



2 – 18 Centennial Road, Bowral

Arboricultural Impact Assessment

Prepared for
Waterbrook

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DOCUMENT TRACKING

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All trees have been assessed based on the observations from the site inspection and information presented by the client or relevant parties at the time of inspection. No responsibility can be taken for incorrect or misleading information provided by the client or other parties.

Trees are living organisms. As such, their health and structure may alter, they will grow and their environmental circumstances may change from the time of the site inspection upon which this assessment is based. Trees, as with all living things, pose some level of risk.

Tree assessments are valid for 12 months after the date of inspection, unless otherwise stated. Any significant change to the subject tree(s) or surrounding environment, including significant or catastrophic storm/wind events will require the immediate re-inspection and assessment of the tree(s).

Trees fail in ways that the arboricultural community are yet to fully understand. There is no guarantee expressed or implied that failure or deficiencies may not arise of the subject trees in the future. No responsibility is accepted for damage to property or injury/death caused by the nominated trees.

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Abbreviations

Abbreviation	Description
AQF	Australian Qualifications Framework
AS	Australian Standards
DBH	Diameter at Breast Height
ELA	Eco Logical Australia
m	Metre
mm	Millimetre
NDE	Non-Destructive Excavation
NO	Number
NSW	New South Wales
SP	Species
SRZ	Structural Root Zone
TPZ	Tree Protection Zone
VTA	Visual Tree Assessment
EEC	Endangered Ecological Community

1 Background

1.1 Introduction

Eco Logical Australia Pty Ltd (ELA) was commissioned by Waterbrook to prepare an arboricultural impact assessment for a proposed residential senior living development at 2 – 18 Centennial Road, Bowral.

The purpose of this report is to:

- identify the trees within the site that are likely to be affected by the proposed works
- assess the current overall health and condition of the subject trees
- evaluate the retention value of the subject trees
- assess likely impacts.

1.2 The proposal

The key features of the proposed construction likely to negatively affect the subject trees can be summarised as follows:

- excavation works
- plant movement
- changes in soil grades

1.3 The study area

The study area is in Bowral in the Wingecarribee Local Government Area. A map of the study area is in **Appendix A**.

1.4 The subject trees

There are a total of **483** subject trees within Stages 1 and 2 of the development. The trees were inspected in October 2018 and January 2019. Further information, observations and measurements specific to each of the subject trees can be found in **Chapter 3**.

1.5 Documents and plans referenced

The conclusions and recommendations of this report are based on the *Australian Standard, AS 4970-2009, Protection of Trees on Development Sites*, the findings from the site inspections and analysis of the following documents/plans:

- Site Design +Studios, *Waterbrook Bowral 2 – 18 Centennial Road Bowral, Existing Tree Plan Page L-11, Revision H* dated 17/4/2019
- Site Design +Studios, *Waterbrook Bowral 2 – 18 Centennial Road Bowral, Redesigned Entry Road, Page L-12, Issue D* dated 3/4/19
- *Tree Survey – 2 – 18 Centennial Road, Bowral – Prepared by Veris* dated 18/09/18
- Marchese Partners, *Civil Works Detailed Typical Sections Entry Roads 1A & 1B – Sheet 1, Drawing DA-C-146, Revision Q* dated 19/3/19
- Marchese Partners, *Civil Works Detailed Typical Sections Entry Roads 1A & 1B – Sheet 2, Drawing DA-C-147, Revision Q* dated 19/3/19

- Marchese Partners, *Civil Works Entry Roads Detailed Sections Sheet 3 Drawing DA-C-148 Revision R*, dated 16/4/19
- Marchese Partners, *Civil Works Entry Roads Detailed Sections Sheet 4, Drawing DA-C-149, Revision R*, dated 16/4/19
- Marchese Partners, *Civil Works Entry Roads Detailed Sections Sheet 5, Drawing DA-C-150, Revision R* dated 16/4/19
- Marchese Partners, *Civil Works Site Grading and Bulk Earthworks Levels Plan Sheet 2, Drawing DA-C-102 Revision T* dated 16/4/19

2 Method

2.1 Visual tree assessment

The subject trees were assessed in accordance with a stage one visual tree assessment (VTA) as formulated by Mattheck & Breloer (1994)¹, and practices consistent with modern arboriculture.

The following limitations apply to this methodology:

- Trees were inspected from ground level, without the use of any invasive or diagnostic tools and testing.
- No aerial inspections or root mapping was undertaken.
- Tree heights, canopy spread and diameter at breast height (DBH) was estimated, unless otherwise stated.
- Tree identification was based on broad taxonomical features present and visible from ground level at the time of inspection.

2.2 Retention Value

The retention value/importance of a tree or group of trees, is determined using a combination of environmental, cultural, physical and social values.

- **Low:** These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
- **Medium:** These trees are moderately important for retention. Their removal should only be considered if adversely affected by the proposed works and all other alternatives have been considered and exhausted.
- **High:** These trees are considered important and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by *Australian Standard AS4970 - Protection of trees on development sites*.

This tree retention assessment has been undertaken in accordance with the *Institute of Australian Consulting Arboriculturists (IACA) Significance of a Tree, Assessment Rating System (STARS)*. Further details and assessment criteria are in **Appendix C**.

¹ VTA is an internationally recognised practice in the visual assessment of trees as prescribed by Mattheck, C. and Breloer, H. 1994. 'Field Guide for Visual Tree Assessment' *Arboricultural Journal*, Vol 18 pp 1-23.

2.3 Protection zones

- **Tree protection zone (TPZ):** The TPZ is the combination of crown and root area (as defined by AS 4970-2009) that requires restriction of access during the construction process. Tree sensitive construction measures must be implemented if works are to proceed within the Tree Protection Zone.
- **Structural root zone (SRZ):** The SRZ is the area of the root system (as defined by AS 4970-2009) used for stability, mechanical support and anchorage of the tree. It is critical for the support and stability of trees. Severance of roots within the SRZ is not recommended as it may lead to the destabilisation and/or decline of the tree.

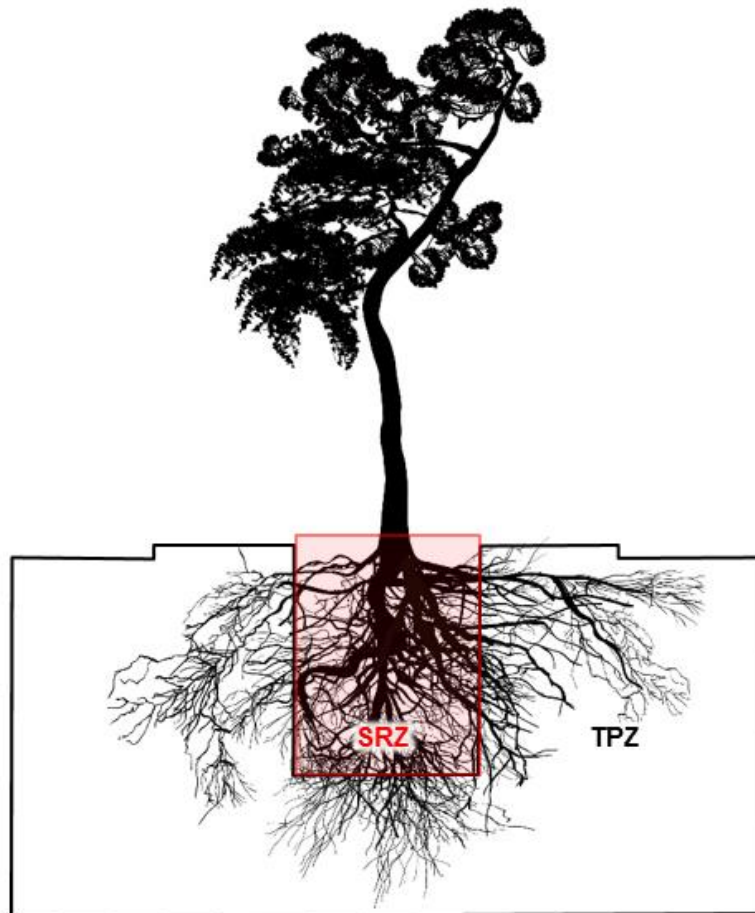


Figure 1: Indicative TPZ and SRZ

2.4 Impacts within the TPZ

- **No impact (0%):** No likely or foreseeable encroachment within the TPZ.
- **Low impact (<10%):** If the proposed encroachment is less than 10% (total area) of the TPZ, and outside of the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere.
- **Medium impact (<20%):** If the proposed encroachment is greater than 10% of the TPZ and outside of the SRZ, the project arborist must demonstrate that the tree(s) remain viable. The area lost to this encroachment should be compensated for elsewhere. All work within the TPZ must be carried out under the supervision of the project arborist.
- **High impact (>20%):** If the proposed encroachment is greater than 20% of the TPZ the SRZ may be impacted. Tree sensitive construction techniques may be used for minor works within this area providing no structural roots are likely to be impacted, and the project arborist can demonstrate that the tree(s) remain viable. Root investigation by non-destructive methods is essential for any proposed works within this area.

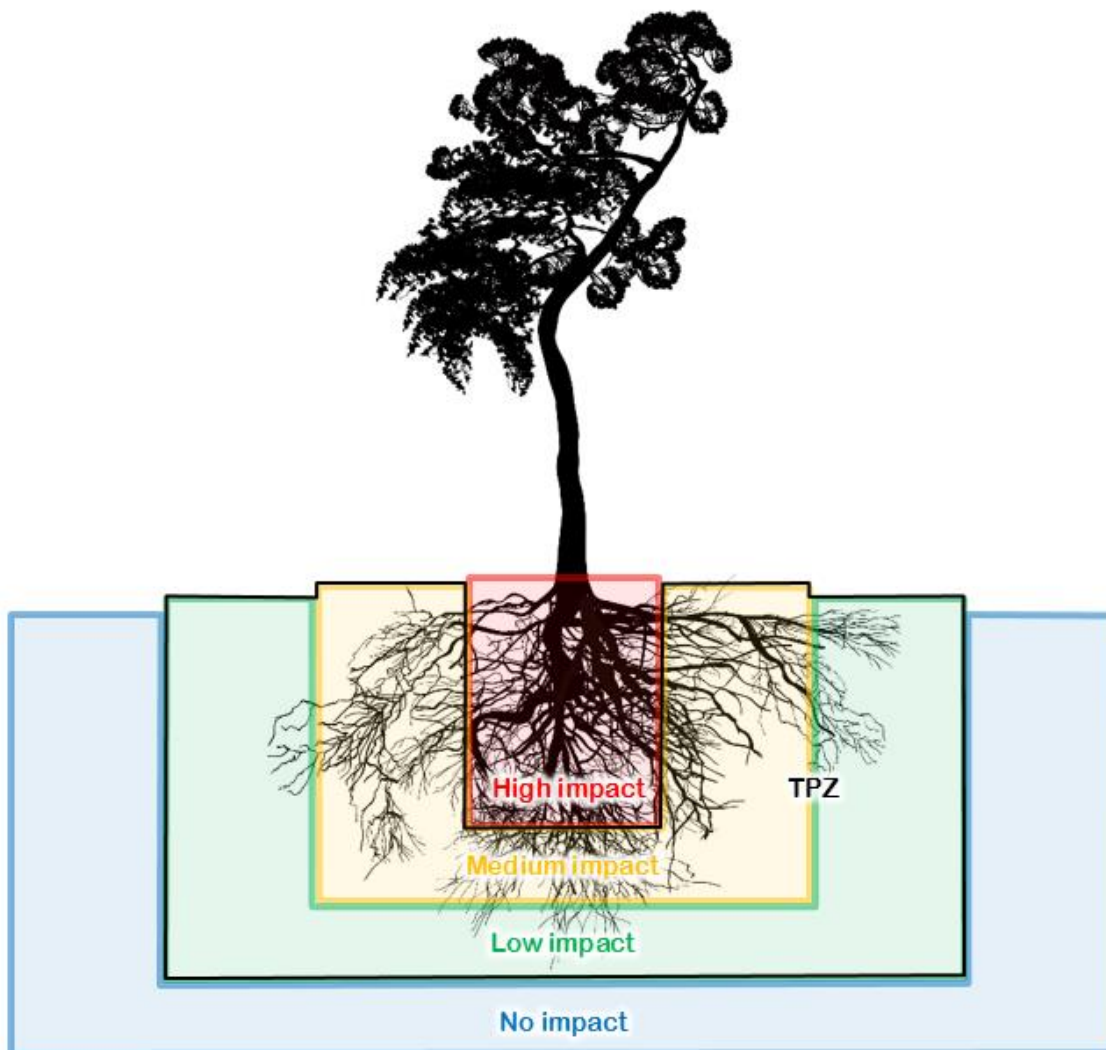


Figure 2: Indicative zones of impact within the TPZ

2.5 Mitigation measures

Encroachment within the TPZ must be offset with a range of mitigation measures to ensure that impacts to the subject tree(s) are reduced or restricted wherever possible. Mitigation must be increased relative to the level of encroachment within the TPZ to ensure the subject tree remains viable. **Table 1** outlines mitigation requirements under AS 4970-2009 within each category of encroachment.

Table 1: Mitigation measures

Impact	Requirements under AS 4970-2009	Mitigation (design phase)	Mitigation (construction phase)
Low impact ($<10\%$)	- The area lost to this encroachment should be compensated for elsewhere, contiguous with the TPZ. - Detailed root investigations should not be required.	N/A	- The area lost to this encroachment should be compensated for elsewhere, contiguous with the TPZ. - Tree protection must be installed.
Medium impact ($<20\%$) High impact ($>20\%$)	- The project arborist must demonstrate the tree(s) would remain viable. - Root investigation by non-destructive methods may be required. - Consideration of relevant factors including: Root location and distribution, tree species, condition, site constraints and design factors. - The area lost to this encroachment should be compensated for elsewhere, contiguous with the TPZ.	The following design changes should be considered to retain trees where practicable, considering the retention value of the tree and the complexity and cost of the change. - Relocate services/pathways outside of tree protection zones - Design services to be installed at a minimum depth of 1200mm below ground to avoid impact to the root zones of trees. - Design pathways to be installed on or above grade, minimising/eliminating excavation within tree protection zones. - Design pathways using porous materials (eco-paving, porous asphalt, decomposed granite) to allow water and oxygen to reach the root zone. - Design pathways using tree sensitive techniques (pier and beam, suspended slabs). - The area lost to encroachment should be compensated for elsewhere, contiguous with the TPZ.	- The area lost to this encroachment should be compensated for elsewhere, contiguous with the TPZ. - The project arborist would be consulted for any works within the TPZ. - Tree protection must be installed. - Tree sensitive techniques can be used to install services within the TPZ. Horizontal directional drilling (HDD), boring, non-destructive excavation (NDE). - Location and distribution of roots may be determined through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation.

3 Discussion

3.1 Stage 1 impacts

Table 2 shows the results of the arboricultural assessment for **Stage 1**: The key points are:

- **High impact (>20%):** **63** trees will be subject to a major encroachment (>20%) within the TPZ. These trees are unable to be sustainably retained without substantial modification of the proposal. Trees in this category have the following retention values:
 - **19** trees with a low retention value
 - **35** trees with a medium retention value
 - **9** trees with a high retention value.
- **Medium impact (<20%):** **11** trees will be subject to a medium impact <20% of the TPZ. More detailed assessments will be required to determine the suitability of retention. Trees in this category have the following retention values:
 - **4** trees with a low retention value
 - **2** trees with a medium retention value
 - **5** tree with a high retention value.
- **Low impact (<10%):** **8** trees will be subject to a low impact within the TPZ. The anticipated low impact of the proposed development will have negligible impacts to the tree's health, vigour or stability. Under the current proposal, these trees can be successfully retained. Trees within this category have the following retention values:
 - **3** trees with a low retention value
 - **5** trees with a medium retention value
- **No impact:** **401** trees will not be impacted by the proposed development. Under the current proposal, these trees can be successfully retained. Of these:
 - **133** trees with a low retention value
 - **212** trees with a medium retention value
 - **56** trees with a high retention value.

3.2 Stage 2 impacts

Table 2 shows the results of the arboricultural assessment for **Stage 2**. The key points are:

- **High impact (>20%): 86** trees will be subject to a major encroachment (>20%) within the TPZ. These trees are unable to be sustainably retained without substantial modification of the proposal. Trees in this category have the following retention values:
 - **25** trees with a low retention value
 - **50** trees with a medium retention value
 - **11** trees with a high retention value.
- **Medium impact (<20%): 16** trees will be subject to a medium impact <20% of the TPZ. More detailed assessments will be required to determine the suitability of retention. Trees in this category have the following retention values:
 - **5** trees with a low retention value
 - **5** trees with a medium retention value
 - **6** trees with a high retention value.
- **Low impact (<10%): 32** trees will be subject to a low impact within the TPZ. The anticipated low impact of the proposed development will have negligible impacts to the tree's health, vigour or stability. Under the current proposal, these trees can be successfully retained. Trees within this category have the following retention values:
 - **8** trees with a low retention value
 - **21** trees with a medium retention value
 - **3** trees with a high retention value.
- **No impact: 349** trees will not be impacted by the proposed development. Under the current proposal, these trees can be successfully retained. Of these:
 - **121** trees with a low retention value
 - **178** trees with a medium retention value
 - **50** trees with a high retention value.

Table 2: Results of the arboricultural assessment

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
1	<i>Pinus sp.</i>	1	12	5	Good	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
2	<i>Eucalyptus sp.</i>	1	11	6	Fair	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
3	<i>Pinus sp.</i>	1	13	3	Fair	Fair	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
4	<i>Eucalyptus tereticornis</i>	1	16	13	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
5	<i>Eucalyptus tereticornis</i>	1	13	6	Fair	Poor	Low	650	7800	2800	No Impact: 0%	No Impact: 0%
6	<i>Eucalyptus sp.</i>	1	7	4	Fair	Poor	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
7	<i>Pinus sp.</i>	1	13	7	Fair	Poor	Low	600	7200	2700	Medium Impact: <20%	Medium Impact: <20%
8	<i>Pinus sp.</i>	1	12	11	Good	Fair	Medium	900	11000	3200	High Impact: >20%	High Impact: >20%
9	<i>Eucalyptus tereticornis</i>	1	12	11	Poor	Fair	Low	950	11000	3200	High Impact: >20%	High Impact: >20%
10	<i>Eucalyptus tereticornis</i>	1	13	8	Good	Fair	Medium	850	10000	3100	No Impact: 0%	No Impact: 0%
11	<i>Eucalyptus tereticornis</i>	1	22	12	Fair	Fair	Medium	1000	12000	3300	High Impact: >20%	High Impact: >20%
12	<i>Eucalyptus sp.</i>	1	9	7	Poor	Poor	Low	800	9600	3000	High Impact: >20%	High Impact: >20%
13	<i>Eucalyptus tereticornis</i>	1	18	11	Fair	Good	Medium	1000	12000	3300	High Impact: >20%	High Impact: >20%
14	<i>Eucalyptus saligna</i>	1	26	18	Fair	Poor	Low	1200	14000	3600	No Impact: 0%	High Impact: >20%
15	<i>Eucalyptus saligna</i>	1	26	22	Fair	Fair	Medium	1200	14000	3600	No Impact: 0%	High Impact: >20%
16	<i>Eucalyptus sp.</i>	1	16	16	Good	Fair	Medium	500	6000	2500	No Impact: 0%	High Impact: >20%
17	<i>Eucalyptus saligna</i>	1	12	9	Good	Good	High	900	11000	3200	High Impact: >20%	High Impact: >20%
18	<i>Eucalyptus tereticornis</i>	1	13	11	Good	Good	High	700	8400	2800	High Impact: >20%	High Impact: >20%
19	<i>Eucalyptus sp.</i>	1	13	11	Poor	Poor	Low	800	9600	3000	High Impact: >20%	High Impact: >20%
20	<i>Cupressus sp.</i>	1	9	6	Poor	Poor	Low	1000	12000	3300	High Impact: >20%	High Impact: >20%
21	<i>Cupressus sp.</i>	1	14	9	Good	Poor	Medium	1300	16000	3700	High Impact: >20%	High Impact: >20%
22	<i>Populus sp.</i>	1	12	6	Poor	Poor	Low	800	9600	3000	High Impact: >20%	High Impact: >20%
23	<i>Eucalyptus sp.</i>	1	9	6	Poor	Poor	Low	700	8400	2800	High Impact: >20%	High Impact: >20%
24	<i>Cupressus sp.</i>	1	12	7	Good	Fair	Medium	850	10000	3100	High Impact: >20%	High Impact: >20%
25	<i>Cupressus sp.</i>	1	11	6	Good	Fair	Medium	750	9000	2900	High Impact: >20%	High Impact: >20%
26	<i>Pinus sp.</i>	1	14	13	Good	Good	High	2500	30000	4900	High Impact: >20%	High Impact: >20%
27	<i>Eucalyptus tereticornis</i>	1	15	10	Good	Good	High	900	11000	3200	High Impact: >20%	High Impact: >20%
28	<i>Chamaecyparis sp.</i>	1	11	5	Fair	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
29	<i>Chamaecyparis sp.</i>	1	11	6	Fair	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
30	<i>Chamaecyparis sp.</i>	1	12	5	Good	Fair	Medium	750	9000	2900	No Impact: 0%	No Impact: 0%
31	<i>Chamaecyparis sp.</i>	1	11	5	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
32	<i>Chamaecyparis sp.</i>	1	11	5	Fair	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
33	<i>Chamaecyparis sp.</i>	1	15	6	Good	Good	High	900	11000	3200	Medium Impact: <20%	Medium Impact: <20%
34	<i>Chamaecyparis sp.</i>	1	11	4	Poor	Poor	Low	500	6000	2500	High Impact: >20%	High Impact: >20%
35	<i>Chamaecyparis sp.</i>	1	15	6	Fair	Fair	Medium	800	9600	3000	High Impact: >20%	High Impact: >20%
36	<i>Chamaecyparis sp.</i>	1	11	6	Fair	Fair	Medium	850	10000	3100	High Impact: >20%	High Impact: >20%
37	<i>Chamaecyparis sp.</i>	1	11	3	Good	Fair	Medium	500	6000	2500	High Impact: >20%	High Impact: >20%
38	<i>Eucalyptus tereticornis</i>	1	15	8	Fair	Poor	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
39	<i>Eucalyptus sp.</i>	1	22	13	Fair	Poor	Medium	950	11000	3200	High Impact: >20%	High Impact: >20%
40	<i>Eucalyptus tereticornis</i>	1	15	6	Fair	Fair	Medium	500	6000	2500	No Impact: 0%	High Impact: >20%
41	<i>Eucalyptus sp.</i>	1	15	7	Poor	Fair	Medium	600	7200	2700	No Impact: 0%	Low Impact: <10%
42	<i>Eucalyptus sp.</i>	1	12	6	Poor	Fair	Low	600	7200	2700	No Impact: 0%	Low Impact: <10%
43	<i>Cupressus sp.</i>	1	12	6	Good	Fair	Medium	700	8400	2800	High Impact: >20%	High Impact: >20%
44	<i>Chamaecyparis sp.</i>	1	10	5	Fair	Poor	Low	600	7200	2700	High Impact: >20%	High Impact: >20%
45	<i>Chamaecyparis sp.</i>	1	8	3	Fair	Fair	Low	450	5400	2400	High Impact: >20%	High Impact: >20%
46	<i>Chamaecyparis sp.</i>	1	9	3	Fair	Fair	Medium	400	4800	2300	High Impact: >20%	High Impact: >20%
47	<i>Liquidambar styraciflua</i>	1	5	4	Fair	Poor	Low	400	4800	2300	High Impact: >20%	High Impact: >20%
48	<i>Grevillea robusta</i>	1	6	3	Good	Poor	Low	500	6000	2500	Medium Impact: <20%	Medium Impact: <20%
49	<i>Pinus sp.</i>	1	15	6	Good	Fair	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
50	<i>Pinus sp.</i>	1	18	6	Fair	Fair	Medium	500	6000	2500	High Impact: >20%	High Impact: >20%
51	<i>Pinus sp.</i>	1	15	7	Good	Fair	Medium	500	6000	2500	High Impact: >20%	High Impact: >20%
52	<i>Prunus sp.</i>	1	4	2	Poor	Fair	Low	300	3600	2000	High Impact: >20%	High Impact: >20%
53	<i>Populus sp.</i>	1	12	20	Good	Poor	Medium	400	4800	2300	High Impact: >20%	High Impact: >20%
54	<i>Populus sp.</i>	1	12	12	Good	Poor	Medium	750	9000	2900	High Impact: >20%	High Impact: >20%
55	<i>Populus sp.</i>	1	10	10	Fair	Poor	Low	100	1500	2000	High Impact: >20%	High Impact: >20%
56	<i>Cupressus sp.</i>	1	12	5	Fair	Fair	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
57	<i>Cupressus sp.</i>	1	13	5	Fair	Fair	Medium	300	3600	2000	High Impact: >20%	High Impact: >20%
58	<i>Cupressus sp.</i>	1	15	4	Fair	Poor	Medium	400	4800	2300	High Impact: >20%	High Impact: >20%
59	<i>Eucalyptus amplifolia</i>	1	6	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	High Impact: >20%
60	<i>Eucalyptus viminalis</i>	1	11	6	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
61	<i>Eucalyptus viminalis</i>	1	12	5	Poor	Poor	Low	500	6000	2500	No Impact: 0%	No Impact: 0%
62	<i>Eucalyptus viminalis</i>	1	9	5	Fair	Fair	Medium	300	3600	2000	High Impact: >20%	High Impact: >20%
63	<i>Eucalyptus amplifolia</i>	1	11	5	Fair	Poor	Low	400	4800	2300	High Impact: >20%	High Impact: >20%
64	<i>Eucalyptus amplifolia</i>	1	17	14	Poor	Poor	Low	1400	17000	3800	High Impact: >20%	High Impact: >20%
65	<i>Eucalyptus amplifolia</i>	1	17	11	Poor	Fair	Low	900	11000	3200	High Impact: >20%	High Impact: >20%
66	<i>Eucalyptus elata</i>	1	12	11	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
67	<i>Eucalyptus viminalis</i>	1	15	10	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	Low Impact: <10%
68	<i>Eucalyptus elata</i>	1	12	11	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
69	<i>Fraxinus excelsior</i>	1	10	8	Fair	Poor	Low	600	7200	2700	No Impact: 0%	No Impact: 0%
70	<i>Quercus palustris</i>	1	12	13	Good	Good	High	900	11000	3200	High Impact: >20%	High Impact: >20%
71	<i>Eucalyptus amplifolia</i>	1	15	14	Good	Fair	Medium	1200	14000	3600	Medium Impact: <20%	Medium Impact: <20%
72	<i>Eucalyptus amplifolia</i>	1	16	12	Good	Good	High	800	9600	3000	No Impact: 0%	No Impact: 0%
73	<i>Eucalyptus radiata</i>	1	13	11	Fair	Fair	Medium	900	11000	3200	No Impact: 0%	No Impact: 0%
74	<i>Eucalyptus amplifolia</i>	1	18	16	Good	Fair	Medium	1000	12000	3300	No Impact: 0%	No Impact: 0%
75	<i>Eucalyptus amplifolia</i>	1	18	15	Fair	Good	Medium	850	10000	3100	No Impact: 0%	No Impact: 0%
76	<i>Eucalyptus amplifolia</i>	1	20	11	Fair	Fair	Medium	1100	13000	3400	No Impact: 0%	No Impact: 0%
77	<i>Eucalyptus amplifolia</i>	1	20	11	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
78	<i>Eucaly radiata</i>	1	15	11	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
79	<i>Eucalyptus amplifolia</i>	1	12	11	Fair	Fair	Medium	750	9000	2900	No Impact: 0%	No Impact: 0%
80	<i>Eucalyptus amplifolia</i>	1	20	11	Fair	Fair	Low	450	5400	2400	No Impact: 0%	No Impact: 0%
81	<i>Eucalyptus viminalis</i>	1	20	12	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
82	<i>Eucalyptus viminalis</i>	1	22	20	Good	Good	High	1200	14000	3600	Medium Impact: <20%	Medium Impact: <20%
83	<i>Eucalyptus viminalis</i>	1	15	13	Good	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
84	<i>Eucalyptus radiata</i>	1	20	10	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
85	<i>Eucalyptus viminalis</i>	1	17	12	Fair	Poor	Low	1200	14000	3600	No Impact: 0%	No Impact: 0%
86	<i>Eucalyptus viminalis</i>	1	22	18	Fair	Fair	Medium	1200	14000	3600	No Impact: 0%	No Impact: 0%
87	<i>Eucalyptus viminalis</i>	1	20	10	Fair	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
88	<i>Eucalyptus viminalis</i>	1	25	22	Good	Good	High	1500	18000	3900	No Impact: 0%	No Impact: 0%
89	<i>Eucalyptus viminalis</i>	1	9	4	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
90	<i>Eucalyptus viminalis</i>	1	15	8	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
91	<i>Eucalyptus viminalis</i>	1	20	12	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
92	<i>Acacia sp.</i>	1	7	5	Fair	Poor	Low	309	3700	2000	No Impact: 0%	No Impact: 0%
93	<i>Eucalyptus viminalis</i>	1	12	10	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
94	<i>Eucalyptus viminalis</i>	1	15	11	Fair	Fair	Medium	1000	12000	3300	No Impact: 0%	No Impact: 0%
95	<i>Eucalyptus viminalis</i>	1	17	15	Good	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
96	<i>Eucalyptus viminalis</i>	1	17	12	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
97	<i>Eucalyptus viminalis</i>	1	20	15	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
98	<i>Eucalyptus viminalis</i>	1	20	15	Good	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
99	<i>Eucalyptus viminalis</i>	1	18	11	Fair	Poor	Low	450	5400	2400	No Impact: 0%	No Impact: 0%
100	<i>Eucalyptus viminalis</i>	1	22	20	Fair	Poor	Medium	1400	17000	3800	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
101	<i>Eucalyptus viminalis</i>	1	20	15	Poor	Fair	Low	1000	12000	3300	No Impact: 0%	No Impact: 0%
102	<i>Eucalyptus radiata</i>	1	20	15	Fair	Poor	Medium	1100	13000	3400	No Impact: 0%	No Impact: 0%
103	<i>Eucalyptus radiata</i>	1	17	12	Fair	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
104	<i>Eucalyptus radiata</i>	1	17	12	Fair	Fair	Medium	930	11000	3200	No Impact: 0%	No Impact: 0%
105	<i>Eucalyptus radiata</i>	1	16	12	Poor	Poor	Low	950	11000	3200	No Impact: 0%	Low Impact: <10%
106	<i>Eucalyptus radiata</i>	1	10	8	Poor	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
107	<i>Eucalyptus radiata</i>	1	7	3	Fair	Fair	Medium	350	4200	2100	No Impact: 0%	High Impact: >20%
108	<i>Eucalyptus viminalis</i>	1	17	12	Good	Good	High	980	12000	3300	No Impact: 0%	No Impact: 0%
109	<i>Eucalyptus viminalis</i>	1	15	12	Good	Poor	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
110	<i>Eucalyptus radiata</i>	1	16	14	Fair	Poor	Low	1010	12000	3300	No Impact: 0%	No Impact: 0%
111	<i>Eucalyptus viminalis</i>	1	18	11	Fair	Poor	Low	900	11000	3200	No Impact: 0%	No Impact: 0%
112	<i>Eucalyptus viminalis</i>	1	10	8	Poor	Poor	Low	1000	12000	3300	No Impact: 0%	No Impact: 0%
113	<i>Eucalyptus radiata</i>	1	14	12	Poor	Poor	Low	900	11000	3200	No Impact: 0%	No Impact: 0%
114	<i>Eucalyptus viminalis</i>	1	17	15	Fair	Fair	Medium	1500	18000	3900	No Impact: 0%	No Impact: 0%
115	<i>Eucalyptus viminalis</i>	1	18	15	Fair	Fair	Medium	950	11000	3200	No Impact: 0%	No Impact: 0%
116	<i>Acacia sp.</i>	1	5	4	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
117	<i>Eucalyptus viminalis</i>	1	16	15	Fair	Fair	Medium	950	11000	3200	No Impact: 0%	Low Impact: <10%
118	<i>Eucalyptus radiata</i>	1	8	7	Fair	Poor	Low	550	6600	2600	No Impact: 0%	No Impact: 0%
119	<i>Eucalyptus radiata</i>	1	8	5	Fair	Poor	Low	550	6600	2600	No Impact: 0%	No Impact: 0%
120	<i>Euc radiata</i>	1	18	14	Fair	Poor	Low	850	10000	3100	No Impact: 0%	Low Impact: <10%
121	<i>Eucalyptus viminalis</i>	1	16	15	Good	Good	High	1300	16000	3700	No Impact: 0%	Medium Impact: <20%
122	<i>Eucalyptus viminalis</i>	1	17	8	Fair	Fair	Medium	650	7800	2800	No Impact: 0%	No Impact: 0%
123	<i>Eucalyptus viminalis</i>	1	20	20	Poor	Good	Medium	1300	16000	3700	High Impact: >20%	High Impact: >20%
124	<i>Eucalyptus viminalis</i>	1	17	15	Poor	Fair	Low	609	7300	2700	High Impact: >20%	High Impact: >20%
125	<i>Pinus radiata</i>	1	17	15	Poor	Fair	Low	1000	12000	3300	Medium Impact: <20%	Medium Impact: <20%
126	<i>Pinus radiata</i>	1	13	11	Fair	Fair	Medium	950	11000	3200	Low Impact: <10%	Medium Impact: <20%
127	<i>Cupressus sempervirens</i>	1	13	8	Good	Fair	Medium	800	9600	3000	Low Impact: <10%	Low Impact: <10%
128	<i>Cupressus sp.</i>	1	13	8	Fair	Poor	Low	350	4200	2100	No Impact: 0%	Medium Impact: <20%
129	<i>Quercus palustris</i>	1	16	11	Fair	Poor	Low	400	4800	2300	No Impact: 0%	High Impact: >20%
130	<i>Cupressus x leylandii</i>	1	11	6	Good	Fair	Medium	500	6000	2500	No Impact: 0%	Medium Impact: <20%
131	<i>Pinus radiata</i>	1	15	11	Good	Fair	Medium	800	9600	3000	No Impact: 0%	Low Impact: <10%
132	<i>Pinus radiata</i>	1	12	11	Poor	Fair	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
133	<i>Cupressus x leylandii</i>	1	9	5	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
134	<i>Eucalyptus radiata</i>	1	12	10	Fair	Poor	Low	750	9000	2900	No Impact: 0%	Low Impact: <10%
135	<i>Cupressus sempervirens</i>	1	13	8	Poor	Fair	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
136	<i>Pinus radiata</i>	1	15	11	Fair	Poor	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
137	<i>Cupressus sempervirens</i>	1	15	13	Poor	Poor	Low	2000	24000	4400	Medium Impact: <20%	High Impact: >20%
138	<i>Fraxinus raywood</i>	1	7	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
139	<i>Liquidambar styraciflua</i>	1	6	6	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
140	<i>Picea sp.</i>	1	11	9	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
141	<i>Liquidambar styraciflua</i>	1	11	8	Good	Fair	Medium	460	5500	2400	No Impact: 0%	High Impact: >20%
142	<i>Taxodium distichum</i>	1	17	9	Good	Good	High	900	11000	3200	No Impact: 0%	High Impact: >20%
143	<i>Cupressus sempervirens</i>	1	11	4	Good	Fair	Medium	400	4800	2300	No Impact: 0%	High Impact: >20%
144	<i>Picea sp.</i>	1	13	11	Good	Good	High	600	7200	2700	No Impact: 0%	Low Impact: <10%
145	<i>Cupressus macrocarpa</i>	1	12	6	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
146	<i>Cupressus macrocarpa</i>	1	10	9	Good	Good	High	900	11000	3200	No Impact: 0%	Low Impact: <10%
147	<i>Cupressus macrocarpa</i>	1	10	10	Good	Fair	Medium	1300	16000	3700	No Impact: 0%	Medium Impact: <20%
148	<i>Picea sp.</i>	1	10	8	Poor	Fair	Medium	800	9600	3000	High Impact: >20%	High Impact: >20%
149	<i>Taxodium distichum</i>	1	9	5	Poor	Poor	Low	250	3000	1800	Low Impact: <10%	Low Impact: <10%
150	<i>Picea sp.</i>	1	11	7	Poor	Poor	Low	600	7200	2700	High Impact: >20%	High Impact: >20%
151	<i>Cupressus sp.</i>	1	6	4	Poor	Poor	Low	300	3600	2000	Low Impact: <10%	Low Impact: <10%
152	<i>Quercus palustris</i>	1	18	16	Fair	Fair	Medium	750	9000	2900	Low Impact: <10%	Low Impact: <10%
153	<i>Picea sp.</i>	1	12	10	Fair	Fair	Medium	600	7200	2700	Low Impact: <10%	Low Impact: <10%
154	<i>Cupressus sp.</i>	1	7	3	Fair	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
155	<i>Cupressus sp.</i>	1	15	7	Fair	Poor	Medium	900	11000	3200	High Impact: >20%	High Impact: >20%
156	<i>Quercus palustris</i>	1	15	12	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
157	<i>Cupressus x leylandii</i>	1	9	7	Fair	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
158	<i>Pinus sp.</i>	1	16	11	Fair	Fair	Medium	1000	12000	3300	High Impact: >20%	High Impact: >20%
159	<i>Picea sp.</i>	1	15	10	Fair	Fair	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
160	<i>Taxodium distichum</i>	1	15	11	Good	Good	High	1000	12000	3300	Medium Impact: <20%	Medium Impact: <20%
161	<i>Cupressus macrocarpa</i>	1	15	12	Good	Good	High	1700	20000	4100	High Impact: >20%	High Impact: >20%
162	<i>Cupressus macrocarpa</i>	1	13	12	Good	Fair	Medium	1906	23000	4300	High Impact: >20%	High Impact: >20%
163	<i>Cupressus macrocarpa</i>	1	15	11	Good	Good	High	1900	23000	4300	High Impact: >20%	High Impact: >20%
164	<i>Eucalyptus viminalis</i>	1	13	12	Fair	Poor	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
165	<i>Liquidambar styraciflua</i>	1	8	8	Good	Fair	Medium	400	4800	2300	High Impact: >20%	High Impact: >20%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
166	<i>Pinus sp.</i>	1	20	16	Fair	Fair	Medium	1800	22000	4200	High Impact: >20%	High Impact: >20%
167	<i>Eucalyptus viminalis</i>	1	15	11	Fair	Poor	Medium	709	8500	2900	No Impact: 0%	Low Impact: <10%
168	<i>Pinus sp.</i>	1	10	10	Poor	Fair	Low	900	11000	3200	No Impact: 0%	High Impact: >20%
169	<i>Pinus sp.</i>	1	15	13	Poor	Fair	Low	700	8400	2800	No Impact: 0%	Medium Impact: <20%
170	<i>Eucalyptus amplifolia</i>	1	15	11	Good	Fair	Medium	650	7800	2800	No Impact: 0%	No Impact: 0%
171	<i>Eucalyptus viminalis</i>	1	12	11	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
172	<i>Eucalyptus amplifolia</i>	1	13	12	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
173	<i>Pinus sp.</i>	1	12	9	Fair	Poor	Low	650	7800	2800	No Impact: 0%	No Impact: 0%
174	<i>Pinus sp.</i>	1	11	9	Poor	Fair	Low	500	6000	2500	No Impact: 0%	No Impact: 0%
175	<i>Pinus sp.</i>	1	10	5	Poor	Poor	Low	450	5400	2400	No Impact: 0%	Low Impact: <10%
176	<i>Eucalyptus viminalis</i>	1	12	11	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
177	<i>Pinus sp.</i>	1	15	12	Fair	Fair	Medium	900	11000	3200	No Impact: 0%	Low Impact: <10%
178	<i>Eucalyptus viminalis</i>	1	15	14	Good	Good	High	970	12000	3300	No Impact: 0%	High Impact: >20%
179	<i>Pinus sp.</i>	1	12	11	Good	Poor	Medium	900	11000	3200	No Impact: 0%	High Impact: >20%
180	<i>Pinus sp.</i>	1	15	11	Good	Fair	Medium	750	9000	2900	No Impact: 0%	High Impact: >20%
181	<i>Acacia sp.</i>	10	5	3	Fair	Fair	Medium	150	1500	2000	No Impact: 0%	Low Impact: <10%
182	<i>Cedrus deodara</i>	1	9	10	Good	Good	High	700	8400	2800	High Impact: >20%	High Impact: >20%
183	<i>Cedrus deodara</i>	1	7	7	Good	Good	High	450	5400	2400	High Impact: >20%	High Impact: >20%
184	<i>Eucalyptus viminalis</i>	1	6	4	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
185	<i>Quercus robur</i>	1	14	15	Good	Good	High	1201	14000	3600	Medium Impact: <20%	Medium Impact: <20%
186	<i>Cedrus atlantica</i>	1	11	10	Fair	Fair	Medium	620	7400	2700	High Impact: >20%	High Impact: >20%
187	<i>Cupressus macrocarpa</i>	1	14	13	Fair	Fair	Medium	1408	17000	3800	High Impact: >20%	High Impact: >20%
188	<i>Cinnamomum camphora</i>	1	15	15	Fair	Poor	Low	1100	13000	3400	No Impact: 0%	High Impact: >20%
189	<i>Cinnamomum camphora</i>	1	12	10	Fair	Poor	Low	800	9600	3000	No Impact: 0%	High Impact: >20%
190	<i>Quercus robur</i>	1	7	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
191	<i>Eucalyptus viminalis</i>	1	15	12	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
192	<i>Eucalyptus viminalis</i>	1	16	14	Fair	Fair	Medium	650	7800	2800	No Impact: 0%	No Impact: 0%
193	<i>Eucalyptus viminalis</i>	1	15	12	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
194	<i>Eucalyptus viminalis</i>	1	12	11	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
195	<i>Eucalyptus viminalis</i>	1	11	7	Fair	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
196	<i>Eucalyptus viminalis</i>	1	12	9	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
197	<i>Eucalyptus viminalis</i>	1	11	9	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
198	<i>Eucalyptus amplifolia</i>	1	18	12	Good	Fair	Medium	800	9600	3000	Low Impact: <10%	Low Impact: <10%
199	<i>Eucalyptus viminalis</i>	1	13	12	Fair	Poor	Medium	600	7200	2700	High Impact: >20%	High Impact: >20%
200	<i>Chamaecyparis sp.</i>	1	15	9	Good	Fair	Medium	1702	20000	4100	High Impact: >20%	High Impact: >20%
201	<i>Chamaecyparis sp.</i>	1	13	9	Fair	Poor	Low	850	10000	3100	High Impact: >20%	High Impact: >20%
202	<i>Eucalyptus amplifolia</i>	1	20	16	Good	Fair	Medium	1000	12000	3300	Medium Impact: <20%	Medium Impact: <20%
203	<i>Alnus sp</i>	1	12	8	Fair	Poor	Low	600	7200	2700	High Impact: >20%	High Impact: >20%
204	<i>Chamaecyparis sp.</i>	1	10	7	Fair	Poor	Low	800	9600	3000	Low Impact: <10%	Low Impact: <10%
205	<i>Cupressus torulosa</i>	1	12	6	Good	Fair	High	600	7200	2700	Medium Impact: <20%	Medium Impact: <20%
206	<i>Eucalyptus amplifolia</i>	1	20	19	Good	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
207	<i>Quercus robur</i>	1	9	7	Good	Good	High	800	9600	3000	No Impact: 0%	No Impact: 0%
208	<i>Eucalyptus tereticornis</i>	1	13	9	Good	Fair	Medium	750	9000	2900	No Impact: 0%	No Impact: 0%
209	<i>Eucalyptus tereticornis</i>	1	14	7	Good	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
210	<i>Eucalyptus tereticornis</i>	1	16	8	Good	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
211	<i>Eucalyptus viminalis</i>	1	7	3	Fair	Poor	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
212	<i>Eucalyptus viminalis</i>	1	8	3	Fair	Fair	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
213	<i>Eucalyptus tereticornis</i>	1	14	5	Fair	Poor	Low	450	5400	2400	No Impact: 0%	No Impact: 0%
214	<i>Eucalyptus tereticornis</i>	1	20	13	Fair	Poor	Low	1200	14000	3600	No Impact: 0%	No Impact: 0%
215	<i>Eucalyptus tereticornis</i>	1	18	6	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
216	<i>Eucalyptus viminalis</i>	1	20	11	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
217	<i>Eucalyptus tereticornis</i>	1	17	7	Fair	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
218	<i>Eucalyptus tereticornis</i>	1	15	8	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
219	<i>Pinus radiata</i>	1	18	11	Poor	Fair	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
220	<i>Pinus radiata</i>	1	18	5	Poor	Poor	Low	900	11000	3200	No Impact: 0%	No Impact: 0%
221	<i>Eucalyptus tereticornis</i>	1	15	6	Poor	Poor	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
222	<i>Eucalyptus pilularis</i>	1	18	10	Fair	Poor	Low	750	9000	2900	No Impact: 0%	No Impact: 0%
223	<i>Pinus radiata</i>	1	18	11	Poor	Fair	Low	500	6000	2500	No Impact: 0%	No Impact: 0%
224	<i>Eucalyptus tereticornis</i>	1	25	17	Good	Fair	Medium	1200	14000	3600	No Impact: 0%	No Impact: 0%
225	<i>Pinus radiata</i>	1	14	11	Poor	Poor	Low	600	7200	2700	No Impact: 0%	No Impact: 0%
226	<i>Eucalyptus viminalis</i>	1	19	11	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
227	<i>Eucalyptus viminalis</i>	1	18	9	Fair	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
228	<i>Eucalyptus viminalis</i>	1	17	9	Poor	Fair	Low	700	8400	2800	No Impact: 0%	No Impact: 0%
229	<i>Eucalyptus amplifolia</i>	1	20	15	Good	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
230	<i>Eucalyptus amplifolia</i>	1	16	11	Fair	Good	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%
231	<i>Eucalyptus viminalis</i>	1	17	8	Fair	Fair	Medium	800	9600	3000	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
232	<i>Eucalyptus viminalis</i>	1	22	12	Fair	Fair	Medium	850	10000	3100	No Impact: 0%	No Impact: 0%
233	<i>Eucalyptus viminalis</i>	1	15	11	Fair	Fair	Medium	100	1500	2000	No Impact: 0%	No Impact: 0%
234	<i>Eucalyptus amplifolia</i>	1	15	10	Good	Good	High	1000	12000	3300	No Impact: 0%	No Impact: 0%
235	<i>Eucalyptus viminalis</i>	1	16	12	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
236	<i>Eucalyptus amplifolia</i>	1	11	5	Poor	Fair	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
237	<i>Eucalyptus amplifolia</i>	1	22	20	Good	Good	High	1200	14000	3600	No Impact: 0%	No Impact: 0%
238	<i>Eucalyptus amplifolia</i>	1	17	12	Good	Fair	Medium	650	7800	2800	No Impact: 0%	No Impact: 0%
239	<i>Eucalyptus amplifolia</i>	1	15	11	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
240	<i>Eucalyptus amplifolia</i>	1	17	12	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
241	<i>Eucalyptus amplifolia</i>	1	18	12	Fair	Good	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
242	<i>Eucalyptus amplifolia</i>	1	9	5	Fair	Poor	Low	550	6600	2600	No Impact: 0%	No Impact: 0%
243	<i>Eucalyptus amplifolia</i>	1	18	15	Good	Good	High	700	8400	2800	No Impact: 0%	No Impact: 0%
244	<i>Eucalyptus amplifolia</i>	1	12	9	Poor	Poor	Low	550	6600	2600	No Impact: 0%	No Impact: 0%
245	<i>Eucalyptus amplifolia</i>	1	18	9	Fair	Poor	Low	650	7800	2800	No Impact: 0%	No Impact: 0%
246	<i>Eucalyptus amplifolia</i>	1	18	12	Fair	Fair	Medium	900	11000	3200	No Impact: 0%	High Impact: >20%
247	<i>Eucalyptus amplifolia</i>	1	17	12	Fair	Good	Medium	900	11000	3200	No Impact: 0%	High Impact: >20%
248	<i>Eucalyptus tereticornis</i>	1	8	6	Fair	Fair	Medium	750	9000	2900	No Impact: 0%	High Impact: >20%
249	<i>Eucalyptus viminalis</i>	1	8	5	Good	Fair	Medium	350	4200	2100	No Impact: 0%	High Impact: >20%
250	<i>Eucalyptus amplifolia</i>	1	15	7	Fair	Poor	Low	750	9000	2900	No Impact: 0%	No Impact: 0%
251	<i>Eucalyptus amplifolia</i>	1	10	4	Fair	Poor	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
252	<i>Eucalyptus amplifolia</i>	1	18	13	Fair	Good	Medium	1100	13000	3400	No Impact: 0%	No Impact: 0%
253	<i>Eucalyptus viminalis</i>	1	8	3	Poor	Fair	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
254	<i>Eucalyptus amplifolia</i>	1	15	11	Fair	Fair	Medium	950	11000	3200	No Impact: 0%	No Impact: 0%
255	<i>Eucalyptus amplifolia</i>	1	10	5	Fair	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
256	<i>Eucalyptus amplifolia</i>	1	16	13	Fair	Fair	Medium	1200	14000	3600	No Impact: 0%	Low Impact: <10%
257	<i>Eucalyptus amplifolia</i>	1	6	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	High Impact: >20%
258	<i>Eucalyptus viminalis</i>	1	5	4	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	High Impact: >20%
259	<i>Eucalyptus amplifolia</i>	1	9	4	Good	Fair	Medium	480	5800	2400	No Impact: 0%	No Impact: 0%
260	<i>Eucalyptus viminalis</i>	1	6	3	Poor	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
261	<i>Eucalyptus amplifolia</i>	1	15	11	Fair	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
262	<i>Eucalyptus amplifolia</i>	1	12	11	Poor	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
263	<i>Eucalyptus amplifolia</i>	1	15	11	Poor	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
264	<i>Eucalyptus viminalis</i>	1	15	10	Poor	Fair	Low	1000	12000	3300	No Impact: 0%	No Impact: 0%
265	<i>Eucalyptus viminalis</i>	1	15	6	Poor	Poor	Low	600	7200	2700	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
266	<i>Eucalyptus viminalis</i>	1	15	10	Poor	Poor	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
267	<i>Pinus radiata</i>	1	10	8	Poor	Poor	Low	500	6000	2500	No Impact: 0%	No Impact: 0%
268	<i>Eucalyptus amplifolia</i>	1	12	9	Poor	Fair	Low	800	9600	3000	No Impact: 0%	No Impact: 0%
269	<i>Eucalyptus amplifolia</i>	1	15	11	Fair	Poor	Low	900	11000	3200	No Impact: 0%	No Impact: 0%
270	<i>Eucalyptus amplifolia</i>	1	8	5	Fair	Poor	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
271	<i>Eucalyptus viminalis</i>	1	15	11	Fair	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
272	<i>Eucalyptus amplifolia</i>	1	14	12	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
273	<i>Eucalyptus amplifolia</i>	1	12	11	Fair	Fair	Medium	850	10000	3100	No Impact: 0%	No Impact: 0%
274	<i>Eucalyptus amplifolia</i>	1	15	12	Fair	Poor	Low	700	8400	2800	No Impact: 0%	No Impact: 0%
275	<i>Eucalyptus amplifolia</i>	1	15	10	Fair	Poor	Low	600	7200	2700	No Impact: 0%	No Impact: 0%
276	<i>Eucalyptus amplifolia</i>	1	12	8	Fair	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
277	<i>Acacia sp.</i>	1	6	4	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
278	<i>Acacia sp.</i>	1	6	4	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
279	<i>Eucalyptus viminalis</i>	1	8	5	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
280	<i>Acacia sp.</i>	1	6	5	Good	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
281	<i>Acacia sp.</i>	1	7	4	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
282	<i>Acacia sp.</i>	1	5	3	Fair	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
283	<i>Dracena</i>	1	4	2	Good	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
284	<i>Acacia sp.</i>	1	4	5	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
285	<i>Eucalyptus sp.</i>	1	9	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
286	<i>Eucalyptus viminalis</i>	1	9	4	Poor	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
287	<i>Eucalyptus sp.</i>	1	8	5	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
288	<i>Eucalyptus viminalis</i>	1	13	7	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
289	<i>Eucalyptus viminalis</i>	1	14	5	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
290	<i>Eucalyptus viminalis</i>	1	12	4	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
291	<i>Eucalyptus amplifolia</i>	1	10	3	Fair	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
292	<i>Eucalyptus amplifolia</i>	1	9	1	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
293	<i>Eucalyptus amplifolia</i>	1	7	3	Fair	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
294	<i>Eucalyptus amplifolia</i>	1	8	3	Fair	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
295	<i>Eucalyptus viminalis</i>	1	11	5	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
296	<i>Acacia sp.</i>	1	8	3	Fair	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
297	<i>Eucalyptus amplifolia</i>	1	11	3	Fair	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
298	<i>Acacia sp.</i>	1	9	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
299	<i>Eucalyptus amplifolia</i>	1	10	4	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
300	<i>Acacia sp.</i>	1	4	2	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
301	<i>Eucalyptus viminalis</i>	1	12	7	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
302	<i>Eucalyptus amplifolia</i>	1	8	3	Fair	Poor	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
303	<i>Eucalyptus amplifolia</i>	1	11	4	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
304	<i>Eucalyptus viminalis</i>	1	15	7	Fair	Poor	Low	500	6000	2500	No Impact: 0%	No Impact: 0%
305	<i>Eucalyptus viminalis</i>	1	6	4	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
306	<i>Acacia sp.</i>	1	7	5	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
307	<i>Eucalyptus viminalis</i>	1	9	3	Poor	Poor	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
308	<i>Eucalyptus viminalis</i>	1	7	3	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
309	<i>Eucalyptus viminalis</i>	1	6	5	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
310	<i>Eucalyptus viminalis</i>	1	7	4	Fair	Fair	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
311	<i>Acacia sp.</i>	1	8	3	Poor	Poor	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
312	<i>Acacia sp.</i>	1	5	3	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
313	<i>Eucalyptus viminalis</i>	1	12	5	Fair	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
314	<i>Eucalyptus viminalis</i>	1	9	4	Poor	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
315	<i>Eucalyptus viminalis</i>	1	12	8	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
316	<i>Acacia sp.</i>	1	6	4	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
317	<i>Eucalyptus viminalis</i>	1	8	4	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
318	<i>Acacia sp.</i>	1	7	4	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
319	<i>Eucalyptus viminalis</i>	1	7	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
320	<i>Acacia sp.</i>	1	7	4	Fair	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
321	<i>Eucalyptus viminalis</i>	1	11	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
322	<i>Acacia sp.</i>	1	10	6	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
323	<i>Acacia sp.</i>	1	9	4	Poor	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
324	<i>Acacia sp.</i>	1	7	5	Poor	Fair	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
325	<i>Eucalyptus viminalis</i>	1	12	5	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
326	<i>Acacia sp.</i>	1	6	3	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
327	<i>Eucalyptus viminalis</i>	1	11	4	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
328	<i>Quercus robur</i>	1	15	11	Good	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
329	<i>Quercus robur</i>	1	12	11	Good	Good	High	750	9000	2900	No Impact: 0%	No Impact: 0%
330	<i>Eucalyptus viminalis</i>	1	7	3	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
331	<i>Eucalyptus viminalis</i>	1	15	5	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
332	<i>Eucalyptus viminalis</i>	1	13	6	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
333	<i>Eucalyptus viminalis</i>	1	15	10	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
334	<i>Eucalyptus viminalis</i>	1	14	7	Fair	Poor	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
335	<i>Eucalyptus viminalis</i>	1	15	7	Good	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
336	<i>Eucalyptus viminalis</i>	1	15	7	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
337	<i>Eucalyptus viminalis</i>	1	15	6	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
338	<i>Eucalyptus viminalis</i>	1	14	7	Good	Good	High	700	8400	2800	No Impact: 0%	No Impact: 0%
339	<i>Eucalyptus viminalis</i>	1	11	8	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
340	<i>Eucalyptus viminalis</i>	1	7	3	Fair	Poor	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
341	<i>Acacia sp.</i>	1	7	3	Poor	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
342	<i>Eucalyptus viminalis</i>	1	14	12	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
343	<i>Melaleuca linariifolia</i>	1	5	2	Poor	Fair	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
344	<i>Acacia sp.</i>	1	7	5	Poor	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
345	<i>Acacia decurrens</i>	1	7	3	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
346	<i>Acacia binervata</i>	1	6	3	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
347	<i>Acacia decurrens</i>	1	8	4	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
348	<i>Eucalyptus viminalis</i>	1	9	4	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
349	<i>Eucalyptus viminalis</i>	1	11	7	Good	Good	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
350	<i>Eucalyptus viminalis</i>	1	6	3	Poor	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
351	<i>Casuarina glauca</i>	1	11	6	Good	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
352	<i>Casuarina glauca</i>	1	7	3	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
353	<i>Melaleuca linariifolia</i>	1	5	4	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
354	<i>Casuarina glauca</i>	1	8	5	Fair	Poor	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
355	<i>Casuarina glauca</i>	1	9	5	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
356	<i>Casuarina glauca</i>	1	7	3	Fair	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
357	<i>Acacia binervata</i>	1	6	4	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
358	<i>Eucalyptus viminalis</i>	1	16	12	Good	Good	High	350	4200	2100	No Impact: 0%	No Impact: 0%
359	<i>Acacia binervata</i>	1	4	3	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
360	<i>Eucalyptus viminalis</i>	1	14	7	Good	Good	High	300	3600	2000	No Impact: 0%	No Impact: 0%
361	<i>Eucalyptus viminalis</i>	1	14	4	Fair	Fair	Low	300	3600	2000	No Impact: 0%	No Impact: 0%
362	<i>Melaleuca linariifolia</i>	1	5	3	Fair	Fair	Medium	100	1500	2000	No Impact: 0%	No Impact: 0%
363	<i>Eucalyptus viminalis</i>	1	15	9	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
364	<i>Eucalyptus viminalis</i>	1	11	5	Fair	Fair	Low	350	4200	2100	No Impact: 0%	No Impact: 0%
365	<i>Eucalyptus viminalis</i>	1	10	7	Good	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
366	<i>Eucalyptus viminalis</i>	1	12	5	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
367	<i>Eucalyptus viminalis</i>	1	5	4	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
368	<i>Eucalyptus viminalis</i>	1	12	9	Good	Good	High	750	9000	2900	No Impact: 0%	No Impact: 0%
369	<i>Eucalyptus viminalis</i>	1	11	8	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
370	<i>Eucalyptus viminalis</i>	1	11	4	Poor	Fair	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
371	<i>Eucalyptus viminalis</i>	1	15	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
372	<i>Eucalyptus viminalis</i>	1	12	4	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
373	<i>Acacia decurrens</i>	1	6	4	Good	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
374	<i>Casuarina glauca</i>	1	6	4	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
375	<i>Eucalyptus sp.</i>	1	12	7	Good	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
376	<i>Casuarina glauca</i>	1	11	4	Poor	Poor	Low	400	4800	2300	No Impact: 0%	No Impact: 0%
377	<i>Eucalyptus amplifolia</i>	1	11	4	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
378	<i>Eucalyptus amplifolia</i>	1	12	5	Fair	Poor	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
379	<i>Eucalyptus amplifolia</i>	1	9	3	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
380	<i>Casuarina glauca</i>	1	7	3	Fair	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
381	<i>Casuarina glauca</i>	1	7	3	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
382	<i>Eucalyptus amplifolia</i>	1	15	10	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
383	<i>Casuarina glauca</i>	1	5	3	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
384	<i>Eucalyptus amplifolia</i>	1	7	3	Poor	Fair	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
385	<i>Eucalyptus sp.</i>	1	9	5	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
386	<i>Eucalyptus amplifolia</i>	1	12	12	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
387	<i>Acacia binervata</i>	1	5	2	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
388	<i>Eucalyptus amplifolia</i>	1	11	5	Good	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
389	<i>Eucalyptus amplifolia</i>	1	14	6	Fair	Poor	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
390	<i>Casuarina glauca</i>	1	5	3	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
391	<i>Eucalyptus amplifolia</i>	1	6	2	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
392	<i>Eucalyptus amplifolia</i>	1	8	3	Poor	Poor	Low	110	1500	2000	No Impact: 0%	No Impact: 0%
393	<i>Eucalyptus amplifolia</i>	1	11	4	Poor	Poor	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
394	<i>Acacia binervata</i>	1	7	3	Poor	Poor	Low	110	1500	2000	No Impact: 0%	No Impact: 0%
395	<i>Eucalyptus viminalis</i>	1	15	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
396	<i>Eucalyptus viminalis</i>	1	11	5	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
397	<i>Eucalyptus amplifolia</i>	1	9	3	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
398	<i>Eucalyptus viminalis</i>	1	17	7	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
399	<i>Eucalyptus viminalis</i>	1	17	8	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
400	<i>Eucalyptus viminalis</i>	1	17	6	Good	Fair	Medium	450	5400	2400	No Impact: 0%	No Impact: 0%
401	<i>Acacia binervata</i>	1	6	3	Poor	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
402	<i>Eucalyptus viminalis</i>	1	17	8	Good	Fair	High	650	7800	2800	No Impact: 0%	No Impact: 0%
403	<i>Eucalyptus viminalis</i>	1	17	9	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
404	<i>Eucalyptus viminalis</i>	1	17	11	Good	Good	High	620	7400	2700	No Impact: 0%	No Impact: 0%
405	<i>Eucalyptus viminalis</i>	1	17	8	Good	Good	High	650	7800	2800	No Impact: 0%	No Impact: 0%
406	<i>Eucalyptus viminalis</i>	1	17	11	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
407	<i>Acacia decurrens</i>	1	6	3	Poor	Fair	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
408	<i>Eucalyptus viminalis</i>	1	17	12	Good	Good	High	700	8400	2800	No Impact: 0%	No Impact: 0%
409	<i>Eucalyptus amplifolia</i>	1	15	8	Good	Good	High	650	7800	2800	No Impact: 0%	No Impact: 0%
410	<i>Eucalyptus amplifolia</i>	1	12	3	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
411	<i>Eucalyptus viminalis</i>	1	11	3	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
412	<i>Eucalyptus viminalis</i>	1	17	11	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
413	<i>Eucalyptus viminalis</i>	1	17	8	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
414	<i>Eucalyptus amplifolia</i>	1	15	8	Good	Good	High	400	4800	2300	No Impact: 0%	No Impact: 0%
415	<i>Eucalyptus amplifolia</i>	1	15	9	Good	Good	High	500	6000	2500	No Impact: 0%	No Impact: 0%
416	<i>Eucalyptus amplifolia</i>	1	16	8	Good	Good	High	500	6000	2500	No Impact: 0%	No Impact: 0%
417	<i>Eucalyptus viminalis</i>	1	17	8	Good	Good	High	450	5400	2400	No Impact: 0%	No Impact: 0%
418	<i>Eucalyptus viminalis</i>	1	17	8	Good	Good	High	400	4800	2300	No Impact: 0%	No Impact: 0%
419	<i>Acer negundo</i>	1	4	3	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
420	<i>Acacia binervata</i>	1	4	3	Fair	Poor	Low	120	1500	2000	No Impact: 0%	No Impact: 0%
421	<i>Eucalyptus viminalis</i>	1	17	8	Fair	Poor	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
422	<i>Eucalyptus viminalis</i>	1	17	8	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
423	<i>Eucalyptus viminalis</i>	1	17	9	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
424	<i>Acer negundo</i>	1	5	4	Poor	Poor	Low	100	1500	2000	No Impact: 0%	No Impact: 0%
425	<i>Eucalyptus viminalis</i>	1	13	7	Good	Good	High	500	6000	2500	No Impact: 0%	No Impact: 0%
426	<i>Eucalyptus viminalis</i>	1	13	8	Good	Good	High	700	8400	2800	No Impact: 0%	No Impact: 0%
427	<i>Acacia decurrens</i>	1	6	5	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
428	<i>Banksia sp.</i>	1	4	3	Good	Good	High	100	1500	2000	No Impact: 0%	No Impact: 0%
429	<i>Acacia binervata</i>	1	6	4	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
430	<i>Eucalyptus viminalis</i>	1	11	5	Good	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%
431	<i>Eucalyptus amplifolia</i>	1	9	5	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
432	<i>Eucalyptus viminalis</i>	1	10	6	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
433	<i>Eucalyptus viminalis</i>	1	13	8	Good	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
434	<i>Eucalyptus viminalis</i>	1	14	6	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
435	<i>Eucalyptus viminalis</i>	1	13	9	Good	Fair	Medium	500	6000	2500	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
436	<i>Eucalyptus viminalis</i>	1	9	5	Fair	Fair	Medium	650	7800	2800	No Impact: 0%	No Impact: 0%
437	<i>Quercus robur</i>	1	14	15	Good	Good	High	900	11000	3200	No Impact: 0%	No Impact: 0%
438	<i>Acacia decurrens</i>	1	7	4	Fair	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
439	<i>Eucalyptus amplifolia</i>	1	8	3	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
440	<i>Acacia decurrens</i>	1	6	3	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
441	<i>Eucalyptus amplifolia</i>	1	9	4	Good	Fair	Medium	240	2900	1800	No Impact: 0%	No Impact: 0%
442	<i>Eucalyptus amplifolia</i>	1	14	8	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
443	<i>Eucalyptus amplifolia</i>	1	14	7	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
444	<i>Acacia decurrens</i>	1	7	3	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
445	<i>Acacia decurrens</i>	1	8	4	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
446	<i>Eucalyptus viminalis</i>	1	11	9	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
447	<i>Eucalyptus viminalis</i>	1	13	7	Good	Good	High	500	6000	2500	No Impact: 0%	No Impact: 0%
448	<i>Eucalyptus amplifolia</i>	1	17	8	Good	Good	High	650	7800	2800	No Impact: 0%	No Impact: 0%
449	<i>Eucalyptus amplifolia</i>	1	17	6	Good	Fair	Medium	600	7200	2700	No Impact: 0%	No Impact: 0%
450	<i>Acacia binervia</i>	1	7	3	Fair	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
451	<i>Acacia decurrens</i>	1	6	4	Fair	Poor	Low	110	1500	2000	No Impact: 0%	No Impact: 0%
452	<i>Eucalyptus viminalis</i>	1	16	7	Good	Good	High	550	6600	2600	No Impact: 0%	No Impact: 0%
453	<i>Casuarina glauca</i>	1	7	3	Poor	Fair	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
454	<i>Eucalyptus viminalis</i>	1	13	7	Good	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
455	<i>Acacia decurrens</i>	1	6	4	Fair	Fair	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
456	<i>Eucalyptus viminalis</i>	1	13	5	Good	Fair	Medium	250	3000	1800	No Impact: 0%	No Impact: 0%
457	<i>Acacia decurrens</i>	1	4	5	Fair	Poor	Low	250	3000	1800	No Impact: 0%	No Impact: 0%
458	<i>Acacia decurrens</i>	1	6	4	Poor	Fair	Low	170	2000	1600	No Impact: 0%	No Impact: 0%
459	<i>Acacia decurrens</i>	1	8	3	Good	Fair	Medium	150	1500	2000	No Impact: 0%	No Impact: 0%
460	<i>Eucalyptus viminalis</i>	1	15	7	Fair	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
461	<i>Acacia decurrens</i>	1	8	5	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
462	<i>Eucalyptus viminalis</i>	1	16	11	Fair	Fair	Medium	550	6600	2600	No Impact: 0%	No Impact: 0%
463	<i>Acacia decurrens</i>	1	4	4	Good	Fair	Medium	100	1500	2000	No Impact: 0%	No Impact: 0%
464	<i>Callistemon viminalis</i>	1	16	7	Good	Fair	Medium	350	4200	2100	No Impact: 0%	No Impact: 0%
465	<i>Eucalyptus viminalis</i>	1	12	9	Good	Good	High	600	7200	2700	No Impact: 0%	No Impact: 0%
466	<i>Acacia binervata</i>	1	5	5	Good	Poor	Medium	300	3600	2000	No Impact: 0%	No Impact: 0%
467	<i>Fraxinus raywood</i>	1	4	4	Poor	Poor	Low	150	1500	2000	No Impact: 0%	No Impact: 0%
468	<i>Fraxinus raywood</i>	1	5	5	Poor	Poor	Low	200	2400	1700	No Impact: 0%	No Impact: 0%
469	<i>Quercus sp.</i>	1	17	18	Good	Fair	Medium	1000	12000	3300	No Impact: 0%	No Impact: 0%

Tree	Scientific Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	Retention Value	DBH (mm)	TPZ (mm)	SRZ (mm)	Tree Impacts (Stage 1)	Tree Impacts (Stage 2)
470	<i>Quercus sp.</i>	1	6	5	Good	Fair	Medium	200	2400	1700	No Impact: 0%	No Impact: 0%
471	<i>Acacia decurrens</i>	1	7	5	Fair	Fair	Medium	400	4800	2300	No Impact: 0%	No Impact: 0%
472	<i>Pinus radiata</i>	1	11	10	Good	Fair	Medium	700	8400	2800	No Impact: 0%	No Impact: 0%
473	<i>Pinus radiata</i>	1	15	13	Good	Fair	Medium	900	11000	3200	No Impact: 0%	No Impact: 0%
474	<i>Cupressus macrocarpa</i>	1	18	20	Good	Good	High	2000	24000	4400	No Impact: 0%	Low Impact: <10%

4 Recommendations

4.1 Stage 1

4.1.1 Low retention value trees

- A total of **23** trees with a low retention value that would be subject to medium or high impact are recommended for removal.

4.1.2 Medium retention value trees

- A total of **35** trees with a medium retention value but subject to a high impact within the tree protection zone should be retained wherever possible but should not be a constraint on the development.
- A total of **2** trees with a medium retention value that would be subject to medium impact should be retained wherever possible. If the proposed construction works are restricted to outside of the structural root zone (SRZ), successful retention of trees may be possible. Further detailed assessments (root investigation) under the supervision of the project arborist will be required for any works that encroach greater than 10% within the (TPZ). If encroachment cannot be restricted to outside of the SRZ, these trees cannot be successfully retained.

4.1.3 High retention value trees

- A total of **14** trees with a high retention value that would be subject to medium or high impact are considered important for retention and should be retained and protected wherever possible. All opportunities for retaining these subject trees using design modification and tree sensitive construction techniques should be explored.
- For trees subject to a medium impact under the current proposal, if the proposed construction works are restricted to outside of the structural root zone (SRZ), successful retention may be possible. Further detailed assessments (root investigation) under the supervision of the project arborist will be required for any works that encroach greater than 10% within the (TPZ). If encroachment cannot be restricted to outside of the SRZ, these trees cannot be successfully retained.

All other trees will be subject to either a low or no impact into the tree protection zone. These trees can be sustainably retained through this proposal.

4.2 Stage 2

4.2.1 Low retention value trees

- A total of **30** trees with a low retention value that would be subject to medium or high impact are recommended for removal.

4.2.2 Medium retention value trees

- A total of **50** trees with a medium retention value but subject to a high impact within the tree protection zone should be retained wherever possible but should not be a constraint on the development.
- A total of **5** trees with a medium retention value that would be subject to medium impact should be retained wherever possible. If the proposed construction works are restricted to

outside of the structural root zone (SRZ), successful retention of trees may be possible. Further detailed assessments (root investigation) under the supervision of the project arborist will be required for any works that encroach greater than 10% within the (TPZ). If encroachment cannot be restricted to outside of the SRZ, these trees cannot be successfully retained.

4.2.3 High retention value trees

- A total of **17** trees with a high retention value that would be subject to medium or high impact are considered important for retention and should be retained and protected wherever possible. All opportunities for retaining these subject trees using design modification and tree sensitive construction techniques should be explored.
- For trees subject to a medium impact under the current proposal, if the proposed construction works are restricted to outside of the structural root zone (SRZ), successful retention of trees may be possible. Further detailed assessments (root investigation) under the supervision of the project arborist will be required for any works that encroach greater than 10% within the (TPZ). If encroachment cannot be restricted to outside of the SRZ, these trees cannot be successfully retained.

All other trees will be subject to either a low or no impact into the tree protection zone. These trees can be sustainably retained through this proposal.

4.3 Trees located along the existing driveway

Some high retention and medium retention trees situated along the existing driveways, shall be subject to high impact (>20%) into the tree protection zones from the proposed roadway. Under *AS4970-2009 Protection of Trees on Development Sites* if the proposed encroachment is greater than 10% of the TPZ or inside the SRZ the project arborist must demonstrate that the tree(s) would remain viable.

Existing ground levels are to be retained with the entry road within the footprint of the existing bitumen road. The existing bitumen is proposed to be scarified and new asphalt layer to be placed over the existing road surface. The project arborist can be engaged to oversee these works if required.

4.4 Trees within the EEC and the building footprint

There is an area within the south western area of the site, which has been mapped as *Southern Highlands Shale Woodland* (A Clements 2018). Trees 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120 and 122 have been determined to be located within this EEC, closest to the building alignment and species associated with *Southern Highlands Shale Woodland*. The current development proposal will have no impact into the tree protection zones of these trees.

Trees 82 and 71 are tree species also associated with *Southern Highlands Shale Woodland*, will be subject to medium impacts within the tree protection zones but are located adjacent to the proposed driveway, which is to be built at a natural ground level. Tree 121 is located next to the building alignment, will be subject to a medium impact but the proposed building in this location is to be constructed a similar level to this subject tree.

All of the trees within this determined EEC are a ten metre setback from the proposed building alignment (Marchese Partners 3/4/19 Revision S).

4.5 Tree work

- All tree work (pruning and removal) is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture.
- All tree work must be in accordance with Australian Standard AS 4373-2007, Pruning of Amenity Trees and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998).
- Permission must be granted from the relevant consent authority, prior to removing or pruning of any of the subject trees.

4.6 Offsetting

Any loss of trees should be offset with replacement planting in accordance with the relevant offset policy and in consultation with the local council.

5 Tree protection plan

5.1 Tree protection measures

The following are tree protection measures required if there are trees to be retained:

- Tree protection fencing must be established around the perimeter of the TPZ. If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with AS 4970-2009 - *Protection of trees on development sites*. Existing fencing and site hoarding may be used as tree protection fencing.
- If temporary access for machinery is required within the TPZ, ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Ground protection may include a permeable membrane such as geotextile fabric beneath a layer of mulch, crushed rock or rumble boards.
- Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist and must comply with AS 4970-2009 - *Protection of trees on development sites*.

Further information and guidelines on tree protection are in **Appendix C**.

5.2 Hold points, inspection and certification

A copy of this report must be available onsite prior to the commencement of works, and throughout the entirety of the project. To ensure trees are adequately protected during the construction process, hold points have been specified in the schedule of works below. It is the responsibility of the principal contractor to complete each of the tasks.

Once each stage is reached, the work will be inspected and certified by the project arborist and the next stage may commence. Alterations to this schedule may be required due to necessity, however, this shall be through consultation with the project arborist only.

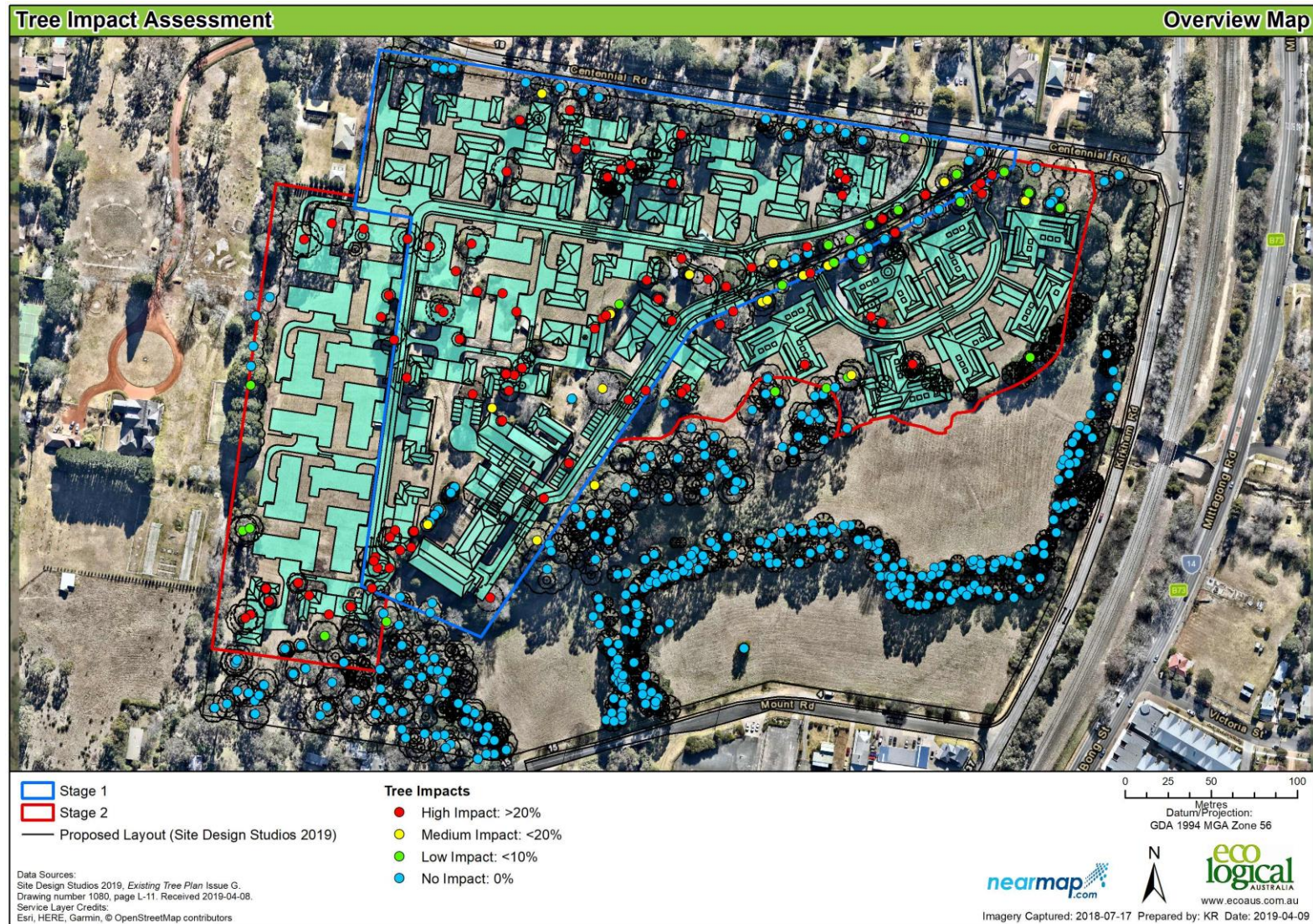
Table 3: Schedule and hold points

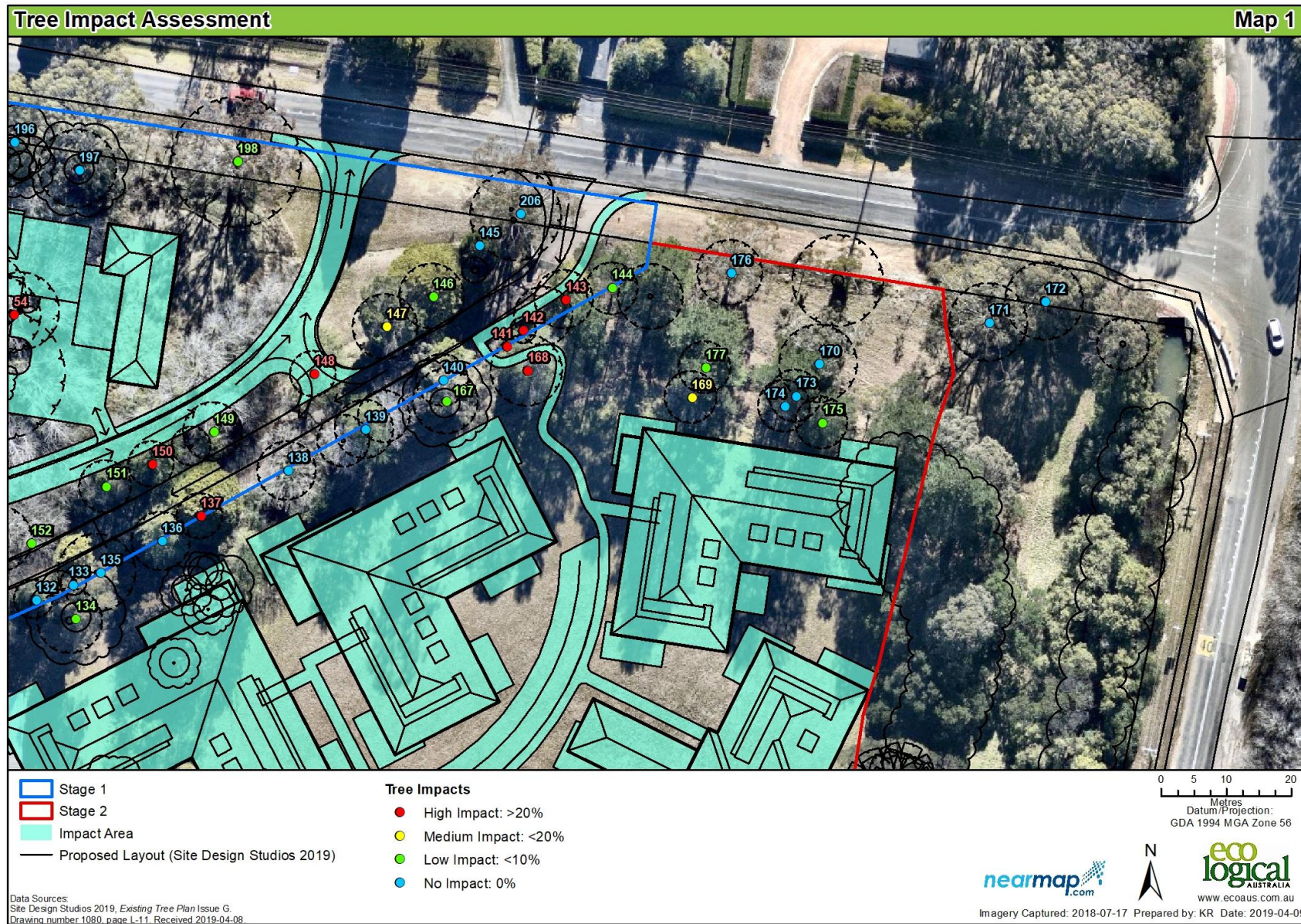
Pre-construction	Prior to demolition and site establishment indicate clearly (with spray paint on trunks) trees marked for removal only.
	Tree protection (for trees that will be retained) shall be installed prior to demolition and site establishment, this will include mulching of areas within the TPZ
During Construction	Scheduled inspection of trees by the project arborist should be undertaken monthly during the construction period. Notification to be given prior to the commencement of work within the tree protection zone, with supervision by the project arborist of any work undertaken in this zone
Post Construction	Inspection of trees by project arborist after all major construction has ceased, following the removal of tree protection measures, with a final inspection of trees by project arborist.

References

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- Standards Australia 2007. *Australian Standard: Pruning of amenity trees, AS 4373 – 2007*, Standards Australia, Sydney.
- Standards Australia 2009. *Australian Standard: Protection of trees on development sites, AS 4970 (2009)*. Standards Australia, Sydney.

Appendix A Tree impacts







Tree Impact Assessment

Map 3



- Stage 1
- Stage 2
- Impact Area
- Proposed Layout (Site Design Studios 2019)

Tree Impacts

- High Impact: >20%
- Medium Impact: <20%
- No Impact: 0%

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 56

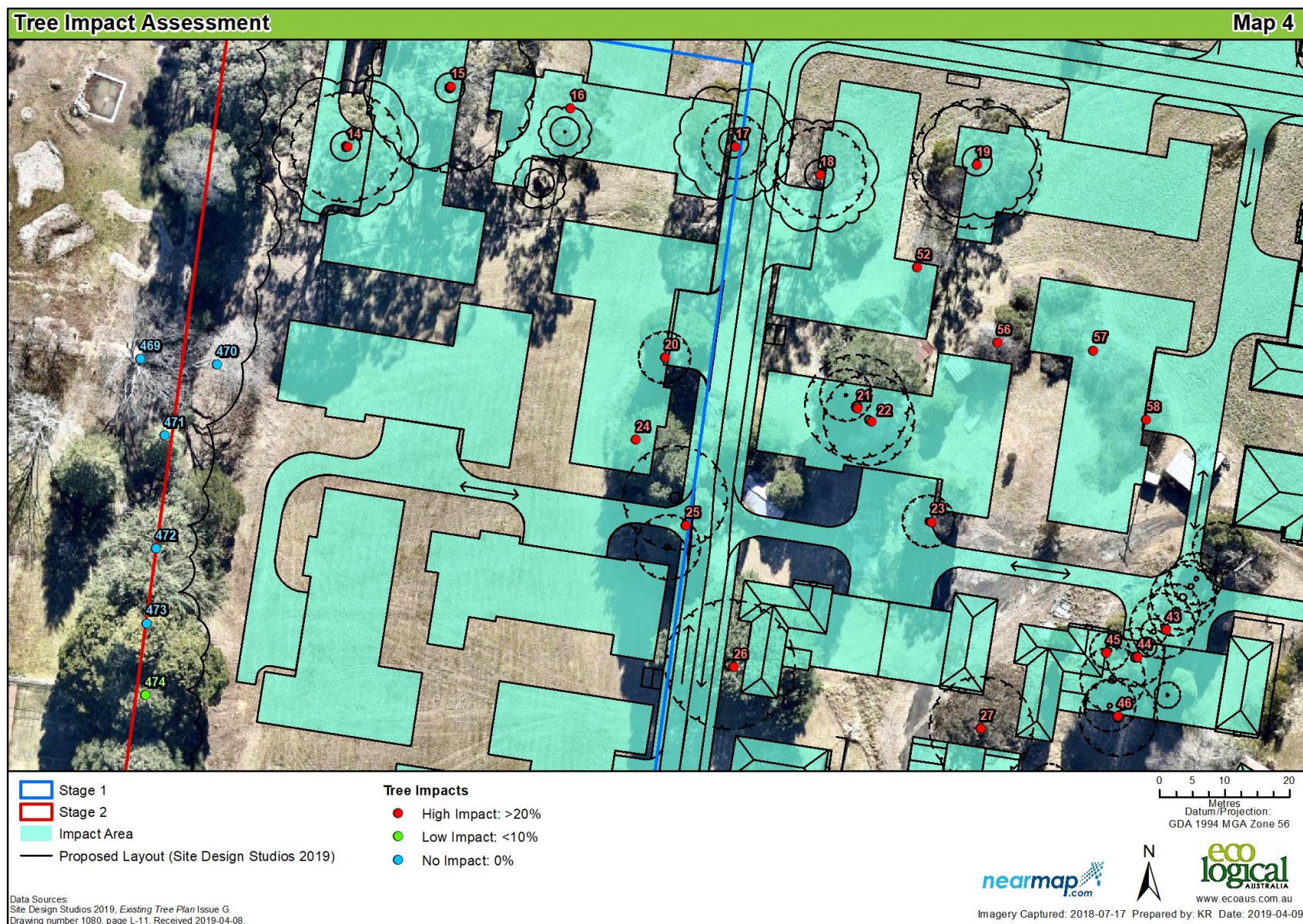
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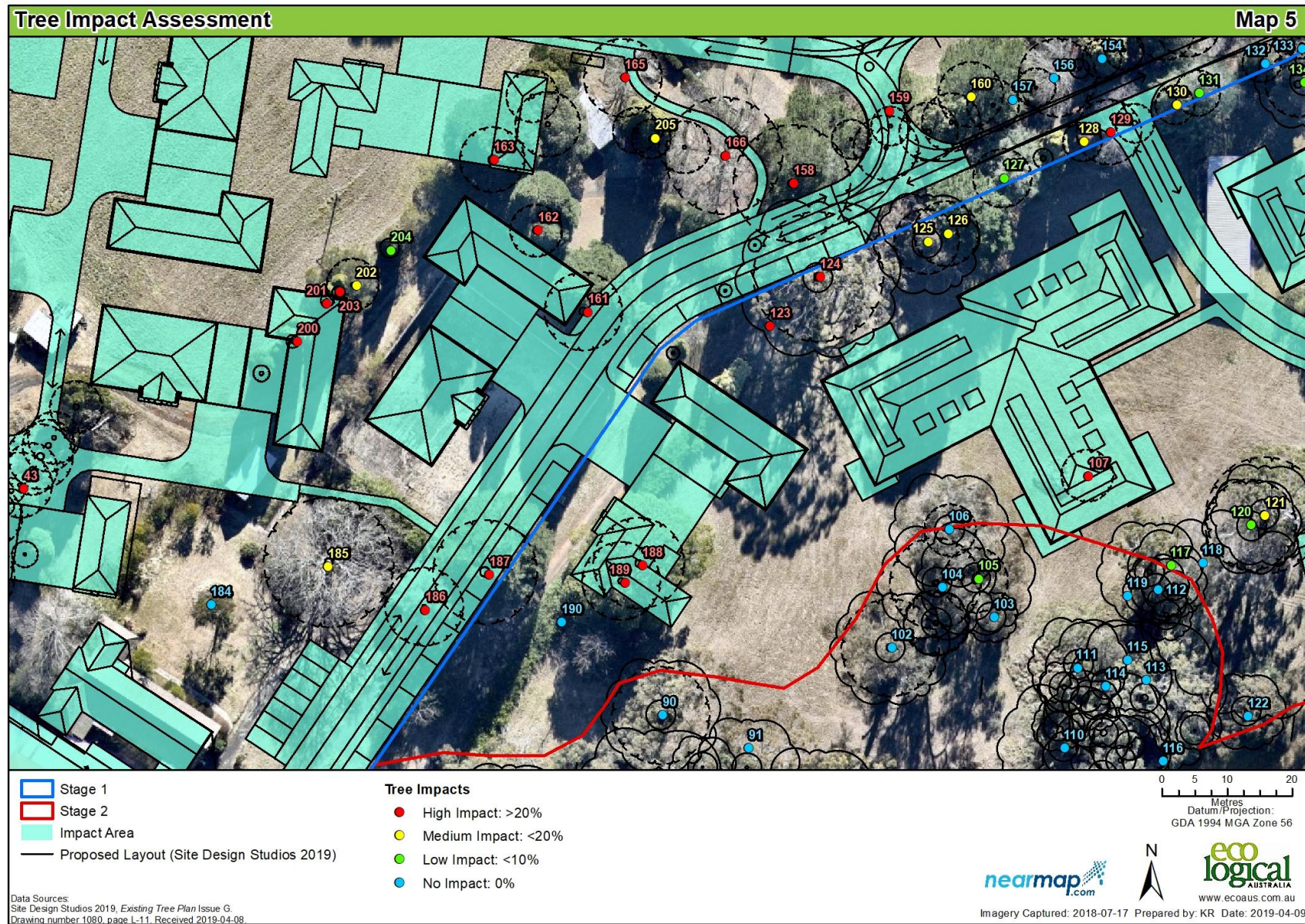


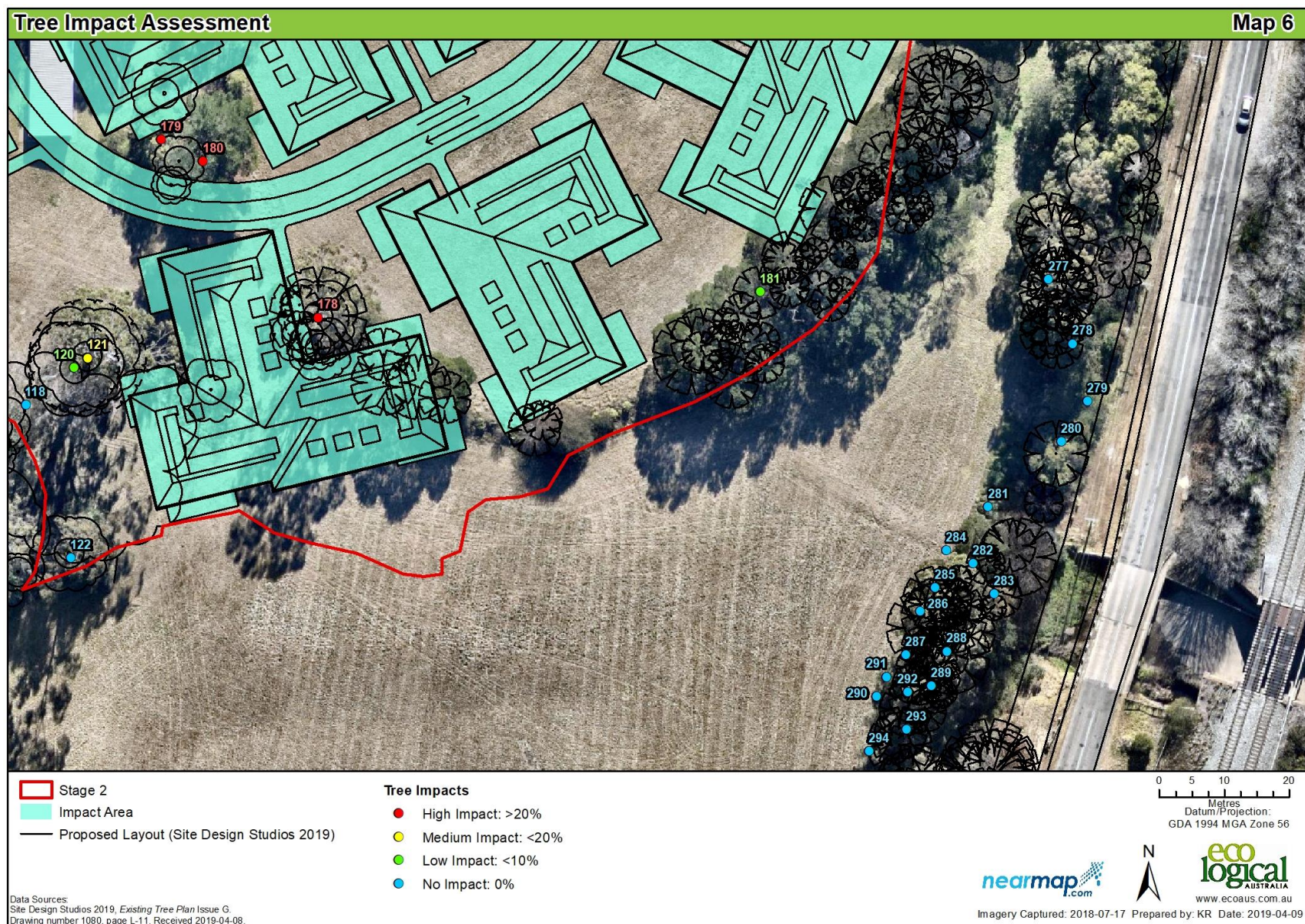
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AUSTRALIA
www.ecoaus.com.au

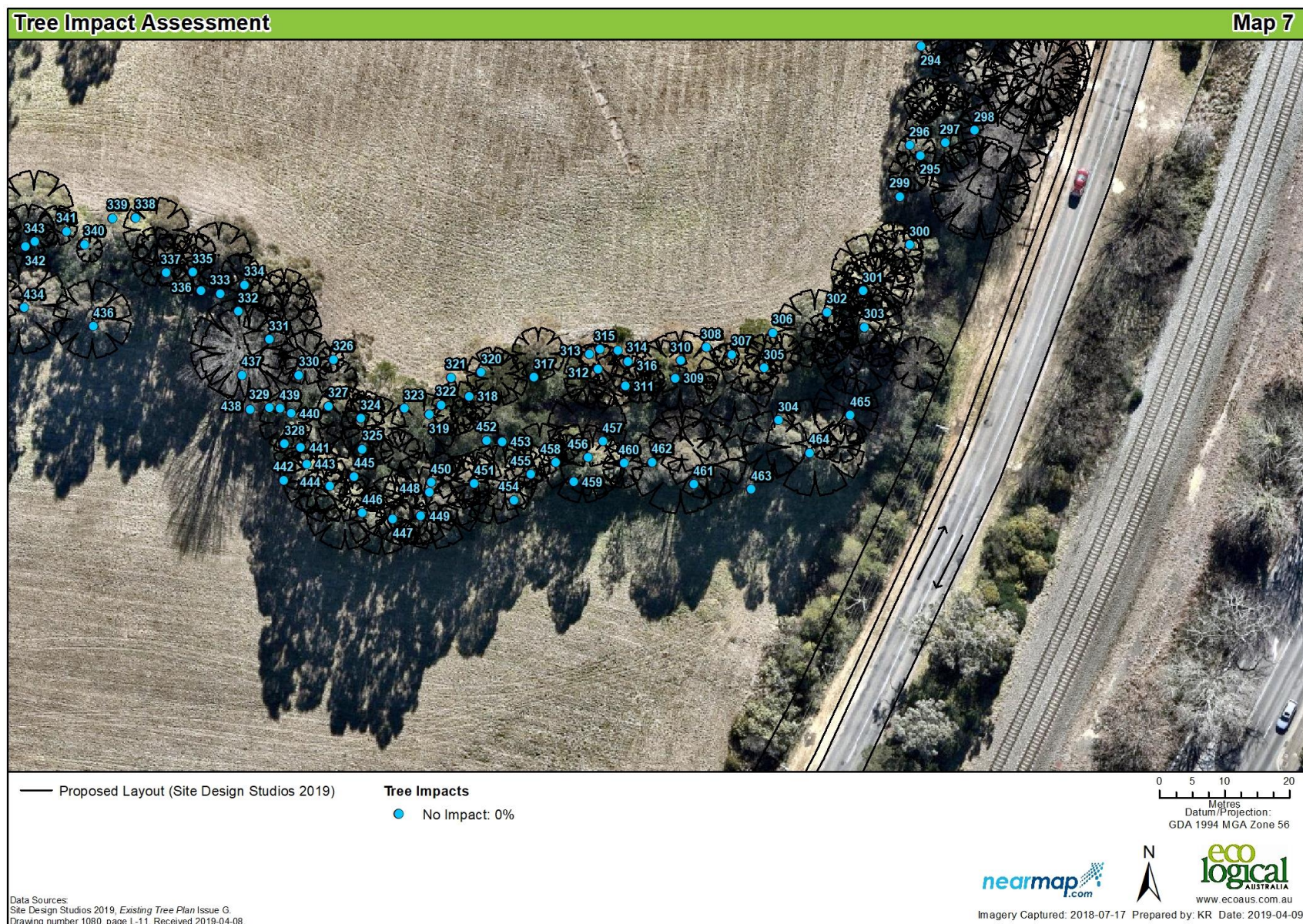
Imagery Captured: 2018-07-17 Prepared by: KR Date: 2019-04-09

Data Sources:
Site Design Studios 2019, Existing Tree Plan Issue G.
Drawing number 1080, page L-11. Received 2019-04-08



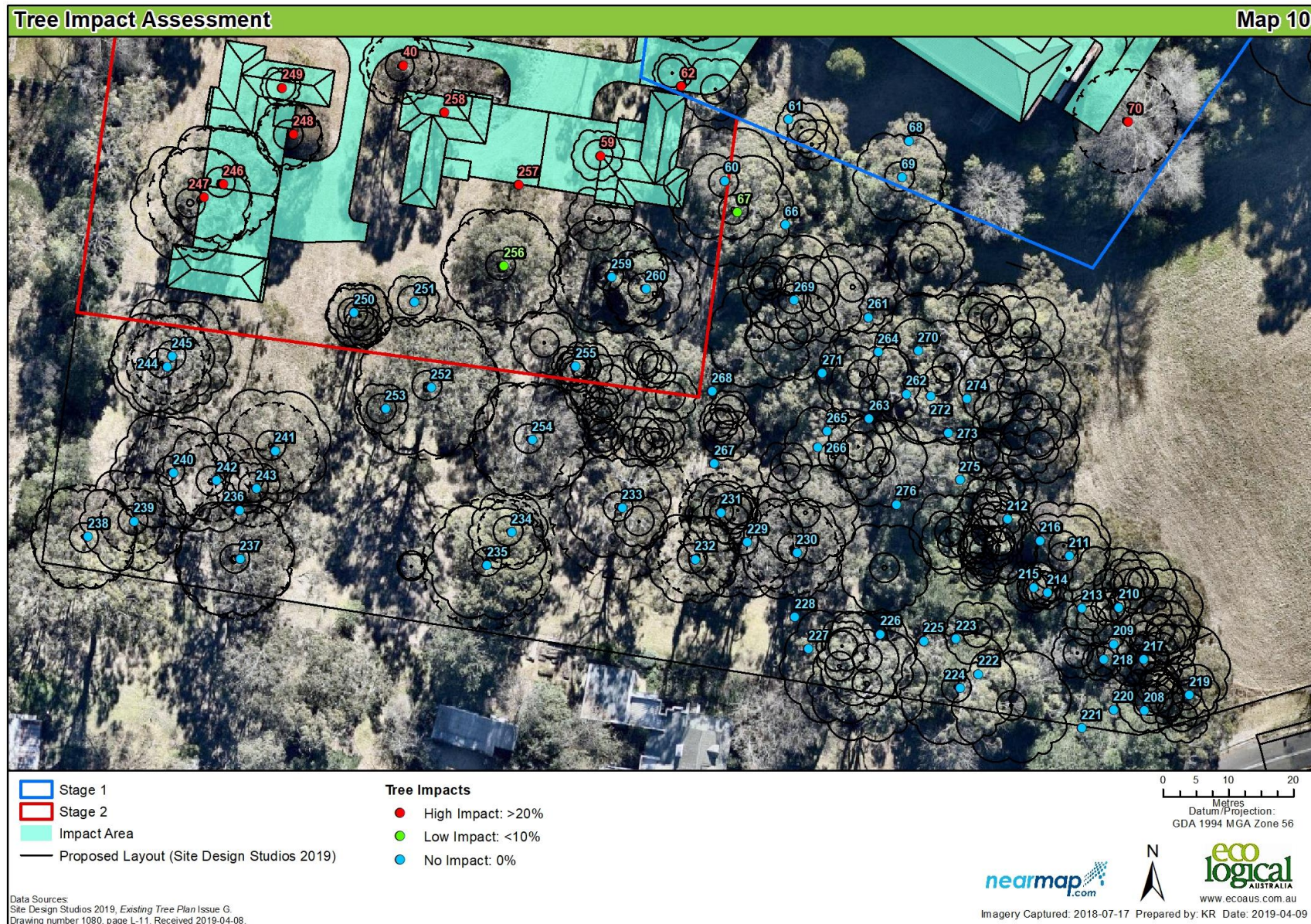












Tree Impact Assessment

Map 11



— Proposed Layout (Site Design Studios 2019)

Tree Impacts

● No Impact: 0%

0 5 10 20
Metres
Datum/Projection:
GDA 1994 MGA Zone 56

Data Sources:
Site Design Studios 2019, Existing Tree Plan Issue G.
Drawing number 1080, page L-11, Received 2019-04-08

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Imagery Captured: 2018-07-17 Prepared by: KR Date: 2019-04-09

Appendix C Tree Protection Guidelines

The following tree protection guidelines must be implemented during the construction period if no tree-specific recommendations are detailed.

Tree protection fencing

The TPZ is a restricted area delineated by protective fencing or the use of an existing structure (such as a wall or fence).

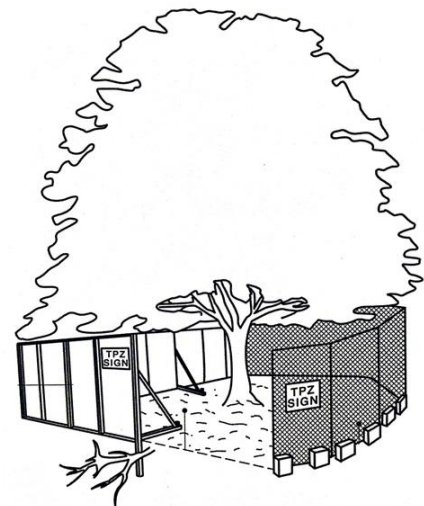
Trees that are to be retained must have protective fencing erected around the TPZ (or as specified in the body of the report) to protect and isolate it from the construction works. Fencing must comply with the *Australian Standard, AS 4687-2007, Temporary fencing and hoardings*.

Tree protection fencing must be installed prior to site establishment and remain intact until completion of works. Once erected, protective fencing must not be removed or altered without the approval of the project arborist.

If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with *AS 4970-2009, Protection of Trees on Development Sites*.

Tree protection fencing shall be:

- Enclosed to the full extent of the TPZ (or as specified in the Recommendations and Tree Protection Plan).
- Cyclone chain wire link fence or similar, with lockable access gates.
- Certified and Inspected by the Project Arborist.
- Installed prior to the commencement of works.
- Prominently signposted with 300mm x 450mm boards stating "NO ACCESS - TREE PROTECTION ZONE".



Crown protection

Tree crowns/canopy may be injured or damaged by machinery such as; excavators, drilling rigs, trucks, cranes, plant and vehicles. Where crown protection is required, it will usually be located at least one meter outside the perimeter of the crown.

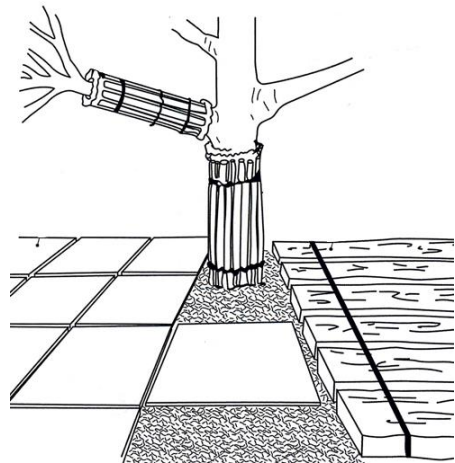
Crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.

Trunk protection

Where provision of tree protection fencing is impractical or must be temporarily removed, trunk protection shall be installed for the nominated trees to avoid accidental mechanical damage.

The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

Trunk protection shall consist of a layer of either carpet underfelt, geotextile fabric or similar wrapped around the trunk, followed by 1.8 m lengths of softwood timbers aligned vertically and spaced evenly around the trunk (with an approx. 50 mm gap between the timbers).



The timbers must be secured using galvanised hoop strap (aluminium strapping). The timbers shall be wrapped around the trunk but not fixed to the tree, as this will cause injury/damage to the tree.

Ground protection

Tree roots are essential for the uptake/absorption of water, oxygen and mineral ions (solutes). It is essential to prevent the disturbance of the soil beneath the dripline and within the TPZ of trees that are to be retained. Soil compaction within the TPZ will adversely affect the ability of roots to function correctly.

If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Ground protection may include a permeable membrane such as geotextile fabric beneath a layer of mulch, crushed rock or rumble boards.

If the grade is to be raised within the TPZ, the material should be coarser or more porous than the underlying material.

Root protection and investigation

If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity. The location and distribution of roots are found through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation. Root investigation does not guarantee the retention of the tree.

If the project arborist identifies conflicting roots that requiring pruning, they must be pruned with a sharp implement such as; secateurs, pruners, handsaws or a chainsaw back to undamaged tissue. The final cut must be a clean cut.

Underground services

All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD). The

horizontal drilling/boring must be at minimum depth of 600mm below grade. Trenching for services is to be regarded as "excavation"

Appendix D Tree retention assessment method

Tree Significance - Assessment Criteria - STARS®		
Low	Medium	High
The tree is in fair-poor condition and good or low vigour. The tree has form atypical of the species The tree is not visible or is partly visible from the surrounding properties or obstructed by other vegetation or buildings The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area The tree is a young specimen which may or may not have reached dimensions to be protected by local Tree Preservation Orders or similar protection mechanisms and can easily be replaced with a suitable specimen The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ – tree is inappropriate to the site conditions The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms The tree has a wound or defect that has the potential to become structurally unsound. The tree is an environmental pest species due to its invasiveness or poisonous/allergenic properties. The tree is a declared noxious weed by legislation	The tree is in fair to good condition The tree has form typical or atypical of the species The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street The tree provides a fair contribution to the visual character and amenity of the local area The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ	The tree is in good condition and good vigour The tree has a form typical for the species The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age. The tree is listed as a heritage item, threatened species or part of an endangered ecological community or listed on Council's significant tree register The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity. The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values. The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa in situ – tree is appropriate to the site conditions.

Tree Significance					
Useful Life Expectancy		High	Medium	Low	
	Long >40 years				
	Medium 15-40 years				
	Short <1-15 years				
	Dead				

Legend for Matrix Assessment	
	Priority for retention (High): These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented if works are to proceed within the Tree Protection Zone.
	Consider for retention (Medium): These trees may be retained and protected. These are considered less critical; however their retention should remain priority with the removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for removal (Low): These tree are not considered important for retention, nor require special works or design modification to be implemented for their retention.
	Consider for removal (Low): These tree are not considered important for retention, nor require special works or design modification to be implemented for their retention.

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