Border trees Pty Ltd
A.C.N. 659218176
A.B.N 57659218176

Arboricultural Assessment & Report

Towong Shire

April 2025

Mildren Street Corryong

bordertrees

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1 Scope

1.1 Stephen Sjoberg from Towong Shire Council has requested a Arboricultural assessment report be undertaken at Midren Street Corryong.

1.2 This report was written by Andrew Mitchener (B.Bus eco, AQF level 5 Arborist)

2 Introduction

2.1 The shire council of Towong are undertaking investigations to establish the condition and value of the trees in question.

2.2 Under AS4970-2009 (Australian Standard – Protection of trees on development sites), the following report would be defined as a 'Preliminary assessment and arboricultural report'.

The standard indicates that this information is to be used by planners, architects and designers, in conjunction with any planning controls and other legislation, to develop the design layout in such a way that trees selected for retention are provided with enough space.

3 Key Objectives

3.1 To undertake a general assessment of trees located on site.

3,2 To provide an assessment of the trees noting their overall condition, structure, safety and suitability for protection.

3.3 To provide an estimated value of the trees in dollar terms.

3.4 To provide recommendations on the suitability of the trees for protection, and provide approved methods of tree protection.

4 Method

4.1 Andrew Mitchener from Border Trees conducted a site and tree inspection on the 25th of March 2025.

4.2 The tree assessment consisted of a visual inspection, which was undertaken with regard to modern arboricultural principles and practices. The assessment did not involve a detailed examination of below ground or internal tree parts. The assessment was undertaken from ground level to determine tree condition and species type. Measurements were taken to establish trunk and crown dimensions.

4.3 The trees have been allocated a retention value rating which combines tree condition factors with functional and aesthetic characteristics in the context of an urban landscape. The ratings can act as a guide to assist in decisions relating to tree management and retention.

4.4 A monetary, tree valuation was derived using The Amenity Value Formula (Dr.Peter Yau, 1990).

5 Observations

Tree #1 Eucalyptus camaldulensis, Red Gum

Tree Valuation Calculation

Base Value (B)		DBH 115cm		$135,029.58
Structural Root Zone:		3.5m		
Tree Protection Zone		13.8m		
Species factor (S)		50-150 years		0.7
Tree condition	Trunk	Solid and Sound	5	
	Growth	5-15cm twig elongation	2	
	Structure	some deadwood	3	
	Pest and diseases	minor symptoms	2	
	Canopy	full but unbalanced	3	
	Life expectancy	10-50years	3	
Tree Condition (C)	Fair		18 Fair	0.6
Aesthetics (A)	Wide Plantings			0.7
Locality (L)	Residential streets			1.5

Total Value.

Base Value (B) X Species (S) X Aesthetics (A) X Locality (L) X Condition (C)

$135,029.58 X 0.7 X 0.7 X 1.5 X 0.6 = **$59,548**

Tree #2 Eucalyptus camaldulensis, Red Gum

Tree Valuation Calculation

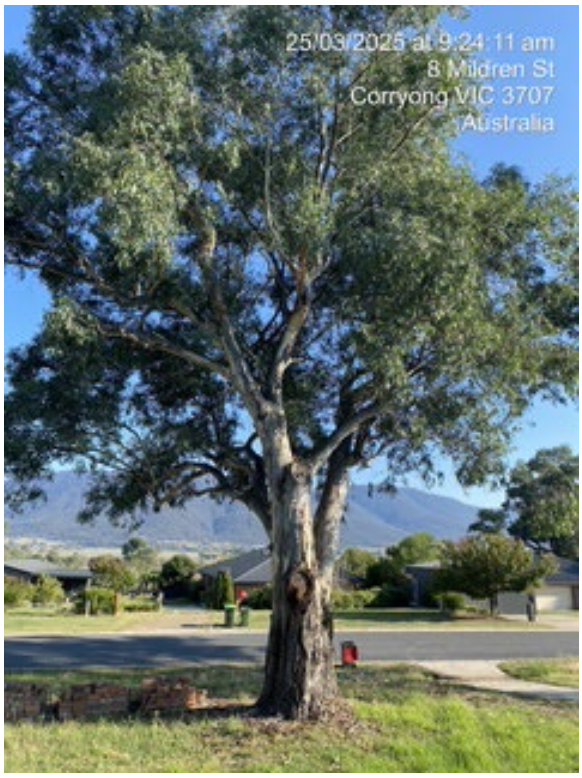
Base Value (B) $214,668.95		DBH 145cm		
Structural Root Zone:		3.86m		
Tree Protection Zone		17.4m		
Species factor (S)		50-150 years		0.7
Tree condition	Trunk	Solid and Sound	5	
	Growth	5-15cm twig elongation	2	
	Structure	some deadwood	3	
	Pest and diseases	minor symptoms	2	
	Canopy	full but unbalanced	3	
	Life expectancy	10-50years	3	
Tree Condition (C)	Fair		18 Fair	0.6
Aesthetics (A)	Wide Plantings			0.7
Locality (L)	Residential streets			1.5

Total Value.

Base Value (B) X Species (S) X Aesthetics (A) X Locality (L) X Condition (C)

$214,668.95 X 0.7 X 0.7 X 1.5 X 0.6 = **$94,669**

Tree #3 Eucalyptus camaldulensis, Red Gum



Tree Valuation Calculation

Base Value (B)		DBH 115cm		$135,029.58
Structural Root Zone:		3.5m		
Tree Protection Zone		13.8m		
Species factor (S)		50-150 years		0.7
Tree condition	Trunk	Solid and Sound	5	
	Growth	5-15cm twig elongation	2	
	Structure	some deadwood	3	
	Pest and diseases	minor symptoms	2	
	Canopy	full but unbalanced	3	
	Life expectancy	10-50years	3	
Tree Condition (C)	Fair		18 Fair	0.6
Aesthetics (A)	Wide Plantings			0.7
Locality (L)	Residential streets			1.5

Total Value.

Base Value (B) X Species (S) X Aesthetics (A) X Locality (L) X Condition (C)

$135,029.58 X 0.7 X 0.7 X 1.5 X 0.6 = **$59,548**

Tree #4 Eucalyptus camaldulensis, Red Gum

Tree Valuation Calculation

Base Value (B)		DBH 95cm		$92,146.84
Structural Root Zone:		3.23m		
Tree Protection Zone		11.4m		
Species factor (S)		50-150 years		0.7
Tree condition	Trunk	Solid and Sound	5	
	Growth	5-15cm twig elongation	2	
	Structure	some deadwood	3	
	Pest and diseases	minor symptoms	2	
	Canopy	full but unbalanced	3	
	Life expectancy	10-50years	3	
Tree Condition (C)	Fair	18 Fair		0.6
Aesthetics (A)	Wide Plantings			0.7
Locality (L)	Residential streets			1.5

Total Value.

Base Value (B) X Species (S) X Aesthetics (A) X Locality (L) X Condition (C)

$92,146.84 X 0.7 X 0.7 X 1.5 X 0.6 = **$40,636**

6 Discussion

6.1

The Australian Standard (AS4970-2009) – 'Protection of trees on development sites' puts forward a process for undertaking tree inspections and reports on property where development Site frontage is being considered. It recommends a preliminary assessment be undertaken to help guide planners and property owners with regard to the preservation of existing trees; that is trees that might contribute to the completed proposal. The standard points out that the preliminary report 'information is to be used by planners, architects and designers, in conjunction with any planning controls and other legislation, to develop the design layout in such a way that trees selected for retention are provided with enough space'.

These assessments typically reveal a range of trees with varying attributes for health, structure and overall value. Some trees may be considered insignificant for their size, age, species type or condition, but they might still be considered for retention because they are situated conveniently on the site. Conversely, some trees may be exceptional for various reasons but there may be no scope for their retention because of their location or other site constraints. An objective of the tree assessment is to determine the trees that may be preferable, in terms of preservation, and to identify poor or insignificant trees that might be easily replaced or replaced with better species.

The arborist must also exercise judgement and expertise with respect to the types of trees that are deemed suitable for retention, and they should also consider what stage the tree is at in its overall lifecycle.

The subject site contained 4 significant Red Gum trees.

Each of these trees have previously been pruned at the time of construction away the buildings. As a result, the canopy weight is heaviest towards the road and away from the buildings. This pruning has reduced the likelihood of a tree failure impacting the dwellings.

However, the poor pruning practices have also left the trees with lopsided canopies, stubs and new epicormic growth. These new branches are poorly attached and prone to fail in stormy conditions.

6.2 Tree protection zones on development sites

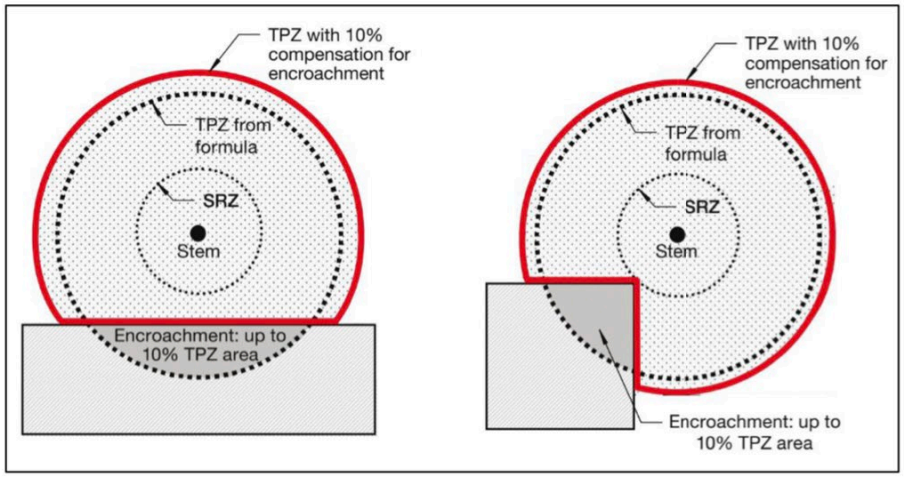
The level of encroachment and the impact to specific trees can be estimated by comparing standard or modified tree protection clearances with those clearances provided to trees in the development design. The overall impact towards a specific tree will be based on the severity of encroachment into the respective tree protection zones. The degree of root activity in the tree protection zone can vary significantly with local growing conditions, which may result in more or less severe impacts to trees. The most accurate means of determining root activity in these zones is to undertake subsurface root investigations. The alternative to undertaking root investigations is to assign appropriate tree protection zones.

This report adopts AS4970-2009, Australian Standard – Protection of trees on development sites as the preferred tree protection method. The method provides a

tree protection zone and a tree protection fencing distance (radial measurement from trunk centre) by using the width of the trunk at 1.4m above ground multiplied by 12. The prescribed TPZ distances are provided for each tree in Appendix 1 and they are also illustrated for specific trees at Appendix 3.

There is scope to reduce the tree protection zone by an area of 10% without further investigations. The rationale for any reduced tree protection distance is detailed in AS4970-2009 (Australian Standard – Protection of trees on development sites). Under encroachment Type A, it is acceptable to reduce the Tree Protection Zone (TPZ) area by 10%. This translates to a reduction in radial clearance distance of approximately 33% on one side of the tree only.

This can be applied if there is contiguous space around the tree for root development to occur. The following diagram, from AS4970-2009, is provided to illustrate the approach.



7 Recommendations

7.1 The site contained 4 significant Red Gum trees.

7.2 It is recommended that all 4 trees be **retained**.

7.3 All 4 trees will benefit from pruning.

Specifically, this will involve:

-Dead wood removal

-Epicormic growth removal

-Stubs pruned back to bridge bark ridge

8 References

Australian Standard AS 4970, 2009. Protection of trees on development sites. Standards

Australia Type A Type B

Gregory M Moore, Lifetime cost models for large, long lived, street trees in Australia

Kieron J. Doick et al. Valuing amenity trees as public assets.

Dubbo Regional Council Tree valuations form using Dr Peter Yau formula derived from the Maurer-Hoffman Formula

9 Definitions

The TPZ and SRZ are defined in AS4970-2009, Australian Standard – Protection of trees on development sites as:

Tree protection zone (TPZ)

A specified area above and below ground and at a given distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development.

Structural root zone (SRZ)

The area around the base of a tree required for the tree's stability in the ground. The woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is nominally circular with the trunk at its centre and is expressed by its radius in metres. This zone considers a tree's structural stability only, not the root zone required for a tree's vigour and long-term viability, which will usually be a much larger area

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1. Any legal description provided to Border Trees is assumed to be correct. Any titles and ownerships to any property are assumed to be correct. No responsibility is assumed for matters outside the consultant's control.

2. Border Trees assumes that any property or project is not in violation of any applicable codes, ordinances, statutes or other local, state or federal government regulations.

3. Border Trees has taken care to obtain all information from reliable sources. All data has been verified insofar as possible; however Border Trees can neither guarantee nor be responsible for the accuracy of the information provided by others not directly under Border Trees Arboriculture control.

4. No Border Trees employee shall be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

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11. To the writer's knowledge all facts, matter and all assumptions upon which the report proceeds have been stated within the body of the report and all opinion contained within the report have been fully researched and referenced and any such opinion not duly researched is based upon the writers experience and observations