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Final Report

Scattered Tree Assessment, PSP 1075 Lancefield Road

Prepared for

Metropolitan Planning Authority

July 2014

Ecology and Heritage Partners Pty Ltd

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- John Petrakos (MPA) for management and provision of landowner details; and,
- The landowners who provided access to their properties.

DOCUMENT CONTROL

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Project number	5700
Project manager	Marc Freestone
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Other EHP staff	Sandra Mijatovic
Mapping	Monique Elsley
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GLOSSARY

Acronym	Description
BCS	*Biodiversity Conservation Strategy for Melbourne's Growth Corridors* (DEPI 2013d)
DBH	Diameter at Breast Height (cm)
DEPI	Victorian Department of Environment and Primary Industries
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EVC	Ecological Vegetation Class
FFG Act	Flora and Fauna Guarantee Act 1988
LOT	Large Old Tree
MOT	Medium Old Tree
PSP	Precinct Structure Plan
ST	Small Tree
TRZ	Tree Retention Zone
VBA	Victorian Biodiversity Atlas (DEPI)
VLOT	Very Large Old Tree

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1 INTRODUCTION

1.1 Background

Ecology and Heritage Partners Pty Ltd was commissioned by Metropolitan Planning Authority to conduct a Scattered Tree Assessment in previously unassessed properties within PSP 1075 Lancefield Road. The purpose of the assessment was to identify the number and type of scattered native trees present within the study area.

This report satisfies and completes the scattered indigenous tree assessment requirements for the preparation of the Lancefield Road Precinct Structure Plan (PSP 1075).

2 METHODS

2.1 Nomenclature

Common and scientific names of vascular plants follow the Victorian Biodiversity Atlas (VBA) (DEPI 2013a) and the Census of Vascular Plants of Victoria (Walsh and Stajsic 2007). Vegetation community names follow DEPI's Ecological Vegetation Classes (EVC) benchmarks (DEPI 2013b).

2.2 Desktop Assessment

The following resources and databases were reviewed over the duration of the project:

- Department of Environment and Primary Industries' Biodiversity Interactive Maps showing historic and current EVCs (DEPI 2013c); and,
- *Biodiversity Conservation Strategy for Melbourne's Growth Corridors* (DEPI 2013d).

Liaison was undertaken with the Metropolitan Planning Authority (MPA) to confirm the extent and intensity of the proposed methodology.

The Department of Environment and Primary Industries (DEPI) identified a number of potential scattered trees within the study area and provided point locations on aerial imagery of the trees requiring investigation.

2.3 Field Surveys

The scattered trees identified by DEPI, along with any other scattered trees present in the study area, were identified and, if found to be remnant indigenous trees, mapped for the current assessment. A total of five properties were assessed plus one rail line.

Scattered tree assessments were undertaken by a botanist with current Certificates of Competency in conducting Vegetation Quality Assessments from DEPI. The scattered tree assessment was undertaken on 19 – 21 March 2014. All scattered indigenous trees were assigned a sequential number and recorded as a point location on aerial maps using handheld GPS devices and ArcGIS software (Figure 1). A diameter at breast height (DBH) measurement was taken for each tree using a diameter tape. The size class and conservation significance was determined for all indigenous trees according to the relevant Ecological Vegetation Class (EVC) benchmark. Benchmark tree measurements for relevant EVCs are provided in Table 1. The survey assessment date, duration and assessor are provided in Table 2.

Table 1: Relevant EVC benchmark information pertaining to tree size classes.

Bioregion	Ecological Vegetation Class	Very Large Old Tree (cm)*	Large Old Tree DBH (cm)	Medium Old Tree DBH (cm)*	Small Old Tree DBH (cm)*
Victorian Volcanic Plain	Box Ironbark Forest (EVC 61)	>105	70 - 104	53 – 69	<53
Victorian Volcanic Plain	Plains Woodland (EVC 803)	>105	70 - 104	53 – 69	<53
Victorian Volcanic Plain	Stream Bank Shrubland (EVC 851)	>105	70 - 104	53 – 69	<53

Notes: * Very Large Old Trees are at least 1.5 times the trunk diameter of a large old tree; Large Old Trees are >1.0 to <1.5 times trunk diameter; Medium Old Trees >0.75 to <1.0 times trunk diameter and; Small Old Trees are <0.75 times trunk diameter, as defined by the relevant EVC benchmarks and the Port Phillip and Westernport Native Vegetation Plan (DEPI 2013b; PPWCMA 2006).

Table 2: Scattered Tree survey date, duration, access issues and assessor.

Landowner Number	Parcel_SPI	Access	Assessment Date	Duration	Assessor
2	Q\PS435007, P\PS435007, 5~8\PP2174	Approved – 17/3/2014 Development Manager from Villawood met us on site.	19-March-14, 20-March-14	2.00pm - 5.00pm, 8.30am - 10.00am	Marc Freestone, Sandra Mijatovic
-	1\TP946712	Rail line	20-March-14	9.00am - 9.15am	Marc Freestone
15	2\LP141875	Approved 17/3/2014 Met landowner on site	19-March-14	9.00am - 9.30am	Marc Freestone, Sandra Mijatovic
18	2\LP76657	Approved – 17/3/2014 Met landowner on site	20-March-14	11.00am - 11.30am	Marc Freestone
19	1\LP76657	Approved – 17/3/2014 Met landowner on site	20-March-14	10.30am - 11.00am	Marc Freestone
26	4\LP208321	Approved – 21/3/2014	21-March-14	2.30pm - 3.00pm	Marc Freestone
42	3\TP113714	Door knocked but no answer – 21/3/2014 – not assessed	-	-	-
45	1\TP113714	Door knocked but no answer – 21/3/2014 – not assessed	-	-	-
63	1\TP372586	Access unattainable (no details) – assessed from road.	20-March-14	11.00am	Marc Freestone

3 RESULTS

3.1 Scattered Tree Assessment

A total of 119 indigenous remnant trees were recorded within the study area (Figure 1, Appendix 1). The species include River Red Gum *Eucalyptus camaldulensis*, Melbourne Yellow Gum *E. leucoxylon* subsp. *connata,* Yellow Box *E. melliodora*, Grey Box *E. microcarpa* and Manna Gum *Eucalyptus viminalis* subsp. *viminalis*. Melbourne Yellow Gum is listed as Vulnerable in Victoria (DSE 2005). The number of indigenous remnant trees within each size class is as follows:

- 17 Very Large Old Trees (VLOT);
- 56 Large Old Trees (LOT);
- 21 Medium Old Trees (MOT); and,
- 25 Small Trees (ST).

All trees correspond to either Box-Ironbark Forest (EVC 61), Plains Woodland (EVC 803) or Stream Bank Shrubland (EVC 851) Ecological Vegetation Classes (DEPI 2013c, Table 1).

All scattered small trees are of Low conservation significance (DSE 2007). Scattered old trees within the study area are assigned the lowest conservation significance rating based on the Bioregional Conservation Status (BCS) of the relevant pre-1750s EVC (DSE 2007; DEPI 2013c). Plains Woodland and Stream Bank Shrubland have a Bioregional Conservation Status of Endangered. Therefore, all scattered old trees from these EVCs are of High conservation significance. Box Ironbark Forest has a Bioregional Conservation Status of Vulnerable, therefore all scattered old trees from this EVC are assigned a Medium conservation significance.

All other trees within the study area identified by DEPI as being possible scattered indigenous trees are non-indigenous or exotic species such as Sugar Gum *Eucalyptus cladocalyx*. The details of indigenous trees recorded within each property are presented in Appendix 1. Scattered trees were absent from properties 2\LP141875, 1\TP946712 and 4\LP208321.

No trees recorded during this assessment were within a patch of native vegetation.

Under the Biodiversity Conservation Strategy (BCS), habitat compensation fees are only required for the removal of Very Large Old Trees, Large Old Trees and Medium Old Trees. No fees apply to Small Trees.

4 HABITAT COMPENSATION COSTS FOR SCATTERED TREE REMOVAL

Under the BCS DEPI have outlined habitat compensation costs (offset costs) that are required to be paid to DEPI before the removal of native vegetation and scattered trees is permitted. These costs go towards managing conservation areas within the Urban Growth Boundary. The cost to remove a scattered tree is the same for all size classes of scattered tree (VLOT, LOT, MOT), although no fee is required to remove Small Trees (DEPI 2013e). Under the *Draft Habitat Compensation Under the Biodiversity Compensation Strategy* (DEPI 2013e) released in May 2013, the cost is $13,218 per scattered tree considered removed. This includes stags, and trees that experience impacts to their Tree Retention Zone, but are not physically removed (Appendix 1.2).

5 REFERENCES

DEPI 2013a. Victorian Biodiversity Atlas. Victorian Department of Environment and Primary Industries.

DEPI 2013b. Ecological Vegetation Class (EVC) Benchmarks for each Bioregion [WWW Document]. URL http://www.dse.vic.gov.au/conservation-and-environment/native-vegetation-groups-for-victoria/ecological-vegetation-class-evc-benchmarks-by-bioregion (accessed 1.4.12). Victorian Department of Environment and Primary Industries.

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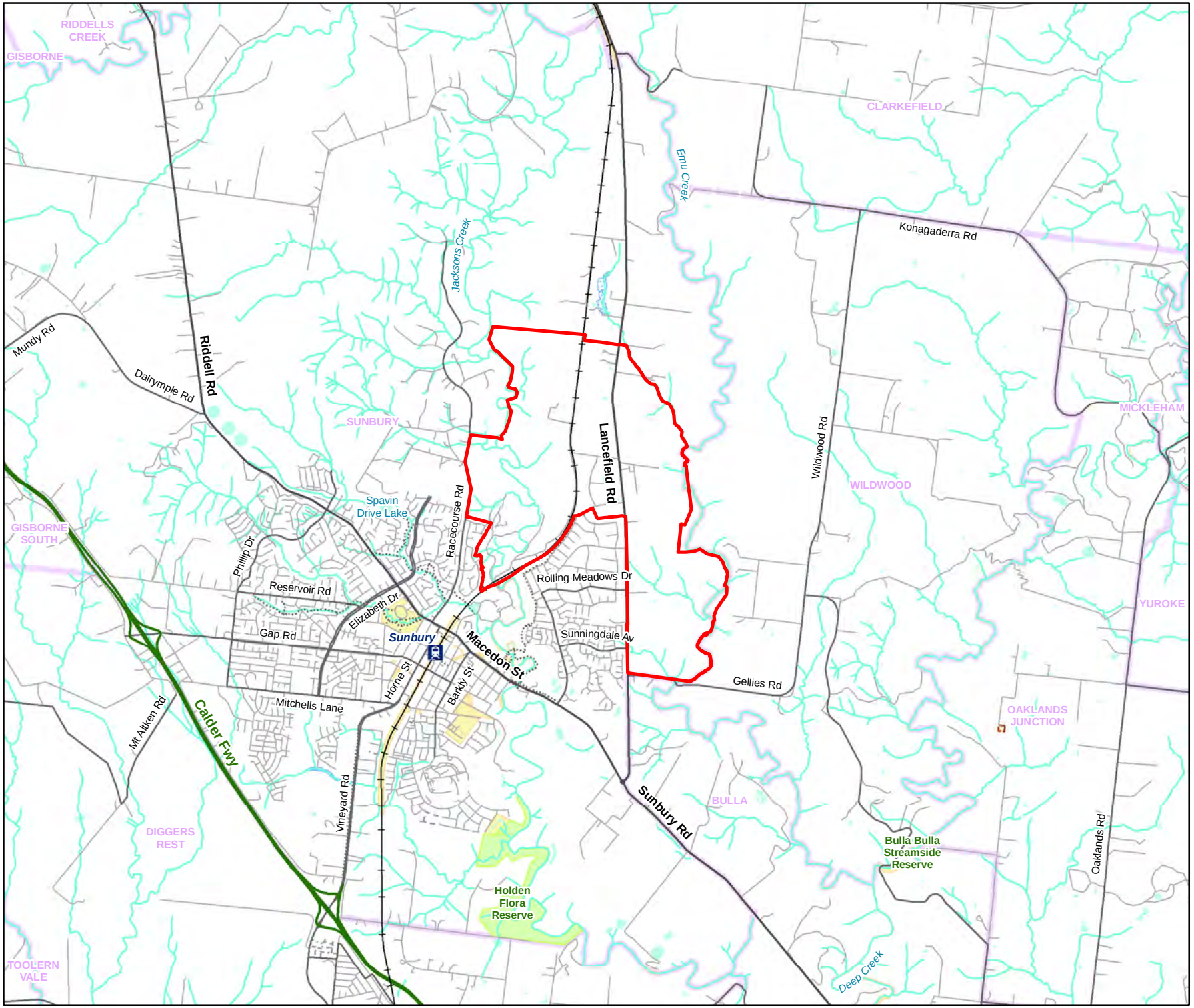
6 FIGURES



Legend

- Study Area
- Freeway
- Major Road
- Collector Road
- Minor Road
- Proposed Road
- Walking Track
- Minor Watercourse
- Permanent Waterbody
- Land Subject to Inundation
- Parks and Reserves
- Crown Land
- Localities

Figure 1

Location of the study area

PSP 75 Lancefield Road

N

0 750 1,500

Metres

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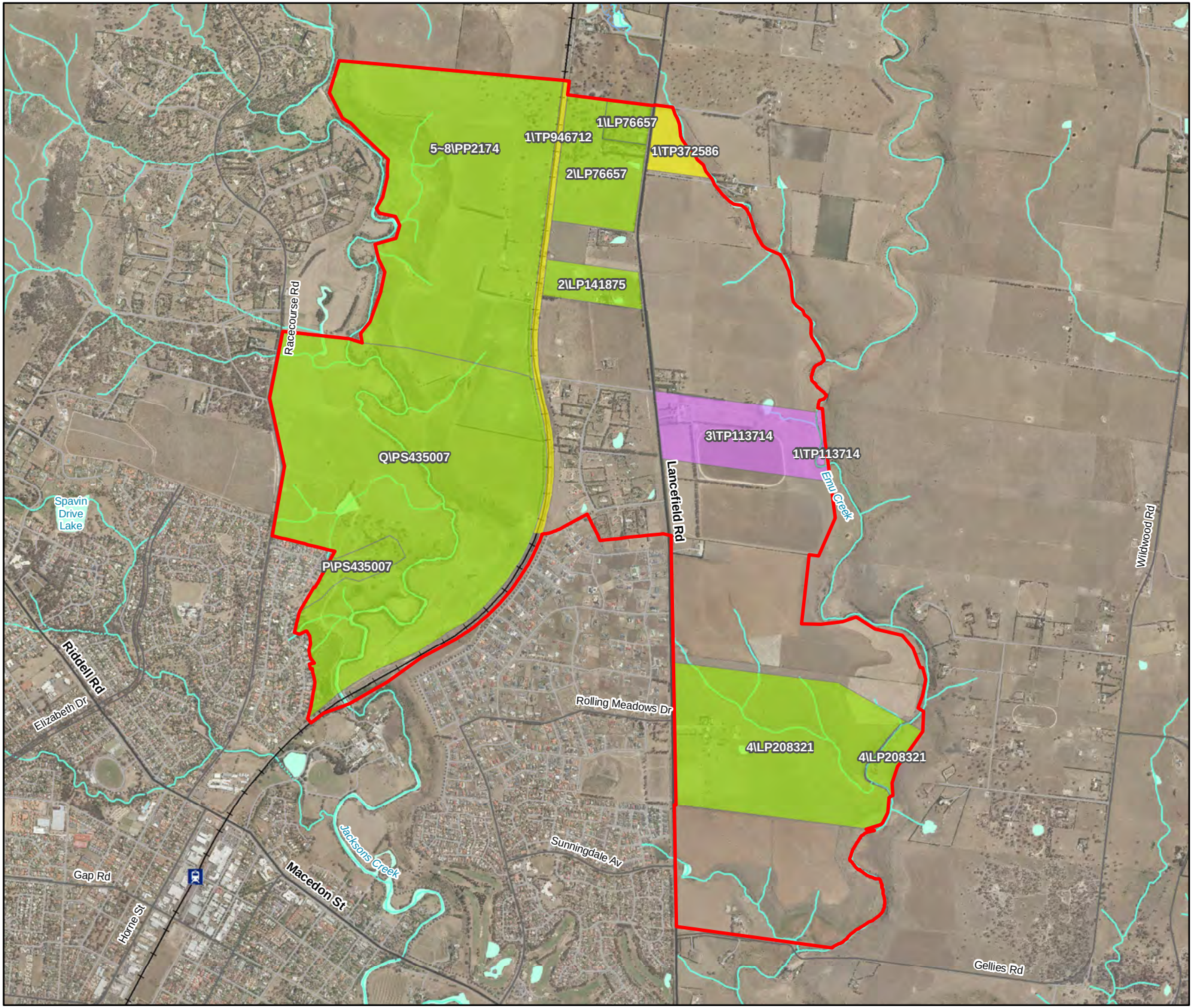


Legend

Study Area

Property access

- Access granted
- Access unattainable - assessed from road
- Access unattainable - not assessed

Figure 2

Property Access

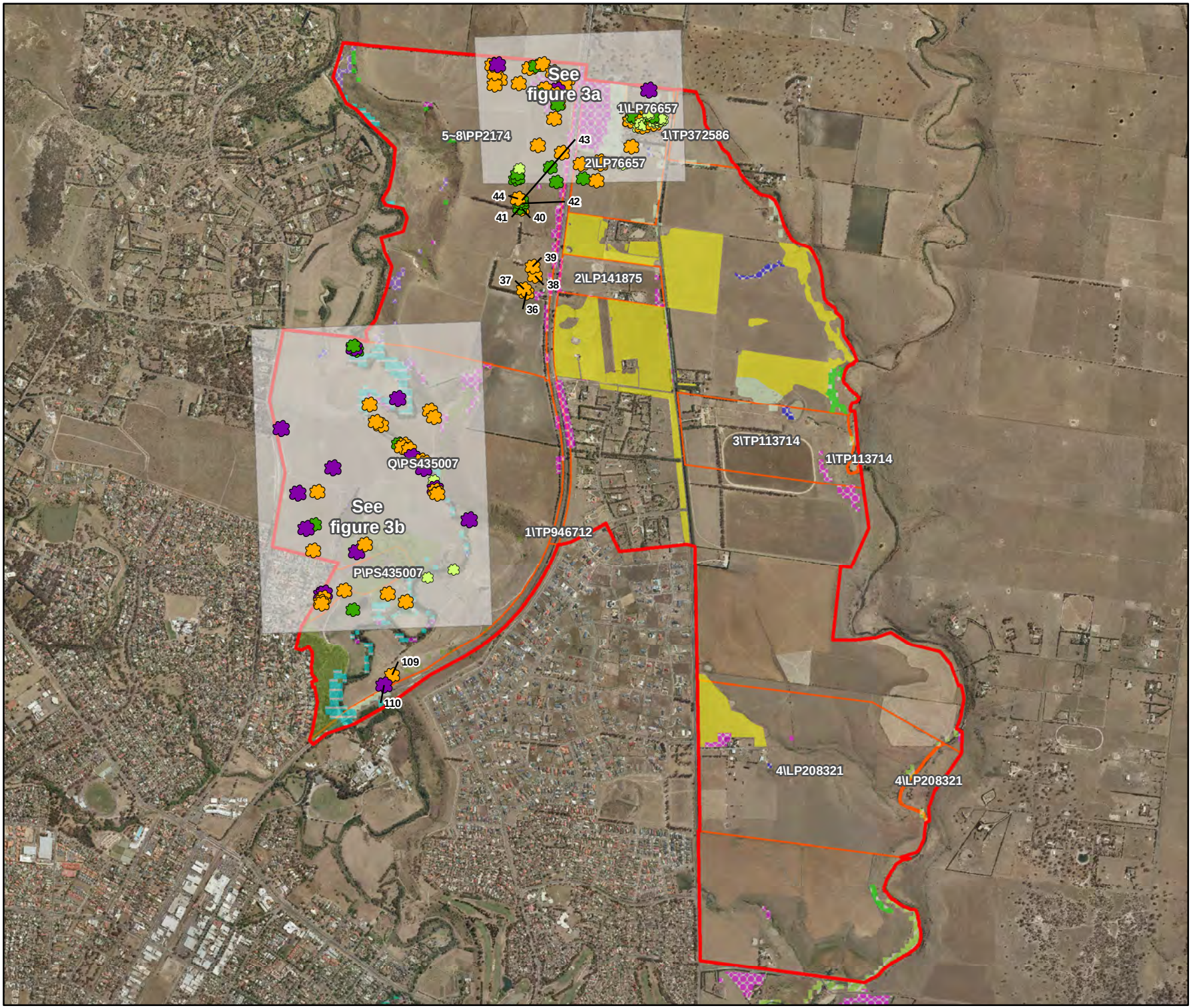
PSP 75 Lancefield Road

N

0 250 500

Metres

ecology & heritage partners



Legend

- Study Area
- Property boundaries

Scattered Trees

- VLOT
- LOT
- MOT
- ST

Time Stamped Vegetation

- EVC 125 Plains Grassy Wetland
- EVC 132 Plains Grassland
- EVC 47 Valley Grassy Forest
- EVC 55 Plains Grassy Woodland
- EVC 61 Box Ironbark Forest
- EVC 641 Riparian Woodland
- EVC 68 Creekline Grassy Woodland
- EVC 803 Plains Woodland
- EVC 851 Stream Bank Shrubland
- EVC 895 Escarpment Shrubland

Figure 3 Overview

Scattered Trees

PSP 1075 Lancefield Road

N

0 280 560

Metres

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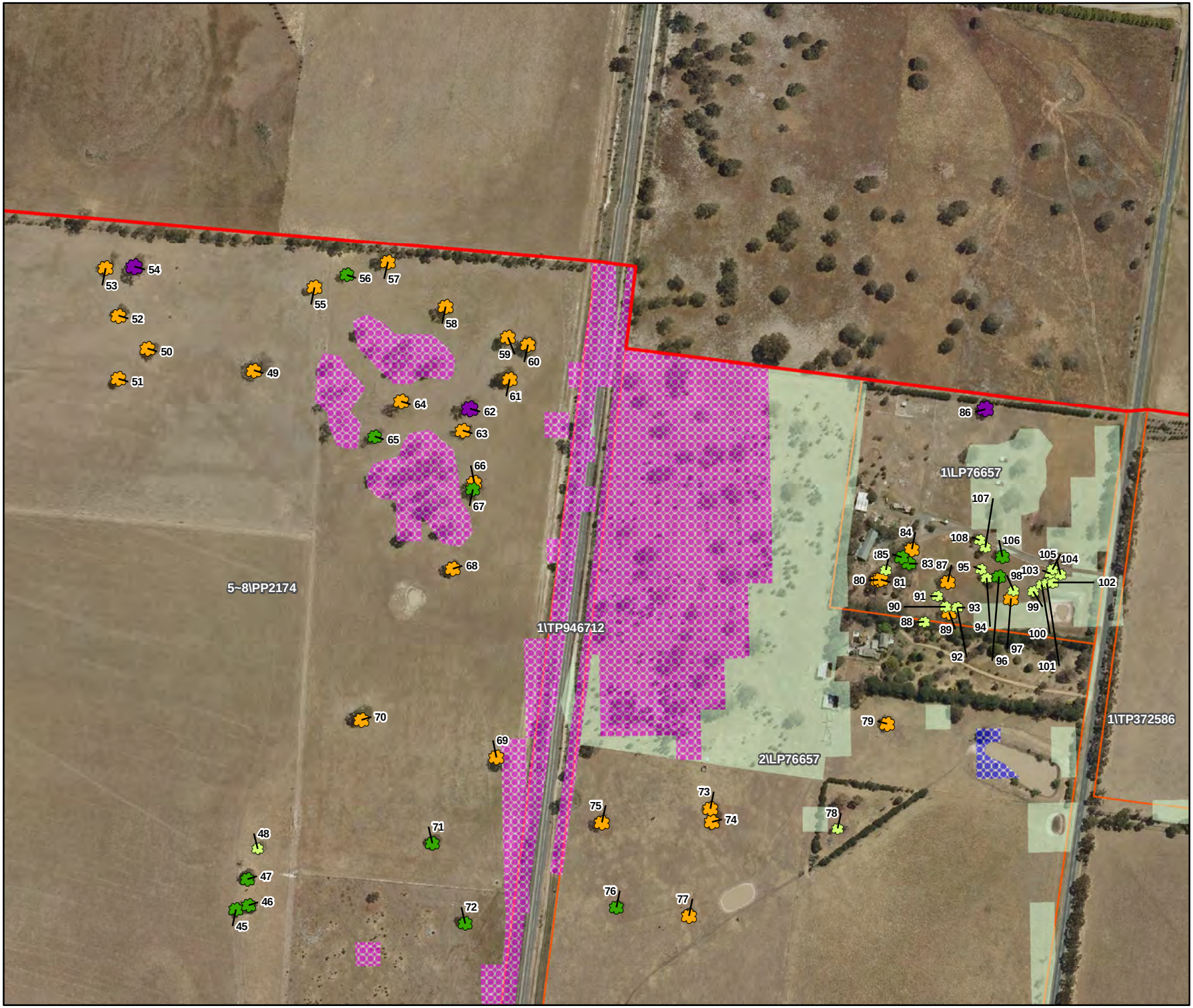


Legend

- Study Area
- Property boundaries

Scattered Trees

- VLOT
- LOT
- MOT
- ST

Time Stamped Vegetation

- EVC 125 Plains Grassy Wetland
- EVC 55 Plains Grassy Woodland
- EVC 803 Plains Woodland

Figure 3a

Scattered Trees

PSP 1075 Lancefield Road

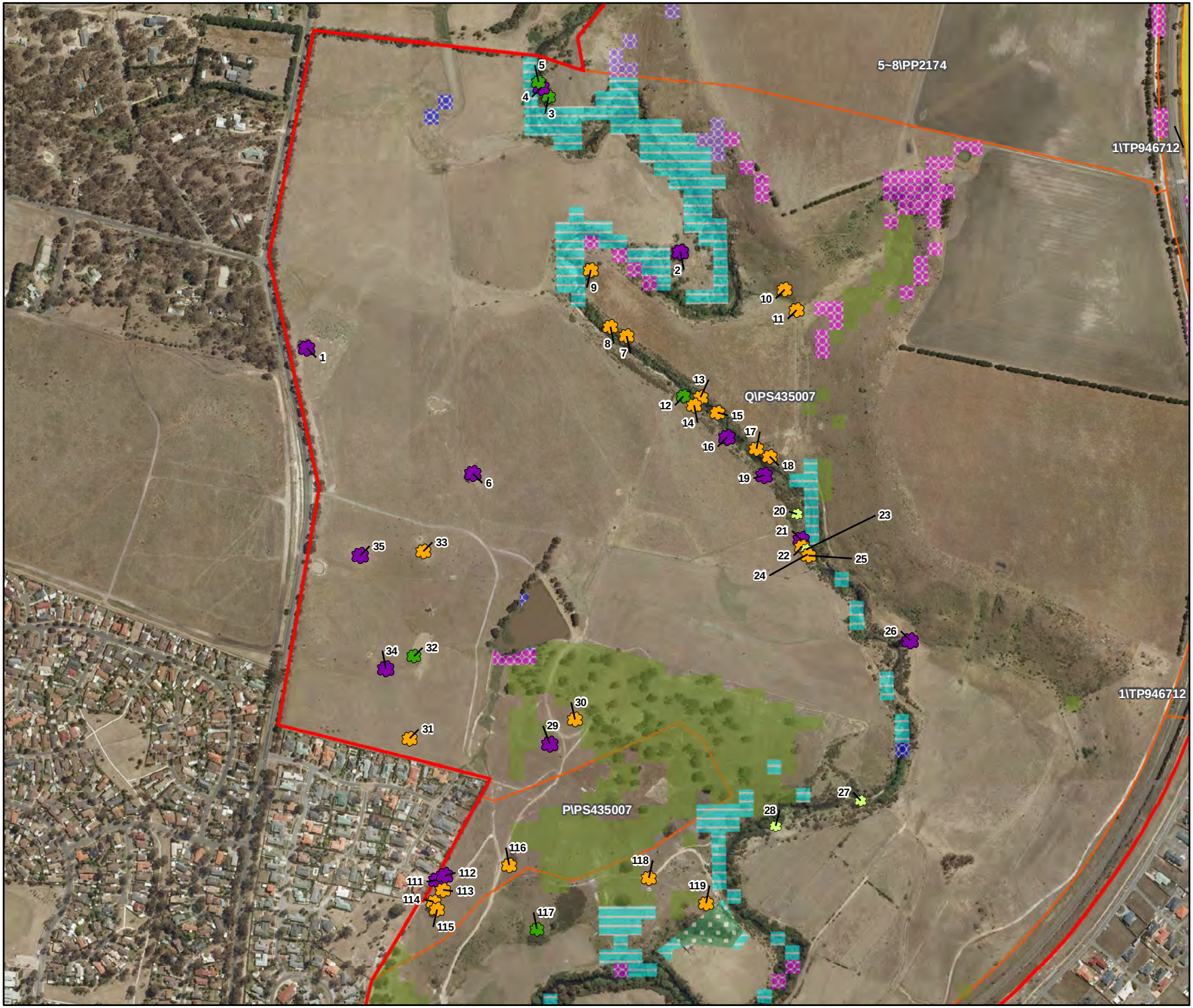
N

0 50 100

Metres

ecology & heritage partners

5700_Fig03_ScatTrees_MB_PSP1075 24/07/2014 melsley



Legend

- Study Area
- Property boundaries

Scattered Trees

- VLOT
- LOT
- MOT
- ST

Time Stamped Vegetation

- EVC 125 Plains Grassy Wetland
- EVC 132 Plains Grassland
- EVC 47 Valley Grassy Forest
- EVC 55 Plains Grassy Woodland
- EVC 61 Box Ironbark Forest
- EVC 641 Riparian Woodland
- EVC 803 Plains Woodland
- EVC 851 Stream Bank Shrubland

Figure 3b

Scattered Trees

PSP 1075 Lancefield Road

N

0 87.5 175

Metres

ecology & heritage partners

5700_Fig03_ScatTrees_MB_PSP1075 24/07/2014 melsley

7 APPENDICES

APPENDIX 1

Appendix 1.1 – Scattered Tree Data

Table A1.1. Scattered trees recorded during the present assessment.

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
Q\PS435007	1	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	160	VLOT	High*	VVP	EVC 61	-37.55516	144.73442
	2	*Eucalyptus camaldulensis*	River Red Gum	110	VLOT	High	VVP	EVC 851	-37.55378	144.74186
	3	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	65	MOT	High	VVP	EVC 851	-37.55129	144.73933
	4	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	115	VLOT	High	VVP	EVC 851	-37.55114	144.73919
	5	*Eucalyptus* spp.	Stag	55	MOT	High	VVP	EVC 851	-37.55105	144.73914
	6	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	145	VLOT	High*	VVP	EVC 61	-37.55720	144.73765
	7	*Eucalyptus camaldulensis*	River Red Gum	96	LOT	High	VVP	EVC 851	-37.55509	144.74076
	8	*Eucalyptus camaldulensis*	River Red Gum	97	LOT	High	VVP	EVC 851	-37.55493	144.74044
	9	*Eucalyptus camaldulensis*	River Red Gum	72	LOT	High	VVP	EVC 851	-37.55403	144.74008
	10	*Eucalyptus camaldulensis*	River Red Gum	73	LOT	High	VVP	EVC 851	-37.55442	144.74391
	11	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	71	LOT	High*	VVP	EVC 61	-37.55474	144.74413
	12	*Eucalyptus camaldulensis*	River Red Gum	65	MOT	High	VVP	EVC 851	-37.55606	144.74185
	13	*Eucalyptus camaldulensis*	River Red Gum	75	LOT	High	VVP	EVC 851	-37.55608	144.74219
	14	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	92	LOT	High	VVP	EVC 851	-37.55621	144.74206
	15	*Eucalyptus camaldulensis*	River Red Gum	83	LOT	High	VVP	EVC 851	-37.55633	144.74253
	16	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	128	VLOT	High	VVP	EVC 851	-37.55672	144.74270

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
	17	*Eucalyptus camaldulensis*	River Red Gum	95	LOT	High	VVP	EVC 851	-37.55691	144.74328
	18	*Eucalyptus camaldulensis*	River Red Gum	80	LOT	High	VVP	EVC 851	-37.55704	144.74353
	19	*Eucalyptus* spp.	Stag	115	VLOT	High	VVP	EVC 851	-37.55733	144.74342
	20	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	35	ST	High	VVP	EVC 851	-37.55796	144.74405
	21	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	110	VLOT	High	VVP	EVC 851	-37.55837	144.74412
	22	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	90	LOT	High	VVP	EVC 851	-37.55847	144.74414
	23	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	22	ST	High	VVP	EVC 851	-37.55852	144.74421
	24	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	22	ST	High	VVP	EVC 851	-37.55859	144.74424
	25	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	98	LOT	High	VVP	EVC 851	-37.55862	144.74425
	26	*Eucalyptus viminalis subsp. viminalis*	Manna Gum	115	VLOT	High	VVP	EVC 851	-37.55999	144.74623
	27	*Eucalyptus camaldulensis*	River Red Gum	41	ST	High	VVP	EVC 851	-37.56250	144.74517
	28	*Eucalyptus camaldulensis*	River Red Gum	35	ST	High	VVP	EVC 851	-37.56286	144.74348
	29	*Eucalyptus camaldulensis*	River Red Gum	108	VLOT	Medium	VVP	EVC 61	-37.56149	144.73904
	30	*Eucalyptus melliodora*	Yellow Box	96	LOT	Medium	VVP	EVC 61	-37.56111	144.73955
	31	*Eucalyptus melliodora*	Yellow Box	86	LOT	Medium	VVP	EVC 61	-37.56134	144.73627
	32	*Eucalyptus* spp.	Stag	69	MOT	Medium	VVP	EVC 61	-37.56006	144.73640
	33	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	91	LOT	High*	VVP	EVC 61	-37.55840	144.73663
	34	*Eucalyptus* spp.	Stag	180	VLOT	Medium	VVP	EVC 61	-37.56024	144.73584
	35	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	110	VLOT	High*	VVP	EVC 61	-37.55845	144.73538
	109	*Eucalyptus melliodora*	Yellow Box	105	LOT	Medium	VVP	EVC 61	-37.56775	144.74111
	110	*Eucalyptus melliodora*	Yellow Box	131	VLOT	Medium	VVP	EVC 61	-37.56826	144.74057
	117	*Eucalyptus* spp.	Stag	65	MOT	Medium	VVP	EVC 61	-37.56440	144.73871

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
	118	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	71	LOT	High*	VVP	EVC 61	-37.56364	144.74094
	119	*Eucalyptus melliodora*	Yellow Box	80	LOT	Medium	VVP	EVC 61	-37.56405	144.74206
5~8\PP2174	36	*Eucalyptus microcarpa*	Grey Box	90	LOT	High	VVP	EVC 803	-37.54855	144.75021
	37	*Eucalyptus microcarpa*	Grey Box	100	LOT	High	VVP	EVC 803	-37.54841	144.75005
	38	*Eucalyptus melliodora*	Yellow Box	81	LOT	High	VVP	EVC 803	-37.54773	144.75079
	39	*Eucalyptus melliodora*	Yellow Box	95	LOT	High	VVP	EVC 803	-37.54726	144.75065
	40	*Eucalyptus melliodora*	Yellow Box	89	LOT	High	VVP	EVC 803	-37.54432	144.75004
	41	*Eucalyptus melliodora*	Yellow Box	55	MOT	High	VVP	EVC 803	-37.54429	144.74991
	42	*Eucalyptus melliodora*	Yellow Box	62	MOT	High	VVP	EVC 803	-37.54406	144.75005
	43	*Eucalyptus melliodora*	Yellow Box	65	MOT	High	VVP	EVC 803	-37.54390	144.75005
	44	*Eucalyptus melliodora*	Yellow Box	76	LOT	High	VVP	EVC 803	-37.54381	144.74981
	45	*Eucalyptus melliodora*	Yellow Box	63	MOT	High	VVP	EVC 803	-37.54282	144.74969
	46	*Eucalyptus melliodora*	Yellow Box	52	MOT	High	VVP	EVC 803	-37.54279	144.74984
	47	*Eucalyptus melliodora*	Yellow Box	67	MOT	High	VVP	EVC 803	-37.54255	144.74983
	48	*Eucalyptus melliodora*	Yellow Box	48	ST	High	VVP	EVC 803	-37.54228	144.74995
	49	*Eucalyptus microcarpa*	Grey Box	103	LOT	High	VVP	EVC 803	-37.53797	144.75004
	50	*Eucalyptus microcarpa*	Grey Box	83	LOT	High	VVP	EVC 803	-37.53775	144.74884
	51	*Eucalyptus microcarpa*	Grey Box	77	LOT	High	VVP	EVC 803	-37.53802	144.74851
	52	*Eucalyptus microcarpa*	Grey Box	91	LOT	High	VVP	EVC 803	-37.53745	144.74852
	53	*Eucalyptus microcarpa*	Grey Box	92	LOT	High	VVP	EVC 803	-37.53701	144.74839
	54	*Eucalyptus microcarpa*	Grey Box	111	VLOT	High	VVP	EVC 803	-37.53701	144.74872
	55	*Eucalyptus microcarpa*	Grey Box	85	LOT	High	VVP	EVC 803	-37.53724	144.75075

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
	56	*Eucalyptus microcarpa*	Grey Box	58	MOT	High	VVP	EVC 803	-37.53713	144.75112
	57	*Eucalyptus microcarpa*	Grey Box	74	LOT	High	VVP	EVC 803	-37.53702	144.75159
	58	*Eucalyptus microcarpa*	Grey Box	87	LOT	High	VVP	EVC 803	-37.53744	144.75223
	59	*Eucalyptus microcarpa*	Grey Box	95	LOT	High	VVP	EVC 803	-37.53773	144.75293
	60	*Eucalyptus microcarpa*	Grey Box	103	LOT	High	VVP	EVC 803	-37.53780	144.75315
	61	*Eucalyptus microcarpa*	Grey Box	98	LOT	High	VVP	EVC 803	-37.53810	144.75293
	62	*Eucalyptus melliodora*	Yellow Box	108	VLOT	High	VVP	EVC 803	-37.53836	144.75248
	63	*Eucalyptus microcarpa*	Grey Box	81	LOT	High	VVP	EVC 803	-37.53856	144.75239
	64	*Eucalyptus microcarpa*	Grey Box	88	LOT	High	VVP	EVC 803	-37.53828	144.75170
	65	*Eucalyptus microcarpa*	Grey Box	68	MOT	High	VVP	EVC 803	-37.53859	144.75139
	66	*Eucalyptus microcarpa*	Grey Box	74	LOT	High	VVP	EVC 803	-37.53903	144.75251
	67	*Eucalyptus microcarpa*	Grey Box	68	MOT	High	VVP	EVC 803	-37.53909	144.75249
	68	*Eucalyptus microcarpa*	Grey Box	74	LOT	High	VVP	EVC 803	-37.53980	144.75224
	69	*Eucalyptus melliodora*	Yellow Box	78	LOT	High	VVP	EVC 803	-37.54151	144.75268
	70	*Eucalyptus microcarpa*	Grey Box	86	LOT	High	VVP	EVC 803	-37.54114	144.75116
	71	*Eucalyptus melliodora*	Yellow Box	68	MOT	High	VVP	EVC 803	-37.54227	144.75193
	72	*Eucalyptus melliodora*	Yellow Box	63	MOT	High	VVP	EVC 803	-37.54300	144.75228
1\LP76657	73	*Eucalyptus melliodora*	Yellow Box	80	LOT	High	VVP	EVC 803	-37.54202	144.75509
	74	*Eucalyptus melliodora*	Yellow Box	71	LOT	High	VVP	EVC 803	-37.54214	144.75510
	75	*Eucalyptus melliodora*	Yellow Box	71	LOT	High	VVP	EVC 803	-37.54212	144.75386
	76	*Eucalyptus melliodora*	Yellow Box	58	MOT	High	VVP	EVC 803	-37.54289	144.75400
	77	*Eucalyptus melliodora*	Yellow Box	71	LOT	High	VVP	EVC 803	-37.54298	144.75482

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
	78	*Eucalyptus microcarpa*	Grey Box	42	ST	High	VVP	EVC 803	-37.54222	144.75652
	79	*Eucalyptus melliodora*	Yellow Box	85	LOT	High	VVP	EVC 803	-37.54129	144.75711
	80	*Eucalyptus melliodora*	Yellow Box	80	LOT	High	VVP	EVC 803	-37.53999	144.75705
	81	*Eucalyptus melliodora*	Yellow Box	76	LOT	High	VVP	EVC 803	-37.53999	144.75708
	82	*Eucalyptus melliodora*	Yellow Box	52	ST	High	VVP	EVC 803	-37.53991	144.75714
	83	*Eucalyptus melliodora*	Yellow Box	61	MOT	High	VVP	EVC 803	-37.53985	144.75740
	84	*Eucalyptus melliodora*	Yellow Box	74	LOT	High	VVP	EVC 803	-37.53972	144.75744
	85	*Eucalyptus melliodora*	Yellow Box	63	MOT	High	VVP	EVC 803	-37.53979	144.75732
	86	*Eucalyptus melliodora*	Yellow Box	112	VLOT	High	VVP	EVC 803	-37.53848	144.75831
	87	*Eucalyptus melliodora*	Yellow Box	73	LOT	High	VVP	EVC 803	-37.54003	144.75784
	88	*Eucalyptus melliodora*	Yellow Box	51	ST	High	VVP	EVC 803	-37.54038	144.75756
	89	*Eucalyptus melliodora*	Yellow Box	81	LOT	High	VVP	EVC 803	-37.54030	144.75784
	90	*Eucalyptus melliodora*	Yellow Box	18	ST	High	VVP	EVC 803	-37.54025	144.75781
	91	*Eucalyptus melliodora*	Yellow Box	31	ST	High	VVP	EVC 803	-37.54015	144.75772
	92	*Eucalyptus melliodora*	Yellow Box	20	ST	High	VVP	EVC 803	-37.54026	144.75794
	93	*Eucalyptus melliodora*	Yellow Box	18	ST	High	VVP	EVC 803	-37.54026	144.75794
	94	*Eucalyptus melliodora*	Yellow Box	15	ST	High	VVP	EVC 803	-37.53999	144.75828
	95	*Eucalyptus melliodora*	Yellow Box	25	ST	High	VVP	EVC 803	-37.53992	144.75822
	96	*Eucalyptus melliodora*	Yellow Box	67	MOT	High	VVP	EVC 803	-37.53999	144.75842
	97	*Eucalyptus melliodora*	Yellow Box	47	LOT	High	VVP	EVC 803	-37.54018	144.75855
	98	*Eucalyptus melliodora*	Yellow Box	52	ST	High	VVP	EVC 803	-37.54012	144.75858
	99	*Eucalyptus melliodora*	Yellow Box	48	ST	High	VVP	EVC 803	-37.54013	144.75880

Parcel SPI	Tree #	Scientific name	Common name	DBH (cm)	Size Class	Conservation Significance	Bioregion	EVC	Latitude	Longitude
	100	*Eucalyptus melliodora*	Yellow Box	43	ST	High	VVP	EVC 803	-37.54007	144.75890
	101	*Eucalyptus melliodora*	Yellow Box	32	ST	High	VVP	EVC 803	-37.54006	144.75896
	102	*Eucalyptus melliodora*	Yellow Box	36	ST	High	VVP	EVC 803	-37.54005	144.75902
	103	*Eucalyptus melliodora*	Yellow Box	23	ST	High	VVP	EVC 803	-37.53997	144.75900
	104	*Eucalyptus melliodora*	Yellow Box	29	ST	High	VVP	EVC 803	-37.53998	144.75911
	105	*Eucalyptus melliodora*	Yellow Box	26	ST	High	VVP	EVC 803	-37.53994	144.75902
	106	*Eucalyptus melliodora*	Yellow Box	63	MOT	High	VVP	EVC 803	-37.53981	144.75846
	107	*Eucalyptus melliodora*	Yellow Box	41	ST	High	VVP	EVC 803	-37.53972	144.75827
	108	*Eucalyptus melliodora*	Yellow Box	37	ST	High	VVP	EVC 803	-37.53966	144.75821
P\PS435007	111	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	114	VLOT	High*	VVP	EVC 61	-37.56359	144.73675
	112	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	120	VLOT	High*	VVP	EVC 61	-37.56353	144.73690
	113	*Eucalyptus melliodora*	Yellow Box	98	LOT	Medium	VVP	EVC 61	-37.56375	144.73686
	114	*Eucalyptus melliodora*	Yellow Box	76	LOT	Medium	VVP	EVC 61	-37.56394	144.73667
	115	*Eucalyptus melliodora*	Yellow Box	89	LOT	Medium	VVP	EVC 61	-37.56405	144.73673
	116	*Eucalyptus leucoxylon subsp. connata*	Melbourne Yellow Gum	90	LOT	High*	VVP	EVC 61	-37.56338	144.73818

*Conservation Significance of Melbourne Yellow Gum is increased due to its status of vulnerable in Victoria (DSE 2005, DSE 2007, NRE 2002).

Appendix 1.2 – Tree Retention Zones

Tree Retention Zones (TRZs) should be implemented to prevent indirect losses of native vegetation during construction activities (DSE 2010). A TRZ applies to a tree and is a specific area above and below the ground, with a radius 12 x the DBH. At a minimum standard a TRZ should consider the following:

- A TRZ of trees should be a radius no less than two metres or greater than 15 metres;
- Construction, related activities and encroachment (i.e. earthworks such as trenching that disturb the root zone) should be excluded from the TRZ;
- Where encroachment exceeds 10% of the total area of the TRZ, the tree should be considered as lost and offset accordingly;
- Directional drilling may be used for works within the TRZ without being considered encroachment. The directional bore should be at least 600 millimetres deep;
- The above guidelines may be varied if a qualified arborist confirms the works will not significantly damage the tree (including stags / dead trees). In this case the tree would be retained and no offset would be required; and,
- Where the minimum standard for a TRZ has not been met an offset may be required.

A Tree *Protection* Zone (TPZ) is different to a TRZ. A TPZ applies to any scattered trees used as an offset and is designed not only to prevent the tree from indirect damage, but also to give it sufficient space to recruit new trees in the future. A TPZ is defined as an area of twice the canopy diameter, which should be fenced and protected from adverse impacts (e.g. grazing, burning, soil disturbance, removal of logs, etc.) (DSE 2007).