URBAN TREE MANAGEMENT

CONSULTING ARBORICULTURISTS & HORTICULTURISTS

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Our ref: 11183.loc.1

12 May 2009

NSW Government
Department of Planning
Mr Andrew Smith
GPO Box 39
Sydney NSW 2001

Dear Mr Smith,

ARBORICULTURAL ASSESSMENT REPORT

Response to Director-General's Requirements
Application No. MP 08-0207 for
1, 1a & 5 Avon Road, 1 Arilla Road, 4 & 8 Beechworth Road, Pymble NSW *(the site)*

URBAN TREE MANAGEMENT writes for and on behalf of Mr Jim Neale (*the applicant*), 1 Avon Road, Pymble NSW 2073, to respond to the Director-General's Requirements for development of the site regarding tree management matters and particularly *Plans and Documents to accompany the Application – Plans and Documents 5. Other Plans – Arborist Report*.

An Arboricultural Assessment Report for *the site* was prepared by this office on 22 April 2002, reference 4191 (*the initial report*). The site was visited again on Wednesday 6 May 2009 in the company of Mr Neale and the trees examined against the initial report. Except for the removal of some weed trees the information contained in *the initial report* remains satisfactory to describe the trees at the site as they have not changed substantially.

The protection of trees to be retained subject to construction is not contained in *the initial report* as setbacks and protection measures would be determined at the design stage for buildings and infrastructure. Such work should be undertaken by a Consulting Arboriculturist with membership of IACA Institute of Australian Consulting Arboriculturists www.iaca.org.au. The methodology applied at this time for trees to be retained and protected would be contained in an Arboricultural Impact Assessment (AIA) report with measures adopted from the soon to be released Australian Standard AS4970 Protection of Trees on Development Sites.

Yours sincerely,

Danny Draper
Principal Consultant, Director
Dip. Hort. (Arboriculture)
Assoc. Dip. Hort. (Pk. Mgmt.)
Hort. Cert.

URBAN TREE MANAGEMENT

ARBORICULTURAL ASSESSMENT REPORT

1 & 5 Avon Road,
1 Arilla Road,
4 & 8 Beechworth Road,
PYMBLE.

Prepared 22 April 2002

by

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Contents

URBAN TREE MANAGEMENT
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22 April 2002

Mr J & Mrs C Neale
1 Avon Road
PYMBLE NSW 2073

Our reference: **4191**

Arboricultural Assessment Report:
1 & 5 Avon Road, 1 Arilla Road and 4 & 8 Beechworth Road,
PYMBLE NSW, *(the site)***.**

1.0 PREFACE

URBAN TREE MANAGEMENT ®© has prepared this report for Mr J and Mrs C Neale (*the applicants*), 1 Avon Road, Pymble. The site was inspected and the trees and their growing environment were examined by Messrs. Neville Shields and Danny Draper (*the author*), on Saturday 13th April 2002. The site is subject to a Development Application and this report and any works recommended herein, that require approval from the consenting authority, forms part of that development application.

This report is further to the report prepared by Angela Maroney in 1994 and is based upon the plans containing the Vegetation Survey undertaken as the basis for that report.

This report considers the retention or removal of trees as part of the development of the site, and the removal of trees based on their Environmental / Landscape significance value and the structured removal of trees on a prioritized basis or Retention Priority. Here it has utilised with consent from the author the methodology as developed and utilised on other properties within the vicinity by Arboricultural, Environmental and Horticultural Consultants - Footprint Green P/L, of 5 Watkins Road, Avalon Beach NSW 2107.

2.0 INTRODUCTION

The site is located in the Ku-ring-gai Council (the *Council)* Local Government Area (*LGA*) and a Tree Preservation Order (TPO*)* applies. The New South Wales State Government department *Planning NSW* is the consenting authority for development works on the site. This report involves 151 trees, (*the trees*), as indicated on the Site Plan - Survey of Subject Trees and Tree Removals (Appendix A), and considers the retention of 75 trees. The trees will be considered as 151 specimens within one stand to encompass all trees within and immediately adjacent to the site as marked on Appendix A and further indicated on its component properties.

The site was comprised of five adjoining residential blocks all of which have been previously subject to residential development with land clearing and tree and garden planting with a creek central to the site running through 1 Avon Road. Much of the site has been infested with noxious weeds such as ***Ligustrum lucidum*** **- Large-leaved Privet**, and ***Ligustrum sinense*** - **Small-leaved Privet**. Many of the older Eucalyptus saligna - Sydney Blue Gum, evident on site were planted and many of the few remnant trees of this species are senescent or were damaged in the severe storm event of January 1991 and have failed in full or part and remain in a structurally deteriorated and therefore hazardous condition. Many younger Sydney Blue Gums' were planted on the site and most of these trees will be retained.

The trees located within a conservation zone on both sides of the creek are to be retained. There is expected to be minor impact on local amenity from the tree removals but this is expected to be ameliorated by retaining existing trees in situ mainly around the perimeter within the site and the planting of many new trees and shrubs on the site as part of the proposed comprehensive planning for the landscape.

The proposed development does not impact adversely on any trees on adjoining properties. The majority of the larger trees are to be retained in situ in their positions in and around the site, however some removals will be required to provide access, while other removals will be staged over time to reduce the impact of their removal in the long term on local amenity and to provide screening of views to the site during construction, and will substantially preserve existing amenity, minimizing the impact of the loss of those trees.

The setbacks for the new buildings and its infrastructure such as the carparks and drainage works, should provide sufficient space to protect the existing growing environments both above and below ground for the trees to be retained, and so that no trees on adjoining properties will be adversely affected.

Each tree assessed is detailed in section 4.0 and considers the *Safe Useful Life Expectancy(SULE)* (Table 1.0), *significance, retention priority (Table 2.0),* and *age class*.

3.0 METHODOLOGY

3.1 Tree Assessment

The inspection for each tree was undertaken considering the values discussed below and by a visual assessment form the ground, but limited for some trees by restricted access to trunks and parts of their crowns by weed infestation. Therefore, further assessment may be required for some trees in the future allowing a more detailed examination to be conducted when the land is cleared of weeds, providing the opportunity for a more thorough inspection of some trees as required.

3.2 Safe Useful Life Expectancy (SULE)

The condition information is used to determine the Safe Useful Life Expectancy (SULE) of each tree and takes into account the age of the tree, the life span of the species, local environmental conditions, estimated life expectancy, the location of the tree and safety aspects.

The SULE method takes into account whether a tree retained with an acceptable level of risk based on the information available at the time of inspection. A SULE assessment is not static as it relates to the tree's vigour and physical condition and the surrounding conditions within its growing environment. Changes to the tree's vigour or physical condition will effect the assessment, and changes to the surrounding environment may result in changes to the SULE assessment. The range of SULE values expressed in Table 2.0 are listed in Table 1.0.

3.3 Tree Significance

3.3.1 Environmental Significance

Trees need to be considered in the overall environment and are subject to specific legislation primarily:

- Threatened Species Conservation Act (NSW) 1995, and
- Noxious Weeds Act (NSW) 1993.

Also plants recognised by the Local Government as weed species.

3.3.2 Landscape Significance

Assessment of a tree's significance in the landscape takes into account its prominence from a broad landscape perspective, neighbourhood perspective, local perspective and a site perspective. The landscape is generally categorised as:

1. Significant in the Landscape
2. High in the Landscape
3. Moderate in Landscape
4. Low in landscape.

Table 1.0 Safe Useful Life Expectancy - S.U.L.E. (Barell 1995)

	1. Long	2. Medium	3. Short	4. Removal	5. Moved or replaced
	Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.	Trees that appeared to be retainable at the time of assessment for 15 - 40 years with an acceptable level of risk.	Trees that appeared to be retainable at the time of assessment for 5 - 15 years with an acceptable level of risk.	Trees that should be removed within the next 5 years	Trees which can be reliably moved or replaced.
A	Structurally sound trees located in positions that can accommodate future growth.	Trees that may only live between 15 and 40 years.	Trees that may only live between 5 and 15 more years.	Dead, dying, suppressed or declining trees through disease or inhospitable conditions.	Small trees less than 5m in height.
B	Trees that could be made suitable for retention in the long term by remedial tree care.	Trees that may live for more than 40 years but would be removed for safety or nuisance reasons.	Trees that may live for more than 15 years but would be removed for safety or nuisance reasons.	Dangerous trees through instability or recent loss of adjacent trees.	Young trees less than 15 years old but over 5m in height.
C	Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention.	Trees that may live for more than 40 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting.	Trees that may live for more than 15 years but should be removed to prevent interference with more suitable individuals or to provide space for new planting.	Damaged trees through structural defects including cavities, decay, included bark, wounds or poor form.	Trees that have been pruned to artificially control growth.
D		Trees that could be made suitable for retention in the medium term by remedial tree care.	Trees that require substantial remedial tree care and are only suitable for retention in the short term.	Damaged trees that are clearly not safe to retain.	
E				Trees that may live for more than 5 years but should be removed to prevent interference with more suitable individuals or to provide space for new plantings.	
F				Trees that are damaging or may cause damage to existing structures within 5 years.	
G				Trees that will become dangerous after removal of other trees for reasons given in A) to F).	

3.4 Tree Retention Priority

Based upon the tree's Safe Useful Life Expectancy (SULE) (section 3.2 and Table 1.0), and their environmental / landscape significance (section 3.3), the following table identifies priorities for tree retention.

Based upon the tree's SULE, other factors and landscape significance the table identifies the trees that are:

- "Priority for retention" and should be excluded from the potential building envelope. This exclusion area should also include the root zone of the tree, typically the width of the lateral spread of the tree canopy;
- "Consider for Retention" and should, where possible, be excluded from the proposed building footprint. This area should also include the root zone of the, typically the width of the lateral spread of the tree canopy;
- "Consider for Removal" if necessary, the removal of these trees would have the least long-term impact;
- "Priority for Removal" and are either unstable, noxious weeds, pest species or in poor condition and of minor landscape significance.

Table 2.0 Tree Retention Priority Matrix.

SULE	Environmental & Landscape Significance						
	Threatened Flora Species	Significant in Landscape	High Significance in Landscape	Moderate Significance in Landscape	Low Significance in Landscape	Environmental Pest Species	Declared Noxious Weed
1	Priority for Retention						
2			Consider for Retention				
3				Consider for Removal			
4							
5					Priority for Removal		

4.0 Tree Assessment

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
1	*Magnolia grandiflora* Bull Bay Magnolia	2	A1	3	4	S
2	*Chamaecyparis obtusa 'Crippsii'* Hinoki False Cypress	2	A2	4	4	M
3	*Acer negundo 'Variegata'* Variegated Box Elder	2	A3	3	4	M
4	*Pinus radiata* Monterey Pine	2	A3	4	5	O
5	*Jacaranda mimosifolia* Jacaranda	2	A3	4	4	O
6	*Acer negundo 'Variegata'* Variegated Box Elder	2	A3	4	5	O
7	*Agathis australis* Kauri	1	A1	1	1	M
8	*Jacaranda mimosifolia* Jacaranda	2	A2	4	5	M
9	*Pittosporum undulatum* Sweet Pittosporum	2	A1	4	4	M
10	*Liquidamber styraciflua* Liquidamber	2	A2	3	4	O
11	*Liquidamber styraciflua* Liquidamber	2	A1	3	4	S
12	*Cedrus atlantica 'Glauca'* Blue Atlas Cedar	2	A1	3	4	S
13	*Eucalyptus saligna* Sydney Blue Gum	2	A1	3	4	S
14	*Eucalyptus saligna* Sydney Blue Gum	2	A1	3	4	S
15	*Juniperus sabina* Savin Juniper	1	A1	3	3	S
16	*Camellia sasanqua* Camellia	1	A1	2	2	S
17	*Cinnamomum camphora* Camphor Laurel	1	A1	2	2	M
18	*Syzygium luehmannii* Small-leaved Water Gum	1	A1	2	2	M
19	*Syzygium australe* Brush Cherry	1	A1	2	2	M
20	*Cedrus atlantica 'Glauca'* Blue Atlas Cedar	2	A1	4	3	M

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
21	*Waterhousea floribunda* Weeping Myrtle	2	A1	3	4	Y
22	*Afrocarpus falcatus* Common Yellowood	1	A1	1	1	M
23	*Cupressus glabra* Smooth Arizona Cypress	2	A1	3	4	S
24	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
25	*Syncarpia glomulifera* Turpentine	1	A1	1	1	M
26	*Syncarpia glomulifera* Turpentine	1	A1	1	1	M
27	*Syncarpia glomulifera* Turpentine	1	A1	1	1	M
28	*Syncarpia glomulifera* Turpentine	1	A1	1	1	M
29	*Brachychiton acerifolius* Illawarra Flame Tree	1	A1	1	1	M
30	*Chamaecyparis obtusa 'Crippsii'* Hinoki False Cypress	1	A1	1	1	M
31	*Afrocarpus falcatus* Common Yellowood	2	A1	4	4	S
32	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
33	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
34	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
35	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
36	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
37	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
38	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
39	*Lophostemon confertus* *Brushbox*	1	A1	1	1	M
40	*Ginkgo biloba* *Maidenhair Tree*	1	A1	1	1	M

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
41	*Michelia figo* Port Wine Magnolia	2	A2	3	4	M
42	*Jacaranda mimosifolia* Jacaranda	2	A2	4	5	M
43	*Jacaranda mimosifolia* Jacaranda	2	A2	4	5	M
44	*Backhousia myrtifolia* *Grey Myrtle*	2	A1	3	4	M
45	*Waterhousea floribunda* Weeping Myrtle	2	A1	3	4	M
46	*Cedrus atlantica 'Glauca'* *Blue Atlas Cedar*	2	A1	3	4	M
47	*Cedrus atlantica 'Glauca'* *Blue Atlas Cedar*	2	A1	3	4	M
48	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
49	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
50	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
51	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
52	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
53	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
54	*Pinus radiata* Monterey Pine	2	A3	3	4	O
55	*Eucalyptus saligna* Sydney Blue Gum	2	A3	3	4	O
56	*Eucalyptus saligna* Sydney Blue Gum	2	A3	3	3	M
57	*Eucalyptus saligna* Sydney Blue Gum	2	A3	3	3	M
58	*Eucalyptus saligna* Sydney Blue Gum	2	A3	3	3	M
59	*Salix babylonica* Weeping Willow	2	A3	3	4	O
60	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	M

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
61	*Cinnamomum camphora* Camphor Laurel	2	A1	3	4	M
62	*Jacaranda mimosifolia* Jacaranda	2	A1	4	5	M
63	*Grevillea robusta* Silky Oak	1	A1	2	2	M
64	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
65	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	Y
66	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	Y
67	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
68	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
69	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
70	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
71	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
72	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
73	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
74	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
75	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
76	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
77	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
78	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
79	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
80	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
81	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
82	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
83	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
84	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
85	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
86	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
87	*Ficus microcarpa* Hills Weeping Fig	2	A1	3	4	M
88	*Salix babylonica* Weeping Willow	2	A4	3	4	O
89	*Livistona australis* Cabbage Tree Palm	1	A1	1	1	M
90	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
91	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
92	*Cinnamomum camphora* Camphor Laurel	2	A1	3	5	M
93	*Eucalyptus saligna* Sydney Blue Gum	2	A2	3	4	M
94	*Eucalyptus saligna* Sydney Blue Gum	2	A2	3	4	M
95	*Eucalyptus saligna* Sydney Blue Gum	2	A4	4	5	Dead
96	*Erythrina x sykesii* Coral Tree	2	A2	3	5	S
97	*Eucalyptus pilularis* Blackbutt	1	A1	1	1	M
98	*Eucalyptus saligna* Sydney Blue Gum	1	A1	2	2	M
99	*Erythrina x sykesii* Coral Tree	2	A1	4	4	M
100	*Eucalyptus saligna* Sydney Blue Gum	1	A1	3	2	M

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
101	*Franklinia axillaris* Gordonia	2	A1	4	4	M
102	*Eucalyptus saligna* Sydney Blue Gum	2	A1	3	4	S
103	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
104	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	S
105	*Eucalyptus saligna* Sydney Blue Gum	2	A3	3	4	S
106	*Eucalyptus saligna* Sydney Blue Gum	2	A1	3	4	S
107	*Eucalyptus saligna* Sydney Blue Gum	1	A1	1	1	M
108	*Schefflera actinophylla* Umbrella Tree	2	A1	3	4	M
109	*Erythrina x sykesii* Coral Tree	2	A3	3	3	M
110	*Eucalyptus saligna* Sydney Blue Gum	1	A2	1	1	O
111	*Jacaranda mimosifolia* Jacaranda	2	A1	3	3	S
112	*Syzygium australe* Brush Cherry	2	A3	3	3	M
113	*Syzygium australe* Brush Cherry	2	A3	3	3	M
114	*Liquidamber styraciflua* Liquidamber	2	A1	3	3	M
115	*Lophostemon confertus* Brushbox	1	A1	1	1	M
116	*Lophostemon confertus* Brushbox	1	A1	1	1	M
117	*Lophostemon confertus* Brushbox	1	A1	1	1	M
118	*Eucalyptus saligna* Sydney Blue Gum	1	A3	1	1	M
119	*Araucaria heterophylla* Norfolk Island Pine	1	A1	1	1	M
120	*Eucalyptus saligna* Sydney Blue Gum	1	A3	1	1	O

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
121	*Syzygium australe* Brush Cherry	2	A3	4	4	M
122	*Syzygium australe* Brush Cherry	2	A3	4	4	M
123	*Lophostemon confertus* Brushbox	1	A1	2	2	M
124	*Syzygium australe* Brush Cherry	2	A3	3	3	S
125	*Erythrina x sykesii* Coral Tree	2	A1	4	4	O
126	*Cedrus deodara* Himalayan Cedar	2	A3	3	3	O
127	*Jacaranda mimosifolia* Jacaranda	2	A1	3	4	S
128	*Cedrus deodara* Himalayan Cedar	2	A1	3	4	S
129	*Liquidamber styraciflua* Liquidamber	2	A1	3	4	S
130	*Cupressus macrocarpa* Monterey Cypress	2	A3	3	4	O
131	*Liquidamber styraciflua* Liquidamber	2	A1	3	4	M
132	*Cupressus macrocarpa* Monterey Cypress	2	A4	4	5	O
133	*Cedrus deodara* Himalayan Cedar	2	A1	3	4	S
134	*Syzygium australe* Brush Cherry	2	A1	3	4	S
135	*Jacaranda mimosifolia* Jacaranda	2	A1	4	4	S
136	*Acer palmatum* Japanese Maple	2	A4	4	4	O
137	*Franklinia axillaris* Gordonia	1	A1	1	1	M
138	*Syagrus romanzoffianum* Cocos Palm	1	A1	1	2	M
139	*Phoenix canariensis* Canary Island Date Palm	1	A1	1	1	M
140	*Acer buergeranum* Trident Maple	1	A1	1	1	M

4.0 Tree Assessment Continued.

Tree No.	*Genus and species* Common Name	Retain / Remove 1= Retain 2= Remove	Safe Useful Life Expectancy (SULE) see Appendix B	Significance 1=Significant in landscape 2=High in landscape 3=Moderate in landscape 4=Low in landscape	Tree retention priority 1 = highest priority 5 = lowest priority	Age Y= Young (<1/3 life span) S= Semi-mature (>1/3 - <2/3 life span) M= Mature (>2/3 life span) O= Over-mature (>2/3 life span and declining through senescence)
141	*Rhododendron sp.* Rhododendron	1	A1	1	1	M
142	*Acer buergeranum* Trident Maple	1	A1	1	1	M
143	*Syzygium australe* Brush Cherry	1	A1	1	1	M
144	*Cinnamomum camphora* Camphor Laurel	1	A1	2	2	M
145	*Jacaranda mimosifolia* Jacaranda	2	A1	4	4	S
146	*Ulmus parvifolia* Chinese Weeping Elm	2	A1	4	4	Y
147	*Camellia sasanqua* Camellia	1	A1	2	2	M
148	*Camellia sasanqua* Camellia	1	A1	2	2	M
149	*Jacaranda mimosifolia* Jacaranda	2	A1	4	4	S
150	*Ulmus glabra 'Lutescens'* Golden Wych Elm	2	A1	4	4	S
151	*Nyssa sylvatica* Tupelo	1	A1	2	2	M

5.0 RECOMMENDATIONS

This report recommends that of the 151 trees surveyed being 139 within the site and 12 on neighbouring properties, consideration be given to the retention and protection of 75 trees and the removal and replacement of 64 trees from within the site. Tree protection should be achieved through the implementation of suitable measures for the integration of the trees and the development by the application of appropriate technology. A comprehensive Landscape Plan to be prepared when required should include planting with new trees as appropriate.

6.0 CONCLUSION

It is often a consequence of redevelopment, and subject to the nature of the proposed land use and its zoning, that some or all of the trees present on the site prior to that redevelopment may be required to be removed and replaced with new tree plantings in different locations. This may be dependant upon the type of development and its design constraints and the requirements of the local planning instruments and any Landscape Design Codes if existing. Where tree removal is required for this development, it is considered that those trees identified within this report are not sustainable within the context of the proposed development. Where tree retention has been considered, those trees are expected to survive the redevelopment process and remain stable and viable. The retention and protection of existing trees on site is a significant aspect of the development process, allowing those trees as components of the current curtilage to be transferred to the new dwellings for incorporation into the landscaping works for the site. The retention of some or all of the existing trees contributes to: securing local amenity, preservation of existing amenity, screening of views to and from the site, and a balance to the scale and bulk of buildings, while maintaining elements of a continuous landscape, providing a more harmonious integration and transition of the use of the land.

If all the recommendations and procedures detailed herein are adhered to, some or all of the trees the subject of this report will continue, or will be replaced with more appropriate plantings in suitable locations, or enhanced by additional new plantings, and will grow to develop as important landscape components providing elements of long term amenity for the property and its owners or occupants, and the local community.

As a renewable and dynamic natural resource the urban tree and the growing environment essential for its survival must be understood and carefully managed to balance its needs with those of people. It is crucial that as required: this resource be planned for, planted, nurtured, protected, maintained and replaced, to ensure appropriateness and suitability of new plantings and trees retained, for safety and viability, so that it remains vital, and is sustainable in continuity.

Danny Draper
Principal Consultant

Neville Shields
Senior Consultant

Appendix A

Site Plan – Survey of Subject Trees and Tree Removals

Trees the subject of this report are marked on the following plan and are numbered as listed below.

Tree No.	*Genus and species*	Common name
1	*Magnolia grandiflora*	Bull Bay Magnolia
2	*Chamaecyparis obtusa 'Crippsii'*	Hinoki False Cypress
3	*Acer negundo 'Variegata'*	Variegated Box Elder
4	*Pinus radiata*	Monterey Pine
5	*Jacaranda mimosifolia*	Jacaranda
6	*Acer negundo 'Variegata'*	Variegated Box Elder
7	*Agathis australis*	Kauri
8	*Jacaranda mimosifolia*	Jacaranda
9	*Pittosporum undulatum*	Sweet Pittosporum
10	*Liquidamber styraciflua*	Liquidamber
11	*Liquidamber styraciflua*	Liquidamber
12	*Cedrus atlantica 'Glauca'*	Blue Atlas Cedar
13	*Eucalyptus saligna*	Sydney Blue Gum
14	*Eucalyptus saligna*	Sydney Blue Gum
15	*Juniperus sabina*	Savin Juniper
16	*Camellia sasanqua*	Camellia
17	*Cinnamomum camphora*	Camphor Laurel
18	*Syzygium luehmannii*	Small-leaved Water Gum
19	*Syzygium australe*	Brush Cherry
20	*Cedrus atlantica 'Glauca'*	Blue Atlas Cedar
21	*Waterhousea floribunda*	Weeping Myrtle
22	*Afrocarpus falcatus*	Common Yellowood
23	*Cupressus glabra*	Smooth Arizona Cypress
24	*Eucalyptus saligna*	Sydney Blue Gum
25	*Syncarpia glomulifera*	Turpentine
26	*Syncarpia glomulifera*	Turpentine
27	*Syncarpia glomulifera*	Turpentine
28	*Syncarpia glomulifera*	Turpentine
29	*Brachychiton acerifolius*	Illawarra Flame Tree
30	*Chamaecyparis obtusa 'Crippsii'*	Hinoki False Cypress
31	*Afrocarpus falcatus*	Common Yellowood
32	*Lophostemon confertus*	*Brushbox*
33	*Lophostemon confertus*	*Brushbox*
34	*Lophostemon confertus*	*Brushbox*
35	*Lophostemon confertus*	*Brushbox*
36	*Lophostemon confertus*	*Brushbox*
37	*Lophostemon confertus*	*Brushbox*
38	*Lophostemon confertus*	*Brushbox*
39	*Lophostemon confertus*	*Brushbox*
40	*Ginkgo biloba*	*Maidenhair Tree*
41	*Michelia figo*	Port Wine Magnolia
42	*Jacaranda mimosifolia*	Jacaranda
43	*Jacaranda mimosifolia*	Jacaranda
44	*Backhousia myrtifolia*	*Grey Myrtle*
45	*Waterhousea floribunda*	Weeping Myrtle
46	*Cedrus atlantica 'Glauca'*	*Blue Atlas Cedar*
47	*Cedrus atlantica 'Glauca'*	*Blue Atlas Cedar*
48	*Jacaranda mimosifolia*	Jacaranda
49	*Jacaranda mimosifolia*	Jacaranda
50	*Jacaranda mimosifolia*	Jacaranda

Appendix A continued

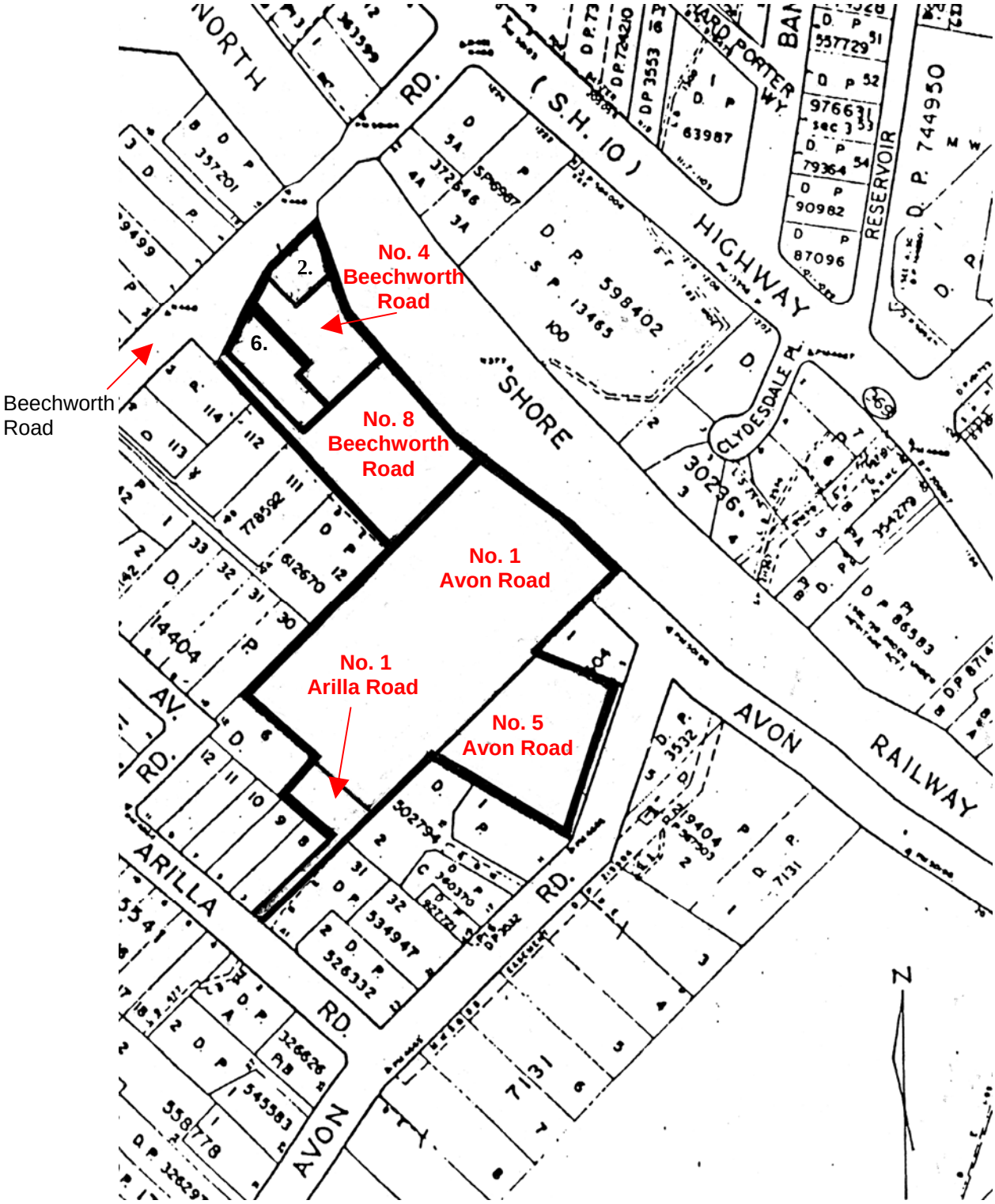
Tree No.	*Genus and species*	Common name
51	*Jacaranda mimosifolia*	Jacaranda
52	*Jacaranda mimosifolia*	Jacaranda
53	*Jacaranda mimosifolia*	Jacaranda
54	*Pinus radiata*	Monterey Pine
55	*Eucalyptus saligna*	Sydney Blue Gum
56	*Eucalyptus saligna*	Sydney Blue Gum
57	*Eucalyptus saligna*	Sydney Blue Gum
58	*Eucalyptus saligna*	Sydney Blue Gum
59	*Salix babylonica*	Weeping Willow
60	*Jacaranda mimosifolia*	Jacaranda
61	*Cinnamomum camphora*	Camphor Laurel
62	*Jacaranda mimosifolia*	Jacaranda
63	*Grevillea robusta*	Silky Oak
64	*Eucalyptus saligna*	Sydney Blue Gum
65	*Eucalyptus saligna*	Sydney Blue Gum
66	*Eucalyptus saligna*	Sydney Blue Gum
67	*Eucalyptus saligna*	Sydney Blue Gum
68	*Eucalyptus saligna*	Sydney Blue Gum
69	*Eucalyptus saligna*	Sydney Blue Gum
70	*Eucalyptus saligna*	Sydney Blue Gum
71	*Eucalyptus saligna*	Sydney Blue Gum
72	*Eucalyptus saligna*	Sydney Blue Gum
73	*Eucalyptus saligna*	Sydney Blue Gum
74	*Eucalyptus saligna*	Sydney Blue Gum
75	*Eucalyptus saligna*	Sydney Blue Gum
76	*Eucalyptus saligna*	Sydney Blue Gum
77	*Eucalyptus saligna*	Sydney Blue Gum
78	*Eucalyptus saligna*	Sydney Blue Gum
79	*Eucalyptus saligna*	Sydney Blue Gum
80	*Eucalyptus saligna*	Sydney Blue Gum
81	*Eucalyptus saligna*	Sydney Blue Gum
82	*Eucalyptus saligna*	Sydney Blue Gum
83	*Eucalyptus saligna*	Sydney Blue Gum
84	*Eucalyptus saligna*	Sydney Blue Gum
85	*Eucalyptus saligna*	Sydney Blue Gum
86	*Eucalyptus saligna*	Sydney Blue Gum
87	*Ficus microcarpa*	Hills Weeping Fig
88	*Salix babylonica*	Weeping Willow
89	*Livistona australis*	Cabbage Tree Palm
90	*Eucalyptus saligna*	Sydney Blue Gum
91	*Eucalyptus saligna*	Sydney Blue Gum
92	*Cinnamomum camphora*	Camphor Laurel
93	*Eucalyptus saligna*	Sydney Blue Gum
94	*Eucalyptus saligna*	Sydney Blue Gum
95	*Eucalyptus saligna*	Sydney Blue Gum
96	*Erythrina x sykesii*	Coral Tree
97	*Eucalyptus pilularis*	Blackbutt
98	*Eucalyptus saligna*	Sydney Blue Gum
99	*Erythrina x sykesii*	Coral Tree
100	*Eucalyptus saligna*	Sydney Blue Gum

Appendix A continued

Tree No.	*Genus and species*	Common name
101	*Franklinia axillaris*	Gordonia
102	*Eucalyptus saligna*	Sydney Blue Gum
103	*Eucalyptus saligna*	Sydney Blue Gum
104	*Eucalyptus saligna*	Sydney Blue Gum
105	*Eucalyptus saligna*	Sydney Blue Gum
106	*Eucalyptus saligna*	Sydney Blue Gum
107	*Eucalyptus saligna*	Sydney Blue Gum
108	*Schefflera actinophylla*	Umbrella Tree
109	*Erythrina x sykesii*	Coral Tree
110	*Eucalyptus saligna*	Sydney Blue Gum
111	*Jacaranda mimosifolia*	Jacaranda
112	*Syzygium australe*	Brush Cherry
113	*Syzygium australe*	Brush Cherry
114	*Liquidamber styraciflua*	Liquidamber
115	*Lophostemon confertus*	Brushbox
116	*Lophostemon confertus*	Brushbox
117	*Lophostemon confertus*	Brushbox
118	*Eucalyptus saligna*	Sydney Blue Gum
119	*Araucaria heterophylla*	Norfolk Island Pine
120	*Eucalyptus saligna*	Sydney Blue Gum
121	*Syzygium australe*	Brush Cherry
122	*Syzygium australe*	Brush Cherry
123	*Lophostemon confertus*	Brushbox
124	*Syzygium australe*	Brush Cherry
125	*Erythrina x sykesii*	Coral Tree
126	*Cedrus deodara*	Himalayan Cedar
127	*Jacaranda mimosifolia*	Jacaranda
128	*Cedrus deodara*	Himalayan Cedar
129	*Liquidamber styraciflua*	Liquidamber
130	*Cupressus macrocarpa*	Monterey Cypress
131	*Liquidamber styraciflua*	Liquidamber
132	*Cupressus macrocarpa*	Monterey Cypress
133	*Cedrus deodara*	Himalayan Cedar
134	*Syzygium australe*	Brush Cherry
135	*Jacaranda mimosifolia*	Jacaranda
136	*Acer palmatum*	Japanese Maple
137	*Franklinia axillaris*	Gordonia
138	*Syagrus romanzoffianum*	Cocos Palm
139	*Phoenix canariensis*	Canary Island Date Palm
140	*Acer buergeranum*	Trident Maple
141	*Rhododendron sp.*	Rhododendron
142	*Acer buergeranum*	Trident Maple
143	*Syzygium australe*	Brush Cherry
144	*Cinnamomum camphora*	Camphor Laurel
145	*Jacaranda mimosifolia*	Jacaranda
146	*Ulmus parvifolia*	Chinese Weeping Elm
147	*Camellia sasanqua*	Camellia
148	*Camellia sasanqua*	Camellia
149	*Jacaranda mimosifolia*	Jacaranda
150	*Ulmus glabra 'Lutescens'*	Golden Wych Elm
151	*Nyssa sylvatica*	Tupelo

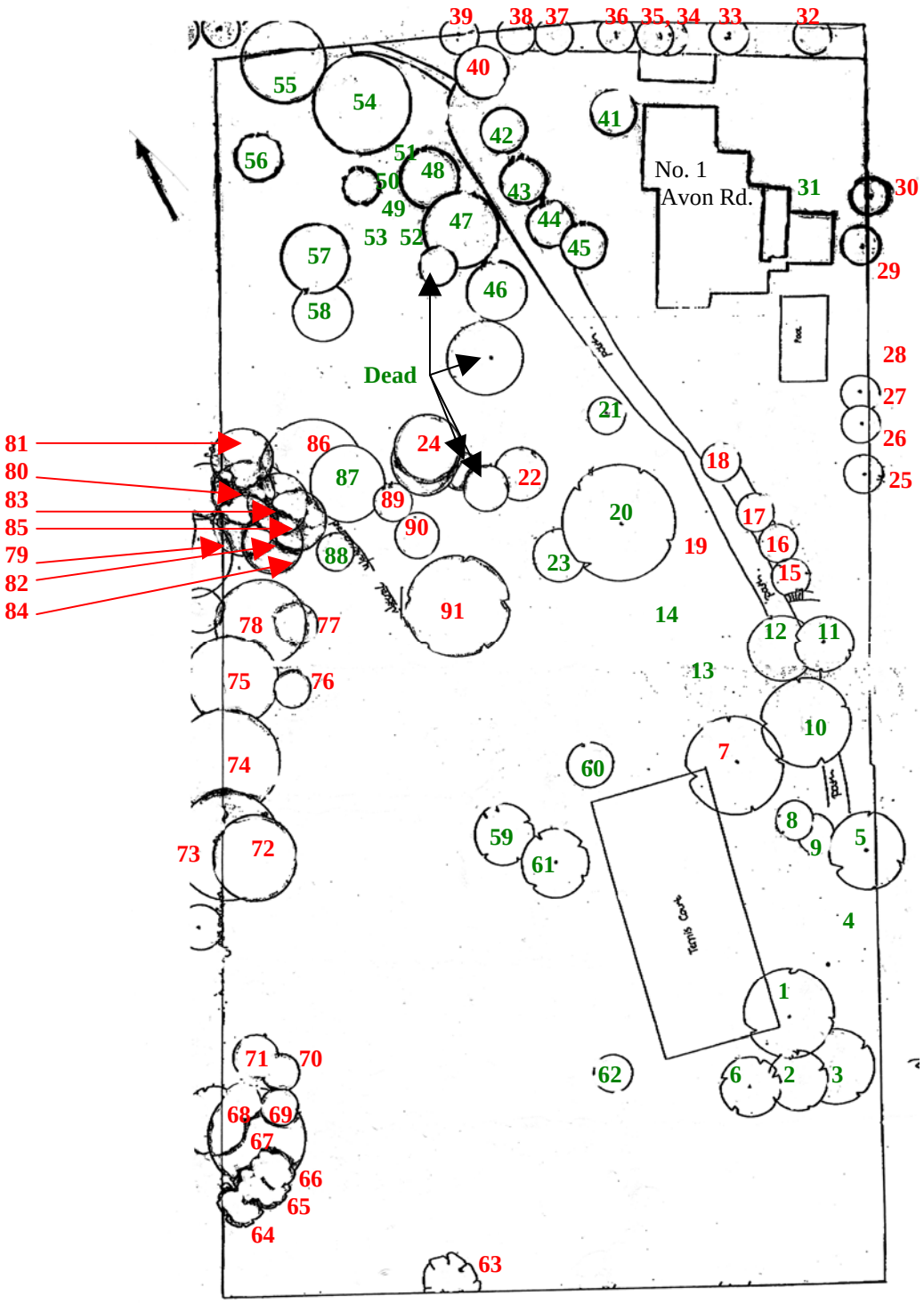
Site Plan

See the following individual plans for the location of subject trees on component properties as marked below in red. All plans sourced from the Vegetation Survey prepared by Angela Maroney, 1994.



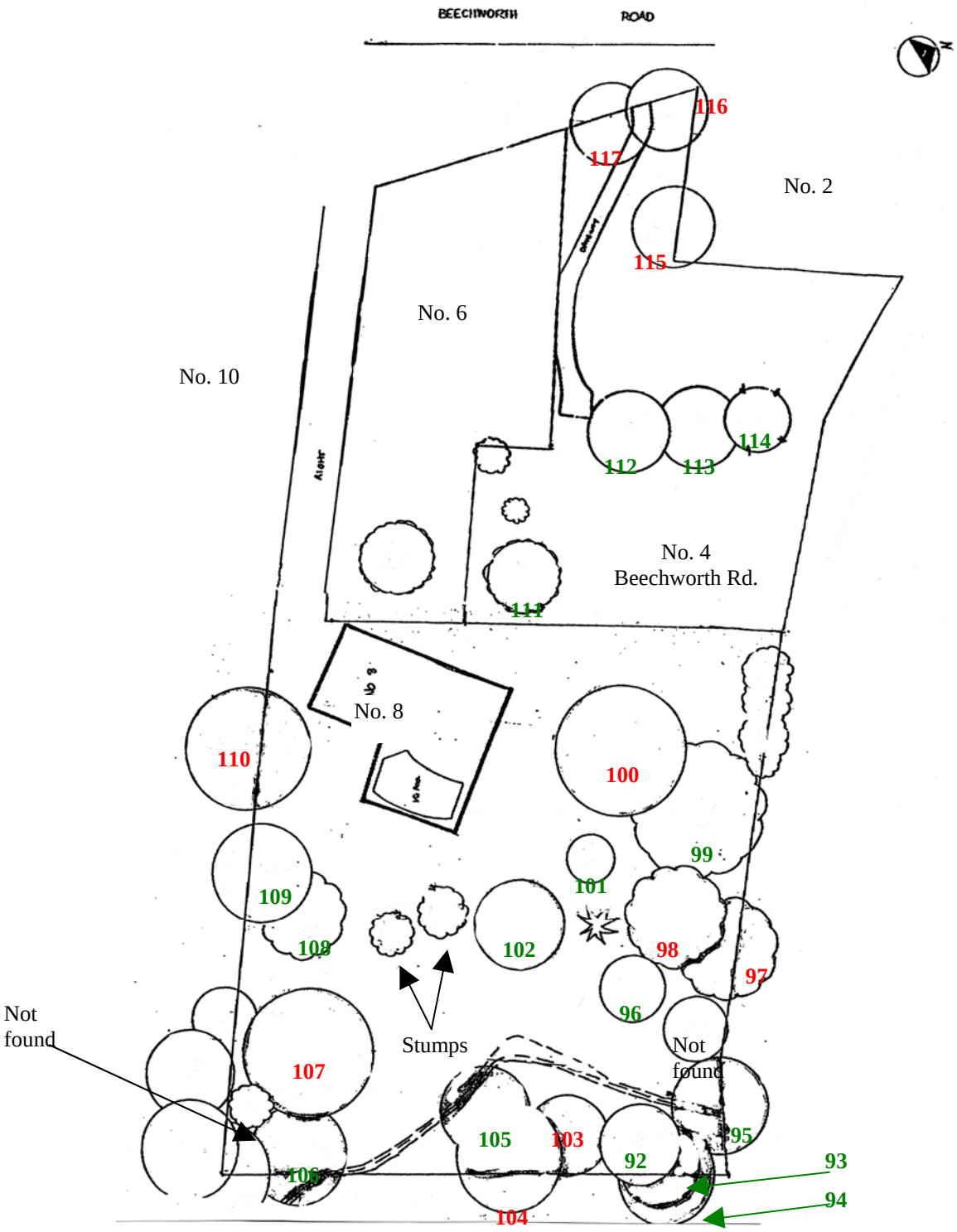
Site Plan - 1 Avon Road, Pymble.

Trees numbered in **red** are recommended for **retention** and those indicated in **green** are recommended for **removal**. Additional trees surveyed are denoted by their number and do not show crown spread.



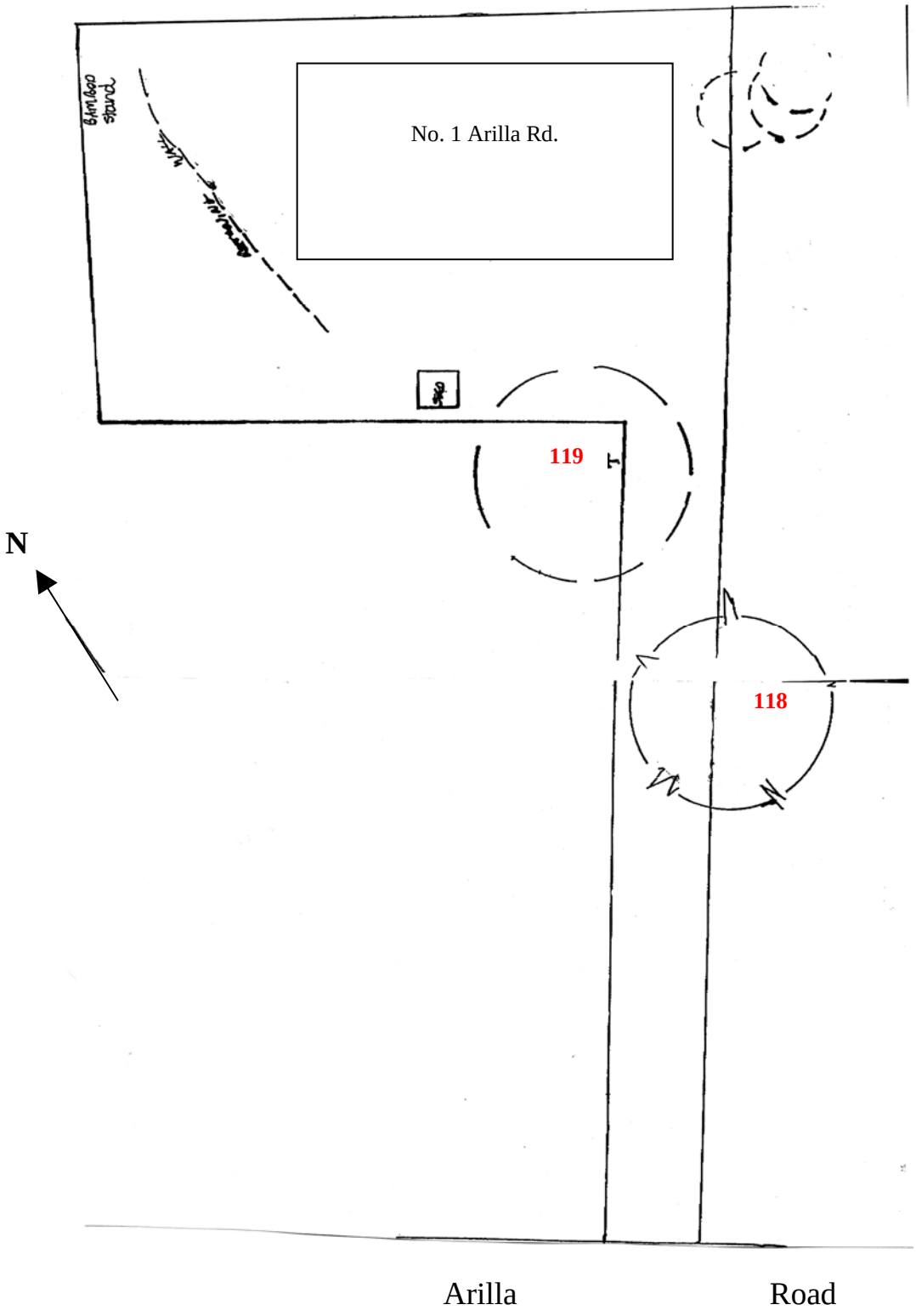
Site Plan - 4 & 8 Beechworth Road, Pymble.

Trees numbered in **red** are recommended for **retention** and those indicated in **green** are recommended for **removal**. Additional trees surveyed are denoted by their number and do not show crown spread.



Site Plan - 1 Arilla Road, Pymble.

Trees numbered in **red** are recommended for **retention** and those indicated in **green** are recommended for **removal**. Additional trees surveyed are denoted by their number and do not show crown spread.



Site Plan - 5 Avon Road, Pymble.

Trees numbered in **red** are recommended for **retention** and those indicated in **green** are recommended for **removal**. Additional trees surveyed are denoted by their number and do not show crown spread.