

1 October 2024

KLM Spatial
Suite 1, Building 3, 3 Ordish Road
Dandenong South 3175

Attention: Katelyn Nash (Director – Major Projects Manager)

Dear Katelyn,

RE: 350 NARRE WARREN – CRANBOURNE ROAD, CRANBOURNE EAST
FLORA AND FAUNA ASSESSMENT – NVPP MAPPING
NATURE ADVISORY REF. NO. 22200.01

1.1. Background

KLM Spatial engaged Nature Advisory Pty Ltd to conduct a flora and fauna assessment of a 65-hectare area of land in Cranbourne East – 350 Narre Warren-Cranbourne Road. Nature Advisory has undertaken numerous ecological assessments of this property since 2022. The specific area investigated, referred to herein as the ‘study area’, comprised areas of native vegetation identified on the study area’s north-eastern boundary by WSP Australia Pty Limited (WSP) in 2023 (Photo 1, below). These areas will be included in the Croskell Native Vegetation Precinct Plan (NVPP), with implications for native vegetation retention and removal outlined under this plan and subject to Clause 52.16 of the state planning scheme.



Photo 1: Native vegetation, marked as Habitat Zones 1P-4P, mapped by WSP in 2023.

This investigation was commissioned to provide information on the extent and condition of native vegetation in the study area according to Victoria's *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017a), herein referred to as 'the Guidelines'. This report outlines any implications under relevant national, state and local legislation and policy frameworks.

1.2. Methods

The field assessment was conducted on 23rd September 2024. During this assessment, the study area was surveyed in detail on foot by an experienced DEECA accredited botanist.

Sites in the study area found to support native vegetation were mapped through a combination of aerial photograph interpretation and ground-truthing using a hand-held GPS (accurate to approximately five metres).

1.3. Results

1.3.1. Native vegetation patches

Two patches (referred to herein as habitat zones) comprising the South Gippsland Plains Grassland (EVC 132_62) and Swamp Scrub (EVC 53) Ecological Vegetation Classes (EVCs), were identified on the northeastern boundary the property (Figure 1). This totalled an area of 0.010 hectares of native vegetation in patches and included no large trees.

Habitat Zone	EVC	Description
2P	South Gippsland Plains Grassland (EVC 132_62)	This habitat zone occurred beneath a canopy of planted eucalypts, on the study area's northeastern boundary. It comprised a groundcover of Weeping Grass, with a comparatively sparse occurrence of Native Rush species interspersed. Weed cover was moderate (35%) and associated with exotic pastures, primarily comprising Panic Veldt-grass, Brown-top Bent and Cocksfoot. Organic litter cover was high (40%) relative to the EVC benchmark and associated with native leaf litter from overhanging planted eucalypts of indigenous origin. Recruitment potential was low, given minimal bare ground cover (3%).
4P	Swamp Scrub (EVC 53)	<p>This habitat zone occurred adjacent to planted shrubs and eucalypts, on the study area's northeastern boundary. It consisted of a small tract of Swamp Paperbark, with native understory elements otherwise being absent. Weed cover was high (45%) and mostly associated with Panic Veldt-grass and Rye. Litter cover was moderate relative to the EVC benchmark and associated with exotic litter derived from introduced pastures.</p> <p>Although the area in which this vegetation occurred is modelled to support a Plains Grassland/Plains Grassy Woodland Mosaic, the dominance of Swamp Paperbark is more consistent with the Swamp Scrub EVC modelled to occur in close vicinity.</p>

Table 1: Summary of Vegetation Quality Assessment results

Habitat Zone	EVC	Area (ha)	Condition score (out of 100)	No. of large trees in HZ
2P	Plains Grassland (EVC132_62)	0.004	19	0
4P	Swamp Scrub (EVC 53)	0.005	26	0
Total		0.010		0

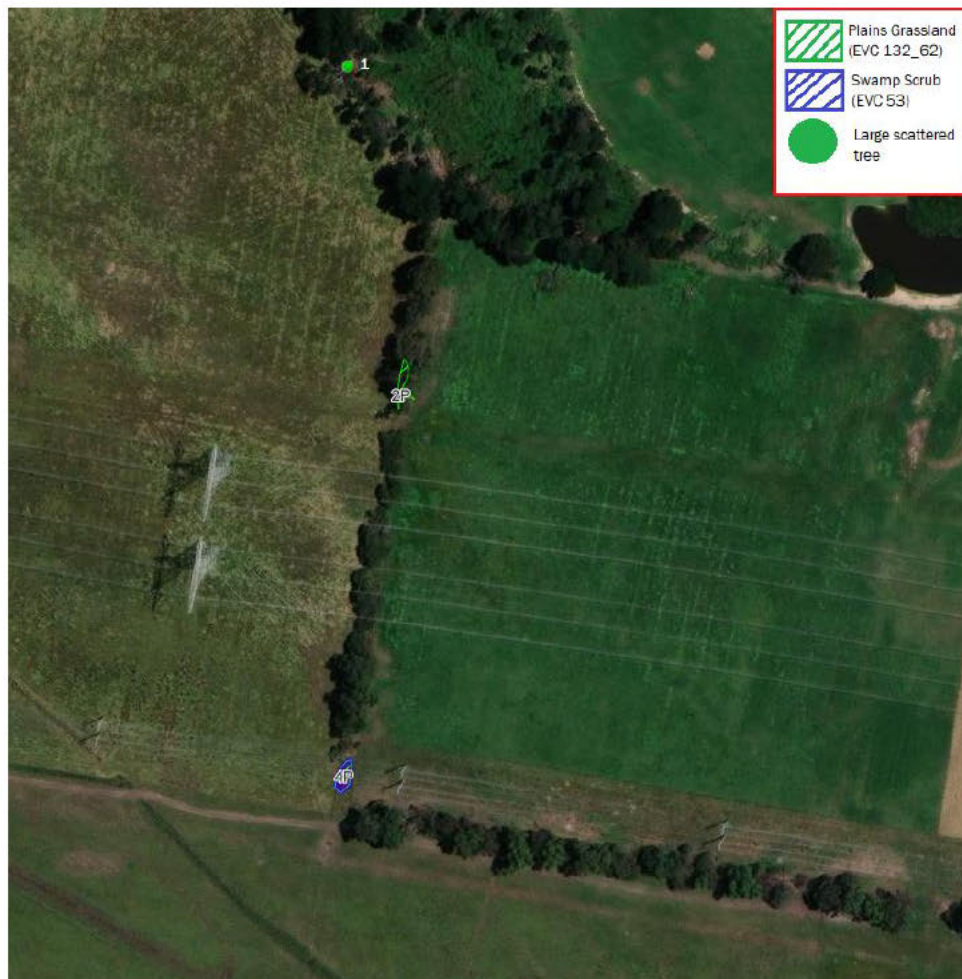
Detailed Vegetation Quality Assessment results can be found at Appendix 1.

1.3.2. Scattered trees

Scattered trees recorded in the study area would once have comprised the canopy component of Plains Grassy Woodland (EVC 55).

One large scattered tree (≥ 70 -centimetre DBH) occurred adjacent to the study area boundary (Figure 1). This comprised a remnant River Red-gum. This tree was assumed to be remnant, given its notable size (105cm DBH) and occurrence within an area otherwise supporting planted exotic Monterey Pine.

Figure 1: Native vegetation identified during the 2024 Nature Advisory assessment.



1.3.3. Inconsistencies with WSP Results

Absent patches

Both Habitat Zones 3P and 4P identified by WSP were absent during the most recent Nature Advisory assessment. The WSP Biodiversity Assessment states that “*Patches of Plains Grassy Woodland within the study area were predominantly due to River Red Gum Eucalyptus camaldulensis canopy. These three remnant patches are a highly modified example of this EVC with low understory species diversity.*” However, during the Nature Advisory assessment, the aforementioned River Red-gum canopy was attributed to planted individuals. These were determined to be planted, as they demonstrated uniform age and placement and occurred in alignment with other planted elements (see Photos 2-3). Additionally, native understory elements were generally absent in these areas (Photo 4), with the exception of an incidental occurrence of native graminoids that did not achieve the minimum 25% native perennial cover required to qualify as a patch, as per the Guidelines.



Photo 2: Planted River Red-gum, demonstrating uniform age.



Photo 3: Planted River Red-gum within the extent of Habitat Zone 1P, in alignment (rows) with other planted trees and shrubs.



Photo 4: Groundcover within the extent of Habitat Zone 3P (as per WSP mapping), demonstrating dense growth of exotic pastures.

EVC designations

Habitat zone 2P was identified as Plains Grassy Woodland (EVC 55) by WSP. While the study area is modelled to support a Plains Grassland/Plains Grassy Woodland Mosaic, South Gippsland Plains Grassland (EVC 132_62) was considered to be a more appropriate EVC designation. This was primarily due to a lack of remnant woody understory and canopy components typically associated with the Plains Grassy Woodland EVC. Plains Grassland was also the only EVC to be identified during 2022 Nature Advisory assessments, therefore demonstrating its likely dominance in the study area. However, given a mosaic of these EVCs is modelled to occur, this is a minor inconsistency.

Patch extents

There was a slight difference in the patch sizes of Habitat Zones 2P and 4P identified by WSP. Regarding 2P, this habitat zone demonstrated a significantly reduced extent in the Nature Advisory assessment, given that canopy values included in the WSP extent were determined to be planted and therefore did not contribute to the patch size. When considering patch extent differences for 4P, this is likely due to the inherent inaccuracies of hand-held GPS devices, which are generally accurate to approximately 5m. Alternatively, the patch extent may have changed slightly since 2023 assessments by WSP, based on factors such as weed infestations or dieback of some native vegetation.

Scattered trees

Two scattered trees were identified by WSP, with both occurring beyond the property fence line. However, of these scattered trees, only one (Tree 1) was confirmed to occur by Nature Advisory. The remaining scattered tree appeared to be planted on the basis of its uniform alignment with other planted trees. However, given that both trees occurred beyond the NVPP boundary, there are no further implications under the Croskell NVPP.

VQA scoring

WSP calculated Vegetation Quality Assessment (VQA) scores of 13 and 18 for Habitat Zones 2P and 4P respectively. However, Nature Advisory calculated scores of 19 for Habitat Zone 2P and 26 for Habitat Zone 4P. The difference in EVC designation for Habitat Zone 2P is an obvious cause of this disparity, given WSP assessed large tree and canopy components for Plains Grassy Woodland, which are not considered for Plains Grassland. The difference in scores otherwise appears to be largely due to differences in organic litter cover, weed cover and recruitment. Both organic litter cover and weed cover are based on the estimation of these values by the assessor, and therefore an element of subjectivity may influence these results. All of the above aspects of the VQA assessment are also likely to change on a seasonal basis, and these changes may have become more pronounced between the time of the assessments.

1.4. Conclusions

Habitat Zones 1P-4P that were identified by WSP are marked for retention under the Croskell NVPP. However, of these Habitat Zones, only a portion of 2P associated with native groundcover and 4P were deemed to occur by Nature Advisory during the most recent assessment. Vegetation in areas correlating with 1P and 3P was determined to consist of planted elements, overlying a primarily exotic groundcover. Therefore, it is advised that the presence of native vegetation is amended with regard to Habitat Zones 1P and 3P. The extent of Habitat Zones 2P and 4P should also be amended (i.e. reduced), based on the most recent detailed field assessment.

As such, given their poor quality, small size and isolated nature, these patches of native vegetation do not warrant retention in a NVPP.

Furthermore, it should also be noted that native vegetation identified by Nature Advisory occurred entirely beyond the subject property fence line, which delineates the NVPP boundary.

Recommendations

It is recommended that the authority undertaking the NVPP be made aware of the situation regards to native vegetation extent and quality in the study area and amend their plans accordingly.

Yours sincerely,

Alan Brennan

Director
Nature Advisory Pty Ltd

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References

DELWP 2017a, *Guidelines for the removal, destruction or lopping of native vegetation*, Department of Environment, Land, Water and Planning, East Melbourne.

DELWP 2024, *NatureKit*, Department of Environment, Land, Water and Planning, East Melbourne, Victoria, <https://www.environment.vic.gov.au/biodiversity/naturekit>.

Department of Sustainability and Environment (DSE) 2004a, *Ecological Vegetation Class (EVC) Benchmarks by Bioregion*, Department of Environment, Land, Water and Planning, East Melbourne.

Department of Sustainability and Environment (DSE) 2004b, *Native Vegetation: sustaining a living landscape, Vegetation Quality Assessment Manual – guidelines for applying the Habitat Hectare scoring method (Version 1.3)*, Department of Environment, Land, Water and Planning, East Melbourne.

Nature Advisory 2022, *350 Narre Warren-Cranbourne Road, Cranbourne - Flora and Fauna Assessment- Report No. 22200.01 (1.0)*, Nature Advisory Pty Ltd, Hawthorn East, consultant report prepared for Marnbeck Management Pty Ltd.

WSP 2024, *Croskell (Employment) Native Vegetation Precinct Plan*, WSP Australia Pty Limited, Southbank, consultant report prepared for Victorian Planning Authority.

WSP 2024, *Croskell Precinct Structure Plan – Biodiversity Assessment Update - Report No. PS135385*, WSP Australia Pty Limited, Southbank, consultant report prepared for Victorian Planning Authority.

Appendix 1: Detailed Vegetation Quality Assessment Results

Habitat Zone			2P	4P
Bioregion			GipP	GipP
EVC Number			132_62	53
Total area of Habitat Zone (ha)			0.004	0.005
Site Condition	Large Old Trees	/10	N/A	N/A
	Tree Canopy Cover	/5	N/A	0
	Lack of Weeds	/15	6	6
	Understorey	/25	5	5
	Recruitment	/10	0	5
	Organic Matter	/5	2	4
	Logs	/5	N/A	N/A
	Site condition standardising multiplier*		1.36	1.25
	Site Condition subtotal		18	25
Landscape Context	Patch Size	/10	1	1
	Neighbourhood	/10	0	0
	Distance to Core	/5	0	0
Total Condition Score		/100	19	26