.au)>

**Sent:** Tuesday, September 24, 2024 1:40 PM

**To:** Robel Chowdhury <[Robel.Chowdhury@transport.nsw.gov.au](mailto:Robel.Chowdhury@transport.nsw.gov.au)>; Phillip Matevski <[phillip.matevski@martinus.com.au](mailto:phillip.matevski@martinus.com.au)>; Metro <[metro@cbc.city.nsw.gov.au](mailto:metro@cbc.city.nsw.gov.au)>; Ryan Kane <[Ryan.Kane2@transport.nsw.gov.au](mailto:Ryan.Kane2@transport.nsw.gov.au)>; Emmanuel Smith <[Emmanuel.Smith@transport.nsw.gov.au](mailto:Emmanuel.Smith@transport.nsw.gov.au)>; Luis Barroso <[Luis.Barroso@martinus.com.au](mailto:Luis.Barroso@martinus.com.au)>

**Cc:** Graeme Kyle <[graeme.kyle@martinus.com.au](mailto:graeme.kyle@martinus.com.au)>; Evan Johnston <[Evan.Johnston@martinus.com.au](mailto:Evan.Johnston@martinus.com.au)>; Wassim Habbouche <[Wassim.Habbouche@transport.nsw.gov.au](mailto:Wassim.Habbouche@transport.nsw.gov.au)>; David Luong <[david.luong@martinus.com.au](mailto:david.luong@martinus.com.au)>

**Subject:** RE: Urgent Approval Request for Sapling Relocation

Hi Robel,

As before, councils stance is to not relocate the trees but council will not stop you from removing said trees.

Please clarify on where you will relocate the trees and how they will be stored?

Regards,



**Imran Khan - Project Engineer**  
T 02 9707 9081  
E [Imran.Khan@cbc.city.nsw.gov.au](mailto:Imran.Khan@cbc.city.nsw.gov.au)  
[www.cbc.city.nsw.gov.au](http://www.cbc.city.nsw.gov.au)

# RE: Dot Points For Martinus - Canterbury Road tree saplings



ArborScan General Enquiries <info@arborscan.c

To Phillip Matevski

Cc Michael Saros; Evan Johnston; Graeme Kyle

Reply Reply All Forward

Tue 24/09/2024 3:20 PM

This sender info@arborscan.com.au is from outside your organization.

You replied to this message on 24/09/2024 3:38 PM.

You don't often get email from [info@arborscan.com.au](mailto:info@arborscan.com.au). [Learn why this is important](#)

Thanks Phil, we will have something on letterhead across to you in the morning.

Here is some base data from the arborist who attended site.

ArborScan Tree Summary – [CLICK HERE](#)

Note these trees could be hand-dug from the holes and transplanted to a new site. We could advise plenty of location options for this.

Spotted gums are easily sourced, and we would recommend planting new trees back in place of those removed.

The issued letter will address the findings and your points below.

Talk soon.

Best Regards,

Marc Fisher  
Consulting Arborist (AQF 5)  
1800 ARBORSCAN (272 677)  
ISA Professional Member – 240990





## Appendix 2: Community Notifications



# Construction Notification – Canterbury Station

September 2024

Sydney Metro is Australia's biggest public transport project.

By 2030, Sydney will have a network of four metro lines, 46 stations and 113km of new metro rail.

Sydney Metro is revolutionising how Australia's biggest city travels, connecting Sydney's north west, south west and greater west to fast, reliable turn-up-and-go metro services with fully accessible stations.

The T3 Bankstown Line will close later this year for up to 12 months to complete the final metro conversion works and in 2025, Southwest Sydney will have turn-up-and-go metro services every four minutes in the peak directly into Sydney CBD.

In September, work will continue along the corridor and at Canterbury Station (weather and site conditions permitting). Work will be undertaken during standard construction hours, **Monday to Friday 7am-6pm** and **Saturday 8am-6pm**.

## What work are we doing?

Location	Work during standard hours
Canterbury (along the rail corridor)	<ul style="list-style-type: none"><li>• Site investigations, surveys and associated activities</li><li>• De-vegetation and tree clearing around the rail corridor where required</li><li>• Mobilisation and demobilisation of plant and materials</li><li>• Work related to security fence installation and combined services route (CSR) within the corridor</li><li>• Signalling related work and testing and commissioning of services and equipment and inspections</li><li>• Parking removal and lane closures to facilitate plant and truck operation, and parking and access</li><li>• Installation and modification of combined service route (CSR), cables, and trackside equipment</li><li>• Demolition of the former Canterbury Signals Depot building</li><li>• Pedestrian footpath between former Canterbury Bowls Club and rail corridor to be closed between Canterbury Rd and Church St Pedestrian Footbridge. Diversions in place via Church St and Tincombe St</li><li>• Establishment of laydown areas for temporary storage of construction materials</li></ul>
Around Canterbury Station	<ul style="list-style-type: none"><li>• Minor defect rectification work as required</li><li>• Minor civil, electrical and containment works at station building/platforms</li><li>• Testing and commissioning activities</li><li>• Ongoing termination and cabling work within the station and on platforms</li><li>• Installation of brackets and containments, and installation and modification of cable service routes</li><li>• Installation of equipment, cables, cable tray and cabinets in station rooms and buildings</li><li>• Security fence installation</li><li>• Signalling related work</li><li>• Mobilisation of site compound and establishment of ancillary sites including a site office and ablutions</li><li>• Parking removal and lane closures to facilitate plant and truck operation, and parking and access</li><li>• Establishing laydown areas for temporary storage of construction materials</li></ul>
Services building site on Charles Street	<ul style="list-style-type: none"><li>• Ongoing termination and cabling work, electrical fit out and finishing work in services buildings</li><li>• Testing and commissioning of equipment and services</li><li>• Minor defect rectification work as required</li><li>• Landscaping, remediation and maintenance activities</li></ul>
Former Bowling Club	<ul style="list-style-type: none"><li>• De-vegetation and tree clearing throughout the rail corridor where required</li><li>• Mobilisation and demobilisation of plant and materials including preparatory activities for future work</li></ul>
Substation site (off Hutton Street)	<ul style="list-style-type: none"><li>• Ongoing termination and cabling work</li><li>• Testing and commissioning of equipment and services</li><li>• Drainage work on Hutton Street, with temporary lane closure and traffic management in place</li><li>• Traffic control to facilitate truck movements on The Boulevarde, as required</li></ul>

\*From time to time we may finish work later than 6pm to complete concrete pours. This entails finishing off poured concrete using manual and powered floats and may continue until 10pm. This may occur on up to four separate evenings during the month. Noise impacts from this work will be very low.



**Out-of-hours (night) work – due to the nature of some activities and for the safety of community and workers, some work will occur outside standard construction hours**

Date/Time	Out-of-hours work
Mid-week between 6pm and 7am (for no more than 3 nights per week)	<ul style="list-style-type: none"> <li>• Site investigations, surveys and associated activities</li> <li>• Mobilisation and demobilisation of plant and materials</li> <li>• Installation of brackets and containments on station platform</li> <li>• Testing and commissioning of equipment and services, and trackside inspection</li> <li>• Signalling related work</li> <li>• Utility locating and associated activities at Melford Street and Canterbury Road overbridges</li> </ul>


**What to expect**


- Equipment used includes, but is not limited to excavators (including rock hammering equipment), concrete trucks and pumps, concrete vibrators, mobile cranes, elevated work platforms, loaders, rail tamper, hammer drill, rail grinder, hi-rail vehicles, generators, lighting towers, milling machine, paver, water cart, light and heavy vehicles, tippers, dump and delivery trucks, hand-held and electric tools, demolition and road saws, jack hammers, power drills, vacuum truck, asphalt paver, welding equipment, rail and circular saws and compaction equipment including a roller.
- The project team will take every step possible to minimise noise impacts, however some of this work will be noisy. A range of measures are in place to reduce noise and meet the project’s approval conditions, including noise barriers, using only the necessary equipment for each task, turning off equipment when not in use and equipping machinery with non-tonal movement alarms. Respite hours will be implemented in line with the project’s approvals. Highly impacted residents will be notified separately.
- Some equipment may be transported outside of standard construction hours in line with Transport for NSW requirements for transporting oversized vehicles.
- Access to buildings and driveways will be maintained at all times.
- We will park our vehicles along the rail corridor where possible however, please be aware that on-street parking may be limited near worksites, particularly during planned rail possessions.



**Thank you for your cooperation and understanding while we complete this essential work.**

**Contact us**

 24-hour Community Information Line **1800 171 386**

 [southwestmetro@transport.nsw.gov.au](mailto:southwestmetro@transport.nsw.gov.au)

 Sydney Metro City & Southwest, PO Box K659, Haymarket NSW 1240



**Translating and interpreting service**

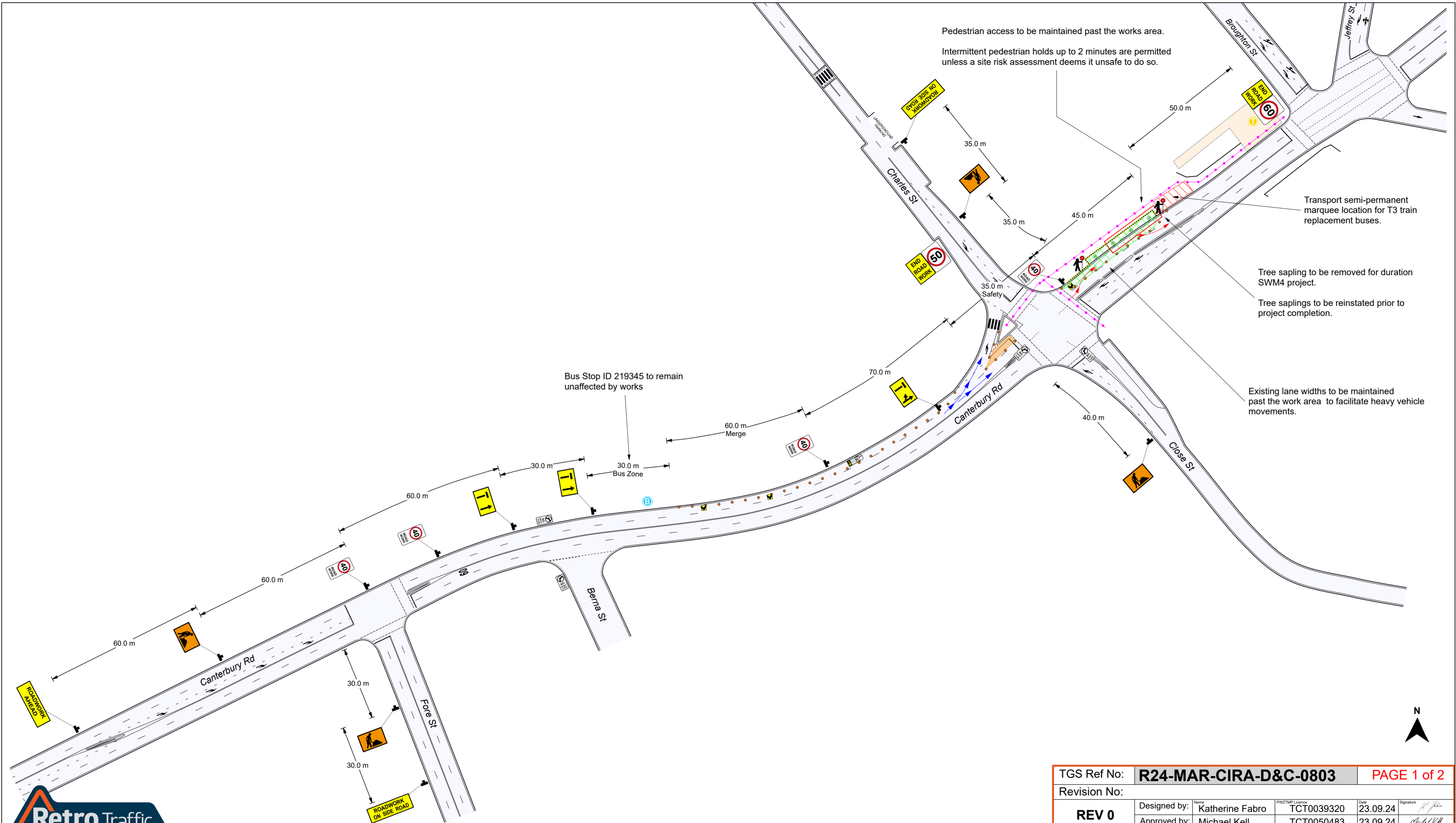
If you need help understanding this information, please contact the Translating and Interpreting Service on **131 450** and ask them to call us on **1800 171 386**

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## Appendix 3: Tree Impact Assessment (to be appended)



## Appendix 4: Traffic Guidance Schemes



Pedestrian access to be maintained past the works area.  
 Intermittent pedestrian holds up to 2 minutes are permitted unless a site risk assessment deems it unsafe to do so.

Transport semi-permanent marquee location for T3 train replacement buses.

Tree sapling to be removed for duration SWM4 project.  
 Tree saplings to be reinstated prior to project completion.

Existing lane widths to be maintained past the work area to facilitate heavy vehicle movements.



**SITE SPECIFIC NOTES**

- Implementation:**
- 1.1 - Signs are NOT to be positioned such that they block a pedestrian pathway
  - 1.2 - Signs placed along parking bays should be positioned to ensure clear sight distance is maintained
  - 1.3 - Sign spacing may be adjusted within the allowable tolerance as stated in TCAWS v6.1
  - 1.4 - A shadow vehicle and a pod truck is required for the mobilisation and demobilisation of the work site due to the volumes of traffic expected on a State Road
- Operation:**
- 2.1 - Access to the adjacent driveways must not be obstructed
  - 2.2 - Traffic controllers to direct pedestrians past the work area, a min 1.5m wide pathway is to be maintained at all times

**LEGEND**

- Permanent/Temp Compound
- Temporary Work Area
- Safety Buffer
- Traffic Cone/Delineation
- Water Filled Barrier
- Concrete Barrier
- Permanent Fencing
- Klemmfix
- Tiger bars
- Relocated Bus Stop
- Closed Bus Stop
- Traffic Controller (TC)
- Arrow Board
- TMA
- Work Vehicle
- General Traffic
- Detour Route
- Local Traffic Only
- Construction Vehicles
- Bus travel Path
- Pedestrian Ramp
- Pedestrian Route

**Client** : Martinus Rail  
**Contact** : Evan Johnston  
**Location** Canterbury Rd, Canterbury

**Project** : SWM4 - (CIRA)

**Scope of Works:**

Construction activities including Demolition, excavation and construction of EVM and HVM treatments.

\*To implement this TGS the below checked approvals must be obtained  
 ROL (Road Occupancy Licence)  Council  Bus

TGS Ref No: **R24-MAR-CIRA-D&C-0803** PAGE 1 of 2

Revision No:	Designed by: Katherine Fabro	PWZTMP Licence: TCT0039320	Date: 23.09.24	Signature: <i>[Signature]</i>
<b>REV 0</b>	Approved by: Michael Kell	TCT0050483	23.09.24	<i>[Signature]</i>

**Temporary Traffic Management**

Road Closure/Detour  Standard lane closure  Contra Flow  Shuttle Flow   
 Intermittent Stoppages  Parking lane/Shoulder  Speed reduction  PTC

**TGS MODIFICATIONS**

Modified by: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_  
 PWZTMP Licence: \_\_\_\_\_ Time: \_\_\_\_\_  
 Modification Reason: \_\_\_\_\_

streets ahead



# RETRO TRAFFIC

## Traffic Guidance Scheme Risk Assessment & TGS Verification Checklist

### Location Details

Road Canterbury Rd Suburb Canterbury Road Speed: **50** km/hr  
 Direction: **N** E S W Nearest Cross Street Charles St

### Temporary Traffic Management

Method: Around **Past** Through

Reason method selected: **Acceptable worker/traffic offset can be maintained past the work area**

### Risk Assessment

Section 1 - General	Yes	No	Description of risks if answered no to any question	Enter Risk Rating
1.1 - Does the TGS define minimum clearances required of workers to live traffic, are distances compliant?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.2 - Are worker symbolic signs to be placed in advance of areas where workers will be visible to traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.3 - Are all signs placed at correct distances? i.e. D for multiple signs, 2D for single sign above 60km/h	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.4 - Are Taper lengths compliant and not placed in areas with poor sight distance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.5 - Are lane status signs placed in advance of a lane merge?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.6 - Are the correct Tapers being used? i.e. Merge Taper, Traffic Control Taper, Lateral Shift Taper.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.7 - Does the TGS clearly define transition zones between tapers on multilane roads, are they compliant?	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
1.8 - Does the TGS clearly define Buffer areas, are they compliant and at least 30m in length?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.9 - Does the TGS clearly define site access and egress for work vehicles, is impact to traffic managed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.10 - Does the TGS clearly define pedestrian routes, are the routes suitable for all pedestrians?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
1.11 - Does the TGS consider Cyclists, can Cyclists transverse the site safely?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	3 High	3 High	4 Acute	4 Acute	4 Acute
Likely	2 Moderate	3 High	3 High	4 Acute	4 Acute
Possible	1 Low	2 Moderate	3 High	4 Acute	4 Acute
Unlikely	1 Low	1 Low	2 Moderate	3 High	4 Acute
Rare	1 Low	1 Low	2 Moderate	3 High	3 High

Section 2 - Does the TGS Involve Shuttle Flow arrangements? Yes <b>No</b>	Yes	No	Description of risks if answered no to any question	Enter Risk Rating
(If answered no proceed to section 3)				
2.1 - Is a PTC used in place of a manual Traffic Controller where existing speed is greater than 45km/h?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
2.2 - Is the operating speed of the road 60km/h or less where Traffic Control or PTC are in use?	<input type="checkbox"/>	<input type="checkbox"/>		
2.3 - Are x4 Traffic Cones placed on the edge or center line, approaching the Traffic Controller or PTC?	<input type="checkbox"/>	<input type="checkbox"/>		
2.4 - Is Prepare to stop and Traffic Control or PTC symbolic signs installed?	<input type="checkbox"/>	<input type="checkbox"/>		
2.5 - Do Traffic Control and PTC positions have adequate lighting during low light conditions?	<input type="checkbox"/>	<input type="checkbox"/>		
2.6 - Does sight distance of at least 1.5D exist on approach to Traffic Control or PTC?	<input type="checkbox"/>	<input type="checkbox"/>		

Section 3 - Does the TGS Involve Detours of Traffic Yes <b>No</b>	Yes	No	Description of risks if answered no to any question	Enter Risk Rating
(If answered no proceed to section 4)				
3.1 - Are detour routes suitable for all vehicle classes being detoured?	<input type="checkbox"/>	<input type="checkbox"/>		
3.2 - Is access to local residence and business maintained?	<input type="checkbox"/>	<input type="checkbox"/>		
3.3 - Are detour signs located at decision points to clearly guide motorists through detour?	<input type="checkbox"/>	<input type="checkbox"/>		
3.4 - Can roads and intersections used as detour routes accommodate the additional traffic volume?	<input type="checkbox"/>	<input type="checkbox"/>		
3.5 - Is the same level of safety maintained for turn movements? e.g. Traffic using signalized intersections Being sent through a detour route that involves turn movements at non-signalised intersections.	<input type="checkbox"/>	<input type="checkbox"/>		

Section 4 - Other Hazards & Risks	Enter Risk Rating
4.1 -	
4.2 -	
4.3 -	
4.4 -	

### TGS Verification Checklist

Section 5 - Verification	Have the below items been addressed on the TGS for this location?	Yes	No
Traffic Volumes		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Predicted Queue Length		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Shoulder Widths		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sight Distances		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Existing Infrastructure		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transport Services (i.e. Bus Stops)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Appropriate Site Access		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Appropriate Escape Route for Traffic Controllers		<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Section 6 - Confirmation (Completed on Site as per Daily HAC)

Does the TGS require adjustments within tolerances?	<input type="checkbox"/>	<input type="checkbox"/>
Does the TGS require any additional modifications?	<input type="checkbox"/>	<input type="checkbox"/>
Is the TGS appropriate for use for works?	<input type="checkbox"/>	<input type="checkbox"/>
Have key risks been addressed on site?	<input type="checkbox"/>	<input type="checkbox"/>

### Additional Comments

### Risk Management

If 'No' selected for any question in items 1, 2, 3 or 4 in the Risk Assessment, a control needs to be assigned in the table below to mitigate any additional risk

Item	Control Measures	Remaining Risk Rating

TGS Ref: **R24-MAR-CIRA-D&C-0803** **PAGE 2 of 2**

<b>REV 0</b>	Designed by:	Name: Katherine Fabro	PWZTMP Licence: TCT0039320	Date: 23.09.24	Signature: <i>K. Fabro</i>
	Approved by:	Michael Kell	TCT0050483	23.09.24	<i>M. Kell</i>
	1 Up Manager:				

\* Denotes approval from one up manager required