

TECHNICAL MEMORANDUM

Construction Management Plan

PROJECT NUMBER	EP20-088(12)	DOC. NUMBER	EP20-088(12)--018 KK
PROJECT	Montague Estate	CLIENT	Montague VY No. 1 Pty Ltd ATF Montague Trust
AUTHOR	KK	REVIEWER	KK
VERSION	001	DATE	June 2021

1 OVERVIEW

Emerge Associates have been engaged by Montague VY No. 1 Pty Ltd ATF Montague Trust (the proponent) to provide environmental advice to support the expansion of an existing winery operation at Lot 32 (No. 325) Tom Cullity Drive, Wilyabrup (herein referred to as 'the site').

This technical memorandum has been prepared to outline the approach to support mitigation measures proposed as part of the proposed expansion, namely protection and management of flora, vegetation and fauna values as part of the proposed clearing and development. The site and areas of proposed clearing/disturbance are shown within **Figure 1**.

2 PURPOSE

This purpose of this *Construction Management Plan* is to provide overarching guidance for the management of flora, vegetation and fauna prior to, during, and post construction of the winery expansion with the aim of avoiding or mitigating adverse impacts to vegetation and fauna, as far as is practical.

3 EXISTING VALUES

3.1 Background information

3.1.1 Flora and vegetation values

A detailed flora and vegetation survey (Emerge Associates 2020a) was undertaken for the site and identified areas of variable vegetation condition and values. The majority of existing vegetation within the site is proposed to be retained, and is associated with vegetation in generally 'good' or better condition. These areas will need to be protected as part of clearing and construction activities within the site.

The areas that will be cleared include:

- Removal of 2.16 ha of vegetation identified as 'proposed extent of clearing' in **Figure 1**.
- Removal of 0.58 ha of understorey and mid-storey vegetation identified as 'proposed vegetation modification area' in **Figure 1**. Trees with a diameter at breast height (DBH) of 500 mm or greater will be retained in this area and will need to be protected.

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3.1.2 Fauna habitat

A basic fauna and targeted black cockatoo assessment as well as targeted western ringtail possum assessment was completed across the site and/or areas of proposed clearing/disturbance (Emerge Associates 2020b and 2021).

Vegetation within the site may provide habitat to a range of birds and arboreal fauna species, including conservation significant species such as:

- *Pseudocheirus occidentali* (western ringtail possums)
- Three species of black cockatoo, namely *Calyptorhynchus baudinii* (Baudin's cockatoo), *Calyptorhynchus latirostris* (Carnaby's cockatoo) and *Calyptorhynchus banksii naso* (forest-red tailed black cockatoo)

Other fauna species were also observed, including *Trichosurus vulpecula* (common brushtail possum) and will require consideration as part of the proposed development.

3.1.3 Potential impacts

Development will result in selective ground disturbance and clearing. Ground disturbance and clearing of vegetation within the site has the potential to directly impact upon vegetation, birds, arboreal fauna species and ground dwelling fauna species and their habitat.

The methods outlined below aim to avoid or minimise impacts to flora, vegetation and fauna through identifying areas of impact (including identifying trees for retention), undertaking pre-clearing checks and fauna spotting and translocation during clearing.

4 METHODS

The methods that will be applied to assess and manage flora, vegetation and fauna values prior to, during and post construction within the site are detailed below.

4.1 Personnel

The vegetation management actions outlined in this plan will be undertaken by the proponent with support from an environmental scientist with knowledge of the site

The fauna management actions outlined in this plan will be undertaken by a suitably qualified zoologist or environmental scientist with knowledge of the site.

4.2 Timing

Timeframes for vegetation and fauna management actions and construction works will be confirmed as part of the works program, once all approvals have been obtained.

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4.3 Prior to clearing

4.3.1 Site preparation

The vegetation proposed to be retained will be clearly identified with marking tape, temporary fencing or similar. This includes identifying trees with a diameter at breast height (DBH) 500 mm or greater (black cockatoo habitat trees) for retention within the 'proposed vegetation modification area'.

The black cockatoo habitat trees containing suitable or potentially suitable hollows that are within 10 m of works areas will be clearly identified and avoided at all times.

4.3.1 Tree retention

Any trees identified for retention within the 'proposed vegetation modification area' (see **Figure 1**) will be clearly marked and protected to avoid unintended removal or damage in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by a qualified arborist.

Similarly, any trees within 10 m of the 'proposed clearing extent' (see Figure 1) will be managed in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by a qualified arborist, to manage potential impacts from unintended removal or damage.

4.3.2 License application

A *Regulation 28 licence (Fauna taking (relocation) licence)* will be gained from the Department of Biodiversity Conservation and Attractions (DBCA) pursuant to the *Biodiversity Conservation Act 2016* (and associated regulations) prior to implementing the proposed fauna management actions.

4.3.3 Pre-clearing inspection

At least five days prior to clearing an inspection will be undertaken by an experienced fauna specialist to identify potential for fauna interactions during clearing and recent evidence of native fauna activity. In particular, the site will be searched for signs of recent use by native ground-dwelling vertebrate fauna such as quenda and reptiles, as well as arboreal mammal species such as possums.

All trees will be inspected for nests or hollows suitable for nesting (by any bird species, possums or similar) and where observed these will be examined for signs of current use (e.g. nesting). This will be undertaken using a high-definition camera mounted on a telescopic pole to examine inside the hollows for evidence of use. If the hollows are in use, tree clearing will be postponed until any juveniles have left the nest.

4.3.4 Informing site personnel

All site personnel are to be informed of the potential for fauna to continue to be present at the site following relocation.

Basic information to all employees on-site during clearing works will be circulated about the steps to follow if native fauna is observed on site.

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Should any fauna be observed on site, the first point of contact will be the site supervisor (who may be the proponent), who can stop work and accordingly advise Emerge.

4.4 During clearing

4.4.1 Disease and weed management

The soil borne water mould *Phytophthora cinnamomi* or other *Phytophthora* sp. (phytophthora dieback) kill susceptible plants by attacking their root system which inhibits uptake of water and nutrients. It is unknown whether phytophthora dieback occurs in the site.

Dieback is spread through movement of soil and mud, especially by vehicles and footwear (DPaW 2015; Commonwealth of Australia 2018), as are weed species.

To ensure dieback or other pathogens and weeds are not introduced to or spread within the site (if present) the following management measures shall be undertaken during implementation of this plan:

- Vehicles, tools, equipment (including boots) and machinery shall be free of all mud, soil and plant material on arrival at the site.
- If vehicles, tools, equipment (including boots) and machinery are temporarily removed from the site during works they must be free of all mud, soil and plant material on return.

4.4.2 Vegetation and tree retention

Any vegetation or trees identified for retention are to be avoided.

4.4.3 Clearing spotting

As far as practical, clearing will be completed in a single direction without creating islands of vegetation, ensuring that fauna do not become trapped during works.

An experienced fauna specialist with knowledge of the site will be present as a fauna spotter during clearing of vegetation. This role will involve active searching for fauna in areas to be cleared and areas just cleared. This searching will aim to identify the presence of bird or marsupial species in trees and more common ground dwelling fauna species, such as small mammals, lizards and snakes. If encountered, these animals will be assisted to disperse to nearby vegetation, if appropriate, or translocated.

A post-clearing assessment will be undertaken of any trees with hollows identified. Once felled, hollows will be inspected by the fauna spotter and any vertebrate fauna within the hollow will be removed and relocated appropriately.

Should injured fauna be encountered, the severity of injuries will be assessed. If the experienced fauna specialist considers that an injured native animal has a reasonable chance of being satisfactorily rehabilitated, it will be transferred to a registered DBCA wildlife carer. Where the experienced fauna specialist considers that any injured fauna is unlikely to be satisfactorily rehabilitated, they will be taken to a nearby vet to be humanely euthanised.

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4.5 After clearing

On completion of the pre-clearing trapping and fauna spotting program, a report summarising the number of fauna captured and/or relocated and a license return will be prepared and submitted to DBCA outlining species and number of any fauna individuals translocated.

4.6 During construction

4.6.1 Disease and weed management

To ensure dieback or other pathogens and weeds are not introduced to or spread within the site (if present) the following management measures shall be undertaken during implementation of this plan:

- Vehicles, tools, equipment (including boots) and machinery shall be free of all mud, soil and plant material on arrival at the site.
- If vehicles, tools, equipment (including boots) and machinery are temporarily removed from the site during works they must be free of all mud, soil and plant material on return.

4.6.2 Feral and pest animals

The works areas are to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.

4.6.3 Fauna management

Any fauna observed during construction will be allowed to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, an appropriate fauna specialist will be engaged, or DBCA WildCare Helpline will be called (08 9474 9055).

Any fauna handling required will be undertaken in accordance with DBCA's *Standard Operating Procedures* (DBCA 2019) (or as updated). Any native vertebrate fauna captured during construction will be handled appropriately and translocated to an appropriate location as specified in the *Fauna taking (relocation) licence* for this management plan.

4.6.1 Tree retention

Any trees identified for retention within the 'proposed vegetation modification area' or in areas adjacent to the 'proposed extent of clearing' (see **Figure 1**) will continue to be protected to avoid unintended removal or damage in line with *AS 4970-2009 Protection of Trees on Development Sites* (Standards Australia 2009) or in accordance with recommendations by a qualified arborist.

4.7 Implementation

The implementation of this *Construction Management Plan* will primarily be the responsibility of the proponent. All contractors engaged to undertake works within the site will be required to adhere to this plan.

The key management actions and associated responsibilities are provided in **Table 1** below.

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Table 1: Management actions and responsibilities to support clearing and construction

No.	Management action	Location	Responsibility	Status
Prior to clearing				
1.	Mark all trees/areas of vegetation identified for retention with coloured flagging tape to avoid incidental clearing.	All areas	Proponent/ contractor	To review before clearing commences.
2.	Obtain a fauna taking (relocation) licence from the DBCA for fauna trapping and translocation of fauna	All areas	Fauna specialist	Licence to be gained prior to clearing
3.	Undertake a pre-clearing fauna inspection to identify potential fauna interactions, including an inspection of trees for hollows and signs of use.	All areas	Fauna specialist	To review before clearing commences.
4.	Communicate fauna management requirements to all employees.	All areas	Proponent/ contractor	To review before clearing commences.
During clearing and construction				
5.	For management of disease (such as dieback), all machinery, equipment (including boots), vehicles and tools to be cleaned of soil before entering the site and when leaving the site	All areas	Proponent/ contractor	To be checked prior to machinery entering or leaving site.
6.	The works area to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.	All areas	Proponent/ contractor	To be checked daily.
7.	Direct and coordinate clearing works to avoid impacts to fauna wherever possible and to recover small to medium sized (translocatable) fauna that are observed to be in harms way during clearing works. This includes having a fauna spotter present.	All areas	Fauna specialist	To be reviewed daily during clearing activities.
8.	Complete an assessment of any felled trees with hollows.	All areas	Fauna specialist	To be reviewed after clearing activities.
9.	Allow all observed fauna during clearing to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, fauna specialist to determine appropriate action or call DBCA WildCare Helpline (08 9474 9055).	All areas	Proponent/ contractor	To be reviewed daily during clearing activities.

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Table 1: Management actions and responsibilities to support clearing and construction (continued)

No.	Management action	Location	Responsibility	Status
During construction				
10.	For management of disease (such as dieback), all machinery, equipment (including boots), vehicles and tools to be cleaned of soil before entering the site and when leaving the site	All areas	Proponent/ contractor	To be checked prior to machinery entering or leaving site.
11.	The works area to be maintained in a clean and tidy manner to ensure that feral and other species are not attracted to site.	All areas	Proponent/ contractor	To be checked daily.
12.	Areas of retained trees and vegetation to be avoided. Machinery is not to be parked under retained trees to prevent compaction off soil and tree roots.	All areas	Proponent/ contractor	To be checked daily.
13.	Allow all observed fauna to move to areas of adjacent vegetation, if appropriate. If fauna is required to be removed or if injured fauna is encountered, fauna specialist to determine appropriate action or call DBCA WildCare Helpline (08 9474 9055).	All areas	Proponent/ contractor	To be reviewed daily.
Post clearing and construction				
14.	Prepare licence return reports summarising the number fauna captured and/or relocated and a licence return will be prepared and submitted to DBCA.	Not applicable	Fauna specialist	To be prepared upon completion of relocation program

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4.8 References

Commonwealth of Australia 2018, *Threat abatement plan for disease in natural ecosystems caused by Phytophthora cinnamomi*

Cooperative Research Centre for Australian Weed Management 2005, *Herbicides: Guidelines for use in and around water*.

Department of Parks and Wildlife (DPaW) 2015, *Corporate Policy Statement No. 3 - Management of Phytophthora Disease*, Perth. August 2015.

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Animal Handling and Restraint using Soft Containment*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Hand Capture of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Hand Restraint of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Humane Killing of Animals under Field Conditions*, Perth, WA.

Department of Biodiversity, Conservation and Attractions 2017, *Standard Operating Procedure: Transport and Temporary Holding of Wildlife*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Cage Traps for Live Capture of Terrestrial Vertebrates*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Dry Pitfall Trapping for Vertebrates and Invertebrates*, Perth, WA

Department of Biodiversity, Conservation and Attractions 2018, *Standard Operating Procedure: Funnel Trapping for Terrestrial Fauna*, Perth, WA

Emerge Associates 2020, *Detailed Flora and Vegetation Assessment - Lot 32 (No.325) Tom Cullity Drive, Wilyabrup*, EP20-088(01)--007 RAW, Version 1.

Emerge Associates 2020a, *Basic Fauna and Targeted Black Cockatoo Assessment - Lot 32 (No.325) Tom Cullity Drive, Wilyabrup*, EP20-088(02)—004A MS, Version A.

Emerge Associates 2021, *Targeted Western Ringtail Possum Assessment – Lot 32 (No.325) Tom Cullity Drive, Wilyabrup*, EP20-088(11)—014A MS, Version A.

National Health and Medical Research Council 2013, *Australian code for the care and use of animals for scientific purposes, 8th edition*, Canberra, ACT

Standards Australia 2009, *AS 4970-2009 Protection of trees on development sites* Sydney.

Figures



Figure 1 – Updated Disturbance Area

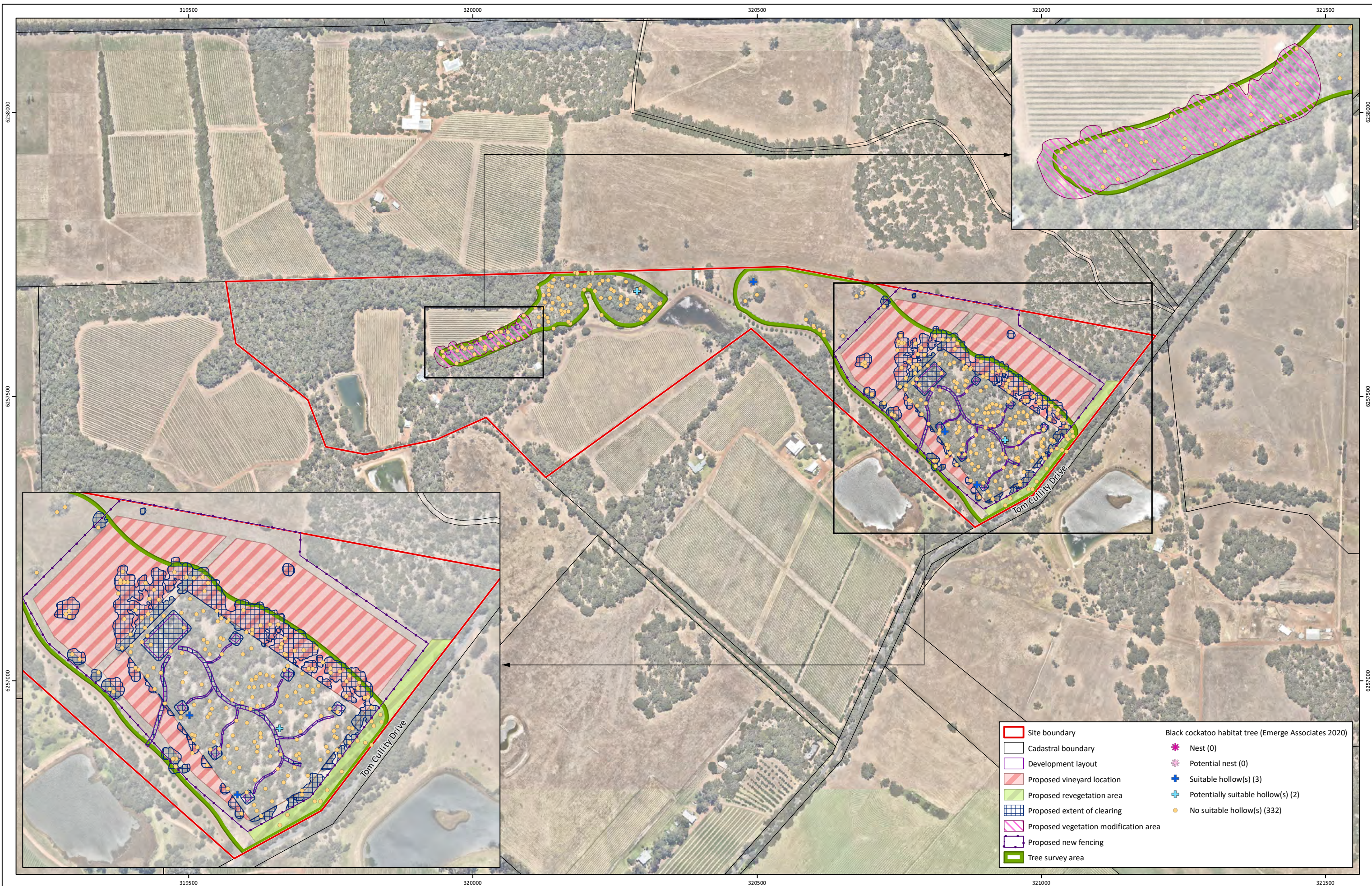


Figure 1: Updated Disturbance Area

Project: EPBC Act Referral (2020/8866) - Preliminary Documentation
 Lot 32 (No.325) Tom Cullity Drive, Wilyabrup
Client: Montague VY No. 1 Pty Ltd ATF Montague Trust

Plan Number: EP20-088(12)-F59a
 Drawn: GAR
 Date: 28/05/2021
 Checked: KK
 Approved: KK
 Date: 02/07/2021



0 100 200
 Metres
 Scale: 1:6,000@A3
 GDA 1994 MGA Zone 50



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