



**Treed *environs***  
*a business name of Terrastylis Pty Ltd*

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**STATEMENT OF EVIDENCE  
BY JEFF LATTER  
ARBORICULTURAL & ENVIRONMENTAL  
CONSULTANT  
&  
ARBORICULTURAL  
ASSESSMENT & REPORT**

**PROPOSED REZONING AND NATIVE VEGETATION  
PRECINCT PLAN  
55 DORE ROAD  
PAKENHAM**

**AMENDMENT C234 – PAKENHAM EAST PSP**

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Prepared for  
Paul and Penny Carney

by  
Treed environs  
14 May 2018

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▪ TREES ▪ NATIVE VEGETATION ▪ BUSHFIRE MANAGEMENT

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# **1 STATEMENT OF QUALIFICATIONS AND EXPERIENCE**

## **1.1 Name and address**

Jeffrey Allan Latter  
Principal Consultant  
Terrastylis Pty Ltd, which trades as Treed Environs  
10 Meadowview Lane  
Emerald 3782

## **1.2 Qualifications and Memberships**

My educational qualifications and membership of professional associations are as follows:

- Bachelor of Forest Science, University of Melbourne
- Tree Risk Assessment Qualification (TRAQ) International Society of Arboriculture
- Member of International Society of Arboriculture
- Member of Arboriculture Australia

## **1.3 Experience**

- Current position           Principal Consultant with Terrastylis Pty Ltd
- 1995 - 1997                 Planning Officer for National Parks Service/Parks Victoria
- 1984 - 1995                 Land and Environmental Officer for Local Government
- 1982 - 1984                 Project fire fighter and Ranger with the Forests Commission  
Victoria/Department Conservation Forests and Lands

## **1.4 Areas of Expertise**

My professional experience includes 30 years' experience in vegetation management and in excess of 20 years vegetation management in association with planning controls:

I have extensive experience in vegetation management, including indigenous and exotic vegetation both in natural systems and urban situations.

## **1.5 Expertise to make the statement**

I have considerable experience in assessing the value and suitability of vegetation to be retained in residential development.

## **1.6 Instructions**

In April 2018 I was engaged by Penny and Paul Carney to assess trees on the northern end of their property and provide advice on the suitability for the retention on the site with the rezoning to residential. I was also asked to consider the suitability for retention of trees if the residential zone was increased to include land closer to the Deep Creek boundary of the site and into the proposed reserve set out in the precinct structure plan. During the assessment I was also asked to comment on 3 patches of native vegetation on the northern part of the property.

I was subsequently engaged to prepare this Statement of Evidence and attend Panel hearings.

## **1.7 Matter used in making the report**

In the preparation of this report I have:

- Reviewed the amendment documents for the subject property.
- Inspected trees on or adjoining the subject site on April 2018. The assessments were undertaken from the ground and no excavation or sampling was undertaken.
- Utilised Tree Risk Assessment Manual and structure plan for considering tree risk.
- Considered documents provided by Penny and Paul Carney relating to tree failures on their property in recent years

## **1.8 Reference materials**

- The tree assessment followed the Visual Tree Assessment developed by Mattheck and Breloer and published in “The body language of trees” The Stationary Office 1999.
- Structural root radius and Tree Protection Zones are in accordance with Standards Australia AS 4970 – 2009.
- Tree risk management is in accordance with Tree Risk Assessment Manual International Society of Arboriculture

## **1.9 Identity of other persons relied on in making this report**

No other person assisted me in the preparation of this report.

## **1.10 Summary of opinions**

The subject property has a history of tree failures that needs to be considered in determining whether trees are appropriate for retention.

The NVPP should be updated to reflect trees that have failed.

Trees should only be considered for retention when a substantial public exclusion area is provided. Substantial public exclusion area is likely to be a minimum of 1.5 times the tree height of trees to be retained in residential or high use public areas.

The retention of trees within residential areas will affect the number of lots that will be created in the future subdivision of the land. This will be due to the need for substantial public exclusion zones and the creation of lots or reserves with an area of greater than 4000m<sup>2</sup> for the trees to not be deemed lost.

There is a conflict within the Precinct Structure Plan between the retention of the trees and the proposed north south road. Trees 211, 226 and 229 will need to be removed for the road shown.

Patch SW2 is of low value and should be shown as vegetation to be removed in the NVPP.

Part of patch SW31 on the northern boundary of the site should be able to be retained.

### **1.11 Provisional opinions**

To the best of my knowledge all matters on which I have made comment in this statement have been appropriately researched or are based on my knowledge and experience. This statement does not contain any provisional opinions, which have not been fully researched.

### **1.12 Matters outside of my expertise**

To the best of my knowledge, none of the matters on which I have made comment in this statement are outside my area of expertise. The report is complete and to the best of my knowledge does not contain any matters, which are inaccurate.

### **1.13 Practice Note Declaration**

I have made all the enquiries that I believe are desirable and appropriate and that no matters of significance, which I regard as relevant, have to my knowledge been withheld from the panel.

A handwritten signature in black ink, appearing to read 'Jeff Latter', with a long horizontal flourish extending to the right.

Jeff Latter B Forest Science (Melb), TRAQ (ISA), MISA, M Arb Aust

Principal Consultant

May 2018

## **2 VEGETATION ASSESSMENT:**

### **2.1 Background**

Ecology and Heritages Partners undertook *Ecological investigations for the Pakenham East Precinct Structure Plan*. This report was provided as a background report to amendment C234.

The report (page 6) indicates that the original survey was undertaken in November 2012 and that additional surveys were undertaken in early 2017. 669 scattered trees were recorded across the precinct in 2012. The 2017 additional surveys recorded 530 scattered trees. The difference of 139 trees was attributed to “storm damage and clearing”. The report does not provide any data on the location of trees that were lost between November 2012 and early 2017.

### **2.2 Subject property 45, 55 & 95 Dore Road**

The subject property comprises 3 lots being 45 Dore Road (Lot 1 PS 512523), 55 Dore Road (Lot 1 PS 815190) and 95 Dore Road (Lot 2 PS 815190). The Ecology and Heritage Partners report refers to these as properties 10, 11 and 14. However the boundaries shown on the plans in the Ecology and Heritage Partners report do not match the current lay out of lots. This creates some confusion in referencing but is otherwise not significant.

In May 2018 the Carney family undertook a review of Nearmap © images between 2012 and 2017 and identified 28 trees on their property that had failed in this time period. 16 trees are not shown on the NVPP. 12 Tree are shown on the NVPP. These are 8 trees proposed for removal and 4 trees proposed for retention.

### **2.3 Northern part of subject site**

In April 2018 I assessed trees on the northern part of the subject site. The assessment was specifically to review nominated trees but additional trees were assessed where these trees were located between nominated trees. The plan shown as Figure 2C of the Pakenham East Native Vegetation Precinct Plan (Ecology and Heritage Partners December 2017) was used as the basis for assessment.

The assessment showed that Trees 158, 185, 197, 235 & 237 have failed and are no longer standing or were not present on site. Tree 158 failed between site visits. Tree 190 has recently died.

Trees 162 and 163 I consider to be *Eucalyptus viminalis* subsp *viminalis* rather than subsp *pryoriana* as shown.

### **2.4 Discussion/conclusions**

The extent of tree failures is significant to the development of the property and risk to future residents or users of public reserves. Tree failures are likely to be in response to tree buttress and root plate damage caused by long term stock aggregation around the base of trees. This is well known to cause root damage both directly from the cattle but also through changes in soil structure through pugging and changes in nutrient regimes. Substantial public exclusion areas, say of 1.5 times tree height, should be available prior to trees being considered for retention in developable areas or on high use reserves.

Failed trees should be removed from the NVPP and all consideration.

Tree 684 and 685 could not be found and it is also likely that these trees have failed. Trees 193, 194, 195 & 196 are heavily decayed and should be considered unstable. These trees, in the absence of a substantial public exclusion area, are not suitable for retention and should be shown as trees to be removed.

Trees 199, 200 & 201 are in very poor condition and quite fragile. These trees are only suitable for retention with a substantial public exclusion area. There may be opportunity for a public exclusion area to be applied around these trees.

Trees 211, 226 and 228 are shown to be retained. The structure plan shows a north south road to immediately adjoining the gas easement. These trees are all substantial trees with AS 4970-2009 tree protection zones (TPZ) of approximately 12, 15 & 15 metres around each tree. The proposed road and the retention of these trees are incompatible. Either the trees should be shown for removal or the road will need to be rerouted away from these trees. Encroachment into TPZ of retained living trees should not exceed 10% of the area of the TPZ and appropriate compensating area should be available.



**Part of Future Urban Structure plan showing North South Road**

Tree 160 is likely to be a planted tree and is less than 10 m from a building. This tree is exempt from a permit for removal under clause 52.17. This tree should be shown for removal and should be excluded from offset requirements.

From my site assessment it is quite apparent that trees are failing frequently. Most of the failed trees have been dead trees but the recent failure of Tree 158 confirms that failure is not limited to dead trees.



**Recently fallen Tree 158**

The NVPP proposes to retain some dead stag and other scattered trees with “Developable Area – Residential”. The grazing and congregation of stock around trees has caused damage to the root plate of many trees. This is often not reflected in the superficial appearance of the canopy of live trees but can result in trees being unstable. These trees are quite large and general arboricultural hazard assessments look at uses within 1.5 times the tree height. Assuming the trees are 25 metres high (many will be higher) then the hazard assessment area is 1.5 times 25 m or 37.5 m. This would pose a significant constraint on development. Unless there is a high level of understanding that the trees being retained will be there for the long term then it would appear to be contrary to the development intent to retain these trees.

### 3 PATCHES OF VEGETATION

The Ecology and Heritage Partners report identified 3 patches of native vegetation on the northern part of the property. These are all Swampy Woodland. These patches are referred to as SW2, SW3 and SW31.

Ecology and Heritage Partners describes Swampy Woodland as:

*“Swampy Woodland is described as open eucalypt woodland up to 15 metres tall with ground layer dominated by tussock grasses and/or sedges and often rich in herbs. This EVC occurs on poorly drained, seasonally waterlogged heavy soils, primarily on swamp deposits but extending to suitable substrates within some landscapes of sedimentary origin (DSE 2013b).”*

*Remnant patches of Swampy Woodland are scattered throughout the study area in association with drainage lines and low lying areas that are prone to waterlogging. The condition of Swampy Woodland patches varied from poor to moderate and canopy trees were absent or sparse. Native flora species associated with the Swampy Woodland remnants included, Swamp Gum, Mealy Stringybark, Swamp Paperbark, Tall Sedge, Thatch Saw-sedge, Joint-leaf Rush and Toad Rush.”*

Patch SW2 is devoid of trees and Swamp Paperbark. Only Rush (Juncus) species were observed in the area.

SW2 is proposed to be retained and SW3 and SW31 are proposed to be removed. The E&HP report assigns habitat scores of 15, 24 and 18 to these patches.

The habitat score for patch SW2 seems high as this area has been continuously grazed and has been used for hay production. The extent of cover in April 2018 was unlikely to define this area as a patch.

The habitat scores for patches SW3 and SW31 are appropriate. SW31 is shown to be removed. This is surprising as a substantial area of this patch is located on the uncredited open space. There should be little reason why at least the part of this patch on the northern edge of the property should not be retained.

Should you require any additional information please contact me on 0419899446.

Yours faithfully,



Jeff Latter B Forest Science (Melb), MISA, MARb Australia

Principal Consultant.