

# 672-690 Portarlington Road Leopold

## Vegetation Assessment

A Report to  
H4 Project Group

Prepared by

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***Mark Trengove Ecological Services***

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# 1 INTRODUCTION

## 1.1 *Project Background*

An area of land, located at 672-690 Portarlington Road Leopold, is proposed to be developed as a residential sub division. This report was commissioned by H4 Project Group to determine any implications for the removal of native vegetation at the subject site.

Under Clause 52.17 of the Planning Scheme, the State has gazetted the Native Vegetation Removal Regulations. The Regulations ‘introduce a risk based approach to assessing applications to remove native vegetation’ (DELWP Website i)

Refer to Section 4 for further discussion.

## 1.2 *Objectives*

The objectives of this investigation are to:

- Describe the flora values of the land.
- Evaluate the conservation significance of the land.
- Assess any potential impacts of the proposed development.
- Discuss the implications of relevant government policy and legislation.
- Determine any native vegetation offset implications.

## 1.3 *Study Area*

The study area is comprised of approximately 1.52 ha of land located at 672-690 Portarlington Road Leopold (proposed Lot 2), located within the City of Greater Geelong. The site is zoned Farming Zone (FZ) under the City of Greater Geelong Planning Scheme (Land.vic website i).

The site is within the Otway Plains bioregion and is located within the Corangamite Catchment Management Authority region (Department of Environment, Land, Water and Planning [DELWP] website ii).

The site appears to have a history of agricultural and domestic use and having been subjected to significant disturbance including imported fill and is dominated by exotic and planted non-native vegetation.

The location of the study area is shown on Figure 1.



**Figure 1. Study area.** 672-690 Portarlington Road Leopold (proposed Lot 2).

#### **1.4 Proposed Development**

The proposed land use is to rezone the land to General Residential Zone.

## **2 METHODS**

### **2.1 Taxonomy**

Scientific names for plants follow the Flora of Victoria (RBG website). Common names for plants follow the Flora of Victoria Vols 2-4 (Walsh and Entwisle 1994-1999).

### **2.2 Literature and Database Review**

Relevant literature, online resources and databases were reviewed to provide an up to date assessment of ecological values associated with the study area and surrounds, including:

- The Victorian Department of Environment, Land, Water and Planning (DELWP) NVIM tool (DELWP website ii) for:
  - Modelled data for remnant vegetation patches and habitat for rare or threatened species and
  - the extent of historic and current Ecological Vegetation Classes (EVC)s.
- Aerial photography of the study area (Google maps).

### **2.3 Field Survey**

The site was inspected on foot on the 11<sup>th</sup> of November 2021. The entire site was traversed. Records were made of dominant vascular plant species. The location of any areas of native vegetation were mapped.

### **2.4 Limitations**

The assessment was conducted during spring, a time of year that are suitable for the detection of most flora species likely to occur on site. The site was mostly unslashed and ungrazed at the time of survey. The survey includes only vascular flora.

Due to the relatively degraded condition of the study area vegetation, the site inspection is considered sufficient to assess the ecological values of the proposed impact site. As a result, for the purposes of assessing the proposed impact site, there are not considered to be any significant limitations to the findings of this study.

### **2.5 Defining Significance**

A number of criteria are applied in order to assess the significance of flora species and vegetation communities. The definition of the criteria is detailed in Appendix 1.

## **2.6 Defining and Assessing Vegetation**

Native vegetation in Victoria has been defined by DELWP as belonging to two categories. These are:

### **Patch native vegetation**

Patch native vegetation is either:

- any area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native
- any area with three or more native canopy trees where the canopy foliage combines
- Any area of wetland as defined by current DELWP mapping.

### **Scattered tree native vegetation**

Scattered tree native vegetation is:

- a native canopy tree that does not form part of a patch.

### **Habitat hectares**

Habitat hectares (Vegetation Quality Assessment) is a site-based measure that combines extent and condition of native vegetation. The current condition of native vegetation is assessed against a benchmark for its Ecological Vegetation Class (EVC). EVCs are classifications of native vegetation types. The benchmark for an EVC describes the attributes of the vegetation type in its mature natural state, which reflects the pre-settlement circumstances. The condition score of native vegetation at a site can be determined through undertaking a habitat hectare assessment.

The habitat hectares of native vegetation is calculated by multiplying the current condition of the vegetation (condition score) by the extent of native vegetation.

(DELWP Website i).

### 3 RESULTS

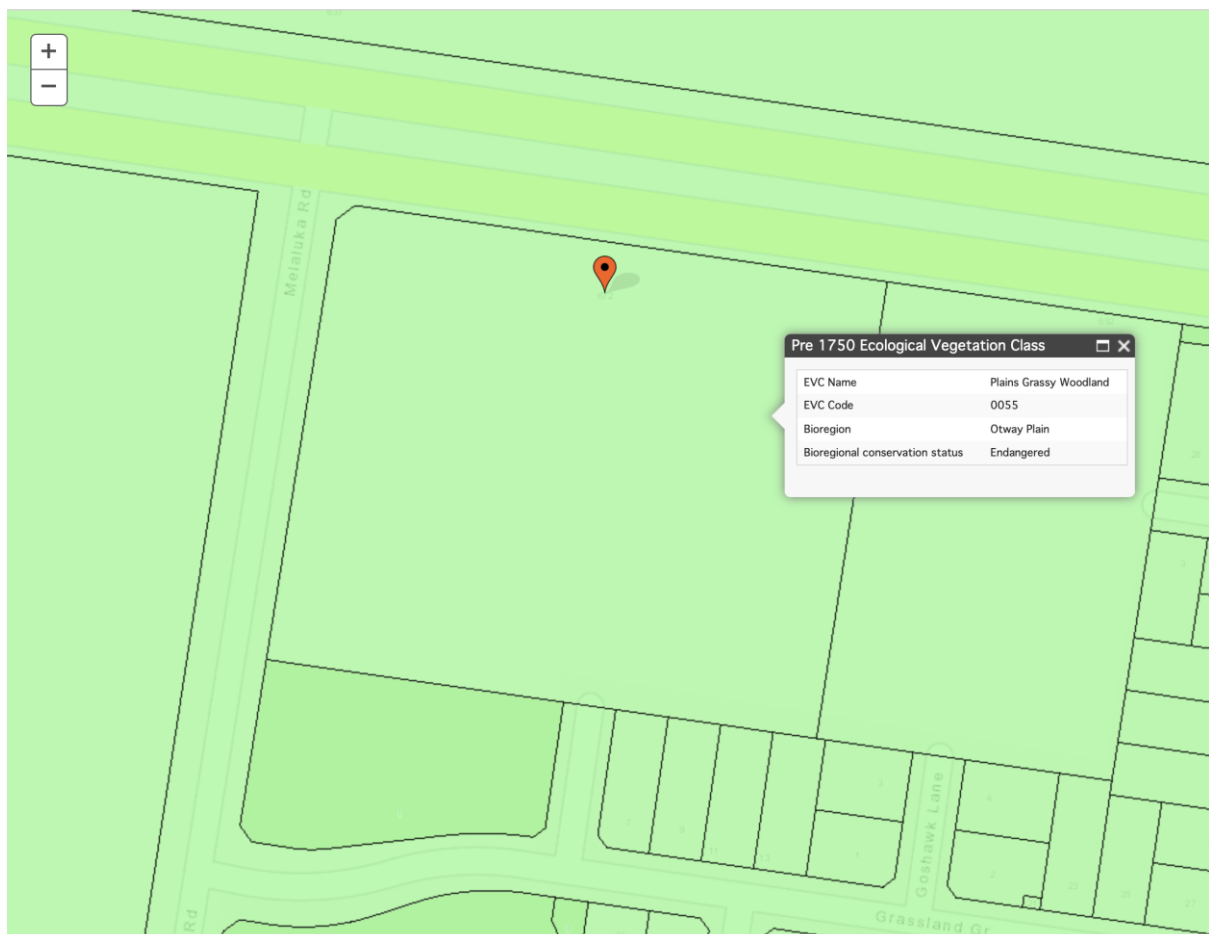
#### 3.1 Ecological Vegetation Class

Ecological Vegetation Classes (EVCs) are the primary level of classification of vegetation communities within Victoria. An EVC contains one or more plant (floristic) community and represents a grouping of vegetation communities with broadly similar ecological attributes. Classification of EVCs in this report follows Oates and Taranto (2001).

The pre-1750 EVC mapping of the study area undertaken by DELWP (DELWP Website i) indicates that the study area was comprised of EVC 55 Plains Grassy Woodland. EVC 55 Plains Grassy Woodland is currently listed as ‘Endangered’ in the Otway Plains bioregion (DELWP website ii).

The current study records no areas vegetation that accords with EVC 55 Plains Grassy Woodland within the study area.

Refer to Figure 2 for DELWP EVC mapping.



**Figure 2.** Distribution of EVCs pre-1750. Data by DELWP (DELWP Website i).

### 3.2 Flora

No indigenous vascular plant species were recorded from the study area. Refer to Table 1 for a list of plant species recorded, including status.

### 3.3 Vegetation Condition

The study area is dominated by exotic pasture grasses and ruderal weeds. These areas appear to have been subject to past and on-going disturbance. Refer to Table 1 for a list of the dominant naturalised plant species recorded during this study.

Plantations of Tuart (*Eucalyptus gomphocephalum*), Sugar Gum (*Eucalyptus cladocalyx*), River Sheoke (*Allocasuarina cunninghamii*), Giant Honey-myrtle (*Melaleuca armillaris*) and Cypress (*Cupressus* spp) occur across much of the study area. Established exotic gardens and lawns also occur.

Refer to Plates 1-4 for photographs of the vegetation.

**Table 1 Dominant naturalised vascular plant species and status**

Botanical Name	Common Name	Status
<i>Bromus</i> sp	Brome Grass	Exotic
<i>Cenchrus clandestinum</i>	Kikuyu	Exotic
<i>Cynodon dactylon</i>	Couch Grass	Exotic
<i>Dactylis glomeratus</i>	Cock's-foot	Exotic
<i>Ehrharta erecta</i>	Panic Veldt-grass	Exotic
<i>Galenia pubescens</i>	Blanket Weed	Exotic
<i>Lolium</i> sp	Rye-grass	Exotic
<i>Phalaris aquatica</i>	Canary-grass	Exotic
<i>Polygonum aviculare</i>	Knotweed	Exotic
<i>Trifolium</i> sp	Clover	Exotic

### 3.4 Significant Flora

No National or State or Local significant plant species were recorded. Refer to Appendix 1 for the rationale for assessing significance.

## 4 Native Vegetation Permitted Clearing Regulations

Under Particular Provision (Native Vegetation Clause 52.17) the State has gazetted the Native Vegetation Permitted Clearing Regulations, revised in December 2017. The Native Vegetation Permitted Clearing Regulations introduce a risk-based approach to assessing applications to remove native vegetation.

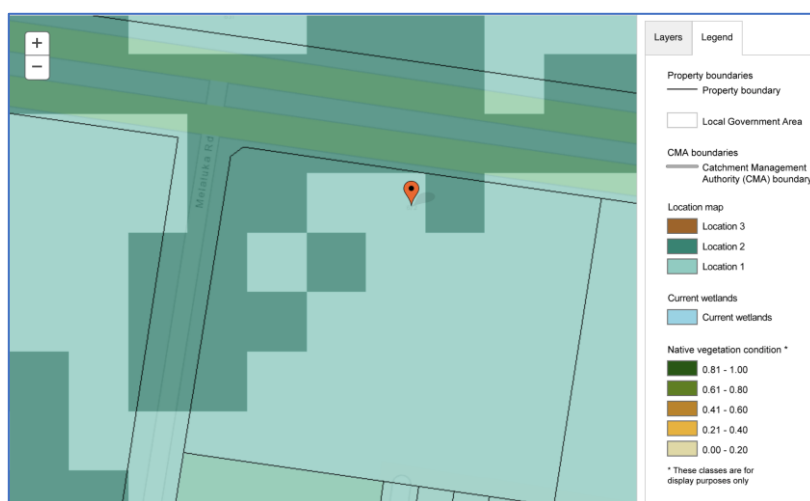
The objective for the permitted clearing of native vegetation is that it results in no net loss. This means permitted clearing has a neutral impact on Victoria's biodiversity.

The purpose of Clause 52.17 is to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved by applying the following three step approach in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, 2017):

1. Avoid the removal, destruction or lopping of native vegetation.
2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
3. Provide an offset to compensate for the biodiversity impact if a permit is granted to remove, destroy or lop native vegetation.

When native vegetation removal is permitted, an offset must be secured which achieves a no net loss outcome for biodiversity. To achieve this the offset makes a contribution to Victoria's biodiversity that is equivalent to the contribution made by the native vegetation that was removed. The type and amount of offset required depends on the native vegetation being removed and the contribution it makes to Victoria's biodiversity.

Implications for the current proposal are discussed as follows. Refer to Figure 3 for Location mapping (DELWP data).



**Figure 3.** Distribution of vegetation according to 'Location'. Light green equates to 'Location 1' (i.e. lowest risk), Dark green equates to Location 2 (medium risk) (DELWP Website i).

#### ***4.1 Patch Native Vegetation***

Under the Native Vegetation Permitted Clearing Regulations, any areas of patch native vegetation that are proposed to be removed are subject to protection/and or recruitment offsets, depending upon the characteristics of the site.

No patch native vegetation was recorded for the study area.

#### ***4.2 Scattered Tree Native Vegetation***

Under the Native Vegetation Permitted Clearing Regulations, any scattered tree native vegetation that is proposed to be removed are subject to protection/and or recruitment offsets, depending upon the characteristics of the site.

Scattered trees, that is, mature native canopy trees that exist outside of a patch, are also assessed under the Regulations. Within the Otway Plains bioregion, EVC 55 has Eucalyptus spp as 'canopy trees'. For practicality, a standard extent amount has been developed for scattered trees, based on the habitat hectare assessment method.

No scattered tree native vegetation was recorded for the study area.

#### ***4.3 Implications***

The results show that no native vegetation condition is recorded for the study area. Consequently, there would be no implications for the removal of native vegetation under the Native Vegetation Permitted Clearing Regulations.

Refer to Plates 1-4 for photographs of the vegetation existing conditions.

## **5 CONCLUSIONS**

### **Description**

The land at 672-690 Portarlington Road Leopold (proposed Lot 2), that is the subject of this report, has been subjected to past disturbance and contains vegetation that is relatively degraded and dominated by exotic plant species and planted specimens. Habitat values within these areas are negligible.

No areas of native vegetation were recorded.

### **Implications**

No Local State or National significant plant species were recorded.

The results show that no native vegetation condition is recorded for the study area. Consequently, there would be no implications for the removal of native vegetation under the Native Vegetation Permitted Clearing Regulations.

### **Limitations**

There are not considered to be any significant limitations to the findings of this study.

## **Appendix 1 - ASSESSING CONSERVATION SIGNIFICANCE**

Conservation significance is assessed at a range of scales, including national, state, regional and local. Criteria used for determining the conservation significance of flora at national to local scales are presented below for botanical conservation significance.

### ***Botanical Significance***

**National** botanical significance applies to an area when it supports one or more of the following attributes:

a population of at least one nationally threatened plant species listed by Briggs and Leigh (1996) or plant species listed on the schedules to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

A nationally threatened ecological community listed on the schedules of the *Environment Protection and Biodiversity Conservation Act 1999*.

**State** botanical significance applies to an area when it supports one or more of the following attributes:

A population of at least one plant species threatened in Victoria, as listed by Gullan et al. (1990), NRE (2000a) or more recently in the unpublished records of the Flora Information System (NRE), or on the schedules to the Victorian *Flora and Fauna Guarantee Act 1988*.

An ecological community considered threatened in Victoria through its listing on the schedules of the *Flora and Fauna Guarantee Act 1988*.

**Regional** botanical significance applies to an area that supports one or more of the following attributes:

Supports a population of one or more regionally depleted species defined in a valid regional assessment of biodiversity (eg. Regional Native Vegetation Plan, Environment Conservation Council Report or Comprehensive Regional Assessment documents).

An ecological vegetation class that is considered endangered or vulnerable in a particular bioregion (based on Conn 1993 and the Regional Native Vegetation Plan), in which case the area is of **High Regional** significance.

An ecological vegetation class that is considered depleted in a particular bioregion (based on Conn 1993 and the Regional Native Vegetation Plan), in which case it is of **Regional** significance.

**Local** botanical significance applies to all remnant native vegetation that does not meet the above criteria. In much of Victoria native vegetation has been so depleted by past clearing and disturbance that all remaining vegetation must be considered to be of at least local conservation significance.

## 6 REFERENCES

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<https://www.environment.vic.gov.au/native-vegetation/native-vegetation>

DELWP website iv. EVC Benchmarks.

<http://www.depi.vic.gov.au/environment-and-wildlife/biodiversity/evc-benchmarks>

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<https://nvim.delwp.vic.gov.au/>.

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**Plates 1-4 Vegetation Photographs**



**Plate 1.** Planted exotic and non-native vegetation, typical conditions.



**Plate 2.** Planted exotic and non-native vegetation, typical conditions.



**Plate 3.** Planted exotic and non-native vegetation, typical conditions.



**Plate 4.** Planted exotic and non-native vegetation, typical conditions.