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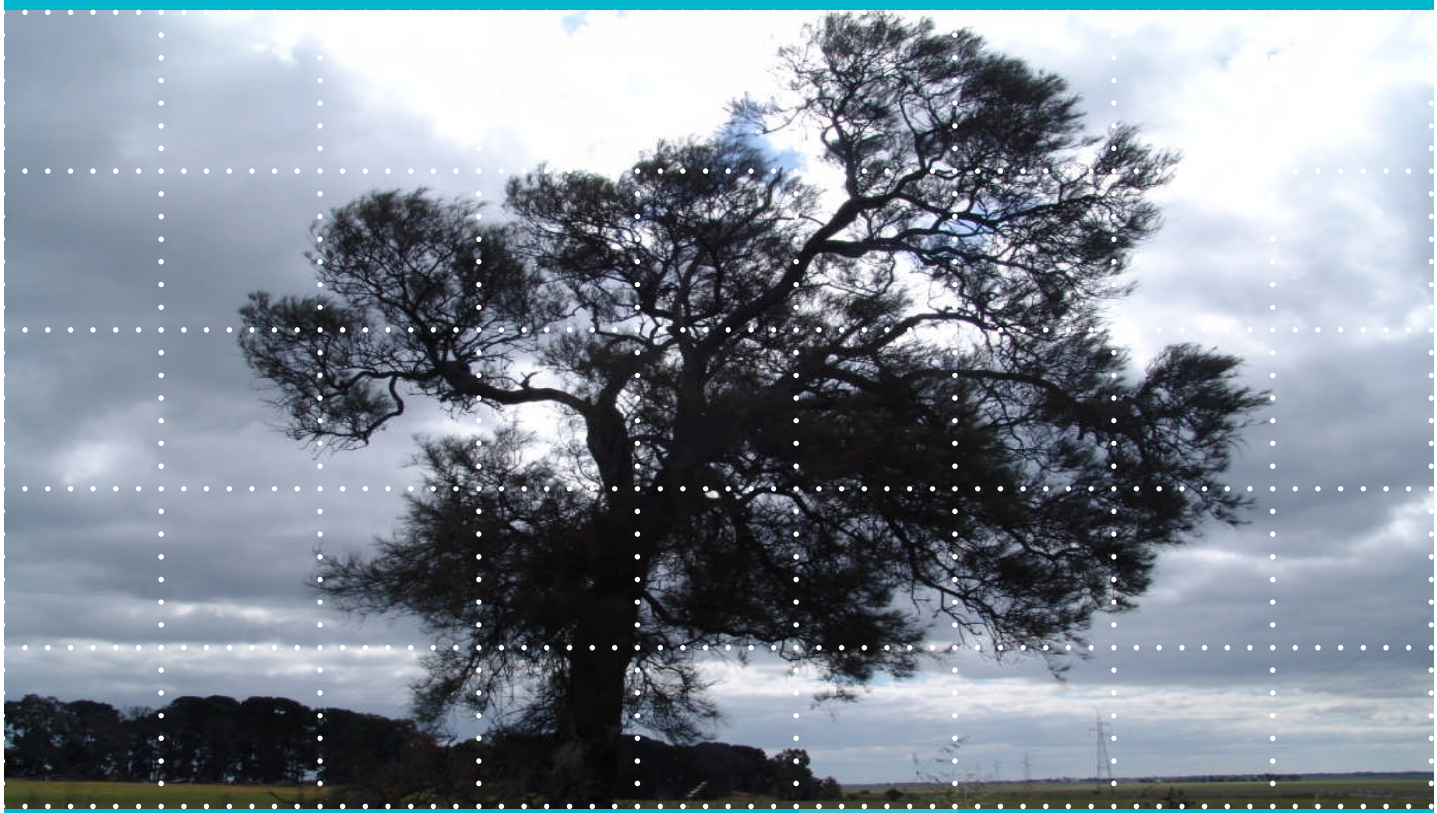
FINAL REPORT:

Addendum to *Biodiversity Assessment for Area 1099, Rockbank South 2, Victoria*

Scattered Tree Assessments at Five Unsurveyed Properties

PREPARED FOR:

Growth Areas Authority



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- Nat Anson (Growth Areas Authority) for assistance throughout the project and for comments on the draft versions of the report.
- The Department of Environment and Primary Industries for the use of data available on the Biodiversity Interactive Map.
- Landholders for providing access and information on their properties.

The following Ecology and Heritage Partners Pty Ltd employees either undertook the field assessments and/or contributed to the preparation of the final report:
Aaron Organ, Marc Freestone, Liza James and Monique Elsley.

Cover Photo: Scattered Buloke *Allocasuarina luehmannii* tree (taken by Marc Freestone, Ecology and Heritage Partners Pty Ltd).

Document Control

Project name	Addendum to Area 1099, Rockbank South 2, Victoria
Project number	4849
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Mapping	Monique Elsley
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Final	GAA	Marc Freestone	12/8/2012

1 INTRODUCTION

This report is an addendum to the existing report *Biodiversity Assessment for Area 1099, Rockbank South 2, Victoria* (Ecology and Heritage Partners Pty Ltd 2012). This addendum was required to assess five properties that were not assessed during the production of the existing report (Ecology and Heritage Partners Pty Ltd 2012). Therefore, the current report has been structured to reflect a streamlined addendum to the existing report (Ecology and Heritage Partners Pty Ltd 2012).

This report, together with *Biodiversity Assessment for Area 1099, Rockbank South 2, Victoria*, satisfies and completes the scattered indigenous tree assessment requirements for the preparation of the Rockbank Precinct Structure Plan (PSP 1099).

2 METHODS

Common and scientific names of vascular plants follow the Victorian Biodiversity Atlas (DSE 2011a) and the Census of Vascular Plants of Victoria (Walsh and Stajsic 2007). Vegetation community names follow DSE's EVC Benchmarks (DSE 2012b).

2.1 Literature and Database Review

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

- DEPI's Biodiversity Interactive Maps showing historic and current EVCs (DEPI 2013a);
- Biodiversity Conservation Strategy for Melbourne's Growth Corridors (DEPI 2013);
- Relevant legislation and policies; and
- Known ecological reports relevant to the precinct.

Liaison was undertaken with the Growth Areas Authority (GAA) to confirm the extent and intensity of the proposed methodology.

2.2 Field Surveys

Scattered tree assessments were undertaken by an experienced botanist with current Certificates of Competency in conducting Vegetation Quality Assessments (habitat hectares) from DSE. The scattered tree assessment was undertaken on 15 May 2013. 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 EVC benchmark. Benchmark tree measurements for relevant EVCs are provided in Table 1.

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	Lignum Swamp (EVC 104)	120+	80 – 119	60 – 79	<60
Victorian Volcanic Plain	Plains Woodland (EVC 803) *Allocasuarina luehmannii* *Eucalyptus* spp.	 60+ 105+	 40 – 59 70 – 104	 30 – 39 53 – 69	 <30 <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 DSE benchmarks and the Port Phillip and Westernport Native Vegetation Plan (DSE 2012a; PPWCMA 2006).

The survey assessment date, duration and assessor are provided below (Table 2).

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

Property Number	Access	Assessment Date	Duration	Assessor
53040448	Approved – 14/5/2013 Landowner present during survey	15-May-13	10.30am – 11.00am	Marc Freestone
50268202	Approved – 14/5/2013	15-May-13	11.00am – 12.00am	Marc Freestone
50268205	Not approved – assessed from neighbouring property	15-May-13	12.00am – 12.30pm	Marc Freestone
50268214	Approved – 14/5/2013 Landowner present during survey	15-May-13	1.00pm – 2.00pm	Marc Freestone
213370704	Signed consent, no verbal contact	15-May-13	2.00pm – 4.30pm	Marc Freestone

2.3 Assessment Qualifications and Limitations

The objective of the assessment was to document indigenous remnant trees (scattered or in patches of remnant native vegetation) within the study area. A large number of indigenous trees, most commonly River Red-gum *Eucalyptus camaldulensis* have been planted by landowners. Planted indigenous trees younger than 10 years were not included within the assessment as they did not meet the remnant tree definition under *Victoria's Native Vegetation Management: a Framework for Action* (DNRE 2002).

While a DBH reading was taken for nearly all indigenous remnant trees, the three trees in property number 50268205 could not be accessed for measurement due to lack of access approval and signage warning against unauthorised access. Estimates of DBH are provided in such instances.

3 RESULTS

3.1 Indigenous Remnant Trees

A total of 10 indigenous remnant trees were recorded within the study area (Figure 1, Appendix 1). The majority of trees are River Red-gum, with three Buloke *Allocasuarina luehmannii* trees present. The number of indigenous remnant trees within each size class is as follows:

- 2 Very Large Old Trees (VLOTs);
- 3 Large Old Trees (LOTs);
- 2 Medium Old Trees (MOTs); and
- 3 Small Trees (ST).

The scattered Buloke trees correspond to the Plains Woodland EVC (803), while the scattered River Red Gum trees correspond to the Lignum Swamp EVC (104).

Scattered indigenous remnant 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 2007a; DSE 2012a). Very Large, Large and Medium scattered indigenous trees within the study area are representative of the Plains Woodland and Plains Grassy Wetland or Lignum Swamp EVCs, all of which have a Bioregional Conservation Status of Endangered. Therefore, any scattered indigenous remnant trees are of High conservation significance. Scattered small indigenous trees are assigned a Low conservation significance rating based on the Port Phillip and Westernport Native Vegetation Plan (PPWCMA 2006). The number of indigenous remnant trees within the Very High, High, Medium and Low conservation significance category is as follows:

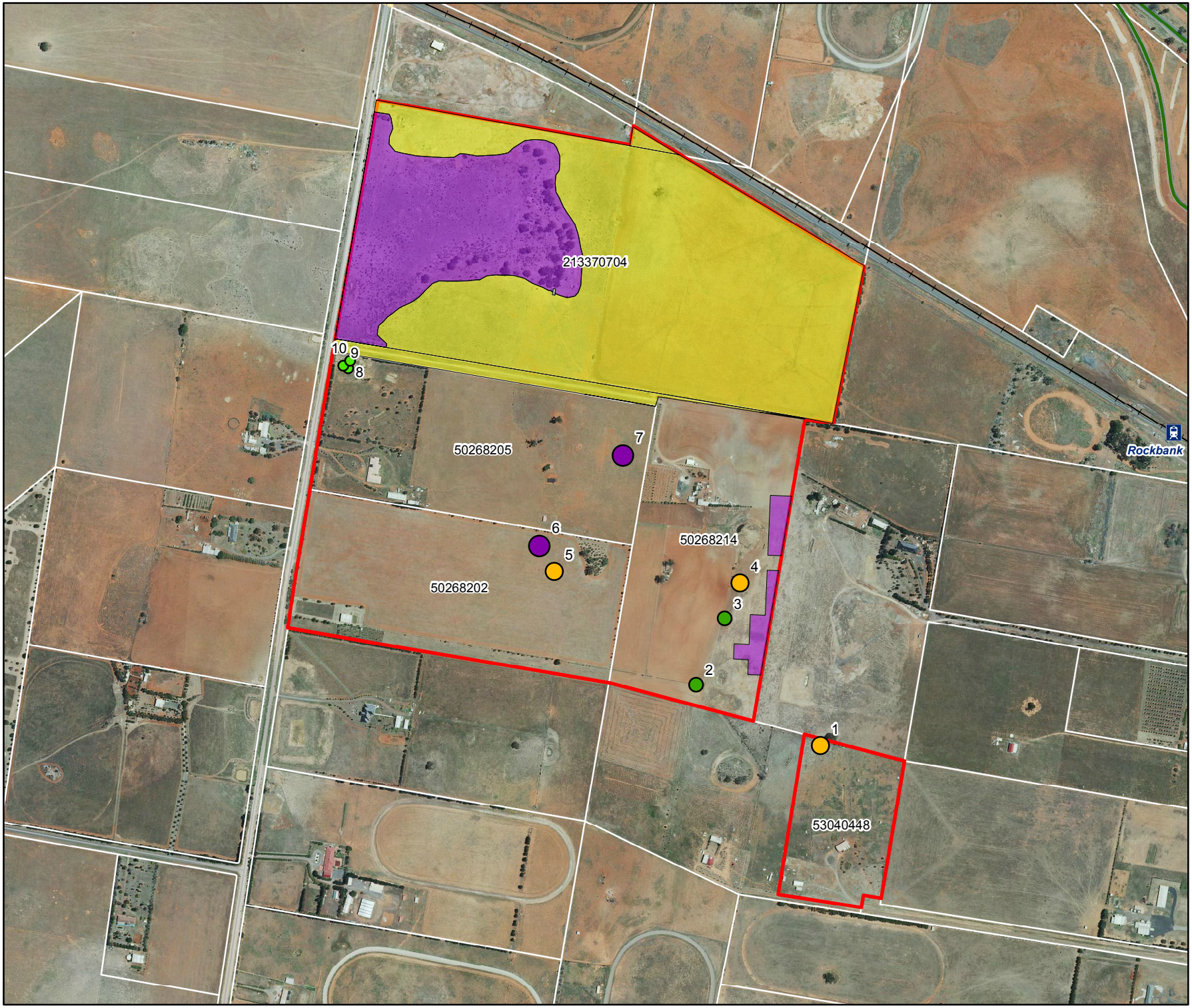
- 2 VLOTs are of **High** conservation significance and;
- 3 LOTs are of **High** conservation significance and;
- 2 MOTs are of **High** conservation significance and;
- 3 STs are of **Low** conservation significance.

All other trees within the study area are planted, including young River Red-gum and non-indigenous or exotic species such as Sugar Gum *Eucalyptus cladocalyx*. In all instances, it is obvious if trees have been planted. Planted trees less than ten years old were not included in the assessment as they did not meet the definition of a remnant tree under the Framework (DNRE 2002). The details of indigenous trees recorded within each property are presented in Appendix 1.

Property 213370704 is entirely mapped as time-stamped native vegetation (Figure 1). Therefore this property contains no scattered trees, as all trees located in the property are considered part of the time-stamped patch of native vegetation (DSE 2007).

Two trees each in properties 50268202, 50268205 and 50268214 were identified by DEPI as being potential scattered indigenous trees. However, the site assessments undertaken as part of this addendum confirmed all of these trees to be mature, planted Sugar Gum *Eucalyptus cladocalyx* trees, a species endemic to South Australia, but widely planted in western Victoria.

FIGURES



Legend

Time-stamped EVCs

- 104 Lignum Swamp
- 132 Plains Grassland

Scattered Trees

- VLOT
- LOT
- MOT
- ST
- Study Area

Figure 1

Scattered Trees

Biodiversity Assessment (Scattered Tree Assessment), PSP 1099, Rockbank

N

0 140

Metres

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APPENDICES

Appendix 1 – Indigenous Tree Table

Table A.1. Scattered trees recorded during the present survey (May 2013).

Parcel PFI	Tree Number	Species (scientific name)	Common name	DBH (cm)	Tree Size	Bioregion	Conservation Significance	Eastings (MGA54)	Northings (MGA54)	Map no.
53040448	1	*Eucalyptus camaldulensis*	River Red Gum	85	LOT	VVP	High	821170.62	5817439.26	Fig. 1
50268214	2	*Eucalyptus camaldulensis*	River Red Gum	74	MOT	VVP	High	820963.20	5817540.68	Fig. 1
	3	*Eucalyptus camaldulensis*	River Red Gum	65	MOT	VVP	High	821010.92	5817651.36	Fig. 1
	4	*Eucalyptus camaldulensis*	River Red Gum	82	LOT	VVP	High	821036.35	5817710.52	Fig. 1
50268202	5	*Allocasuarina luehmannii*	Buloke	54	LOT	VVP	High	820726.47	5817729.72	Fig. 1
	6	*Allocasuarina luehmannii*	Buloke	67	VLOT	VVP	High	820701.46	5817771.97	Fig. 1
50268205	7	*Allocasuarina luehmannii*	Buloke	80	VLOT	VVP	High	820840.98	5817922.87	Fig. 1
	8	*Eucalyptus camaldulensis*	River Red Gum	50	ST	VVP	Low	820382.93	5818068.22	Fig. 1
	9	*Eucalyptus camaldulensis*	River Red Gum	15	ST	VVP	Low	820374.50	5818072.63	Fig. 1
	10	*Eucalyptus camaldulensis*	River Red Gum	10	ST	VVP	Low	820386.14	5818080.66	Fig. 1