

APZ Tree Survey

Site Address: 71 Fig Hill Lane, Dunmore

Prepared for: Tony Peterson on behalf of Contract Properties Pty Ltd

Date: 13/01/2021

Prepared by: Vicki Beecher

Consulting Arborist (AQF5), Horticulturalist (AQF5)

BSc Earth Science (Hons)(AQF9)

Our Garden Path Pty Ltd



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Statement of Authorship

This study and report were undertaken by Our Garden Path at 71 Fig Hill Lane, Dunmore. The author of the report is Vicki Beecher with qualifications BSc. majoring in Geology and Climate Science with over 20 years' experience in this field, AQF level 5 Horticulture, AQF level 8 Arboriculture and AQF level 3 Landscape Construction.

Limitations Statement

Information presented in this report is based on an objective study undertaken in response to the brief provided by the client. Any opinions expressed in this report are the professional, objective opinions of the authors and are not intended to advocate any proposal or pre-determined position.

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1 Introduction

1.1 Background

- 1.1.1 Our Garden Path has been commissioned by Tony Peterson on behalf of Contract Properties Pty Ltd to prepare a Tree Survey within the proposed Asset Protection Zone (APZ) of a proposed development at 71 Fig Hill Lane, Dunmore. The project involves the demolition of an existing building and associated structures and the construction of a proposed Eco – tourism development. The aim of this report is to provide adequate information of species onsite within the proposed APZ and recommendations on trees to be retained whilst adhering to a canopy cover of below 15%.



Figure 1: Site location

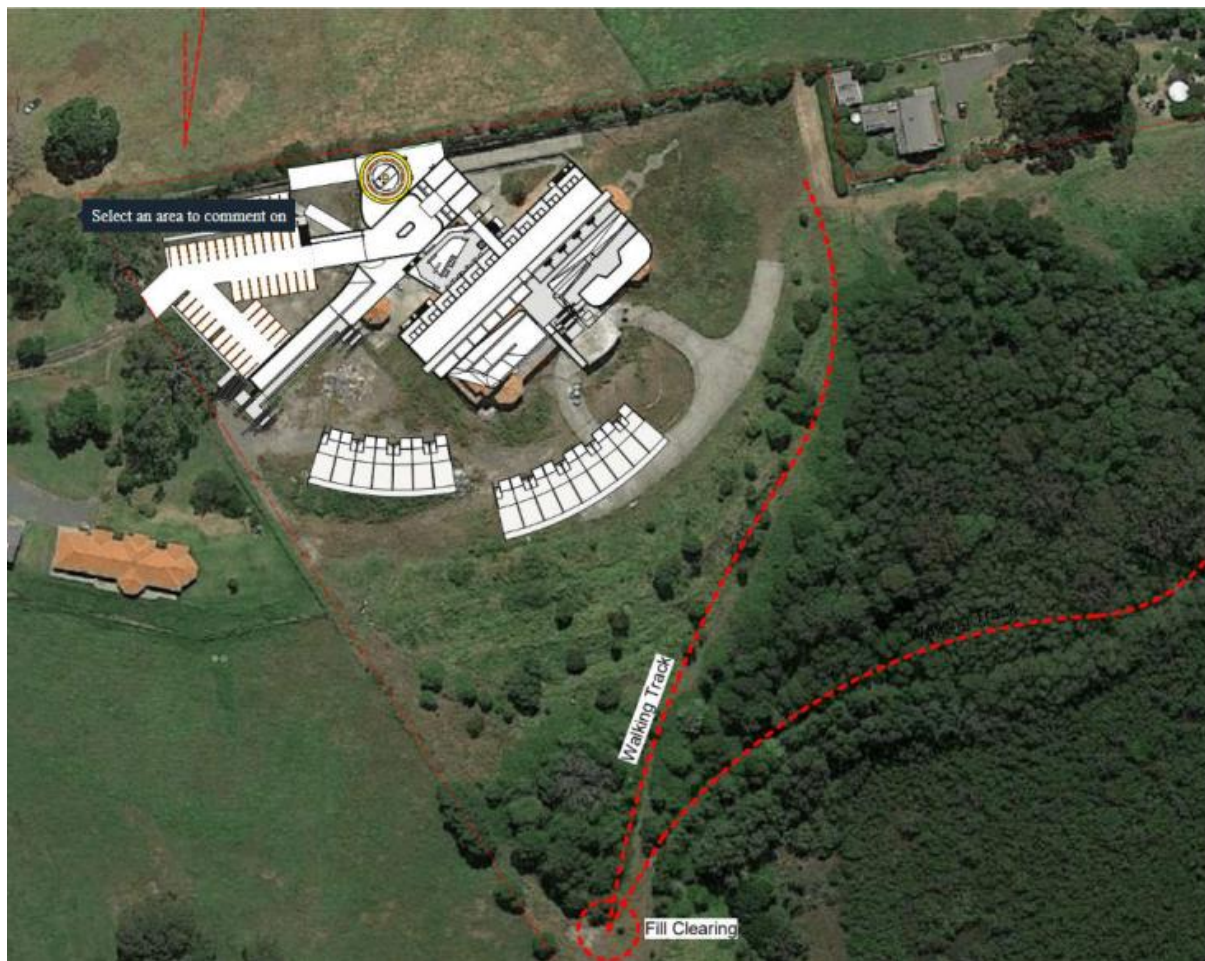


Figure 2: proposed development footprint

1.1.2 The following documentation was reviewed and assists in the preparation of this report:

- Biodiversity Development Assessment Report, 71 Fig Hill Lane, Dunmore Draft form, prepared by Cumberland Ecology September 2019
- Bushfire Advice, Travers bushfire and ecology. Prepared by John Travers January 2021.
- Survey with APZ area demarcated. Prepared by Nordon Jago Architects January 2021.

- 1.1.2 Vicki Beecher attended site on 6th January and 11th January 2021 to collect basic tree data including species, height, diameter, maturity and potential contribution to amenity within the proposed development and thus the potential for retention.
- 1.1.3 Trees identified for retention were assessed using the principles of a ground based Visual Tree Assessment (VTA) and methods consistent with modern arboriculture. No aerial (climbing) inspection, tissue sampling or diagnostic testing was undertaken as part of the inspection process unless otherwise stated.
- 1.1.4 Full results of the tree inspection and data collection can be found within **Appendix 1** Tree Assessment Schedule.
- 1.1.5 The conclusions drawn within this report are based on the information provided and data collected during an on-site inspection.
- 1.1.6 This report is to be used in its entirety only. Any written or verbal submission, report or presentation that includes statements taken from the findings, discussions, conclusions or recommendations made in this report may only be used where the whole original report (or a copy) is referenced to and directly attached to that submission, report or presentation. Information contained in the report covers only the trees that were inspected and reflects the trees condition at the time of the inspection. There is no guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

2 Trees within APZ

- 2.1.1 Trees within the APZ are either removed or thinned to allow a canopy cover of no greater than 15% in accordance with bushfire requirements. The Australian Standard 4970-2009 Protection of Trees on Development Sites defines the requirements for assessing trees with respect to development. It provides the guidance on how to decide which trees are appropriate for retention and on the means of protecting them during construction works. It describes the areas and offsets, referred to as the Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) required to be free from

development works to maintain tree vitality and stability. This report has been prepared in accordance with the conditions set out within the standard.

- 2.1.2 **Tree Protection Zone** – The tree protection zone is defined as a specified area above and below ground set aside for the protection of the tree’s roots and crown. It is expressed as a radial measurement taken from the centre of the trunk at ground level.
- 2.1.3 **Structural Root Zone** – The structural root zone is defined as a specified area around the base of a tree required to maintain its stability within the ground. It is expressed as a radial measurement taken from the centre of the trunk at ground level. Excavation and development works are not recommended within the structural root zone unless additional investigation as to root size and location is undertaken.
- 2.1.4 Tree protection zone calculations have been made in accordance with AS4970-2009 and can be found within the Tree Assessment Schedule of the Preliminary Tree Assessment Report. Calculation of the Structural Root Zone (SRZ) has been made where required. A tree location plan showing an indicative tree protection zones for each tree can be found as **Appendix 2**.

3 Site Specific Tree Retention

- 4.1 Seventy-four trees were identified and assessed as part of this tree survey.
- 4.2 Of the seventy-four trees assessed 5 were found to be suitable for retention. They are Trees 31, 46, 47, 48 and 54. Under consultation with John Travers of Travers bushfire and ecology the retention of these trees is deemed acceptable as they are less than the allowed 15% total canopy cover.
- 4.3 It is recommended that the protection measures are established under consultation between the property owner, building contractor and project arborist. Tree protection measures may be altered and adjusted under guidance of the project arborist as construction works progress. Where encroachments through or over a tree protection zone are required appropriate ground protection measures are to be implemented.

- 4.2 Tree protection zones are to be established prior to site establishment.
- 4.3 All tree removal works are to be undertaken prior to site establishment by suitably qualified tree workers (minimum AQF level 3 or equivalent) in accordance with Safe Work Australia's Guide to Managing Risks of Tree Trimming and Removal Works. All appropriate approvals and consents are to be obtained prior to tree removal works commencing.
- 4.4 Any discernible change in the characteristics of the trees to be retained should be referred to the project arborist and an inspection undertaken. These changes can include, but are not limited to:
- A change in foliage colour and or density
 - Dieback or death of branches or areas of the trees canopy
 - An increase in the presence of dead branches
 - Occurrence of branch failure
 - Infestation by pest species
- It is felt that these observations can reasonably be made by ordinary people or site personnel with no arboricultural background.
- 4.5 Any excavation required to be undertaken within a tree protection zone is to be supervised by the project arborist. All excavation is to be undertaken manually using hand tools or methods that do not damage tree roots. Tree roots exposed by the works are to be assessed and managed in accordance with the project arborists recommendations.
- 4.6 It is the responsibility of the principle construction contractor to ensure that the sites trees are regularly inspected throughout the development process.
- 4.7 Contractor site sheds, amenities, car parking and storage containers are not to be positioned within a TPZ. There is to be no stockpiling of spoil, building or waste material within a TPZ.

Appendix 1: Tree Assessment Schedule

Tree No	Botanical Name	Common Name	Height (m)	Canopy Spread (m)	DBH (mm)	DAB (mm)	Age Class	Vigour	Condition	SULE	Landscape Significance	Retention Value	TPZ (m)	SRZ (m)	Retain/Remove
1	<i>Acacia binervata</i>	Two veined hickory	5-10		130	190	M	-	G	M	M	M	2.00	1.65	Remove
2	<i>Acacia binervata</i>	Two veined hickory	5-10		140	200	M	N	G	M	M	M	2.00	1.68	Remove
3	<i>Acacia binervata</i>	Two veined hickory	5-10		130	190	M	N	F	M	M	M	2.00	1.65	Remove
4	<i>Acacia madenii</i>	Maidens wattle	5-10		160	220	M	N	F	M	M	M	2.00	1.75	Remove
5	<i>Acacia binervata</i>	Two veined hickory	5-10		180	220	M	N	F	M	M	M	2.16	1.75	Remove
6	<i>Acacia binervata</i>	Two veined hickory	5-10		190	210	M	N	F	M	M	M	2.28	1.72	Remove
7	<i>Acacia binervata</i>	Two veined hickory	5-10		120	180	M	N	F	M	M	M	2.00	1.65	Remove
8	<i>Acacia binervata</i>	Two veined hickory	5-10		120	180	M	N	G	M	M	M	2.00	1.65	Remove
9	<i>Acacia binervata</i>	Two veined hickory	5-10		170	210	M	N	G	M	M	M	2.04	1.72	Remove
10	<i>Acacia binervata</i>	Two veined hickory	5-10		170	210	M	N	G	M	M	M	2.04	1.72	Remove
11	<i>Acacia binervata</i>	Two veined hickory	5-10		180	220	M	L	F	M	M	M	2.16	1.75	Remove
12	<i>Acacia binervata</i>	Two veined hickory	5-10		120	180	M	N	G	M	M	M	2.00	1.65	Remove
13	<i>Acacia binervata</i>	Two veined hickory	5-10		200	220	M	N	G	M	M	M	2.40	1.75	Remove
14	<i>Acacia binervata</i>	Two veined hickory	5-10		140	170	M	N	G	M	M	M	2.00	1.65	Remove
15	<i>Acacia binervata</i>	Two veined hickory	5-10		150	180	M	N	G	M	M	M	1.00	1.65	Remove
16	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.00	1.65	Remove
17	<i>Acacia madenii</i>	Maidens wattle	10-15		190	210	M	N	G	M	M	M	2.28	1.72	Remove
18	<i>Casuarina spp.</i>	She oak	5-10		260	330	M	N	G	M	M	M	3.12	2.08	Remove
19	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.00	1.65	Remove
20	<i>Acacia binervata</i>	Two veined hickory	5-10		190	210	M	N	G	M	M	M	2.28	1.72	Remove
21	<i>Acacia binervata</i>	Two veined hickory	5-10		220	240	M	N	G	M	M	M	2.64	1.82	Remove
22	<i>Acacia binervata</i>	Two veined hickory	1-5		200	240	M	N	G	M	M	M	2.40	1.82	Remove
23	<i>Casuarina spp.</i>	She oak	5-10		270	290	M	N	G	M	M	M	3.24	1.97	Remove
24	<i>Casuarina spp.</i>	She oak	5-10		300	320	M	N	G	M	M	M	3.60	2.05	Remove
25	<i>Acacia binervata</i>	Two veined hickory	1-5		160	180	M	N	G	M	M	M	2.00	1.65	Remove
26	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	F	M	M	M	2.16	1.68	Remove

Tree No	Botanical Name	Common Name	Height (m)	Canopy Spread (m)	DBH (mm)	DAB (mm)	Age Class	Vigour	Condition	SULE	Landscape Significance	Retention Value	TPZ (m)	SRZ (m)	Retain/Remove
27	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	F	M	M	M	2.16	1.68	Remove
28	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	F	M	M	M	2.16	1.68	Remove
29	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	F	M	M	M	2.00	1.65	Remove
30	<i>Acacia binervata</i>	Two veined hickory	5-10		130	165	M	N	F	M	M	M	2.00	1.65	Remove
31	<i>Streblus brunonianus</i>	Whalebone tree	5-10		300	340	M	N	G	M	M	M	3.60	2.10	Retain
32	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.16	1.68	Remove
33	<i>Acacia binervata</i>	Two veined hickory	5-10		200	280	M	N	G	M	M	M	2.40	1.94	Remove
34	<i>Acacia binervata</i>	Two veined hickory	5-10		200	210	M	N	G	M	M	M	2.40	1.72	Remove
35	<i>Acacia binervata</i>	Two veined hickory	5-10		200	210	M	N	G	M	M	M	2..4	1.72	Remove
36	<i>Casuarina spp.</i>	She oak	5-10		180	200	M	N	G	M	M	M	2.16	1.68	Remove
37	<i>Casuarina spp.</i>	She oak	5-10		190	210	M	N	G	M	M	M	2.28	1.68	Remove
38	<i>Stag</i>	Stag	5-10						D						Remove
39	<i>Acacia binervata</i>	Two veined hickory	5-10		160	190	M	N	G	M	M	M	2.00	1.65	Remove
40	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.16	1.68	Remove
41	<i>Acacia binervata</i>	Two veined hickory	5-10		170	200	M	N	G	M	M	M	2.04	1.68	Remove
42	<i>Acacia binervata</i>	Two veined hickory	5-10		140	190	M	N	G	M	M	M	2.00	1.65	Remove
43	<i>Glochidion ferdinandi</i>	Cheese tree	5-10		160	190	M	N	G	M	M	M	2.00	1.65	Remove
44	<i>Acacia binervata</i>	Two veined hickory	5-10		180	220	M	N	G	M	M	M	2.00	1.68	Remove
45	<i>Acacia binervata</i>	Two veined hickory	5-10		180	230	M	N	G	M	M	M	2.16	1.79	Remove
46	<i>Eucalyptus tereticornis</i>	Forest red gum	10-15	N4, S1, E2, W1	320	380	M	N	G	M	H	H	3.84	2.20	Retain
47	<i>Eucalyptus tereticornis</i>	Forest red gum	10-15	N1, S4, E3, W1	310	360	M	N	G	M	M	M	3.72	2.15	Retain
48	<i>Eucalyptus tereticornis</i>	Forest red gum	10-15	N.5, S3, E2.5, W1.5	330	360	M	N	G	M	M	M	3.96	2.15	Retain
49	<i>Casuarina spp.</i>	She oak	1-5		150	160	M	N	G	M	M	M	2.00	1.65	Remove
50	<i>Casuarina spp.</i>	She oak	5-10		200	210	M	N	G	M	M	M	2.40	1.72	Remove
51	<i>Acacia binervata</i>	Two veined hickory	1-5		120	140	M	N	F	M	M	M	2.00	1.65	Remove
52	<i>Acacia binervata</i>	Two veined hickory	1-5		120	140	M	N	G	M	M	M	2.00	1.65	Remove

Tree No	Botanical Name	Common Name	Height (m)	Canopy Spread (m)	DBH (mm)	DAB (mm)	Age Class	Vigour	Condition	SULE	Landscape Significance	Retention Value	TPZ (m)	SRZ (m)	Retain/Remove
53	<i>Acacia binervata</i>	Two veined hickory	5-10		390	410	M	N	G	M	M	M	4.68	2.28	Remove
54	<i>Streblus brunonianus</i>	Whalebone tree	1-5		180	200	M	N	G	M	M	M	2.00	1.65	Retain
55	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	G	M	M	M	2.00	1.65	Remove
56	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	G	M	M	M	2.00	1.65	Remove
57	<i>Acacia binervata</i>	Two veined hickory	5-10		180	190	M	N	G	M	M	M	2.00	1.65	Remove
58	<i>Acacia binervata</i>	Two veined hickory	5-10		160	170	M	N	F	S	M	L	2.00	1.65	Remove
59	<i>Acacia binervata</i>	Two veined hickory	5-10		150	160	M	N	F	S	M	L	2.00	1.65	Remove
60	<i>Acacia binervata</i>	Two veined hickory	5-10		150	170	M	N	G	M	M	M	2.00	1.65	Remove
61	<i>Acacia binervata</i>	Two veined hickory	5-10		180	190	M	N	G	M	M	M	2.00	1.65	Remove
62	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	F	S	M	L	2.00	1.65	Remove
63	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	P	S	M	L	2.00	1.65	Remove
64	<i>Acacia binervata</i>	Two veined hickory	5-10		180	190	M	L	P	S	L	L	2.16	1.65	Remove
65	<i>Acacia binervata</i>	Two veined hickory	5-10		150	170	M	N	G	M	M	M	2.00	1.65	Remove
66	<i>Acacia binervata</i>	Two veined hickory	5-10		160	190	M	N	G	M	M	M	2.00	1.65	Remove
67	<i>Acacia binervata</i>	Two veined hickory	5-10		160	180	M	N	G	M	M	M	2.00	1.65	Remove
68	<i>Acacia binervata</i>	Two veined hickory	5-10		150	180	M	N	G	M	M	M	2.00	1.65	Remove
69	<i>Acacia binervata</i>	Two veined hickory	5-10		150	190	M	N	G	M	M	M	2.00	1.65	Remove
70	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.16	1.68	Remove
71	<i>Acacia binervata</i>	Two veined hickory	5-10		170	210	M	N	F	S	M	L	2.00	1.72	Remove
72	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.16	1.68	Remove
73	<i>Acacia binervata</i>	Two veined hickory	5-10		140	190	M	N	G	M	M	M	2.00	1.68	Remove
74	<i>Acacia binervata</i>	Two veined hickory	5-10		180	200	M	N	G	M	M	M	2.16	1.68	

