



EARTHSCAPE HORTICULTURAL SERVICES
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**ARBORICULTURAL IMPACT
ASSESSMENT REPORT**

**ART GALLERY OF NSW EXPANSION
PROJECT - SYDNEY MODERN**

**ART GALLERY OF NSW
ART GALLERY ROAD, SYDNEY**

November 2017

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EXECUTIVE SUMMARY

This report examines the potential impact of the proposed expansion of the Art Gallery of NSW on existing trees in the vicinity of the development site. The Art Gallery of NSW proposes to undertake a major expansion of the existing art gallery adjacent to the Phillip Precinct of the Domain. The expansion, proposed as a separate, stand-alone building, is located north of the existing gallery, partly extending over the Eastern Distributor land bridge and a disused Navy fuel bunker located to the north east of this land bridge. Two-hundred and twenty (220) trees located in the vicinity of the site have been included in this report, including thirty-eight (38) trees of High Retention Value, one-hundred and twenty-eight (128) trees of Moderate Retention Value, forty-six (46) of Low Retention Value and eight (8) of Very Low Retention Value.

The proposed development will necessitate the removal of a total of one-hundred and forty (140) trees. This includes forty-three (42) trees of Low and Very Low Retention Value, ninety-one (91) of Moderate Retention Value and seven (7) trees of High Retention Value. In addition, three (3) trees of High Retention Value and five (5) trees of Moderate Retention Value are proposed to be relocated (transplanted) elsewhere within and outside of the site to accommodate the proposed works. The remaining seventy-one (71) trees are proposed to be retained in situ and protected as part of the proposed development. In order to compensate for loss of amenity resulting from the removal of trees to accommodate the proposed development, two-hundred and sixty-five (265) new trees are proposed to be planted within the site as part of the landscape works.

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1 INTRODUCTION

- 1.1.1 This report was commissioned by McGregor Coxall to assess the health and condition of two-hundred and twenty-one (221) trees located surrounding the Art Gallery of NSW and portions of The Domain surrounding the Gallery building and over the Eastern Distributor to the north-east of the Art Gallery. The report has been prepared to aid in the assessment of a Development Application (DA) for the Art Gallery of NSW Expansion Project, 'Sydney Modern'. The Project has been declared as State Significant Development (SSD) [No. 14_6471] to be assessed under Part 4 of the *Environmental Planning & Assessment Act* (EP&A Act) 1979 (NSW).
- 1.1.2 The purpose of this report is to assess the potential impact of the proposed development on the subject trees, together with recommendations for amendments to the design or construction methodology where necessary to minimise any adverse impact. The report also provides recommended tree protection measures to ensure the long-term preservation of the trees to be retained where appropriate.
- 1.1.3 This report has been prepared in accordance with the City of Sydney Council's guidelines for preparation of Arborist's Reports as outlined in Schedule 8 of the *Sydney Development Control Plan* (SDCP) 2012 and Sections 2.3.2 - 2.3.5 of the Australian Standard for *Protection of Trees on Development Sites* (AS 4970-2009).

2 THE SITE

- 2.1.1 The subject property consists of a number of allotments including the following:-
- Lot 102 in DP 854472 (the Art Gallery of NSW);
 - Lot 1013 in DP 1199151 [formerly part of Lot 101 in DP 854472] (The Domain);
 - A portion of Lot 34 in DP39586 (The Domain, including the playing fields overlying the former fuel bunker);
 - Lots 107, 108, 113 & 115 in DP 1105308 (associated with the Eastern Distributor and the Cross City Tunnel) located in the vicinity of the Art Gallery of NSW (also known as the 'Landbridge' Area);
 - Lot 4 in DP 259027 (Easement for Support);
 - Lincoln Crescent (road reserve);
 - Art Gallery Road (road reserve);
 - Cowper Wharf Road (road reserve); and
 - Mrs Macquaries Road (road reserve).
- 2.1.2 For the purposes of this report, the subject allotments will be referred to as "the Site". The extent of the site is shown in **Figure 1**. A proposed Seawater Heat Exchange System (external to the site) also forms part of the Sydney Modern Project. However, this area was not included in the arboricultural assessment.
- 2.1.3 The allotment containing the Art Gallery of NSW is zoned Metropolitan Centre [B8] and the surrounding areas of The Domain are zoned Public Recreation [RE1] under the *Sydney Local Environmental Plan* (SLEP) 2012. The area over the Eastern Distributor is zoned Infrastructure (Classified Road) [SP2].

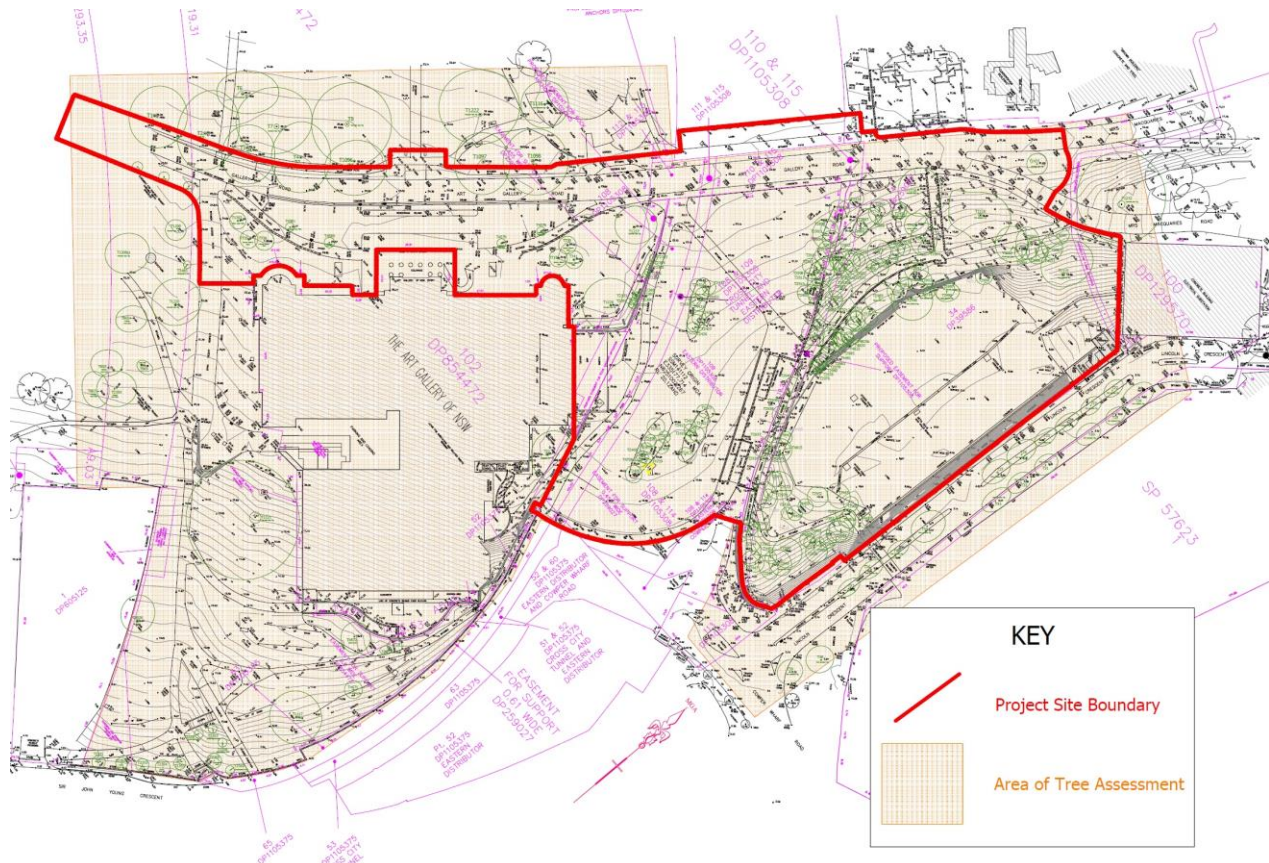


Figure 1 – Showing the Project Site Boundary and area included in the arboricultural assessment.

- 2.1.4 The site includes areas of The Domain to the north-east of Art Gallery building, including the ‘land bridge’ over the Eastern Distributor and playing field over the disused fuel bunker. The area in the immediate vicinity of the Art Gallery has a moderate to steep easterly gradient with a parkland appearance, containing numerous established trees in open lawn areas. The trees in this area include a variety of large shade trees (Hills Fig, Moreton Bay Fig and Port Jackson Fig) with formal palms (Silver Date Palm, Canary Island Palm and Cabbage Tree Palm) flanking the façade of the Art Gallery. The areas surrounding the gallery (including the Landbridge Area) also include informal plantings of Eucalypts and Angophoras, some of which are located on shallow soils over the tunnel section of the Eastern Distributor. The north-eastern portion of the site contains a playing field over a former Naval fuel bunker surrounded by steep embankments with a predominantly easterly gradient. These embankments are mass planted with a variety of locally-indigenous species, including Sydney Red Gum, Forest Red Gum and Bangalay, most of which are young and semi-mature trees.
- 2.1.5 Soils of this area have been extensively disturbed and modified for urban development. The original soils of this area are typical of the GyMEA Landscape Group (as classified in the *Soil Landscapes of the Sydney 1:100,000 Sheet*), consisting of “shallow to moderately deep (300 – 1000 mm) *Yellow Earths* and *Earthy Sands* on crests and inside of benches and shallow (< 200 mm) *Siliceous Sands* on leading edges of benches; localised *Gleyed Podzolic Soils* and *Yellow Podzolic Soils* on shale lenses; and shallow to moderately deep (< 1000mm) *Siliceous Sands* and *Leached Sands* along Drainage Lines.”¹ Soil materials are derived Hawkesbury Sandstone and may be discontinuous with localised rock outcrop.
- 2.1.6 The original vegetation of this area consisted of open forest and woodland typical of Hawkesbury Sandstone areas, most of which has now been cleared for urban development.² The dominant

locally-indigenous tree species formerly occurring in this area included *Angophora costata* (Sydney Red Gum), *Corymbia gummifera* (Red Bloodwood) and *Eucalyptus haemastoma* (Scribbly Gum). Other species occurring in this association may include *Eucalyptus botryoides* (Bangalay), *Eucalyptus punctata* (Grey Gum), *Eucalyptus sieberi* (Silvertop Ash), *Eucalyptus pilularis* (Blackbutt), *Eucalyptus tereticornis* (Forest Red Gum), *Eucalyptus globoidea* (White Stringybark) and *Banksia serrata* (Old Man Banksia). *Glochidion ferdinandi* (Cheese Tree) and *Ficus rubiginosa* (Port Jackson Fig) may also be found on sheltered sites on lower slopes.

3 SUBJECT TREES

- 3.1.1 The subject trees were inspected by Earthscape Horticultural Services (EHS) on the 24th May 2016. Each tree has been provided with an identification number for reference purposes denoted on the attached Tree Location Plan (**Appendix 5**), based on the survey prepared by YSCO Geomatics, Dwg. Ref No. 0714/1F dated March 2014.
- 3.1.2 Numerous trees within the site were not shown on the survey drawing. These have been plotted in their approximate positions by superimposing the Royal Botanic Garden Landbridge Tree Survey (2015)³ and an aerial image of the site provided by McGregor Coxall, Dwg No. LD_01 Rev F dated 26/04/2016 (source: Nearmap, date 23/08/2015). It is understood that the trees included in the Landbridge Tree Survey were located using a portable Global Positioning System (GPS) unit, with the GPS co-ordinates of each tree plotted on the drawing. Due to the inaccuracies of GPS under tree canopy, there are some discrepancies between tree positions shown on the survey drawing compared with the Landbridge Tree Survey. In the instances where a survey position is indicated, the survey position has been assumed correct and takes precedence. In instances where there is no survey position indicated for a tree, the GPS position has been assumed as correct.
- 3.1.3 The numbers used on the Tree Location Plan correlate with the Tree Assessment Schedule (**Appendix 3**). Tree numbers are consistent with those used in the Landbridge Tree Survey (2015), with exception of T1-T39. These have been allocated a sequential number since they are not allocated with an identification number in the Landbridge Tree Survey.

4 HEALTH AND CONDITION ASSESSMENT

4.1 Methodology

- 4.1.1 An assessment of each tree was made using the Visual Tree Assessment (VTA) procedure.⁴ All of the trees were assessed in view from the ground. No aerial inspection or diagnostic testing has been undertaken as part of this assessment.
- 4.1.2 The following information was collected for each tree:-
 - Tree Species (Botanical & Common Name);
 - Approximate height;
 - Canopy spread; measured using a metric tape and an average taken.
 - Trunk diameter (measured at 1.4 metres from ground level);
 - Live Crown Size; (measured by subtracting the total height of the tree from the lowest point of the crown and multiplying by the average crown spread to give a value in square metres).
 - Health & vigour; using foliage size, colour, extension growth, presence of disease or pest infestation, canopy density, presence of deadwood, dieback and epicormic growth as indicators,
 - Condition; using visible evidence of structural defects, instability, evidence of previous pruning and physical damage as indicators.
 - Suitability of the tree to the site and its existing location; in consideration of damage or potential damage to services or structures, available space for future development and nuisance issues.

4.1.3 This information is presented in a tabulated form in **Appendix 3**.

4.2 Safe Useful Life Expectancy (SULE)

4.2.1 The remaining Safe Useful Life Expectancy⁵ of the tree is an estimate of the sustainability of the tree in the landscape, calculated based on an estimate of the average age of the species in an urban area, less its estimated current age. The life expectancy of the tree has been further modified where necessary in consideration of its current health and vigour, condition and suitability to the site. The estimated SULE of each tree is shown in **Appendix 3**.

4.2.2 The following ranges have been allocated to each tree:-

- Greater than 40 years (Long)
- Between 15 and 40 years (Medium)
- Between 5 and 15 years (Short)
- Less than 5 years (Transient)
- Dead or immediately hazardous (defective or unstable)

5 LANDSCAPE SIGNIFICANCE

5.1 Methodology for Determining Landscape Significance

5.1.1 The significance of a tree in the landscape is a combination of its amenity, environmental and heritage values. Whilst these values may be fairly subjective and difficult to assess consistently, some measure is necessary to assist in determining the retention value of each tree. To ensure a consistent approach, the assessment criteria shown in **Appendix 1** have been used in this assessment.

5.1.2 A rating has been applied to each tree to give an understanding of the relative significance of each tree in the landscape and to assist in determining priorities for retention, in accordance with the following categories:-

- 1. Significant**
- 2. Very High**
- 3. High**
- 4. Moderate**
- 5. Low**
- 6. Very Low**
- 7. Insignificant**

5.2 Environmental Significance

5.2.1 Tree Management Controls

All trees within The Domain are protected under Clause 13 (1) of the *Royal Botanic Gardens and Domain Trust Regulation 2013*, made pursuant to the *Royal Botanic Gardens and Domain Trust Act 1980*. This Clause prohibits the removal of any tree or other vegetation, or any part of any tree or other vegetation, without the prior written consent of the Trust.

Prescribed Trees within the City of Sydney Local Government Area (LGA) are protected under Section 3.5.3 of the *Sydney Development Control Plan (SDCP) 2012*, made pursuant to Clause 5.9 (2) of the *Sydney Local Environmental Plan (SLEP) 2012*. The SDCP generally protects all trees of a height of five (5) metres or greater or with a canopy spread of five (5) metres or greater, or trunk diameter of 300mm or greater (measured at ground level) or any tree listed on Council's Significant Tree Register. Some exemptions apply. Clause 5.9 does not apply to trees on land vested in the Royal Botanic Gardens and Domain Trust. As such, Council's Tree Management

Controls only apply to the street trees within Lincoln Crescent in the context of this development. These trees are protected under the provisions of the SDCP 2012.

5.2.2 *Wildlife Habitat*

The site contains a number of locally-indigenous tree species, all of which have been planted within the site. These include *Angophora costata* (Sydney Red Gum), *Eucalyptus tereticornis* (Forest Red Gum), *Eucalyptus botryoides* (Bangalay), *Banksia integrifolia* (Coast Banksia) and *Syncarpia glomulifera* (Turpentine). All of these species (whilst planted) are representative of the original vegetation of the area and would be of benefit to native wildlife. However, none of the trees contain cavities that would be suitable as nesting hollows for arboreal mammals or birds. A few of the trees show evidence of Possum foraging and claw marks consistent with those made by Brushtail and/or Ringtail Possums. There were no other visible signs of wildlife habitation.

5.2.3 *Noxious Plants & Environmental Weeds*

None of the trees assessed are scheduled as Noxious Weeds under the meaning of *Noxious Weeds Act* (NSW) 1993. None of the subject trees are considered to be Environmental Weed Species with the City of Sydney Local Government Area (LGA).

5.2.4 *Threatened Species & Ecological Communities*

None of the subject trees are listed as Threatened or Vulnerable Species or form part of Endangered Ecological Communities (EECs) under the provisions of the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999.

5.3 **Heritage Significance**

5.3.1 *Heritage Items*

The Art Gallery of NSW is listed as an item of Environmental Heritage (Item 1665) of Local Significance under Part 1, Schedule 5 of the *Sydney Local Environmental Plan* (SLEP) 2012. The Art Gallery building was designed by then Government Architect Walter Liberty Vernon in c. 1895, replacing an earlier building designed by John Horbury Hunt, constructed c. 1885. The new building was completed in 1902, with additions completed in 1904 (south wing) and 1909 (north gallery). The sandstone façade of the building features a large centrally placed classical portico with a pediment supported on fluted columns with Ionic capitals. The Gallery building is described as a grand civic monument in the Beaux-Arts tradition, typical of a number of cultural buildings in Sydney constructed around the same time. More recent modern additions to the north and east were undertaken c.1989.⁶

The Domain (excluding the Landbridge Area over the Eastern Distributor) is also listed as an item of Environmental Heritage (Item 1653) of State Significance under Part 1, Schedule 5 of the *Sydney Local Environmental Plan* (SLEP) 2012. The Domain precinct (including Mrs Macquarie's Chair) originally occupied a much larger area than present day, including the area of the Royal Botanic Garden. The Domain was originally defined by Governor Phillip in 1792. It encompassed Government House, Bennelong Point and Ansons Point (Mrs Macquarie's Chair), extending from Farm Cove (Circular Quay) to Woolloomooloo Bay. In 1820, under the direction of Governor Macquarie, the Domain was enclosed with high sandstone walls.⁷ The Domain is considered to be the most extensive, publically accessible and intact cultural landscape in Australia. It forms an open space link between the Royal Botanic Garden and Hyde Park. The Item includes numerous built features and mature plantings of *Ficus macrophylla* (Moreton Bay Fig) [circa 1880's], *Flindersia australis* (Crows Foot Ash), *Araucaria cunninghamiana* (Hoop Pine) and *Phoenix canariensis* (Canary Island Palm).⁸ The Domain was opened for public use and recreation in the 1830's. A Naval fuel bunker (now disused) was constructed beneath the playing field in the north-eastern area of the site in c.1942.

5.3.2 *Heritage Conservation Area*

The site is *not* located within a Heritage Conservation Area under Part 2 of Schedule 5 of the SLEP 2012.

5.3.3 Significant Tree Register

None of the subject trees are listed on Council's *Register of Significant Trees* Volume 4 (*Significant Trees under Private Ownership*)⁹ or Volume 2 (*Significant Street Trees*).¹⁰ The Sydney Royal Botanic Garden and Domain is noted in Council's *Register of Significant Trees* Volume 3 (*Significant Trees: Other Government Authorities, Institutional, Religious and Non-government Organisations*).¹¹ However, no trees within this precinct are specifically listed in the Register.

Trees T1, T2, T3, T4, T1096, T1097 & T1098 (all Hills Figs) were planted c. 1919-1921, being fairly typical of Inter-war period plantings in Sydney. These trees are visible as young specimens in the 1943 aerial photo of Sydney (SIX Maps). They were originally planted as part of an avenue on both sides of Art Gallery Road, but now only remain on the north-west side of the roadway. T735, T736, T737, T739, T741 & T742 (all Canary Island Palms) are visible as semi-mature specimens at this time. These trees were planted c.1909¹² following completion of the north gallery, being fairly typical of civic plantings of this period. T1363 (a Silver Date Palm) is not visible in the 1943 aerial and may have been transplanted from a nearby location sometime later. This would explain the variance in species. All these trees are considered to be of Heritage Significance. All of these trees are nominated 'High Significance' in the Landbridge Tree Survey.

T7, T8, T1222, T21, T1221 & 1223 (all Moreton Bay Figs) and T6, T1116, T1118, T1119 (Port Jackson Figs) appear to be early plantings, probably planted c. 1860-1880. These are typical of the mature plantings through much of the Domain and Hyde Park planted under the direction of Charles Moore (former Director of the Royal Botanic Garden, 1848-1896). The area surrounding the Art Gallery formerly had many more mature Figs, most of which have now been removed. T969, an *Araucaria columnaris* (Cook Pine), is also likely to have been planted at this time, being visible as a mature specimen in the 1943 aerial photo and typical of this era. This tree is nominated 'High Significance' in the Landbridge Tree Survey. T2436, a *Chamaerops humilis* (Mediterranean Fan Palm) may also have been planted during this period. All these trees are considered to be of Heritage Significance. Trees T1208, T1220, T1226 & T1227 (all Moreton Bay Figs) and T1117 (Port Jackson Fig) appear to be more recent replacement plantings, probably planted c. 1980-1990.

The Eucalypts and Angophoras on the 'Landbridge' over the Eastern Distributor and further north east surrounding the playing field are thought to have been planted c.1999 following completion of the land bridge. These have no special heritage significance.

5.4 Amenity Value

- 5.4.1 Criteria for the assessment of amenity values are incorporated into **Appendix 1**. The amenity value of a tree is a measure of its live crown size, visual appearance (form, habit, crown density), visibility and position in the landscape and contribution to the visual character of an area. Generally the larger and more prominently located the tree, and the better its form and habit, the higher its amenity value.

6 TREE RETENTION VALUES

- 6.1.1 The Retention Values shown in **Appendix 3** and **Appendix 5** have been determined on the basis of the estimated longevity of the trees and their Landscape Significance Rating (incorporating heritage, ecological and amenity significance) in accordance with **Table One**. Together with guidelines contained in **Section 7** (Tree Protection Zones) this information should be used to determine the most appropriate position of building footprints and other infrastructure within the

site, with due consideration to other site constraints, to minimise the impact on trees considered worthy of preservation.

TABLE 1 – TREE RETENTION VALUES – ASSESSMENT METHODOLOGY

	Landscape Significance Rating						
Estimated Life Expectancy	1	2	3	4	5	6	7
Long - Greater than 40 Years	High Retention Value						
Medium- 15 to 40 Years			Moderate Retention Value				
Short - 5 to 15 years			Low Ret. Value				
Transient - Less than 5 Years		Very Low Retention Value					
Dead or Potentially Hazardous							

7 TREE PROTECTION ZONES

7.1.1 The Tree Protection Zone (TPZ) is a radial distance measured from the centre of the trunk of the tree as specified in **Appendix 4**. These have been calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites).¹³

7.1.2 The intention of the TPZ is to ensure protection of the root system and canopy from the potential damage from construction works and ensure the long-term health and stability of each tree to be retained. Incursions to the root zone may occur due to excavations, changes in ground levels, (either lowering or raising the grade), trenching or other forms of soil disturbance such as ripping, grading or inverting the soil profile. Such works may cause damage or loss of part of the root system, leading to an adverse impact on the tree.

7.2 Structural Root Zone (SRZ)

7.2.1 The Structural Root Zone (SRZ) provides the bulk of mechanical support and anchorage for a tree. This is also a radial distance measured from the centre of the trunk as specified in **Appendix 4**. The SRZ has been calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites).

7.2.2 Incursions within the SRZ are not recommended as they are likely to result in the severance of woody roots which may compromise the stability of the tree or lead to its decline and demise.

7.3 Acceptable Encroachments to the Tree Protection Zone.

7.3.1 Where encroachment to the TPZ is unavoidable, an incursion to the TPZ of not exceeding 10% of the area of the TPZ and outside the SRZ may be acceptable. Examples of acceptable incursions are shown in **Appendix 2**. Greater incursions to the TPZ may result in an adverse impact on the tree.

7.3.2 Where incursions greater than 10% of the TPZ are unavoidable, exploratory excavation using non-destructive methods may be required to evaluate the extent of the root system affected and determine whether or not the tree can remain viable

7.4 Acceptable Encroachments to the Canopy

- 7.4.1 The removal of a small portion of the crown (foliage and branches) is generally tolerable provided that the extent of pruning required is less than 10% of the total foliage volume of the tree and the removal of branches does not create large wounds or disfigure the natural form and habit of the tree. All pruning cuts must be undertaken in accordance with AS 4373:2007. This generally involves reduction of the affected branches back to the nearest branch collar at the junction with the parent branch, rather than at an intermediate point. The latter is referred to as “lopping” and is no longer an acceptable arboricultural practice. Generally speaking, the minimum pruning as required to accommodate any proposed works is desirable. Extensive pruning can result in a detrimental impact on tree health and may lead to exposure of remaining branches to wind forces that they were previously sheltered from, leading to a greater risk of branch failure.
- 7.4.2 Clearance to between the building line and canopy should take into account any projecting structures, such as balconies, awnings and the roofline and any requirement for temporary scaffolding to be erected during construction (typically 1-1.5 metres wide). High structures should preferably be located outside the canopy dripline (as shown indicatively on the attached plans) in order to avoid or minimise canopy pruning.

8 PROPOSED DEVELOPMENT

- 8.1.1 The Art Gallery of NSW proposes to undertake a major expansion of the existing art gallery adjacent to the Phillip Precinct of the Domain. The expansion, proposed as a separate, stand-alone building, is located north of the existing gallery, partly extending over the Eastern Distributor land bridge and a disused Navy fuel bunker located to the north east of this land bridge.
- 8.1.2 The new building comprises a new entry plaza, new exhibition spaces, shop, food and beverage facilities, visitor amenities, art research and education spaces, new roof terraces and landscaping and associated site works and infrastructure, including loading and service areas, services infrastructure and an ancillary seawater heat exchange system.

9 IMPACT ASSESSMENT

- 9.1.1 The intention of this assessment is to determine the incursions to the root zones and canopies created by the proposed development and evaluate the likely impact of the proposed works on the subject trees. Details shown on the following plans were used in this assessment:-

Title	Author	Dwg No.	Date
<i>Landscape Master Plan – GF Level</i>	McGregor Coxall	LD_DA_00-02 Rev K	03/10/2017
<i>Roof level Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Entry level Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Level 1 Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Level 2 Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Level 3 Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Level 4 Plan</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Section A-A</i>	SANAA	OVA-ARCH-D-XXXX	05/09/2017
<i>Section B-B</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017
<i>Section C-C</i>	SANAA	OVA-ARCH-D-XXXX	26/09/2017

- 9.1.2 Note that no other drawings or documents were provided for review as part of this assessment.
- 9.1.3 A summary of the impact of the proposed development on each tree within the site is shown in **Appendix 5**. The following criteria have been examined as part of this assessment:-
- Existing Relative Levels (R.L.);
 - Tree Protection Zone (TPZ);
 - Structural Root Zone (SRZ);
 - Footprint and envelope of the proposed development and temporary structures (scaffolding, hoardings etc);
 - Incursions to the TPZ & SRZ, including estimated cut & fill beyond the building footprint;
 - Incursions to the tree canopy from the building envelope and temporary structures; and
 - Assessment of the likely impact of the works on existing trees.
- 9.1.4 The proposed development will necessitate the removal of forty-two (42) trees of low and very low retention value. These include Tree No.s T3708 (Black Wattle), T2888, T2910, T2941, T2942, T2951a, T4431 & T4432 (Sydney Red Gum), T2383, T2384, T2385, T2386, T2387, T2388, T2389, T2390, T2392, T2393 & T2394 (Red Flowering Gum), T2889, T2899, T2957, T2971, T2976, T3690, T3711, T4436, T4817 & T4819 (Bangalay), T2934 (hybrid Blue Gum/Bangalay), T2930a, T2963, T2978, T3004, T4433, T4458, T4461 & T4815 (Forest Red Gum), and T4714, T22, T23 & T24 (Port Jackson Fig). None of these trees are considered significant or worthy of special measures to ensure their preservation. It should be noted that Trees T22, T23 & T24 are located within the road reserve (median) in Lincoln Crescent.
- 9.1.5 The proposed development will also necessitate the removal of ninety-one (91) trees of moderate retention value. These include Tree No.s T2405, T2406, T2407, T2408, T2409, T2410, T2411, T2413, T2416, T2417, T2419, T2422, T2423, T2426, T2427, T2428, T2430, T2432, T2433, T2887, T2892, T2895, T2913, T2943, T2958, T2983, T4738, T4739, T4820, T4820a, T4821 & T4822 (Sydney Red Gum), T2434 & T2990 (Coast Banksia), T2985 (Swamp Oak), T2901, T2931, T2932, T2933, T2953, T2954, T2955, T2970, T3000, T3006, T3710 & T4452 (Bangalay), T3692 (Sydney Blue Gum), T2897, T2930 & T4437 (hybrid Blue Gum/Bangalay), T4459 (Stringybark), T2904, T2905, T2907, T2908, T2912, T2915, T2916, T2918, T2920, T2922, T2928, T2951, T2952, T2965, T2973, T2979, T2980, T2982, T2984, T2986, T2991, T2994, T3001, T3007, T3712, T4435, T4450, T4453 & T4460 (Forest Red Gum), T1119, T2999, T2997 & T2998 (Port Jackson Fig), T2936, T2937, T2938, T2939 & T2940 (Crows Foot Ash) and T4842 (Turpentine). With exception of T1119, these trees are not considered significant, but are in good health and condition and make a fair contribution to the amenity of the site and surrounding properties. In order to compensate for loss of amenity resulting from the removal of these trees to accommodate the proposed development, consideration should be given to replacement planting within the site in accordance with Section 11. It should be noted that T1119 (Port Jackson Fig) is a very substantial specimen and is considered to be of heritage significance. However, Diagnostic Testing using a Picus Sonic Tomograph has indicated extensive decay and a large cavity in the lower trunk, which render the tree potentially hazardous. There is no remedial action that can be recommended in this instance to mitigate the hazard. As such, the removal of this tree to accommodate the proposed development is considered warranted in this instance.
- 9.1.6 The proposed development will also necessitate the removal of seven (7) trees of high retention value. These include Tree No.s T2972, T2989, T2992, T2993, T2995 & T3002 (Forest Red Gum) and T2996 (Port Jackson Fig). None of these trees have any special ecological or heritage significance. However, all of these trees are in good health and condition and make a positive contribution to the amenity of the site. Given the position of these trees within the site and the extent and scale of the site development, there are no feasible options that can be recommended in this instance to preserve these trees. In order to compensate for loss of amenity resulting from the removal of these trees to accommodate the proposed development, consideration should be given to replacement planting within the site in accordance with Section 11.

- 9.1.7 A further eight (8) trees, including three (3) of high retention value [Tree No.s T2436 (Mediterranean Fan Palm), T1228 (Moreton Bay Fig) & T742 (Canary Island Palm)] and five (5) of moderate retention value [T4481, T4580, T4579, T4578 (Cabbage Tree Palm) and T1227 (Moreton Bay Fig)] are proposed to be relocated (transplanted) elsewhere within the site as shown indicatively on the Landscape Plans prepared by McGregor Coxall. The transplantation of these trees is considered to be horticulturally feasible provided that the works are undertaken in accordance with the following Transplanting Specification (refer Section 12). The exact positions shall be determined on site in consultation with the Landscape Architect, Project Arborist and Transplant Contractor to ensure that the trees are relocated into positions that have adequate above and below ground space for future growth and restoration of the root system. Transplanted trees should be placed outside the TPZ of any existing trees to be retained.
- 9.1.8 Three newly planted Hill's Figs adjacent Art Gallery Road (not included in this assessment) are located within a proposed new footway and parking bay within Art Gallery Road. Consideration should be given to transplanting these trees elsewhere within the site in accordance with Section 12.
- 9.1.9 The proposed new Entry Plaza area is located just outside the TPZ of T1226 (Moreton Bay Fig). Given the level of the Plaza, some filling will be required on the north-eastern side of this tree, potentially encroaching upon the TPZ. This area is currently occupied by a sandstone rock embankment. The proposed works will not result in any adverse impact on this tree, provided that any required filling beyond the footprint of the Plaza does not encroach upon an area of greater than 10% of the TPZ. This would be equivalent to a minimum setback of 6 metres between the trunk and the toe of the bank at tangent to the TPZ (refer to **Appendix 2**). In order to avoid any adverse impact on this tree, any fill required to be placed within the TPZ should be supplied and placed in accordance with **Section 10.9**. It is recommended that the proposed gravel treatment beneath this tree be deleted and the existing turf grass and soft landscape area on the embankment surrounding the tree be maintained at existing levels to avoid disturbance within the root zone.
- 9.1.10 A proposed new building (Gallery 1) is located within the TPZ of T1118 (Port Jackson Fig). Assuming minimal over-excavation to facilitate construction of the associated retaining walls, excavations for the building foundations will result in an encroachment to the TPZ of this tree of approximately 8%, which is within acceptable limits under AS 4970:2009. The roofline is just clear of the canopy dripline. No canopy pruning should be required to clear the building envelope. In order to avoid canopy pruning to clear temporary scaffolding, the temporary scaffolding on the northern façade of the building should be limited to no greater than 1.5 metres from the building wall and the scaffolding should be erected in accordance with Section 10.14.
- 9.1.11 The existing asphalt pathway alongside Art Gallery Road (north-western side) is proposed to be demolished and replaced with a new granite stone pathway within the TPZs of Trees T1, T2, T3, T4, T1096, T1097 & T1098 (all Hills Figs). The pathway is sited slightly further away from the trees than the existing pathway. Assuming that the pavement section of the proposed granite pavement and existing asphalt pavement are similar and the new pavement is installed at the existing level and grade, the proposed new pathway should not result in any adverse impact on these trees. In order to avoid any adverse impact, demolition of the existing asphalt pathway should be undertaken in accordance with Section 10.5 and any required excavations for the sub-grade of the new pavement within the TPZs of these trees should be undertaken in accordance with Section 10.6. A Tree Protection Fence should be erected in accordance with Section 10.3.
- 9.1.12 A new granite paved area is proposed to be installed within the TPZ of T1363 (Silver Date Palm). Excavations and compaction for the new pavement subgrade will result in an encroachment to the TPZ of approximately 26%, which exceeds acceptable limits under AS 4970:2009. This extent of encroachment is likely to result in an adverse impact on this tree. Given the significance of this palm and the nearby group of which it forms, it is recommended that the pavement be reduced to

limit the encroachment to the TPZ to no greater than 10%. This would be equivalent to a minimum setback distance (on one side, at tangent to the TPZ – refer **Appendix 2**) of 3.6 metres.

9.1.13 No other trees will be adversely affected by the proposed development.

10 RECOMMENDED TREE PROTECTION MEASURES

10.1 Tree Protection Plan

10.1.1 The following Tree Protection Measures should be read in accordance with the Tree Protection Plan (**Appendix 6**). The Tree Protection Plan (TPP) indicates the position of tree protection devices and other recommended measures to ensure the protection of trees within the site to be retained as part of the proposed development.

10.2 Prohibited Activities

10.2.1 The following activities should be avoided within specified Tree Protection Zones (refer **Appendix 4 & 6** for extent of the TPZ for each tree):-

- Excavations and trenching (with exception of the approved remediation works, underground services, building foundations or pavement sub-grade);
- Soil disturbance, surface grading, compaction, tining, ripping or cultivation of soil;
- Mechanical removal of vegetation, including extraction of tree stumps;
- Soil level changes including the placement of fill material (excluding imported validated fill for remediation works or placement of fill for approved works)
- Movement and storage of plant, equipment & vehicles (except within defined temporary haul roads, where ground protection has been installed, or within the footprint of existing floor slabs or paved areas);
- Erection of site sheds (except where approved by the site arborist);
- Affixing of signage, barricades or hoardings to trees;
- Storage of building materials, waste and waste receptacles;
- Stockpiling of spoil or fill;
- Stockpiling of bulk materials, such as soil, sand, gravel, roadbase or the like;
- Stockpiling of demolition waste;
- Disposal of waste materials and chemicals including paint, solvents, cement slurry, fuel, oil and other toxic liquids;
- Other physical damage to the trunk or root system; and
- Any other activity likely to cause damage to the tree.

10.3 Tree Protection Fencing

10.3.1 All trees within the site to be retained shall be protected prior to and during construction from all activities that may result in detrimental impact by erecting a suitable protective fence beneath the canopy to the full extent of the Tree Protection Zone, excluding the footprint of the proposed works and areas within adjoining properties, as indicated on the Tree Protection Plan. As a minimum, the fence should consist of temporary chain wire panels of 1.8 metres in height, supported by steel stakes as required and fastened together and supported to prevent sideways movement using corner braces where required. The fence shall be erected prior to the commencement of any work on-site and shall be maintained in good condition for the duration of construction. Where tree protection zones merge together a single fence encompassing the area is deemed to be adequate. Existing site boundary fences may form part of the enclosure.

10.3.2 Appropriate signage shall be installed on the fencing to prevent unauthorised movement of plant and equipment or entry to the Tree Protection Zone.

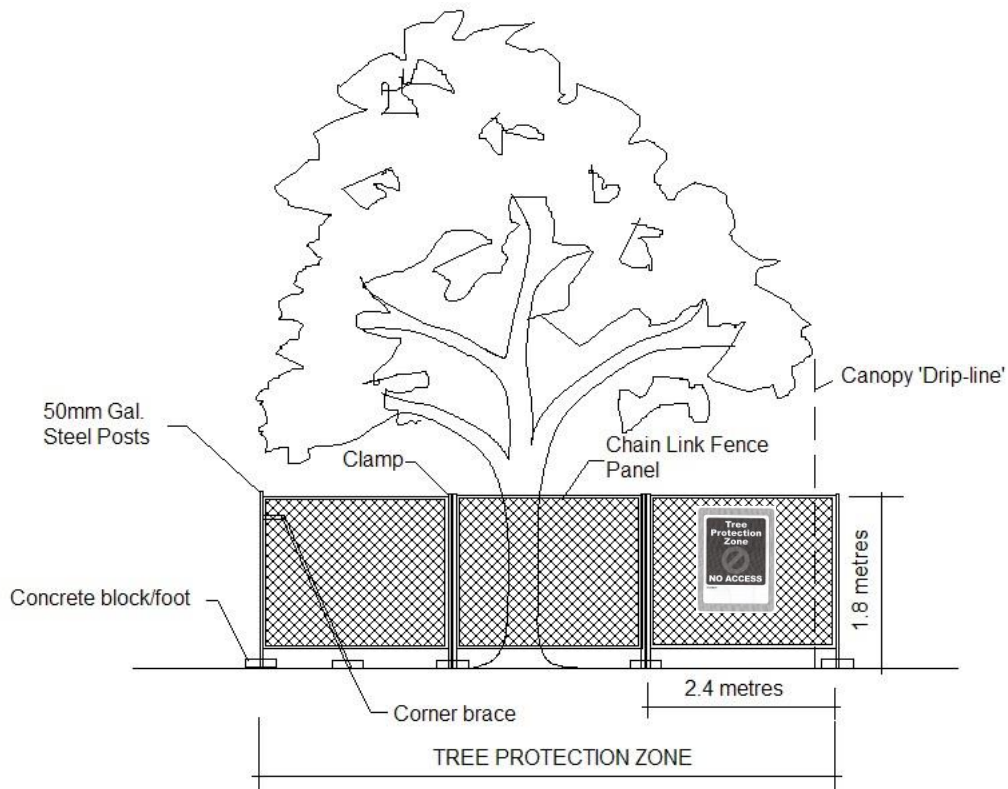


Figure 1 – Detail of Tree Protection Fence

10.4 Tree Protection Signs

10.4.1 Signs shall be installed on the Tree Protection Fence to prevent unauthorised movement of plant and equipment or entry to the Tree Protection Zone. The signs shall be securely attached to the fence using cable ties or equivalent. Signs shall be placed at minimum 10 metre intervals. The wording and layout of the sign shall comply with AS 4970-2009 as shown in **Figure 2**.



Figure 2 – Detail of Tree Protection Sign

10.5 Demolition Works within Tree Protection Zones

10.5.1 Demolition of paved areas within the Tree Protection Zones of trees to be retained shall be undertaken under the supervision of the Site Arborist. The pavement surface and sub-base within the TPZ shall be gradually removed in layers of no greater than 50mm thick using a small rubber tracked excavator or alternative approved method to avoid damage to underlying roots and minimise disturbance and compaction of the underlying soil profile. The machine shall work within the footprint of the existing paved surfaces to avoid compaction of the underlying soil. The final layer of sub-base material shall be removed using hand tools were required to avoid compaction of the underlying soil profile and damage to woody roots.

10.5.2 Following removal of the pavement surface and sub-base, clean, friable topsoil shall be used to fill in the excavated area and bring flush with surrounding levels within new landscape areas. Soil shall only be imported and spread when the underlying soil conditions are dry to avoid compaction

of the soil profile. Where there is insufficient recovered site topsoil for this purpose, any imported material shall be free of rocks, vegetation, heavy clay or other extraneous matter. Any imported soil material should be similar in texture to the existing site topsoil.

- 10.5.3 Demolition of existing walls, kerbs and other structures within the Tree Protection Zone of trees to be retained shall be undertaken under the supervision of the Site Arborist. The structures shall be demolished using equipment on stationed outside the TPZ where possible or within the footprint of existing hardstand areas. Care shall be taken to avoid the root systems, trunks and lower branches of trees in the vicinity of the structures during demolition works, with special attention required during demolition of the footings and other sub-surface members to avoid damage to woody roots.

10.6 Excavations within Tree Protection Zones

- 10.6.1 Prior to any mechanical excavations for building foundations or pavement sub-grade within the Tree Protection Zone of all trees nominated for retention, exploratory excavation using non-destructive techniques shall be taken along the perimeter of the structure or pavement within the TPZ. Non-destructive excavation techniques may include the use of hand-held implements, air pressure (using an Air-spade® device) or water pressure. The exploratory excavation shall be undertaken along the perimeter of the foundation or pavement (within the TPZ) to the depth of the foundation or to a maximum of 800mm from surface levels, to locate and expose any woody roots prior to any mechanical excavation. All care shall be undertaken to preserve woody roots intact and undamaged during exploratory excavation. Any roots encountered of less than 50mm in diameter may be cleanly severed with clean sharp pruning implements at the face of the excavation. The root zone in the vicinity of the excavation shall be kept moist following excavation for the duration of construction to minimise moisture stress on the tree.
- 10.6.2 Where large woody roots (greater than 50mm diameter) are encountered during exploratory excavations, further advice from a qualified arborist shall be sought prior to severance. Where necessary, (to avoid severing large woody roots) consideration should be given to the installation of an elevated structure (e.g. pier and beam footing, suspended slab or floor supported on piers, cantilevered slab, up-turned edge beam etc) in preference to structures requiring a deep edge beam or continuous perimeter strip footing. The beam section of any pier and beam footing should be placed **above** grade to avoid excavation within the SRZ. Pier footings intersecting large woody roots should be slightly offset where necessary to avoid root severance.
- 10.6.3 For masonry walls or fences it may be acceptable to delete continuous concrete strip footings and replace with suspended in-fill panels (eg steel or timber pickets, lattice etc) fixed to pillars. For paved areas, consideration should be given to raising the proposed pavement level and using a porous fill material in preference to excavation where large woody roots are found within the sub-base.

10.7 Underground Services

- 10.7.1 All proposed stormwater lines and other underground services should be located outside TPZs of trees proposed to be retained wherever possible or installed by alternative measures. Alternative measures include suspending pipelines beneath the floor of a building or structure (to avoid excavation with the TPZ), non-destructive excavation methods or Horizontal Directional Drilling (HDD). Where the installation of service lines within TPZs is unavoidable, the pipelines or conduits should be installed as follows.
- 10.7.2 Where the extent of the incursion to the root zone is less than 10% of the TPZ including any excavations for benching and shoring the trench, the pipeline or conduit may be installed by open trenching using standard construction methods (excavator or trenching machine). 10% of the TPZ

is equivalent to one-third of the TPZ radius on one side (refer to **Appendix 2**). Refer to **Appendix 4** for radial distances of TPZs for each tree.

- 10.7.3 Where the extent of the incursion to the root zone exceeds 10% of the TPZ, but is outside the SRZ, non-destructive excavation methods must be adopted in accordance with **Section 10.6**. Where large woody roots are encountered during excavation or trenching (root diameter greater than 50mm), these shall be retained intact wherever possible (e.g. by tunnelling beneath roots and inserting the pipeline or conduit beneath or re-routing the service etc). Where this is not practical and root pruning is the only alternative, proposed root pruning should be assessed by a qualified arborist [AQF 5] to evaluate the potential impact on the health and stability of the subject tree.
- 10.7.4 Excavations required for underground services within the Structural Root Zone of any tree to be retained should only be undertaken by sub-surface boring (Horizontal Directional Drilling). The Invert Level of the pipe, plus the pipe diameter, must be lower than the estimated root zone depth as specified. At this site a minimum depth of 1 metre to the invert level of the pipe is specified.

10.8 Pavements

- 10.8.1 Proposed paved areas within the Tree Protection Zone (TPZ) of trees to be retained should be placed at or slightly above grade where possible to minimise excavations within the root zone and avoid severance and damage of woody roots. The pavement sub-base material should be supplied and installed in accordance with **Section 10.9**.

10.9 Pavement Sub-base

- 10.9.1 Pavement sub-base material within TPZs of trees to be retained shall be a coarse, gap-graded material such as 20 – 50mm crushed basalt (Blue Metal) or equivalent no-fines gravel material to provide some aeration and moisture permeation to the root zone. Note that road base or crushed sandstone or other similar material containing a high percentage of fines is unacceptable for this purpose. The fill material should be consolidated using a non-vibrating roller or similar to minimise compaction of the underlying soil. A permeable geotextile may be used beneath the sub-base to prevent migration of the stone into the sub-grade and provide greater load capacity.

10.10 Placement of Fill Material

- 10.10.1 Placement of fill material within the Tree Protection Zone (TPZ) of trees to be retained should be avoided wherever possible. Where placement of fill is unavoidable, the material shall be a well-drained friable material, equivalent in texture to the existing site topsoil material. The fill should be free from rocks, vegetation and other extraneous material complying with AS 4419:2003 (*Soils for Landscaping and Garden Use*).
- 10.10.2 The fill may be lightly consolidated, but shall not be compacted to engineering standards. No fill material should be placed in direct contact with the trunk.
- 10.10.3 Plant and equipment used to place and spread fill material should be stationed outside the TPZ where possible. Where not possible, suitable ground protection should be installed in accordance with **Section 10.15** to avoid compaction of the underlying soil profile and root zone.

10.11 Canopy & Root Pruning

- 10.11.1 All canopy pruning work required shall be carried out in accordance with Australian Standard 4373-2007 – Pruning of Amenity Trees. Written approval from Council may be required under the Tree Preservation Order prior to undertaking this work. All pruning work shall be carried out by a qualified and experienced arborist or tree surgeon [Australian Qualification Framework Level 3] in

accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). No branches of greater than 100mm in diameter should be removed or pruned without further advice from a Consulting Arborist [Australian Qualification Framework Level 5].

- 10.11.2 Where root pruning is required, roots shall be severed with clean, sharp pruning implements and retained in a moist condition during the construction phase using Hessian material or mulch where practical. Severed roots shall be treated with a suitable root growth hormone containing the active constituents Indol-3-yl-Butric Acid (IBA) and 1-Naphthylacetic Acid (NAA) to stimulate rapid regeneration of the root system.

10.12 Tree Damage

- 10.12.1 Care shall be taken when operating cranes, drilling rigs and similar equipment near trees to avoid damage to tree canopies (foliage and branches). Under no circumstances shall branches be torn-off by construction equipment. Where there is potential conflict between tree canopy and construction activities, the advice of the Site Arborist must be sought.
- 10.12.2 In the event of any tree becoming damaged for any reason during the construction period a consulting arborist [Australian Qualification Framework Level 5] shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the arborist.

10.13 Tree Removal

- 10.13.1 The approval of City of Sydney Council shall be obtained prior to the removal or pruning of any tree protected under the SDCP 2012 (including any trees within road reserves under the care, control and management of City of Sydney Council, such as Lincoln Crescent) and approval of the Royal Botanic Gardens and Domain Trust shall be obtained prior to removing any tree protected under the *Royal Botanic Gardens and Domain Trust Regulation 2013*.
- 10.13.2 Tree removal work shall be carried out by an experienced tree surgeon in accordance with the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). Care shall be taken to avoid damage to other trees during the felling operation.
- 10.13.3 Stumps located within the TPZs of trees to be retained shall be grubbed-out where required using a mechanical stump grinder (or by hand where less than 150mm in diameter) without damage to the root system of other trees. Where trees to be removed are within the SRZ of any trees to be retained, consideration should be given to cutting the stump close to ground level and retaining the root crown intact. Stumps within the Tree Protection Zone of other trees to be retained shall **not** be pulled out using excavation equipment or similar.

10.14 Temporary Scaffolding

- 10.14.1 Where temporary scaffolding must be erected within the TPZ of trees to be retained (as indicated in **Appendix 6**), the scaffold shall be erected in accordance with **Figure 4**. Where foliage or branches project through the scaffold and create a safety hazard, this foliage and branches shall be temporarily excluded from the inner part of the scaffold by affixing a shade cloth screen on the outside of the scaffold (refer to **Figure 4**), or alternatively temporarily tying back branches where required. The pruning or removal of branches to accommodate the scaffold should be avoided wherever possible. Suitable ground protection shall be installed beneath the scaffold as shown in **Figure 4** to prevent contamination, disturbance and compaction of the soil profile within the scaffold zone during construction.

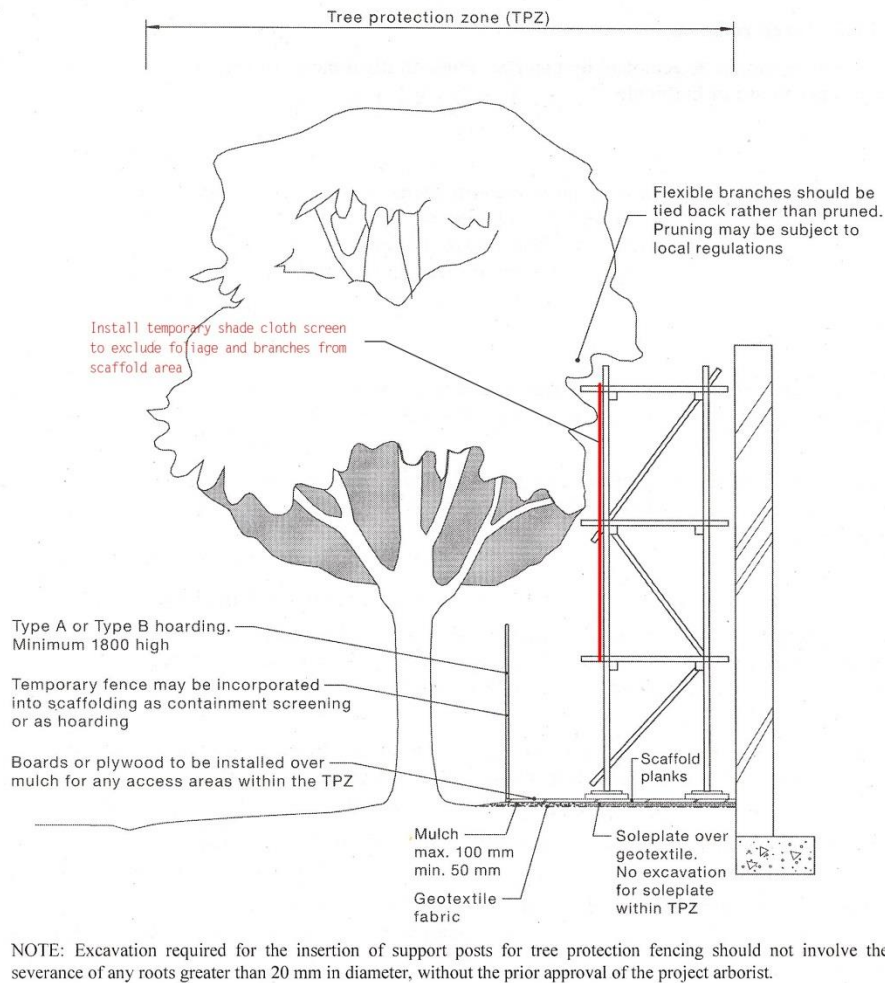


Figure 4 - Detail of Temporary scaffolding within a Tree Protection Zone

10.14.2 Where pruning or removal of branches to accommodate temporary scaffolding is unavoidable, all such pruning work shall be undertaken in accordance with **Section 10.11**.

10.15 Ground Protection

10.15.1 A 100mm layer of woodchip mulch or washed river sand shall be installed within designated areas of the Tree Protection Zone of nominated trees as indicated on the Tree Protection Plan (Appendix 7) to minimise compaction of the underlying soil profile during construction activity and haulage. A Geotextile fabric, such as Geotex® 'ST' Series manufactured by Synthetic Industries or an equivalent product, shall be installed beneath the mulch/sand layer to minimise compaction to the underlying soil profile and limit migration of mulch into the underlying soil profile. Mulch/sand shall be installed and spread by hand to avoid soil disturbance and compaction within the root zone.

10.15.2 To minimise displacement of woodchip/sand in highly trafficked areas, 20mm thick marine ply sheets, truck mats (such as Envirex Versadeck® access mats) or rumble boards should be placed over the top of the woodchip/sand. Rumble boards can be constructed with timber sleepers or similar spaced with no more than 200mm gaps between boards and held together with galvanised hoop strap or similar (refer **Figure 5**).



Figure 5 – Showing typical detail for rumble boards.

10.15.3 Ground protection shall be installed prior to any site works and maintained in good condition for the duration of the construction period. On completion of the works, ground protection shall be removed without damage or disturbance to the underlying soil profile.

11 REPLACEMENT PLANTING

11.1.1 Two-hundred and sixty-five (265) new trees are proposed to be planted within the site as part of the landscape works associated with the development. The extent of replacement planting is adequate to compensate for loss of amenity (resulting from the removal of trees to accommodate the development) in the short term (next 10 to 15 years).

11.1.2 Some replacement planting should be consistent with the Victorian Period to maintain historic references to past planting and maintain the visual character of the precinct. The following species palette would be appropriate to the site conditions and sympathetic with the existing plantings within The Domain:-

- *Ficus macrocarpa* (Moreton Bay Fig)
- *Ficus rubiginosa* (Port Jackson Fig)
- *Ficus obliqua* (Small-leaf Fig).
- *Ficus virens* (Deciduous Fig)
- *Araucaria cunninghamii* (Hoop Pine)
- *Araucaria heterophylla* (Norfolk Island Pine)
- *Araucaria columnaris* (Cook Pine)
- *Quercus ilex* (Holm Oak),
- *Quercus suber* (Cork Oak)
- *Washingtonia filifera* (Cotton Palm)
- *Flindersia australis* (Australia Teak)
- *Waterhousea floribunda* (Weeping LillyPilly)
- *Syzygium paniculatum* (Magenta Cherry)
- *Afrocarpus falcatus* (Yellowwood)
- *Brachychiton discolor* (Queensland Lacebark)
- *Callitris columellaris* (White Cypress Pine)
- *Magnolia grandiflora* (Bullbay Magnolia)

- *Agathis robusta* (Queensland Kauri).
- 11.1.3 Replacement trees should preferably include some locally indigenous species in appropriate areas. These will be most appropriate to the site conditions and be most valuable in terms of preserving the landscape character and wildlife habitat of the area. The following species are appropriate to the site conditions and could be considered for replacement planting:-
- *Ficus rubiginosa* (Port Jackson Fig)
 - *Glochidion ferdinandi* (Cheese Tree)
 - *Corymbia gummifera* (Red Bloodwood)
 - *Eucalyptus haemastoma* (Scribbly Gum)
 - *Eucalyptus punctata* (Grey Gum)
 - *Eucalyptus sieberi* (Silvertop Ash)
 - *Eucalyptus pilularis* (Blackbutt)
 - *Eucalyptus tereticornis* (Forest Red Gum)
 - *Angophora costata* (Sydney Red Gum)

12 TRANSPLANTING

12.1 Extent of Work

- 12.1.1 The work under this specification includes the transplantation of the following trees:-
- one (1) *Phoenix canariensis* (Canary Island Palm) [T742];
 - one (1) *Chamaerops humilis* (Mediterranean Fan Palm) [T2436];
 - two (2) *Ficus macrophylla* (Moreton Bay Fig) [T1227 & T1228]; and
 - four (4) *Livistona australis* (Cabbage Tree Palm) [T4578, T4579, T4580 & T4581].
- 12.1.2 The approximate dimensions of these trees are indicated in **Appendix 3**.
- 12.1.3 The location of each tree to be transplanted is indicated on the 'Tree Action Plan' prepared by McGregor Coxall, Dwg No. LD_DA_50-01 Rev D dated 26/07 2016. This drawing also shows indicative positions for relocation of the trees (new planting sites). Exact positions for placement shall be verified with the Project Arborist and Landscape Architect prior to commencement of work.
- 12.1.4 The scope of work under this specification includes the preparation, excavation, lifting, replanting and maintenance of the subject tree in accordance with this Specification.
- 12.1.5 A **Project Arborist** will be appointed to oversee the works and certify compliance with this specification.

12.2 Inspection and Hold Points

- 12.2.1 Give 48 hours notice to the Project Arborist prior to the following hold points:-
- Following excavation of the sides of the root plate and root pruning and prior to burlaping and undercutting of the root plate;
 - Following undercutting and burlaping of the root plate and prior to lifting;
 - Following excavation of the new planting holes and drainage and prior to planting;
 - Following planting and prior to backfilling of the planting hole; and
 - At completion of the works.
- 12.2.2 Works shall not proceed until such time as the Project Arborist (or their nominated representative) has inspected the site at each of the above hold points and given verbal approval to proceed.

12.3 Site Preparation

- 12.3.1 Prior to commencement of any excavation work, the root plate of each tree (at the extent of the proposed excavation) shall be marked-out on the ground at using high visibility marker paint.
- 12.3.2 The orientation the tree to north shall be marked on the base of the trunk using indelible marker paint so that the trees can be stored and reinstated in the same orientation as they are presently growing. A spot mark of no greater than 30mm in diameter shall be marked on the stem at 200mm from ground level on the north side of the tree.

12.4 Underground Services

- 12.4.1 Prior to commencement of any excavation, all underground services in the vicinity of the works shall be located using appropriate searches through relevant utility authorities or Dial Before You Dig. The position of the service lines shall be verified with suitable detection equipment and the alignment marked on the ground surface and labeled with high visibility marker paint.
- 12.4.2 Repair of underground services damaged during the transplanting operation as a result of the tree relocation works shall be the responsibility of the contractor.

12.5 Excavation of the Root Plate

- 12.5.1 Prior to excavation of the root plate, the root zone of each tree shall be moistened to just below field capacity and allowed to drain.

12.6 Canopy Pruning

- 12.6.1 All live branches of the subject trees shall be retained intact. No pruning of live palm fronds or branches of the subject trees shall be undertaken without prior approval of the Project Arborist. Where necessary, palm fronds shall be tied back into the crown temporarily to avoid damage or pruning and aid in relocation.
- 12.6.2 Where approval is granted for the removal of live fronds or branches to facilitate excavation of the root plate, all pruning work shall be undertaken under the supervision of a qualified arborist with a minimum qualification of Australian Qualification Framework (AQF) Level 5 in accordance with Australian Standard No 4373-2007 – Pruning of Amenity Trees and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998). Appropriate hygiene measures shall be implemented to avoid infection with Fusarium Wilt or other diseases.

12.7 Minimum Root Plate Size

- 12.7.1 The minimum root plate size for each tree shall be nominated by the Transplant Contractor and submitted to the Project Arborist for review and approval prior to commencement. The size of the root plate shall be determined based on the maximum size possible to ensure the sustainability of the tree in consideration of the logistical constraints in lifting and transporting the mass of the tree and root plate.

12.8 Root Plate Depth

- 12.8.1 The root plate depth shall be determined on the basis of the existing site conditions to encapsulate as much of the root crown as possible. As a minimum, the root plate shall be undercut at 800 mm from surface level unless rock is encountered at less than this depth. Where soil depth is found to be less than 800mm, the Project Arborist shall be notified prior to undercutting of the root plate.

12.9 Preparation of Root Plate

- 12.9.1 Prior to mechanical excavation of the root plate, roots at the extremity of the root plate shall be exposed by excavating a trench with a suitable high pressure water device (such as the WaterKnife) or pneumatic device (such as the Airspade®) or satisfactory alternative method to locate and expose roots along the perimeter of the marked root plate. Any alternative method shall be submitted to the Project Arborist or approval prior to commencement.

HOLD POINT : Following excavation of the sides of the root plate and root pruning and prior to burlaping and undercutting of the root plate, the Project Arborist shall inspect the root plate.

- 12.9.2 Any soil slurry or dust arising from the excavation shall be contained using silt fencing, a vacuum unit or other suitable device. Under no circumstances shall soil slurry be pumped to or directed to stormwater drains, channels or open water bodies. Any stormwater inlet pits in the vicinity of the works shall be adequately protected prior to root plate preparation from the influx of sediment laden water using an appropriate filter fabric or approved equivalent method. Soil slurry collected in a vacuum unit shall be disposed of at a Licensed Landfill site registered to accept such waste.
- 12.9.3 All care shall be undertaken to preserve root systems intact and undamaged during pneumatic or hydraulic excavation.
- 12.9.4 Alternative methods (such as excavation using a chain trenching device), may be considered subject to a methodology detailing the equipment proposed being submitted to the Project Arborist for approval prior to commencement.

12.10 Root Pruning

- 12.10.1 Following pneumatic or hydraulic excavation of the sides of the root plate and prior to any mechanical excavation, all roots at the extremity of the root plate shall be severed at the face of the excavation by hand using clean, sharp pruning implements. All such pruning shall be undertaken by an experienced arborist with a minimum qualification of Australian Qualification Framework (AQF) Level 3.

12.11 Root Growth Hormone Treatment

- 12.11.1 Severed roots shall be treated with a suitable root growth hormone containing the active constituents Indol-3-yl-Butric Acid (IBA) and 1-Naphthylacetic Acid (NAA) to stimulate rapid regeneration of the root system. The method of application (e.g. spray, soil drench etc) shall be submitted to the project arborist prior to commencement.

12.12 Excavation

- 12.12.1 Following root pruning, bulk excavation around the root plate shall be undertaken using a suitable backhoe or excavator to remove excess soil and permit access for lifting and undercutting equipment where required. All care shall be undertaken during bulk excavation to avoid damage to the crown (foliage and branches) and trunk of the trees.
- 12.12.2 The root plate shall be undercut to the prescribed depth using a Waterknife (palms), horizontal boring (trees) or other approved method to ensure the retention of the majority of the root system and avoid damage to the root crown.
- 12.12.3 Methods involving ramming or hammering steel bars, tubes or plates beneath the root plate using pneumatic or hydraulic pressure are **not** acceptable. The proposed method of undercutting shall be submitted to the Project Arborist for approval prior to commencement of work.

- 12.12.4 Immediately following the excavation, the sides of the root plate shall be temporarily shored and stabilised with a suitable material (hessian, polythene film or equivalent) to prevent soil erosion and drying within the remaining root plate. The root plate shall be maintained in a moist condition and prevented from drying out for the duration of the transplanting process. Under no circumstances shall the root plate be allowed to dry out completely.

12.13 Protection & Restoration

- 12.13.1 All unattended excavations shall be fenced off to prevent public access. High visibility barricades shall be installed around the perimeter of the excavation until such time that the excavation is backfilled and made safe.
- 12.13.2 The site shall be restored to original condition by backfilling holes with clean site material or clean imported fill material where required. The backfill material shall be consolidated and ground levels shall be restored to an even grade to match existing surfaces at their pre-existing levels. Fill material shall be free of all extraneous material including vegetation, rock and debris.

12.14 Burlaping Root Plate

- 12.14.1 The root plate shall be wrapped using a triple layer of Hessian material or equivalent flexible pervious geofabric material and tied securely using rope lacing, wire mesh or approved equivalent method to prevent soil loss from the root plate prior to lifting.

HOLD POINT: Following undercutting and burlaping of the root plate and prior to lifting; the Project Arborist shall inspect the prepared root plate.

12.15 Lifting

- 12.15.1 Palms trees shall be lifted using appropriate soft web slings placed securely and evenly around the root plate, supporting the trunk where required. Trees shall only be lifted using cables or chains attached to anchor points on a constructed lifting platform. During lifting operations, the root plate shall be fully supported and completely contained to prevent soil loss damage to the root plate. The tree shall *not* be lifted by wrapping slings, ropes or cables directly around the trunk. Ropes and cables shall not be placed or tied around the trunk. Cables and chains used in lifting shall be adequately padded with suitable material where they may contact the trunk or branches to avoid abrasion and damage to trunk and branches during the lifting and movement operation.
- 12.15.2 The tree and root plate shall be lifted using a mobile crane or similar device. The trees shall not be lifted and relocated using excavators or similar equipment.

12.16 Preparation of New Planting pit

- 12.16.1 The tree shall be installed in the new position as indicated on the Landscape Plan prepared by McGregor Coxall to conform to the finished levels as indicated.
- 12.16.2 The new planting site shall be prepared by excavating a hole slightly larger (300mm all round clearance) and the same depth as the existing root plate. The sides of the planting hole shall be sloped at approximately 60 degrees. The base of the planting hole shall be shaped with a slight fall (1 in 50 grade) toward the sub-surface drainage line to ensure drainage of the planting pit.
- 12.16.3 The sides of the planting pit shall be de-glazed and scarified using hand tools or other approved method to relieve compaction and aid in root penetration following establishment.

12.17 Drainage

- 12.17.1 A narrow trench (100-150mm wide) shall be excavated from the lowest point of the planting hole for a distance of three metres to the surrounding site with a minimum 1 in 100 fall away from the planting pit. A 100mm Agricultural Drain shall be installed in the trench and covered with 200mm of 20mm blue metal.

HOLD POINT: Following excavation of the new planting holes and drainage and prior to planting, the planting hole shall be inspected by the Project Arborist.

12.18 Installation

- 12.18.1 The tree shall be lifted and relocated as described previously (**Section 12.15**) and installed in the new planting hole in the same orientation as original with the trunk in the same vertical alignment as its original position. Where the tree is to be placed on sloping terrain, the original slope orientation of the root plate shall conform to the slope orientation of the new site where possible.

HOLD POINT: Following planting and prior to backfilling of the planting hole, the position and level of the tree shall be inspected by the Project Arborist.

12.19 Backfill Material

- 12.19.1 Clean, friable, screened soil containing no rocks, heavy clay, vegetative matter or other extraneous material equivalent to the existing site A2 or B1 horizon sub-soil shall be used as backfill around the root plate following placement of the tree. Where the existing site soil is found to be unsuitable for use an imported soil mix may be used, equivalent in texture to the site soil. Organic soil mixes, compost or other material containing a high percentage of organic matter are not acceptable for this purpose.
- 12.19.2 The backfill material shall be installed to ensure soil-root contact on all sides of the root plate with no voids. No backfill material should be placed on top of the root plate or in direct contact with the trunk.

12.20 Mulch

- 12.20.1 Following installation of the tree in the planting pit, the root zone shall be covered with a composted mulch material and watered thoroughly. The mulch material shall be a composted wood waste material and installed evenly to a depth of 75 mm over the whole root plate and one metre beyond the planting pit. Mulch shall not be placed in direct contact with the trunk.

12.21 Guying

- 12.21.1 Where the Contractor is of the view that Guy wires and soil anchors are needed to support the tree during establishment, details of the guying system and soil anchors shall be provided to the Project Arborist for approval prior to installation. The guy wires shall be affixed to the tree using soft padded slings or equivalent. Guy wires shall be an approved braided steel cable fitted with turnbuckles.

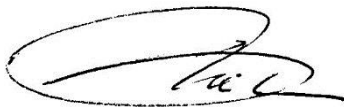
12.22 Establishment Maintenance

- 12.22.1 Soil moisture should be maintained in a moderately moist (but not wet) condition for a 12 month period from Practical Completion during re-establishment.

- 12.22.2 Fertilising should not be required for the first 12 month period. If the contractor is of the view that fertilising should be undertaken during the maintenance or defects liability period, details of the proposed fertiliser and rates shall be submitted to the Project Arborist for review prior to application.
- 12.22.3 Mulch levels around the root plate should be maintained to a minimum depth of 50mm.
- 12.22.4 The removal of dead branches shall be undertaken as and when required in accordance with AS 4373-2007 by a qualified (AQF 3] and experienced arborist. Appropriate hygiene measures shall be implemented to avoid infection with Fusarium Wilt.
- 12.22.5 During the first twelve months following transplanting the tree shall be inspected on a quarterly basis by a qualified arborist to ensure that the tree is receiving adequate moisture and is not suffering any adverse impact from the transplanting process.
- 12.22.6 In the event of that the health of any of the tree deteriorates during the post construction period, a consulting arborist shall be engaged to inspect and provide advice on any remedial action to improve the health and condition of the tree(s). Such remedial action shall be implemented as soon as practicable and certified by the arborist.

12.23 ALTERNATIVE METHODS

- 12.23.1 Alternative methods will be considered subject to the preparation of a detailed Method Statement describing the methodology to be adopted in the transplanting process.



Andrew Morton
EARTHSCAPE HORTICULTURAL SERVICES
3rd November 2017

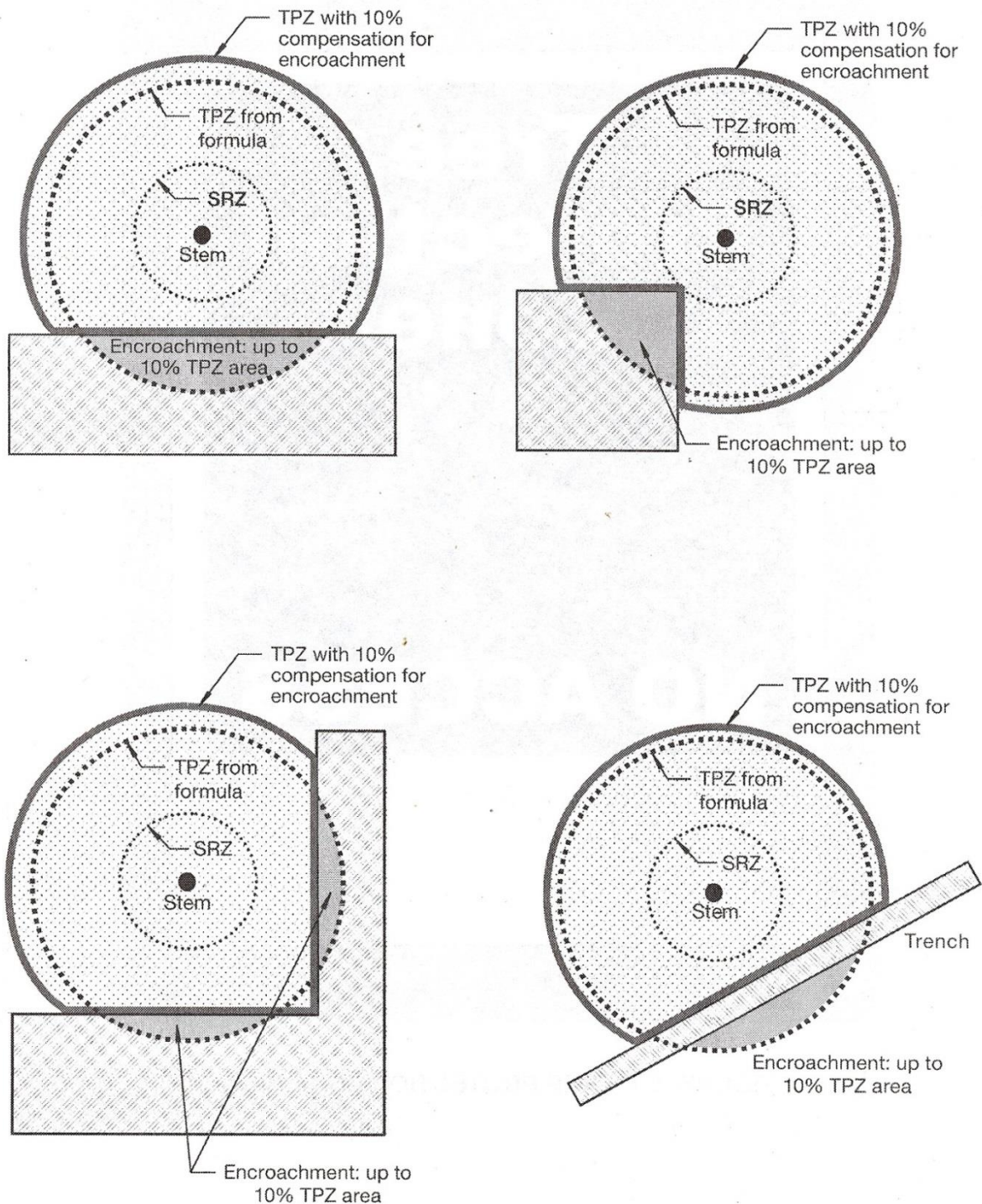
APPENDIX 1 - CRITERIA FOR ASSESSMENT OF LANDSCAPE SIGNIFICANCE

RATING	HERITAGE VALUE	ECOLOGICAL VALUE	AMENITY VALUE
1. SIGNIFICANT	The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance or is listed on Council's Significant Tree Register	The subject tree is scheduled as a Threatened Species as defined under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999	The subject tree has a very large live crown size exceeding 300m ² with normal to dense foliage cover, is located in a visually prominent position in the landscape, exhibits very good form and habit typical of the species
	The subject tree forms part of the curtilage of a Heritage Item (building /structure /artefact as defined under the LEP) and has a known or documented association with that item	The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species	The subject tree makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity
	The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event	The subject tree is a Remnant Tree, being a tree in existence prior to development of the area	The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.
2. VERY HIGH	The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc) within or adjacent the property and/or exemplifies a particular era or style of landscape design associated with the original development of the site.	The tree is a locally-indigenous species, representative of the original vegetation of the area and is a dominant or associated canopy species of an Endangered Ecological Community (EEC) formerly occurring in the area occupied by the site.	The subject tree has a very large live crown size exceeding 200m ² ; a crown density exceeding 70% (normal-dense), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area
3. HIGH	The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence	The tree is a locally-indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link / Wildlife Corridor or has known wildlife habitat value	The subject tree has a large live crown size exceeding 100m ² ; The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (e.g. crown distortion/suppression) with a crown density of at least 70% (normal); The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area
4. MODERATE	The tree has no known or suspected historical association, but does not detract or diminish the value of the item and is sympathetic to the original era of planting.	The subject tree is a non-local native or exotic species that is protected under the provisions of this DCP.	The subject tree has a medium live crown size exceeding 40m ² ;The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc) with a crown density of more than 50% (thinning to normal); and
			The tree is visible from surrounding properties, but is not visually prominent – view may be partially obscured by other vegetation or built forms. The tree makes a fair contribution to the visual character and amenity of the area.
5. LOW	The subject tree detracts from heritage values or diminishes the value of a heritage item	The subject tree is scheduled as exempt (not protected) under the provisions of this DCP due to its species, nuisance or position relative to buildings or other structures.	The subject tree has a small live crown size of less than 40m ² and can be replaced within the short term (5-10 years) with new tree planting
6. VERY LOW	The subject tree is causing significant damage to a heritage Item.	The subject tree is listed as an Environment Weed Species in the relevant Local Government Area, being invasive, or is a known nuisance species.	The subject tree is not visible from surrounding properties (visibility obscured) and makes a negligible contribution or has a negative impact on the amenity and visual character of the area. The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% (sparse).
7. INSIGNIFICANT	The tree is completely dead and has no visible habitat value	The tree is a declared Noxious Weed under the Noxious Weeds Act (NSW) 1993 within the relevant Local Government Area.	The tree is completely dead and represents a potential hazard.

Ref:- Morton, A (2006) **Determining the Retention Value of Trees on Development Sites**

TreeNet - Proceedings of the 7th National Street Tree Symposium 2006 Government of South Australia Department for Transport, Energy and Infrastructure

APPENDIX 2 – ACCEPTABLE INCURSIONS TO THE TREE PROTECTION ZONE (TPZ)



NOTE: Less than 10% TPZ area and outside SRZ. Any loss of TPZ compensated for elsewhere.

REF:- Council of Standards Australia (August 2009)
AS 4970 – 2009 – Protection of Trees on Development Sites
 Standards Australia, Sydney

REFERENCES:-

¹ GA Chapman & CL Murphy (1989)

Soil Landscapes of the Sydney 1:100,000 Sheet

Soil Conservation Service of NSW. Sydney

² Benson, Doug & Howell, Jocelyn (1990)

Taken for Granted: the Bushland of Sydney and its Suburbs.

Kangaroo Press & The Royal Botanic Gardens, Sydney, NSW

³ Bidwell, David (December 2013)

Report on the Trees in the Landbridge Area, north of the Art Gallery of NSW

Royal Botanic Gardens Sydney

⁴ Mattheck, Dr. Claus & Breloer, Helge (1994) – Sixth Edition (2001)

The Body Language of Trees – A Handbook for Failure Analysis

The Stationery Office, London, England

⁵ Barrell, Jeremy (1996)

Pre-development Tree Assessment

Proceedings of the International Conference on Trees and Building Sites (Chicago)

International Society of arboriculture, Illinois, USA

⁶ NSW Office of Environment and Heritage, Heritage Branch (December 2005)

Heritage Database - Art Gallery of NSW including interiors

NSW Office of Environment and Heritage, Sydney, NSW

⁷ NSW Office of Environment and Heritage, Heritage Branch (December 2005)

Heritage Database – Domain (including Mrs Macquaries Chair)

NSW Office of Environment and Heritage, Sydney, NSW

⁸ NSW Office of Environment and Heritage, Heritage Branch (August 2011)

Heritage Database – The Domain

NSW Office of Environment and Heritage, Sydney, NSW

⁹ Ruting, Noel (November 2005)

Register of Significant Trees – Part 4 of 4; Significant Trees under Private Ownership (City of Sydney)

Landarc Pty Ltd & the Council of the City of Sydney, Sydney NSW

¹⁰ Ruting, Noel (November 2005)

Register of Significant Trees – Part 2 of 4; Significant Street Trees (City of Sydney)

Landarc Pty Ltd & the Council of the City of Sydney, Sydney NSW

¹¹ Ruting, Noel (November 2005)

Register of Significant Trees – Part 3 of 4; Significant Trees on land under the care control and management of Other Government Authorities, Institutional, Religious and Non-Government Organisations (City of Sydney)

Landarc Pty Ltd & the Council of the City of Sydney, Sydney NSW

¹² Barry, Steven (15th July 2016)

Art Gallery of NSW Expansion: Sydney Modern Project. Heritage Impact Statement

GML Heritage (Sydney)

¹³ Council of Standards Australia (August 2009)

AS 4970 – 2009 – Protection of Trees on Development Sites

Standards Australia, Sydney

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
1	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	15	20	994	240	M	Stability suspect with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple moderate bark inclusions. Exhibits a prominent lean to the north and corresponding inclination in root plate	Selectively crown thinned & deadwooded	Very Good	No Evidence	Medium 15-40 Years	2	High	The Domain
2	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	15	25	1038	300	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple moderate bark inclusions.	Selectively crown thinned & deadwooded	Very Good	Low foliar insect infestation	Medium 15-40 Years	2	High	The Domain
3	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	15	20	885	240	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple low bark inclusions.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
4	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	14	22	866	264	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple low bark inclusions.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
6	<i>Ficus rubiginosa</i> (Port Jackson Fig)	13	18	990	198	M	Appears stable with sound branching structure. Exhibits a slight lean to the NE. Crown suppressed on the SE side due to crowding. Multiple small wounds due previous pruning with decay evident at branch collars.	Deadwooded	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	2	High	The Domain
7	<i>Ficus macrophylla</i> (Moreton Bay Fig)	14	24	1700	288	M	Appears stable with sound branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple low bark inclusions. Multiple aerial and prop roots descending from trunk and PLs. Multiple small wounds due previous pruning with decay evident at branch collars.	Selectively crown thinned & deadwooded	Good	No Evidence	Medium 15-40 Years	1	High	The Domain
8	<i>Ficus macrophylla</i> (Moreton Bay Fig)	20	25	1500	425	M	Appears stable with sound branching structure. Exhibits multiple moderate wounds to buttress roots on NE side & NW side with decay evident. Large wound on buttress roots on west side with decay evident.	Selectively crown thinned & deadwooded	Good	No Evidence	Medium 15-40 Years	1	High	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE														
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
19	<i>Melaleuca linariifolia</i> (Narrow-leaved Paperbark)	5.5	5	270	17.5	M	Appears stable with fair branching structure. Crown suppressed on the NW side due to crowding.	Crown lifted to 2 metres.	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	5	Low	The Domain
20	<i>Melaleuca linariifolia</i> (Narrow-leaved Paperbark)	4	3	150	6	I	Appears stable with fair branching structure. Crown suppressed on the north side due to overshadowing.	Crown lifted to 2 metres.	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	5	Low	The Domain
21	<i>Ficus macrophylla</i> (Moreton Bay Fig)	15	16	1000	208	M	Appears stable with sound branching structure. Exhibits multiple small wounds to buttress roots. Crown suppressed on SW side due to building/previous pruning.	Selectively pruned to clear building. Crown lifted & deadwooded	Good	Low Fig Psyllid infestation	Long - more than 40 years	2	High	Art Gallery
22	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5	6	271	18	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the NE. Confined root plate. Moderate bark inclusion at 1 metre. Multiple moderate wounds on PLs at 2 metres due to sunscald.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
23	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5	7	248	21	SM	Appears stable with fair branching structure. Confined root plate.	Crown lifted to 3 metres	Fair with thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
24	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5.5	8	280	28	SM	Appears stable with fair branching structure. Confined root plate.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
25	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5.5	7	287	24.5	SM	Appears stable with fair branching structure. Confined root plate.	Crown lifted to 3 metres	Fair with thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
26	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6	8	306	32	SM	Appears stable with fair branching structure. Confined root plate.	Crown lifted to 3 metres	Fair with thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
27	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6.5	9	220 + 320	40.5	SM	Appears stable with fair branching structure. Confined root plate. Exhibits a moderate bark inclusion at 0.5 metres.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median

		APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE												
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m ²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
28	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	7.5	12	331	54	SM	Appears stable with sound branching structure. Located within asphalt footpath.	Crown lifted to 3 metres	Very Good	Low foliar insect infestation (Fig Psyllid)	Long - more than 40 years	4	Moderate	Lincoln Crescent Median
29	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	4.5	6	185	15	SM	Appears stable with fair branching structure. Located within asphalt footpath.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	5	Low	Lincoln Crescent Median
30	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6	8	232	32	SM	Appears stable with fair branching structure. Located within asphalt footpath. Exhibits multiple moderate wounds at 2.5 metres due branch loss (vehicle damage). Prominent lean to the SE.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	5	Low	Lincoln Crescent Median
31	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6.5	7	303	24.5	SM	Appears stable with fair branching structure. Located within asphalt footpath. Prominent lean to the east.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	4	Moderate	Lincoln Crescent Median
32	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6.5	8	229	28	SM	Appears stable with fair branching structure. Located within asphalt footpath. Exhibits prominent lean to the SE. Exhibits multiple moderate bark inclusions at 0.5 metres. Moderate wound on trunk at GL.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	4	Moderate	Lincoln Crescent Median
33	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6.5	10	328	35	SM	Appears stable with fair branching structure. Located within asphalt footpath. Exhibits prominent lean to the NE. Exhibits multiple moderate bark inclusions at 0.5-1 metres.	Crown lifted to 3 metres	Good	Low foliar insect infestation (Fig Psyllid)	Long - more than 40 years	4	Moderate	Lincoln Crescent Median
34	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	7	11	408	44	SM	Appears stable with sound branching structure. Confined root plate. Moderate wound at 3 metres due branch loss. Prominent lean to the west.	Crown lifted to 3 metres	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	4	Moderate	Lincoln Crescent Median
35	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5	7	160x3	21	SM	Appears stable with sound branching structure. Confined root plate. Multiple moderate wounds at 1-3 metres due vehicle damage. Exhibits multiple moderate bark inclusions at 0.5 metres.	Crown lifted to 3 metres	Fair	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median

		APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE												
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
36	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	6	7	258	28	SM	Appears stable with fair branching structure. Confined root plate.	Crown lifted to 3 metres	Good	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	4	Moderate	Lincoln Crescent Median
37	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	5	6	290	24	SM	Appears stable with sound branching structure. Confined root plate. Prominent lean to the NW. Exhibits a moderate bark inclusion at 1 metre. Multiple wounds on PLs due to sunburn.	Crown lifted to 3 metres	Good	Low foliar insect infestation (Fig Psyllid)	Short 5-15 Years	5	Low	Lincoln Crescent Median
38	<i>Ficus rubiginosa</i> (Port Jackson Fig)	6	9	315	36	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres. Selectively crown thinned.	Fair with thinning crown	No Evidence	Short 5-15 Years	4	Low	Lincoln Crescent verge
39	<i>Ficus rubiginosa</i> (Port Jackson Fig)	5.5	9	341	31.5	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres. Selectively crown thinned.	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	4	Moderate	Lincoln Crescent verge
735	<i>Phoenix canariensis</i> (Canary Island Palm)	15	5.5	621	38.5	M	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
736	<i>Phoenix canariensis</i> (Canary Island Palm)	17	6	452	48	M	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
737	<i>Phoenix canariensis</i> (Canary Island Palm)	16	6	701	30	M	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	The Domain
739	<i>Phoenix canariensis</i> (Canary Island Palm)	16	6	720	30	M	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	The Domain
741	<i>Phoenix canariensis</i> (Canary Island Palm)	16	6	627	30	M	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	2	High	The Domain
742	<i>Phoenix canariensis</i> (Canary Island Palm)	15	8	680	56	M	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	2	High	The Domain

		APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE												
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m ²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
860	<i>Angophora costata</i> (Sydney Red Gum)	10	10	411	85	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE. 5% deadwood.	No Evidence	Fair	No Evidence	Long - more than 40 years	4	Moderate	The Domain
863	<i>Angophora costata</i> (Sydney Red Gum)	8	11	379	71.5	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the north. Upper crown suppressed due overshadowing. Grafted PLs at 3 metres.	Deadwooded	Good	No Evidence	Short 5-15 Years	4	Low	The Domain
865	<i>Angophora costata</i> (Sydney Red Gum)	12	10	500	100	M	Appears stable with sound branching structure. Exhibits patches of necrosis in vascular tissue & bark.	Selectively pruned & deadwooded	Good	High borer infestation	Medium 15-40 Years	3	Moderate	The Domain
969	<i>Araucaria columnaris</i> (Cook Pine)	25	4	745	94	M	Appears stable with sound branching structure. Exhibits a prominent lean to NE (self-corrected), typical for species.	No Evidence	Good	No Evidence	Medium 15-40 Years	2	High	The Domain
1096	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	13	20	745	200	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple low bark inclusions. Prominent lean to the north.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
1097	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	13	20	885	220	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple low bark inclusions. Prominent lean to the NE.	Selectively crown thinned & deadwooded	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	2	High	The Domain
1098	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	13	22	1100	242	M	Appears stable with fair branching structure. Exhibits multiple co-dominant extended lateral primary limbs at 2-3 metres with multiple moderate bark inclusions.	Selectively crown thinned & deadwooded	Very Good	Moderate foliar insect infestation (Scale & Sooty Mould)	Medium 15-40 Years	2	High	The Domain
1116	<i>Ficus rubiginosa</i> (Port Jackson Fig)	15	16	800	192	M	Appears stable with sound branching structure.	Selectively crown thinned & deadwooded	Fair with slightly thinning crown	No Evidence	Medium 15-40 Years	2	High	The Domain
1117	<i>Ficus rubiginosa</i> (Port Jackson Fig)	7	18	561	108	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 1-2 metres at junctions of extended lateral PLs.	Crown lifted to 1 metre.	Good	No Evidence	Long - more than 40 years	3	High	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m ²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
1118	<i>Ficus rubiginosa</i> (Port Jackson Fig)	14	18	1061	216	M	Appears stable with sound branching structure. Co-dominant primary limbs at 2 metres. Exhibits a high bark inclusion at 3 metres at junction of SLs.	Selectively pruned and deadwooded.	Fair with thinning crown	No Evidence	Medium 15-40 Years	1	High	The Domain
1119	<i>Ficus rubiginosa</i> (Port Jackson Fig)	15	18	1178	234	M	Stability suspect with fair branching structure. Exhibits a large cavity in lower trunk and root crown with decay evident. Prominent lean to the north. Co-dominant primary limbs at 2 metres. Possibly previously filled around trunk (ground level raised).	Selectively pruned and deadwooded.	Fair with slightly thinning crown	No Evidence	Transient (less than 5 years)	1	Moderate	The Domain
1208	<i>Ficus macrophylla</i> (Moreton Bay Fig)	8	14	800	84	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 0.5 metres at junctions of multiple co-dominant PLs. Hollow beneath root plate.	Crown lifted to 3 metres.	Very Good	Low foliar insect infestation (Fig Psyllid)	Long - more than 40 years	4	Moderate	The Domain
1209	<i>Ficus macrophylla</i> (Moreton Bay Fig)	5	7	318	21	SM	Appears stable with sound branching structure. 5% deadwood.	Deadwooded	Fair with slightly thinning crown	Low foliar insect infestation (Fig Psyllid)	Long - more than 40 years	5	Moderate	The Domain
1220	<i>Ficus macrophylla</i> (Moreton Bay Fig)	10	16	771	144	SM	Appears stable with sound branching structure.	Crown lifted to 3 metres. Selectively pruned.	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
1221	<i>Ficus macrophylla</i> (Moreton Bay Fig)	20	36	3800	684	M	Appears stable with sound branching structure. Exhibits multiple extended lateral primary limbs. Crown suppressed on NE side due to previous pruning. Exhibits a large wound from GL to 2.5 metres on east side with cavity and decay evident.	Selectively pruned on the north side to clear Art Gallery building	Very Good	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	1	High	The Domain
1222	<i>Ficus macrophylla</i> (Moreton Bay Fig)	17	26	1200	390	M	Appears stable with sound branching structure.	Selectively crown thinned & deadwooded	Good	No Evidence	Medium 15-40 Years	2	High	The Domain
1226	<i>Ficus macrophylla</i> (Moreton Bay Fig)	9	18	669	162	M	Appears stable with sound branching structure. Extended lateral lower PLs.	Selectively pruned	Very Good	Low Fig Psyllid infestation	Long - more than 40 years	3	High	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
1227	<i>Ficus macrophylla</i> (Moreton Bay Fig)	8	13	340x2 + 400 + 250	91	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 0.5 to 1 metre. Large woody surface roots visible for 5-6 metres radius. Possible growing over sandstone rock platform.	Selectively pruned and crown lifted to 3 metres.	Very Good	Low Fig Psyllid infestation	Long - more than 40 years	4	Moderate	The Domain
1228	<i>Ficus macrophylla</i> (Moreton Bay Fig)	9	16	586	120	SM	Appears stable with sound branching structure. Located close to existing stairway. Large woody surface roots visible for 6-7 metres radius.	Selectively pruned and crown lifted to 3 metres.	Very Good	Low Fig Psyllid infestation	Long - more than 40 years	3	High	The Domain
1232	<i>Ficus macrophylla</i> (Moreton Bay Fig)	18	30	2400	450	M	Appears stable with sound branching structure. Exhibits multiple extended lateral primary limbs. Located close to roadway. Multiple moderate wounds due previous pruning with decay evident at branch collar.	Selectively pruned & deadwooded	Good	Low foliar insect infestation (Fig Psyllid)	Medium 15-40 Years	1	High	The Domain
1363	<i>Phoenix sylvestris</i> (Silver Date Palm)	13	5	516	30	M	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
2350	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	14	13	481	162.5	M	Appears stable with poor branching structure. Exhibits a severe bark inclusion at 6 metres at junction of co-dominant PLs with part fracture at junction.	Selectively pruned & deadwooded	Very Good	No Evidence	Medium 15-40 Years	3	Moderate	The Domain
2351	<i>Flindersia australis</i> (Crows Foot Ash)	6	4.5	162	20.25	I	Appears stable with sound branching structure. Exhibits a small wound on the lower trunk due to mechanical injury.	Crown lifted to 2 metres.	Very Good	Low foliar insect infestation	Long - more than 40 years	5	Moderate	The Domain
2352	<i>Flindersia australis</i> (Crows Foot Ash)	6.5	4	169	20	I	Appears stable with sound branching structure.	Crown lifted to 2 metres.	Good	Low foliar insect infestation	Long - more than 40 years	5	Moderate	The Domain
2353	<i>Flindersia australis</i> (Crows Foot Ash)	6.5	4.5	172	22.5	I	Appears stable with sound branching structure.	Crown lifted to 2 metres.	Very Good	Low foliar insect infestation	Long - more than 40 years	5	Moderate	The Domain
2354	<i>Flindersia australis</i> (Crows Foot Ash)	6	5	169	25	I	Appears stable with sound branching structure.	Crown lifted to 2 metres.	Very Good	Low foliar insect infestation	Long - more than 40 years	5	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE														
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2355	<i>Flindersia australis</i> (Crows Foot Ash)	6	4	143	20	I	Appears stable with sound branching structure.	Crown lifted to 1 metre.	Very Good	Low foliar insect infestation	Long - more than 40 years	5	Moderate	The Domain
2356	<i>Agathis robusta</i> (Queensland Kauri)	7	3	191	15	I	Appears stable with sound branching structure. Exhibits a prominent lean to the NE (bend in lower trunk), self-corrected.	Crown lifted to 3 metres.	Very Good	Low foliar insect infestation (Scale)	Long - more than 40 years	5	Moderate	The Domain
2357	<i>Agathis robusta</i> (Queensland Kauri)	7	3	190	12	I	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Very Good	Low foliar insect infestation (Scale)	Long - more than 40 years	5	Moderate	The Domain
2358	<i>Agathis robusta</i> (Queensland Kauri)	7	3	185	13.5	I	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Very Good	Low foliar insect infestation (Scale)	Long - more than 40 years	5	Moderate	The Domain
2359	<i>Agathis robusta</i> (Queensland Kauri)	7	5	210	25	I	Appears stable with sound branching structure.	Crown lifted to 2 metres.	Very Good	Low foliar insect infestation (Scale)	Long - more than 40 years	5	Moderate	The Domain
2360	<i>Agathis robusta</i> (Queensland Kauri)	8	3	175	18	I	Appears stable with sound branching structure.	Crown lifted to 3 metres.	Very Good	Low foliar insect infestation (Scale)	Long - more than 40 years	5	Moderate	The Domain
2383	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	2.5	100	3.75	I	Appears stable with sound branching structure. Located on shallow soil over rock platform.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
2384	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	1.5	50	2.25	I	Appears stable with sound branching structure. Located on shallow soil over rock platform.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	Low	The Domain
2385	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	1.5	70	2.25	I	Stability suspect with fair branching structure. Located on shallow soil over rock platform. Exhibits a prominent lean to the north.	No Evidence	Dead	No Evidence	Nil	7	Very Low	The Domain
2386	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.8	2	80	3.6	I	Stability suspect with fair branching structure. Located on shallow soil over rock platform. Exhibits a prominent lean to the north.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
2387	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	2	70	3	I	Stability suspect with fair branching structure. Located on shallow soil over rock platform. Exhibits a very prominent lean to the NW.	No Evidence	Good	No Evidence	Transient (less than 5 years)	5	Very Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2388	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	1.5	70	2.25	I	Appears stable with sound branching structure. Located on shallow soil over rock platform. Crown suppressed on south side due to crowding.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	Low	The Domain
2389	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	1.5	70	2.25	I	Stability suspect with fair branching structure. Located on shallow soil over rock platform. Crown suppressed on south side due to crowding.	No Evidence	Fair	No Evidence	Transient (less than 5 years)	5	Very Low	The Domain
2390	<i>Corymbia ficifolia</i> (Red Flowering Gum)	1.5	1.5	50	2.25	I	Appears stable with sound branching structure. Located on shallow soil over rock platform.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	Low	The Domain
2392	<i>Corymbia ficifolia</i> (Red Flowering Gum)	2	3	70 + 60	6	I	Appears stable with fair branching structure. Located on shallow soil over rock platform.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
2393	<i>Corymbia ficifolia</i> (Red Flowering Gum)	2	2	70	4	I	Stability suspect with fair branching structure. Located on shallow soil over rock platform. Very prominent lean to the NW.	No Evidence	Good	No Evidence	Transient (less than 5 years)	5	Very Low	The Domain
2394	<i>Corymbia ficifolia</i> (Red Flowering Gum)	2	3	80	6	I	Appears stable with sound branching structure. Located on shallow soil over rock platform. Crown suppressed on south side due to overshadowing.	No Evidence	Very Good	No Evidence	Short 5-15 Years	5	Low	The Domain
2405	<i>Angophora costata</i> (Sydney Red Gum)	7	6	200x2	30	SM	Appears stable with sound branching structure. Twin-trunked	Crown lifted to 2 metres.	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2406	<i>Angophora costata</i> (Sydney Red Gum)	7	4	201	16	SM	Appears stable with sound branching structure. Exhibits a prominent lean to north (bend in trunk at 2 metres).	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2407	<i>Angophora costata</i> (Sydney Red Gum)	7.5	4	170	18	I	Appears stable with fair branching structure. Exhibits a prominent lean to the SW.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2408	<i>Angophora costata</i> (Sydney Red Gum)	6	4	150	14	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2409	<i>Angophora costata</i> (Sydney Red Gum)	7	5	180	25	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2410	<i>Angophora costata</i> (Sydney Red Gum)	5	4	140	14	I	Appears stable with fair branching structure. Contorted habit.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2411	<i>Angophora costata</i> (Sydney Red Gum)	7	6	223	42	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2413	<i>Angophora costata</i> (Sydney Red Gum)	7	5	204	30	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE (self-corrected).	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2416	<i>Angophora costata</i> (Sydney Red Gum)	6.5	4	185	14	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the SW (self-corrected). Small basal wound.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2417	<i>Angophora costata</i> (Sydney Red Gum)	5	4	127	20	I	Appears stable with fair branching structure. Crown suppressed on the east side due overshadowing.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2419	<i>Angophora costata</i> (Sydney Red Gum)	7	5	191	35	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE (self-corrected).	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2422	<i>Angophora costata</i> (Sydney Red Gum)	7	5	201	27.5	SM	Appears stable with sound branching structure. Exhibits a moderate axial wound from GL to 1 metre.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2423	<i>Angophora costata</i> (Sydney Red Gum)	7	6	201	33	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2426	<i>Angophora costata</i> (Sydney Red Gum)	7	4	180	20	I	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2427	<i>Angophora costata</i> (Sydney Red Gum)	7	6	220	30	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2428	<i>Angophora costata</i> (Sydney Red Gum)	7	5	160	25	I	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2430	<i>Angophora costata</i> (Sydney Red Gum)	7	4	204	16	SM	Appears stable with sound branching structure. Exhibits a large axial wound from GL to 4 metres.	No Evidence	Fair	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2432	<i>Angophora costata</i> (Sydney Red Gum)	8	6	213	36	SM	Appears stable with sound branching structure. Exhibits multiple axial striations in vascular tissue on trunk due moisture stress	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2433	<i>Angophora costata</i> (Sydney Red Gum)	7	5	223	30	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north. Multiple axial striations in vascular tissue on trunk due moisture stress	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2434	<i>Banksia integrifolia</i> (Coast Banksia)	7	5	229	30	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2436	<i>Chamaerops humilis</i> (Mediterranean Fan Palm)	4	5	150x7	20	M	Appears stable with fair branching structure. Multi-trunked at ground level. Steel props installed to support trunks.	No Evidence	Very Good	No Evidence	Long - more than 40 years	2	High	The Domain
2437	<i>Ficus macrophylla</i> (Moreton Bay Fig)	6	6	350	30	SM	Appears stable with sound branching structure.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2887	<i>Angophora costata</i> (Sydney Red Gum)	8	7	255	42	SM	Appears stable with fair branching structure. Exhibits a very prominent lean to the north. Crown suppressed on the south side due crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2888	<i>Angophora costata</i> (Sydney Red Gum)	10	6	201	48	SM	Appears stable with fair branching structure. Crown suppressed on the NE & SW side due crowding.	No Evidence	Good	Low borer infestation at 3.5 metres	Medium 15-40 Years	5	Low	The Domain
2889	<i>Eucalyptus botryoides</i> (Bangalay)	11	5	268	25	SM	Appears stable with fair branching structure. Exhibits multiple moderate bark inclusions at 5 metres.	No Evidence	Fair with slightly thinning crown	Moderate foliar insect infestation (Brown Lace Lerp)	Short 5-15 Years	5	Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE														
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2892	<i>Angophora costata</i> (Sydney Red Gum)	10	7	268	56	SM	Appears stable with sound branching structure. Crown suppressed on the south side due crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2895	<i>Angophora costata</i> (Sydney Red Gum)	12	7	334	77	SM	Appears stable with sound branching structure. Crown suppressed on east side due crowding.	No Evidence	Good	Moderate borer infestation (trunk)	Medium 15-40 Years	4	Moderate	The Domain
2897	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	13	8	264	48	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2899	<i>Eucalyptus botryoides</i> (Bangalay)	7	5	140	20	I	Appears stable with sound branching structure.	No Evidence	Good	Low foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	5	Low	The Domain
2901	<i>Eucalyptus botryoides</i> (Bangalay)	10	10	261	80	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the west (self-corrected). Crown suppressed on east side due crowding.	No Evidence	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	4	Moderate	The Domain
2904	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	6	226	60	SM	Appears stable with fair branching structure. Exhibits a low bark inclusion at 4 metres & PLs grafted above junction.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2905	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	9	7	245	49	SM	Appears stable with sound branching structure. Crown suppressed on the north side due crowding. 5% interior crown deadwood.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2907	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	10	8	306	64	SM	Appears stable with sound branching structure. Crown suppressed on the south side due crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2908	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	5	245	45	SM	Appears stable with sound branching structure. Exhibits multiple low bark inclusions at 4-5 metres at junctions of PLs	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	The Domain
2910	<i>Angophora costata</i> (Sydney Red Gum)	7	2	223	12	I	Appears stable with sound branching structure. Crown suppressed on the NE side due crowding.	No Evidence	Fair	No Evidence	Short 5-15 Years	5	Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2912	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	6	268	66	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2913	<i>Angophora costata</i> (Sydney Red Gum)	10	6	217	48	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the SW (self-corrected). Crown suppressed on NE side due to crowding.	Selectively pruned	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2915	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	7	277	42	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NW. Crown suppressed on SE side due to crowding.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2916	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	8	360	72	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the NE (self-corrected).	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2918	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	8	3	172	21	I	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2920	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	5	255	45	SM	Appears stable with sound branching structure. Exhibits a low bark inclusion at 1.5 metres.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2922	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	5	191	50	SM	Appears stable with fair branching structure. Exhibits a very prominent lean to the NW. Crown suppressed on the south side due to crowding.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2928	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	15	5	277	45	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2930	<i>Eucalyptus saligna</i> x <i>botryoides</i> (Hybrid Sydney Blue Gum)	15	7	261	63	SM	Appears stable with sound branching structure. Crown suppressed on the west side due to crowding.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2930a	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	4	159	20	I	Appears stable with sound branching structure.	No Evidence	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	5	Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE														
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2931	<i>Eucalyptus botryoides</i> (Bangalay)	9	6	188	18	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2932	<i>Eucalyptus botryoides</i> (Bangalay)	8	6	172	18	I	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2933	<i>Eucalyptus botryoides</i> (Bangalay)	8	4	146	12	I	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2934	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	13	8	283	80	SM	Appears stable with fair branching structure. Main leader broken out at 9 metres with multiple co-dominant PLs arising from old wound.	No Evidence	Good	No Evidence	Short 5-15 Years	4	Low	The Domain
2936	<i>Flindersia australis</i> (Crows Foot Ash)	6.5	4	178	22	I	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2937	<i>Flindersia australis</i> (Crows Foot Ash)	6.5	4.5	150	24.75	I	Appears stable with sound branching structure.	Crown lifted to 2 metres	Fair with slightly thinning crown	Chlorotic foliage	Long - more than 40 years	5	Moderate	The Domain
2938	<i>Flindersia australis</i> (Crows Foot Ash)	6	6	197	27	I	Appears stable with sound branching structure. Defoliated.	Crown lifted to 2 metres	Fair with thinning crown	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2939	<i>Flindersia australis</i> (Crows Foot Ash)	6.5	5	191	27.5	I	Appears stable with sound branching structure.	Crown lifted to 2 metres	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2940	<i>Flindersia australis</i> (Crows Foot Ash)	6	5	213	25	I	Appears stable with sound branching structure. Exhibits a low bark inclusion at 3 metres at junction of co-dominant PLs. Partly defoliated.	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2941	<i>Angophora costata</i> (Sydney Red Gum)	3.5	3	96	10.5	I	Appears stable with fair branching structure. Exhibits a prominent lean to the south.	No Evidence	Very Good	No Evidence	Transient (less than 5 years)	5	Very Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2942	<i>Angophora costata</i> (Sydney Red Gum)	9	7	271	49	SM	Stability suspect with sound branching structure. Exhibits a very prominent lean to the south. Crown suppressed north side due to crowding. Located close to existing masonry wall.	No Evidence	Good	No Evidence	Short 5-15 Years	4	Low	The Domain
2943	<i>Angophora costata</i> (Sydney Red Gum)	9	9	303	54	SM	Appears stable with sound branching structure.	Deadwooded	Good	Low borer infestation	Medium 15-40 Years	4	Moderate	The Domain
2944	<i>Eucalyptus botryoides</i> (Bangalay)	10	8	264	40	SM	Appears stable with fair branching structure. Exhibits multiple PLs at 6 metres.	Deadwooded	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	4	Moderate	The Domain
2945	<i>Eucalyptus botryoides</i> (Bangalay)	7	5	204	15	SM	Appears stable with fair branching structure. Exhibits 20% epicormic growth.	Deadwooded	Fair with slightly thinning crown	Moderate foliar insect infestation (Brown Lace Lerp)	Short 5-15 Years	5	Low	The Domain
2947	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	9	5	239	35	SM	Appears stable with sound branching structure.	No Evidence	Very Good	Moderate foliar insect infestation (Lace Lerp)	Long - more than 40 years	4	Moderate	The Domain
2948	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	10	8	287	64	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the south. Crown suppressed north side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2949	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	9	312	108	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
2950	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	10	312	80	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the west (self-corrected). Bend in trunk at GL.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2951	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	7	280	63	SM	Appears stable with fair branching structure. Exhibits a prominent lean to the north. Crown suppressed south side due to crowding.	Deadwooded	Fair with slightly thinning crown	No Evidence	Long - more than 40 years	4	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE														
Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2951a	<i>Angophora costata</i> (Sydney Red Gum)	6	6	248	24	I	Appears stable with fair branching structure. Exhibits a prominent lean to the north. Crown suppressed south side due to crowding.	Deadwooded	Good	No Evidence	Medium 15-40 Years	5	Low	The Domain
2952	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	9	7	318	56	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2953	<i>Eucalyptus botryoides</i> (Bangalay)	12	7	287	63	SM	Appears stable with sound branching structure.	Deadwooded	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	4	Moderate	The Domain
2954	<i>Eucalyptus botryoides</i> (Bangalay)	13	8	172	72	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	Moderate foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	4	Moderate	The Domain
2955	<i>Eucalyptus botryoides</i> (Bangalay)	11	5	223	35	SM	Appears stable with fair branching structure.	No Evidence	Fair	Moderate foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	4	Moderate	The Domain
2957	<i>Eucalyptus botryoides</i> (Bangalay)	9	3	143	18	I	Appears stable with fair branching structure. Exhibits moderate dieback with 20% deadwood and 5% epicormic growth.	No Evidence	Fair with thinning crown	Low foliar insect infestation (Brown Lace Lerp)	Short 5-15 Years	5	Low	The Domain
2958	<i>Angophora costata</i> (Sydney Red Gum)	8	7	213	56	SM	Appears stable with fair branching structure. Exhibits a low prop branch on east side at GL.	Deadwooded	Fair	No Evidence	Medium 15-40 Years	4	Moderate	The Domain
2963	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	5	180x2	25	SM	Appears stable with fair branching structure. Exhibits multiple axial wounds at 1-2 metres. High bark inclusion at 0.3 metres at junction of co-dominant leaders.	No Evidence	Good	No Evidence	Short 5-15 Years	4	Low	The Domain
2965	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	10	8	360	64	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2970	<i>Eucalyptus botryoides</i> (Bangalay)	12	8	274	72	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the south. Crown suppressed north side due to crowding.	No Evidence	Good	Low foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	4	Moderate	The Domain
2971	<i>Eucalyptus botryoides</i> (Bangalay)	8	5	160	0	SM	Stability suspect with poor branching structure.	No Evidence	Dead	No Evidence	Nil	7	Very Low	The Domain
2972	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	14	11	376	110	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
2973	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	7	312	77	SM	Appears stable with sound branching structure. Located close to existing retaining wall.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	3	Moderate	The Domain
2976	<i>Eucalyptus botryoides</i> (Bangalay)	9	4	159	20	I	Appears stable with sound branching structure. Located close to existing masonry retaining wall.	Selectively pruned to clear pedestrian access	Fair	Low foliar insect infestation (Brown Lace Lerp)	Short 5-15 Years	5	Low	The Domain
2978	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	9	5	204	35	SM	Appears stable with sound branching structure. Located close to existing masonry retaining wall.	No Evidence	Very Good	No Evidence	Short 5-15 Years	4	Low	The Domain
2979	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	10	5	169	35	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	The Domain
2980	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	5	191	25	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the east. Crown suppressed west side due to overshadowing.	No Evidence	Good	No Evidence	Medium 15-40 Years	4	Moderate	The Domain
2982	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	4	232	24	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2983	<i>Angophora costata</i> (Sydney Red Gum)	8	5	210	25	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the SE (self corrected).	Selectively pruned to clear pedestrian access	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2984	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	9	347	81	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2985	<i>Casuarina glauca</i> (Swamp Oak)	13	8	299	88	SM	Appears stable with fair branching structure. C-dominant leaders at 5 metres.	Crown lifted to 3 metres	Good	No Evidence	Medium 15-40 Years	4	Moderate	The Domain
2986	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	10	293	70	SM	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2989	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	14	10	389	110	SM	Appears stable with sound branching structure. Exhibits adaptive growth beneath junction of co-dominant PL on west side.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
2990	<i>Banksia integrifolia</i> (Coast Banksia)	11	4	180	36	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2991	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	11	4	146	24	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2992	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	14	8	280	88	SM	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	3	High	The Domain
2993	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	14	8	363	96	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the NE (self-corrected).	No Evidence	Good	No Evidence	Long - more than 40 years	3	High	The Domain
2994	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	6	261	48	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2995	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	11	325	110	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north, self-corrected.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
2996	<i>Ficus rubiginosa</i> (Port Jackson Fig)	13	14	700	168	M	Appears stable with sound branching structure. Growing on sandstone cliff face. Multiple primary limbs at 1 metre.	Selectively crown thinned & deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
2997	<i>Ficus rubiginosa</i> (Port Jackson Fig)	13	7	300	63	SM	Appears stable with sound branching structure. Growing on sandstone cliff face. Exhibits multiple aerial roots growing down rock face.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
2998	<i>Ficus rubiginosa</i> (Port Jackson Fig)	6	8	240	32	SM	Appears stable with sound branching structure. Growing on sandstone cliff face	Crown lifted to 2 metres	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
2999	<i>Ficus rubiginosa</i> (Port Jackson Fig)	3	6	200	18	SM	Appears stable with sound branching structure. Growing on rock shelf.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
3000	<i>Eucalyptus botryoides</i> (Bangalay)	9	6	220	45	SM	Appears stable with sound branching structure.	No Evidence	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	5	Moderate	The Domain
3001	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	12	9	404	90	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north with adaptive growth corresponding with lean.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
3002	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	12	404	132	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
3004	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	8	6	200	36	I	Appears stable with sound branching structure. Crown suppressed on the NE & SW side due to overshadowing.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	5	Low	The Domain
3006	<i>Eucalyptus botryoides</i> (Bangalay)	12	8	261	64	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
3007	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	9	8	287	64	SM	Appears stable with sound branching structure. Crown suppressed on the SW side due to crowding. Exhibits a moderate bark inclusion at 2 metres.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
3485	<i>Callitris macleayana</i> (Stringybark Pine)	5	2.5	160	12.5	SM	Appears stable with sound branching structure. Exhibits a prominent lean (bend in lower trunk) to NW (self-corrected).	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
3690	<i>Eucalyptus botryoides</i> (Bangalay)	9	4	130	16	I	Appears stable with sound branching structure. Crown suppressed on the north side due to overshadowing.	No Evidence	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	5	Low	The Domain
3692	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	11	6	213	42	I	Appears stable with sound branching structure. Crown suppressed on the north side due to crowding.	Deadwooded	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
3708	<i>Acacia decurrens</i> (Black Wattle)	12	6	156	54	SM	Appears stable with sound branching structure. Exhibits a prominent lean to the north. Crown suppressed south side due to crowding.	No Evidence	Fair with slightly thinning crown	No Evidence	Short 5-15 Years	4	Low	The Domain
3710	<i>Eucalyptus botryoides</i> (Bangalay)	9	6	207	30	SM	Appears stable with sound branching structure.	Deadwooded	Good	Low foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	4	Moderate	The Domain
3711	<i>Eucalyptus botryoides</i> (Bangalay)	7	4	127	8	I	Appears stable with sound branching structure. Exhibits a prominent lean to the west. Crown suppressed east side due to crowding.	Deadwooded	Good	Low foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	5	Low	The Domain
3712	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	4	153	20	I	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
3726	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	4	166	16	I	Appears stable with sound branching structure. Exhibits a prominent lean to the NE.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4431	<i>Angophora costata</i> (Sydney Red Gum)	6	5	130 + 120 + 150	30	I	Appears stable with poor branching structure. Exhibits multiple trunks at GL with basal cavity.	Previously cut to GL (Crown restored)	Very Good	No Evidence	Medium 15-40 Years	5	Low	The Domain
4432	<i>Angophora costata</i> (Sydney Red Gum)	6	4.5	156	22.5	I	Appears stable with sound branching structure. Exhibits a small wound at 2 metres due to borer damage.	No Evidence	Good	Low Bullseye Borer infestation	Medium 15-40 Years	5	Low	The Domain
4433	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	5	4	150	12	I	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Medium 15-40 Years	5	Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
4435	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	13	6	252	54	SM	Appears stable with sound branching structure.	No Evidence	Fair with slightly thinning crown	No Evidence	Long - more than 40 years	4	Moderate	The Domain
4436	<i>Eucalyptus botryoides</i> (Bangalay)	8	4	130	12	I	Appears stable with sound branching structure. Crown suppressed on the north side due to overshadowing.	No Evidence	Good	Moderate foliar insect infestation (Brown Lace Lerp)	Medium 15-40 Years	5	Low	The Domain
4437	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	13	6	248	30	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4450	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	5	201	25	I	Appears stable with sound branching structure. Exhibits a prominent lean to the NW (self-corrected). Bend in lower trunk.	No Evidence	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4451	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	5	4	100	12	I	Appears stable with sound branching structure.	No Evidence	Good	Moderate foliar insect infestation (Lace Lerp)	Long - more than 40 years	5	Moderate	The Domain
4452	<i>Eucalyptus botryoides</i> (Bangalay)	7	5	131	25	I	Appears stable with sound branching structure.	Deadwooded	Fair	Moderate foliar insect infestation (Brown Lace Lerp)	Long - more than 40 years	5	Moderate	The Domain
4453	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	6	4	146	16	I	Appears stable with sound branching structure. Exhibits a prominent lean to the NW (self-corrected). Bend in trunk at GL.	Deadwooded	Good	Low foliar insect infestation (Lace Lerp)	Long - more than 40 years	5	Moderate	The Domain
4458	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	5	5	162	20	I	Appears stable with poor branching structure. Exhibits some dieback in upper crown with 10% deadwood. Upper crown suppressed due to overshadowing.	No Evidence	Poor with sparse crown	Moderate Possum defoliation	Transient (less than 5 years)	5	Very Low	The Domain
4459	<i>Eucalyptus sp.</i> (Stringybark)	8	5	188	20	SM	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
4460	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	10	7	258	56	SM	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
4461	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	7	5	217	20	SM	Appears stable with fair branching structure. Exhibits a high bark inclusion at 2 metres. Crown suppressed on NE side due to crowding.	No Evidence	Good	No Evidence	Medium 15-40 Years	5	Low	The Domain
4578	<i>Livistona australis</i> (Cabbage Tree Palm)	6.5	3	283	7.5	SM	Appears stable with sound branching structure. Located in asphalt pavement with small pavement opening.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4579	<i>Livistona australis</i> (Cabbage Tree Palm)	6	3	293	6	SM	Appears stable with sound branching structure. Located in asphalt pavement with small pavement opening.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4580	<i>Livistona australis</i> (Cabbage Tree Palm)	6.5	3.5	283	8.75	SM	Appears stable with sound branching structure. Located in asphalt pavement with small pavement opening.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4581	<i>Livistona australis</i> (Cabbage Tree Palm)	6	3	274	6	SM	Appears stable with sound branching structure. Located in asphalt pavement with small pavement opening.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4671	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	4	6	239	24	I	Appears stable with fair branching structure. Exhibits a moderate bark inclusion at 1 metre at junction of PL.	Selectively pruned.	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4714	<i>Ficus rubiginosa</i> (Port Jackson Fig)	9	4	100	28	I	Appears stable with sound branching structure. Growing on sandstone cliff face	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
4738	<i>Angophora costata</i> (Sydney Red Gum)	5	4	100 + 80	16	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4739	<i>Angophora costata</i> (Sydney Red Gum)	6	4	150	20	I	Appears stable with sound branching structure.	No Evidence	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4815	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	8	4	140	24	I	Appears stable with fair branching structure. Crown suppressed on SW side due to overshadowing.	No Evidence	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
4817	<i>Eucalyptus botryoides</i> (Bangalay)	8	3	120	15	I	Appears stable with fair branching structure. Exhibits moderate dieback with 30% deadwood and 30% epicormic growth.	No Evidence	Poor with sparse crown	No Evidence	Transient (less than 5 years)	5	Very Low	The Domain

APPENDIX 3 - TREE HEALTH AND CONDITION ASSESSMENT SCHEDULE

Tree Identification No.	Species	Height (m)	Spread (m)	Trunk Diameter (mm)	Live Crown Size (m²)	Maturity Class	Condition	Previous Pruning	Health		Remaining Safe Useful Life Expectancy (SULE)	Landscape Significance Rating	Retention Value	Location
									Vigour	Pest & Disease				
4819	<i>Eucalyptus botryoides</i> (Bangalay)	7	6	169	24	I	Appears stable with fair branching structure. Exhibits multiple co-dominant PLs (x4) at 3 metres. Prominent lean to west (self corrected).	Deadwooded	Good	No Evidence	Short 5-15 Years	5	Low	The Domain
4820	<i>Angophora costata</i> (Sydney Red Gum)	7	6	197	30	SM	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	4	Moderate	The Domain
4820a	<i>Angophora costata</i> (Sydney Red Gum)	5	3	111	6	I	Appears stable with sound branching structure. Exhibits a prominent lean to the SW.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4821	<i>Angophora costata</i> (Sydney Red Gum)	6	4	121	12	I	Appears stable with sound branching structure.	Deadwooded	Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4822	<i>Angophora costata</i> (Sydney Red Gum)	7	5	146	25	I	Appears stable with sound branching structure.	Deadwooded	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4842	<i>Syncarpia glomulifera</i> (Turpentine)	6	4	99	24	I	Appears stable with sound branching structure.	Crown lifted to 1 metre	Very Good	No Evidence	Long - more than 40 years	5	Moderate	The Domain
4872	<i>Eucalyptus microcorys</i> (Tallowwood)	13	11	510	121	M	Appears stable with sound branching structure.	No Evidence	Very Good	No Evidence	Long - more than 40 years	3	High	The Domain
4926	<i>Lophostemon confertus</i> (Brushbox)	12	12	739	108	M	Appears stable with fair branching structure. Exhibits moderate dieback with 20% deadwood and 20% epicormic growth. Exhibits a prominent lean to the NW.	Crown lifted to 3 metres. Selectively pruned & deadwooded	Fair with thinning crown	No Evidence	Short 5-15 Years	3	Moderate	The Domain

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
1	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	11.9	3.3	446.4	Existing asphalt pathway offset 1.9 metres south-east to be demolished and replaced with new stone slab pathway offset 2.1 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
2	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	12.5	3.4	487.4	Existing asphalt pathway offset 2.1 metres south-east to be demolished and replaced with new stone slab pathway offset 2.2 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
3	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	10.6	3.1	354.4	Existing asphalt pathway offset 1.5 metres south-east to be demolished and replaced with new stone slab pathway offset 2.3 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
4	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	11.0	3.1	379.9	Existing asphalt pathway offset 1.7 metres south-east to be demolished and replaced with new stone slab pathway offset 2.3 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
6	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	11.9	3.3	443.6	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
7	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	15.0	4.1	706.5	Existing asphalt pathway offset 10.5 metres south-east to be demolished and replaced with new stone slab pathway offset 11.7 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact	To be retained - no special tree protection measures required.
8	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	15.0	3.9	706.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
19	<i>Melaleuca linariifolia</i> (Narrow-leaved Paperbark)	M	3.2	1.9	33.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
20	<i>Melaleuca linariifolia</i> (Narrow-leaved Paperbark)	M	1.8	1.5	10.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
21	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	12.0	3.3	452.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
22	<i>Ficus rubiginosa var. glabrescens</i> (Port Jackson Fig)	M	4.1	1.9	51.8	Located within footprint of proposed roadway (section of median removed).	Proposed works will necessitate removal	Remove tree.
23	<i>Ficus rubiginosa var. glabrescens</i> (Port Jackson Fig)	M	3.7	1.8	43.6	Located within footprint of proposed roadway (section of median removed).	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
24	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.2	1.9	55.5	Section of median to north to be demolished within TPZ and new kerb offset 0.9 metres north. Excavations for new road pavement and kerb footing within TPZ/SRZ. Substantial encroachment to TPZ.	Proposed works will necessitate removal	Remove tree.
25	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.3	2.0	58.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
26	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.6	2.0	66.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
27	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.8	2.3	72.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
28	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	6.0	2.1	113.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
29	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	3.0	1.6	28.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
30	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.0	1.8	50.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
31	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.5	2.0	64.7	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
32	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.0	1.8	50.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
33	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	5.0	2.1	78.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
34	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	6.1	2.3	117.4	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
35	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.8	2.1	72.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
36	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	3.9	1.9	47.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
37	<i>Ficus rubiginosa</i> var. <i>glabrescens</i> (Port Jackson Fig)	M	4.3	2.0	59.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
38	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	4.7	2.0	70.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
39	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	5.1	2.1	82.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
735	<i>Phoenix canariensis</i> (Canary Island Palm)	G	5.6	2.7	98.1	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
736	<i>Phoenix canariensis</i> (Canary Island Palm)	G	4.1	2.4	52.0	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
737	<i>Phoenix canariensis</i> (Canary Island Palm)	G	5.0	2.9	78.5	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
739	<i>Phoenix canariensis</i> (Canary Island Palm)	G	5.0	2.9	78.5	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
741	<i>Phoenix canariensis</i> (Canary Island Palm)	G	5.0	2.7	78.5	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
742	<i>Phoenix canariensis</i> (Canary Island Palm)	M	6.1	2.8	117.6	Located within footprint of proposed building (roofline) & basement.	Proposed works will necessitate removal (High Retention Value). Proposed to be transplanted elsewhere within the site.	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
860	<i>Angophora costata</i> (Sydney Red Gum)	P	6.2	2.3	119.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
863	<i>Angophora costata</i> (Sydney Red Gum)	P	5.7	2.2	101.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
865	<i>Angophora costata</i> (Sydney Red Gum)	P	6.0	2.5	113.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
969	<i>Araucaria columnaris</i> (Cook Pine)	M	8.9	2.9	251.1	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1096	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	11.2	2.9	392.4	Existing asphalt pathway offset 1.6 metres south-east to be demolished and replaced with new stone slab pathway offset 1.7 metres SE (slightly beyond existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
1097	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	10.6	3.1	354.4	Existing asphalt pathway offset 1.7 metres south-east to be demolished and replaced with new stone slab pathway offset 1.7 metres SE (within alignment of existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
1098	<i>Ficus microcarpa</i> var. <i>hillii</i> (Hill's Weeping Fig)	M	13.2	3.4	547.1	Existing asphalt pathway offset 1.8 metres south-east to be demolished and replaced with new stone slab pathway offset 1.8 metres SE (within alignment of existing path). Excavations for new path sub-grade within SRZ/TPZ (within footprint of existing path)	No adverse impact, provided that all works are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Demolish existing asphalt pathway in accordance with Section 10.5. Undertake all excavations for new pavement sub-grade within TPZ in accordance with Section 10.6.
1116	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	9.6	3.0	289.4	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1117	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	9.0	2.6	254.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
1118	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	12.7	3.4	508.5	Proposed new building (Special Purpose Gallery, Lower Level 2) offset 9.5 metres south at RL 9.7 (8 to 9 metres below grade). Excavations for building foundations within TPZ. Encroachment to TPZ = 8% (assuming contiguous pier type retaining wall or soldier pile wall with minimal over-excavation). Roofline offset 8.7 metres south (just outside canopy dripline) at RL 25.0 (7 metres above grade). No canopy pruning required assuming scaffold width is limited to 1.5 metres from building facade. Existing asphalt pathway offset 10.5 metres north-west to be demolished within TPZ. Proposed new granite path offset 9.5 metres NW at RL? (slightly above existing grade). Encroachment to TPZ = 9%. Cumulative encroachment = 17%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. However, this species will tolerate the extent of the encroachment proposed, provided that all proposed works within TPZ are undertaken as recommended.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3. Undertake all excavations for building foundations in accordance with Section 10.6. Over-excavation (to facilitate construction of basement wall) is not to exceed 500mm from building footprint. Install temporary scaffolding in accordance with Section 10.14. Scaffold width not to exceed 1.5 metres from building facade.
1119	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	14.1	3.5	627.8	Proposed new building (Temporary Collections - Lower Level 3) offset 3.3 metres south at RL3.50 (9 metres below grade). Excavations for building foundations within SRZ/TPZ. Encroachment to TPZ = 37%.	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Proposed works will result in a significant adverse impact, necessitating removal.	Remove tree. Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
1208	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	9.6	3.0	289.4	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1209	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	4.8	2.0	71.7	No proposed works within TPZ.	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Install Tree Protection Fence in accordance with Section 10.3.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
1220	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	9.2	3.0	268.6	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1221	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	24.0	5.8	1808.6	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1222	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	14.4	3.6	651.1	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1226	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	9.0	2.8	254.3	Proposed new Entrance Plaza offset 10.3 metres north-east at RL 25.00 (3 metres above grade, beyond existing rock embankment, outside TPZ). Some non-engineered fill may be required to be placed within TPZ to manage grade transition. Turfgrass and soft landscape within TPZ to be removed and replaced with gravel pavement/mulch.	No adverse impact, provided any required fill for grade transition is supplied and placed as recommended. Removal of turfgrass and soft landscape on adjacent banks may result in some adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Limit extent of any fill to no greater than 10% of the TPZ (minimum offset to toe of fill bank = 6 metres from trunk). All fill material within TPZ to be supplied and placed in accordance with Section 10.9. Install Tree Protection Fence in accordance with Section 10.3. Maintain existing turfgrass and soft landscape treatment within TPZ (delete proposed gravel mulch).
1227	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	7.8	2.8	191.0	Located within footprint of proposed new Entrance Plaza	Proposed works will necessitate removal (High Retention Value). Proposed to be transplanted elsewhere within the site.	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
1228	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	9.0	2.6	254.3	Located within footprint of proposed paved forecourt area.	Proposed works will necessitate removal (High Retention Value). Proposed to be transplanted elsewhere within the site.	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
1232	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	16.0	4.8	803.8	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
1363	<i>Phoenix sylvestris</i> (Silver Date Palm)	G	4.6	2.5	67.7	Proposed new granite pavement offset 1.6 metres north-west at RL? (assumed close to existing grade) excavations for pavement sub-grade within TPZ. Encroachment to TPZ = 26%	Extent of encroachment to TPZ exceeds acceptable limits under AS 4970:2009. Excavations for pavement sub-grade may result in root damage leading to an adverse impact.	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3. Consider reducing paved area to limit encroachment to no more than 10% of the TPZ (Minimum setback 3.2 metres).
2350	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	7.2	2.4	163.4	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2351	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.4	1.5	18.6	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2352	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.5	1.6	20.1	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2353	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.6	1.6	20.9	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2354	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.5	1.6	20.1	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2355	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.1	1.5	14.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2356	<i>Agathis robusta</i> (Queensland Kauri)	M	2.9	1.7	25.8	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2357	<i>Agathis robusta</i> (Queensland Kauri)	M	2.9	1.6	25.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2358	<i>Agathis robusta</i> (Queensland Kauri)	M	2.8	1.6	24.1	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2359	<i>Agathis robusta</i> (Queensland Kauri)	M	3.2	1.7	31.2	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2360	<i>Agathis robusta</i> (Queensland Kauri)	M	2.6	1.6	21.7	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2383	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.3	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2384	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	0.9	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2385	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2386	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2387	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2388	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2389	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2390	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	0.9	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2392	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	2.3	1.5	15.9	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2393	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.5	1.1	7.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2394	<i>Corymbia ficifolia</i> (Red Flowering Gum)	P	1.2	1.1	4.5	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
2405	<i>Angophora costata</i> (Sydney Red Gum)	P	4.5	2.0	63.6	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2406	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	28.4	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2407	<i>Angophora costata</i> (Sydney Red Gum)	P	2.6	1.6	20.4	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2408	<i>Angophora costata</i> (Sydney Red Gum)	P	2.3	1.5	15.9	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2409	<i>Angophora costata</i> (Sydney Red Gum)	P	2.7	1.6	22.9	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2410	<i>Angophora costata</i> (Sydney Red Gum)	P	2.1	1.4	13.8	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2411	<i>Angophora costata</i> (Sydney Red Gum)	P	3.3	1.8	35.1	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2413	<i>Angophora costata</i> (Sydney Red Gum)	P	3.1	1.7	29.4	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2416	<i>Angophora costata</i> (Sydney Red Gum)	P	2.8	1.6	24.1	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2417	<i>Angophora costata</i> (Sydney Red Gum)	P	2.0	1.4	12.6	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2419	<i>Angophora costata</i> (Sydney Red Gum)	P	2.9	1.7	25.8	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2422	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	28.4	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2423	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	28.4	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2426	<i>Angophora costata</i> (Sydney Red Gum)	P	2.7	1.6	22.9	Located within footprint of proposed new pathway	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2427	<i>Angophora costata</i> (Sydney Red Gum)	P	3.3	1.8	34.2	Located within footprint of proposed new landscape area (sedge field)	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2428	<i>Angophora costata</i> (Sydney Red Gum)	P	2.5	1.5	19.6	Located within footprint of proposed new landscape area (sedge field)	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2430	<i>Angophora costata</i> (Sydney Red Gum)	P	3.1	1.7	29.4	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2432	<i>Angophora costata</i> (Sydney Red Gum)	P	3.2	1.7	32.2	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2433	<i>Angophora costata</i> (Sydney Red Gum)	P	3.3	1.8	35.1	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2434	<i>Banksia integrifolia</i> (Coast Banksia)	M	3.4	1.8	37.1	Located close to footprint of proposed new building (<2 metres).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2436	<i>Chamaerops humilis</i> (Mediterranean Fan Palm)	P	4.0	2.5	50.2	Located within footprint of proposed building & basement.	Proposed works will necessitate removal (High Retention Value). Given the position of this tree within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2437	<i>Ficus macrophylla</i> (Moreton Bay Fig)	M	4.2	2.1	55.4	No proposed works within TPZ (located within road traffic island)	No adverse impact	To be retained - no special tree protection measures required.
2887	<i>Angophora costata</i> (Sydney Red Gum)	P	3.8	1.9	45.9	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2888	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	28.4	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
2889	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.0	1.9	50.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
2892	<i>Angophora costata</i> (Sydney Red Gum)	P	4.0	1.9	50.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2895	<i>Angophora costata</i> (Sydney Red Gum)	P	5.0	2.1	79.0	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2897	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	P	4.0	1.9	49.4	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2899	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.5	1.4	19.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
2901	<i>Eucalyptus botryoides</i> (Bangalay)	P	5.0	1.9	78.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2904	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.4	1.8	36.1	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2905	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.7	1.8	42.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2907	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.6	2.0	66.0	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2908	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.7	1.8	42.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2910	<i>Angophora costata</i> (Sydney Red Gum)	P	3.3	1.8	35.1	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
2912	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.0	1.9	50.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2913	<i>Angophora costata</i> (Sydney Red Gum)	P	3.2	1.7	33.1	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2915	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.2	1.9	54.2	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2916	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.4	2.2	91.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2918	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.6	1.6	20.9	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2920	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.8	1.9	45.9	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2922	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.9	1.7	25.8	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2928	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.2	1.9	54.2	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2930	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	P	3.9	1.9	48.2	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2930a	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.4	1.5	17.9	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
2931	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.0	1.6	28.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2932	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.0	1.6	28.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2933	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.2	1.5	15.2	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2934	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	P	4.3	1.9	56.8	Located within footprint of proposed new building (Special Purpose Gallery).	Proposed works will necessitate removal	Remove tree.
2936	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.7	1.6	22.5	Located within footprint of proposed new paved area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2937	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.2	1.5	15.8	Located within footprint of proposed new paved area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2938	<i>Flindersia australis</i> (Crows Foot Ash)	M	3.0	1.7	27.5	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2939	<i>Flindersia australis</i> (Crows Foot Ash)	M	2.9	1.7	25.8	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2940	<i>Flindersia australis</i> (Crows Foot Ash)	M	3.2	1.7	32.2	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2941	<i>Angophora costata</i> (Sydney Red Gum)	P	1.5	1.2	7.1	No proposed works within TPZ.	no adverse impact	Remove tree.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2942	<i>Angophora costata</i> (Sydney Red Gum)	P	4.1	1.9	51.8	Existing footpath offset 1.6 metres north to be demolished and new path installed in the same footprint at RL?. Excavations for pathway sub-grade and re-grading within SRZ.	Proposed works will result in a significant adverse impact.	Remove tree.
2943	<i>Angophora costata</i> (Sydney Red Gum)	P	4.5	2.0	64.7	Existing footpath offset 0.9 metres north to be demolished and new path installed in the same footprint at RL?. Excavations for pathway sub-grade and re-grading within SRZ.	Proposed works will result in a significant adverse impact.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2944	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.0	1.9	49.4	No proposed works within TPZ.	no adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
2945	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.1	1.7	29.4	No proposed works within TPZ.	no adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Install Tree Protection Fence in accordance with Section 10.3.
2947	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.6	1.8	40.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2948	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.3	2.0	58.0	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2949	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.7	2.0	68.8	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2950	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.0	2.0	78.5	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
2951	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.2	1.9	55.5	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2951a	<i>Angophora costata</i> (Sydney Red Gum)	P	3.7	1.8	43.6	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Remove tree.
2952	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.8	2.0	71.7	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2953	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.3	2.0	58.0	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2954	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.0	1.6	50.2	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2955	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.3	1.8	35.1	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2957	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.1	1.5	14.5	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal	Remove tree.
2958	<i>Angophora costata</i> (Sydney Red Gum)	P	3.5	1.7	38.5	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2963	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.9	1.9	47.8	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Remove tree.
2965	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.4	2.2	91.5	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

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Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2970	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.1	1.9	53.0	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2971	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.5	1.5	19.6	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal	Remove tree (dead).
2972	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.6	2.2	99.8	Located within footprint of proposed building (Lower Level 3 ramp).	Proposed works will necessitate removal (High Retention Value).	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2973	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.7	2.0	68.8	Located within footprint of proposed building (Lower Level 3).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2976	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.4	1.5	17.9	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Remove tree.
2978	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.1	1.7	29.4	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Remove tree.
2979	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	PP	2.5	1.6	20.1	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2980	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.9	1.7	25.8	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2982	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.5	1.8	38.2	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2983	<i>Angophora costata</i> (Sydney Red Gum)	P	3.2	1.7	31.2	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2984	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.2	2.1	85.1	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2985	<i>Casuarina glauca</i> (Swamp Oak)	M	4.5	2.0	63.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2986	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.0	2.0	78.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2989	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.8	2.2	106.7	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal (High Retention Value). Given the position of the proposed building within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2990	<i>Banksia integrifolia</i> (Coast Banksia)	M	2.7	1.6	22.9	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2991	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.2	1.5	15.2	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

		APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE						
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2992	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.2	1.9	55.5	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal (High Retention Value). Given the position of the proposed building within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2993	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.4	2.2	93.1	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal (High Retention Value). Given the position of the proposed building within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2994	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.9	1.9	48.2	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2995	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	5.5	2.1	95.0	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal (High Retention Value). Given the position of the proposed building within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2996	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	8.4	2.8	221.6	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal (High Retention Value). Given the position of the tree within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2997	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	4.5	2.0	63.6	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
2998	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	4.0	1.8	50.2	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
2999	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	3.0	1.7	28.3	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3000	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.3	1.8	34.2	Located within footprint of proposed new egress pathway.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3001	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	6.1	2.3	115.6	Located within footprint of proposed new building (Lower Level 3 - Exhaust Vent & chamber)	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3002	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	6.1	2.3	115.6	Located within footprint of proposed new building (Lower Level 3)	Proposed works will necessitate removal (High Retention Value). Given the position of the proposed building within the site, there are no feasible options that can be recommended in this instance to preserve this tree.	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3004	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.0	1.7	28.3	Located within footprint of proposed new building (Lower Level 3)	Proposed works will necessitate removal	Remove tree.
3006	<i>Eucalyptus botryoides</i> (Bangalay)	P	4.0	1.9	50.2	Located within footprint of proposed new building (Lower Level 3 - Exhaust Vent & chamber)	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3007	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	4.3	2.0	58.0	Located within footprint of proposed new egress pathway.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3485	<i>Callitris macleayana</i> (Stringybark Pine)	M	2.4	1.5	18.1	No proposed works within TPZ (existing service road to be maintained).	No adverse impact	Retain in accordance with recommended Tree Protection Measures (Section 10). Maintain existing ground levels within TPZ. Install Tree Protection Fence in accordance with Section 10.3.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
3690	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.0	1.4	11.9	Located within footprint of proposed new building (Gallery 2).	Proposed works will necessitate removal	Remove tree.
3692	<i>Eucalyptus saligna</i> (Sydney Blue Gum)	P	3.2	1.7	32.2	Located within footprint of proposed new building.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3708	<i>Acacia decurrens</i> (Black Wattle)	M	3.0	1.5	28.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
3710	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.1	1.7	30.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3711	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.0	1.4	12.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
3712	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.3	1.5	16.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
3726	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.5	1.6	19.4	Located within footprint of proposed new building (Lower Level 3 - ramp).	No adverse impact	To be retained - no special tree protection measures required.
4431	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	28.3	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.
4432	<i>Angophora costata</i> (Sydney Red Gum)	P	2.3	1.5	17.2	Located within footprint of proposed new Entry Plaza	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE								
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m ²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
4433	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.3	1.5	15.9	Located within footprint of proposed new egress pathway.	Proposed works will necessitate removal.	Remove tree.
4435	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.8	1.9	44.7	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4436	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.0	1.4	11.9	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Remove tree.
4437	<i>Eucalyptus saligna x botryoides</i> (Hybrid Sydney Blue Gum)	P	3.7	1.8	43.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4450	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.0	1.7	28.4	Located within footprint of proposed new building (Lower Level 3)	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4451	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.0	1.3	12.6	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
4452	<i>Eucalyptus botryoides</i> (Bangalay)	P	2.5	1.4	19.6	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4453	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.2	1.5	15.2	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4458	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.4	1.5	18.6	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

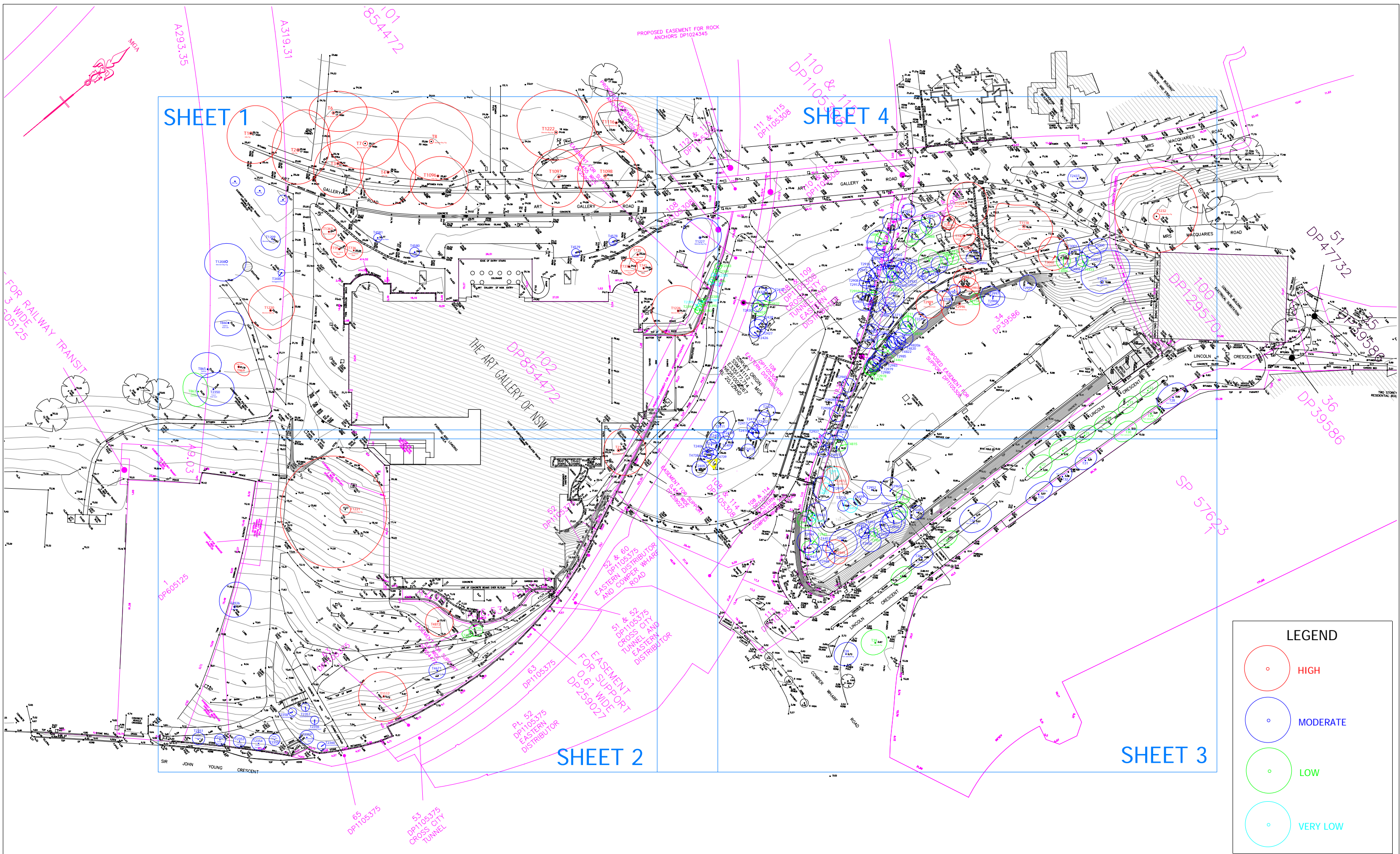
Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
4459	<i>Eucalyptus sp.</i> (Stringybark)	P	2.8	1.6	24.9	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4460	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.9	1.9	47.0	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4461	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	3.2	1.7	33.1	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
4578	<i>Livistona australis</i> (Cabbage Tree Palm)	G	2.6	1.9	20.4	Located within footprint of proposed paved forecourt area.	Proposed works will necessitate removal	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
4579	<i>Livistona australis</i> (Cabbage Tree Palm)	G	2.6	2.0	21.8	Located within footprint of proposed paved forecourt area.	Proposed works will necessitate removal	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
4580	<i>Livistona australis</i> (Cabbage Tree Palm)	G	2.6	1.9	20.4	Located within footprint of proposed paved forecourt area.	Proposed works will necessitate removal	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
4581	<i>Livistona australis</i> (Cabbage Tree Palm)	G	2.5	1.9	19.1	Located within footprint of proposed paved forecourt area.	Proposed works will necessitate removal	Relocate (transplant) to the new position as indicated on the approved Landscape Plan in accordance with the transplant specification (Section 12)
4671	<i>Ficus rubiginosa var. glabrescens</i> (Port Jackson Fig)	M	3.6	1.8	40.3	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
4714	<i>Ficus rubiginosa</i> (Port Jackson Fig)	M	2.0	1.3	12.6	Located within footprint of proposed new building (Gallery 1).	Proposed works will necessitate removal	Remove tree.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
4738	<i>Angophora costata</i> (Sydney Red Gum)	P	2.3	1.5	15.9	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4739	<i>Angophora costata</i> (Sydney Red Gum)	P	2.3	1.5	15.9	Located within footprint of proposed new open grassed area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4815	<i>Eucalyptus tereticornis</i> (Forest Red Gum)	P	2.1	1.4	13.9	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Remove tree.
4817	<i>Eucalyptus botryoides</i> (Bangalay)	P	1.8	1.4	10.2	Located within footprint of proposed new building (Lower Level 3 - ramp).	Proposed works will necessitate removal	Remove tree.
4819	<i>Eucalyptus botryoides</i> (Bangalay)	P	3.0	1.6	28.3	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Remove tree.
4820	<i>Angophora costata</i> (Sydney Red Gum)	P	3.0	1.7	27.5	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4820a	<i>Angophora costata</i> (Sydney Red Gum)	P	1.7	1.3	8.8	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4821	<i>Angophora costata</i> (Sydney Red Gum)	P	2.0	1.4	12.6	Located within footprint of proposed new building (Entrance Pavilion).	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4822	<i>Angophora costata</i> (Sydney Red Gum)	P	2.5	1.5	19.6	Located within footprint of proposed new paved area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.

APPENDIX 4 - IMPACT ASSESSMENT SCHEDULE

Tree Identification No.	Species	Construction Tolerance	Tree Protection Zone (m R)	Structural Root Zone (m R)	TPZ (m²)	Incursions To Root Zone &/or Canopy	Likely Impact	Recommendation
4842	<i>Syncarpia glomulifera</i> (Turpentine)	M	2.0	1.3	12.6	Located within footprint of proposed new paved area.	Proposed works will necessitate removal	Undertake replacement planting elsewhere within the site with a new tree to compensate for loss of amenity in accordance with Section 11.
4872	<i>Eucalyptus microcorys</i> (Tallowwood)	P	6.1	2.5	117.4	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.
4926	<i>Lophostemon confertus</i> (Brushbox)	M	8.9	2.9	246.8	No proposed works within TPZ.	No adverse impact	To be retained - no special tree protection measures required.



APPENDIX 5
TREE LOCATION PLAN SHOWING
TREE RETENTION VALUES
 Art Gallery of NSW Expansion Project
 Art Gallery Road, SYDNEY



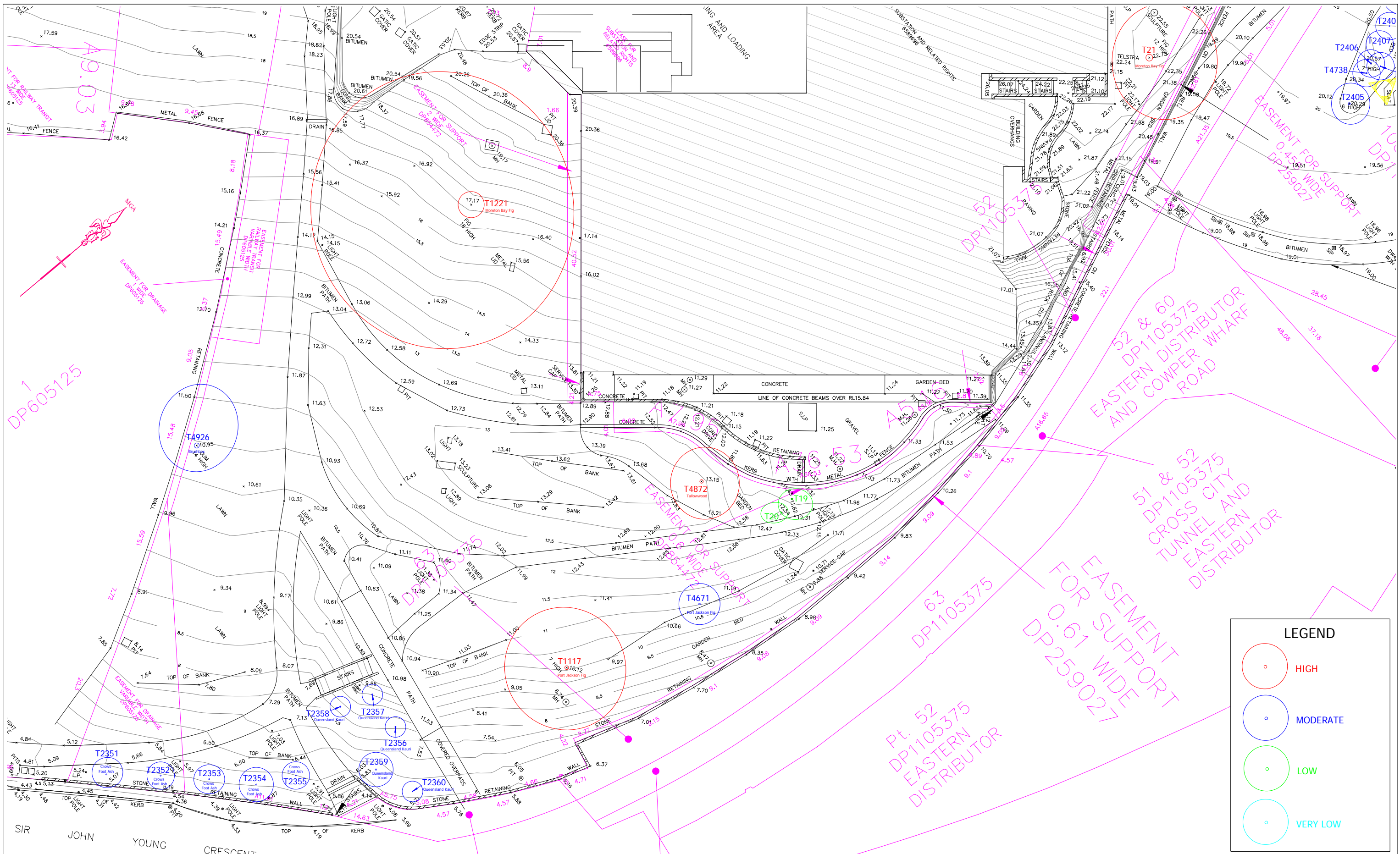
Earthscape Horticultural Services
 Arboricultural and Horticultural Consultants
 PO Box 364
 BEROWRA NSW 2081
 Ph: 02 9456 4787
 Fax: 02 9456 5757 e: earthscape@iinet.net.au

Based on the Survey Drawing prepared by YSCO Geomatics,
 Dwg No. 0714/1F of 03/2014;
 Landbridge Tree Survey (2015) prepared by the
 Sydney Royal Botanic Gardens; and
 'Existing Trees' plan (aerial image) prepared
 by McGregor Coxall, Dwg No. LD_01 Rev F dated 26/04/2016

DWG No. T16-060101

KEY PLAN

DATE: 11/10/2017



APPENDIX 5
TREE LOCATION PLAN SHOWING
TREE RETENTION VALUES
Art Gallery of NSW Expansion Project
Art Gallery Road, SYDNEY



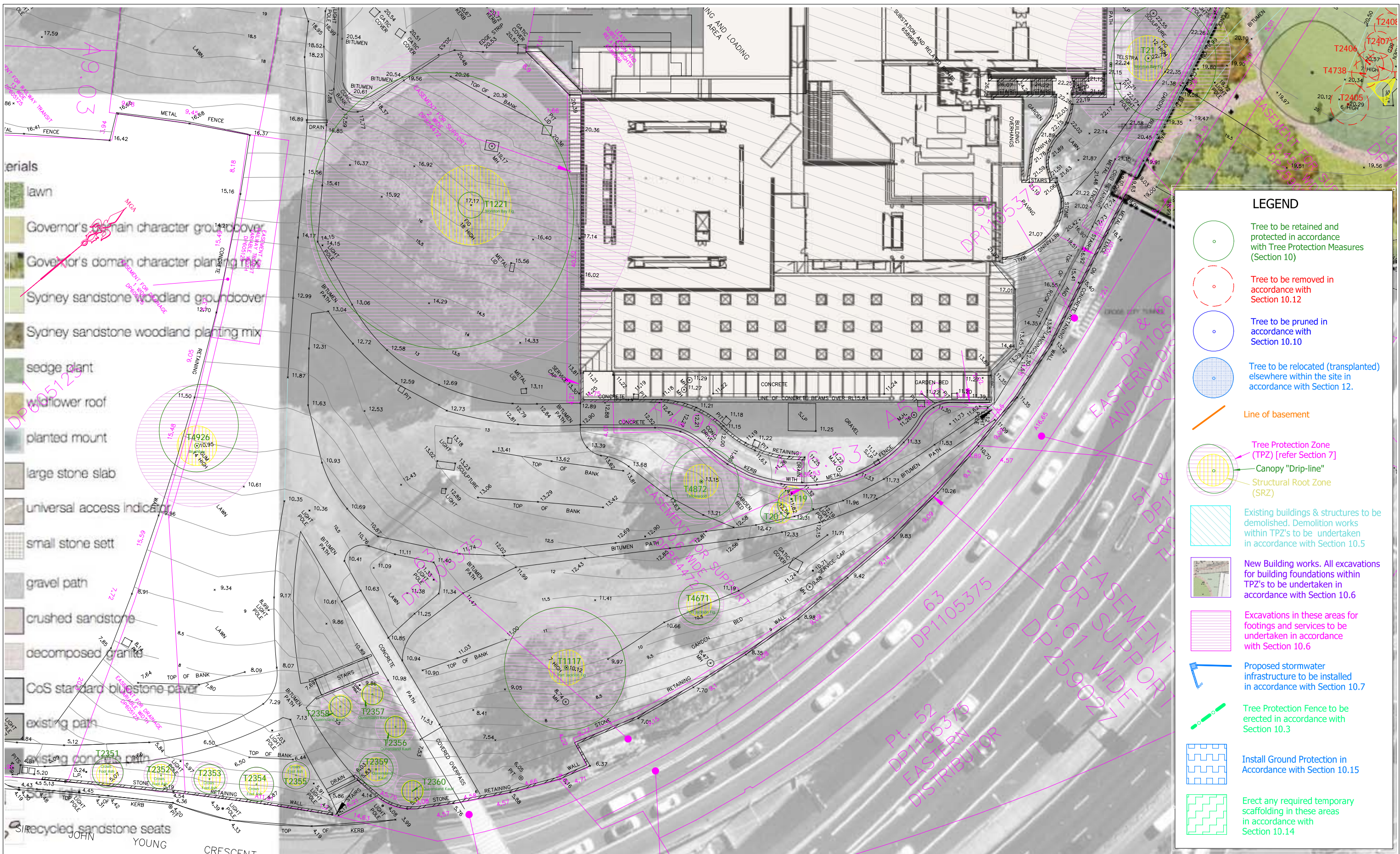
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DWG No. T16-060101

SHEET 2

DATE: 11/10/2017



APPENDIX 6 TREE PROTECTION PLAN

Art Gallery of NSW Expansion Project
- Sydney Modern
Art Gallery Road, SYDNEY



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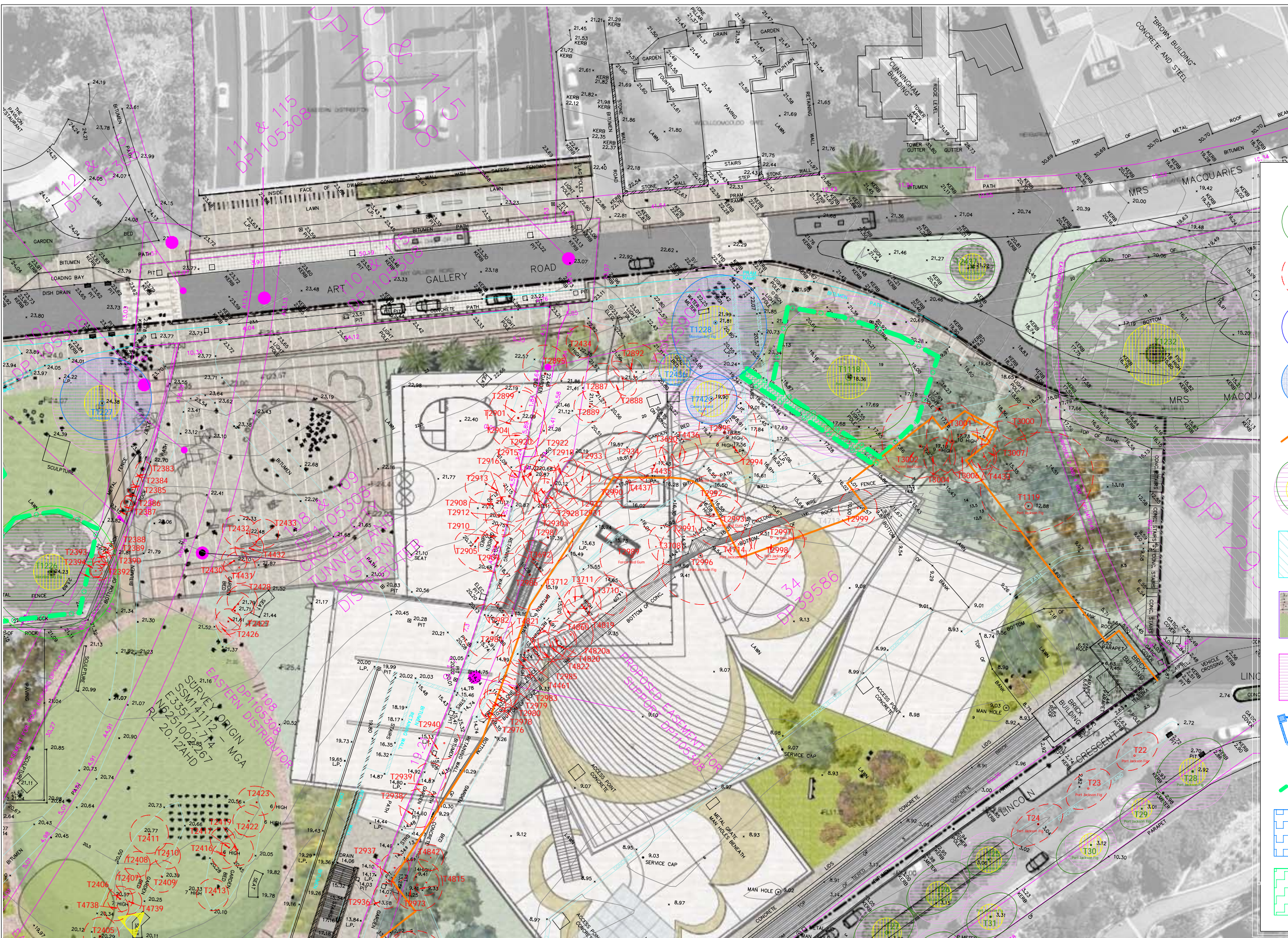
Landbridge Tree Survey (2015) prepared by the
Sydney Royal Botanic Gardens; and

'Existing Trees' plan (aerial image) prepared
by McGregor Coxall, Dwg No. LD_01 Rev F dated 26/04/2016

DWG No. T16-060102

SHEET 2

DATE: 11/10/2017



APPENDIX 6

TREE PROTECTION PLAN

Art Gallery of NSW Expansion Project
- Sydney Modern
Art Gallery Road, SYDNEY



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by McGregor Coxall, Dwg No. LD_01 Rev F dated 26/04/2016

DWG No. T16-060102

SHEET 4

DATE: 2/11/2017