PREMLIMINARY ARBORICULTURAL REPORT-1/2 MURRAY ROSE OLYMPIC PARK

SITE ADDRESS | 1-2 Murray Rose Avenue, Olympic Park, NSW

PREPARED FOR | Will Wang, Austino Property Group

PREPARED BY | Dr Matthew Laurence

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1.0 INTRODUCTION |

1.1 Background

1.1.1 This Preliminary Arboricultural Report was prepared for the Austino Property Group in relation to 1 Murray Rose Avenue (hereby designated 'S1') and 2 Murray Rose Avenue (hereby designated 'S2') Sydney Olympic Park, NSW. This Preliminary Arboricultural Report provides an overview of the quality and value of the trees on site, and provides arboricultural advice to assist in the development process.

1.1.2 In preparing this report, the author is aware of and has considered the objectives of the Sydney Olympic Park Authority (SOPA), Cumberland Council's *Development Control Plan 2010, Australian Standard 4970 Protection of Trees on Development Sites (2009)*, *Australian Standard 4373 Pruning of Amenity Trees (2007)* and *Australian Standard 2303 Tree Stock for Landscape Use (2015).*

1.1.3 The *Australian Standard 4970 Protection of Trees on Development Sites (2009)* Clause 2.3.2 requires the allocation of a tree Retention Value. This value is based on the Useful Life Expectancy and Landscape Significance, which considers the tree's health, structural condition and site suitability. The Retention Value does not consider any proposed development works and is not a schedule for tree retention or removal. The trees have been allocated one of the following Retention Values:

- Priority for Retention
- Consider for Retention
- Consider for Removal
- Priority for Removal

1.1.4 Further Methodology used in the preparation of this Report is detailed in Appendix 1.

1.1.5 This Preliminary Arboricultural Report is based on an assessment of the following supplied documentation/plans only:

- *Detail Survey Over Lots 1 & 2 D,P,1185060 Murray Rose Avenue, Sydney Olympic Park* Reference 258-14-prepared by Craig & Rhodes (dated 27/01/2015).

1.2 The Sites

1.2.1 The sites are approximately square shaped and situated within the Sydney Olympic Park Authority and bound between Parkview Drive to the South, Bennelong Parkway to the North and transected by Murray Rose Avenue.

1.3 **Aims**

1.3.1 The aims of this Report were to:

- Undertake a visual assessment of the subject trees
- Determine the subject trees' approximate height, canopy spread and trunk diameter
- Estimate the subject trees' Useful Life Expectancy
- Determine the subject trees' Landscape Significance
- Outline the subject trees' Retention Value
- Determine the subject trees' Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) in accordance with *Australian Standard 4970 Protection of Trees on Development Sites (2009)*
- Determine the species, height and estimate the trunk diameter of trees on adjacent properties that could be impacted by future site development
- Prepare a report summarizing site conditions, tree assessment and management option

2.0 RESULTS |

2.1 The Trees

2.1.1 A Visual Tree Assessment[1] (VTA) has been undertaken on trees growing within the site to determine their health and structural condition. A total of twenty two (22) trees (and group trees) were assessed which included a mix of locally indigenous, Australian native and exotic species.

2.1.2 An additional twenty six (26) trees were located outside of the site boundaries. A full VTA of these trees was not undertaken due to limited access. The species and trunk diameter were recorded for the purposes of determining Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) calculations only. The distance of the tree from the Site boundary is an approximation only due to limited access. These trees have been identified alphabetically.

2.1.3 A search of the BioNet Atlas of NSW Wildlife Database was undertaken in March 2017. No individual threatened tree species that were listed within this database for the area were identified during the current field investigations of the site[2]. The ecological significance and habitat value of the trees has not been assessed and is beyond the scope of this report.

2.1.4 Trees 1 & 2 were identified as *Eucalyptus melliodora* (Yellow Box) and were allocated a low Landscape Significance and a Retention Value of *Consider for Removal*.

2.1.5 Trees 3 & 8 were identified as *Corymbia eximia* (Yellow Bloodwood) and were allocated a low Landscape Significance and a Retention Value of *Consider for Removal*.

2.1.6 Trees 4, 11, 14 & 16 were identified as *Corymbia eximia* (Yellow Bloodwood) and were allocated a moderate Landscape Significance and a Retention Value of *Consider for Retention*.

2.1.7 Trees 9, 15 & 17 were identified as *Corymbia eximia* (Yellow Bloodwood) and were allocated a low Landscape Significance and a Retention Value of *Priority for Removal*.

2.1.8 Tree 5 is a group of five (5) trees identified as *Elaeocarpus reticulatus* (Blueberry Ash). Individually, these trees provide a low contribution to the landscape however as a group they have moderate Landscape Significance and were allocated a Retention Value of *Consider for Retention*.

2.1.9 Tree 6 is a group of three (3) trees identified as *Ulmus parvifolia* (Chinese Weeping Elm) and were allocated a moderate Landscape Significance and a Retention Value of *Consider for Removal*.

2.1.10 Tree 7 was identified as *Ulmus parvifolia* (Chinese Weeping Elm) and was allocated a low Landscape Significance and a Retention Value of *Consider for Removal*.

2.1.11 Trees 10 & 18-22 were identified as *Eucalyptus robusta* (Swamp Mahogany) and were allocated a low Landscape Significance and a Retention Value of *Consider for Removal*.

2.1.12 Trees 12 & 13 were identified as *Eucalyptus robusta* (Swamp Mahogany) and were allocated a moderate Landscape Significance and a Retention Value of *Consider for Retention*.

2.1.13 Tree A was identified as a *Eucalyptus* sp. Tree A was located 10m within no. 4 Murray Rose Avenue which bounded S2. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

2.1.14 Trees E,M,N,O & Z were identified as *Eucalyptus* spp. and were located on the boundary of S1 on the reserve between the site and Bennelong Parkway. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

2.1.15 Tree B was a group of 27 trees identified as *Casuarina glauca* (Swamp She-oak) that formed a screen on the boundary of S1 and Bennelong Parkway. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

2.1.16 Tree C was identified as *Casuarina glauca* (Swamp She-oak) that was a larger tree in the Tree group B and formed part of the screen on the boundary of S1 and Bennelong Parkway. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

2.1.17 Tree D was identified as *Eucalyptus sideroxylon* (Mugga Ironbark) and was located on the boundary of S1 on the reserve between the site and Bennelong Parkway. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

2.1.18 Trees F-L and P-Y were identified as *Corymbia maculata* (Spotted Gum) and were located on the boundary of S1 on the reserve between the site and Bennelong Parkway. All trees outside of the site boundaries have been allocated a Retention Value of *Priority for Retention.*

3.0 DEVELOPMENT WORKS |

3.1 Tree Protection Zones & Structural Root Zones

3.1.1 The Tree Protection Zone (TPZ) is the area above and below ground, at a given distance from the trunk, which is isolated from construction disturbance in order to preserve the vigour and long-term viability of the tree. The TPZ is the primary means of protecting trees on development sites and the details are outlined in the *Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970)*[3].

3.1.2 The TPZ is based on scientific research and is generally accepted within the arboricultural industry as providing adequate tree protection from construction disturbance. The TPZ is a radial measurement calculated by multiplying the tree's Diameter at Breast Height (DBH) by 12[3].

3.1.3 Ideally works within the TPZ should be avoided. However, *Minor Encroachments* (defined in AS4970 as less than 10% of the TPZ area) are considered acceptable when it is compensated for elsewhere and contiguous within the TPZ. A *Major Encroachment* (defined in AS4970 as greater than 10% of the TPZ area or within the SRZ) may require root investigations by non-destructive methods and tree sensitive construction methods.

3.1.4 The Structural Root Zone (SRZ) is the minimum area around the base of the tree required for the tree's stability. The SRZ is expressed by its radius in metres and is a circular area centred around the trunk[3]. The SRZ only relates to tree stability and not the vigour and long-term viability of the tree.

3.1.5 Encroachment into SRZ (i.e. severance of structural roots >25mmØ) may lead to the destabilisation of the tree and the long-term viability must be demonstrated in such cases. This may require root investigations by non-destructive methods[3].

3.1.6 The TPZ and SRZ of the trees have been calculated in accordance with the AS-4970 and are included in the Tree Assessment Schedule (Appendix 2).

3.2 Crown Protection

3.2.1 The TPZ may need to be extended to provide additional protection to the above ground parts of the tree[3].

3.2.2 In the likelihood of conflict between branches and structures/machinery during the development, branches should be protected with padding and timber battens, temporarily tied back or in some cases pruned. However, pruning should only be considered if does not impact the tree's health, structural condition and long-term viability or form.

3.2.3 Pruning works must be in accordance with *Australian Standard 437 Pruning of Amenity (2007)*[4] *Trees* and the *Workcover Code of Practice for the Amenity Tree Industry (1998)*[5].

3.3 Replacement Planting

3.3.1 Replacement tree planting should be provided when trees are removed. Replacement trees should be supplied as advanced-size stock to help offset the loss of amenity resultant from the tree removals.

3.3.2 Replacement planting should be supplied in accordance with *Australian Standard 2303 (2015) Tree Stock for Landscape Use*[6].

4.0 CONCLUSION |

4.1 All 22 trees surveyed within S1 and S2 were generally of low quality with no trees allocated a high or very high Landscape Significance. Many of these trees had structural defects and poor form (Appendix 4).

4.2 Tree group 5 was allocated a Retention Value of *Consider for Retention*. However, these trees were suppressed and given their small size the removal and replacement with healthy advanced size specimens could replace the loss of amenity within a short to medium timeframe.

4.3 The majority of trees (A-Z) were outside of the site boundaries and, by necessity, were allocated a Retention Value of *Priority for Retention.*

4.4 Tree A was ~10m from boundary and the TPZ was not within Site S2. This tree is unlikely to be negatively impacted by future development works within S2.

4.5 Tree C and Tree group B were within ~100mm of the site boundary and both the TPZ and SRZ extend into S2 by ~4.1m and ~2m, respectively.

4.6 The TPZ & SRZ of trees D,E,F,H,J,K,L,M,N,O,P,Q,R,T,U,V,X,Y & Z SRZs extend into S1 and must be considered in planning future development of the site.

4.7 The TPZ & SRZ of trees G,I,S & W did not extend into S1 and are unlikely to be negatively impacted by future development works within S1.

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5.0 REFERENCES |

[1] Mattheck & Breloer (2003), *The Body Language of Trees – A Handbook for Failure Analysis*.
[2] NSW Office of Environment and Heritage's Atlas of NSW Wildlife (2011), *BioNet Atlas of NSW Wildlife*.
[3] Standards Australia (2009), Protection of Trees on Development Sites AS-4970
[4] Standards Australia (2007), Pruning of Amenity Trees AS-4373.
[5] Workcover Code of Practice for the Amenity Tree Industry (1998) (accessed 10/3/2017)
[6] Standards Australia (2015), Tree Stock for Landscape Use. AS-2303

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6.0 APPENDIX 1 | METHODOLOGY

6.1 **Site Inspection:** This Report was determined as a result of a comprehensive site inspection during March 2017. The comments and recommendations in this Report are based on findings from this site inspection.

6.2 **Visual Tree Assessment (VTA):** The subject tree(s) was assessed using the Visual Tree Assessment criteria and notes as described in *The Body Language of Trees – A Handbook for Failure Analysis* (Mattheck & Breloer, 2003). The inspection was limited to a visual examination of the subject tree(s) from ground level only. No internal diagnostic testing was undertaken as part of this assessment. Trees outside the subject site were assessed from the property boundaries only.

6.3 **Tree Dimensions:** The dimensions of the subject tree(s) are approximate only.

6.4 **Tree Locations:** The location of the subject tree(s) was determined from the Location Plan provided. Trees not shown on this plan have been plotted in their approximate location only.

6.5 **Trees & Development:** Tree Protection Zones & Structural Root Zones for the subject tree(s) was based on methods outlined in *Australian Standard 4970-2009 Protection of Trees on Development Sites*

6.6 **Tree Health:** The health of the subject tree(s) was determined by assessing:

- Foliage size and colour
- Pest and disease infestation
- Extension growth
- Crown density
- Deadwood size and volume
- Presence of epicormic growth

6.7 **Tree Structural Condition:** The structural condition of the subject tree(s) was assessed by:

- Visible evidence of structural defects or instability
- Evidence of previous pruning or physical damage

6.8 **Useful Life Expectancy (ULE):** The ULE is an estimate of the longevity of the subject tree(s) in its growing environment. The ULE is modified where necessary to take in consideration tree(s) health, structural condition and site suitability. The tree(s) has been allocated one of the following ULE categories (Modified from Barrell, 2001):

- 40 years +
- 15-40 years
- 5-15 years
- Less than 5 years

6.9 **Landscape Significance**: Landscape Significance was determined by assessing the combination of the cultural, environmental and aesthetic values of the subject tree(s). Whilst these values are subjective, a rating of very high, high, moderate, low or insignificant has been allocated to the tree(s). This provides a relative value of the tree's Landscape Significance which may aid in determining its Retention Value. If the tree(s) can be categorized into more than one value, the higher value has been allocated.

Landscape Significance	Description
Very High	The subject tree is listed as a Heritage Item under the *Local Environmental Plan* with a local or state level of significance.
	The subject tree is listed on Council's Significant Tree Register.
	The subject tree is a remnant tree.
High	The subject tree creates a 'sense of place' or is considered 'landmark' tree.
	The subject tree is of local, cultural or historical importance or is widely known.
	The subject tree has been identified by a suitably qualified professional as a species scheduled as a Threatened or Vulnerable Species or forms part of an Endangered Ecological Community associated with the subject site, as defined under the provisions of the *Threatened Species Conservation Act* 1995 (NSW) or the *Environmental Protection and Biodiversity Conservation Act* 1999.
	The subject tree is known to provide habitat to a threatened species.
	The subject tree is an excellent representative of the species in terms of aesthetic value.
	The subject tree is of significant size, scale or makes a significant contribution to the canopy cover of the locality.
	The subject tree forms part of the curtilage of a heritage item with a known or documented association with that item.
Moderate	The subject tree makes a positive contribution to the visual character or amenity of the area.
	The subject tree provides a specific function such as screening or minimising the scale of a building.
	The subject tree has a known habitat value.
	The subject tree is a good representative of the species in terms of aesthetic value.
Low	The subject tree is an environmental pest species or is exempt under the provisions of the local Council's Tree Management Controls
	The subject tree makes little or no contribution to the amenity of the locality.
	The subject tree is a poor representative of the species in terms of aesthetic value.
Insignificant	The subject tree is declared a Noxious Weed under the Noxious Weeds Act

The above table was provided by Anna Hopwood of TreeIQ™ and was modified from the Earthscape Criteria for Assessment of Landscape Significance.

6.10 **Retention Value**: Retention Value was based on the subject tree's Useful Life Expectancy and Landscape Significance. The Retention Value was modified where necessary to take in consideration the subject tree's health, structural condition and site suitability. The subject tree(s) has been allocated one of the following Retention Values:

- Priority for Retention
- Consider for Retention
- Consider for Removal
- Priority for Removal

<table>
<tr><th>ULE</th><th></th><th colspan="4">Landscape Significance</th></tr>
<tr><th></th><th>Very High</th><th>High</th><th>Moderate</th><th>Low</th><th>Insignificant</th></tr>
<tr><td>40 years +</td><td rowspan="2">Priority for Retention</td><td colspan="2">Priority for Retention</td><td rowspan="3">Consider for Removal</td><td rowspan="3">Priority for Removal</td></tr>
<tr><td>15-40 years</td><td>Priority for Retention</td><td>Consider for Retention</td></tr>
<tr><td>5-15 years</td><td colspan="3">Consider for Retention</td></tr>
<tr><td>Less than 5 years</td><td>Consider for Removal</td><td colspan="4">Priority for Removal</td></tr>
</table>

The above table was provided by Anna Hopwood of TreeIQ™

7.0 APPENDIX 2 | TREE ASSESSMENT SCHEDULE

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
1	*Eucalyptus melliodora* (Yellow Box)	250, 200	10	7	Good	Good	Crown density 75-95%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in moderate volumes. Partially suppressed.	5-15	low	Consider for Removal	4.0	1.9
2	*Eucalyptus melliodora* (Yellow Box)	300, 250	10	7			Small (<25mmø) deadwood in moderate volumes. Small (<25mmø) epicormic growth in high volumes. Partially suppressed.	5-15	low	Consider for Removal	4.8	2.0
3	*Corymbia eximia* (Yellow Blood-Wood)	200	8	2	Good	Fair	Co-dominant inclusions, major. Grade alteration, fill.	5-15	Low	Consider for Removal	2.4	1.7
4	*Corymbia eximia* (Yellow Blood-Wood)	300	12	7	Good	Good	Medium (25-75mmø) & large (>75mmø) deadwood in low volumes. Wound(s), no visible sign of decay. Grade alteration, fill.	15-40	Moderate	Consider for Retention	3.6	2
5	*Elaeocarpus reticulatus* (Blueberry Ash)	50 to 100	3 to 7m	2	Good	Good	Group of 5. Partially suppressed.	5-15	Moderate	Consider for Retention	1.5	1.5
6	*Ulmus parvifolia* (Chinese Weeping Elm)	100	2 to 6m	4	Fair	Fair	Heavily suppressed. Group of 3.	5-15	Low	Consider for Removal	1.5	1.5

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
7	*Ulmus parvifolia* (Chinese Weeping Elm)	100	6	4	Good	Good		5-15	Low	Consider for Removal	1.5	1.5
8	*Corymbia eximia* (Yellow Blood-Wood)	250	11	5	Good	Fair	Co-dominant inclusions, minor. Crossing branches	5-15	Low	Consider for Removal	3	1.9
9	*Corymbia eximia* (Yellow Blood-Wood)	200	10	2	Poor	Fair	Crown density 50-75%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes. Heavily suppressed. Wound(s), no visible sign of decay.	<5	Low	Priority for Removal	2.4	1.7
10	*Eucalyptus robusta* (Swamp Mahogany)	350	8	5	Good	Good	Small (<25mmø), medium (25-75mmø) & large (>75mmø) deadwood in low volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in high volumes. Partially suppressed. Previous branch failure(s).	5-15	Low	Consider for Removal	4.2	2.2
11	*Corymbia eximia* (Yellow Blood-Wood)	300	12	5	Good	Good	Small (<25mmø) deadwood in low volumes. Partially suppressed.	15-40	Moderate	Consider for Retention	3.6	2
12	*Eucalyptus robusta* (Swamp Mahogany)	250	8	5	Fair	Poor	Small (<25mmø) deadwood in low volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in moderate volumes. Heavily suppressed. Co-dominant inclusions, major. Adaptive growth.	5-15	Moderate	Consider for Retention	3	1.9

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
13	*Eucalyptus robusta* (Swamp Mahogany)	250	6	6	Fair	Good	Small (<25mmø) deadwood in low volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in moderate volumes. Heavily suppressed.	5-15	Moderate	Consider for Retention	3	1.9
14	*Corymbia eximia* (Yellow Blood-Wood)	300, 200	11	6	Fair	Poor	Crown density 50-75%. Small (<25mmø) & medium (25-75mmø) deadwood in low volumes. Co-dominant inclusions, major. Bark inclusion(s), major. Poor form.	5-15	Moderate	Consider for Retention	4.4	2
15	*Corymbia eximia* (Yellow Blood-Wood)	250	10	5	Fair	Good	Crown density 50-75%. Small (<25mmø) deadwood in low volumes. Heavily suppressed.	<5	Moderate	Priority for Removal	3	1.9
16	*Corymbia eximia* (Yellow Blood-Wood)	200, 200	10	6	Fair	Poor	Partially suppressed. Co-dominant inclusions, major. Bark inclusion(s), major. Poor form.	5-15	Moderate	Consider for Retention	3.5	1.7
17	*Corymbia eximia* (Yellow Blood-Wood)	200, 100	7	4	Fair	Poor	Small (<25mmø) deadwood in moderate volumes. Small (<25mmø) epicormic growth in high volumes. Partially suppressed. Co-dominant inclusions, major. Bark inclusion(s), major. Poor form.	<5	Low	Priority for Removal	2.8	1.7
18	*Eucalyptus robusta* (Swamp Mahogany)	350	11	4	Fair	Fair	Crown density 75-95%. Small (<25mmø) & medium (25-75mmø) deadwood in low volumes. Partially suppressed.	5-15	Low	Consider for Removal	4.2	2.2

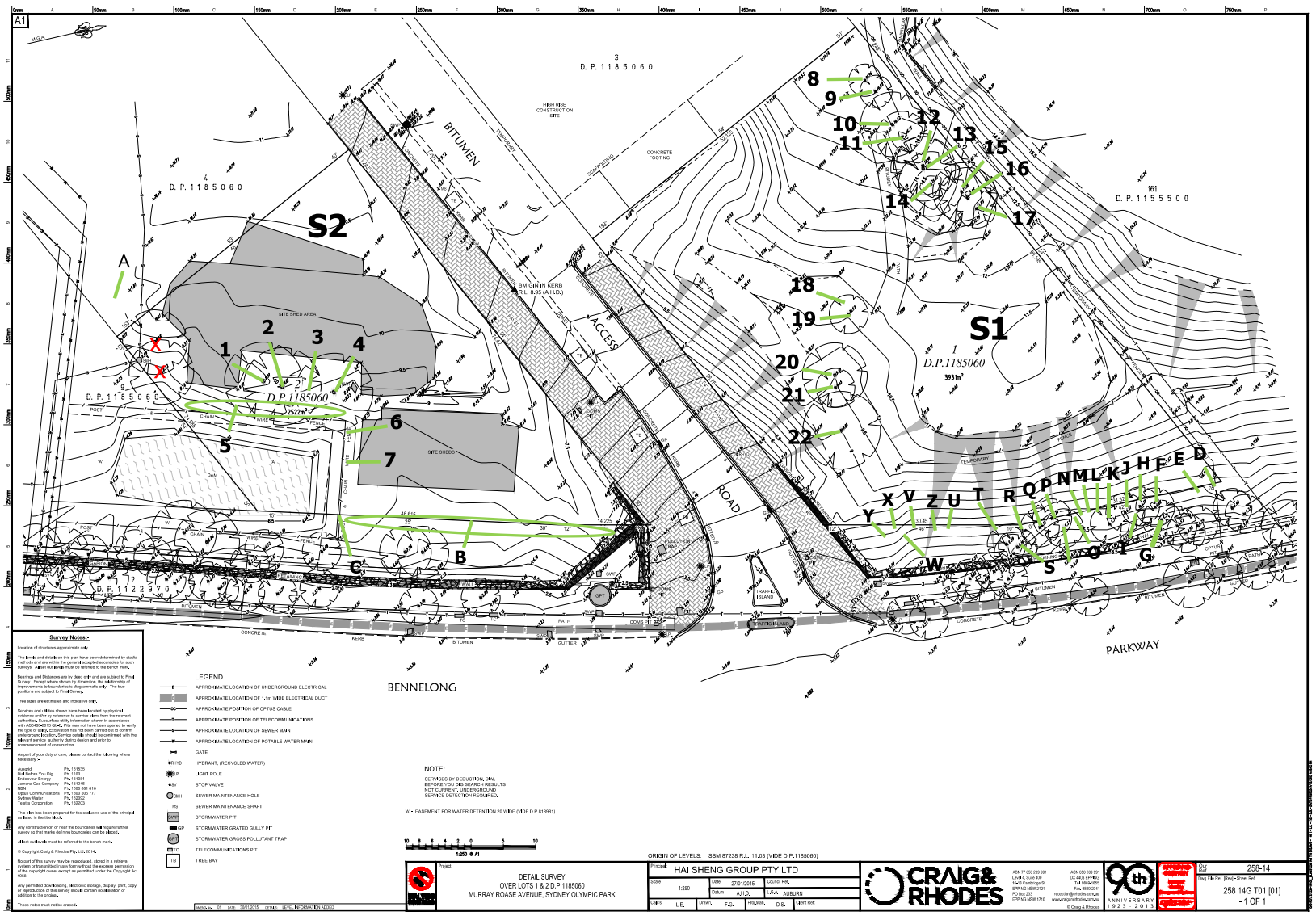
Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
19	*Eucalyptus robusta* (Swamp Mahogany)	400	11	6	Fair	Good	Small (<25mmø) & medium (25-75mmø) deadwood in high volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in high volumes. Partially suppressed.	5-15	Low	Consider for Removal	4.8	2.3
20	*Eucalyptus robusta* (Swamp Mahogany)	250	8	5	Fair	Fair	Small (<25mmø) & medium (25-75mmø) deadwood in high volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in high volumes. Partially suppressed. Poor form.	5-15	Low	Consider for Removal	3	1.9
21	*Eucalyptus robusta* (Swamp Mahogany)	250	9	4	Fair	Poor	Small (<25mmø) & medium (25-75mmø) deadwood in high volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in high volumes. Partially suppressed. Co-dominant inclusions, major. Poor form.	5-15	Low	Consider for Removal	3	1.9
22	*Eucalyptus robusta* (Swamp Mahogany)	300	10	7	Fair	Good	Crown density 50-75%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes. Small (<25mmø) & medium (25-75mmø) epicormic growth in high volumes. Storm damage.	5-15	Low	Consider for Removal	3.6	2
A	*Eucalyptus* sp.	400	10	6			10m from Site boundary.				4.8	2.3
B	*Casuarina glauca* (Swamp She-oak)	100 to 300	8	3			Group of 27.				3.6	2

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
C	*Casuarina glauca* (Swamp She-oak)	350	11	6							4.2	2.2
D	*Eucalyptus sideroxylon* (Mugga Ironbark)	75	9	2							1.5	1.5
E	*Eucalyptus* sp.	100	9	2							1.5	1.5
F	*Corymbia maculata* (Spotted Gum)	200	13	4							2.4	1.7
G	*Corymbia maculata* (Spotted Gum)	200	10	3							2.4	1.7
H	*Corymbia maculata* (Spotted Gum)	200	12	3							2.4	1.7
I	*Corymbia maculata* (Spotted Gum)	100	7	1							1.5	1.5
J	*Corymbia maculata* (Spotted Gum)	200	9	4							2.4	1.7
K	*Corymbia maculata* (Spotted Gum)	300	12	4							3.6	2
L	*Corymbia maculata* (Spotted Gum)	100	7	1							1.5	1.5
M	*Eucalyptus* sp.	100	6	1							1.5	1.5

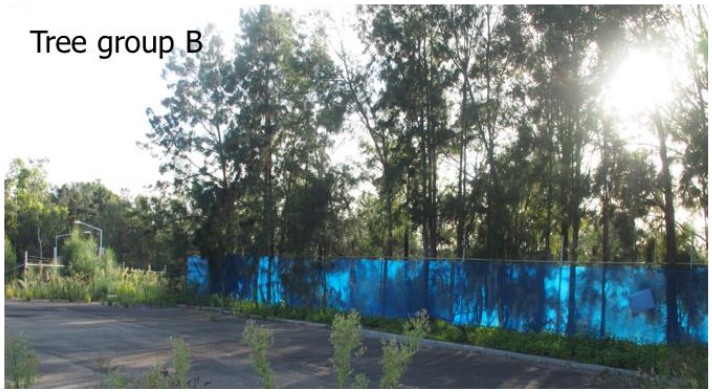
Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
N	*Eucalyptus* sp.	100	6	1							1.5	1.5
O	*Eucalyptus* sp.	100	6	1							1.5	1.5
P	*Corymbia maculata* (Spotted Gum)	300	12	5							3.6	2
Q	*Corymbia maculata* (Spotted Gum)	250	12	5							3	1.9
R	*Corymbia maculata* (Spotted Gum)	250	12	5							3	1.9
S	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
T	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
U	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
V	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
W	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
X	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7

Tree No.	Species	DBH (mm)	Height (m)	Radial Crown Spread (m)	Health Rating	Structural Rating	Comments	ULE (years)	L/Sign	Retention Value	Radial TPZ (m)	Radial SRZ (m)
Y	*Corymbia maculata* (Spotted Gum)	200	11	2							2.4	1.7
Z	*Eucalyptus* sp.	100	4	2							1.5	1.5

8.0 APPENDIX 3 | TREE LOCATION PLAN



9.0 APPENDIX 4 | PLATES



10.0 APPENDIX 5 | LIMITATIONS & DISCLAIMERS

10.1 Subject trees were assessed from the ground only and for the purpose of providing a Preliminary Arboricultural Report.

10.2 All recommendations in this Preliminary Arboricultural Report are based on the observations made on the day of inspection (11.3.17). There is no warranty, expressed or implied, that problems or deficiencies relating to the subject trees, or the subject site may not arise in the future as the effects of root pruning are not always predictable.

10.3 Laurence & Co Consultancy takes care to obtain information from reliable sources. However, Laurence & Co Consultancy can neither guarantee nor be responsible for the accuracy of information provided by others. Plans, diagrams, graphs and photographs in this Tree Pruning Specification are visual aids only and are not necessarily to scale. This Report provides recommendations relating to tree management only. Advice should be sought from appropriately qualified consultants regarding design/construction/ecological/heritage etc. issues.

10.4 This Report has been prepared for exclusive use by the client. This Report shall not be viewed by others or for any other reason outside its intended target or without the prior written consent of Laurence & Co Consultancy. Unauthorised alteration or separate use of any section of the Report invalidates the Report.

10.5 Many factors may contribute to tree failure and cannot always be predicted. Laurence & Co Consultancy takes care to accurately assess tree health and structural condition. However, a tree's internal structural condition may not always correlate to visible external indicators.

10.6 There is no warranty or guarantee, expressed or implied that problems or deficiencies regarding the trees or site may not arise in the future. Information contained in this report covers only the trees assessed and reflects the condition of the trees at the time of inspection.

10.7 Reference should be made to any relevant legislation including Tree Management Controls. All recommendations contained within this Report are subject to approval from the relevant Consent Authority.