

Memo

To

From

Priority	ROUTINE
Date	26/10/2023
Subject	Addendum assessment and decision No.05 for proposed modifications to M1 Western Distributor Smart Motorway Project

Proposed modification

Modification to the M1 Western Distributor Smart Motorway Review of Environment Factors (REF).

Background

In 2021, Transport for NSW proposed to introduce intelligent technology, known as a smart motorway system, to the M1 corridor between Milsons Point and Allen Street in Pyrmont. This proposal is located in the North Sydney and City of Sydney local government areas (LGAs).

A review of environmental factors (REF) was prepared for the Western Distributor Smart Motorway proposal (referred to as the approved project REF) which was determined in May 2021.

A further four (4) addendum REFs and one (1) consistency report have been prepared and determined (refer Attachment 1, 2, 3, 4 and 5):

- Addendum assessment and decision No.01 for proposed modification for the use of an auxiliary compound site for the M1 Western Distributor Smart Motorway, December 2022.
- Addendum assessment and decision No.02 for proposed modification for the M1 Western Distributor Smart Motorway,
 January 2022 Modification to project boundaries to include five new gantry work, minor landscaping works, removal of existing traffic signage and additional ITS works.
- Addendum assessment and decision No.03 for proposed modification for the use of an additional construction compound site at Colebee for the M1 Western Distributor Smart Motorway, February 2023.



- Addendum assessment and decision No.04 for proposed modification for the M1 Western Distributor Smart Motorway, April 2023.
- M1 Western Distributor Smart Motorway Review of Environmental Factors consistency review No.01, September 2023 modifications to project boundaries, variation to works including new gantry structures and ITS connections.

Purpose

The purpose of this memo is to:

- Describe the proposed modification
- Document and assess the likely impacts of the proposed modification on the environment
- Detail protective measures to be implemented
- Document the recommendation of the Transport Senior Manager Environment and Sustainability and the decision by the Transport delegated manager as to whether to, or not to determine the modification to the project.

This memo is an addendum to and is to be read in conjunction with the previous project REF, addendum REFs and consistency review determined for the project (refer Attachments refer Attachment 1, 2, 3, 4 and 5

Description of proposed modification

There are three (3) modifications proposed to the works scope of the M1 Western Distributor Smart Motorway (WDSM) Project that form the subjects of this memo.

- 1. Transport for NSW proposes to modify the WDSM project scope of works with additional vegetation clearing required to facilitate construction. The additional works of this proposal includes:
 - The removal of one (1) additional semi-mature tree (Ficus micropara var hilllii) (Tree ID #70) from TfNSW land, adjacent to private property of 280 Jones Street, Harbour Mill building in Pyrmont; shown in Figure 1, Figure 2 and Figure 3 of Appendix D.
 - The clearing of low-lying shrub <2.0m vegetation from Shelley St, Sydney. The proposed modification to vegetation clearing at Shelley Street is illustrated in Figure 4, Figure 5, Figure 6, Figure 7 and Figure 9 of Appendix D.
- 2. Transport for NSW proposes to modify the existing WDSM Project boundary to facilitate required point of supply (POS) connections for Roadside Cabinets (RSC) #17, #18 and #19. This is in response to the requirements outlined by the electricity distribution company Ausgrid.
 - The adjustment to boundary to increase the project area by an additional ~50 metres along the public road corridor, further to the east of the intersection of Bathurst Street and Day Street, Sydney. The proposed modification is shown in Figure 10, Figure 11, Figure 12, and Figure 13 of Appendix D.
- 3. Transport for NSW proposes to modify the approved WDSM Project with the redesign of RSC #30. Trenching, cable tray installation works, and positioning of the communications cabinet. This modification is required for construction and system operation.
 - The proposed modification would require about 20 metres of trenching to be undertaken adjacent to the Anzac memorial at the western abutment of the Anzac Bridge, the mounting of cable trays and the communications cabinet to the bridge viaduct, maintenance access, and installation on the viaduct undercarriage. The proposed modification is shown in Figure 14, Figure 15, Figure 16, Figure 17 and Figure 18 of Appendix D.



Need for the proposed modification

Additional Tree/vegetation Removal

• The removal of an additional tree and low-level shrub vegetation is required to facilitate installation of cable trays and conduits. Existing built ground conditions prevent the safe construction access to the Western Distributor parapet with the tree in place. There is insufficient room for construction to safely be undertaken. Furthermore, the tree is growing from the retaining wall that supports the Western Distributor which presents a risk to the structural integrity of the wall.

WDSM Project Boundary Modification

• The adjustment to the WDSM project boundary is required to connect the electrical supply requirements to the nearest available point of supply point for RSC#17, #18 and #19. This requirement has been advised by Ausgrid the local electricity distributor.

Roadside Cabinet 30 (RSC 30) Installation

• The installation of RSC 30 which is a new proposal based on design development since previous approvals. The cabinet is proposed at the Western abutment of the Anzac Bridge, connecting the cabinet and other communications infrastructure (cabling) to nearby available utilities. This connection is required to facilitate electrical and communication connections to the new smart motorway infrastructure of the Anzac Bridge; a component of AREF No.02.

Chapter 2 of the approved project REF addresses the strategic need for the project, the project objectives and the options that were considered. The proposed modifications described and assessed in this addendum REF are consistent with the strategic need for the project.

The proposed modifications support provision of a Smart Motorway solution on the missing section of motorway corridor between Rozelle and North Sydney.

The proposed modifications, remain consistent with the policies and planning documents outlined in Chapter 2 of the determined project REF and its addenda as listed below:

- Future Transport Strategy
- Movement and Place Framework
- Future Transport Technology Roadmap
- Greater Sydney Regional Plan
- Eastern City District Plan
- Road Safety Plan 2021
- Connected and Automated Vehicles Plan
- State Infrastructure Strategy 2018-2038
- Sydney City Centre Access Strategy
- Sydney's Bus Future
- NSW Freight and Ports Strategy
- NSW Freight and Ports Plan

Options considered

During development of the project, strategic alternatives were considered. Following this process, two options were identified for further investigation:



- Option 1 'Do not modify project'- The project would proceed without the modifications proposed in this memo
- Option 2 'Modify project' Construct the project with the modifications proposed in this memo.

These options were assessed against the proposal objectives and development criteria outlined in Chapter 2 of the determined REF. 'Option 1' was discounted as key power supply and cabling infrastructure for the Western Distributor Smart Motorway cannot be installed without the proposed modification.

The proposed modifications which comprise 'Option 2' have been through design refinement to minimise tree and non-Aboriginal heritage impacts.

As such, 'Option 2' is the preferred option.

Consultation

The modification does not require formal consultation due to its limited nature. The project has notified and engaged with the following key stakeholders located immediately adjacent to or having an interest in the specific work areas at which this modification impacts:

- Strata manager of the Flour Mills Building, 280 Jones Street, Pyrmont
- Public Open Space manager of City of Sydney
- Representatives of the Anzac Bridge Statues Returned Servicemen's League (RSL) working group
- Representatives of Veterans Affairs
- Senior Heritage Specialist of Transport for New South Wales
- Senior Environment and Sustainability Officer of Transport for New South Wales

During the consultation process no unacceptable impact or concern was raised regarding this modification.

The representative of Veterans Affairs, Caroline Mackaness, indicated her support for the relocation of RSC30.



Impact assessment

Soil

No additional soil or water quality impacts are anticipated. No additional safeguards are required.

Waterways and water quality

No additional impacts to waterways and water quality are anticipated. No additional safeguards are required.

Noise and vibration

Due to the proximity of the tree to the road corridor, the tree removal would be conducted at night under traffic control. Noise producing plant and equipment would include petrol chainsaws and a mulcher. Potential noise impacts are considered minor due to the minor and short nature of the works required.

Per the approved REF all noisy works will be performed under an approved Out of Hours Work (OOHW) permit and noisy works will cease by 12:00am and must not exceed five nights each week.

Construction noise impacts will be relatively consistent with the construction noise footprint assessed in the determined REF and subsequent addenda.

The additional trenching will be performed by suitable industry accepted construction methods and will not introduce new construction methods.

The previously determined safeguards are considered adequate to manage these potential noise impacts.

The proposed modification includes work on the heritage significant Anzac Bridge. Transport adopts the *DIN 4150: Vibration in buildings – Part 3: Effects on structures* vibration criteria for heritage items or structures which are found to be structurally unsound. The bridge is structurally sound, however, the Anzac memorial adjacent to the utility trenching work is not. Vibratory plant and equipment used near the memorial may comprise a small trench roller or plate compacter. These plant may need to work within the safe working distances of two metres in accordance with DIN 4150. Condition inspection of the memorial would be undertaken prior to commencement of the vibration producing activities and vibration monitoring would be undertaken during the works.

Air quality

No additional air quality impacts are anticipated. No additional safeguards are required.

Aboriginal heritage

An additional basic Aboriginal Information Management System (AHIMS) was undertaken on 18 September 2023. No Aboriginal sites or places were recorded in or near the location of the WDSM project boundary and proposed adjustments of this modification.

Non-Aboriginal heritage

A search of the State Heritage Register was undertaken on 19 October 2023. There is one (1) recorded non-Aboriginal heritage site in proximity to the proposed WDSM project boundary adjustment. A former warehouse, 'The Vintage Building' at 281-287 Sussex Street, Sydney. This is within 50m of the proposed modification boundary, but direct impacts are not expected. The Vintage Building is of historical significance as a good example of a simple inner-city warehouse dating from the late nineteenth century. It provides physical evidence of the redevelopment of this part of Sydney with large-scale warehouses during that period. All significant fabric remains in good to excellent condition.



The Anzac Bridge is not listed on the State Heritage Register but has been acknowledged as having state heritage significance because of its technical qualities; it is a world standard bridge in scale, aesthetics and design features (refer determined REF). The Anzac memorial including statue adjacent to the Anzac Bridge are not original but contribute to the significance of the bridge. The installation of RSC 30 would involve utilities trenching, cable tray installation and installation of roadside cabinet 30 (refer Figures 14, 15, 16 and 17 of Appendix D). The potential impacts of each element are assessed in Table 1.

Proposed modification element on Anzac Bridge	Potential impacts
Utilities trenching under footpath	The trenching would take place in the concrete footpath on approach to the shared path which extends across the Anzac bridge. The trenching would also cut through two sections of pebblecrete which radiate out from the Anzac memorial.
(Refer Figure 17 of Appendix D)	The concrete slabs and pebblecrete would be reinstated to their existing condition. Neither material is original fabric. As such, the trenching and reinstatement is not expected to have impact on the heritage significance of the Anzac Bridge.
	The potential vibration impacts of the trenching works have been assessed above.
Cable tray and roadside cabinet installation (Refer Figures 14, 15 and 16 of Appendix D)	The installation of a cable tray leading from the trenched utilities down to the location of RSC 30 would require anchoring points to be periodically drilled into the western abutment. This would involve some disturbance to the original fabric These impacts are expected to be minor as the volume of fabric impacted would be small. The cable tray and roadside cabinet would result in a visual impact to views of the bridge underdeck along the shared path ramp. The cable tray would also impact views to the Anzac memorial from the surrounding garden path. Views of the bridge underdeck are not sensitive and already comprise another roadside cabinet (RSC 30 would be larger but colour-matched) and piped conduits. Views to the Anzac memorial from the garden path are sensitive, however, the cable tray is in a location which already features other ancillary infrastructure and would be partially screened by the adjacent palm trees.
	As such, the installation of cable tray and roadside cabinet are not expected to have more than a minor impact on the heritage significance of the Anzac Bridge.

The proposed modification is not located near any further recorded non-Aboriginal heritage items. No additional safeguards are required.

Biodiversity

The one (1) additional tree (ID#70 - *Ficus micropara var hilllii*) to be removed is a self-seeded tree growing out the main deck of the Western Distributor. It does not comprise part of contiguous vegetation or an existing ecological community. See Appendix E – Correspondence with WDSM Project Arborist

The engaged project arborist has assessed the proposed clearing extents of Tree-ID#70. The arborist has determined that it is an exotic species in the semi-mature category and has a moderate amenity value, with a low retention value.

Traffic and transport

No additional traffic and transport impacts are anticipated. No additional safeguards are required.

Socio-economic issues



No additional socio-economic impacts are anticipated. No additional safeguards are required.

Landscape character and visual impacts

No additional landscape character and visual impacts are anticipated. No additional safeguards are required.

Waste

The proposed modification would result in minimal additional green waste which is a waste type considered part of the determined project. The waste will be managed and disposed of in accordance with existing pathways.

No additional safeguards are required.

Cumulative impacts

The proposed modification would not result in any cumulative impacts.

No additional safeguards are required.

Attachment A addresses the environmental factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021.



Summary of additional or revised safeguards

A summary of additional or revised safeguards to be included as part of this modification are listed in the table below. A complete list of project safeguards as amended is provided in Attachment B.

Safeguards	
Soil	No additional safeguards are required.
Waterways and water quality	No additional safeguards are required.
Noise and vibration	 Condition inspection of the Anzac memorial to be completed prior to commencement of vibration producing activities within two metres of the memorial. Vibration monitoring on the Anzac memorial to be carried out during any vibration producing activities within two metres of the memorial.
Air quality	No additional safeguards are required.
Non-Aboriginal heritage	No additional safeguards are required.
Aboriginal heritage	No additional safeguards are required.
Biodiversity	No additional safeguards are required.
Trees	No additional safeguards are required.
Traffic and transport	No additional safeguards are required.
Socio-economic	No additional safeguards are required.
Landscape character and visual amenity	No additional safeguards are required.
Waste	No additional safeguards are required.
Cumulative impacts	No additional safeguards are required.



Licences, permits or approvals

All relevant licenses, permits, notifications and approvals needed for the Western Distributor Smart Motorway (WDSM) and when they need to be obtained are listed in the determined Western Distributor Review of Environmental Factors (REF) May 2021 and the four addenda (as determined). These have been included in the approved project Construction Environmental Management Plan (CEMP).

There are no changes to the licencing, permits or existing approvals required as part of this proposed modification.

Conclusion

All relevant safeguards identified in the Western Distributor Smart Motorway (WDSM) Review of Environmental Factors (REF) and the four addenda, all as determined will be applied to this modification and included work. There are no additional proposed work activities or impacts requiring additional or revised project safeguards to those previously approved.

Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) applies to the proposed modification. The proposed modification has been reviewed in the context of the Western Distributor Smart Motorways Review of Environmental Factors and four addenda as determined which have been considered against the requirements of sections 5.5 and 5.7 of the EP&A Act.

In considering the proposed modification this assessment has examined and taken into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of that activity as addressed in this memo, and associated information. This assessment is considered to be in accordance with the factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021.

The M1 Western Distributor Smart Motorway Project including the proposed modification described in this memo will have manageable environmental impacts which will be satisfactorily mitigated against. Having regard to the safeguards and management measures proposed, it is considered that the expected environmental impacts are unlikely to be significant and a further or revised environmental impact statement is not required under Division 5.2 of the EP&A Act.

The assessment has considered the potential impacts of the activity on the biodiversity values listed under the *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994*. The M1 Western Distributor Smart Motorway Project including the proposed modification described in this memo will not significantly affect biodiversity values listed under the *Biodiversity Conservation Act 2016*. Therefore, the concurrence of the Coordinator General of the Environment and Heritage Group of Department of Planning and Environment and a species impact statement or a Biodiversity Development Assessment Report (BDAR) is not required.

In addition to the above, the assessment considered the effect of the activity on:

- Conservation agreements under the National Parks and Wildlife Act 1974.
- Plans of management under the National Parks and Wildlife Act 1974.
- Biodiversity stewardship sites under the *Biodiversity Conservation Act 2016*.
- Wilderness areas under the Wilderness Act 1987.

The assessment has also addressed the potential impacts of the activity on matters of national environmental significance and any impacts on the environment of Commonwealth land and concluded that there will be no significant impacts. Therefore, there is no need for a referral to be made to the Australian Government Department of Agriculture, Water and the Environment for a decision by the Australian Minister for the Environment on whether assessment and approval is required under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or for application of the EPBC Act strategic assessment for Transport activities assessed under Part 5 of the EPBC Act.

This memo is of adequate quality and meets all relevant requirements.



The proposed modification has been characterised in the context of the M1 Western Distributor Smart Motorway Project and is consistent with that project's objectives and key features. While the proposed modification would increase the overall environmental impacts of the determined project, it is substantially the same as the activity described and assessed in the determined REF and does not constitute an entirely new activity.



Appendix E - Correspondence with WDSM Project Arborist

Appendix F- Updated WDSM Project Tree Register 13/10/2023

Appendix G - AHIMS Search for Adjustment to WDSM Project Boundary at Junction of Bathurst Street and Day Street, Sydney

Appendix H - City of Sydney Heritage Item Report: 281-287 Sussex Street, Sydney

Appendix I - City of Sydney Significant Trees Interactive Map

Appendix A: Environmental Planning and Assessment Regulation 2021 checklist

The following factors, listed in section 171(2) of the Environmental Planning and Assessment Regulation 2021, have been considered to assess the likely impacts of the proposal on the natural and built environment. This consideration is required to comply with sections 5.5 and 5.7 of the EP&A Act.

Enviro	Environmental factor		
(a)	Any environmental impact on a community? Nil additional impact. All temporary disruptions to the community during construction will be communicated at least 5 business days in advance of the works. Any closures or diversions will be clearly signposted.	Short term only	
(b)	Any transformation of a locality? The proposed work will not transform the locality, as works will generally be contained within the existing public roadway.	Nil	
(c)	Any environmental impact on the ecosystems of a locality? No potential impact of the local ecosystems will arise from the works. All potential impacts will be managed using the existing project safeguards.	Nil	
(d)	Any reduction of the aesthetic, recreational, scientific, or other environmental quality or value of a locality? The proposal will not reduce the aesthetic, recreational, scientific, or other environmental quality or value of the locality, as works are within the existing project boundary or within the minor extension contained within the existing road formation.	Nil	
(e)	Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific, or social significance or other special value for present or future generations? The proposal will not impact on a locality, place or building having any listed value above or other special value for present or future generations. All potential impacts will be mitigated against using existing project safeguards.	Nil	
(f)	Any impact on habitat of any protected animals (within the meaning of the Biodiversity Conservation Act 2016)? The proposal will not have any impact on the habitat of protected animals with appropriate safeguards being implemented to mitigate potential risks	Nil	
(g)	Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? The proposal will not endanger any species of animal, plant, or other form of life, whether living on land, in water or in the air and appropriate safeguards will be implemented prior to mitigate risks	Nil	
(h)	Any long-term effects on the environment? The proposal would have positive long-term effects on the environment due to improved customer journey experience including road safety. There are no anticipated negative long-term effects on the environment from any maintenance arising.	Nil	

(i)	Any degradation of the quality of the environment? The proposal will have minimal adverse impact on the quality of the environment. Potential impacts will be mitigated against through implementation of the safeguards.	Nil
(j)	Any risk to the safety of the environment? No unacceptable risks posed to the safety of the environment potentially arising from the works. The potential impacts will be mitigated against through the implementation of the safeguards.	Nil
(k)	Any reduction in the range of beneficial uses of the environment? During construction the use of the road and permitted work areas will be limited because of temporary construction activities. The proposed modification will have no long-term impact on any beneficial uses of the environment.	Nil
(1)	Any pollution of the environment? The proposed works will not result in pollution of the environment. Potential risks will be mitigated via the implementation of the safeguards.	Nil
(m)	Any environmental problems associated with the disposal of waste? The proposed works will not generate extensive wastes different to those already managed on the project. Any waste generated during the works will be managed and disposed of to approved and licenced recycling or landfill facilities. Potential risks will be managed via the implementation of the safeguards.	Nil
(n)	Any increased demands on resources, natural or otherwise which are, or are likely to become, in short supply? The modification is a minor extension of works similar in nature to the approved project works and no further impact will arise. Potential risks will be managed via the implementation of the safeguards.	Nil
(o)	Any cumulative environmental effect with other existing or likely future activities? The proposed modification is minor in nature and will not pose risk to cumulative project or environmental impacts. The potential impacts on the environment will be minimised by risk mitigation through implementation of the safeguards.	Nil
(p)	Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? Nil additional impacts on coastal processes and coastal hazards, including those under projected climate change conditions.	Nil
(q)	Any impact on applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1? The proposed works are similar in nature to those previously determined as part of the project approval. No new works are being introduced. There is no impact to applicable planning legislation or regional plans. For further information on the applicable plans refer to Regional and district plans (nsw.gov.au) website.	Nil
(r)	Any impact on other relevant environmental factors? Nil additional impact to other environmental factors has been identified through the preparation of this modification and during development of the proposed activities.	Nil

Appendix B: Environmental Planning and Assessment Regulation 2021 checklist

Environmental safeguards for the Western Distributor Smart Motorway are listed below. Additional safeguards identified in this addendum minor works REF memo are included in bold and italicised font. The safeguards will be incorporated into the CEMP and implemented during construction and operation of the proposed modification, should it proceed. These safeguards will minimise potential adverse impacts arising from the proposed works on the surrounding environment.

7. Environmental management

7.1 Environmental management plans

A number of safeguards and management measures have been identified to minimise adverse environmental impacts, including social impacts, which could potentially arise as a result of the proposed modification. Should the proposed modification proceed, these management measures would be addressed if required during detailed design and incorporated into the Contractors Environmental Management Plan (CEMP) and applied during the construction and operation of the proposed modification.

7.2 Summary of environmental safeguards and management measures

Environmental safeguards and management measures for the M1 Western Distributor Smart Motorway are summarised in Table 7-1. Additional safeguards and management measures identified in this addendum REF are included in bold and italicised font. The safeguards and management measures will be incorporated into the CEMP and implemented during construction and operation of the proposed modification, should it proceed. These safeguards and management measures will minimise any potential adverse impacts arising from the proposed works on the surrounding environment.

Table 7-1: Summary of safeguards and management measures

No.	Impact	Environmental safeguards and management measures	Responsibility	Timing
No. GEN1	General - minimise environmental impacts during construction	A CEMP will be prepared and submitted for review and endorsement of the Transport for NSW Environment Manager prior to commencement of the activity. • As a minimum, the CEMP will address the following: • any requirements associated with statutory approvals • details of how the project will implement the identified safeguards outlined in the REF • issue-specific environmental management plans • roles and responsibilities • communication requirements • induction and training requirements • procedures for monitoring and evaluating environmental performance, and for corrective action • reporting requirements and record-keeping • procedures for emergency and incident management • procedures for audit and review. The endorsed CEMP will be implemented during the undertaking of the activity.	Responsibility Contractor Transport for NSW project manager	Pre-construction Detailed design
GEN2	General - notification	All businesses, residential properties and other key stakeholders (e.g. schools, local councils) affected by the activity will be notified at least five days prior to commencement of the activity.	Contractor Transport for NSW project manager	Pre-construction
GEN3	General -environmental awareness	All personnel working on site will receive training to ensure awareness of environment protection requirements to be implemented during the project. This will include up-front site induction and regular 'toolbox' style briefings. Site-specific training will be provided to personnel engaged in activities or areas of higher risk. These include the proximity of works the State and National listed heritage items.	Contractor Transport for NSW project manager	Pre-construction
TT1	Traffic and transport	A Traffic Management Plan (TMP) will be prepared and implemented as part of the CEMP. The TMP will be prepared in accordance with the Traffic Control at Work	Contractor	Pre-construction

		Sites Manual (Roads and Maritime, 2018) and QA Specification G10 Control of Traffic (Roads and Maritime, 2008). The TMP will include:		
		confirmation of construction traffic routes		
		measures to maintain access to local roads and properties		
		site-specific traffic control measures (including signage) to manage and regulate traffic movement		
		measures to maintain pedestrian and cyclist access		
		 requirements and methods to consult and inform the local community of impacts on the local road network 		
		 access to construction sites including entry and exit locations and measures to prevent construction vehicles queuing on public roads. 		
		a response plan for any construction traffic incident		
		consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic monitoring, review and amendment mechanisms		
TT2	Emergency services vehicles and buses	Traffic management measures will be implemented to ensure emergency services vehicles and buses can negotiate work areas during construction. Where access is not possible, emergency services would be notified at least five business days prior to closures.	Contractor	Construction
TT3	Property and parking access	Footpath and or cycleway impacts would be communicated to the public, City of Sydney Council and North Sydney Council at least five business days in advance and suitable alternative routes would be clearly signposted.	Contractor	Construction
TT4	Pedestrian and cyclist access	Advance notice of footpath and or cycleway impacts will be communicated to the public and the City of Sydney and suitable alternative routes will be clearly signposted.	Contractor	Construction
TT5	Traffic and transport	Stakeholder Engagement Strategy to include collaboration with Sydney Metro manage potential cumulative traffic impacts.	Contractor	Pre-construction / construction
TT6	Traffic Management Plan	The TMP would be developed in conjunction with key stakeholders where property and/or user access is impacted.	TfNSW Contractor	Detailed design Pre-construction Construction
ТТ7	Bus routes	Ongoing consultation with bus route operators in advance about potential detour arrangements that may affect services.	TfNSW	Pre-construction Construction
TT8	Detour routes	Road detours would be coordinated with surrounding interfacing major projects and major stakeholders.	TfNSW Contractor	Construction
TT9	Sydney Fish Market consultation	Ongoing consultation with Sydney Fish Market to minimise construction impacts to property access and car parking.	TfNSW	Pre-construction Construction
TT10	Consultation with Hymix	Ongoing consultation with Hymix regarding potential construction access impacts.	TfNSW	Pre-construction
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				Construction

TT11	Consultation with Darling Harbour stakeholders	Ongoing consultation with key stakeholders in the Darling Harbour precinct including the International Convention Centre and the new W Hotel to manage potential construction impacts including accessibility.	TfNSW	Pre-construction Construction
TT12	Consultation with Sydney Light Rail	Strategic coordination with Sydney Light Rail to coordinate closures and minimise impacts to public transport journeys.	TfNSW	Pre-construction Construction
TT13	Property and access	Advance notice of property and access impacts will be communicated to relevant stakeholders.	TfNSW Contractor	Pre-construction Construction
TT14	Parking	The TMP is to include measures to manage and minimise impacts to parking and property access.	TfNSW Contractor	Pre-construction Construction
LCV1	Visual impacts during construction	Suitable barriers will be provided to screen the visibility of construction activities from adjacent areas where appropriate.	Contractor	Construction
LCV2	Visual impacts during construction	Construction site compound areas will be returned to at least their preconstruction state following completion of the project.	Contractor	Construction
LCV3	Visual impacts during construction	Following the completion of construction works, plant/equipment will be removed, and disturbed areas will be revegetated, turfed or otherwise restored as appropriate.	Contractor	Construction
LCV4	Impact from lighting	Temporary site lighting will be installed and operated in accordance with AS4282:1997 Control of the Obtrusive Effect of Outdoor Lighting, and an approved Traffic Management Plan.	Contractor	Construction
LCV5	Impacts on street trees	Establishment of Tree Protection Zones and tree protection measures consistent with AS4970-2009 Protection of Trees on Development Sites will be implemented for all trees within or immediately adjacent to the construction footprint.	Contractor	Construction
LCV6	Visual impacts	Where illuminated signage is located adjacent to more sensitive residential uses at Bulwara Road, investigate screening to minimise potential light spill.	Transport for NSW	Detailed design
LCV7	Visual impacts	 The following will occur during the detailed design of proposed new gantries: Minimise the number signs required in order to minimise visual clutter and the overall bulk and massing of the gantries Provide minimal depth and width for structural post and beams for the gantry structure Conceal fixings to streamline appearance Utilise a visually recessive colour on posts and fixings so that the visual impact on the skyline is minimised, such as Sydney Harbour Bridge Grey. 	Transport for NSW	Detailed design
LCV8	Visual impacts	Offset any street trees removed for the proposal in consultation with local Council.	Transport for NSW	Detailed design
NAH1	Non-Aboriginal heritage	A Non-Aboriginal Heritage Management Plan (NAHMP) will be prepared and implemented as part of the CEMP. It will provide specific guidance on measures and controls to be implemented to avoid and mitigate impacts to Non-Aboriginal heritage.	Contactor	Detailed design Pre-construction
NAH2	Non-Aboriginal heritage	The Standard Management Procedure - Unexpected Heritage Items Invalid source specified. will be followed in the event any unexpected heritage items, archaeological remains or potential relics of non-Aboriginal origin are encountered.	Contactor	Construction

		Work will only re-commence once the requirements of that Procedure have been satisfied.		
NAH3	Non-Aboriginal heritage	Further assessment of potential archaeological impacts will be carried out following refinement of proposed ground disturbance areas. This will include identification of any permit requirements under the <i>Heritage Act 1977</i> .	Transport for NSW	Detailed design
NAH4	Non-Aboriginal Heritage	Compound sites are to be included in the vibration risk assessment and noise and vibration management plan.	Contractor	Pre-construction / construction
NAH5	Non-Aboriginal Heritage	Environmental awareness training to include a Heritage component and requirements of the CEMP Heritage management plan and vibration risk management measures.	Contractor	Pre-construction / construction
NAH6	Non-Aboriginal Heritage	Ground disturbance at the Sommerville Road compound site must be minimal, maintain a buffer distance to the dyke exposure feature, and must not exceed one metre depth. No ground disturbance is permitted at Glebe Island Bridge abutment.	Contractor	Construction
NV1	Construction noise and vibration	A Noise and Vibration Management Plan (NVMP) will be prepared and implemented as part of the CEMP.	Contractor	Pre-construction
		The NVMP will generally follow the approach in the Interim Construction Noise Guideline (ICNG) (DECC, 2009) and identify:		
		all potential noise and vibration generating activities associated with the activity		
		 feasible and reasonable mitigation measures to be implemented, taking into account Beyond the Pavement: urban design policy, process and principles (Transport for NSW, 2014) 		
		a monitoring program to assess performance against relevant noise and vibration criteria		
		 arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures 		
		contingency measures to be implemented in the event of non-compliance with noise and vibration criteria.		
NV2	Construction noise	All sensitive receivers likely to be affected will be notified at least five working days prior to commencement of any works associated with the activity that may have an adverse noise or vibration impact. The notification will provide details of:	Contractor	Pre-construction
		the project		
		the construction period and construction hours		
		contact information for project management staff		
		complaint and incident reporting		
		how to obtain further information.		
1V3	Construction noise	Noisy works such as sawcutting and jackhammering to be completed by midnight	Contractor	Construction
NV 4	Construction noise	Noise curtains are to be placed between sources of construction noise and sensitive receivers during night works where noise sources are stationary and near to the ground.	Contractor	Construction
NV5	Construction vibration	Prior to the start of construction, a Ground Vibration Risk Assessment shall be carried out by a suitably qualified person to identify all vibration generating tasks, duration and predicted vibration levels and to determine reasonable and feasible vibration mitigation and management measures to address the potential impacts of ground vibration on	Contractor	Construction

		adjacent buildings during construction. The assessment shall also identify which		
		properties contain buildings which would require building condition surveys.		
		The Vibration Risk Assessment must include (as a minimum):		
		 i. Identification of construction ground vibration criteria under BS7385 and DN4150 as described in this REF. ii. Identification of the ground type and topography in the vicinity of the works location (in terms of its susceptibility to ground vibration); iii. Identification and description of potentially affected buildings on adjacent properties which may be impacted by ground vibration during construction; iv. Identification of the types of activities to be carried out (including compound sites and active work sites), machinery and equipment to be used, including the predicted vibration emission levels from each plant and the required buffer distances needed between the machinery/equipment and potentially affected buildings; v. A risk assessment to determine the potential for discrete work activities to affect buildings on adjacent properties; vi. An assessment of the potential vibration impacts on the potentially affected buildings on adjacent properties due to vibration; vii. A map indicating the buildings on adjacent properties considered likely to be impacted by ground vibration and those requiring building condition inspections; viii. Details on which buildings on adjacent properties will require building condition surveys; Identification of potential mitigation measures to be incorporated during construction to address round vibration impacts on buildings. 		
NV6	Construction vibration	Based on the results of the Ground Vibration Risk Assessment, a Ground Vibration	Contractor	Construction
		Management Plan must be prepared prior to construction as part of the CEMP to address how construction will be carried out to minimise the impact of ground vibration on affected buildings within adjacent properties. The Vibration Management Plan must detail how construction vibration will be managed for various plant items working adjacent to the potentially affected buildings (as identified in the Vibration Risk Assessment). The Plan must show the locations of all occupied and unoccupied buildings which are potentially impacted on surrounding properties (including relevant heritage items) on a map, and provide details of control measures to be undertaken during construction, including: a) Identification of all vibration generating tasks, duration and predicted vibration levels (based on the Vibration Risk Assessment); b) A schedule of properties where building condition inspections are required to be undertaken (based on the Vibration Risk Assessment); c) Location and type of mitigation measures to reduce excessive ground vibration such as:		

		 Maximising the offset distance between high vibration plant items and nearby buildings; 		
		 Substitution by alternative equipment, plant and processes; 		
		 Screening or enclosures; 		
		 Restricted times when work is being carried out; 		
		 Work setback distances, for example different vibration levels and machinery; 		
		 Consultation with affected residences and business owners; 		
		 Orienting equipment away from vibration-sensitive areas; and 		
		 Selecting site access points and roads as far as possible from sensitive receptors. 		
		 Specific physical and managerial measures for controlling ground vibration to comply with the relevant OEH guidelines and best practice; 		
		e) Vibration monitoring, reporting and response procedures;		
		 Procedures for notifying residents and business premises about vibration- generating activities likely to affect buildings on their property; 		
		 g) Contingency plans to be implemented in the event of non-compliances and/or vibration complaints; 		
		Procedures for regularly reviewing the effectiveness of the Vibration Management Plan;		
NV7	Construction vibration	Where construction activity occurs in close proximity to sensitive receivers, vibration testing of actual equipment on site shall be undertaken in relation those properties identified as being particularly sensitive to ground vibration (as identified in the Vibration Risk Assessment) prior to their commencement of construction to validate the acceptable buffer distances to the nearest affected receiver locations.	Contractor	Construction
NV8	Construction vibration	Building conditions surveys shall be conducted at receivers determined, by the Contractor, to be sensitive to ground vibration impacts. The determination should be based on the results of a Vibration Risk Assessment plan for the project prior to construction, where the results of this will also feed into the Vibration Management Plan. These measures are to address potential community concerns that perceive vibration may cause damage to building.	Contractor	Construction
NV9	Construction noise and vibration-cumulative impacts	The noise and vibration management plan (NVMP) is to include a process for Verification monitoring to confirm noise management levels and adjust management measures as appropriate.	Transport/ Contractor	Pre-construction / construction
NV9	Site planning and layout	Locate noise-generating activities away from sensitive receivers. Plan traffic flow, parking, loading/unloading, and other vehicle movements to keep vehicles away from sensitive receivers where possible and to minimise reversing movements.	Contractor	Construction

NV10	Plant and equipment	The contract requires the procurement of the quietest vehicle or machinery available for the works. Prepare an inventory report for all vehicles and machinery that will be used during the contract. The inventory report is to include:	Contractor	Pre-construction
		 An outline of the different options of vehicles and machinery available and their sound power levels 		Construction
		• List of vehicles and machinery to be used during the contract and their sound power levels		
		Evidence indicating that the vehicles and machinery proposed for the works are the quietest available.		
NV11	Limit equipment in use	Only the equipment necessary during each stage of the works will be used.	Contractor	Construction
NV12	Timing of equipment in use	Where practicable, activities and plant will be scheduled/limited. At night, high noise impact sources will be scheduled prior to midnight and use will be avoided after midnight.	Contractor	Construction
NV13	Limit activity duration	Any equipment not in use for extended periods shall be switched off. For example, heavy vehicles should switch engines off when not in use.	Contractor	Construction
NV14	Non-tonal reversing alarms	Alternative reverse alarms, such as 'quackers' will be installed on all vehicles & mobile plant regularly used on site and on all vehicles & mobile plant required for OOHW.	Contractor	Pre-construction
				Construction
NV15	Behavioural practices	No swearing or unnecessary shouting or loud stereos/radios on site. No dropping of materials from height, throwing of metal items and slamming of doors.	Contractor	Construction
NV16	Noise monitoring	Noise monitoring to be conducted at key locations to quantify noise impacts at sensitive receivers. The above guidelines, including NMLs, would be used to determine any necessary mitigation responses for noise in excess of guideline values.	Contractor	Construction
NV17	Respite coordination	Consult with proponents of other construction works in the vicinity of the worksite and take reasonable steps to coordinate works to minimise cumulative impacts of noise and vibration and maximise respite for affected sensitive receivers (e.g., aligning respite	TfNSW	Pre-construction
		evenings).	Contractor	Construction
NV18	Construction Vibration - Works in Proximity to Anzac	Condition inspection of the Anzac memorial to be completed prior to commencement of vibration producing activities within two metres of the memorial.	Contractor	Pre construction
	Memorial	Vibration monitoring on the Anzac memorial to be carried out during any vibration producing activities within two metres of the memorial.	Contractor	Construction
SWQ2	Soils and water	A site-specific Erosion and Sediment Control Plan/s will be prepared and implemented as part of the CEMP. The ESCP(s) will address the requirements of Transport for NSW specification G38.	Contractor	Pre-construction
SWQ3	Soils and water	The Erosion and Sediment Control Plan/s will include arrangements for managing wet weather events, including monitoring of potential high-risk events (such as storms) and specific controls and follow-up measures to be applied in the event of wet weather.	Contractor	Pre-construction
		The Plan/s will also include measures to minimise the impact of discharging site water to the adjacent watercourses.		

SWQ4	Soils and water	A site-specific emergency spill plan will be developed and include spill management measures in accordance with the Code of Practice for Water Management (RTA, 1999) and relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including Transport for NSW and EPA officers).	Contractor	Detailed design / pre-construction / construction
SWQ5	Soils and water	Where required, designated, fully contained concrete washout areas would be established away from drainage lines and waterways.	Contractor	Construction

SWQ6	Surface Water quality	Glebe Island Bridge facility to include spill response provisions including marine kit.	Contractor	Construction
SWQ7	Surface Water quality	Glebe Island Bridge facility to be used as a secondary option only for excess spoil storage. All stockpiles must be fully contained, and removed as soon as practical.	Contractor	Construction
CL1	Contamination	An unexpected finds procedure will be developed in the proposal CEMP for contamination.	Contractor	Detailed design / Pre-construction
		The procedure will ensure that if contaminated areas are encountered during construction, appropriate control measures will be implemented to manage the immediate risks of contamination.		
		All other works that may impact on the contaminated area will cease until the nature and extent of the contamination has been confirmed and any necessary site-specific controls or further actions identified in consultation with the Transport for NSW Environment Manager and/or EPA.		
AQ1	Air quality	Air quality management measures will be identified and implemented as part of the CEMP. These measures must include, but may not be limited to:	Contactor	Pre-construction
		Potential sources of air pollution (including compound operation)		
		 Air quality management objectives consistent with any relevant published EPA and/or OEH guidelines 		
		Mitigation and suppression measures to be implemented		
		Methods to manage work during strong winds or other adverse weather conditions.		
AH1	Aboriginal heritage	The Standard Management Procedure - Unexpected Heritage Items (Roads and Maritime, 2015) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where Transport for NSW does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place. Work will only recommence once the requirements of that Procedure have been satisfied.	Contactor	Pre-construction
AH2	Aboriginal heritage	A 50 metre exclusion zone will apply to all registered AHIMS sites within and adjacent to the proposal corridor.	Contactor	Pre-construction
SEO1	Socio-economic	A Communication Plan will be prepared and implemented as part of the CEMP to help provide timely and accurate information to the community during construction. The Communication Plan will include (as a minimum):	Transport for NSW	Pre-construction
		 Mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions 		
		Contact name and number for complaints		
		Notification requirements for noise generating activities		
		Procedures for communicating with other projects to determine the potential for concurrent activities and associated cumulative impacts.		
BIO1	Biodiversity	If unexpected flora or fauna are discovered on site stop work immediately and implement the Transport for NSW Unexpected Threatened Species Find Procedure in the Biodiversity Guidelines, Guide 1.	Contractor	Construction
BIO2	Biodiversity	Offset of removed street vegetation at Gantry 13 will be designed in consultation with City of Sydney Council.	Transport for NSW	Detailed design

BIO3	Biodiversity	Chemical storage is not permitted on the Glebe Island Bridge compound facility.	Contractor	Construction
BIO4	Offset policy	Trees removed for the proposal would be offset in line with the TfNSW Biodiversity Offset Policy (2022).	TfNSW	Pre-construction
				Construction
BIO5	Tree Protection Plan	A Tree Protection Plan (TPP) would be developed as part of the CEMP.	Contractor	Detailed design
				Pre-construction
BIO6	Pre-clearance survey	A pre-clearance survey by suitably qualified ecologist would be conducted to confirm the presence of HBTs and other relevant habitat features prior to commencement of works to minimise impacts to resident fauna.	Contractor Ecologist	Detailed design Pre-construction
BIO7	Biodiversity	Suitably qualified ecologist to complete pre-clearing inspection of the Colebee main	Contractor	Construction
	2.00.70.010,	construction area. Pre-clearing check to include inspection for		
		- Boundary of Cumberland Plain Woodland (CEEC)		
		- Grevillea juniperina (BC Act, Vulnerable)		
		- Dillwynia tenuifolia (BC Act, Vulnerable)		
		- Pultenaea parviflora (BC Act, Endangered)		
		- Meridolum corneovirens (BC Endangered)		
		Ecologist advice to be incorporated into the preparation of sensitive area mapping and physical protection measures.		
BIO8	Biodiversity	Physical exclusion area is to be established and maintained around the mapped sensitive area (biodiversity) for the duration of construction.	Contractor	Construction
BIO9	Biodiversity	Tree Protection measures are to be implemented in accordance with Australian Standard AS4970 for protection of trees on development sites.	Contractor	Construction
BIO10	Biodiversity	All works, including removal of the dead tree, are to comply with Transport Biodiversity Guideline - Protecting and Managing Biodiversity on Transport projects.	Contractor	Construction
BIO11	Biodiversity	Appropriate fire prevention and response measures are to be inlcuded in the CEMP to protect the adjoining bushland area from ignition risks (such as sparks from welding and fabrication works and vehicle exhausts).	Contractor	Construction
BIO12	Trees	Alternatives to tree trimming should be considered prior to trimming including branch tie back in consultation with a Level 8 AQF arborist	Contractor	Construction
BIO13	Trees	Trimming is not to exceed 20 per cent of the tree foliage.	Contractor	Construction
BIO14	Trees	Trimming of trees will be limited to branches of less than or equal to 200mm circumference.	Contractor	Construction
WM1	Waste	A Waste Management and Resource Recovery Management Plan (WMRRP) will be prepared and implemented as part of the CEMP. The WMRRP will include but not be limited to:	Contactor	Detailed design / pre-construction
		Measures to avoid and minimise waste associated with the project		
		 Classification of wastes and management options (re-use, recycle, stockpile, disposal) 		

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		Statutory approvals required for managing both on and off-site waste, or application of any relevant resource recovery exemptions		
		Procedures for storage, transport and disposal		
		Monitoring, record keeping and reporting.		
CU1	Cumulative impacts	Current and upcoming projects with the potential to interact with the proposal will be monitored. Where potential cumulative impacts are identified, the scheduling of works will be coordinated with interacting projects to minimise potential impacts. This will include	Transport for NSW Project Manager	Construction
		Scheduling works to allow suitable respite periods for construction noise		
		 Scheduling of works to minimise consecutive construction noise impacts, where feasible 		
		Coordinating lane closures and pedestrian/cyclist diversions to minimise the overall		

Appendix C: Determined Minor Works REF and Determined Addenda

A review of environmental factors (REF) was prepared for the Western Distributor Smart Motorway proposal (referred to as the approved project REF) which was determined in May 2021.

A further four (4) addendum REFs and one (1) consistency report have been prepared and determined (refer Attachment 1, 2, 3, 4 and 5):

- Addendum assessment and decision No.01 for proposed modification for the use of an auxiliary compound site for the M1 Western Distributor Smart Motorway, December 2022.
- Addendum assessment and decision No.02 for proposed modification for the M1 Western Distributor Smart Motorway,
 January 2022 Modification to project boundaries to include five new gantry work, minor landscaping works, removal of existing traffic signage and additional ITS works.
- Addendum assessment and decision No.03 for proposed modification for the use of an additional construction compound site at Colebee for the M1 Western Distributor Smart Motorway, February 2023.
- Addendum assessment and decision No.04 for proposed modification for the M1 Western Distributor Smart Motorway, April 2023.
- M1 Western Distributor Smart Motorway Review of Environmental Factors consistency review No.01, September 2023 modifications to project boundaries, variation to works including new gantry structures and ITS connections.

Appendix D: Site Photos and Figures



Figure 1 - Additional Tree to be Removed, ID#70, Existing Condition



Figure 2 - Additional Tree to be Removed, ID#70, Existing Condition.



Figure 3 - Approximate Location of Tree ID#70, 10 Jones Street, Pyrmont



Figure 4 - Current Condition of Vegetation (hedges, shrubs) to be Removed from Shelley Street, Sydney



Figure 5 - Current Condition of Vegetation (hedges, shrubs) to be Removed from Shelley Street, Sydney



Figure 6 - Current Condition of Vegetation to be removed from Western Distributor Parapet at Shelley Street, Sydney



Figure 7 - Extent of Vegetation to be cleared at Shelley Street, Sydney



Figure 8 - Cable Tray Alignment Along the Western Distributor Parapet at Shelley Street, Sydney



Figure 9 - Extent of Vegetation to be Cleared at Shelley Street, Sydney

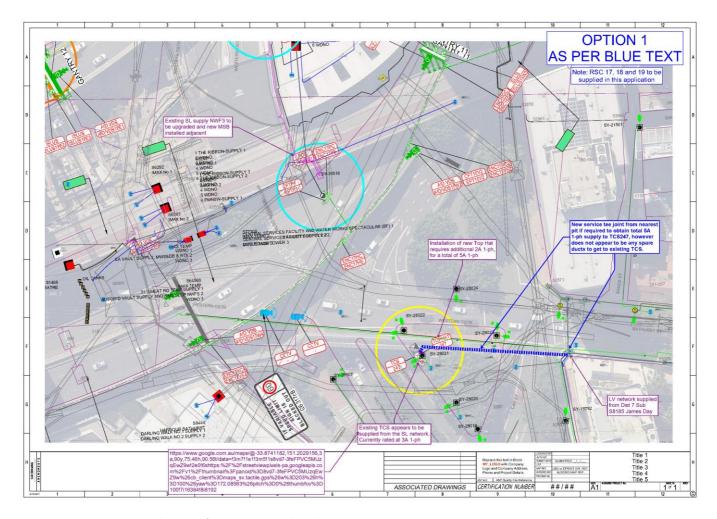


Figure 10 - WDSM Project Boundary Modification Associated Works Scope Drawings



Figure 11 - WDSM Project Boundary Adjustment for POS at intersection of Bathurst St and Day St, Sydney



Figure 12 - WDSM Project Boundary Adjustment for POS at intersection of Bathurst St and Day St, Sydney



Figure 13 - WDSM Project Boundary Adjustment for POS and Non-Aboriginal Heritage at intersection of Bathurst St and Day St, Sydney

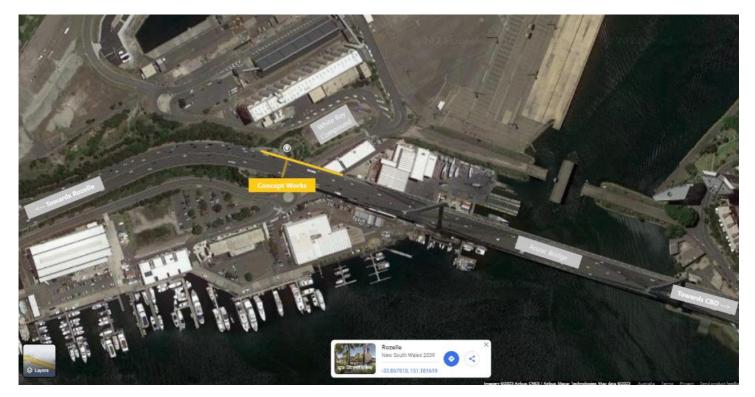


Figure 14 - New Concept Works for RSC#30 Location (Aerial)



Figure 15 - Final Concept Design for RSC#30, Under the Western side pier of the Anzac Bridge, Rozelle



Figure 16 - Final Concept Design for Cable Tray Installation Under the Pier of the Western side of the Anzac Bridge, Rozelle



Figure 17 - Final Concept Design for Cable Tray Installation and RSC#30, Under the Pier of the Western side of the Anzac Bridge, Rozelle



Figure 18 - Final Concept Design for Trenching works (Underground Conduit Installation) adjacent to the Anzac Digger Statue on the Western end of the Anzac Bridge, Rozelle

Appendix E – Correspondence with WDSM Project Arborist

From:

Sent: Thursday, 12 October 2023 6:30 PM

To:

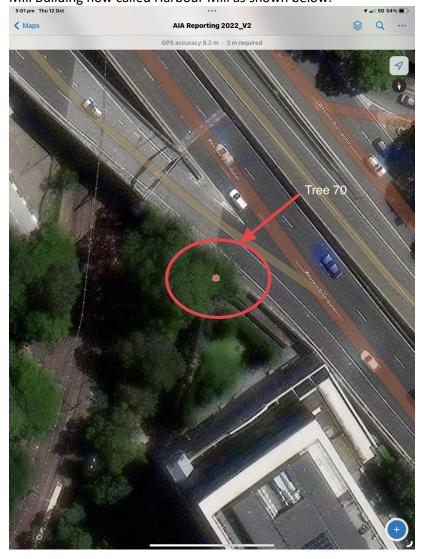
Subject: Updates to Project Tree Register & T70

Attachments: 10.2 Attachment 2 - Updated Tree Register 101223.pdf

Follow Up Flag: Flag for follow up

Flag Status: Flagged

Please find attached the updated Tree register for the project from which I have deleted the trees that have been removed to date and added the additional trees at Pyrmont Bridge Rd & Bank St, Trees 6A, 6B & 8A. I have also added Tree 70 which is located adjacent to the off ramp to Pyrmont Bridge rd near the old Edwin Davey Flour Mill Building now called Harbour Mill as shown below.



As per our site meeting at the Harbour Mill building grounds on Monday 9th October 2023 I can confirm that the newly added T70 is an adventitiously germinated specimen of <u>Ficus microcarpa var hilli</u>. (Hills Weeping Fig) which is an exotic tree species in the young to semi-mature age category with a moderate amenity value and a low retention value.



T70 is growing out of the existing wall adjacent to the Pyrmont Bridge Rd offramp. The subject tree has little to no chance of reaching its full potential in this location and is likely to cause long term damage to the structure of the wall. In order to complete the required works in this area it is my recommendation that the subject tree should be removed as the impact of the works poses an unacceptable level of encroachment within the TPZ and due to the fact that the subject tree is growing in a position which is not viable for its long term growth and retention.

Should you require any further information in relation to this or any other matter please do not hesitate to contact me,

Kind Regards

Xylem TreeTech Pty Ltd

Appendix F – Updated WDSM Project Tree Register 13/10/2023

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OFFICIAL

Western Distributor Smart Motorway Tree Data Tree Protection Detail Rev 03 10/13/23

												S											
												RZE											
												ncro											
Tree				Tree	Heigh	Sprea	Diameter	Diameter Above				achr				Amenity		Retention					
No.	Genus	Species	Common Name	Significance				Buttress (cm)	TPZ	SRZ	TPZ m2	Nent	% Encroachmen	t Health	Structure	Value	ULE	Value	Origin	Maturity	Defects	Works Description	Retention Comments
1	Livistona	<u>australis</u>	Cabbage Palm	Desirable	6		36	47	4.30	2.40	59	N	09	6 Good	Good	High	25-50	High	Sydney	Mature	NII	To be Removed	Remove within footprint of works
2	<u>Livistona</u>	<u>australis</u>	Cabbage Palm	Desirable	6.8	4	42	47	5.00	2.40	79	Υ	159	6 Good	Good	High	25-50	High	Sydney	Mature	Nil	To be Removed	Remove within footprint of works
																					Bark inclusions as for		Minor encroachment works are acceptable provided the trench is installed with low
																					the habit of this		pressure NDD under supervision of the
3	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	13.4	17	78	77	9.40	3.00	275	N	59	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~0.5m width)	project arborist
																					Bark inclusions as for		Minor encroachment works are acceptable provided the trench is installed with low
																					the habit of this		pressure NDD under supervision of the
4	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	13	21	92	124	11.80	3.70	383	N	79	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1m width)	project arborist
																					Doub inclusions as for		Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
5	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	16	13	101	77	12.10	3.00	462	N	59	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1m width)	project arborist
																					David in alcoio na cas fau		Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
6	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	14	19	88	92	10.60	3.20	350	N	89	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1m width)	project arborist
																							Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
6A	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	14.80	19	88	92	10.60	3.20	350	N	59	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1m width)	project arborist
																							Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
6B	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	10.80	19	58	62	10.60	3.20	152	l _N	59	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1m width)	project arborist
- 02	11000		Timo Weeping Fig	2 0011 0010	20.00	123	30	02	20.00	0.20	1202		3,			16	25 55	16			орголого	, ,	
																							Works within SRZ, design to be modified to route works outside SRZ and limit effects to
																							TPZ. Utilise low pressure NDD to advise on
7	<u>Livistona</u>	<u>australis</u>	Cabbage Palm	Desirable	2	2	25	27	3.00	2.00	28	Υ	469	6 Good	Good	High	15-25	Moderate	Sydney	Young	NII	Trench (~1.5m width)	relocation of works.
																					Doub inclusions as for		Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
8	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	16	19	82	81	9.80	3.00	304	N	69	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1.5m width)	project arborist
																					Doub inclusions as for		Minor encroachment works are acceptable
																					Bark inclusions as for the habit of this		provided the trench is installed with low pressure NDD under supervision of the
8A	<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	13.00	15	66	64	7.90	2.70	197	N	59	6 Good	Good	High	25-50	High	Exotic	Mature	species	Trench (~1.5m width)	project arborist
9	<u>Livistona</u>	<u>australis</u>	Cabbage Palm	Desirable	2	2	15	17	2.00			N	09	6 Good	Good	Moderate			Sydney	Young	NII	None	Unaffected
10	<u>Livistona</u>	<u>australis</u>	Cabbage Palm	Desirable	2	_	15	17	2.00			N		6 Good	Good	Moderate	25-50	High	Sydney	Young	NII	None	Unaffected
11	<u>Butia</u>	<u>capitata</u>	Brazilian Jelly Palm	Desirable	3	4	30	32	3.60	2.10	5	N	09	6 Fair	Fair	Moderate	25-50	Moderate	Exotic	Young	Nil	None	Unaffected Minor encroachment works are acceptable
																							provided the trench is installed with low
																							pressure NDD under supervision of the
12	<u>Casuarina</u>	<u>cunninghamiana</u>	River She-Oak	Desirable	18.4	12	75	96	9.00	3.30	255	N	29	6 Fair	Fair	Moderate	25-50	Moderate	Sydney	Mature	Deadwood with	Trench (~0.5m width)	project arborist
12	<u>Casuarina</u>	<u>cunninghamiana</u>	River She-Oak	Desirable	7	3	18	20	2.20	1 70	15	N	0.0	6 Fair	Fair	Moderate	5-15	Moderate	Sydney	Semi-mature	Suppressed with mechanical damage	Trench (~0.5m width)	Unaffected
13									2.23	12.70	1	1	0/			ucrute	5 13	derate	D, arrey	- mature			
																						Above Ground Mounted	
23	<u>Corymbia</u>	gummifera	Red Bloodwood	Desirable	11	4	29	30	3.50	2.00	38	N	Ω9	6 Fair	Fair	Moderate	5-16	Moderate	Sydney	Semi-mature	Significant lean	to Concrete Wall, Works within TPZ	Unaffected
		3								50			07			cucrute	5 15	derate	Sydney	- mature	- Ge ican		
																						Above Ground Mounted	
24	<u>Eucalyptus</u>	microcorys	Tallowwood	Desirable	8.6	5	28	30	3.40	2 00	36	N	00	6 Fair	Fair	Moderate	15-25	Moderate	NSW	Semi-mature	Suppressed	to Concrete Wall, Works within TPZ	Unaffected
24	Lucaryptus	ici oco. ya	. anow wood	Scondoic	0.0		_0		5.40	2.00		1	0/	- I un	T GII	moderate	13 23	inoaciate	11344	Jenn mature	- spp. coscu		
																						Above Ground Mounted	
25	<u>Eucalyptus</u>	microcorys	Tallowwood	Desirable	12	9	39	48	4.70	2 40	69	N	0.0	6 Fair	Fair	Moderate	15-25	Moderate	NSW	Early-mature	Nil	to Concrete Wall, Works within TPZ	Unaffected
	Lucaryptus			Sestitable	1-2	,			1.70	2.70	00		07	- I un	T GII	moderate	13 23	THOUGHALE	11344	-urry mature			
																						Above Ground Mounted	
26	<u>Eucalyptus</u>	paniculata paniculata	Grey Ironbark	Undesirable	9.6	3	20	20				N	00	6 Dead	Poor	Very Low	0	Very Low	Sydney	Mature	Deadwood	to Concrete Wall, Works within TPZ	Unaffected
20	Lucuiyptus	pariiculata	Grey Horibark	ondestrable	3.0	3	20	20				IV	09	Deau	1 001	very LOW		very LOW	Sydney	iviatule	Dedawood	Within 11 Z	Charlected
																						Above Ground Mounted	
27	Casmanin	cunninghi	Divor Sha Cal	Dociroble	11	4	24	24	2.00	1.00	26	N	20	/ Cast	Fair	Moderata	25 50	Moderate	Curdence	Comi Matura		to Concrete Wall, Works	Unaffected
27	<u>Casuarina</u>	<u>cunninghamiana</u>	River She-Oak	Desirable	11	4	24	24	2.90	1.80	20	IN	I 09	6 Good	Fair	Moderate	25-50	Moderate	Sydney	Semi-Mature	Nil	within TPZ	Unaffected



Western Distributor Smart Motorway Tree Data Tree Protection Detail Rev 03 10/13/23

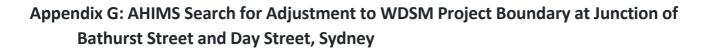
																							Above Ground Mounted	
																							to Concrete Wall, Works	
2	8 Fu	<u>ıcalyptus</u>	microcorys	Tallowwood	Desirable	10.4	6	34	38	4.10	2.20	52		0%	Good	Fair	Moderate	15-25	Moderate	NSW	Semi-mature		within TPZ	Unaffected
_	<u> </u>	-cury p cus	- Interdeditys	14.101111004	D COM COM	12011	 	<u> </u>		20	2.20			0,0	0000		moderate	10 20	ouerate		oe			
																							Above Ground Mounted	
																							to Concrete Wall, Works	
2	.9 <u>Co</u>	<u>orymbia</u>	<u>gummifera</u>	Red Bloodwood	Desirable	8	4	19	20	2.30	1.70	16	1	0%	Fair	Fair	Moderate	15-25	Moderate	Sydney	Semi-mature	Nil	within TPZ	Unaffected
																							Above Ground Mounted	
																							to Concrete Wall, Works	
3	0 <u>Ce</u>	eltis	<u>australis</u>	European Nettle Tree	Desirable	3	3	6	7	2.00	1.50	13		0%	Fair	Fair	Low	15-25	Low	Exotic	Young	Nil	within TPZ	Unaffected
																							to Concrete Wall, Works	
3	1 <u>Eu</u>	<u>icalyptus</u>	<u>sp.</u>	Gum Tree	Undesirable	16	4	38	40			1	ı	0%	Dead	Poor	Very Low	0	Very Low	Australian	Mature	Dead	within TPZ	Unaffected
																							Above Ground Mounted	
2	2	<u>ısuarina</u>	cunninghamiana	River She-Oak	Desirable	15	6	36	60	1 20	2.70	50		0%	Fair	Poor	Moderate	E 1E	Moderate	Sydnov	Early-mature		to Concrete Wall, Works within TPZ	Unaffected
	2 Cu	isuurinu .	canningnamana	Miver Sile-Oak	Desirable	13	-	30	00	4.30	2.70	33		070	i ali	F 001	iviouerate	3-13	Wioderate	Syuriey	Larry-mature	Зарргеззеи	Within 11 Z	Charlected
																							Above Ground Mounted	
																							to Concrete Wall, Works	
3	3 <u>Ce</u>	<u>ltis</u>	<u>australis</u>	European Nettle Tree	Desirable	4	3	6	7	2.00	1.50	13	1	0%	Fair	Fair	Low	0	Low	Exotic	Young	Nil	within TPZ	Unaffected
																							Above Cround Mounted	
																							Above Ground Mounted to Concrete Wall, Works	
3	4 Ca	<u>isuarina</u>	cunninghamiana	River She-Oak	Desirable	5	2	14	17	2.00	1.60	13		0%	Fair	Poor	Moderate	5-15	Low	Sydney	Semi-mature		within TPZ	Unaffected
	-	isaariira .	cammignamana	Miver Sile Ouk	Desirable		-	12-7	17	2.00	1.00	13		0,0	i un	1 001	Moderate	3 13	2011	Sydney	Jenn matare	ouppi esseu		S. Maries Co.
																							Above Ground Mounted	
																							to Concrete Wall, Works	
3	5 <u>Ca</u>	<u>isuarina</u>	<u>cunninghamiana</u>	River She-Oak	Desirable	9	3	16	17	2.00	1.60	13	1	0%	Fair	Poor	Moderate	5-15	Low	Sydney	Semi-mature	Suppressed	within TPZ	Unaffected
																							Above Ground Mounted	
																							to Concrete Wall, Works	
3	6 Ca	suarina	cunninghamiana	River She-Oak	Desirable	7	4	20	22	2.40	1.80	18		0%	Fair	Poor	Moderate	5-15	Moderate	Sydney	Semi-mature		within TPZ	Unaffected
		eltis	sinensis	Chinese Celtis	Desirable	14	8	45	47	5.40						Fair	Moderate	5-15	Moderate			Nil	None	Unaffected
		eltis	<u>sinensis</u>	Chinese Celtis	Desirable	14	8	26	28	3.10					Fair	Fair	Moderate	5-15	Very Low			Nil	None	Unaffected
3	9 <i>Ce</i>	eltis	sinensis	Chinese Celtis	Desirable	13	6	20	22	2.40				<30%	Fair	Fair	Moderate	5-15	Low	Exotic	Early-mature	Nil	To be Removed	Remove within footprint of works
		la:a		all a lu																Funtin	F 1 .			
4	.0 <u> Ce</u>	<u>ritis</u>	<u>sinensis</u>	Chinese Celtis	Desirable	13	Įδ	20	22	2.40	1.80	18 1		0%	Fair	Fair	Moderate	5-15	Low	Exotic	Early-mature	Nil	None	Unaffected
4	.0 <u>Ce</u>	<u>ritis</u>	<u>sinensis</u>	Chinese Celtis	Desirable	13	Ь	20	22	2.40	1.80	18	l	0%	Fair	Fair	Moderate	5-15	Low	EXOLIC	Early-mature	Nil	None	
4	.0 <u>Ce</u>	<u>aus</u>	sinensis	Chinese Celtis	Desirable	13	Ь	20	22	2.40	1.80	18		0%	Fair	Fair	Moderate	5-15	Low	EXOLIC	Early-mature		None	Works within SRZ, design to be modified to
4	0 <u>Ce</u>	<u>:::::::::::::::::::::::::::::::::::::</u>	sinensis	Chinese Celtis	Desirable	13	Ь	20	22	2.40	1.80	18		0%	Fair	Fair	Moderate	5-15	Low	EXOLIC	Early-mature	Bark inclusions as for	None	Works within SRZ, design to be modified to route works outside SRZ and limit effects to
							12														·	Bark inclusions as for the habit of this		Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
	.0 <u>Ce</u>		microcarpa var hillii	Hills Weeping Fig	Desirable		12		37		2.20					Fair	Moderate High	15-25			Early-mature	Bark inclusions as for the habit of this	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
							12														·	Bark inclusions as for the habit of this species		Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to
							12														Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to
4	3 <u>Fic</u>	<u>cus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	9.4			37	4.10	2.20	52		15%	Good	Good	High	15-25	High	Exotic	Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
4		<u>cus</u>								4.10		52		15%	Good				High	Exotic	Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to
4	3 <u>Fic</u>	<u>cus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	9.4			37	4.10	2.20	52		15%	Good	Good	High	15-25	High	Exotic	Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
4	3 <u>Fic</u>	<u>cus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	9.4			37	4.10	2.20	52		15%	Good	Good	High	15-25	High	Exotic	Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4	3 <u>Fic</u>	<u>cus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	9.4			37	4.10	2.20	52		15%	Good	Good	High	15-25	High	Exotic	Early-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
4	3 <u>Fic</u>	<u>cus</u> cus	microcarpa var hillii	Hills Weeping Fig	Desirable	9.4	7		37	2.90	2.20	52		15% 23%	Good	Good	High	15-25	High	Exotic	Early-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to
4	3 <u>Fic</u>	<u>cus</u> cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable	9.4	7	34	27	2.90	1.90	52		15% 23%	Good	Good	High High	15-25	High	Exotic	Early-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for	Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	7.2	7	24	27	2.90	1.90	26		23% 21%	Good Good	Good Good	High High	15-25 15-25	High High High	Exotic Exotic	Early-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width) Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4	3 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable	9.4	7	24	27	2.90	1.90	26		23% 21%	Good	Good	High High	15-25	High High High	Exotic Exotic	Early-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on TPZ. Utilise low pressure NDD to advise on
4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	7.2	7	24	27	2.90	1.90	26		23% 21%	Good Good	Good Good	High High	15-25 15-25	High High High	Exotic Exotic	Early-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this	Trench (~1m width) Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
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4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30	27 27 32	2.90 3.00 3.60	2.20 1.90 1.90 2.50	26 9		23% 21% <30%	Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	7.2	7	24	27	2.90 3.00 3.60	1.90	26 9		23% 21% <30%	Good Good Good	Good Good Good	High High	15-25 15-25	High High High	Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30	27 27 32	2.90 3.00 3.60	2.20 1.90 1.90 2.50	26 9		23% 21% <30%	Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
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4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30	27 27 32	2.90 3.00 3.60	2.20 1.90 1.90 2.50	26 9		23% 21% <30%	Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u>	cus cus cus	microcarpa var hillii microcarpa var hillii microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30	27 27 32	3.00 3.60	2.20 1.90 1.90 2.50	52 26 28 41		23% 21% <30%	Good Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 6 <u>Fic</u>	cus cus cus	microcarpa var hillii	Hills Weeping Fig	Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30 26	27 27 27 32 28	3.00 3.60	1.90 1.90 2.50	52 26 28 41		23% 21% <30%	Good Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 6 <u>Fic</u>	cus cus cus	microcarpa var hillii	Hills Weeping Fig	Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30 26	27 27 27 32 28	3.00 3.60	1.90 1.90 2.50	52 26 28 41		23% 21% <30%	Good Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 6 <u>Fic</u>	cus cus cus	microcarpa var hillii	Hills Weeping Fig	Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7	34 24 25 30 26	27 27 27 32 28	3.00 3.60	1.90 1.90 2.50	52 26 28 41		23% 21% <30%	Good Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High	Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 7 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7 7 7.0 7	34 24 25 30 26	27 27 32 28	3.00 3.60 3.10	2.20 1.90 2.50 1.90	26 Y		23% 21% <30% 21%	Good Good Good Good	Good Good Good Good	High High High High	15-25 15-25 15-25 15-25	High High High High	Exotic Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on PZZ. Utilise low pressure NDD to advise on TPZ. Utilise low pressure NDD to advise ODD
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 6 <u>Fic</u>	cus cus	microcarpa var hillii	Hills Weeping Fig	Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7 7 7.0 7	34 24 25 30 26	27 27 27 32 28	3.00 3.60 3.10	1.90 1.90 2.50	26 Y		23% 21% <30% 21%	Good Good Good Good	Good Good Good	High High High	15-25 15-25 15-25	High High High High	Exotic Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 7 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7 7 7.0 7	34 24 25 30 26	27 27 32 28	3.00 3.60 3.10	2.20 1.90 2.50 1.90	26 Y		23% 21% <30% 21%	Good Good Good Good	Good Good Good Good	High High High High	15-25 15-25 15-25 15-25	High High High High	Exotic Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 7 <u>Fic</u>	cus cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7 7 7.0 7	34 24 25 30 26	27 27 32 28	3.00 3.60 3.10	2.20 1.90 2.50 1.90	26 Y		23% 21% <30% 21%	Good Good Good Good	Good Good Good Good	High High High High	15-25 15-25 15-25 15-25	High High High High	Exotic Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
4 4 4	3 <u>Fic</u> 4 <u>Fic</u> 5 <u>Fic</u> 7 <u>Fic</u>	cus cus cus cus	microcarpa var hillii microcarpa var hillii	Hills Weeping Fig Hills Weeping Fig	Desirable Desirable Desirable Desirable Desirable	9.4 7.2 7.6 9.5	7 7 7.0 7	34 24 25 30 26	27 27 32 28	3.00 3.60 3.10 4.30	2.20 1.90 2.50 1.90	52 26 28 41 31 59		23% 21% <30% 21% 15%	Good Good Good Good	Good Good Good Good	High High High High	15-25 15-25 15-25 15-25	High High High High	Exotic Exotic Exotic Exotic Exotic Exotic	Semi-mature Semi-mature Semi-mature Semi-mature Early-mature	Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species Bark inclusions as for the habit of this species	Trench (~1m width) Trench (~1m width) Trench (~1m width) To be Removed Trench (~1m width) Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Remove within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works. Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.



Western Distributor Smart Motorway Tree Data Tree Protection Detail Rev 03 10/13/23

<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	12	19	59	60	7.10	2.70	158	Y	91	% Go	ood	Fair	High	15-25	High	Exotic	Mature	Bark inclusions as for the habit of this species	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
Ficus	microcarpa var hillii	Hills Weeping Fig	Desirable	11	11	63	53	7.60	2.50	179	Y	8	% Go	ood	Good	Good	15-25	High	Exotic	Mature	Bark inclusions as for the habit of this species	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
		2 22 0 0																	Z.VOCIO		Bark inclusions as for the habit of this		Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on
<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	11	11	63	60	7.60	2.70	180	Υ	8	% Go	od	Good	High	15-25	High	Exotic	Mature	species	Trench (~1m width)	relocation of works.
<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	11	11	52	55	6.20	2.60	122	Y	10	% Goo	ood	Good	High	15-25	High	Exotic	Mature	Bark inclusions as for the habit of this species	Trench (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
Ficus	microcarna var hillii	Hills Weening Fig	Decirable	11	14	er.	62	7 90	2 70	101	v	90	% Gov	and	Cood	High	15.25	Lligh	Evotic	Maturo	Bark inclusions as for the habit of this	Tranch (~1m width)	Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
											V										Bark inclusions as for the habit of this		Works within SRZ, design to be modified to route works outside SRZ and limit effects to TPZ. Utilise low pressure NDD to advise on relocation of works.
<u>ricus</u>	Inicrocurpa var mini	niiis weeping rig	Desirable	111	14	85	83	10.20	3.10	327	Y	0	% G00	ou (G000	High	15-25	High	EXOTIC	Iviature	Possible evidence of	Trencii (IIII widiii)	relocation of works.
<u>Ficus</u>	<u>macrophylla</u>	Moreton Bay Fig	Desirable	10.6	8	42	52	5.00	2.50	80	N	01	% Faii	ir	Fair	High	25-50	High	NSW	Semi-Mature	Phellinussp.	None	Unaffected
Ficus	microcarpa var hillii	Hills Weeping Fig	Desirable	12.6	17	78	95	9.40	3.20	275	N	6	% Goo	bood	Fair	High	15-25	High	Exotic	Farly-mature	Bark inclusions as for the habit of this species	Trench (~1m width)	Minor encroachment works are acceptable provided the trench is installed with low pressure NDD under supervision of the project arborist
		Moreton Bay Fig	Desirable		_		44	5.20			N		_	_		High			NSW	Semi-Mature		None	Unaffected
																							Minor encroachment works are acceptable provided the trench is installed with low pressure NDD under supervision of the
		•	Desirable	6.2			56				N		_			High					Deadwood	,	project arborist
<u>FICUS</u>	тасгорпуна	Moreton Bay Fig	Desirable	4.8		18	34	2.20	2.10	15	N	O	% Faii	r	Fair	High	25-50	High	NSW	Young		None	Unaffected Minor encroachment works are acceptable provided the trench is installed with low pressure NDD under supervision of the
	<u>rubiginosa</u>	Port Javkson Fig	Desirable	5	_		60				N		_		Good	High			Sydney	Semi-mature	Minor Deadwood	Trench (~1m width)	project arborist
<u>Ficus</u>	<u>macrophylla</u>	Moreton Bay Fig	Desirable	6	12	46	61	5.50	2.70	96	N	0	% Faii	ir	Fair	High	25-50	High	NSW	Semi-mature		None	Unaffected Minor encroachment works are acceptable
Ficus	microcarpa var hillii	Hills Weeping Fig	Desirable	7	13	48	59	5.80	2.70	104	N	8	% Faiı	ir	Good	High	15-25	High	Exotic	Semi-mature	Pest affected	Trench (~1m width)	provided the trench is installed with low pressure NDD under supervision of the project arborist
	<u>macrophylla</u>	Moreton Bay Fig	Desirable				51				N					High			NSW	Semi-mature		None	Unaffected
																					Deadwood and pest		Minor encroachment works are acceptable provided the trench is installed with low pressure NDD under supervision of the
<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	10	20	77	106	9.20	3.40	268	N	69	% Fair	ir I	Fair	High	15-25	High	Exotic	Early-mature	affected	Trench (~1m width)	project arborist Minor encroachment works are acceptable
Ficus	ruhiainosa	Port Jaykson Fig	Desirable	7	12	05	74	11 40	2 90	408	N	5.	% 60	and	Eair	∐igh	25 50	Lligh	Sudnov	Early maturo	Bark inclusions as for the habit of this	Trench (~1 m width)	provided the trench is installed with low pressure NDD under supervision of the project arborist
		. oresavison rig	Destirable		1.5			11.40	2.50	100	14	3	70 000	Ju	. dii	111611	23-30		Syulley	carry-mature	Bark inclusions as for the habit of this	The state of the s	Minor encroachment works are acceptable provided the trench is installed with low pressure NDD under supervision of the
<u>Ficus</u>	<u>rubiginosa</u>	Port Javkson Fig	Desirable	5	4	43	37	5.20	2.20	84	N	10	% Go	bod	Good	High	25-50	High	Sydney	Early-mature	species	Trench (~1m width)	project arborist
<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	9.6	14	55	55	6.60	2.50	137	N	0	% Faii	ir	Fair	High	15-25	High	Exotic	Semi Mature	pest affectedf	None	Unaffected
<u>Ficus</u>	microcarpa var hillii	Hills Weeping Fig	Desirable	4.00	4	30	28	3.60	1.90	41	Y	<30'	% Fair	ir	Fair	Moderate	0-5	Low	Exotic	Semi Mature	Bark inclusions as for the habit of this species		Remove within footprint of works and tree is growing out of the existing wall structure and will in time need to be removed due to potential damage to the existing wall.
	Ficus Ficus	Ficus microcarpa var hillii Ficus macrophylla Ficus rubiqinosa Ficus macrophylla Ficus macrophylla Ficus rubiqinosa Ficus macrophylla Ficus macrophylla Ficus rubiqinosa Ficus macrophylla Ficus microcarpa var hillii Ficus microcarpa var hillii	Ficus microcarpa var hillii Hills Weeping Fig Ficus macrophylla Moreton Bay Fig Ficus microcarpa var hillii Hills Weeping Fig Ficus rubiqinosa Port Javkson Fig Ficus Hills Weeping Fig Ficus Hills Weeping Fig Ficus Hills Weeping Fig	Ficus microcarpa var hillii Hills Weeping Fig Desirable Ficus macrophylla Moreton Bay Fig Desirable Ficus macrophylla Moreton Bay Fig Desirable Ficus macrophylla Moreton Bay Fig Desirable Ficus rubiqinosa Port Javkson Fig Desirable Ficus macrophylla Moreton Bay Fig Desirable Ficus macrophylla Moreton Bay Fig Desirable Ficus microcarpa var hillii Hills Weeping Fig	Ficus microcarpo var hillii Hills Weeping Fig Desirable 11 Ficus microcarpo var hillii Hills Weeping Fig Desirable 11 Ficus microcarpo var hillii Hills Weeping Fig Desirable 11 Ficus microcarpo var hillii Hills Weeping Fig Desirable 11 Ficus microcarpo var hillii Hills Weeping Fig Desirable 10.6 Ficus macrophylla Moreton Bay Fig Desirable 10.6 Ficus macrophylla Moreton Bay Fig Desirable 6.2 Ficus macrophylla Moreton Bay Fig Desirable 6.2 Ficus macrophylla Moreton Bay Fig Desirable 5 Ficus macrophylla Moreton Bay Fig Desirable 6 Ficus microcarpo var hillii Hills Weeping Fig Desirable 7 Ficus microcarpo var hillii Hills Weeping Fig Desirable 6 Ficus microcarpo var hillii Hills Weeping Fig Desirable 7 Ficus microcarpo var hillii Hills Weeping Fig	Ficus microcarpa var hillii Hills Weeping Fig Desirable 11 11 Ficus microcarpa var hillii Hills Weeping Fig Desirable 11 11 Ficus microcarpa var hillii Hills Weeping Fig Desirable 11 14 Ficus microcarpa var hillii Hills Weeping Fig Desirable 11 14 Ficus macrophylla Moreton Bay Fig Desirable 10.6 8 Ficus macrophylla Moreton Bay Fig Desirable 12.6 17 Ficus macrophylla Moreton Bay Fig Desirable 6.2 2 Ficus macrophylla Moreton Bay Fig Desirable 6.2 7 Ficus macrophylla Moreton Bay Fig Desirable 5 8 Ficus microcarpa var hillii Hills Weeping Fig Desirable 7 13 Ficus microcarpa var hillii Hills Weeping Fig Desirable 6 12 Ficus microcarpa var hillii Hills Weeping Fig Desirable 7 13 Ficus micr	Ficus microcarpa var hillii Hills Weeping Fig Desirable 11 11 63			Figus	Figure	Figure	Price	Prince	Price	FEE2	Page Page	Column	No.	Section	Column	Companies Comp	Companies of the Comp





Date: 18 September 2023

Attention:

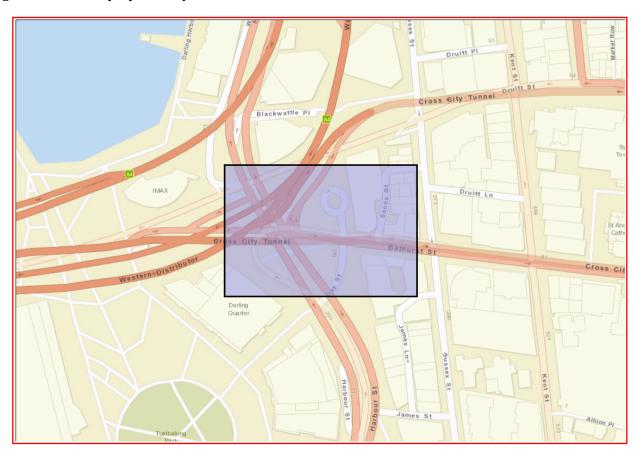
Email:

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From: -33.8745, 151.2022 - Lat, Long To:

-33.8734, 151.2041, conducted by on 18 September 2023.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

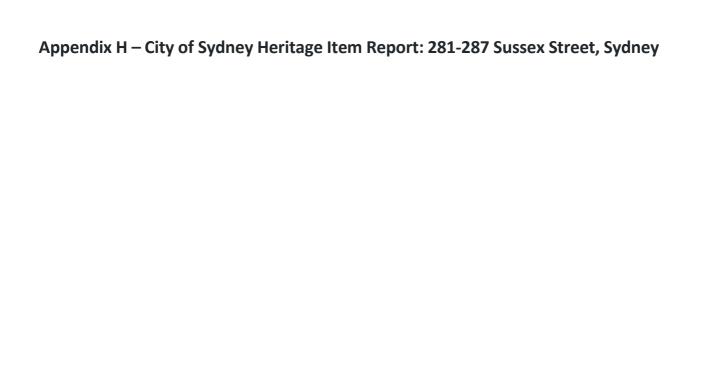
- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.

ABN 34 945 244 274

Email: ahims@environment.nsw.gov.au

Web: www.heritage.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.



Item Details

Name

Former Warehouse Including Interiors

SHR/LEP/S170

LEP #I1964

Address

281-287 Sussex Street SYDNEY NSW 2000

Local Govt Area

Sydney

Local Aboriginal Land Council

Unknown

Item Type Group/Collection

Built Commercial Warehouse/storage area

All Addresses

Addresses

Records Retrieved: 1

Stre et No	Street Name	Suburb/Town/Postc ode	Local Govt. Area	LALC	Parish	County	Electorate	Address Type
281- 287	Sussex Street	SYDNEY/NSW/2000	Sydney	Unknown			Unknown	Primary Address

Category

Significance

Statement Of Significance

The Vintage is of historical significance as a good example of a simple inner city warehouse dating from the late nineteenth century. It provides physical evidence of the redevelopment of this part of Sydney with large-scale warehouses during that period. All significant fabric remains in good to excellent condition. Work in 1980 identified and rtook care to retain the character of the building.

Criteria a)

Historical Significance

The Vintage is part of the extensive group of warehouses in western Sydney which grew up around Darling Harbour. It is a prominent corner building which has been adapted to a new use, but which still retains its traditional warehouse character to the principal facades and roof-line. Has historic significance locally.

Criteria c)

Aesthetic/Technical Significance

The building presents tangible evidence of milling and wine making in NSW.

Criteria d)

Social/Cultural Significance

The Vintage exemplifies one of a range of trades and businesses carried out in the western CBD during the early part of this century, the role of employer and the manufactrure of basic foodstuff. The building presents tangible evidence of milling and wine making in NSW.

Criteria f)

Rarity

The Vintage is one of only a small number of pre 1900 buildings in the city south of Druitt Street and the only one with an industrial heritage.

Criteria g)

Representative

The Vintage is a highly visible example of the warehouses which once occupied most of this part of Sydney. It is representative of low scale face brick industrial buildings of the 1890s.

Owners

Records Retrieved: 0

Organisation	Stakeholder Category	Date Ownership Updated
	No Results Found	

Description

DesignerBuilder/MakerUnknownUnknown

Physical Description Updated

The Vintage is a three storey polychrome face brick building with timber windows and a corrugated steel roof, which has facades to Bathurst and Sussex Streets. Internally much of the original structure remains and has been used as permanent formwork for new concrete slab floors. The building has also been extensively partitioned internally. Category:Individual Building. Style:Victorian utilitarian. Storeys:3 + basement. Facade:Face brick, timber frame windows. Side/Rear Walls:Face brick. Internal Walls:Face brick, plasterbd & stud. Roof Cladding:Corrugated steel sheeting. Internal Structure:Timber post & beam. Floor:Reinf. conc. slab and carpet over original timber joists & boards. Roof:Unknown; presumably timber frame. Ceilings:Exposed floor structure, plasterbd.. Stairs:Reinf. conc., brass handrails. Fire Stairs:Reinf. conc., steel balustrade. Sprinkler System:Yes. Lifts:None.

Physical Condition Updated 01/12/2006

The building retains much of the partitioning associated with its residential use, although it is now mostly occupied as offices. Timber windows retain old sashes but have been converted from double hung to awning action..Intrusive Elements:Window mounted air conditioning units, surface mounted wiring on interior.

Modifications And Dates

c. 1893

Further Comments

High Significance: External form viewed from Sussex and Bathurst Streets. The form of the roof. Face brick walls, sills, lintels, arch bricks, cornices and window reveals, and reused elements such as window sashes. Barred openings, Cast iron Guards to base of arched window recesses either side of entry. Brick chimney on Sands Lane. Internally, original timber structure, timber entry door. Medium Significance: Altered window frames in original openings. Gutters and downpipes. WC under Sussex Street. Brick walls to basement. Internally, timber panelling to columns, painted face brick wall (original), timber boarding to ceiling, windows to courtyard. Low Significance: Roller shutters. Brass letterboxes. Skylights mounted flush with roof. Roof mounted plant and catwalks. Concrete floors, internal partitions and stairs, rooflights. Brick walls under courtyard. Brick paving. Comments: HFS approved D2000/00839. Conservation Plan to be revised see condition No 2.

Heritage Inventory sheets are often not comprehensive, and should be regarded as a general guide only. Inventory sheets are based on information available, and often do not include the social history of sites and buildings. Inventory sheets are constantly updated by the City as further information becomes available. An inventory sheet with little information may simply indicate that there has been no building work done to the item recently: it does not mean that items are not significant. Further research is always recommended as part of preparation of development proposals for heritage items, and is necessary in preparation of Heritage Impact Assessments and Conservation Management Plans, so that the significance of heritage items can be fully assessed prior to submitting development applications.

Current Use

Offices; Residential

Former Use

Warehouse: Industrial

Listings

Listings

				Records R	etrieved: 2
Heritage Listing	Listing Title	Listing Number	Gazette Date	Gazzette Number	Gazzette Page
Local Environmental Plan	Sydney Local Environmental Plan 2012	11964	12/14/2012 12:00:00 AM		
Heritage study					

Procedures/Exemptions

Records Retrieved: 0

Sectio n of Act	Description	Title	Comments	Action Date	Outcome
			No Results Found		

н	istory	V
	13101	

Historical Notes or Provenance

Updated

The "Eora people" was the name given to the coastal Aborigines around Sydney. Central Sydney is therefore often referred to as "Eora Country". Within the City of Sydney local government area, the traditional owners are the Cadigal and Wangal bands of the Eora. There is no written record of the name of the language spoken and currently there are debates as whether the coastal peoples spoke a separate language "Eora" or whether this was actually a dialect of the Dharug language. Remnant bushland in places like Blackwattle Bay retain elements of traditional plant, bird and animal life, including fish and rock oysters.

With the invasion of the Sydney region, the Cadigal and Wangal people were decimated but there are descendants still living in Sydney today. All cities include many immigrants in their population. Aboriginal people from across the state have been attracted to suburbs such as Pyrmont, Balmain, Rozelle, Glebe and Redfern since the 1930s. Changes in government legislation in the 1960s provided freedom of movement enabling more Aboriginal people to choose to live in Sydney.

(Information sourced from Anita Heiss, "Aboriginal People and Place", Barani: Indigenous History of Sydney City http://www.cityofsydney.nsw.gov.au/barani)

The first building on the site, which was granted to James Wilshire in 1838, appears to have been erected some time between 1882 (when it was rated as a timber yard) and 1893 (when Council building records note "built prior to 1894"). In 1897 the building was rated as a four storey brick and slate flour mill owned by Aitken & Scott, flour millers. From 1915 to 1922 the occupants were Mungo Scott Ltd, Millers. In 1923 the building was taken over by Bernard Seppelt & Sons, Wine & Spirit Merchants, as their Sydney office and warehouse, and used as such until 1974. In 1979 the building was converted for use as residential apartments. It began to be used as commercial premises in the late 1980s.

Historic Themes

Records Retrieved: 2

National Theme	State Theme	Local Theme
3. Economy	Commerce	Unknown
3. Economy	Convict	Unknown

Recommended Management

Management Summary

General: The Vintage should be conserved largely in its existing form and scale, with no vertical additions to the main wings which front Bathurst and Sussex Streets. It would be preferable for the building to retain its present size, however, some additions in the 1979 courtyard could be contemplated if these were of similar scale and form to the existing building. Other uses for the building could be considered provided that these will not require the removal of significant fabric. Features of high significance should be conserved, and other fabric dealt with so that the form and appearance of the building are conserved. Surfaces never intended for painting such as face brick should remain unpainted, while surfaces such as timber which were originally painted should continue to be painted in appropriate colours.

Exterior: The facade should be conserved largely in its existing appearance.

Interior: The interiors could be subject to further alteration in the future (including resubdivision or removal of partitions) to assist the continuing use of the place, provided that surviving significant fabric (notably the timber structure) is preserved.

The building should be retained and conserved. A Heritage Assessment and Heritage Impact Statement, or a Conservation Management Plan, should be prepared for the building prior to any major works being undertaken. There shall be no vertical additions to the building and no alterations to the façade of the building other than to reinstate original features. The principal room layout and planning configuration as well as significant internal original features including ceilings, cornices, joinery, flooring and fireplaces should be retained and conserved. Any additions and alterations should be confined to the rear in areas of less significance, should not be visibly prominent and shall be in accordance with the relevant planning controls.

Management

Records Retrieved: 0

Management Category	Management Name	Date Updated
	No Results Found	

Report/Study

Heritage Studies

Records Retrieved: 0

Report/Study Name	Report/Study Code	Report/Study Type	Report/Stud y Year	Organisation	Author		
No Results Found							

Reference & Internet Links

References

Records Retrieved: 4

Туре	Author	Year	Title	Link
Written	Macphail & Sproul Architects	2001	The Vintage, residential apartment building, 281-287 Sussex Street, Sydney: conservation plan	
Written			Sands' Directories	
Written	Anita Heiss		Aboriginal People and Place, Barani: Indigenous History of Sydney City	
Written			Council rate books and BA records	

Data Source

The information for this entry comes from the following source:

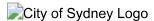
Data Source Record Owner Heritage Item ID

Local Government City of Sydney Council 2424140

Every effort has been made to ensure that information contained in the State Heritage Inventory is correct. If you find any errors or omissions please send your comments to **council@cityofsydney.nsw.gov.au**

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Appendix I – City of Sydney Significant Trees Interactive Map



Home (https://trees.cityofsydney.nsw.gov.au/) » Interactive Map

Interactive Map

Search by suburb

