

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 TfNSW/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	
Contractor:	METRON T2M
Project:	Southwest Metro Design Services (SMDS)
Application Title: (e.g. Smith St trenching works)	General site-wide minor works
Application Number:	SMDS-PCMW-002
Application Date:	09 September 2019
Planning Approval:	Sydney Metro City and Southwest – Sydenham to Bankstown – Environmental Impact Statement (EIS) Sydney Metro City and Southwest – Sydenham to Bankstown – Submissions and Preferred Infrastructure Report (SPIR) Sydney Metro City and Southwest Infrastructure Approval SSI-8256
Minor Works Categories: <ul style="list-style-type: none"> Highlight as applicable. If Items 4, 8 or 11 are applicable, this form must be endorsed by an Environmental Representative. 	<ol style="list-style-type: none"> Survey, survey facilitation and investigations works (including road and building dilapidation survey works, drilling and excavation). Treatment of contaminated sites. Establishment of ancillary facilities (excluding demolition), including construction of ancillary facility access roads and providing facility utilities. Operation of ancillary facilities that have minimal impact on the environment and community. Minor clearing and relocation of vegetation (including native). Installation of mitigation measures, including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments. Property acquisition adjustment works, including installation of property fencing and utility relocation and adjustments to properties. Utility relocation and connections. Maintenance of existing buildings and structures. 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. 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.
Planning Authority Determination: Will the proposed works affect or have the potential to affect heritage items, threatened species,	<i>If ‘Yes’, this completed form must be endorsed by an Environmental Representative, approved by TfNSW and submitted to the applicable planning authority to determine that the works are not defined as ‘construction’.</i>

populations or endangered ecological communities?	No – it is anticipated that there will be no impacts associated with the works that will affect heritage items, areas of known or expected archaeological potential, threatened species, populations or threatened ecological communities. In addition, Metron T2M will implement the Sydney Metro Unexpected Finds Procedure V2.0 throughout the investigation works and undertake works in accordance with the HIA.
---	---

Part 2: Details

<p>Describe the proposed Minor Works: Including work methodologies, site location(s) and site description(s) (e.g. landscape type, waterways, etc.).</p>	<p>Site Description Overview</p> <p>This overview is based on information from the Environmental Impact Statement (EIS) and Submissions and Preferred Infrastructure Report (SPIR).</p> <p>Survey works are to occur within and surrounding the T3 Bankstown Line. The T3 Bankstown Line is comprised of stations, overbridges, overhead wiring structures, track, services and ballast, extending from Sydenham Station to Bankstown Station.</p> <p>The T3 line runs adjacent to a number of land zoning types between Sydenham Station and Bankstown Station including industrial, business and community, infrastructure, residential and recreational.</p> <p>Roads cross the T3 line in a number of places, both by overbridges and underpasses. A number of footbridges also cross the T3 line along the length of its alignment. The T3 Line crosses the Cooks River in one location between Sydenham and Bankstown. Other local waterways such as channels, culverts and stormwater systems are present along the alignment.</p> <p>The majority of vegetation in the survey area comprises exotic or planted native species on highly modified landforms. A number of threatened ecological communities, threatened plant species and habitat trees are within the rail corridor and project area. Refer to Appendix 1.</p> <p>Description of Works</p> <p>Survey and site inspection works are critical to the design development phase and are required early on to inform the design. Without this information, detailed design cannot proceed effectively.</p> <p>Soil resistivity tests will be carried out by using test equipment and rods (4 rods) in the proposed 11kV pad mount areas for the 9 stations –Dulwich Hill, Hurlstone Park, Canterbury, Campsie, Belmore, Lakemba, Wiley Park, Marrickville and Punchbowl. The maximum depth for each electrode will be 100mm. One test will be located outside of the rail corridor – Hurlstone Park. The remaining sites will be located inside the rail corridor. The proposed locations of the tests are shown in Appendix 1.</p> <p>A site ute will be used to travel to between survey sites. Surveyors will proceed on foot with survey equipment.</p> <p>Working Hours</p> <p>Survey works will be undertaken during standard construction hours only. Works will be carried out outside of possession periods.</p>
<p>Planned Commencement Date:</p>	<p>The survey works are targeted to commence from Monday 16 September 2019.</p>
<p>Local Sensitivities: Describe the presence (if any) of local sensitive environmental areas and community receptors</p>	<p>T3 Line between Sydenham Station and Bankstown Station</p> <ul style="list-style-type: none"> • There are a number of residential properties located within close proximity to the corridor as identified in Appendix 1. Noise and air quality impacts from the proposed survey works are expected to be negligible. • There is a potential risk of contamination within the investigation area, with potential contamination sources being historical rail activities, and commercial and residential land use in surrounding areas. Potential contaminants include: <ul style="list-style-type: none"> ○ Asbestos ○ Hydrocarbons ○ Heavy metals ○ Solvents ○ Herbicides. <p>The extent of ground disturbance is limited for the proposed invasive ground investigations. Contractors will follow good working practices and implement an unexpected finds procedure (Appendix 2) to mitigate the risk of encountering significant contamination.</p> <ul style="list-style-type: none"> • No invasive survey works will occur within designated heritage areas (Appendix 1) at all stations except Canterbury and Marrickville precluding the potential for an impact. Works will be undertaken in accordance with the Sydney Metro City and Southwest Unexpected Finds Procedure V2.0 for heritage. Artefact heritage have completed a heritage impact assessment for the proposed tests

	<p>at Canterbury and Marrickville, which concludes the impact to heritage would not be significant. The heritage impact assessment report is provided in Appendix 4.</p> <ul style="list-style-type: none"> • A number of areas of threatened ecological communities and threatened plant species (<i>Acacia pubescens</i>) have been identified along the rail corridor. These areas are shown in Appendix 1. No works will occur within these areas and the survey work will not require the removal or trimming of any vegetation along the corridor, precluding an impact on biodiversity. • There is no erosion and sedimentation risk associated with the proposed survey work. • No roadways or footpaths will be blocked as part of the works.
--	---

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>Documentation: 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>	<p>Maps showing the local sensitivities discussed in Part 2 will be provided to the survey teams to ensure impacts are avoided. The maps are provided in Appendix 1.</p> <p>The mitigation measures developed as part of the environmental risk assessment (provided in Appendix 1) will be provided to survey teams as part of the pre-survey induction.</p> <p>The unexpected contamination finds procedure is provided in Appendix 2. Works will also be undertaken in accordance with the Sydney Metro City and Southwest Unexpected Finds Procedure V2.0 for heritage.</p>
--	---

Part 4: Workforce Notification

<p>How will the environmental and community risks and associated mitigation measures of the proposed Minor Works be communicated to the contractor's workforce?</p>	<p>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>
--	---

Part 5: Community Consultation

<p>What community consultation has been undertaken already?</p>	<p>The Sydney Metro Sydenham to Bankstown monthly notifications for September 2019 includes reference to all of the activities proposed (included in Appendix 3).</p>
<p>What community consultation is planned to be undertaken?</p>	<p>All future works will be included within subsequent monthly notifications and additional targeted notifications, as required by the Sydney Metro OCCS. In accordance with the Sydney Metro OCCS, 7 days notification will be given to the community prior to works starting.</p> <p>Canterbury Bankstown Council be notified of any works taking place outside of the rail corridor.</p>
<p>If drafted already, attach applicable Community Notification as Appendix 3.</p>	

Part 6: Contact Details

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

Name:	Luke Palmer	Position:	Project Manager	Phone:	██████████
	Jonny Steele		Senior Environmental Consultant		██████████
	Andy Luong		Communications Manager		██████████


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.

Name:	Jonny Steele		
Signature:		Date:	9/9/19

Determination Page

(TfNSW/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).			
	TfNSW Principal Manager, Communication & Engagement – Endorsement (required for all applications)	TfNSW Principal Manager, Sustainability, Environment & 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:	<i>Kristina Cimino</i>		
Name:	Kristina Cimino	<i>FIL CERONE</i>	
Date:	16/9/19	<i>19/9/19</i>	
Comments:	Application in line with current community notifications	—	<i>Supporting letter attached as Appendix 4 if necessary.</i>
Conditions:			<i>Supporting letter attached as Appendix 4 if necessary.</i>
<input checked="" type="checkbox"/>	Approved (by TfNSW)		
<input type="checkbox"/>	Endorsed (by Environmental Representative)		
<input type="checkbox"/>	Rejected		

Appendix 1: Environmental Risk Assessment and Environmental Sensitivities Maps.

Environmental Risk Assessment

The Risk Assessment has been undertaken in accordance with the requirements of the Sydney Metro Risk Management Standard.

Aspect	Potential environmental impact	Initial risk rating			Control measures	Residual risk rating		
		Consequence	Likelihood	Risk		Consequence	Likelihood	Risk
Air quality and noise emissions	Noise and air quality impacts on nearby sensitive receivers.	6	5	Low	<ul style="list-style-type: none"> Site equipment is to be turned off when not in use Induction and pre-start briefing to include "good neighbour" approach Follow the appropriate approval process and submit OOHW applications for Environmental Representative approval, if required. Mitigation measures to be implemented in accordance with the Sydney Metro City & Southwest Construction Noise and Vibration Strategy (CNVS), including appropriate notification. 	6	6	Low
Mobilisation of contamination	Local contamination and health risk to surveyors	5	4	Low	<ul style="list-style-type: none"> Surveyors will be vigilant for hazardous materials that may be encountered during investigations 	6	5	Low
Work in heritage areas	No impact to heritage will occur because all invasive works will avoid designated heritage areas	6	6	Low	<ul style="list-style-type: none"> Environmental sensitivities maps will be provided to surveyors as part of the site induction process to ensure heritage areas are avoided. 	6	6	Low

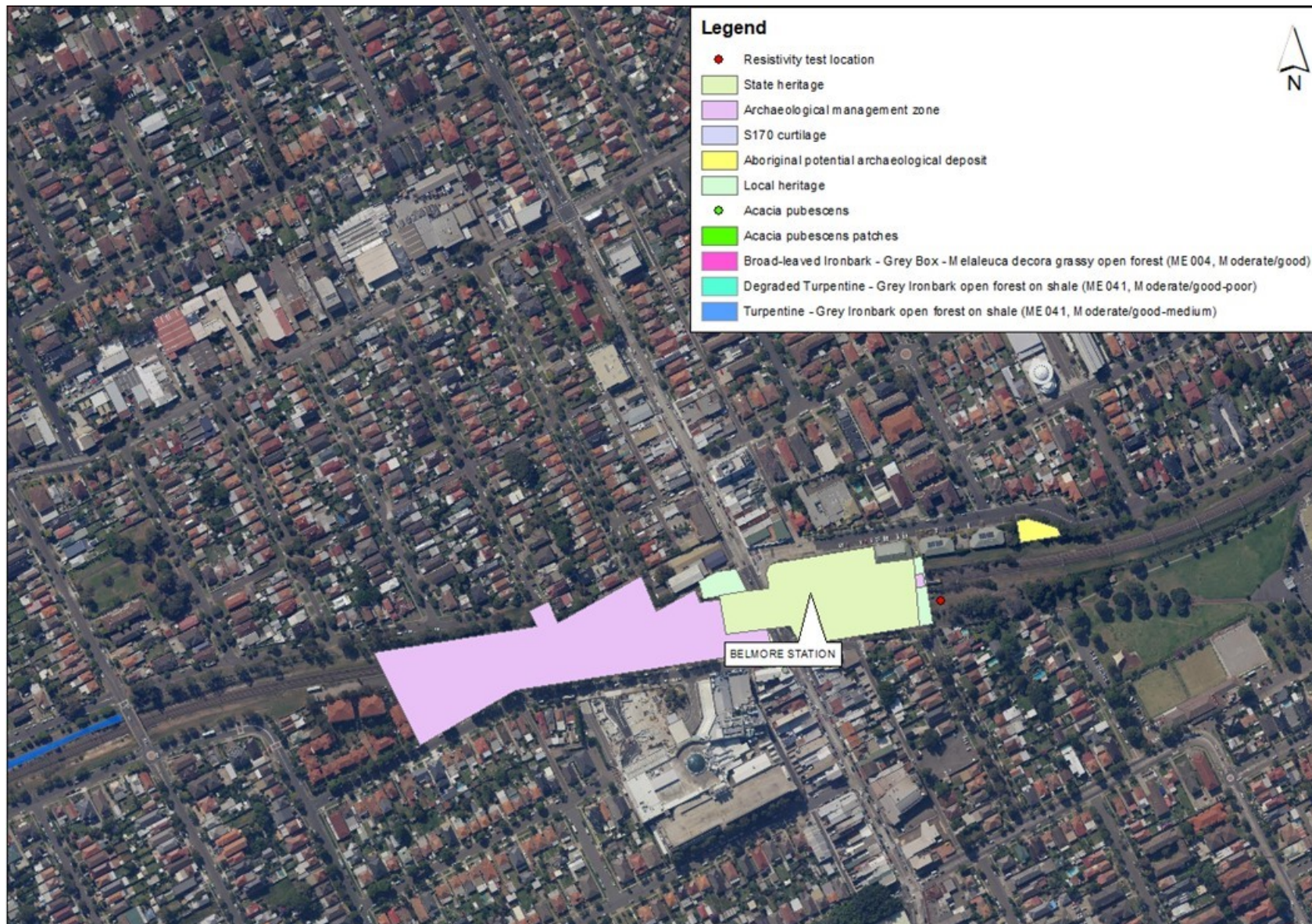
Aspect	Potential environmental impact	Initial risk rating			Control measures	Residual risk rating		
		Consequence	Likelihood	Risk		Consequence	Likelihood	Risk
					<ul style="list-style-type: none"> Works will be undertaken in accordance with the heritage impact assessment contained in Appendix 4 including implementation of mitigation measures. Works will be undertaken in accordance with the Sydney Metro City and Southwest Unexpected Finds Procedure V2.0 for heritage. 			
Work in biodiversity areas	No impact to biodiversity. Invasive works will avoid designated biodiversity areas. No vegetation will be impacted by the survey work.	6	6	Low	Environmental sensitivities maps will be provided to surveyors as part of the site induction process to ensure biodiversity areas are avoided	6	6	Low
Transport and access	Negative impact to local roads, parking and footpaths from closures or obstructions during survey work.	5	5	Low	<ul style="list-style-type: none"> Surveyors will park within the rail corridor where possible. Surveyors will minimise the number of vehicles used to travel to the site. Surveyors will not block roadways or pathways Surveyors will park legally and observe restrictions at all times 	5	6	Low
Service strike	Damage to services during excavation which cause an environmental incident	4	5	Low	The proposed test sites have been chosen by review of the detailed services search provided by Sydney Metro to ensure they will not impact existing services.	4	6	Low

Environmental Sensitivities Maps



















Appendix 2: Environmental Management Documentation.

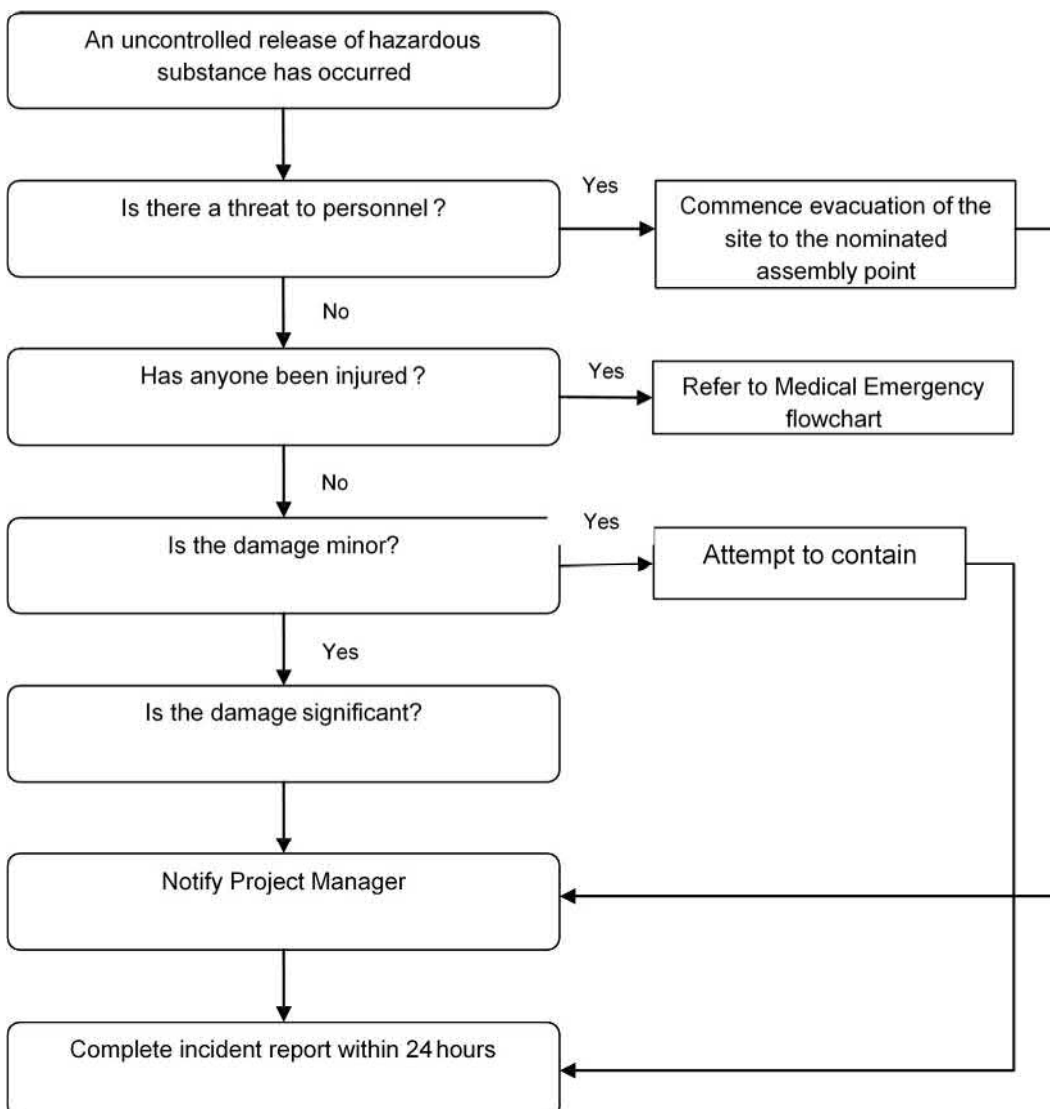
1.1 Unexpected Finds

In the case that an environmental consultant is not available for oversight, workers will be vigilant for hazardous materials that may be uncovered during investigations. Unexpected finds include, but are not limited to, odour, visual contamination, acid sulfate soils, deleterious material inclusions, asbestos containing material, Underground Storage Tanks (USTs) or any other suspect materials. Any unexpected finds will be reported to the Contractor's on-site manager immediately. Additionally, the site owner/occupier should be informed as soon as practical following an unexpected find.

If hazardous materials are uncovered / discovered during excavations the Contractor shall:

- > Cease all work in that vicinity (and fence the area if appropriate)
- > Remove workers from the vicinity
- > An experienced environmental consultant / occupational hygienist should be contacted to assess the potential risks associated with the Unexpected Finds and provide appropriate management options
- > Investigate the nature of the risk of the materials, determine the appropriate response and document the actions in accordance with contractual obligations.

In the event of a serious unexpected find, which could cause harm to human health and/or the environment, TfNSW and the NSW EPA may need to be informed.



Appendix 3: Community Notification.

Sydney Metro is Australia’s biggest public transport project.

Services started in May 2019 in the city’s North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

The upgrade of the T3 Bankstown Line to metro standards received planning approval on 19 December 2018.

Bankstown Line metro upgrade

In September and October early work will continue along the Bankstown Line between Belmore and Bankstown stations (weather and site conditions permitting). For all works, access to the rail corridor will be via existing rail corridor and pedestrian access gates.

Day work		
Work will be carried out during standard construction hours Monday to Friday 7am - 6pm and Saturday 8am - 1pm.		
Location	Detail	
Whole rail corridor (Belmore – Bankstown)	<ul style="list-style-type: none"> Activities will include: <ul style="list-style-type: none"> Surveys, site investigations and soil testing throughout rail corridor and in nearby public areas Surveys of rail assets including drainage, culverts and track formation Hand tools and survey equipment will be used during the above works. 	
Lakemba Punchbowl	<ul style="list-style-type: none"> Geotechnical investigations to obtain information on ground conditions for five new power substations needed to supply traction power to the new metro trains. The investigations will be in the rail corridor (see maps overleaf for locations). Equipment will include light vehicles, a trailer with drill rig to take soil samples and a vacuum truck to remove excavated soil and debris. 	
Out-of-hours work		
Due to the nature of some activities and for the safety of workers, some work will occur outside standard construction hours during rail shutdown periods when trains are not running.		
Date/Time	Location	Detail
7am to 6pm on Saturday and Sunday: 7-8 September 28-29 September and throughout September (for non-invasive surveys only)	Along the rail corridor (Belmore to Bankstown)	<ul style="list-style-type: none"> Activities will include: <ul style="list-style-type: none"> site surveys of track and other rail assets including drainage and ballast Surveys and site investigations along the rail corridor and in nearby public areas Hand tools and survey equipment will be used during the above works



- Torches may be required for night survey works. Lights will be directed away from residential properties when in use.

Keeping you informed

Properties close to the rail corridor will receive notifications when construction work is scheduled to occur. Sydney Trains will deliver notifications for work done during scheduled rail maintenance periods and Sydney Metro will keep you informed of all other work.

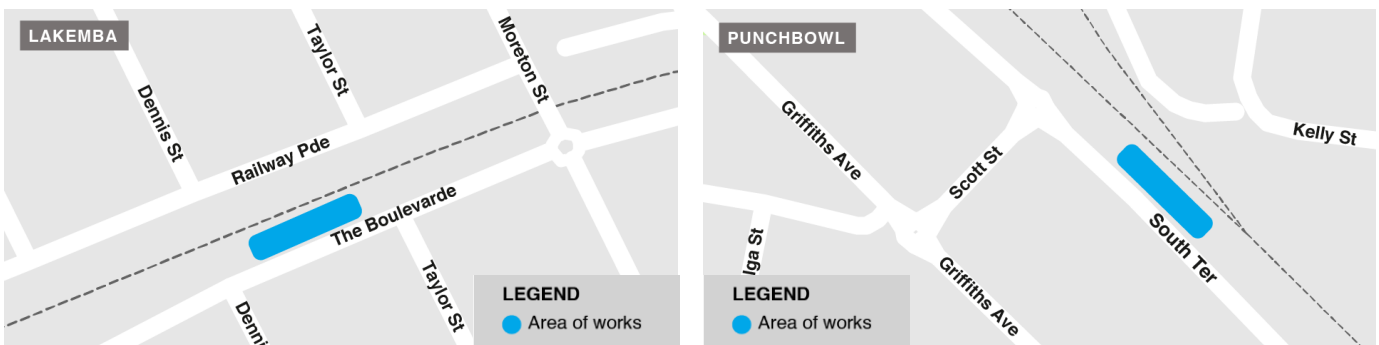
If you'd prefer to receive updates by email, please contact us using the details below. Alternatively visit the Sydney Metro Community Information Centre (CIC) at 243 Beamish St, Campsie to speak to a Sydney Metro representative and to learn more about the project.

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

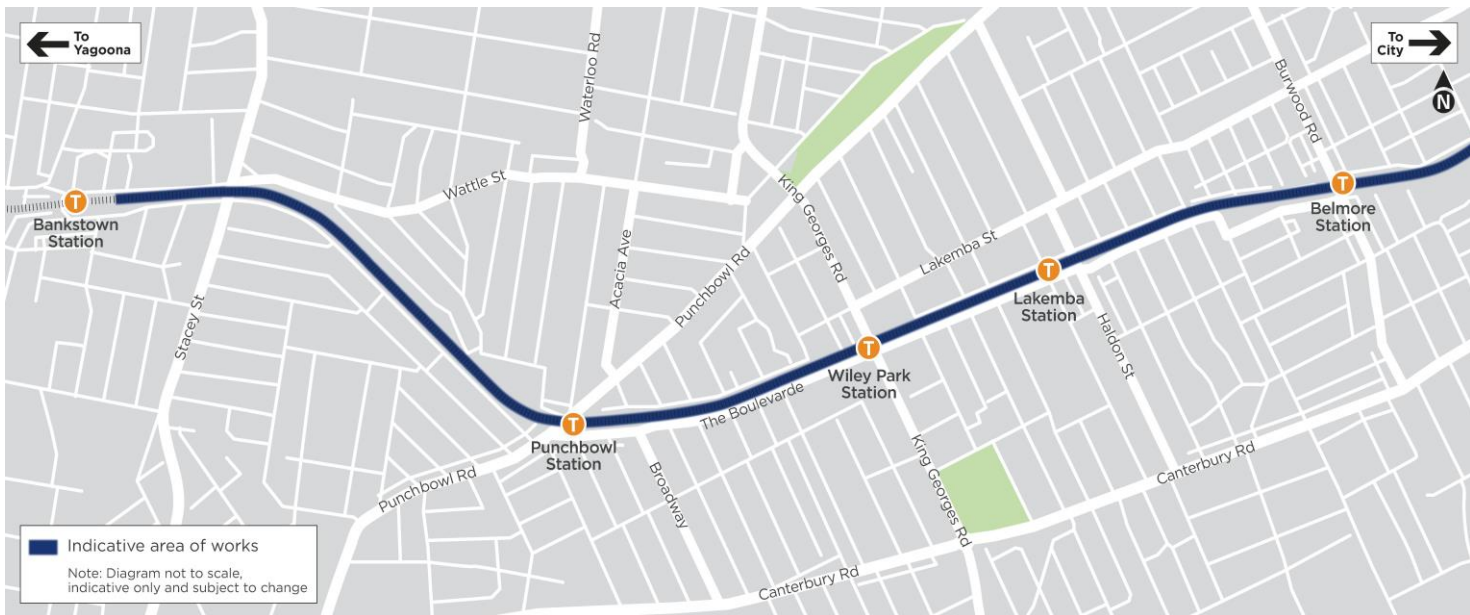
If you have any questions about the rail corridor work, please contact **Melanie** on **1800 171 386** (24 hour community information line) or email SouthwestMetro@transport.nsw.gov.au

If you have any questions about the substation investigation work at Lakemba and Punchbowl, please contact **1800 171 386** or email LinewidthMetro@transport.nsw.gov.au

Geotechnical investigation work areas – traction power supply



Rail corridor work



Sydney Metro is Australia’s biggest public transport project.

Services started in May 2019 in the city’s North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The upgrade of the T3 Bankstown Line to metro standards received planning approval on 19 December 2018.

Bankstown Line metro upgrade

As part of early works for the Bankstown Line metro upgrade between Sydenham and Bankstown, you may have noticed the installation of long steel beams and posts inside the rail corridor. These galvanised steel troughs (GST) will house signalling and communication cables for Sydney Metro operations. De-vegetation and tree clearing has also occurred along the rail corridor to enable us to work safely on rail embankments.

Over the next month construction will continue between Sydenham and Campsie stations (weather and site conditions permitting). Rail access gates along the corridor from Fraser Park to Campsie will be used for delivery and removal of all plant, equipment and materials.

Day work	
Project standard working hours are Monday to Friday 7am - 6pm and Saturday 8am - 6pm.	
Location	Detail
Whole corridor (Sydenham – Campsie)	<ul style="list-style-type: none"> • Activities will include: <ul style="list-style-type: none"> ○ Surveys, site investigations and soil testing throughout rail corridor and in nearby public areas ○ Site establishment work including site preparation, installation of haul roads and temporary fencing ○ Installation of temporary site facilities in the rail corridor located adjacent to Charles Street, Canterbury ○ Locating and confirming underground services which will involve using hand held equipment and non-destructive digging ○ Geotechnical investigations which will include minor drilling and testing the ground ○ De-vegetation and tree clearing where required ○ Installation of cable routes including galvanised steel trough (GST) and ground level trough (GLT) ○ Temporary footpath closure on Livingstone Road bridge on Friday 6 September during standard construction hours. Signage will be in place to assist pedestrians. ○ Installation of security fencing • Equipment used for the above work will include vacuum suction trucks, mulcher, dump trucks, excavators, crane trucks, lifting machinery, elevated work platform, forklift, water cart and power and hand tools.
Dulwich Hill Canterbury Campsie	<ul style="list-style-type: none"> • Geotechnical investigations to obtain information on ground conditions for five new power substations needed to supply traction power to the new metro trains. The substations will be in the rail corridor (see maps overleaf for locations). • Equipment will include light vehicles, vacuum truck and a trailer with drill rig to take soil samples.



Out-of-hours work

Due to the nature of some activities and for the safety of workers, some work will occur outside standard construction hours when trains are not running. Some equipment will also be delivered outside standard construction hours in line with RMS requirements for transporting oversized vehicles.

Date/Time	Location	Detail
7am to 6pm on Saturday and Sunday: 7-8 September 28-29 September and throughout September (for non-invasive surveys only)	Along rail corridor	<ul style="list-style-type: none"> Activities will include site surveys and investigations of: <ul style="list-style-type: none"> stations, rail assets and other visible structures along the rail corridor and in nearby public areas Hand tools and survey equipment will be used. Work is not expected to be noisy. Personal torches may be required for night survey works. Lights will be directed away from residential properties when in use.
Road closure from 1am Monday 2 September to 11:30pm Thursday 12 September	Albermarle Street (rail overbridge section), Marrickville	<ul style="list-style-type: none"> Activities will include installation of underground service crossing at Albermarle Street Due to safety requirements the road closure will be in place for the full duration, however activities will take place during daytime work (weekdays 7am to 6pm, Saturday and Sunday 8am to 6pm). Traffic detours will be in place for motorists and pedestrians. Alternate route signs and VMS will be installed to assist users. Equipment used for the above work will include excavators, concrete saw, dump trucks, fork lift, concrete truck and power and hand tools.

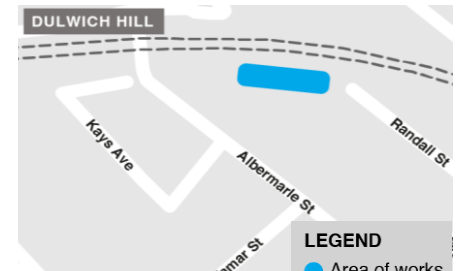
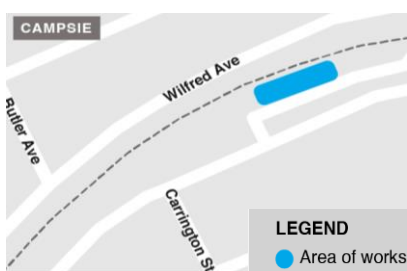
Access to buildings and driveways will be maintained at all times. Some of the service crossing work may be noisy, however we will take every possible step to minimise noise such as switching off equipment when not in use and installing non-tonal reversing beepers on vehicles.

Keeping you informed

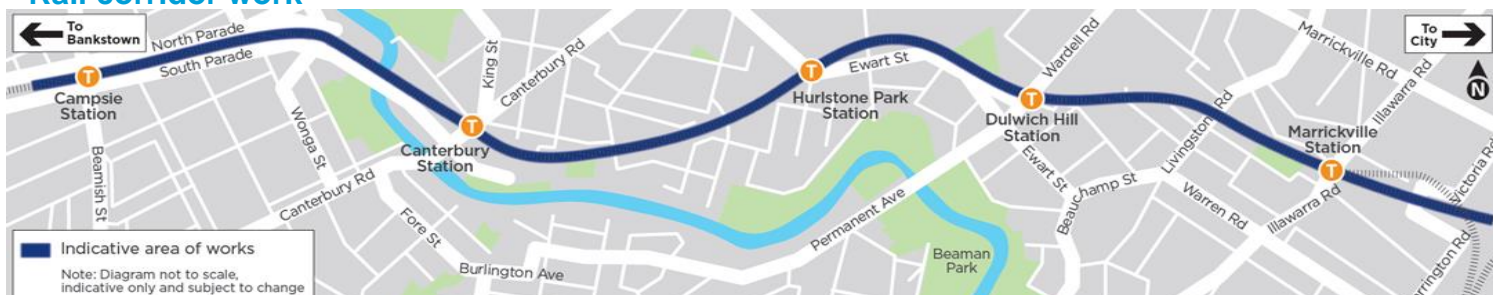
Properties close to the rail corridor will receive notifications when work is scheduled to occur. If you'd prefer to receive updates by email, please contact us using the details below.

Thank you for your cooperation while we complete this essential work. If you have any questions please contact Melanie on 1800 171 386 (24 hour community information line) or SouthwestMetro@transport.nsw.gov.au

Geotechnical investigation work areas – traction power supply



Rail corridor work



Sydney Metro is Australia's biggest public transport project.

Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street and Barangaroo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

The upgrade of the T3 Bankstown Line to metro standards received planning approval on 19 December 2018.

Bankstown Line metro upgrade

In September and October, construction will continue between Sydenham and Campsie stations (weather and site conditions permitting). Rail access gates along the corridor from Fraser Park to Campsie will be used for all activities including delivery and removal of plant, equipment and materials.

Day work		
Project standard working hours are Monday to Friday 7am - 6pm and Saturday 8am - 6pm.		
Location	Detail	
Whole corridor (Sydenham – Campsie)	<ul style="list-style-type: none"> Activities in September and October will include: <ul style="list-style-type: none"> Surveys, site investigations and soil testing throughout rail corridor and in nearby public areas Site establishment work including site preparation, installation of haul roads and temporary fencing Installation of temporary site facilities in the rail corridor located adjacent to Charles Street, Canterbury Locating and confirming underground services which will involve using hand held equipment and non-destructive digging Geotechnical investigations which will include minor drilling and testing the ground De-vegetation and tree clearing where required Installation of cable routes including galvanised steel trough (GST) and ground level trough (GLT) Installation of security fencing Equipment used for the above work will include vacuum suction trucks, mulcher, dump trucks, excavators, crane trucks, lifting machinery, elevated work platform, forklift, water cart and power and hand tools. 	
Out-of-hours work and road closures		
Due to the nature of some activities and for the safety of workers, some work will occur outside standard construction hours when trains are not running. Some equipment will also be delivered outside standard construction hours in line with RMS requirements for transporting oversized vehicles. For all full road closures below, due to safety requirements the road closure will be in place for the duration listed, however work activities will occur weekdays from 7am to 6pm and on Saturday and Sunday between 8am-6pm .		
Date/Time	Location	Work
Full road closure from 1am Monday 23 September to 11:30pm Sunday 29 September	Terrace Road (rail underbridge section), Dulwich Hill	<ul style="list-style-type: none"> Activities will include installation of new cable routes and bridge surveys Equipment used for the above work will include excavators, dump trucks, fork lift, concrete truck and power and hand tools.



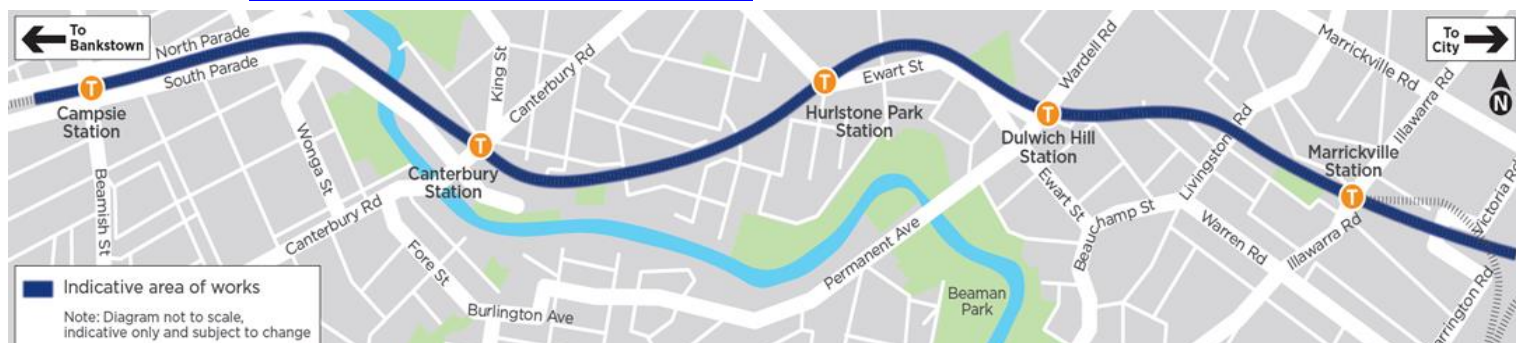
Temporary removal of car spaces from 8am Sunday 29 September to 7pm Sunday 29 September	29 South Parade, Campsie	<ul style="list-style-type: none"> Approximately 12 car spaces will be temporarily removed along 29 South Parade from 8am to 7pm on Sunday 29 September.
Out-of-hours work from 2am Saturday 28 September to 2am Monday 30 September	Between Sydenham and Campsie	<ul style="list-style-type: none"> Activities will include: <ul style="list-style-type: none"> Survey works throughout the rail corridor including track and rail asset conditions surveys Soil testing and site surveys along the rail corridor and in nearby public areas Installation of Galvanised Steel Troughing cable route including a temporary partial lane closure on Livingstone Road, Marrickville Installation of retaining walls between Canterbury and Campsie Partial lane closures at Wairoa and Charles Streets (near rail line) in Canterbury to facilitate retaining wall work HV Feeder power pole refurbishment works in the rail corridor, adjacent to Charles Street, Canterbury De-vegetation between Canterbury and Campsie where required Equipment used for the above work will include vacuum suction trucks, piling rigs, excavators, dump trucks, mobile cranes, concrete placing booms, crane trucks, mulcher, lifting machinery, elevated work platform, forklift, water cart and power and hand tools.
Full road closure from 1am Saturday 28 September to 11:30pm Friday 11 October	Melford Street (rail overbridge section), Hurlstone Park	<ul style="list-style-type: none"> Activities will include installation of underground services to the bridge crossing on Melford Street Equipment used for the above work will include excavators, dump trucks, fork lift, concrete truck and power and hand tools (including concrete saw and jackhammers).

Access to buildings and driveways will be maintained at all times. VMS boards and traffic detour signs will be displayed at road closure locations prior to work commencing. Some of this work may be noisy, however we will take every possible step to minimise noise.

Keeping you informed

Properties close to the rail corridor will receive notifications when work is scheduled to occur. Sydney Trains will deliver notifications for work done during scheduled rail maintenance periods and Sydney Metro will keep you informed of all other work. If you'd prefer to receive updates by email, please contact us using the details below.

Thank you for your cooperation while we complete this essential work. For any questions, please contact 1800 171 386 or SouthwestMetro@transport.nsw.gov.au



Appendix 4: Soil Resistivity Archaeological Assessment Memo for Marrickville and Canterbury Stations.



artefact

23 August 2019

Jonathan Steele
Senior Environmental Consultant
Mott MacDonald

Dear Mr Steele,

Re: Sydney Metro City and Southwest Design – Heritage impact assessment for soil resistivity testing, Marrickville and Canterbury Stations

1.1 Project background

The proposed Sydney Metro City and Southwest project (the project) involves upgrading the 10 existing stations from Marrickville to Bankstown (inclusive), and the 13 kilometre long section of the Sydney Trains T3 Bankstown Line between west of Sydenham Station and west of Bankstown Station, to improve accessibility for customers and enable conversion of the line to metro standards. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

As part of the preparation of the Environmental Impact Statement (EIS) and Submissions and Preferred Infrastructure Report (SPIR), Artefact Heritage (Artefact) prepared non-Aboriginal archaeological assessments which outlined areas of potential significant non-Aboriginal archaeological remains at several of the stations on the T3 Bankstown Line.

The Critical State Significant Infrastructure (CSSI) project was approved by the Minister for Planning on 12 December 2018. As part of the Revised Environmental Mitigation Measures (REMM) for the project, NAH12 indicates that mitigation measures outlined in the Non-Aboriginal archaeological assessments¹² for the project must be adhered to during design, investigation and construction works for the project.

As part of investigative works for the project, Mott MacDonald are proposing to conduct soil resistivity testing at a number of locations throughout the proposed project area. Soil resistivity testing works at Canterbury and Marrickville Stations would be conducted in areas identified as archaeologically sensitive at these stations. This memo provides an assessment of archaeological impacts for the soil resistivity testing works and outlines management guidelines for conducting the works in these areas.

¹ Artefact 2018a *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Submissions and Preferred Infrastructure Report Non-Aboriginal Heritage Assessment*. Report to Transport for NSW.

² Artefact 2018b. *Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Historical Archaeological Assessment & Research Design*. Report to Transport for NSW.

1.1.1 Proposed works

Mott MacDonald are proposing to undertake soil resistivity testing at Marrickville and Canterbury railway stations. Testing would be conducted in areas of the rail corridor located away from rail track and station structures. These locations are indicated in Figure 1 and Figure 3.

Testing would be conducted with the use of four 12 mm rods inserted up to a maximum of 100 mm at each test location.

1.1.2 Report limitations

This heritage assessment is based on historical and archaeological research provided in the previously prepared heritage reports for the Sydney Metro City and Southwest – Sydenham to Bankstown Project. The current assessment provides summaries of the historical and archaeological research prepared in these two reports but does not reproduce the historical context for these reports here. As such, this report should be read in conjunction with previously prepared heritage reports. Reports referenced in this assessment include:

- *Sydney Metro City & Southwest – Sydenham to Bankstown Non-Aboriginal Heritage Impact Assessment* (Artefact 2017)
- *Sydney Metro City & Southwest – Sydenham to Bankstown Historical Archaeological Assessment & Research Design* (Artefact 2018a)
- *Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Submissions and Preferred Infrastructure Report, Non-Aboriginal Heritage Assessment* (Artefact 2018b)

This memo only assesses soil resistivity works that have been proposed to be conducted within the defined precinct boundaries of the Canterbury and Marrickville station sites for the Sydney Metro City and Southwest project.

Any soil resistivity works that would take place outside of the defined precinct boundaries for Canterbury or Marrickville, including soil resistivity tests at other station precincts for the project, or for any soil resistivity works that may occur outside of the boundaries of the defined precincts for the project, are not assessed in this memo.

1.1.3 Authorship

This report was prepared by Duncan Jones (Senior Heritage Consultant).

1.2 Marrickville Railway Station archaeological assessment

1.2.1 Heritage listings

Marrickville Railway Station is listed on the following heritage inventory registers as an item of State significance:

- 'Marrickville Railway Station Group', State Heritage Register SHR# 01186
- 'Marrickville Railway Station Group', RailCorp s.170 heritage inventory register, SHI# 4801091
- 'Marrickville Railway Station', Marrickville LEP 2011, item no. 189

1.2.2 Statement of significance

The following statement of significance for Marrickville Railway Station has been sourced from Artefact 2017.

The railway station at Marrickville is significant as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The highly intact main platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards, while the booking office on Platform 2 reflects a later period of expansion in the first quarter of the 20th century.

Marrickville Railway Station is significant at a State level as the platform building demonstrates the high level of aesthetic design of the pre-1900 standard buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. The platform building is intact and is representative of a small group of such ornate platform buildings including Canterbury and Belmore on the Bankstown Line. The platform building on platform 2 provides an interesting contrast, demonstrating the simpler design of the standard platform buildings of the 1910/20s.

Also of significance is the intactness of the weatherboard booking office which is unusual for being one of the few examples of a booking office located on a platform with street entry only and no access from the footbridge or overbridge, though the structure itself is representative of a standard design.

The Marrickville Railway Station Group demonstrates State historical significance as an important station through:

- *involvement in the expansion of suburban Sydney;*
- *local associations with Marrickville politician and contractor A.H. Scouller;*
- *aesthetic significance as a relatively intact assemblage of station buildings and structures spanning 1895-1917 and demonstrating various economies and design motivations*
- *social significance in its association with the local community;*
- *the 1917 Booking Office having research potential to demonstrate the design of these buildings and rarity values.*

Overall, the component structures of the Marrickville Railway Station Group are excellent representative examples of their types and the level of significance of the Marrickville Railway Station Group is regarded as having state significance.

1.2.3 Potential archaeological remains at Marrickville Railway Station

The Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design has previously predicted archaeological remains of local significance to be present at Marrickville Railway Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 1, and the location of these archaeological resources provided in Figure 1.

Table 1: Summary of areas with potential for significant archaeological remains for Marrickville Station³

Phase	Archaeological Resource	Potential	Significance
1 (1788-1850s)	<ul style="list-style-type: none"> Archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters 	Nil to Low	Unlikely to reach threshold for local significance
2 (1850s – 1890s)	<ul style="list-style-type: none"> Archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek 	Nil to Low	Unlikely to reach threshold for local significance
3 (1890s – 1920s)	<ul style="list-style-type: none"> Archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, utilities such as woodstave sewer or ceramic pipes; brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings 	Moderate to High	Local
	<ul style="list-style-type: none"> Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge Archaeological remains of the former Earlwood tram line that ran across Illawarra Road overbridge such as tram tracks and associated infrastructure 		
4 (1930s – Present)	<ul style="list-style-type: none"> Low potential for footings of former coal loading and storage facilities Low potential for archaeological remains of the former sleeper bridge such as bridge footings 	Low	Unlikely to reach threshold for local significance
	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage Footings associated with the commuter car parking structure and the Illawarra Road footbridge Footings of signalling huts and boxes 	Moderate to High	Unlikely to reach threshold for local significance
	<ul style="list-style-type: none"> Archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, 	Moderate	Local

³ Artefact 2018a: Table 3-4.

Phase	Archaeological Resource	Potential	Significance
-------	-------------------------	-----------	--------------

iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts

1.2.4 Archaeological management strategy for works at Marrickville Station

The *Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design* has assessed potential impacts to archaeological resources at Marrickville Station from the main works required for renovations to Marrickville Station for the Sydney Metro City & Southwest Project. The archaeological management policies for these works are outlined in Table 2 and the location of the archaeological management zones are illustrated in Figure 2.

Table 2: Summary of archaeological management requirements at Marrickville Station Catchment⁴

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1850s)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of dairy farming and market gardening including fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
2 (1850s – 1890s)	Nil to low potential for archaeological features associated with farming such as fence or shed postholes, field drains and isolated artefacts, drains or culverts associated with the former creek. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
3 (1890s – 1920s)	Moderate to high potential for potentially local significant archaeological remains associated with the early phase of railway infrastructure such as culverts, ceramic service pits, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track. Identified remains of original stone copings, earlier alignment of platforms, footscrapers, buried services, original lever set, footings of former platform stairs, platform brick dwarf walls, and building footings. Moderate potential for footings of former platform canopies Low potential for former level crossing at the current Illawarra Road overbridge. Moderate potential for archaeological remains of the former Earlwood tram line that ran across Illawarra	1	<ul style="list-style-type: none"> ● AMS ● Salvage Excavation

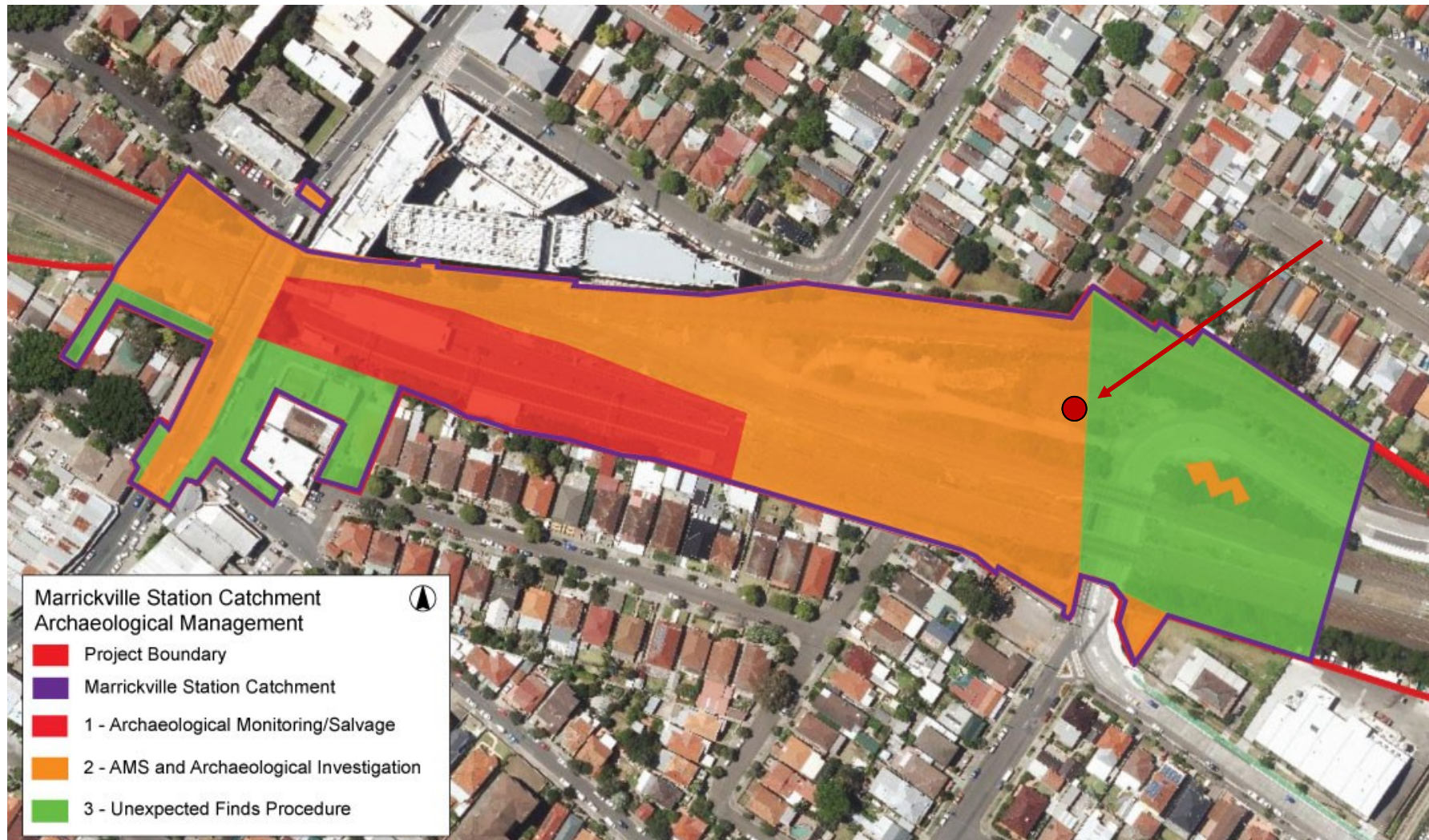
⁴ *Ibid* Table 8-2.

Phase	Potential Archaeology	Management Zone	Mitigation
4 (1930s – Present)	Road overbridge such as tram tracks and associated infrastructure		
	Low potential for footings of former coal loading and storage facilities.	3	Unexpected Finds Procedure
	Low potential for archaeological remains of the former sleeper bridge such as bridge footings.		
	Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage, footings of signalling huts and boxes, and footings associated with the commuter car parking structure and the Illawarra Road footbridge. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure
Moderate potential for locally significant archaeological remains associated with the WWII air raid shelter such as the cut of the pit, sandbags, iron, concrete sandbags, roofing, drainage infrastructure, and associated artefacts.	2	<ul style="list-style-type: none"> ● AMS ● Test / Salvage Excavation 	

Figure 1: Historical overlay for Marrickville Station Catchment, location of proposed soil resistivity test shown in red circle / red arrow



Figure 2: Marrickville Station Catchment archaeological management zones, location of soil resistivity location indicated with red circle / red arrow



1.3 Canterbury Railway Station archaeological assessment

1.3.1 Heritage listings

Canterbury Railway Station is listed on the following heritage inventory registers as an item of State significance:

- ‘Canterbury Railway Station Group’, State Heritage Register SHR# 01109
- ‘Canterbury Railway Station Group’, RailCorp s.170 heritage inventory register, SHI# 4801100
- ‘Canterbury Railway Station’, Canterbury LEP 2012, item no. 167

1.3.2 Statement of significance

The following statement of significance for Canterbury Railway Station has been sourced from Artefact 2017.

Canterbury Railway Station possesses historical significance as it is a station on the Sydenham to Bankstown Line which was constructed to relieve congestion on the Main South Line as well as to encourage suburban development and the growth of agriculture in the late 19th and early 20th century. The main platform building represents the period of transition from the boom time of the 1880s to the standardisation of NSW railway building design from the 1890s onwards.

Canterbury Railway Station is significant at the state level as the platform 1 Building demonstrates the high level of aesthetic design of the pre-1900 standard railway buildings, which included the use of polychromatic brickwork, decorative dentil coursing, ornate awning brackets and carved bargeboards. This platform building is relatively intact and is representative of a small group of such ornate platform buildings including Marrickville and Belmore on the Bankstown Line.

The Canterbury signal box is of historical significance as it is representative of the development of railway signalling technology in the first decades of the 20th century. As it was is [sic] intact internally it is capable of providing information about the workings of a signal box of this era.

1.3.3 Potential archaeological remains at Canterbury Railway Station

The Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design has previously predicted archaeological remains of local significance to be present at Canterbury Railway Station. A summary of the archaeological potential and significance of predicted remains is provided in Table 3, and the location of these archaeological resources for significant phases provided in Figure 3 and Figure 4.

Table 3: Summary of areas with potential for significant archaeological remains for Canterbury Station⁵

Phase	Archaeological Resource	Potential	Significance
1 (1788-1841)	<ul style="list-style-type: none"> • Archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, 	Nil to Low	Unlikely to reach threshold for

⁵ Artefact 2018a: Table 4-3.

Phase	Archaeological Resource	Potential	Significance
	former shed postholes, field drains, isolated artefact scatters		local significance
2 (1841 – 1855)	<ul style="list-style-type: none"> • Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works • Archaeological remains of the outbuildings such as footings, timber slabs remnants, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fencelines, and yard surfaces • Evidence of small scale mining activities • Archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters • Archaeological remains of early residential cottages including wells, cisterns and refuse pits 	Moderate to High	Potentially State
3 (1855 – 1895)	<ul style="list-style-type: none"> • Archaeological remains of early residential cottages including wells, cisterns and refuse pits • Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Blackett and Co Canterbury Engineering Works 	Moderate to High	Potentially Local
4 (1895 – 1943)	<ul style="list-style-type: none"> • Archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers • Archaeological remains of former platform structures • Archaeological remains of the former race platform and retaining wall • Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings • Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track • Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track • It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades. 	Moderate	Potentially Local

Phase	Archaeological Resource	Potential	Significance
5 (1943 – Present)	<ul style="list-style-type: none"> Archaeological remains associated with upgrades such as utilities and drainage 	Moderate to High	Unlikely to reach threshold for local significance

1.3.4 Archaeological management strategy for works at Canterbury Station

The *Sydney Metro City & Southwest – Sydenham to Bankstown Upgrade Historical Archaeological Assessment & Research Design* has assessed potential impacts to archaeological resources at Marrickville Station from the main works required for renovations to Canterbury Station for the Sydney Metro City & Southwest Project. The archaeological management policies for these works are outlined in Table 4 and the location of the archaeological management zones are illustrated in Figure 5.

Table 4: Summary of archaeological management requirements at Canterbury Station Catchment⁶

Phase	Potential Archaeology	Management Zone	Mitigation
1 (1788-1841)	Nil to low potential for archaeological features associated with land clearance such as tree boles, evidence of estate farming activities such as fence line postholes, former shed postholes, field drains, isolated artefact scatters. Unlikely to reach the threshold for local significance	3	Unexpected Finds Procedure
2 (1850s – 1890s)	<p>Moderate to high potential for potentially State significant archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Australasian Sugar Company works.</p> <p>Archaeological remains of the outbuildings such as footings, timber slabs remnants, underfloor deposits, post holes, artefact deposits, cess pits, wells, cisterns, fencelines, and yard surfaces.</p> <p>Evidence of small scale mining activities, archaeological evidence of farming includes fence line postholes, former shed postholes, brick or paved yard surfaces, field drains, isolated artefact scatters.</p> <p>Archaeological remains of early residential cottages including wells, cisterns and refuse pits.</p>	1	<ul style="list-style-type: none"> AMS Salvage Excavation
3 (1855 – 1895)	Moderate to high potential for potentially locally significant archaeological remains of early residential cottages including wells, cisterns and refuse pits.	1	<ul style="list-style-type: none"> AMS Salvage Excavation

⁶ *Ibid* Table 8-2.

Phase	Potential Archaeology	Management Zone	Mitigation
	Archaeological remains of outbuildings, landscape modifications, fence lines, drains and other structural remains associated with the Blackett and Co Canterbury Engineering Works.		
4 (1895 – 1943)	<p>Moderate potential for locally significant archaeological remains and evidence of early railway construction including rails, refuse pits, drains and timber sleepers.</p> <p>Archaeological remains of former platform structures. Archaeological remains of the former race platform and retaining wall.</p> <p>Archaeological remains of the storage sidings for the Canterbury Racecourse special trains and the shunting of the local goods sidings.</p> <p>Archaeological remains of early infrastructure such as culverts, tanks, drains (brick, stone or concrete), electrical conduits and pits, sleepers, signalling equipment and rail track.</p> <p>Archaeological remains associated with the early phase of minor railway buildings (such as toilets) prior to track realignment such as postholes, brick footings, former floor surfaces, and early infrastructure such as ceramic service pipes, brick drainage pits, electrical conduits and pits, stanchion bases, sleepers and rail track.</p> <p>It is unlikely that artefact-bearing deposits associated with the early station accumulated or survived subsequent development and upgrades.</p>	1	<ul style="list-style-type: none"> ● AMS ● Salvage Excavation
5 (1943 – Present)	Moderate to high potential for archaeological remains associated with upgrades such as utilities and drainage. Unlikely to reach the threshold for local significance.	3	Unexpected Finds Procedure

Figure 3: Historical overlay for Canterbury Station Catchment for Phase 2 (1841 – 1855), location of soil resistivity location indicated with red circle / red arrow



Figure 4: Historical overlay for Canterbury Station Catchment for Phase 4 (1895 – 1943) location of soil resistivity location indicated with red circle / red arrow

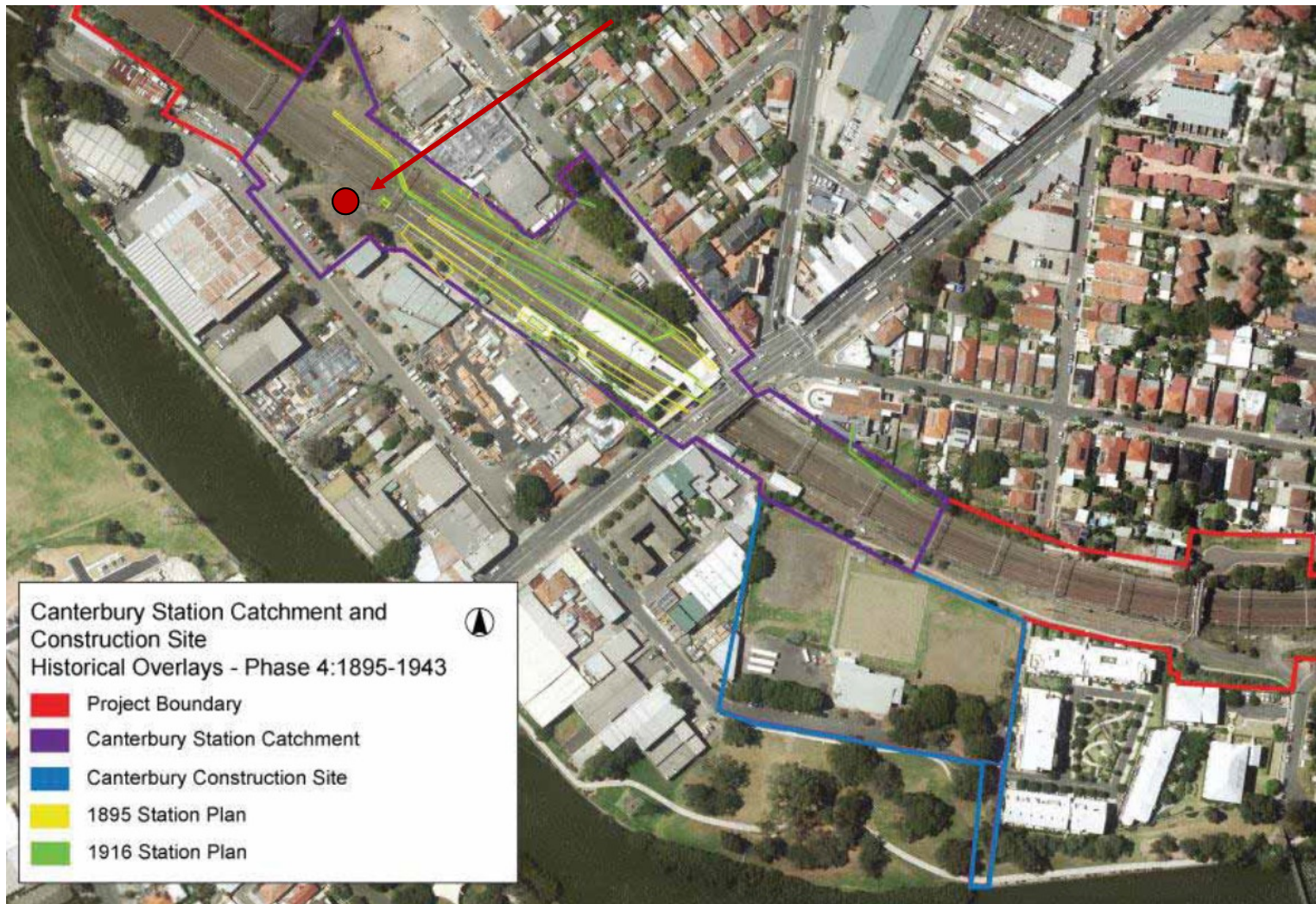


Figure 5: Canterbury Station Catchment archaeological management zones, location of soil resistivity location indicated with red circle / red arrow



1.4 Marrickville soil testing archaeological impact assessment

The soil resistivity test would be located in an area north of the rail corridor and approximately 30 m to the west of Victoria Road, Marrickville. This is located in an area of the rail corridor with no present structures. Historical plans of Marrickville Station show that subsurface brick drainage structures are located approximately 20 m to the west and south of the proposed soil resistivity test location.

The testing location is located within an area where an archaeological management strategy should be prepared prior to ground disturbing works being undertaken. However, the precise location of soil testing is in an area where no significant archaeological resources have been immediately predicted. Furthermore, the insertion of four narrow (12 mm) probes to a shallow depth (100 mm maximum) would cause extremely minor ground disturbance in the location of its insertion and would be unlikely to impact discrete archaeological remains even if remains were predicted to be located within this area.

The soil resistivity works would therefore result in a neutral impact to significant archaeological resources at the Marrickville Station precinct.

1.5 Canterbury soil testing archaeological impact assessment

The soil resistivity test would be located in an area to the south of the rail corridor, to the west of Canterbury Station. This area is currently in use as a vehicle access point to the rail corridor from Charles Street. Historical research indicates that this area has been used as a rail access point for much of the twentieth century, with evidence of landscape modification with artificial embankments constructed to allow graded access to the rail line. There is no evidence that structures have been present in this location prior to its current use as a rail corridor access point.

The testing location is located within an area where an archaeological management strategy should be prepared prior to ground disturbing works being undertaken. However, the precise location of soil testing is in an area where no significant archaeological resources have been immediately predicted. Furthermore, the insertion of four narrow (12 mm) probes to a shallow depth (100 mm maximum) would cause extremely minor ground disturbance in the location of its insertion and would be unlikely to impact discrete archaeological remains even if remains were predicted to be located within this area.

The soil resistivity works would therefore result in a neutral impact to significant archaeological resources at the Canterbury Station precinct.

1.6 Archaeological management and mitigation measures

While both soil resistivity tests would be conducted in areas which have been designated as requiring the preparation of Archaeological Method Statement (AMS) reports, the predicted archaeological impacts at both sites have been assessed as neutral. No significant archaeological remains are predicted to be impacted by the proposed works. In accordance with the archaeological management methodology outlined in the Archaeological Research Design (ARD) for the project:

“An AMS would be prepared prior to construction works with the potential to impact archaeological resources”.⁷

⁷ Artefact 2018b, p. 128.

As the proposed soil resistivity works have been assessed to not cause any impacts to significant archaeological resources identified in archaeological assessments previously prepared for the project, an AMS is not required to be prepared prior to the works taking place.

In addition, due to the way in which resistivity testing would be conducted, archaeological monitoring (involving the presence of an on-site archaeologist to supervise ground disturbing works), would not be effective as the narrow size of the probes prevents any accurate observation of sub-surface conditions.

The works should proceed with the following recommendations:

- This heritage memo should be provided to Sydney Metro for their comment and approval for the works.
- Works for the soil resistivity testing have been assessed for archaeological impacts at locations designated in information provided by Mott MacDonald. Soil resistivity testing must occur at these locations and cannot be moved outside of these locations during works. Should soil resistivity locations be altered, the works would require new archaeological impact assessment, which may require further archaeological management and mitigation measures (such as the preparation of AMS reports, or archaeological monitoring of the works).
- In the unlikely event that soil resistivity works encounter unexpected archaeological remains, the Sydney Metro unexpected finds policy should be enacted. This may involve localised work stoppages and further assessment on site by a suitably qualified archaeologist.



Duncan Jones
Senior Heritage Consultant
Artefact Heritage

duncan.jones@artefact.net.au