

Sydney Trains Environmental Management System Site Environmental Management Plan (SEMP)


Introduction



Sydney Trains is the proponent and determining authority for this activity. This environmental impact assessment is being completed in accordance with Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and Part 8 of the Environment Planning and Assessment Regulation 2021 (EP&A Reg). This SEMP forms the assessment when paired with the associated Environmental Work Method Statements.

The activity covered by this assessment is routine maintenance or ancillary works associated with the ongoing safe operation and management of the Sydney Trains rail network in accordance with NSW and Federal statutory objectives. As such, and in respect to this assessment, the cumulative impacts of the routine maintenance and ancillary works are negligible and alternatives to undertaking the works have not been assessed.

1 Project / Program details

Project / Program Details	
Project/Program Name	St James Station – Elizabeth Street Entrance Awning Conservation & Repair Works / Major Periodic Maintenance – Opportunity Works 22/24
Project/Program No	P.0072970
Scope of Works	<p>Water leaks from the awning above the entry to St James Station on Elizabeth Street Sydney have been evident for some time. An inspection carried out and found that the poor condition of the roof and box gutter of the awning is the cause of the leaks.</p> <p>Sydney Trains is proposing to undertake repair and maintenance works to the awning in line with obligations for the maintenance and repair of its assets. The works consists of eliminating roof leakages through the awning by the replacement of the copper roofing and box gutter and other associated minor works, as well as improving the overall condition and appearance of the entry building and ensuring its longevity.</p> <p>Scope of Works</p> <p>In outline the scope of proposed works is as follows:</p> <ul style="list-style-type: none"> • Replacement of existing copper roof including supporting timber elements where damaged and beyond repair. • Replacement of existing box gutter including supporting elements. • Install new lead lining to existing box gutter outlets if required, alternatively retain existing lead lining if in good condition. • Installation of new box gutter overflows. • Investigation of stormwater system from existing downpipes to street and jet blasting if necessary. • Replacement of stormwater pits under downpipes including installation of new grates. • Removal of peeling paint and rust from both existing downpipes with stormwater heads, treatment against rust and repainting. • Restoration of awning glazed copper sign panels.

	<ul style="list-style-type: none"> • Cleaning and maintenance of awning copper elements including copper ceiling, polishing, and waxing. • Cleaning of brass corner guards and waxing. • Removal of peeling paint and rust from cast iron awning brackets and repainting. • Inspection of existing electrical wiring and possible rectification. • Replacement of lights in station signage in LED. • Replacement of three existing ceiling lights in LED. • Sandstone washing, removal of black stains, removal of biological growth and application of biocide on south elevation including entry reveal and from north elevation of north buttress and south elevation of south buttress. 10% sandstone repointing. • Painting and reinstallation of existing ladder bracket on the side of awning. e a summary of works including; site establishment, the nature, scale and the affected assets, reinstatement works <p>.....</p>
<p>What is the cost of the scope of works?</p>	<p><input checked="" type="checkbox"/> Routine maintenance - any value</p> <p><input type="checkbox"/> Capital investment - less than \$5 million</p> <p><input type="checkbox"/> Capital investment - more than \$5 million</p>
<p>Location</p>	 <p>The map shows the St James Station area in Sydney, Australia. It highlights the Elizabeth Street Entrance Awning location in blue. The map includes surrounding streets such as Elizabeth Street, Market Street, and St James Road. Key landmarks like St James Church and St Mary's Cathedral are also visible.</p> <p>St James Station – Elizabeth Street Entrance Awning</p>

		
Attach applicable Environmental Work Method Statement (EWMS)	EWMS Number	EWMS Title
	EMS-03-EW-0299	Station Refresh and Platform
	EMS-03-EW-0296	Recladding Roofs and Walls
Is any of the proposed work outside of the EWMS' scope?	<input checked="" type="checkbox"/> No: Continue to next question	
	<input type="checkbox"/> Yes:  <i>Contact your environmental officer to determine how the works' environmental assessment can proceed</i>	
Does this work have any steps or equipment that are not covered by the EWMS?	<input checked="" type="checkbox"/> No: Continue to next question	
	<input type="checkbox"/> Yes: Provide details below	
Is the work part of a larger job?	<input checked="" type="checkbox"/> No: Continue to <i>Part 2 Project Timing and Location</i>	
	<input type="checkbox"/> Yes: Provide details of larger job and relationship to these works	
	 <i>Contact your local environmental officer. The larger project may have environmental controls that need to be applied to this job. All relevant conditions and controls need to be added to PART 5. Summary of approvals and control measures</i>	

2 Project timing and location(s)

2.1 Project timing

Activity	Dates & work hours, noting any 'Out of hour' periods <small>(Out of hour = outside of 7am–6pm Monday to Friday or 8am–1pm Saturday)</small>
Works/program commencement: <i>Including pre-works, site establishment (including access, laydown/stockpiles, site amenities, parking), installation of erosion and sediment controls, etc</i>	Site Mobilisation and site setup - Thursday 31st August 2023, 7AM to 5PM

<p>Site construction and/or periodic maintenance activities</p> <p><i>For programs/ recurring maintenance detail recurrence frequency and work hours of activities</i></p>	<p>Scaffold and fall protection</p> <p>Repair Works - All as per attached Program of Works</p>
<p>Works/program completion:</p> <p><i>Including demobilisation and removal of all site offices, equipment and materials.</i></p>	<p>Completion & Demobilisation 8-10 November 2023</p>

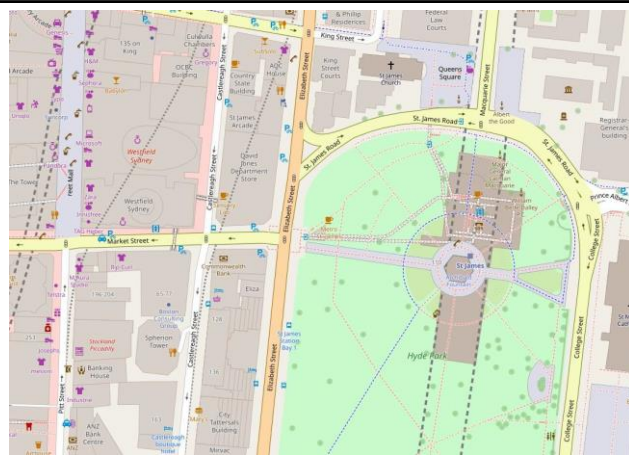
2.2 Existing environment



Where multiple sites are to be covered by this form each location is to be identified separately in the following question set (e.g. Site 1, Site 2, etc)

The descriptions are to be derived from desktop studies such as aerial photos, overlays and databases (e.g. WebGIS ME) and are to be confirmed, modified and expanded by a pre-work site inspection and. Descriptions must include aspects such as acute slope/fall, waterways, drains, vegetation and individual trees, heritage items or curtilage, difficult access, traffic, nearest neighbours etc

Site 1: St James Station – Elizabeth Street Entrance Awning

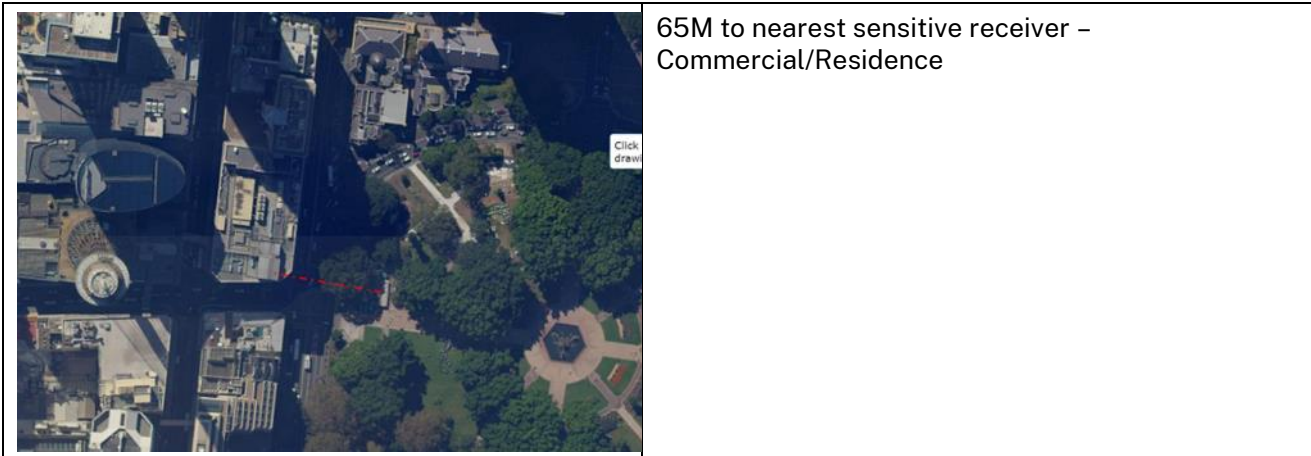


- Local environment includes:
- In, or near, residential area
 - In, or near, customer areas
 - Tunnel/underground location
 - Easement/off corridor areas
 - Open spaces
 - Sparsely vegetated spaces
 - Thickly vegetated spaces
 - In, or near, waterways or drains
 - Other (specify):

Site 2: State Heritage Register listing boundary



Red hatch on plan shows the State Heritage Register listing boundary and curtilage for the Plan showing the SHR curtilage boundary for St James Railway Station Group (source: State Heritage Inventory, accessed August 2022, <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012220>)



3 Consultation requirements

3.1 Consultation with adjoining land managers


Do the works require consultation with other land managers ⁽¹⁾ ?	
Will the works result in substantial impacts on Council related infrastructure and services or locally listed heritage items? (i.e. local heritage items, stormwater, traffic, sewerage, water or impact on public place or footpaths, or works that impact flood prone areas or coastal areas)	<input checked="" type="checkbox"/> No: Continue to next question <input type="checkbox"/> Yes: Identify requirements and how they were addressed:
Are the works adjacent to land reserved under the <i>National Parks & Wildlife Act 1974</i> ?	<input checked="" type="checkbox"/> No: Continue to next question <input type="checkbox"/> Yes: Identify requirements and how they were addressed:
Consultation required with other stakeholders (e.g. Roads, Crown Land, Private landholder etc.)	<input checked="" type="checkbox"/> No: Continue to next question <input type="checkbox"/> Yes: Identify requirements and how they were addressed:
(1) Where consulted, all land managers must have a minimum 21 days to provide comments. Comments received must be considered and appropriate actions identified in <i>Part 5.1</i>	


3.2 Community consultation

Could there be community interest in the works?	
<input checked="" type="checkbox"/> No: Community consultation assessment not required	<input type="checkbox"/> Yes: Complete EMS-03-FM-0104 EIA Public Engagement Assessment and identify the assessment outcome; <ul style="list-style-type: none"> <input type="checkbox"/> 'Outrage' risk management <input type="checkbox"/> Targeted public consultation <input type="checkbox"/> Public engagement not required Actions arising from this assessment are to be identified in <i>Part 5 Summary of approvals and control measures</i>

4 Environmental assessment

4.1 Working outside the Active Operational Zone (AoZ)


Are any works to be completed outside the AoZ?	
<input checked="" type="checkbox"/> No: Continue to Section 4.2 Vegetation condition	<input type="checkbox"/> Yes: Contact your environmental officer for support.  EMS-03-FM-0249 EWMS activities outside AoZ must be completed by an environmental officer and must be attached to this SEMP.

 Vehicle access across land that is not in the control of Sydney Trains via roads, access ways, easements, or with the consent of the relevant landowner is not considered to form part of the works outside the AOZ

4.2 Vegetation condition

Has all the vegetation within the worksite been maintained ⁽¹⁾ within the last 10 years?	
<input type="checkbox"/> Yes: Continue to Section 4.3	<input checked="" type="checkbox"/> No/Don't know Discuss with your local environmental officer whether the site should be considered as a sensitive site due to some biodiversity aspect. If so, add site to 4.3 Sensitive Sites as directed
Note (1): 'Maintained' means pruned, weeded, mowed or other activity that significantly disturbed the vegetation.	

4.3 Sensitive sites

 For works undertaken outside of the AOZ the following section is to include all sites identified by the environmental officer in the activities' **EMS-03-FM-0249 EWMS activities outside AOZ**.

Will the works be located in, or within 100m of a Sensitive Site? (Ref: Web GIS ME)		
• Aboriginal heritage site or Environmentally Sensitive Site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
• Contaminated Site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
• Non-Aboriginal Heritage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
A separate line is to be completed in the following table for each site/location identified		
Location and distance (m) from the worksite	Nature of site (Details from database or register)	Potential for the works to impact ²
Within curtilage	St James Railway Station Group (SHR#2830)	Minimum – Heritage approval/exemption from Heritage Council NSW obtained HCS/2023/26 dated 17/05/23 All workers to be briefed on the conditions of approval

<p>Notes:</p> <ul style="list-style-type: none"> Information about sensitive sites must be sufficient to be able to make an informed decision on potential impacts and appropriate project controls. Additional assessments may be required for works in or adjacent to some sensitive sites. Please see the environmental officer and/or individual subject matter procedures for specific requirements. Where works have the potential to impact sensitive sites the required additional controls, approvals, notifications, etc must be listed in the relevant section of <i>Part 5 Summary of approvals and control measures</i> 		

4.4 Noise and vibration assessment of the works

A. Are there any noise sensitive receivers ⁽¹⁾ within 350m of works?					
<input type="checkbox"/> No Works do not need further noise assessment, go to Section 5.	<input checked="" type="checkbox"/> Yes Describe receivers and continue to Part B. Receivers: Residential Distance: 65m				
B. Track work on a moving face					
Will work be limited to track work on a moving face, be undertaken for less than five (5) consecutive days and consist only of one or more of the following activities: <ul style="list-style-type: none"> <input type="checkbox"/> Ballasting or ballast clean <input type="checkbox"/> Resurfacing (tamping, stabilising, regulating) <input type="checkbox"/> Rail profiling <input type="checkbox"/> Continuous track welding / rail adjusting 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;"><input type="checkbox"/> Yes</td> <td>Works do not need noise and vibration assessment, go to Section 5.</td> </tr> <tr> <td><input checked="" type="checkbox"/> No</td> <td>Continue to Part C.</td> </tr> </table>	<input type="checkbox"/> Yes	Works do not need noise and vibration assessment, go to Section 5.	<input checked="" type="checkbox"/> No	Continue to Part C.
<input type="checkbox"/> Yes	Works do not need noise and vibration assessment, go to Section 5.				
<input checked="" type="checkbox"/> No	Continue to Part C.				
C. Answer the following					
Will there be any equipment producing noise levels of: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> more than 80 dBA ⁽²⁾ during Standard Hours ⁽³⁾, and/or <input type="checkbox"/> more than 60 dBA ⁽²⁾ outside of Standard Hours ⁽³⁾ or <ul style="list-style-type: none"> <input type="checkbox"/> Will the works use pile drivers, hydraulic hammers or vibratory rollers (or similar vibration inducing plant)? or <ul style="list-style-type: none"> <input type="checkbox"/> Will works at any one location last more than 3 weeks in duration? 	<table border="1" style="width: 100%;"> <tr> <td style="width: 20%;"><input checked="" type="checkbox"/> No</td> <td>Works do not need further noise and vibration assessment, go to Section 5.</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td>Complete EMS-09-FM-0166 Maintenance Quantified Noise and Vibration Assessment and include any resulting actions in Section 5.</td> </tr> </table>	<input checked="" type="checkbox"/> No	Works do not need further noise and vibration assessment, go to Section 5.	<input type="checkbox"/> Yes	Complete EMS-09-FM-0166 Maintenance Quantified Noise and Vibration Assessment and include any resulting actions in Section 5.
<input checked="" type="checkbox"/> No	Works do not need further noise and vibration assessment, go to Section 5.				
<input type="checkbox"/> Yes	Complete EMS-09-FM-0166 Maintenance Quantified Noise and Vibration Assessment and include any resulting actions in Section 5.				
(1) Noise sensitive receivers include residences, hospitals, places of worship, schools, aged, childcare facilities, etc. (2) Noise levels are for the loudest equipment's 'Modified 10m Sound Pressure' as given in EMS-09-FM-0166 Maintenance Quantified Noise and Vibration Assessment ('SoundPressure' Table, 'References' Tab). (3) Standard Hours' = 7am-6pm Monday to Friday and 8am-1pm Saturday					

5 Summary of approvals and control measures



For works undertaken outside of the AOZ, the following section is also to include all actions and controls arising from the project's **EMS-03-FM-0249 EWMS Activities Outside of AOZ**.

5.1 Permits, approvals and consultation


Describe all relevant permits, approvals and consultation requirements for the works.

Environmental Hazard	Permits/Other Requirements	Timing	Responsibility
Heritage station	Approval under Section 60 of the Heritage Act 1977 - St James Railway Station Group HCS/2023/26	17 May 2023	PM, ST

5.2 Environmental controls

Environmental Hazard	Work controls and responsibility including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities
Works community notification:	Project manager Letterbox notification provided: Local <input type="checkbox"/> Possession <input type="checkbox"/>
Awareness and responsibility: <i>Staff unaware of the works' environmental controls and their responsibilities</i>	Site supervisor <ul style="list-style-type: none"> Undertake site pre-work briefings and local inductions using the SEMP and the SECM to cover the work's environmental risks and controls and the workers environmental responsibilities Delivery tool-box talks relevant to the environmental hazards Maintain a readily accessible copy of the environmental approval (including all associated specialist approvals and plans) at the worksite whenever work is being undertaken. Display prominently on site, where possible, the SECM and make sure it is accurate and used
Dust: <i>Emissions of dust leaving site from earthworks, stockpiles and works traffic</i>	Site supervisor <ul style="list-style-type: none"> Select plant and equipment for the task that is fit for purpose and minimises dust generation Use water cart to dampen exposed surfaces including access roads, work areas and stockpiles Cover long term stockpiles Minimise removal of vegetation from worksite Keep vehicles to existing access roads
Erosion and sedimentation: <i>Loss of soil and sediment from worksite to surrounding environment, including tracking onto public roads</i>	Site supervisor <ul style="list-style-type: none"> Site supervisor to have completed Level 1 Erosion and Sediment Control course Install and maintain erosion and sediment control structures from prior to commencing site work until site has stabilised after the completion of works Use a street sweeper to regularly remove mud and silt from public roads used for site access Include sediment control in stockpile management Complete post-work site rehabilitation and erosion and sediment control maintenance and inspections (transfer ownership to operational area at end of responsibility)
Heritage: <i>Unintentional or unapproved impact on Aboriginal and non-Aboriginal heritage</i>	Site supervisor <ul style="list-style-type: none"> Isolate and demarcate heritage sites to prevent accidental damage If a heritage or archaeological item is uncovered, immediately stop further disturbance, demarcate the site, contact your environmental support and follow EMS-09-PR-0164 Unexpected Archaeological Finds

Environmental Hazard	Work controls and responsibility <i>including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities</i>
	<ul style="list-style-type: none"> All staff and their contractors to be briefed on site specific heritage matters and provided with relevant tool-box talks. Implement conditions as per Heritage approval from City of Sydney (Approval under Section 60 of the Heritage Act 1977) Change in scope may require additional assessment and approval. Consult with environment professional if changes in scope are proposed.
<p>Incidents and emerging issues <i>An incident or emerging issue is not controlled and causes an environmental impact</i></p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> Support management of emerging issues and incident management, notification, investigation and the completion of corrective and preventative actions <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Complete daily inspections of the site, plant and equipment and the surrounding area Implement incident procedures on unapproved impacts, spills and other environmental incidents Notify incidents to the Incident and Injury Hotline 1800 772 779 or enter incident directly into SHEM
<p>Noise and vibration: <i>Impact of works noise and vibration on neighbouring residents and properties – particularly the potential for sleep disturbance</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Schedule more noisy work for ‘standard hours’ (7am to 9pm Monday to Friday, 8am to 1pm Saturday), where practical Limit operating and idling plant and equipment on site, where practical Locate noisy equipment, parking areas and assembly areas away from sensitive receivers, where practical and instruct workers to minimise noise during shift changes and at crib areas Use non-tonal reversing alarms on vehicles, where practical All plant and equipment to be operated with effective noise attenuation equipment (e.g. mufflers)
<p>Plant and equipment emissions: <i>Smoke, fumes., odours and other emissions from plant and equipment</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Plant and equipment is operated and maintained in a proper and efficient manner with all of its pollution control equipment in place and functioning Plant and equipment not used when needing repair Plant and equipment is regularly checked for wear, leaks, odours, fumes and smoke All plant to have suitable spill kits and operators trained in their use and the disposal of used spill kit materials
<p>Traffic: <i>Traffic disruption to community and other users around worksite</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Plan all vehicle movements to occur outside of local peak traffic periods Place offsite staging areas in low impact areas Obtain a Road Occupancy Licence, as necessary Utilise qualified traffic control staff
<p>Visual impact: <i>Visual impact on community due to works and worksite facilities and activities</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Place stockpiles and site amenities away from residents, and remove them as soon as possible Create or maintain existing visual screens such as using vegetation, shade cloth on fences or natural site features Keep the site tidy and free of litter
<p>Waste: <i>Unnecessary generation of wastes and poor or illegal</i></p>	<p>Construction waste (e.g. spoil, concrete, litter, etc) <i>Site supervisor</i></p>

Environmental Hazard	Work controls and responsibility <i>including those from the EWMS, PART 4 of this SEMP, specialist reports and/or licences and all other relevant activities</i>
<i>disposal of wastes</i>	<ul style="list-style-type: none"> • Do not overestimate quantities of materials required • Separate wastes, place all wastes in appropriate containers and dispose of them as they are generated • Prevent the mixing of similar new and waste materials • Classify all wastes in accordance with the NSW EPA Waste Classification Guidelines • Only use approved waste contractors and dispose of all wastes leaving site to facilities licenced to receive the waste • Keep records of all waste classification, transport, disposal, reuse and recycling activities
	<i>The works' SECM must illustrate the relevant work areas and site environmental controls described above</i>

5.3 Biodiversity offset

Is a Biodiversity Offset required for the project?	
<input checked="" type="checkbox"/> No: Continue	<input type="checkbox"/> Yes: Provide the following information: Value ⁽¹⁾ : _____
(1) All calculations are to be in accordance with EMS-06-WI-0177 Biodiversity Offsets Calculator	

5.4 SEMP documents

For environmental planning and assessment purposes the SEMP for this job comprises of:

- This SEMP
- The Environmental Work Method Statement (EWMS) referred to in Section 1
- The attached project’s Site Environmental Control Map

Plus (tick as appropriate):

- EMS-03-FM-0248 EWMS Scope Exception**
- EMS-09-FM-0249 EWMS Activities outside AOZ** (see Section 4.1)
- EMS-09-FM-0166 Maintenance Quantified Noise and Vibration Assessment** (see Section 4.3)
- Additional environmental studies, approvals (including Aboriginal and non-Aboriginal heritage)

5.5 Environmental review requirements

Is review required by an environmental assessor?

Is this for a program of work?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is any of the work to be completed outside of the Active Operational Zone (AOZ)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is any work being undertaken or will impact on land controlled by others?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is access required across land controlled by others that is not a road, easement or right of way?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Were any sensitive sites identified in Section 4.2?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is any work being undertaken in embankments, cuttings or on the boundary fence?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is extensive Council or other Authority consultation required?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are environmental impacts “likely” <u>and</u> “significant”	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Was an EMS-10-FM-0166 Maintenance Quantified Noise Assessment required (Section 4.3) AND was a work phase identified as High Risk?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is work likely to cause community concern (other than noise)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Were additional environmental studies or approvals (e.g. heritage) required?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Were any biodiversity Offsets required for the project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



If “Yes” to any of the above, this form must be submitted to the local environmental officer for assessment at least 4 weeks prior to the planned commencement date of the works.

6 Determination

The works covered by this document have been determined to proceed under Division 5.1 of the *Environmental Planning & Assessment Act 1979* and Part 8 of the *Environmental Planning & Assessment Regulation 2021* subject to the implementation of all mitigation measures and actions identified in this document.

Position of Determiner: Project Manager - Delivery Infrastructure,

Date of Determination: 28/08/2023

This version of the document has been redacted to remove personal information.



To provide comments on this EIA please complete a [Sydney Trains Feedback Form](#) or call the Sydney Trains Feedback Line on 131 500.

Acknowledgement of Country



Sydney Trains acknowledges the traditional custodians of the land on which we work and live. We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Recladding walls and roofs

Environmental Work Method Statement			Sydney Trains Incident Hotline 1800 772 779
<p>Scope of EWMS: EWMS works are limited to:</p> <ul style="list-style-type: none"> • Re-cladding roofs or walls with similar materials • Installation of whirly birds • Installation of roof louvers and vents • Installation static lines and roof walkways • Guttering 	<p>Not in Scope: Works not in scope include:</p> <ul style="list-style-type: none"> • Enlargement or extension of building or increase in load-bearing capacity of any load-bearing component of building • Structural alterations <p>Note: Works not in scope may require a different form of environmental assessment and approval, Contact local environmental officer for guidance</p>	<p>Project manager requirements:</p> <ul style="list-style-type: none"> • Has a Sydney Trains employee number • Completed <i>Environmental Management for Projects</i> (online) and <i>SEMP Masterclass</i> training 	<p>Plant and equipment</p> <ul style="list-style-type: none"> • Crane truck • Lifting plant – Crane, EWP, Telehandler • Lighting towers • Oxy cutting equipment • Site amenities • Traffic control devices • Waste bins • Welding equipment • Work trucks / vehicles • Scaffolding • Ladder(s) • Water cart
		<p>External notifications: <i>Parties outside of Sydney Trains that are likely to require works' notification</i></p> <ul style="list-style-type: none"> • Letter box drop to residents (if identified in SEMP) 	
		<p>Permits / licences: <i>Licences and permits not issued by Sydney Trains that are likely to be needed for works</i></p> <ul style="list-style-type: none"> • Heritage approval (if identified SEMP) 	

Environmental Hazard Matrix

Job steps	Environmental hazard														
	Awareness and responsibility	Biodiversity	Chemical and fuel storage and decant	Dust	Erosion and sedimentation	Heritage	Incidents and emerging issues	Light Spill	Noise and vibration	Pesticides	Plant and equipment emissions and spills	Soil and water contamination	Traffic	Visual impacts	Waste
Site establishment (including material / plant delivery, establish site amenities, place skip bins, install erosion and sed control, etc)	Y	Y	Y	Y	Y	Y	Y	-	Y	-	Y	-	Y	Y	Y
Preliminary works <ul style="list-style-type: none"> Erect scaffolding Trim vegetation adjacent and overhanging 	Y	Y	-	-	-	-	Y	-	Y	-	Y	-	-	-	Y
Remove existing roofing and flashings or cladding	Y	-	-	-	-	Y	Y	-	Y	-	Y	-	Y	-	Y
Painting: <ul style="list-style-type: none"> Abrasive blast / high pressure water clean Paint the prepared steel surfaces Regular clean up / disposal of spent abrasive and paint debris Painting roof purlins and substructure 	Y	-	Y	Y	-	Y	Y	Y	Y	-	Y	-	-	-	Y
Replace all roof and or cladding insulation and roof mesh Replace roof and or cladding with sheeting to match existing	Y	-	-	-	-	Y	Y	Y	Y	-	Y	-	Y	Y	Y
Stockpile and disposal of waste (e.g. excavated spoil, vegetation)	Y	Y	-	Y	-	-	Y	-	Y	-	Y	Y	Y	Y	Y
Site demobilisation (including removing scaffolding, final waste disposal, site reinstatement, etc)	Y	-	-	-	-	-	Y	-	Y	-	Y	-	Y	-	-

Hazard Control Table

Environmental Hazard	Control and responsibility	Control reference
<p>Awareness and responsibility: Staff unaware of the works' environmental controls and their responsibilities</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> SEMP: The SEMP is signed by the site supervisor and they are aware of the environmental controls and conditions, including those within the SEMP's specialist studies and approvals <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Undertake site pre-work briefings and inductions using the SEMP and the SECM to cover the work's environmental risks and controls and the workers environmental responsibilities Delivery tool-box talks relevant to the environmental hazards Maintain a readily accessible copy of the environmental approval (including all associated specialist approvals and plans) at the worksite whenever work is being undertaken. Display prominently on site, where possible, the SECM and make sure it is accurate and used 	<ul style="list-style-type: none"> Site Environmental Management Plan SMS-06-OP-3114 Pre-work Briefings
<p>Biodiversity: Unintentional or unapproved impacts on native and protected plants, animals and ecological communities</p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Remove weeds from plant before leaving weed infested areas Use tape or other suitable fencing around "no go zones" Clear minimal vegetation and do not clear any vegetation outside of approved scope Trim or remove trees under direction of an arborist Keep vehicles and equipment away from areas of vegetation Contact WIRES as required for injured animals Complete post-work site rehabilitation works, maintenance and inspections and transfer ownership to operational area at end of responsibility 	<ul style="list-style-type: none"> Site Environmental Management Plan EMS-06-OR-1006 Biodiversity
<p>Chemical and fuel storage and decant: Unintentional loss of chemicals and fuels during storage and decanting</p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> SEMP: Check SDS for any chemicals being used (including pesticides) to determine if special storage and preparation controls are needed. Include controls in SEMP Section 5.2. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Maintain current SDS's onsite for all stored chemicals and follow any special precautions Chemicals and fuels are stored in appropriately labelled and approved containers Bund temporary fuel and chemical storage and decant facilities away from drains and waterways 	<ul style="list-style-type: none"> Site Environmental Management Plan Safety Data Sheets (SDS)

Environmental Hazard	Control and responsibility	Control reference
<p>Dust: <i>Emissions of dust leaving worksite from earthworks, stockpiles and works traffic.</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • DESIGN: Minimise and stage removal of vegetation from worksite during design and works planning <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Select plant and equipment for the task that is fit for purpose and minimises dust generation • Use water cart to dampen exposed surfaces including access roads, work areas and stockpiles • Cover long term stockpiles • Minimise removal of vegetation from worksite • Keep vehicles to existing access roads 	<ul style="list-style-type: none"> • Site Environmental Management Plan. • EMS-05-GD-0013 Air Quality Guide
<p>Erosion and sedimentation: <i>Loss of soil and sediment from worksite to surrounding environment, including tracking onto public roads</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • SEMP: Develop erosion and sediment control plan for site using suitably trained and qualified personnel. Note: level of ESC training required is dependent upon the area of ground to be disturbed. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Site supervisor to have completed Level 1 Erosion and Sediment Control course • Install and maintain erosion and sediment control structures from prior to commencing site work until site has stabilised after the completion of works • Use a street sweeper to regularly remove mud and silt from public roads used for site access • Include sediment control in stockpile management • Complete post-work site rehabilitation and erosion and sediment control maintenance and inspections (transfer ownership to operational area at end of responsibility) 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-14-PR-0012 Erosion and Sediment Control
<p>Heritage: <i>Unintentional or unapproved impact on Aboriginal and non-Aboriginal heritage</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • SEMP: Use SEMP to identify and manage impact to Aboriginal and Non-Aboriginal Heritage sites. Contact a Transport Heritage Specialist for advice regarding approval to impact heritage sites. Add controls from approval to SEMP Section 5.2. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Isolate and demarcate heritage sites to prevent accidental damage • If a heritage or archaeological item is uncovered, immediately stop further disturbance, demarcate the site, contact your environmental support and follow EMS-09-PR-0164 Unexpected Archaeological Finds 	<ul style="list-style-type: none"> • EMS-03-FM-0249 EWMS Activities outside the AoZ • Site Environmental Management Plan • TAHE (former RailCorp) Section 170 Heritage and Conservation Register • Sydney Trains environment WebGIS • EMS-09-PR-0164 Unexpected Archaeological Finds

Environmental Hazard	Control and responsibility	Control reference
<p>Incidents and emerging issues <i>An incident or emerging issue is not controlled and causes an environmental impact</i></p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> • <i>SITE</i>: Support management of emerging issues and incident management, notification, investigation and the completion of corrective and preventative actions <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Complete daily inspections of the site, plant and equipment and the surrounding area to identify unexpected impacts and future potential impacts • Consider how changes in the weather could affect the works and the works controls (e.g. during high winds, heavy rainfall, etc) • Contact your environmental officer if the NSW EPA or other external party conducts an environmental site visit • Implement incident procedures on unapproved impacts, spills and other environmental incidents • If a spill occurs, then immediately notify incidents to the Incident and Injury Hotline 1800 772 779 or enter incident directly into SHEM • Refer all complaints to the <i>Sydney Trains & NSW TrainLink Environmental Feedback Line</i> on 1300 500 or https://transportnsw.info/contact-us 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-03-PR-0224 Incident Environmental Management • EMS-02-WI-0214 Notify Pollution Incidents • EMS-09-PR-0164 Unexpected Archaeological Finds
<p>Light spill: <i>Impact of work light sources on neighbouring residents and properties - particularly the potential for sleep disturbance</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Locate portable lighting towers so that they are not directed at residential properties • Ensure parked vehicles headlights do not shine into residences, 	<ul style="list-style-type: none"> • Site Environmental Management Plan

Environmental Hazard	Control and responsibility	Control reference
<p>Noise and vibration: Impact of works noise and vibration on neighbouring residents and properties – particularly the potential for sleep disturbance</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> SEMP: Identify potentially sensitive noise receivers and identify relevant controls through the noise assessment (as required by SEMP) <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Schedule more noisy work for 'standard hours' (7am to 9pm Monday to Friday, 8am to 1pm Saturday), where practical Limit operating and idling plant and equipment on site, where practical Locate noisy equipment, parking areas and assembly areas away from sensitive receivers, where practical and instruct workers to minimise noise during shift changes and at crib areas Use non-tonal reversing alarms on vehicles, where practical All plant and equipment to be operated with effective noise attenuation equipment (e.g. mufflers) 	<ul style="list-style-type: none"> Site Environmental Management Plan EMS-10-GD-0083 Guide to Rail Infrastructure Noise and Vibration Management EMS-10-FM-0166 Maintenance Quantified Noise and Vibration Assessment
<p>Plant and equipment emissions and spills: Smoke, fumes, odours and other emissions from plant and equipment. Spills of hydrocarbons from plant and equipment</p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> SEMP: Specify plant and equipment for the task that is fit for purpose and minimises offsite impacts (e.g. smoke, exhaust, noise, etc) <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Plant and equipment is operated and maintained in a proper and efficient manner with all of its pollution control equipment in place and functioning Plant and equipment not used when needing repair Plant and equipment is regularly checked for wear, leaks, odours, fumes and smoke All plant to have suitable spill kits and operators trained in their use and the disposal of used spill kit materials 	<ul style="list-style-type: none"> Site Environmental Management Plan SMS-16-OP-3076 Inspection, Testing and Monitoring
<p>Soil and water contamination: Contamination of worksite from stockpiling and chemical use</p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Develop a stockpile management plan to segregate potentially contaminated materials from clean materials Undertake daily inspections for spills and contamination (e.g. vehicle tracking, unauthorised material movement, containment failures, etc) Check all imported material for contamination (including weeds, construction wastes, etc) 	<ul style="list-style-type: none"> Site Environmental Management Plan EMS-07-PR-0004 Contaminated Land Management

Environmental Hazard	Control and responsibility	Control reference
<p>Traffic: Traffic disruption to community and other users around worksite</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • <i>SEMP</i>: Develop a Traffic Management Plan, where appropriate <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Plan all vehicle movements to occur outside of local peak traffic periods • Place offsite staging areas in low impact areas • Obtain a Road Occupancy Licence, as necessary • Utilise qualified traffic control staff 	<ul style="list-style-type: none"> • Site Environmental Management Plan
<p>Visual impact: Visual impact on community due to works and worksite facilities and activities</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • <i>DESIGN</i>: Consider visual amenity of structure or item (e.g. retaining walls) in design, e.g. tiering, climbing plants or other measures to soften structure <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Place stockpiles and site amenities away from residents, and remove them as soon as possible • Create or maintain existing visual screens such as using vegetation, shade cloth on fences or natural site features • Keep the site tidy and free of litter 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-03-GD-0014 Visual Amenity Guide
<p>Waste: Unnecessary generation of wastes and poor or illegal disposal of wastes</p>	<p>Construction waste (e.g. spoil, concrete, litter and rubbish, etc)</p> <p><i>Project manager</i></p> <ul style="list-style-type: none"> • <i>SEMP</i>: Develop a Waste Management Plan if the works will generate a significant quantity of wastes, difficult wastes or waste of an unknown quantity/contamination <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Do not overestimate quantities of materials required • Separate wastes, place all wastes in appropriate containers and dispose of them as they are generated • Prevent the mixing of similar new and waste materials • Classify all wastes in accordance with the NSW EPA Waste Classification Guidelines • Only use approved waste contractors and dispose of all wastes leaving site to facilities licenced to receive the waste • Keep records of all waste classification, transport, disposal, reuse and recycling activities 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-13-OR-1013 Waste Management • EPA Waste Classification Guidelines

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Environmental Hazard	Control and responsibility	Control reference
	<p>Vegetation management waste (e.g. clippings, branches, etc) <i>Site supervisor</i></p> <ul style="list-style-type: none"> • Ensure wastes are placed in appropriate bags or containers • All cut vegetation (clippings (mower/whipper sniping clippings, leaves, branches & other) to be removed from site and recycled (where possible) • No spreading of weed infested material within corridor 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-13-OR-1013 Waste Management

Acknowledgement of Country



Sydney Trains acknowledges the traditional custodians of the land on which we work and live. We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Station refresh

Environmental Work Method Statement			Sydney Trains Incident Hotline 1800 772 779
<p>Scope of EWMS:</p> <p>Works covered by this EWMS are limited to the 'refurbishment of the station' including the following elements to meet the requirements Sydney Trains and NSW TrainLink: Station Components Guide (June 2017):</p> <ol style="list-style-type: none"> 1) Maintenance and renewal of the following existing station components: <ol style="list-style-type: none"> a. Flooring, surfaces (including asphalt, tiles, plaster, sandstone, timber surfaces, etc), tuck pointing and tactiles b. Gutters, drains and downpipes, doors and doorways, glazing and footings c. Seats, bubblers, bins, ticketing systems and customer information systems d. Lighting systems and security systems e. Toilets including pans, mirrors, basins and seats f. Stairs including handrails, tactiles, stair nosing and balustrades 2) Removal of redundant services, removal of redundant fixtures, fittings and operational items (including ticket booths, safes, etc), removal of internal non-load bearing walls and false ceilings 3) Cleaning and pressure washing of station assets and infrastructure 4) Pest bird proofing including netting and spikes <p>Renewal includes upgrading existing components to meet the requirements Sydney Trains and NSW TrainLink: Station Components Guide (June 2017).</p>	<p>Not in Scope:</p> <p>Works not in scope include:</p> <ul style="list-style-type: none"> • Installation of new components (including toilets, ticketing systems, security systems, customer information systems, etc) • Any alteration or removal of original Heritage fabric without approval • Any alteration, removal or enlargement of the existing buildings or station infrastructure • Any outdoor commercial advertising signage or other advertising infrastructure • Garden Landscaping <p>Note: Works not in scope may require a different form of environmental assessment and approval, Contact local environmental officer for guidance</p>	<p>Project manager requirements:</p> <ul style="list-style-type: none"> • Has a Sydney Trains employee number • Completed <i>Environmental Management for Projects</i> (online) and <i>SEMP Masterclass</i> training <p>External notifications:</p> <p><i>Parties outside of Sydney Trains that are likely to require works' notification</i></p> <ul style="list-style-type: none"> • Letter box drop to residents (if identified in SEMP) <p>Permits / licences:</p> <p><i>Licences and permits not issued by Sydney Trains that are likely to be needed for works</i></p> <ul style="list-style-type: none"> • Heritage approval (if identified in SEMP) • Road closure permits (if identified in SEMP) 	<p>Plant and equipment</p> <ul style="list-style-type: none"> • Hand tools/Power tools • Jackhammer • Truck • Concrete saw • High rail equipment • EWP • Platform ladder • Scaffolding • Extraction fan • Core borer • Hoarding • Crane truck • Skip bin • Portable toilets • Oxy cutting equipment • Lighting • Generator • Pressure washer • Whacker packer

Environmental Hazard Matrix

Job steps	Environmental hazard														
	Awareness and responsibility	Biodiversity	Chemical and fuel storage and decant	Dust	Erosion and sedimentation	Heritage	Incidents and emerging issues	Light Spill	Noise and vibration	Pesticides	Plant and equipment emissions and spills	Soil and water contamination	Traffic	Visual impacts	Waste
Site establishment (including material / plant delivery, establish site amenities, place skip bins, install hoardings, etc)	Y	Y	Y	Y	Y	Y	Y	-	Y	-	Y	Y	Y	Y	Y
Declutter, including <ul style="list-style-type: none"> Removal redundant equipment and services Removal of floor furnishings and tiles Strip paint 	Y	-	Y	Y	-	Y		Y	Y	-	Y	Y	Y	-	Y
Construction, including <ul style="list-style-type: none"> Asphalting Installation of new plumbing Painting and touch ups Fencing Rust repairs Glazing Install bird proofing Toilet refurbishing <ul style="list-style-type: none"> Ceiling / underside of awning / gable repairs Install new gutters Tuck pointing Stair nosing Crimp safe mesh installation over windows Screen door replacement General make good works 	Y	-	Y	Y	-	Y		Y	Y	-	Y	Y	Y	-	Y
Stockpile and disposal of waste	Y	-	-	Y	Y	-	Y	-	Y	-	Y	Y	Y	Y	Y
Site demobilisation (including final waste disposal, site reinstatement, etc)	Y	-	-	Y	-	-	Y	-	Y	-	Y	-	Y	-	-

Hazard Control Table

Environmental Hazard	Control and responsibility	Control reference
<p>Awareness and responsibility: <i>Staff unaware of the works' environmental controls and their responsibilities</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • <i>SEMP:</i> The SEMP is signed by the site supervisor and they are aware of the environmental controls and conditions, including those within the SEMP's specialist studies and approvals <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Undertake site pre-work briefings and inductions using the SEMP and the SECM to cover the work's environmental risks and controls and the workers environmental responsibilities • Delivery tool-box talks relevant to the environmental hazards • Maintain a readily accessible copy of the environmental approval (including all associated specialist approvals and plans) at the worksite whenever work is being undertaken. • Display prominently on site, where possible, the SECM and make sure it is accurate and used 	<ul style="list-style-type: none"> • Site Environmental Management Plan • SMS-06-OP-3114 Pre-work Briefings
<p>Biodiversity: <i>Unintentional or unapproved impacts on native and protected plants, animals and ecological communities</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Remove weeds from plant before leaving weed infested areas • Use tape or other suitable fencing around "no go zones" • Clear minimal vegetation and do not clear any vegetation outside of approved scope • Trim or remove trees under direction of an arborist • Keep vehicles and equipment away from areas of vegetation • Contact WIRES as required for injured animals • Complete post-work site rehabilitation works, maintenance and inspections and transfer ownership to operational area at end of responsibility 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-06-OR-1006 Biodiversity
<p>Chemical and fuel storage and decant: <i>Unintentional loss of chemicals and fuels during storage and decanting</i></p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> • <i>SEMP:</i> Check SDS for any chemicals being used (including pesticides) to determine if special storage and preparation controls are needed. Include controls in SEMP Section 5.2. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Maintain current SDS's onsite for all stored chemicals and follow any special precautions • Chemicals and fuels are stored in appropriately labelled and approved containers • Bund temporary fuel and chemical storage and decant facilities away from drains and waterways 	<ul style="list-style-type: none"> • Site Environmental Management Plan • Safety Data Sheets (SDS)

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Environmental Hazard	Control and responsibility	Control reference
<p>Dust: <i>Emissions of dust leaving worksite from earthworks, stockpiles and works traffic.</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Select plant and equipment for the task that is fit for purpose and minimises dust generation • Use water cart to dampen exposed surfaces including access roads, work areas and stockpiles • Cover long term stockpiles • Minimise removal of vegetation from worksite • Keep vehicles to existing access roads 	<ul style="list-style-type: none"> • Site Environmental Management Plan. • EMS-05-GD-0013 Air Quality Guide
<p>Erosion and sedimentation: <i>Loss of soil and sediment from worksite to surrounding environment, including tracking onto public roads</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Use a street sweeper to regularly remove mud and silt from public roads used for site access • Include sediment control in stockpile management • Complete post-work site rehabilitation and erosion and sediment control maintenance and inspections (transfer ownership to operational area at end of responsibility) 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-14-PR-0012 Erosion and Sediment Control
<p>Heritage: <i>Unintentional or unapproved impact on Aboriginal and non-Aboriginal heritage</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • SEMP: Use SEMP to identify and manage impact to Aboriginal and Non-Aboriginal Heritage sites. Contact a Transport Heritage Specialist for advice regarding approval to impact heritage sites. Add controls from approval to SEMP Section 5.2. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Isolate and demarcate heritage sites to prevent accidental damage • If a heritage or archaeological item is uncovered, immediately stop further disturbance, demarcate the site, contact your environmental support and follow EMS-09-PR-0164 Unexpected Archaeological Finds 	<ul style="list-style-type: none"> • EMS-03-FM-0249 EWMS Activities outside the AoZ • Site Environmental Management Plan • TAHE (former RailCorp) Section 170 Heritage and Conservation Register • Sydney Trains environment WebGIS • EMS-09-PR-0164 Unexpected Archaeological Finds

Environmental Hazard	Control and responsibility	Control reference
<p>Incidents and emerging issues <i>An incident or emerging issue is not controlled and causes an environmental impact</i></p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> • <i>SITE</i>: Support management of emerging issues and incident management, notification, investigation and the completion of corrective and preventative actions <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Complete daily inspections of the site, plant and equipment and the surrounding area to identify unexpected impacts and future potential impacts • Consider how changes in the weather could affect the works and the works controls (e.g. during high winds, heavy rainfall, etc) • Contact your environmental officer if the NSW EPA or other external party conducts an environmental site visit • Implement incident procedures on unapproved impacts, spills and other environmental incidents • If a spill occurs, then immediately notify incidents to the Incident and Injury Hotline 1800 772 779 or enter incident directly into SHEM • Refer all complaints to the <i>Sydney Trains & NSW TrainLink Environmental Feedback Line</i> on 1300 500 or https://transportnsw.info/contact-us 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-03-PR-0224 Incident Environmental Management • EMS-02-WI-0214 Notify Pollution Incidents • EMS-09-PR-0164 Unexpected Archaeological Finds
<p>Light spill: <i>Impact of work light sources on neighbouring residents and properties - particularly the potential for sleep disturbance</i></p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Locate portable lighting towers so that they are not directed at residential properties • Ensure parked vehicles headlights do not shine into residences, 	<ul style="list-style-type: none"> • Site Environmental Management Plan

Environmental Hazard	Control and responsibility	Control reference
<p>Noise and vibration: <i>Impact of works noise and vibration on neighbouring residents and properties – particularly the potential for sleep disturbance</i></p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> • SEMP: Identify potentially sensitive noise receivers and identify relevant controls through the noise assessment (as required by SEMP) <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Schedule more noisy work for 'standard hours' (7am to 9pm Monday to Friday, 8am to 1pm Saturday), where practical • Limit operating and idling plant and equipment on site, where practical • Locate noisy equipment, parking areas and assembly areas away from sensitive receivers, where practical and instruct workers to minimise noise during shift changes and at crib areas • Use non-tonal reversing alarms on vehicles, where practical • All plant and equipment to be operated with effective noise attenuation equipment (e.g. mufflers) 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-10-GD-0083 Guide to Rail Infrastructure Noise and Vibration Management • EMS-10-FM-0166 Maintenance Quantified Noise and Vibration Assessment
<p>Plant and equipment emissions and spills: <i>Smoke, fumes., odours and other emissions from plant and equipment. Spills of hydrocarbons from plant and equipment</i></p>	<p><i>Project Manager</i></p> <ul style="list-style-type: none"> • SEMP: Specify plant and equipment for the task that is fit for purpose and minimises offsite impacts (e.g. smoke, exhaust, noise, etc) <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Plant and equipment is operated and maintained in a proper and efficient manner with all of its pollution control equipment in place and functioning • Plant and equipment not used when needing repair • Plant and equipment is regularly checked for wear, leaks, odours, fumes and smoke • All plant to have suitable spill kits and operators trained in their use and the disposal of used spill kit materials 	<ul style="list-style-type: none"> • Site Environmental Management Plan • SMS-16-OP-3076 Inspection, Testing and Monitoring

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Environmental Hazard	Control and responsibility	Control reference
<p>Soil and water contamination: Contamination of worksite from stockpiling and chemical use</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> DESIGN and SEMP: Identify potential contaminants prior to commencing work on site DESIGN and SEMP: Check SDS for any chemicals being used (including pesticides) to determine if special use controls are needed. Add any controls to SEMP Section 5.2. <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Develop a stockpile management plan to segregate potentially contaminated materials from clean materials Undertake daily inspections for spills and contamination (e.g. vehicle tracking, unauthorised material movement, containment failures, etc) Check all imported material for contamination (including weeds, construction wastes, etc) 	<ul style="list-style-type: none"> Site Environmental Management Plan EMS-07-PR-0004 Contaminated Land Management
<p>Traffic: Traffic disruption to community and other users around worksite</p>	<p><i>Project manager</i></p> <ul style="list-style-type: none"> SEMP: Develop a Traffic Management Plan, where appropriate <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Plan all vehicle movements to occur outside of local peak traffic periods Place offsite staging areas in low impact areas Obtain a Road Occupancy Licence, as necessary Utilise qualified traffic control staff 	<ul style="list-style-type: none"> Site Environmental Management Plan
<p>Visual impact: Visual impact on community due to works and worksite facilities and activities</p>	<p><i>Site supervisor</i></p> <ul style="list-style-type: none"> Place stockpiles and site amenities away from residents, and remove them as soon as possible Create or maintain existing visual screens such as using vegetation, shade cloth on fences or natural site features Keep the site tidy and free of litter 	<ul style="list-style-type: none"> Site Environmental Management Plan EMS-03-GD-0014 Visual Amenity Guide

Environmental Hazard	Control and responsibility	Control reference
<p>Waste: <i>Unnecessary generation of wastes and poor or illegal disposal of wastes</i></p>	<p>Construction waste (e.g. spoil, concrete, litter and rubbish, etc) <i>Project manager</i></p> <ul style="list-style-type: none"> • <i>SEMP</i>: Develop a Waste Management Plan if the works will generate a significant quantity of wastes, difficult wastes or waste of an unknown quantity/contamination <p><i>Site supervisor</i></p> <ul style="list-style-type: none"> • Do not overestimate quantities of materials required • Separate wastes, place all wastes in appropriate containers and dispose of them as they are generated • Prevent the mixing of similar new and waste materials • Classify all wastes in accordance with the NSW EPA Waste Classification Guidelines • Only use approved waste contractors and dispose of all wastes leaving site to facilities licenced to receive the waste • Keep records of all waste classification, transport, disposal, reuse and recycling activities 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-13-OR-1013 Waste Management • EPA Waste Classification Guidelines
	<p>Slurry wastes (e.g. concrete, supersucker, etc) <i>Site supervisor</i></p> <ul style="list-style-type: none"> • Ensure proper and immediate disposal of slurry offsite, or construct a correctly sized, impermeable slurry holding facility and properly dispose of all dewatered wastes 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-13-WI-0183 Hydrovac Slurry Management
	<p>Vegetation management waste (e.g. clippings, branches, etc) <i>Site supervisor</i></p> <ul style="list-style-type: none"> • Ensure wastes are placed in appropriate bags or containers • All cut vegetation (clippings (mower/whipper sniping clippings, leaves, branches & other) to be removed from site and recycled (where possible) • No spreading of weed infested material within corridor 	<ul style="list-style-type: none"> • Site Environmental Management Plan • EMS-13-OR-1013 Waste Management

Acknowledgement of Country



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ST JAMES RAILWAY STATION
ELIZABETH STREET ENTRY AWNING
CONSERVATION & REPAIRS



STATEMENT OF HERITAGE IMPACT REPORT

Client Sydney Trains
Job No 22036
Date 25 January 2023
Issue B

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Report Register

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Document status:

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PART A: BACKGROUND

1. INTRODUCTION

Water leaks from the awning above the entry to St James Station on Elizabeth Street Sydney have been evident for some time. An inspection carried out by OCP Architects accompanied by a heritage roofing specialist, a structural engineer, and a representatives from Sydney Trains has found that the poor condition of the roof and box gutter of the awning is the cause of the leaks.

Sydney Trains is proposing to undertake repair and maintenance works to the awning in line with obligations for the maintenance and repair of its assets. The works consists of eliminating roof leakages through the awning by the replacement of the copper roofing and box gutter and other associated minor works, as well as improving the overall condition and appearance of the entry building and ensuring its longevity.

OCP Architects have been engaged by Sydney Trains in July 2022 to prepare this Heritage Impact Statement (SoHI) for proposed works to the Elizabeth Street entry awning at St James Railway Station.

The proposed work falls within the description of exemptions of Section 57 RailCorp Agency Specific Exemptions under the NSW *Heritage Act 1977*, and Standard Exemptions under the *Heritage Act 1977*.

This Report

This SoHI has been prepared to assess the impact of the proposed works to the Elizabeth Street entry awning on the heritage significance of St James Railway Station. It should be read in conjunction with the following documents:

- Architectural drawings - *Proposed Repair Works for St James Station Elizabeth Street Entry Awning* prepared by OCP Architects PL: Drawings A01, A02, A03, dated January 2023
- Schedule of Works – *St James Station West Entrance Restoration of Awning and Surrounding Fabric*, prepared by OCP Architects, dated January 2023
- Specification - *St James Station West Entrance Restoration of Awning and Surrounding Fabric*, prepared by OCP Architects, dated January 2023
- Specialist Roofer Report- *St James Train Station Elizabeth Street Awning Roof*, prepared by Architectural Roofing Services P/L dated 24 October 2022.

This report aims to:

- Describe the existing site and its historical context, assess its significance, and describe the proposed works and their rationale.
- Assess the impact of the proposal on the heritage significance of St James Railway Station, and Elizabeth Street entry in particular.

Site Identification

St James Station is located in Hyde Park at 108 Elizabeth Street, Sydney. The platforms and concourse levels are located beneath Hyde Park. Access to the Station is via three existing subway tunnels, one from

Elizabeth Street and two from St James Road as well as a lift adjacent to the Elizabeth Street entry. The Elizabeth Street entry is located directly opposite the eastern end of Market Street (**Figure 1**).

This report is structured into three parts. The Introduction forms **Part A**. Historical and descriptive information relating to the subject site are included at **Part B**. Assessment of heritage significance and details of the proposed works and an assessment of potential heritage impacts are included at **Part C**, which provides recommendations and measures to assist with the mitigation of heritage impacts.

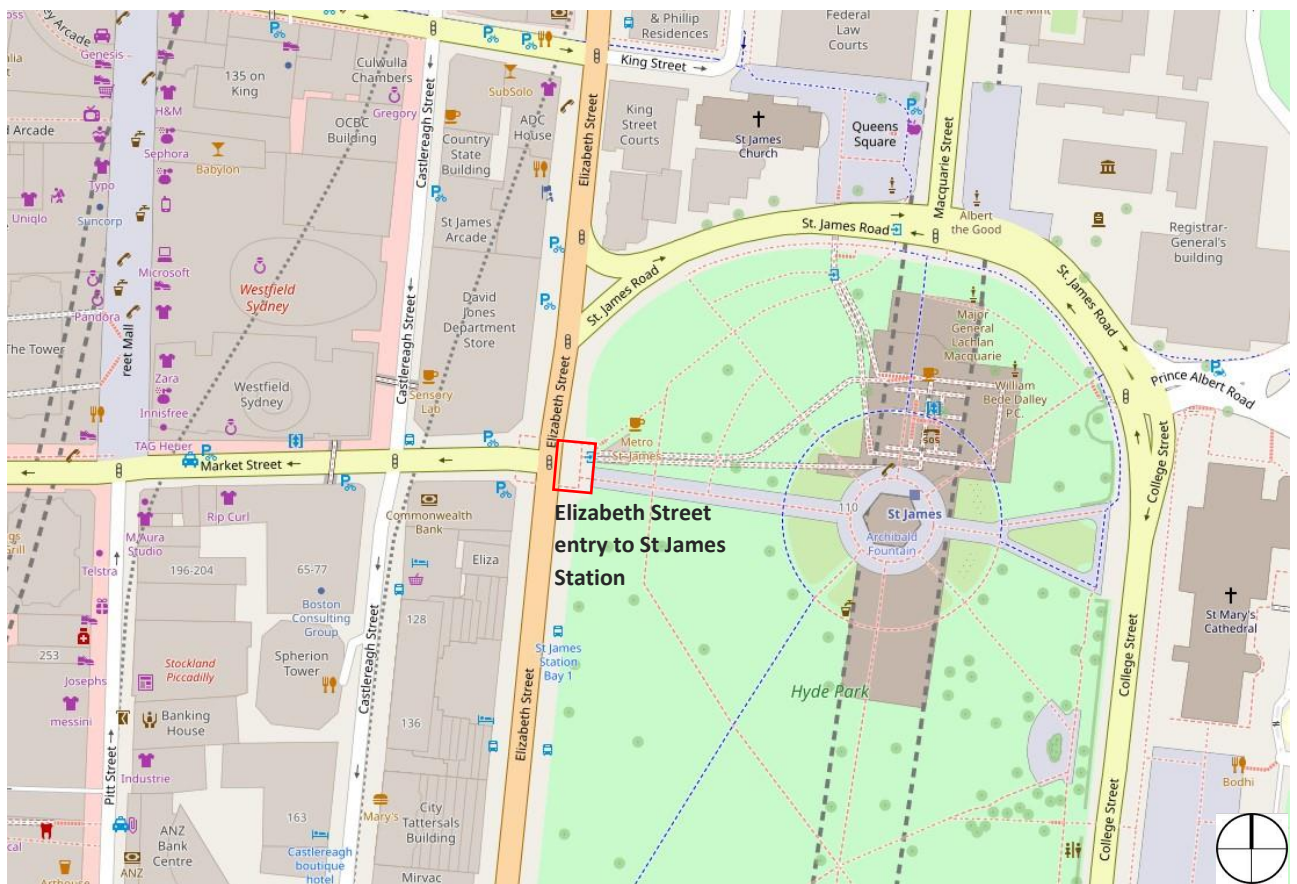


Figure 1. Location Plan showing the Elizabeth Street entry to St James Station and its immediate vicinity (source: OpenStreetMap2020).

Statutory Context and Heritage Listings

The following provides an outline of the statutory planning and heritage management framework and how the various forms of legislation and environmental planning instruments apply to the place and the proposed works.

Heritage Act 1977 (NSW)

The Heritage Act 1977 provides protection for heritage places, buildings, works, relics, moveable objects, precincts, and archaeological sites that are important to the people of NSW. The State Heritage Register (SHR) includes heritage items which are deemed to be significant to the people of New South Wales.

St James Railway Station is listed as an item of State heritage significance on the NSW SHR (listing name *St James Railway Station Group*, listing number 01248).

Statutory approval requirements for items listed on the SHR are outlined in Part 4, Division 2 and 3 (sections 57 to 69) of the *Heritage Act 1977* (NSW).

Section 57(1) of the *Heritage Act 1977* (NSW) provides an outline of the types of work that must not be carried out to items listed on the State Heritage Register or subject to an interim heritage order or items without approval. In accordance with Section 57(2) of the *Heritage Act 1977* (NSW), [December 2020] the Minister may grant exemption from approval in respect of engaging in or carrying out certain types of activities.

The proposed works, as described in Section 5 below, fall within the Standard Exemptions (Gazetted under *Schedule of Standard Exemptions to Subsection 57(1) Of The Heritage Act 1977 Made Under Subsection 57(2)*, and RailCorp Agency Specific Exemptions (Gazetted under *Order under Section 57(2) to Grant Agency-Specific Exemptions From Approval For NSW Transport – RailCorp*, March 2014).

Section 170 Heritage Register

Under Section 170 of the *Heritage Act 1977*, each government agency is required to establish and keep a *Heritage and Conservation Register* that details each item of the environmental heritage the agency owns or occupies.

In accordance with Section 170A (2) of the Act, government instrumentalities are responsible for ensuring that the items listed on its register are maintained with due diligence in accordance with the State-Owned Heritage Management Principles.

The State-Owned Heritage Management Principles which are of specific relevance to the proposed works have been included below for reference:

4. Conservation Outcomes

Heritage assets should be conserved to retain their heritage significance to the greatest extent feasible. State agencies should aim to conserve assets for operational purposes or to adaptively reuse assets in preference to alteration or demolition.

9. Alterations

Alterations should be planned and executed to minimise negative impacts on heritage significance (including curtilage and setting), and appropriate mitigating measures should be identified.

St James Railway Station Group is listed as a heritage item on the TAHE Section 170 Heritage and Conservation Register (Item 4801096).

Environmental Planning & Assessment Act 1979 (NSW)

Planning and development in NSW is predominantly governed by the *Environmental Planning and Assessment Act 1979* (EP&A Act) (NSW). The EP&A Act provides for the making of Environmental Planning Instruments which include State Environmental Planning Policies (SEPPs) which address matters of state or regional significance; and Local Environmental Plans (LEPs) which apply to a specific Local Government Area (LGA).

Sydney Local Environmental Plan 2012

St James Railway Station Group is located within the City of Sydney Local Government Area and as such, development in the area is currently controlled by the *Sydney Local Environmental Plan 2012* (SLEP 2012). Schedule 5 of SLEP 2012 lists the subject site, *St James Railway Station including interior*, as a local heritage item (Item I1740).

Summary of Heritage Listings

The following table provides a summary of the statutory heritage listings that apply to the study area:

ITEM NAME	ADDRESS	STATUTORY INSTRUMENT	ITEM NO.
St James Railway Station Group	City Circle Railway Sydney NSW 2000	State Heritage Register	01248
St James Railway Station Group	108 Elizabeth Street	TAHE Section 170 Heritage and Conservation Register	4801096
St James Railway Station including interior	108 Elizabeth Street	Sydney LEP 2012	I1740

Non-Statutory Listings

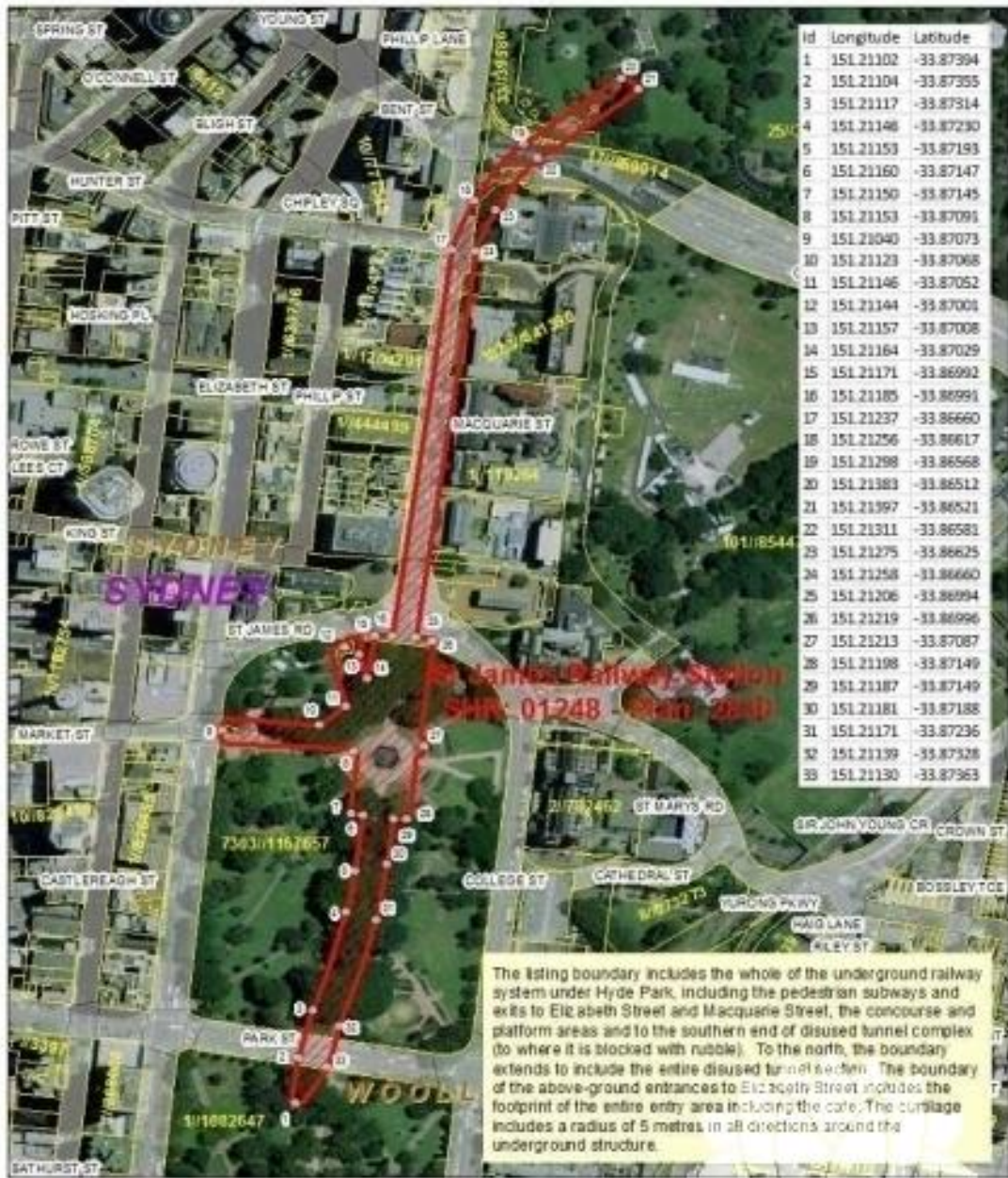
The National Trust Register

St James Station is listed as an item on the National Trust Register and on the Trust's Industrial Archaeological Sites list. The National Trust of Australia (NSW) is a non-government community organisation established in 1945 and incorporated by an Act of the New South Wales Parliament in 1960, dedicated to the conservation of Australia's heritage. It compiles and maintains a Register of places of heritage significance. The National Trust does not have any statutory powers but is influential and persuasive on environmental matters.

RAIA Register of 20th Century Significant Buildings

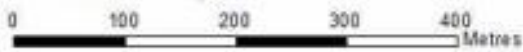
St James Station is listed on the Royal Australian Institute of Architects (RAIA) Register of 20th Century Significant Buildings. The RAIA does not have any statutory powers but is influential on advocating quality design and architecture.

Heritage Council of New South Wales



State Heritage Register - SHR 01248, Plan 2830
St James Railway Station

Gazetted Date: 2 April 1999



Scale: 1:5,000
Datum/Projection: GCS GDA 1994



Legend

- SH Curtilage
- Streets
- Parks
- Tunnels
- LGAs
- Suburbs

Figure 2: Plan showing the SHR curtilage boundary for St James Railway Station Group (source: State Heritage Inventory, accessed August 2022, <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012220>)

Project Methodology & Key Resources

This report has been prepared based on the NSW Heritage Branch guideline for the preparation of Assessments of Heritage Impact. The principles contained in the Australian ICOMOS *Charter for the Conservation of Places of Cultural Significance (The Burra Charter)* 2013 are used as a methodology for assessing heritage impact. The structure and contents of this report has been guided by the *Sydney Trains EMS-09-TP-0228 Statement of Heritage Impact Report Template*.

The SHR inventory form for the *St James Railway Station Group*, and the S170 inventory form for the *St James Railway Station Group* have been referenced throughout this report, incorporating contextual and heritage assessment information.

This report also refers to the following specialist documentation, prepared for the heritage management of the place:

- Conservation study and policy guidelines: *St James Station*: final draft. State Rail Authority of New South Wales, Lester Firth Associates, 1993
- Architectural drawings - *Proposed Repair Works for St James Station Elizabeth Street Entry Awning* prepared by OCP Architects PL: Drawings A01, A02, A03, dated January 2023
- Schedule of Works – *St James Station West Entrance Restoration of Awning and Surrounding Fabric*, prepared by OCP Architects, dated January 2023
- Specification - *St James Station West Entrance Restoration of Awning and Surrounding Fabric*, prepared by OCP Architects, dated January 2023
- Specialist Roofer Report- *St James Train Station Elizabeth Street Awning Roof*, prepared by Architectural Roofing Services P/L dated 24 October 2022.

Physical investigation of the place was undertaken by Milena Crawford, Otto Cserhalmi and Geoff Stennett from OCP Architects in August 2022

Project Limitations

This report does not consider indigenous cultural heritage significance. The physical inspection of the place did not involve the removal of fabric or any ground disturbance.

Authorship & Acknowledgements

This report was prepared by OCP Architects, written by Geoff Stennett, and reviewed by Otto Cserhalmi.

PART B: HISTORY AND PHYSICAL ANALYSIS

2. HISTORICAL CONTEXT

The following brief history has been adapted from:

- Conservation Study and Policy Guidelines: St James Station: final draft. State Rail Authority of New South Wales, Lester Firth Associates, 1993
- St James Railway Station Group listing on the State Heritage Inventory

No further historical research was undertaken as part of this report.

The need for a city rail system

The first plans for extending the railway line into the city proper were prepared as early as 1857 by the Engineer in Chief, John Whitton. Surveys were undertaken to develop a railway line via Castlereagh Street to Circular Quay. By the 1860's it became clear that the area in or around Hyde Park was an ideal location for the city railway station. In 1862 plans were prepared for a line via Hyde Park to the Quay. In 1884 funds were made available and plans prepared for a railway line extension to a principal station between Park Street and St James Road and a branch line to Fort Macquarie. A change of Colonial Government, however, caused the abandonment of the project.

Mounting public concern over the increasing congestion of street traffic and the need for a rail link into the city eventually forced the Government to appoint a Royal Commission in March 1890. Thirty-six separate schemes were submitted, advocating either extension along the western, business side of the city or, along the eastern side through Hyde Park to minimise the costly land resumptions necessary. The Royal Commission recommended the adoption of a proposal by the Chief Railway Commissioner, Mr Eddy, for a line along the eastern City edge to a terminus in Hyde Park. Public opinion was, however, against the loss of a large portion of Hyde Park for railway purposes and eventually the Royal Commission recommended the adoption of an alternative proposal from Mr Eddy which would see a central city station at King Street and branch lines splitting east and north.

No further action was taken until April 1896 when the Premier was forced "in the interest of the safety and comfort of the travelling public" to appoint a second Royal Commission to investigate and report on a suitable route. Inquiries and reports continued over the next few years and, while the Government did authorise the construction of Central station in 1900, agreement on a city railway service could not be achieved.

In 1908 a "Royal Commission on Improvement of the City of Sydney and its Suburbs" was appointed. On the agenda was the recommendation that Hyde Park be left as public space and not to be used for building on. Also, due to increasing pressure from an over worked public rail system, it was recommended that a loop rail line be built through the city, going down York Street, past Circular Quay and back to the newly opened Central Station (1900) via Macquarie Street and Hyde Park.

The Royal commission had received up to eight proposals for the city loop, but it was not until 1915 that a practical plan was agreed on. In February 1915, the Chief Engineer of Metropolitan Railway Construction, J J C Bradfield, after studying the city railways of Europe and North America, submitted his "Report on the Proposed Electric Railways for the City of Sydney," based on overseas undergrounds that would link the city

with the northern and eastern suburbs. Six underground stations were to be located in the positions of the Central, Town Hall, Wynyard, Circular Quay, St James, and Museum stations of today.

In late 1915 the Government passed a City and Suburban Electric Railways Bill, the Vice President of the Legislative Council saying that "underground railways are a necessary part of great cities all over the world," Sydney then having a population of 800,000 people.

The construction of St James Station

An open cut method was agreed upon to excavate the underground tunnels which was to prove devastating to Hyde Park's layout. Excavations were started in 1916 by Norton Griffiths and Co. Their contract was cancelled in 1918 and the work was continued by the Department of Railways until June 1918 when work was halted because of restrictions caused by World War One. Work restarted in 1922 when construction of the tunnels and platforms began. Most of the work was carried out by hand in a cut and cover method. This entailed removing over 100,000 m³ of soil and rock, most of which was used to reclaim the Darling Harbour estuarine foreshore. The walls and stations were then formed, and the tunnel roof added and filled in. Construction of the station utilized concrete for the walls and steel framework and concrete for the roof.



Figure 3: Construction of St. James Station (looking north) c.1925. (Source: National Library)

Museum Station at the southern end of the park was designed in line with European stations having two platforms, a main supporting arch and no supporting structures or columns. St James had four platforms and four tunnels, of which only two have been ever used, other than as proposed air raid shelters during World War Two II. (The other two tunnels were intended for a link from Gladesville to the Eastern line which has not eventuated).

The interiors of Museum and especially St James stations were well detailed, with extensive use of wall tiling and metal stair railings. The main entrances to both stations were each marked by two sandstone and

brick entrance buildings designed in a Classical style with suspended steel awnings over the footpaths. Entry points led passengers through tiled subway passages to concourse areas.

After several years of construction, newspapers finally heralded the opening of Australia's first underground electric railway on 20 December 1926 when the new line section of Central station, and Museum and St James stations were connected by trains. The railway attracted tens of thousands of people during the first few weeks of its operations, "swarms of interested mothers and fathers, together with their children, thronged the platforms and stairways examining Dr Bradfield's super Christmas box to the public."

Media praise for the opening of the two City stations was offset by reporting which focused on the fact that only a small portion of Bradfield's plan was in place. The Evening News of 18 December 1926 stated, "the traffic problem, before it becomes far worse, can only be met by the construction of the inner loop of the City railway."



Figure 4: St. James Station (looking east) c. 1940.
(Source: City of Sydney Archives)

For six years St James and Museum stations were heavily patronised by commuters from the expanding suburbs of Sydney. In 1932, Wynyard and Town Hall stations opened to the public thereby greatly reducing passenger usage of the two earlier stations. After 1956 and the opening of Circular Quay station, St James and Museum again suffered from reduced passenger usage.

The second St James Entrance building located along St James Road was demolished c.1970. Although affected by lack of maintenance and unsympathetic additions, the original sandstone building and interiors of St James Station have retained most original detailing and character. A major refurbishment of the Station was undertaken in the 1990's, which included the replacement of the majority of original tiling. Some original tiling remains, particularly in the entrance building to Elizabeth Street, and the replacement tiling was chosen to closely match the original interiors.



Figure 5: Entrance to St. James Station along St James Road (now demolished) c. 1935. (Source: City of Sydney Archives)

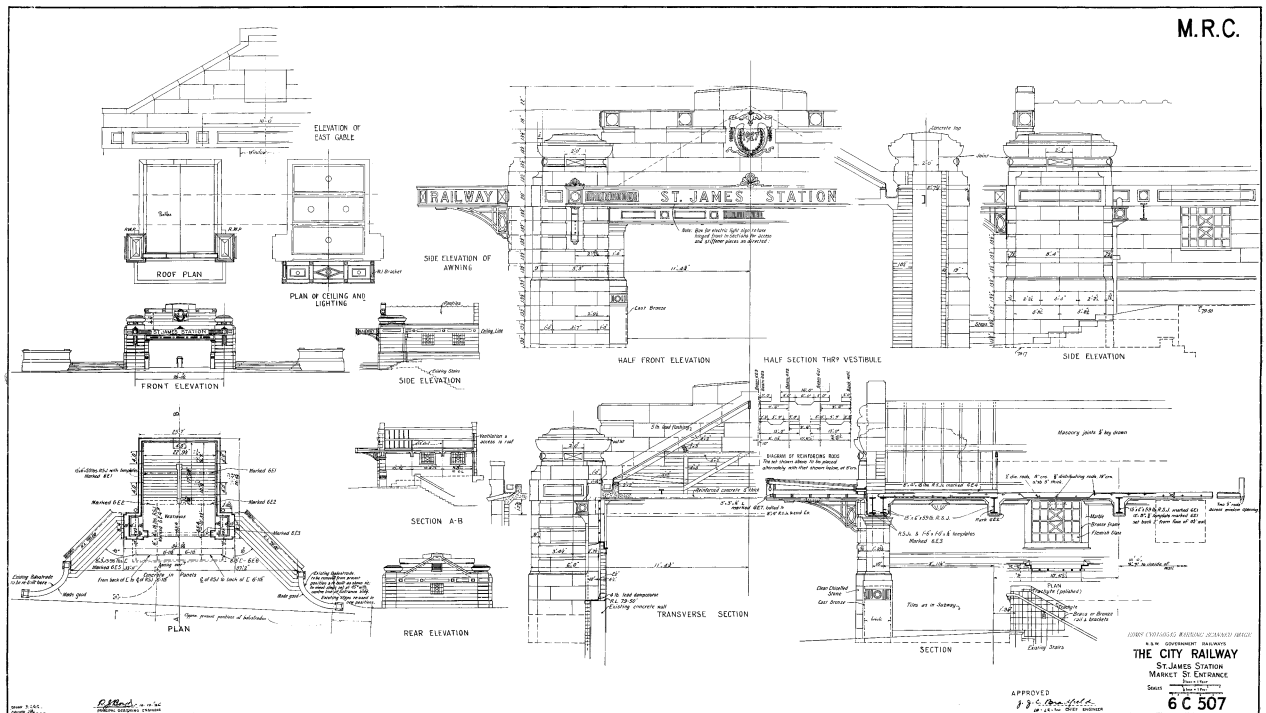


Figure 6: Original architectural drawing of the entrance to St James Station on Elizabeth Street dated 10/12/1926 showing awning structure consisting of steel cantilever beams supporting timber framed roof and roof sheeting, with decorative copper fascia and decorative steel support brackets. Although not noted on this entry drawing, the original drawing for the entry on St James Road indicated the roofing material was galvanised iron and had a 5lb lead box gutter (Figure 7). (Source: Sydney Trains Archives)

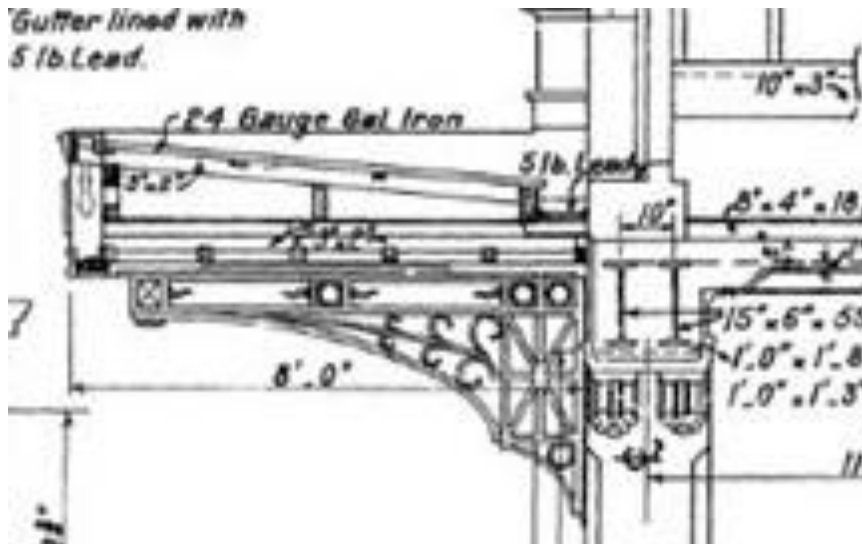


Figure 7: Extract from the original architectural drawing of the entrance to St James Station on St James Road indicating roofing to the awning was galvanised iron with a 5lb gutter.

3. DESCRIPTION AND PHYSICAL EVIDENCE

Elizabeth Street Entrance

The main entrance to St James Station is a small symmetrical sandstone building located at the north western end of Hyde Park along the eastern side of Elizabeth Street and at the intersection of Market Street. The Station building is closely adjoined by a matching stone building which once housed the public toilets. This adjacent building is now totally refurbished as a café and bar and features a new contemporary steel and timber canopy (**Figure 10**). The café sits on a stone podium which links the two buildings forming outdoor dining areas. There is a modern steel and glass access lift located on the northern side of the entry which was constructed in 2011 (**Figure 9**).

The architecture of both sandstone structures is a simple Interwar Classical style. Walls are constructed of ashlar sandstone with simple decorative carvings. The wide station entry is framed by two large sandstone pillars with expressed recessed joints on the Elizabeth St façade and with lead clad sandstone cornices. A stepped parapet hides the slate roof over the entry opening and features a cartouche with the date '1926'.

The northern and southern facades are symmetrical and feature sandstone walls and two fixed square timber framed windows with simple geometric frosted and amber glass panelling (**Figure 12**). The slate roof which has a simple pitch is visible from either elevation.

Internally, concrete steps lead to two vaulted subway tunnels which connect to the concourse level.

The entry awning itself is supported on steel cantilever beams which extend from the internal entry foyer (**Figure 6**). **Figure 7** shows a similar support structure at the now demolished St James Road entrance. The steel cantilever beams support timber framing on which a roll batten copper roof is fixed, and which drains to a shallow box gutter at the stone gable wall (**Figures 17-20**). Both the roof sheeting and box gutter date from the last quarter of the twentieth century. The original drawing of the St James Road awning indicates the original roofing material was galvanised iron (**Figure 7**). As the roof level has been raised above the

original level, it would appear fairly certain that new timber support framing was introduced when the roofing was replaced and raised in the 1990s. Whether the new timber framing has been constructed over the original timber framing or has replaced it can only be determined by inspection beneath the roof sheeting.

At each end of the roof the gutter drains through horizontal outlets introduced when the roof was replaced and raised. These outlets which are higher than the level of the original outlets drain to cast iron rainwater heads and downpipes on the south and north elevations via box gutters on the eastern side of the stone gable wall. (**Figure 19**).

Two ornate steel brackets are located centrally on each stone pillar. A copper clad fascia with pressed embossed detailing and illuminated station signage carries round the three exposed edges of the awning (**Figures 21-24**). The underside of the awning is finished with a pressed embossed patterned ceiling lining with three regularly spaced oyster lights which are not original (**Figure 11**).

General condition of the awning and other elements

Roof and box gutter

The water staining to the copper clad beam at the rear of the awning indicates water leaks from the roof and box gutter (**Figure 11**). Inspection from a ladder and from the roof has identified several factors why the roof is leaking:

- The roof lacks sufficient fall resulting in water ponding on the roof and not draining away adequately (**Figure 17**).
- The box gutter into which the roof drains is too shallow being 15-20mm in height at its highest point, which is insufficient to prevent any backflow or surcharging of stormwater under the roof sheeting and by capillary action at the roof joints (**Figures 17 & 18**).
- The roofing material has indentations and deformations as a result of being walked upon.
- The roof sheeting deflects quite markedly in some sections when stepped on, indicating the timber structure beneath has suffered loss of loadbearing strength.
- CCTV imaging carried out by Sydney Trains show that some of the timber roof framing has badly deteriorated (**Figure 25**).
- The later introduced horizontal gutter outlets inserted through the sandstone gable wall may be undersized.

Downpipes

On the southern façade the stormwater grate at the base of the cast iron downpipe is undersized, and the bottom of the downpipe is not located directly above the grate (**Figures 13 & 14**). The stormwater grate at the bottom of the northern downpipe is blocked (**Figures 15 & 16**).

Ceiling lining and awning fascia

The ceiling lining and fascia cladding are in fair condition, with only some minor damage (**Figures 21 to 24**).

Fascia lighting to signage and ceiling lights

The neon tubes to the rear of the lettering as well as the electrical wiring are in poor condition. The ceiling lights which have been replaced from the original are generally in poor condition.

Sandstone walls

Sandstone walls have built up grime and biological growth, with lower courses and those directly above the awning roof are affected by moisture.

Photographs

The following images show the condition of St James Station Elizabeth Street entry awning as of September 2022. All photographs below were taken by OCP Architects unless otherwise stated.



Figure 8: Elizabeth Street entrance awning looking north east.



Figure 9: Elizabeth Street entrance awning looking south east.



Figure 10: New café and bar located to the east of the Elizabeth Street entry.



Figure 11: Original copper ceiling lining to awning. Note water staining to copper clad beam to the rear.



Figure 12: Southern façade of Elizabeth Street entry



Figure 13: Cast iron downpipe on southern façade of entry building

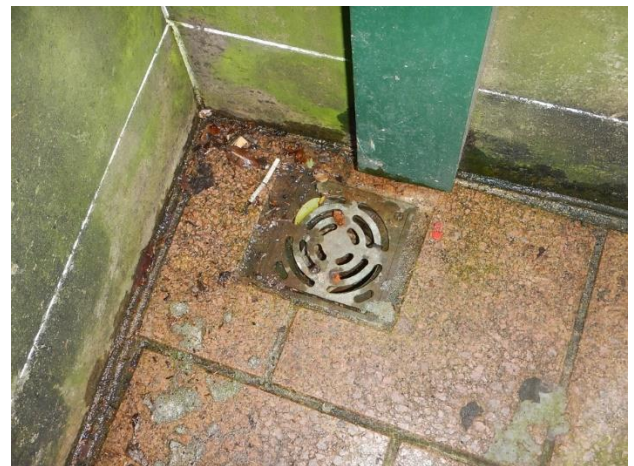


Figure 14: Undersized stormwater grate at base of downpipe on southern façade of building. Note that bottom of downpipe is misaligned with grating outlet.



Figure 15: Cast iron downpipe on northern façade of building

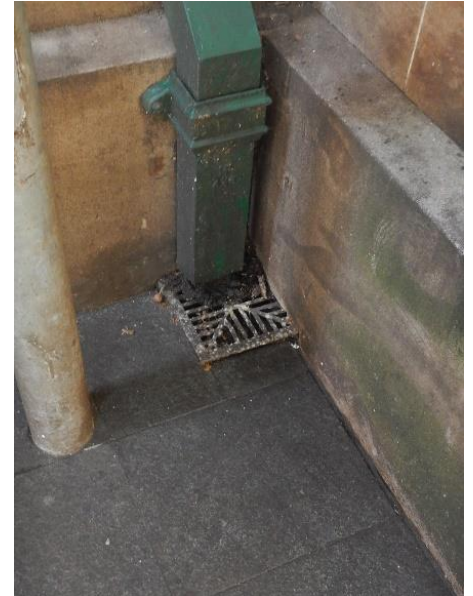


Figure 16: Blocked stormwater grate at base of downpipe on northern façade of building



Figure 17: Batten roll copper roof cladding and copper box gutter to awning installed in the 1990s. Note roof access anchor locations, the fixings of which have penetrated the roof cladding.

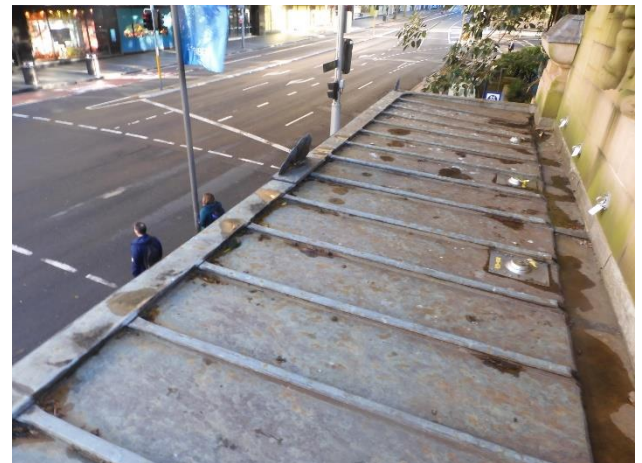


Figure 18: Batten roll copper roof cladding and copper box gutter to awning installed in the 1990s



Figure 19: Horizontal box gutter outlet at southern end of roof created as part of 1990s roof and box gutter replacement. Ladder access bracket at right hand side



Figure 20: Corner of awning roof showing top of fascia cladding and copper acroteria



Figure 21: Original station signage on copper fascia cladding



Figure 22: Original station signage on copper fascia cladding



Figure 23: South west corner of awning fascia



Figure 24: Minor damage to awning fascia



Figure 25: Still from CCTV video showing deteriorated awning roof framing

Source: Sydney Trains

PART C: SIGNIFICANCE, PROPOSED WORKS AND IMPACT ASSESSMENT

4. ASSESSMENT OF HERITAGE SIGNIFICANCE

Criteria Assessment

The NSW Heritage Manual, administered by Heritage NSW, provides a basis for the assessment of heritage significance items in NSW. Assessment is achieved by evaluating the item's significance in reference to specific criteria, which can be applied at a national, state, or local level.

The assessment and summary statement of significance included below has been sourced from the NSW SHR inventory form for the *St James Railway Station Group*.¹

SHR Criteria a)

[Historical significance]

St James Station was, with Museum Station, one the first two underground railway stations to operate in Australia. It has been in continuous operation since its opening and has retained much of the original fabric intact. It was part of the development of transport services in the early twentieth century and provides evidence of the expansion and upgrading of public utilities in the inner city during this period. St James Station is associated with early plans for the development of a city rail network and demonstrates the adoption of the European-style tube station.

The construction of St James and Museum Stations on the eastern edge of the city encouraged the development of commercial and retail property in this part of the city with large firms including David Jones, Farmers (later Grace Bros and now Myers) and Mark Foy's all building large stores near the stations to take advantage. The underground location of the station is a result of citizens' concerns over losing parkland. The St James Railway disused tunnels are also historically significant as part of Sydney's wartime experience, with both military headquarters and civilian air raid shelters located within sections of them during World War II.

SHR Criteria b)

[Historical association significance]

The station is associated with prominent persons such as JJC Bradfield and organisations such as the Department of Railways. JJC Bradfield was Chief Engineer for the Sydney Harbour Bridge and City Transit and had a direct hand in the design and layout of St James Station.

SHR Criteria c)

[Aesthetic significance]

St James Station provides evidence of developing railway technology in NSW and Australia in the 1920s and reflects the underground systems of England and Europe of the same period.

The scale and methods of construction represent a major feat of engineering for its time. The sandstone entry building in Elizabeth Street is a fine and largely intact

¹ Heritage NSW, State Heritage Inventory Listing for St James Railway Station Group, accessed August 2022 from: <https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=5012220>

example of the Inter-War Stripped Classical style and includes significant neon signs in its entrance way. The entry building is a prominent feature in north Hyde Park and at the top of Market Street.

The wall tiling within the station and the pedestrian tunnels, including the green indicator banding, is a distinctive and significant element of the interior of the station, which retains a number of original features including light fittings, station clocks and timber work.

SHR Criteria f)
[Rarity]

St James Station was one of the first two underground railway stations to operate in Australia. The layout of St James, along with Museum, based on the London underground, is unique in the NSW railways network, while the surviving World War II air raid shelter sections are rare remaining examples of public air raid precautions in the Sydney area. The neon Chateau Tanunda (Brandy) sign within the Elizabeth Street entrance building is a rare surviving example of a pre-World War II neon sign in Sydney and a local landmark.

SHR Criteria g)
[Representativeness]

The station entrance (Elizabeth Street) is representative of a low-scale public building constructed in the inter-War Stripped Classical style. It is representative of a facility designed to cater for the ongoing transport of Sydney's citizens. It was associated with early plans for the development of a city rail network and demonstrates the adoption of the European-style tube station.

Statement of Significance

The following Statement of Significance has been extracted from the SHR inventory listing form for *the St James Railway Station Group and Residence*:

St James Station is of State significance because, along with Museum, it was the first underground station in Australia and demonstrates the adaptation of the London tube-style station to the Australian situation. The station is well constructed, proportioned, and detailed.

The station complex is an important part of the larger Sydney Harbour Bridge and the electrified City Underground Railway scheme and has associations with prominent persons such as JJC Bradfield, chief engineer and designer of the Sydney Harbour Bridge and city underground and organisations such as the Department of Railways and represents the culmination of many years of political lobbying for a city railway system. The construction of the city underground and position of St James Station encouraged the retail and commercial development of the Sydney CBD in the late 1920s and 1930s, with large department stores constructed around the stations.

The St James Station entry building is a fine and largely intact example of a small-scale Inter-War Stripped Classical style building which adds to the general character of the immediate area. It has significance as one of two buildings of its type and style remaining in the city railway system (the other being Museum Station entrance) and is a rare example of this type of station building.

The underground platforms and concourse retain many original features and provide one of the most ornate station interiors in the NSW railway system. Disused platforms demonstrate the grand

plans of the 1930s railway network of Bradfield, while the air raid shelter areas in the southern tunnels are rare surviving elements of Sydney's World War II defences.

Individual elements, such as the tiling, ornate stairs, lights, and clocks add to the ambience of the station, while the Chateau Tanunda neon advertising sign at the Elizabeth Street entrance is a rare surviving example of a 1930s neon sign in Sydney.

On review of the heritage assessment, OCP Architects agrees that the existing Statement of Significance has identified important values of *St James Railway Station Group* and has used it as a guide for understanding the significance of the place.

Relative significance of individual awning elements

The following assesses the heritage significance of individual elements of the awning and associated entry portal:

Element	Date	Rated heritage significance
Copper roof sheeting and box gutter	Replaced in the 1990s and raised	Little
Timber structure supporting roof	Introduced in the 1990s when roof was raised	Little
Copper fascia, ceiling soffit	Original construction	High
Copper signage on fascia	Original construction	High
Brass corner guards	Original construction	High
Copper signage in fascia	Original construction	High
Wrought iron awning brackets	Original construction	High
Cast iron downpipes	Original construction	High
Stormwater outlets at base of downpipes	Later. Replaced when new paving introduced	Little
Ceiling oyster lights	Later replacement	Little
Sandstone walls	Original construction	High

5. PROPOSED WORKS AND ASSESSMENT

Rationale

The awning over the Elizabeth Street entry to St James Station leaks. Preliminary CCTV investigations by Sydney Trains has confirmed that there is substantial deterioration of timber roof framing, especially beneath the copper box gutter. OCP architects were commissioned to undertake a more detailed investigation of the causes of the roof leakage and to develop a scope of works for corrective and preventative maintenance works to address the issue.

The intention of the proposed works is to undertake maintenance to address the water ingress, as well as repair minor damage to the awning fascia, and improve the general visual quality of the entry building by cleaning stonework and metal finishes.

Alternative work options considered but discounted

The following work options were considered:

No work

Leaving the awning roof and box gutter in its present situation is not a viable option, as the roof will continue to leak, causing nuisance to the public and damaging significant building fabric below. It is also evident that water ingress to the timber supporting structure has reduced its structural capacity, and with further deterioration may result in more serious failure.

Repairing the existing roof and box gutter

Repairing the existing copper roof sheeting and gutter is not a viable option for the following reasons:

- The existing roof slope is too shallow and requires increasing so as to prevent water ponding and penetrating the roof joints.
- Increasing the roof slope and utilising the original horizontal gutter outlets requires lowering the roof to its original level.
- The existing roof sheeting has been damaged by walking upon and penetration for roof safety anchors.
- The existing box gutter is too shallow and does not have sufficient width to adequately drain stormwater.
- The existing roof sheeting and box gutter is of Little heritage significance and replacement does not incur any negative heritage impacts.

Deconstruct and reconstruct roof and box gutter

For the reasons outlined above, the only viable option for responsible longer term maintenance and prevention of water penetration of the awning roof and subsequent damage to the roof structure and adjacent heritage fabric, is the removal of the existing roof and gutter, which are of Little significance, and replacement with a new copper roof and box gutter, installed at the level of the original roof.

Scope of Works, Assessment, and Exemptions

In outline the scope of proposed works is as follows:

- Replacement of existing copper roof including supporting timber elements where damaged and beyond repair.
- Replacement of existing box gutter including supporting elements.
- Install new lead lining to existing box gutter outlets if required, alternatively retain existing lead lining if in good condition.
- Installation of new box gutter overflows.
- Investigation of stormwater system from existing downpipes to street and jet blasting if necessary.
- Replacement of stormwater pits under downpipes including installation of new grates.
- Removal of peeling paint and rust from both existing downpipes with stormwater heads, treatment against rust and repainting.
- Restoration of awning glazed copper sign panels.
- Cleaning and maintenance of awning copper elements including copper ceiling, polishing, and waxing.
- Cleaning of brass corner guards and waxing.
- Removal of peeling paint and rust from cast iron awning brackets and repainting.
- Inspection of existing electrical wiring and possible rectification.
- Replacement of lights in station signage in LED.
- Replacement of three existing ceiling lights in LED.
- Sandstone washing, removal of black stains, removal of biological growth and application of biocide on south elevation including entry reveal and from north elevation of north buttress and south elevation of south buttress. 10% sandstone repointing.
- Painting and reinstallation of existing ladder bracket on the side of awning.

In summary form this section assesses how the proposed maintenance and repair works to the St James Station awning impacts on the heritage significance of the Elizabeth Street station entrance building.

The works are a positive step that are in line with the requirement for minimum standards of maintenance and repair under the *Heritage Act 1977*, which specifically relate to weatherproofing, and essential maintenance.

The following table has been developed to present an understanding of the works, impact, and relevant exemptions for clarity and accessibility. For clarity, the works presented in this table do not include notes on various methodologies or hold points, unless they specifically relate to an exemption clause. Nonetheless, sufficient information has been included to allow for an assessment of heritage impacts.

For additional clarity, agency-specific exemptions from approval under the *Heritage Act 1977* have been presented with clauses where these are relevant to proposed work.

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
ROOF & BOX GUTTER			
Copper roof (Figures 17 to 20).	Replacement of existing copper roof. (See Specification Section 3.0 Roofing and Rainwater Goods).	The existing copper roof was replaced in the latter part of the twentieth century, and is not original roof fabric, and is therefore considered of Little significance. (Original drawings indicate the original roof was of corrugated steel). The existing roof sheeting has been damaged by the insertion of anchor points, has been deformed by walking upon and will incur stress fractures at joints when roof is removed. No adverse impact	RailCorp Exemption 19(b). (Complete replacement of non-significant fabric with like-for-like)
Timber roof structure	The original roof level has been raised by the construction of the new roof in the 1990s. The roof needs to be reinstated to the original levels to allow greater depth in box gutter which is too low in height to provide sufficient drainage. It would appear that the original timber supporting structure has been built over by the new structure but will require internal inspection to verify.	The new timber roof structure is later construction and considered of Little significance. Removing this timber structure therefore incurs no adverse impact.	RailCorp Exemption 19(b). (Complete replacement of non-significant fabric with like-for-like)
Copper box gutter (Figures 17 & 18)	Replacement of existing box gutter including supporting elements so that new deeper and wider copper box gutter	The existing copper roof was replaced in the latter part of the twentieth century and is not original roof fabric and is	RailCorp Exemption 19(b). (Complete replacement of non-significant fabric with like-for-like)

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
	<p>can be installed to provide adequate drainage to outlets. New 25kg lead flashings to replace existing flashings at stone parapet wall junction. Flashings to be inserted into horizontal joints</p> <p>(See Specification Section 3.0 Roofing and Rainwater Goods).</p>	<p>therefore considered of Little significance.</p> <p>No adverse impact</p>	
Box gutter overflows	<p>Installation of new box gutter overflows.</p> <p>(See Specification Section 3.0 Roofing and Rainwater Goods).</p>	<p>Box gutter overflows are essential for ensuring water does not back up and enter the roof spaces or the public spaces below. The overflow is considered to be of such a small size it will have no visual impact</p> <p>No adverse impact</p>	<p>Standard Exemption 7 for work requiring heritage council approval (Minor activities with no adverse impact on heritage significance)</p>
Roof anchor points (Figures 17 & 18)	<p>Roof safety anchor points have been installed on the roof sheeting which are to be removed. Anchor points are also located on the parapet wall which are sufficient for roof safety.</p>	<p>The modern roof anchor points have no significance. Removal eliminates the need to refix through new roof sheeting and creating potential water entry points and allows the copper roof to expand and contract.</p> <p>Positive impact</p>	<p>RailCorp Exemption 20(c). (Removal of later intrusive elements and accretions)</p>
DOWNPIPES & STORMWATER			
Stormwater investigation	<p>Investigation of stormwater system from existing downpipes to street and jet blasting if necessary.</p>	<p>Flushing the stormwater system will remove the build-up of any detritus while inspection by video will ensure that any pipe damage / displacement can be identified and corrected at a later date. High pressure</p>	<p>RailCorp Exemption 19(c). (Cleaning and maintaining significant fabric using conservation methods)</p>

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
		<p>water cleaning is a low impact method for the removal of blockages in underground water pipes and is suitable for the maintenance of the item. It will ensure the proper drainage of water from the station entry building and improve the performance of the structure in the short to medium term.</p> <p>No adverse impact.</p>	
<p>Stormwater pits and downpipe grates (Figures 14 & 16).</p>	<p>Replacement of stormwater pits under downpipes including installation of new grates (see Specification Section 3.0 Roofing and Rainwater Goods).</p>	<p>The grate beneath the downpipe on the southern side (modern, dating to the last quarter of the twentieth century and is considered of little significance), is undersized and not located directly under the downpipe resulting in excess water run off around the sandstone wall base. The grate on the northern side is blocked with silt. Replacing stormwater pits will ensure adequate drainage at base of sandstone walls.</p> <p>The new grating on the southern side will result in minimal visual impact and is acceptable given the resulting improved drainage.</p> <p>Positive impact, no adverse impact.</p>	<p>RailCorp Exemption 19(b). (Complete replacement of non-significant fabric with like-for-like)</p>
<p>Cast iron downpipes (Figures 13 & 16)</p>	<p>Removal of peeling paint and rust from both existing downpipes with stormwater heads, treatment against rust and repainting.</p>	<p>Cast iron downpipes are original and of High significance.</p> <p>Minor maintenance to the cast iron downpipes will improve the exterior</p>	<p>RailCorp Exemption 13(b). (Removal of earlier lead-based paint that has flaked).</p> <p>RailCorp Exemption 23(1)(c). (Painting that</p>

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
		<p>presentation and assist in long term conservation.</p> <p>No adverse Impact.</p>	<p>uses the same paint scheme, <i>Engineering Standard ESB 010 Heritage Paint Schemes</i>, or other rail heritage colour schemes).</p>
GENERAL IMPROVEMENTS OF APPEARANCE			
Fascia signage panels (Figures 21 & 22)	Restoration of awning glazed copper sign panels (see Specification Section 4.0 Metalwork and Coating).	<p>The signage panels are original and of High significance. The current signage of cut out letters is bent and deformed in some places</p> <p>Minor maintenance to the awning of the entry will improve the exterior presentation.</p> <p>No adverse Impact.</p>	RailCorp Exemption 19(c). (Cleaning and Maintaining significance fabric using conservation methods)
Copper ceiling and copper fascia (Figures 11 & 24).	Cleaning and maintenance of awning copper elements including copper ceiling, and copper fascia and polishing and waxing (see Specification Section 4.0 Metalwork and Coating).	<p>The copper ceiling and fascia s are original and of High significance.</p> <p>Minor maintenance to the copper ceiling and fascia of the entry will improve the exterior presentation.</p> <p>No adverse Impact.</p>	RailCorp Exemption 19(c). (Cleaning and Maintaining significance fabric using conservation methods)
Brass corner guards on each side of entry opening (Figure 8)	Cleaning of brass corner guards and waxing (see Specification Section 4.0 Metalwork and Coating).	<p>The brass corner guards are original and of High significance.</p> <p>Cleaning and waxing of brass corner guards to the entry sides will improve the exterior presentation.</p> <p>No adverse Impact.</p>	RailCorp Exemption 19(c). (Cleaning and Maintaining significance fabric using conservation methods)
Cast iron awning brackets	Removal of peeling paint and rust from cast iron awning brackets and repainting (see	Awning brackets are original and of High significance.	RailCorp Exemption 13(b). (Removal of earlier

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
(Figures 8 & 23)	Specification Section 4.0 Metalwork and Coating).	Minor maintenance to the cast iron awning brackets will improve the exterior presentation and assist in long term conservation. No adverse Impact.	lead-based paint that has flaked). RailCorp Exemption 23(1)(c). (Painting that uses the same paint scheme, <i>Engineering Standard ESB 010 Heritage Paint Schemes</i> , or other rail heritage colour schemes).
Sandstone walls, parapet, and side entry buttresses (Figures 8, 9 & 12)	Sandstone washing, removal of black stains, removal of biological growth and application of biocide on south elevation including entry reveal and from north elevation of north buttress and south elevation of south buttress. 10% sandstone repointing (see Specification Section 5.0 Sandstone Cleaning and Desalination and Coating).	Stonework is of High significance. Cleaning of sandstone will improve appearance. Desalination, repointing and applying biocide is essential maintenance to prolong life of sandstone. Positive impact	RailCorp Exemption 19(c). (Cleaning and maintaining significant fabric using conservation methods)
Ladder access bracket (Figure 19).	Painting and reinstallation of existing ladder access bracket on the side of awning.	Ladder access bracket is a modern safety device and is of Little significance. Painting will improve exterior presentation. No adverse Impact.	RailCorp Exemption 20(d). Minor work
ELECTRICAL & LIGHTING			
Electrical wiring generally	Inspection of existing electrical wiring and possible rectification.	The condition of the existing electrical wiring is not fully known and may have incurred damage from water ingress. No adverse Impact.	RailCorp Exemption 9(a). Security, lighting and customer information systems and signage;

ELEMENT / ITEM No.	WORKS	DETAILED IMPACT ASSESSMENT	RAILCORP EXEMPTION CLAUSE/or STANDARD EXEMPTION
Lighting to fascia signage panels (Figures 21 & 22).	Replacement of lights in station signage in LED.	<p>The current fluorescent tubes are in a poor state.</p> <p>Replacing lighting with new LED will improve visibility and exterior presentation.</p> <p>No adverse Impact.</p>	RailCorp Exemption 9(a). Security, lighting and customer information systems and signage;
Lights to underside of copper ceiling (Figure 11).	Replacement of three existing ceiling lights in LED which are in a poor condition	<p>The current oyster lights are not original and are of little significance.</p> <p>Replacement with new similar oyster lights will improve the exterior presentation and general illumination level.</p> <p>No adverse Impact.</p>	<p>RailCorp Exemption 19(b). (Complete replacement of non-significant fabric with like-for-like)</p> <p>RailCorp Exemption 9(a). Security, lighting and customer information systems and signage;</p>

6. RECOMMENDATIONS & MITIGATION MEASURES

Conclusion

This Statement of Heritage Impact has reviewed the proposed works to the awning and adjacent building fabric at the Elizabeth Street entry to St James Railway Station, which is a site of State heritage significance.

The assessment contained within this report has determined that the proposal will have a positive impact on the heritage values of the entry building. The proposed works are considered essential repair, maintenance and conservation works, which will prevent water ingress and damage to the awning structure and prevent water entry to the public area below. As outlined in Section 5 the works are minor in nature and will have no adverse physical or visual impacts on the entry building, which is in a very visible location on Elizabeth Street.

7. Recommendations

The following recommendations have been developed in response to the proposed works and the assessed heritage significance of the St James Railway Station Elizabeth Street entry.

1. Any modification to the scope of works should be undertaken in consultation with a heritage architect and Sydney Trains Heritage Specialist to ensure that the works are in accordance with the best practice heritage approach and conditions of approval.
2. Prior to the commencement of works, contractors should be briefed on the heritage significance of the place and elements of the station building. These elements should be protected during works and include, but are not limited to, stonework and joinery.
3. Where replacement fabric is proposed, it has been chosen to achieve a good match with the material, dimension, profile, finish of the original/early fabric being replaced; and
4. The proposed works are to be undertaken in accordance with the Schedule of Works prepared by OCP Architects (dated January 2023); the Specification prepared by OCP Architects (dated January 2023), and Roof Report prepared by Architectural Roofing Services (dated 24 October 2022).
5. If a relic or suspected relic is uncovered during stormwater works, work must immediately cease, and Sydney Trains Unexpected Find Protocol must be followed. Should it be required, as part of the unexpected find protocol, the Heritage Council may be notified in writing in accordance with section 146 of the Heritage Act 1977. Depending on the nature of the discovery, assessment and an excavation permit may be required prior to the recommencement of work in the affected area.

Appendix A – Architectural Drawings (OCP Architects)

Appendix B – Schedule of Works, OCP Architects January 2023

Appendix C – Specification, OCP Architects January 2023

Appendix D – Heritage Roofing Specialist – St James Train Station Elizabeth Street Awning Roof

17 May 2023

State heritage works application: 108 Elizabeth Street, SYDNEY NSW 2000
Reference: HCS/2023/26
Item name: St James Railway Station Group
State heritage register number: 01248
Proposal: Alterations and restoration works to St James Station
West Entry Awning
Applicant: SYDNEY TRAINS

As delegate of the Heritage Council of NSW, we have considered your application for the above address.

Approval under Section 60 of the Heritage Act 1977

Pursuant to Section 63 of the Heritage Act 1977, approval is granted subject to the following conditions:

1. Approved development

Development must be in accordance with:

- a) Architectural drawings *St James Station West Entry Awning* prepared by *OCP Architects* as listed in the table below:

Drawing number	Title	Date	Rev
A00	Measured Drawings	Jan 2023	B
A01	Proposed Alteration & Restoration Works	Jan 2023	B
A02	Details	Jan 2023	B

- b) Heritage impact statement titled *St James Railway Station Elizabeth Street Entry Awning Conservation & Repair* prepared by OCP Architects, 25 January 2023.
- c) *Schedule of Repair Works St James Station West Entrance Restoration of Awning and Surrounding Fabric*, prepared by OCP Architects dated January 2023.

Except as amended by the conditions of this approval:

2. Heritage consultant

A suitably qualified and experienced heritage consultant must be nominated for this project. The nominated heritage consultant must provide input into the detailed design, provide heritage information to be imparted to all tradespeople during site inductions, and oversee the works to minimise impacts to heritage values. The nominated heritage consultant must be involved in the selection of appropriate tradespersons and must be satisfied that all work has been carried out in accordance with the conditions of this consent.

Reason: So that appropriate heritage advice is provided to support best practice conservation and ensure works are undertaken in accordance with this approval.

3. Specialist tradespersons

All work to, or affecting, significant fabric shall be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage structures, materials and construction methods.

Reason: So that the construction, conservation and repair of significant fabric follows best heritage practice.

4. Site protection

Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed.

Reason: To ensure significant fabric including vegetation is protected during construction.

5. Unexpected historical archaeological relics

The applicant must ensure that if unexpected archaeological deposits or relics not identified and considered in the supporting documents for this approval are discovered, work must cease in the affected area(s) and the Heritage Council of NSW must be notified. Additional

assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.

Reason: This is a standard condition to identify to the applicant how to proceed if historical archaeological deposits or relics are unexpectedly identified during works.

6. Aboriginal objects

Should any Aboriginal objects be uncovered by the work which is not covered by a valid Aboriginal heritage impact permit, excavation or disturbance of the area is to stop immediately and Heritage NSW is to be informed in accordance with the National Parks and Wildlife Act 1974 (as amended). Works affecting Aboriginal objects on the site must not continue until Heritage NSW has been informed and the appropriate approvals are in place. Aboriginal objects must be managed in accordance with the National Parks and Wildlife Act 1974.

Reason: This is a standard condition to identify to the applicant how to proceed if Aboriginal objects are unexpectedly identified during works.

7. Compliance

If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent.

Reason: To ensure that the proposed works are completed as approved.

8. Duration of approval

This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.

Reason: To ensure the timely completion of works.

Advice

Section 148 of the Heritage Act 1977, allows people authorised by the Minister to enter and inspect, for the purposes of the Act, with respect to buildings, works, relics, moveable objects, places or items that is or contains an item of environmental heritage. Reasonable notice must be given for the inspection.

Right of appeal

If you are dissatisfied with this determination, appeal may be made to the Minister under Section 70 of the Heritage Act 1977.

Other approvals

It should be noted that an approval under the Act is additional to that which may be required from other local government and state government authorities in order to undertake works.

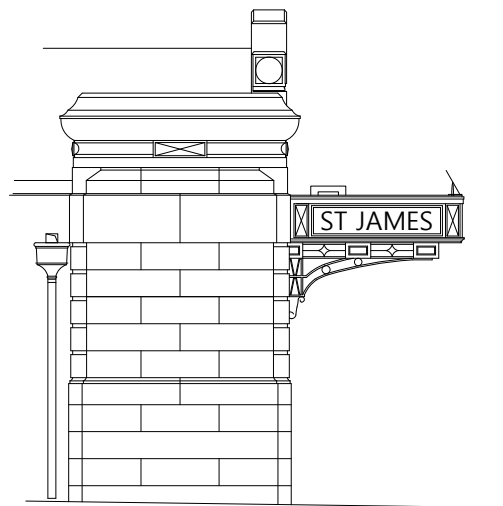
Please contact Hui Wang on 02 9265 9333 if you need to discuss your application. A copy of this determination has been sent to the Heritage Council of NSW.



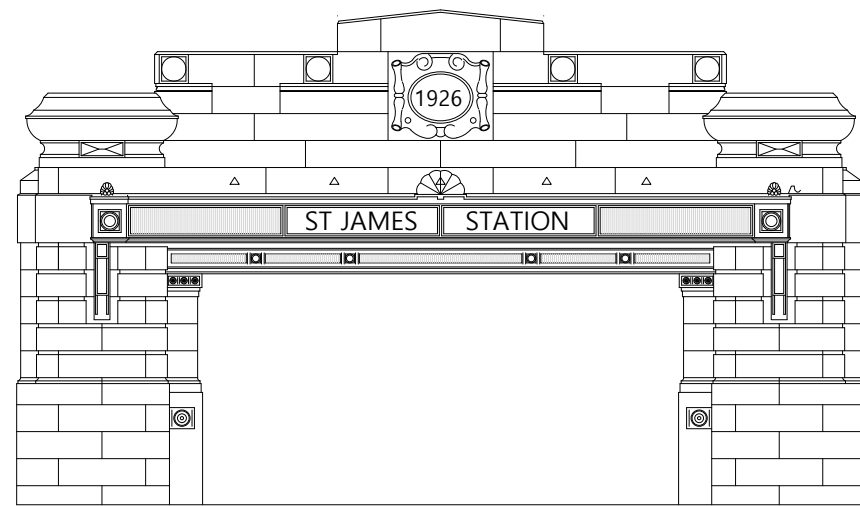
Tony Smith

Urban Design and Heritage Manager

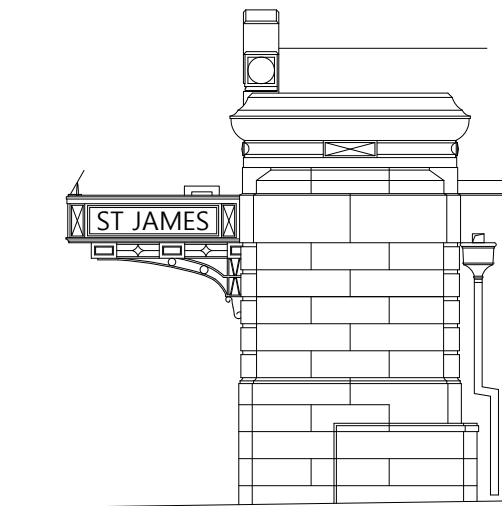
As delegate of the Heritage Council of NSW



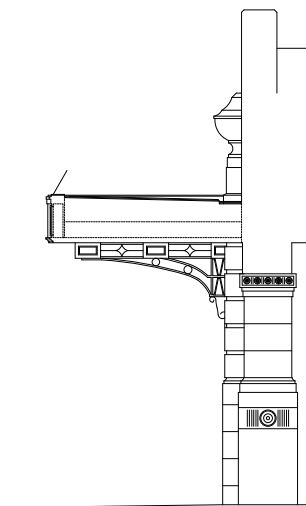
NORTH ELEVATION



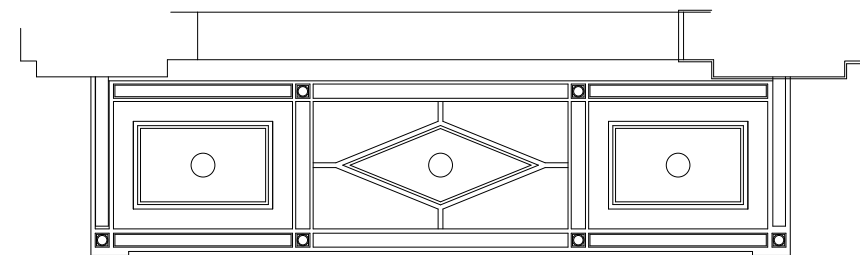
WEST ELEVATION



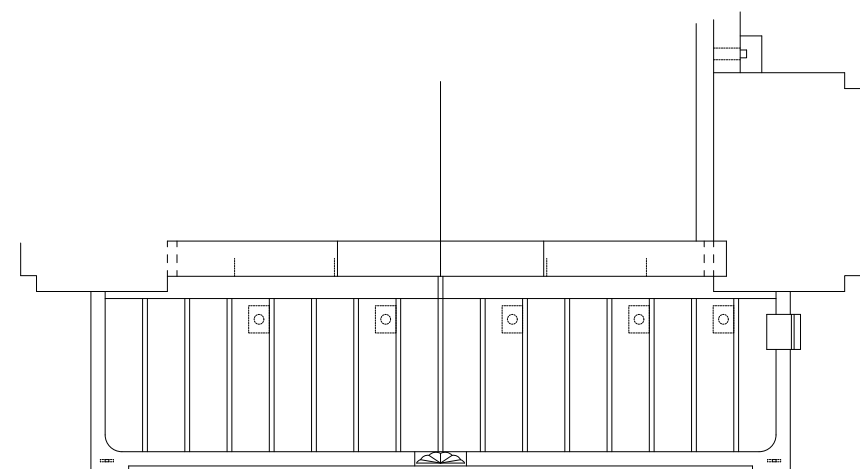
SOUTH ELEVATION



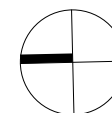
SECTION



REFLECTED CEILING PLAN



ROOF PLAN



HERITAGE ACT 1977
APPLICATION UNDER SECTION 60

 Approved by: Delegated Authority

HCS/2023/26

17/05/2023

These plans should be read in conjunction with the decision notice

Read drawings in conjunction with "Schedule of Repair Works"

CLIENT Sydney Trains	PROJECT ST JAMES STATION WEST ENTRY AWNING	FOR TENDER		
		SCALE 1 : 100 @ A3	DRAWN/CHECK MC/OC	DRAWING NO. A00
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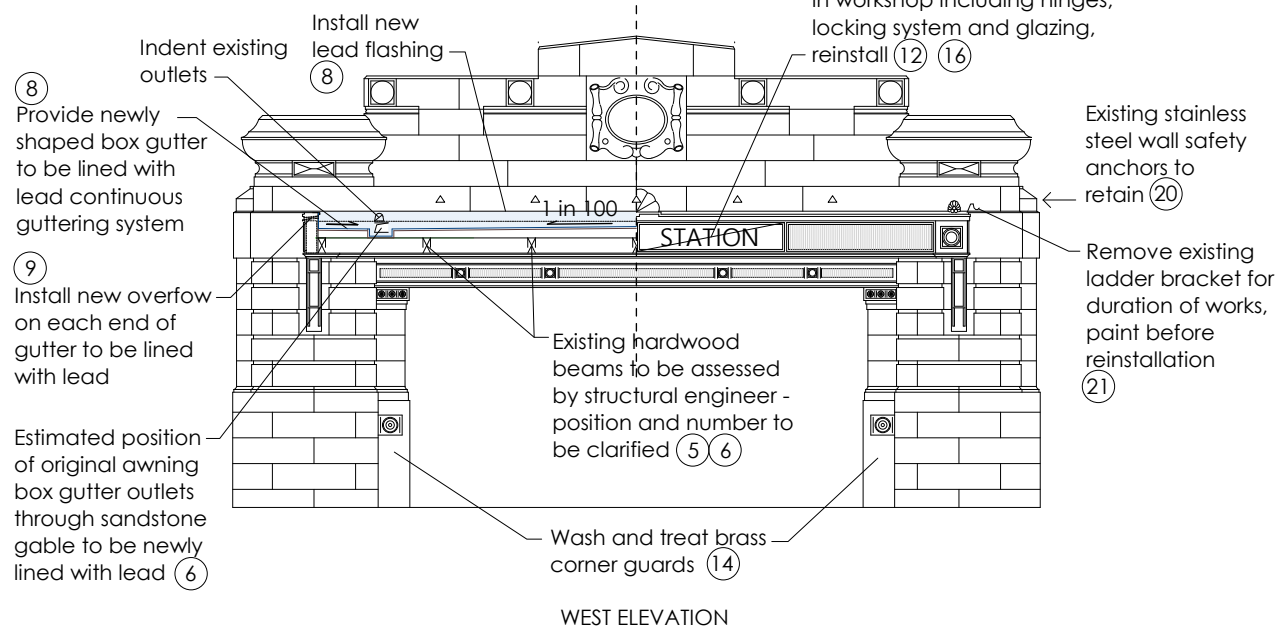


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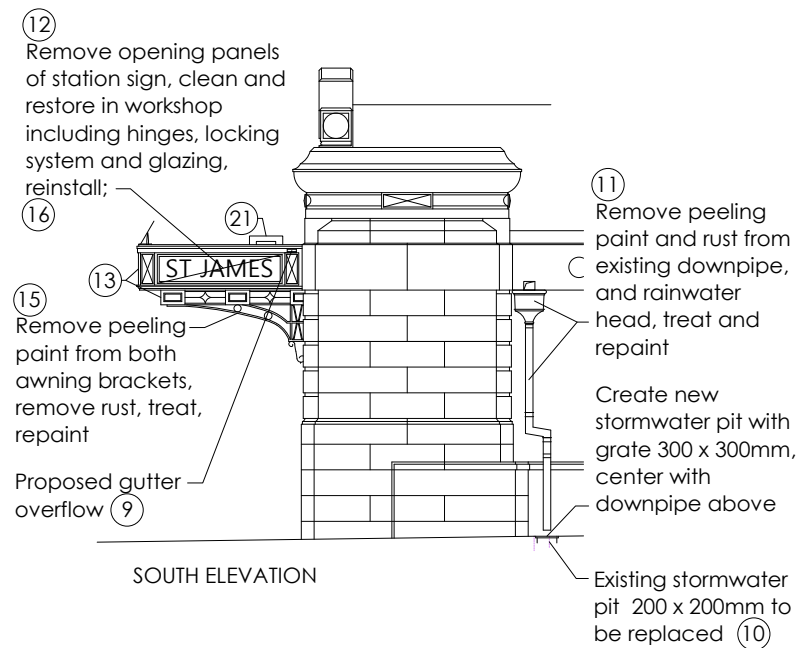
B	UPDATE	JANUARY 2023
A	FIRST ISSUE	OCTOBER 2022
ISSUE	NOTE	DATE

18/19 Wash sandstone including entry reveal, remove black stains, remove biological growth, apply bioside, desalinate (approx 10%), allow for 10% repointing

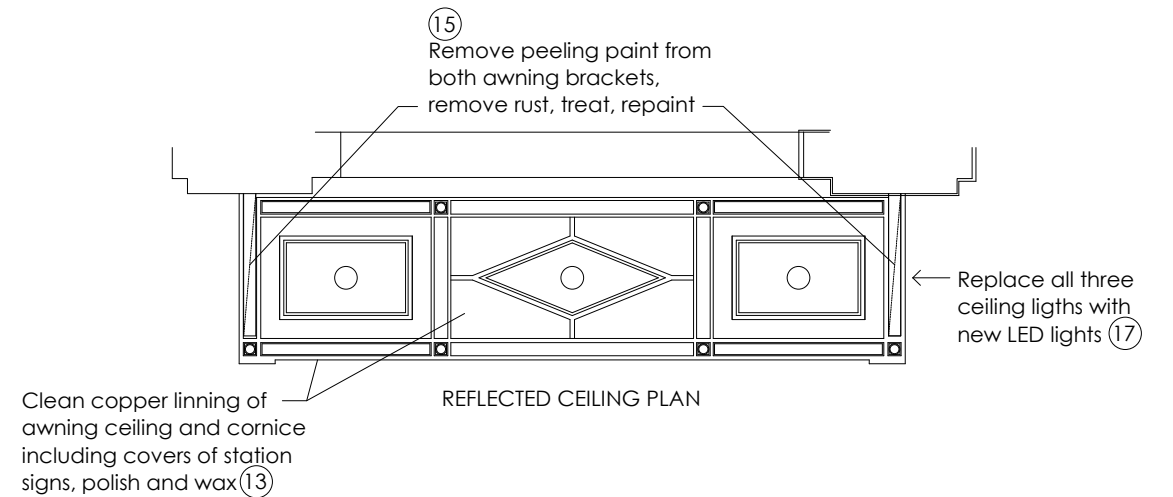
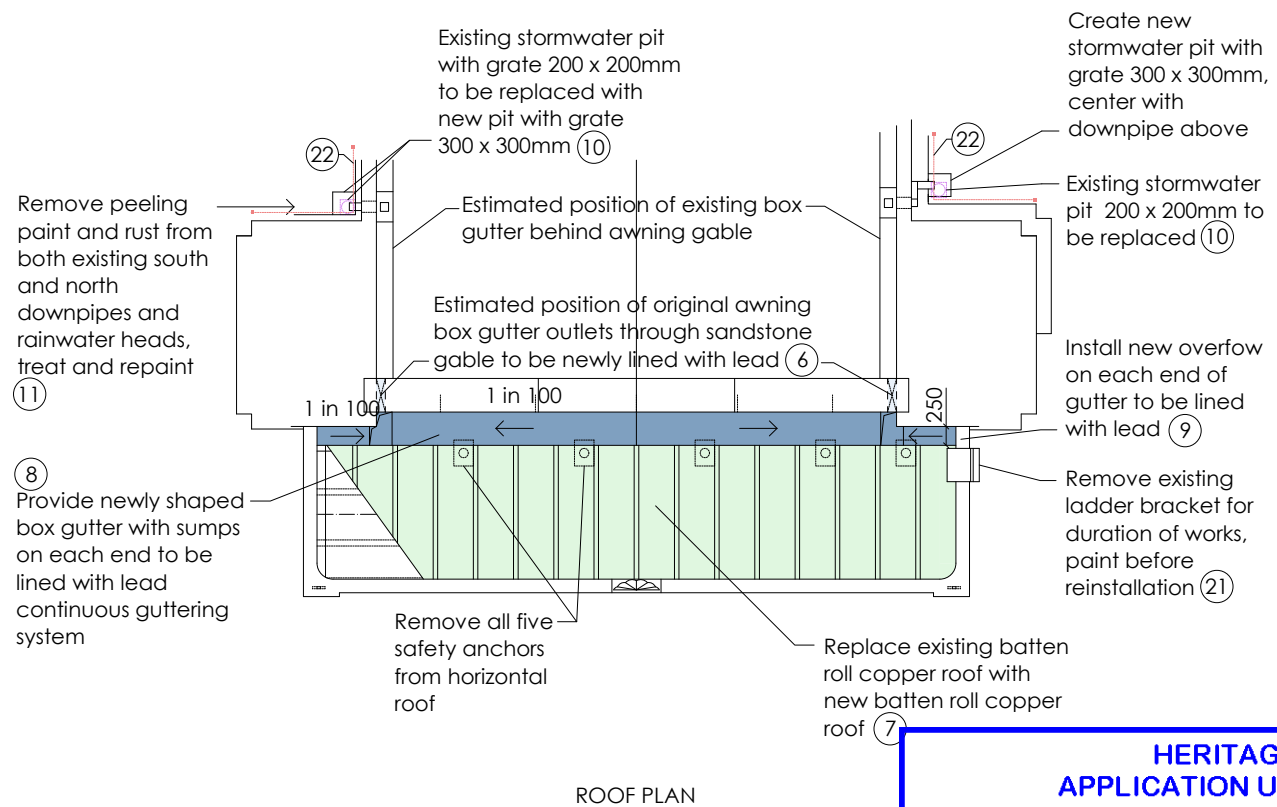
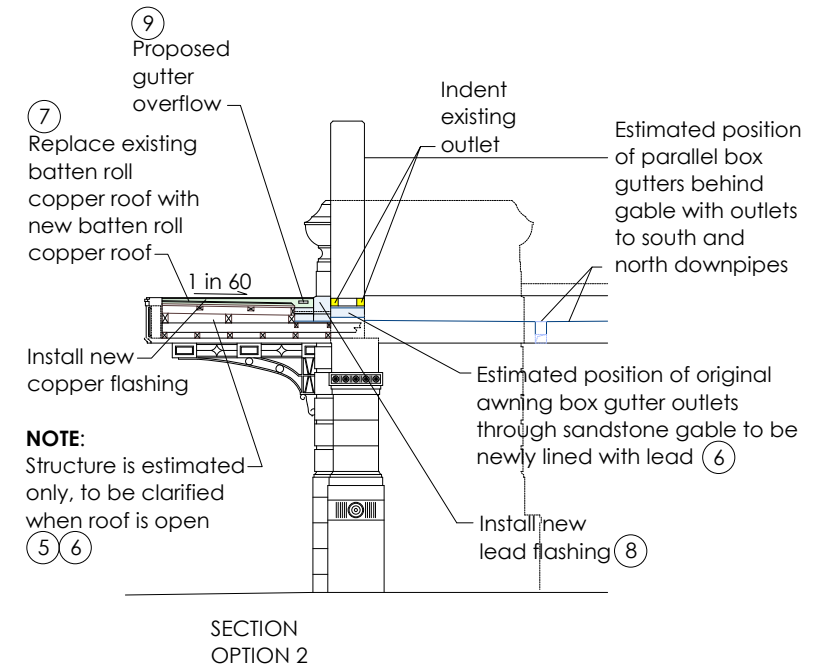
Box gutter and roof to be lowered to approx. original position



18/19 Wash south and north sandstone elevations of corner buttresses, remove black stains, remove biological growth, apply bioside, desalinate (approx 10%), allow for 10% repointing



Box gutter and roof to be lowered to approx. original position



NOTE:
 Investigate stormwater lines from ground stormwater outlets under downpipes at the corners behind buttresses to street using CCTV camera, jet blast if needed.
 Existing structure of the awning to be clarified from scaffold.
 Roof supporting timber structure is approximate only - refer to structural engineer's documents.
 Lights behind station signs to be replaced in LED - details to be clarified when accessible.

Read drawings in conjunction with "Schedule of Repair Works"

**HERITAGE ACT 1977
 APPLICATION UNDER SECTION 60**

Approved by: Delegated Authority

HCS/2023/26

17/05/2023

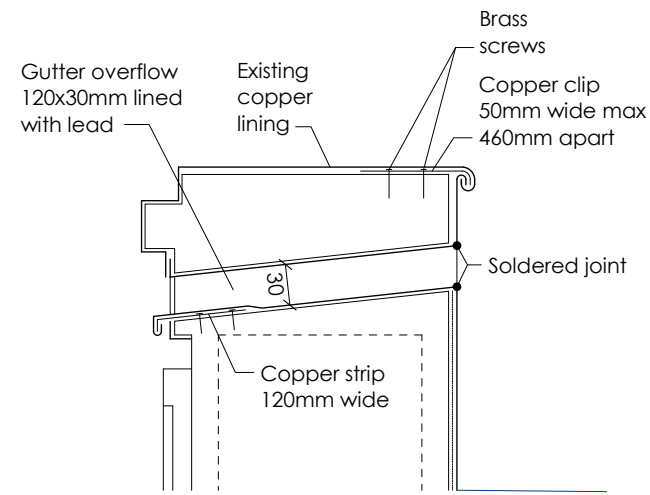
**These plans should be read in conjunction with
 the decision notice**

CLIENT Sydney Trains	PROJECT ST JAMES STATION WEST ENTRY AWNING	FOR TENDER	
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		PROJECT NO. 22036	ISSUE B
			DRAWING NO. A01

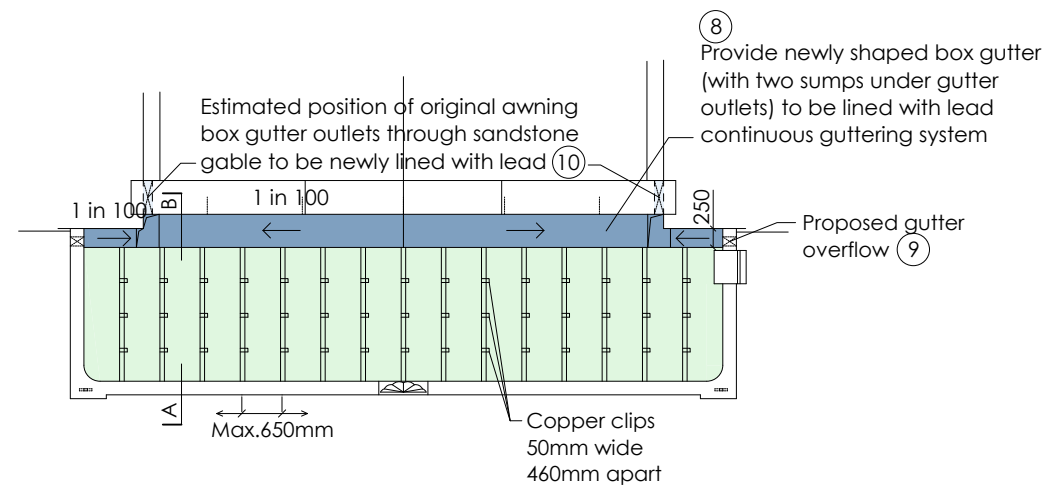


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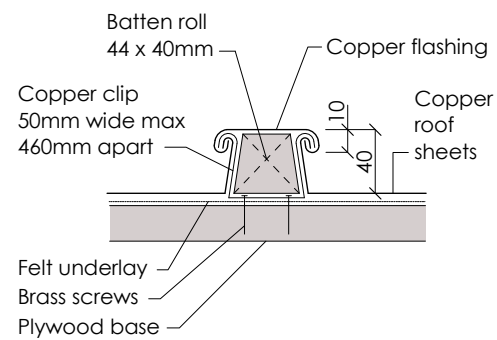
B	UPDATE	JANUARY 2023
A	FIRST ISSUE	OCTOBER 2022
ISSUE	NOTE	DATE



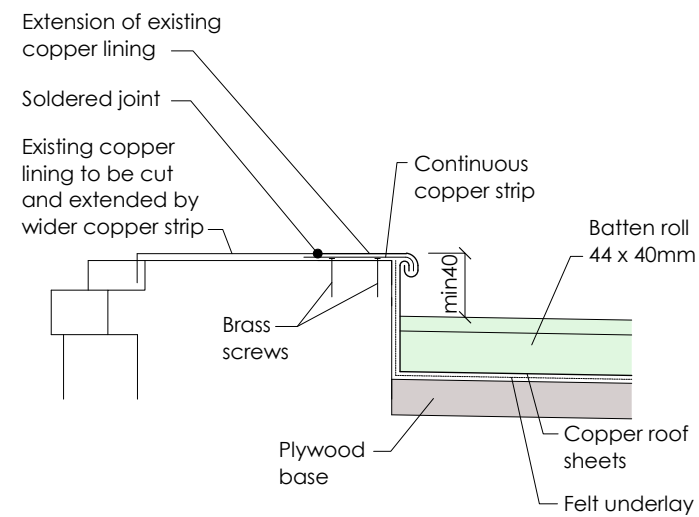
PROPOSED GUTTER OVERFLOW ⑨



COPPER ROOF ⑦

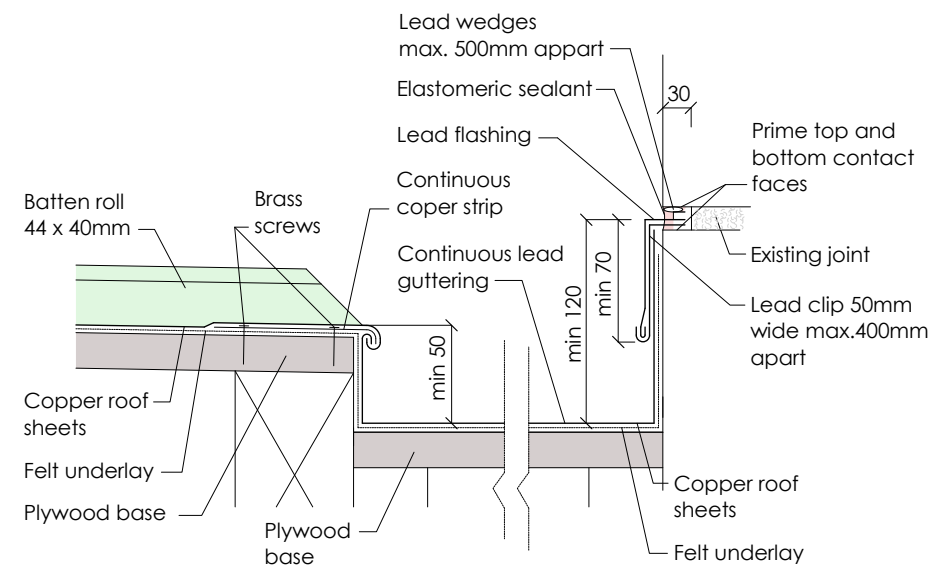


BATTEN ROLL DETAIL



ROOF COPPING SECTION
Box gutter to retain approx. in existing position, roof to be risen

DETAIL A



BOX GUTTER
Box gutter to be lowered, roof to retain approx. in existing position

DETAIL B

**HERITAGE ACT 1977
APPLICATION UNDER SECTION 60**

Approved by: Delegated Authority

HCS/2023/26

17/05/2023

These plans should be read in conjunction with the decision notice

Read drawings in conjunction with "Schedule of Repair Works"

CLIENT Sydney Trains	PROJECT ST JAMES STATION WEST ENTRY AWNING	FOR TENDER	
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