



Arboricultural Report

For

Joscon Tasmania Pty Ltd

Site

**224 Longmans Road, Margate,
7054, TAS**

Prepared By

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1. Overview

Commissioned by Matthew Carter of Joscon Tasmania, Tree Pioneers was engaged to provide an Arboricultural Report in response to an RFI from Kingborough Council. The proposed development of the access road requires widening to accommodate fire trucks to be bushfire compliant. There are 4 locations onsite where trees have been identified to be within 15m of the access upgrade.

2. Key Objectives

- Provide a tree assessment and record tree data.
- Discuss and provide recommendations for the management of trees on development sites.
- Recommendations in line with AS4970-2025

3. Method

The site was inspected from the ground on the 26th of May 2026 by Joe Loorham. The trees were assessed using the Visual Tree Assessment (VTA) methods and hazard identification methods described by Harris, Clark & Matheny (2004), Lonsdale (1999), Matheny & Clark (1998), Mattheck & Breloer (1994), and Matheny & Clark (1994). Tree data and a detailed site map were supplied by North Barker Ecosystems Services. The data provided the following.

- Species identification and origin
- Approximate age of the tree
- Stem diameter at 1.4 metres above ground level with DSH tape or at ground if not possible
- An estimation of the height and width of the tree canopy with Nikon Forestry Pro 2
- The structure of the tree
- The health of the tree
- Potential habitat

4. Scope and Limitations

- The assessment reflects the condition of the trees **at the time of inspection only**.
- This assessment is based on visual, ground-level observations only.
- Trees are dynamic and subject to environmental forces, decay processes, and weather conditions that may alter their condition between inspections.
- The report does not include root-zone excavation, internal decay detection (Tomograph), or soil testing.

5. Site

The site is in the municipality of the Kingborough Council. The site is privately owned and has an existing access path. The existing access path is above grade. The path appears to have been in place for some time. There are 41 trees greater than 25 DSH within 15m of the proposed development. There are 4 separate locations along the access road that have been assessed.

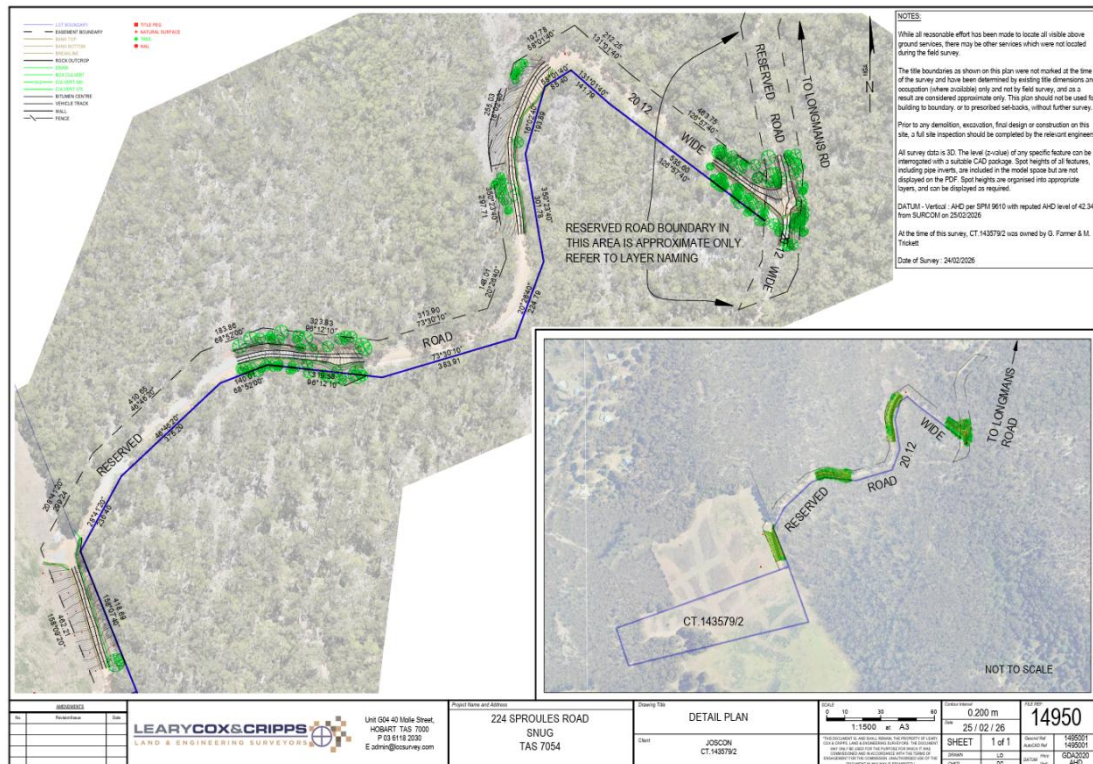


Figure 1. Plans for widening the access road.



Figure 2. Trees within 15m of the access road upgrade and there TPZ.

6. Tree Data

	Tree ID	Common name	Age	Origin	DSH (cm)	TPZ	Retention Value	Notes
1	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.45	5.4		
2	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.42	5.04		
3	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.46	5.52		
4	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.42	5.04		
5	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.34	4.08		
6	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.44	5.28		
7	<i>Eucalyptus obliqua</i>	Stringybark	Young	Native	0.3	3.6		
8	<i>Eucalyptus obliqua</i>	Stringybark	Dead	Native	0.6	7.2		Dead
9	<i>Eucalyptus viminalis</i>	White Gum	Dead	Native	0.7	8.4	Very High	Dead
10	<i>Eucalyptus viminalis</i>	White Gum	Young	Native	0.32	3.84	Very High	
11	<i>Eucalyptus viminalis</i>	White Gum	Young	Native	0.4	4.8	Very High	
12	<i>Eucalyptus viminalis</i>	White Gum	Young	Native	0.34	4.08	Very High	
13	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.41	4.92		
14	<i>Eucalyptus globulus</i>	Blue Gum	Young	Native	0.26	3.12		
15	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.32	3.84		
16	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.85	10.2	Very High	
17	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.62	7.44	High	
18	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.47	5.64		
19	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.45	5.4		
20	<i>Eucalyptus globulus</i>	Blue Gum	Young	Native	0.37	4.44		
21	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.46	5.52	High	
22	<i>Eucalyptus pulchella</i>	White Peppermint	Young	Native	0.31	3.72		
23	<i>Eucalyptus pulchella</i>	White Peppermint	Young	Native	0.3	3.6		
24	<i>Eucalyptus pulchella</i>	White Peppermint	Young	Native	0.4	4.8		
25	<i>Eucalyptus pulchella</i>	White Peppermint	Young	Native	0.5	6		
26	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.34	4.08		
27	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.35	4.2		
28	<i>Eucalyptus pulchella</i>	White Peppermint	Dead	Native	0.44	5.28		Dead
29	<i>Eucalyptus globulus</i>	Blue Gum	Young	Native	0.28	3.36		
30	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.48	5.76	High	
31	<i>Eucalyptus pulchella</i>	White Peppermint	Young	Native	0.32	3.84		
32	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.37	4.44		
33	<i>Eucalyptus pulchella</i>	White Peppermint	Mature	Native	0.38	4.56		
34	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.54	6.48	High	
35	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.7	8.4	Very High	
36	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.8	9.6	Very High	
37	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.51	6.12	High	
38	<i>Eucalyptus obliqua</i>	Stringybark	Mature	Native	0.35	4.2		
39	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.9	10.8	Very High	
40	<i>Eucalyptus globulus</i>	Blue Gum	Mature	Native	0.36	4.32		
41	<i>Eucalyptus obliqua</i>	Stringybark	Mature	Native	0.37	4.44		

Table 1. Tree data.

7. Observations

The site is 224 Longmans Road, Margate. There is a proposed upgrade to the access road for bushfire compliance. There are 41 trees greater than 0.25cm that are within 15 metres of the development. The trees on site are all native specimens indigenous to Tasmania.

In general, the trees present typical characteristics for species. The trees are in fair health and structure. The site is an unkept bush block.

The site has an existing above grade access road. This road has been installed well. There are existing drains and walls between the trees on site and the road. There are differences in topography throughout the site making it unlikely for any roots to be near the roadway.

Trees grow in a delicate balance with their surrounding environment, and the effects of disturbance or site changes are often, not immediately obvious. Additional impacts to already stressed trees, such as construction activities, can add further stress and cause advanced decline, which cannot be reversed.

Machinery and tools can wound or cause mechanical damage to the above-ground parts of a tree. Mechanical damage to wood or bark; the tree's outer protective tissue, creates an entry point for pathogens. Although a tree may seal a wound, the initial damage is permanent.

Works such as trenching, excavation, and site cuts can directly damage trees by removing roots that absorb water and nutrients critical for tree health, or by severing structural roots that keep the tree upright. Various activities, including soil compaction in the root zone, sealing the surface, and adding fill over roots, can inhibit root growth and function by limiting oxygen and moisture availability in the soil. Such damage to trees may take several years to become apparent in the crown but can also be sudden and irreversible. It is therefore important that roots are protected throughout all stages of development.



Figure 3. Image of above grade access road.



Figure 4. Image of Tree 16.



Figure 5. Image of above grade access road.



Figure 6. Image of old stone wall separating trees and access road.



Figure 7. Image of above grade access road.



Figure 8. Image of front gate with large trees beside it.

8. Conclusion/Recommendations

The proposed upgrade of the access road to 224 Longmans Road, Margate has 41 trees that were assessed. There are no trees that require removal. All encroachment is irrelevant as it is above grade and or separated from the access path by the topography of the site. The access path has been installed well and should be extended using the same method.

RFI

- A) Map with tree locations (Figure 2) and tree data (Table 1) provided in report.
- B) No trees to be removed
- C) Trees can be retained with above grade installation of the access road extension for bushfire compliance.

Development methods.

Listed below is the method to extend the access Road onsite.

- A gravel access road can be extended in the same fashion it has been developed. That is above grade and semi permeable construct. This development must be undertaken sensitively to avoid damage to the roots. An example would include a larger rock (ballast rock) as a base and smaller rocks as a finish on top.

Temporary Tree Protection Measures

Listed below are protection measures to be implemented, prior, during and can be removed after all works are complete.

- Installation of fences at the edge of the Tree Protection Zone (TPZ).
Figure 15. depicts a typical TPZ fence. A strained wire fence with bunting will be acceptable.
- Tree Protection fences to be erected at the edge of the encroachment.
- A sign installed on and along TPZ fences to ensure no access to area.
Figure 16. depicts a typical TPZ sign.
- Appoint a site arborist.
- Inspection by site arborist to 'sign off' Tree Protection measures implementation.

Tree Protection

Notional Root Zone (NRZ)

Zone enclosed by a radius 12 times the Diameter at Standard Height (DSH) that is a primary trigger for arboricultural input on a development site.

Tree Protection Zones (TPZ)

The specific area set aside above ground at a given distance from the trunk set aside for the protection of the 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 Zones (SRZ)

The area around the base of a tree is of value 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 the trees structural stability only, not the root zone required for a tree's vigour and long-term viability, which will usually be much larger area.

Encroachment

In some case, encroachment into the TPZ is necessary. There are provisions for encroachment, within the Australian standards framework. Encroachment is categories as minor or major.

Minor Encroachment AS 4970-2025

Minor encroachment is less than or equal to 10% of the TPZ and doesn't enter the SRZ (Structural Root Zone). Generally, it is unlikely that there will be any significant impact to tree health, longevity or structure. Tree protection should be implemented during site works. An equivalent area to the encroachment shall be incorporated into the TPZ, unless the project arborist can otherwise demonstrate the tree will remain viable.

Moderate Encroachment AS 4970-2025

Moderate encroachment is greater than 10% and less than or equal to 20% of the TPZ and doesn't enter the SRZ. The project arborist shall be engaged to review the proposed impact and undertake any necessary investigation to demonstrate how the tree will remain viable. This may be through implementation of suitable design measures and construction control measures to mitigate impact during the process. An equivalent area to the encroachment shall be incorporated into the TPZ, unless the project arborist can otherwise demonstrate the tree will remain viable.

Major Encroachments AS 4970-2025

Major encroachment is greater than 20% of the TPZ and into the SRZ. The project arborist shall be engaged to review the proposed impact and undertake any necessary investigation to demonstrate how the tree will remain viable. This can include research such as root investigation, soil analysis, historical records of the tree or site relevant literature and examples of similar encroachment. These encroachments must be supervised by the project arborist. An equivalent area to the encroachment shall be incorporated into the TPZ, unless the project arborist can otherwise demonstrate the tree will remain viable.

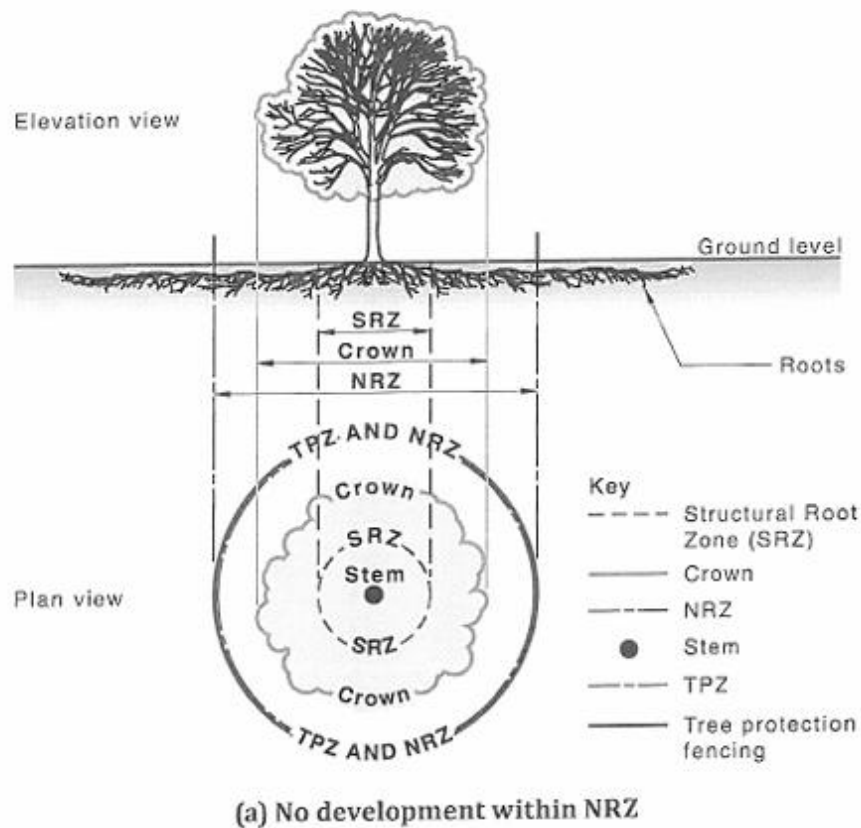
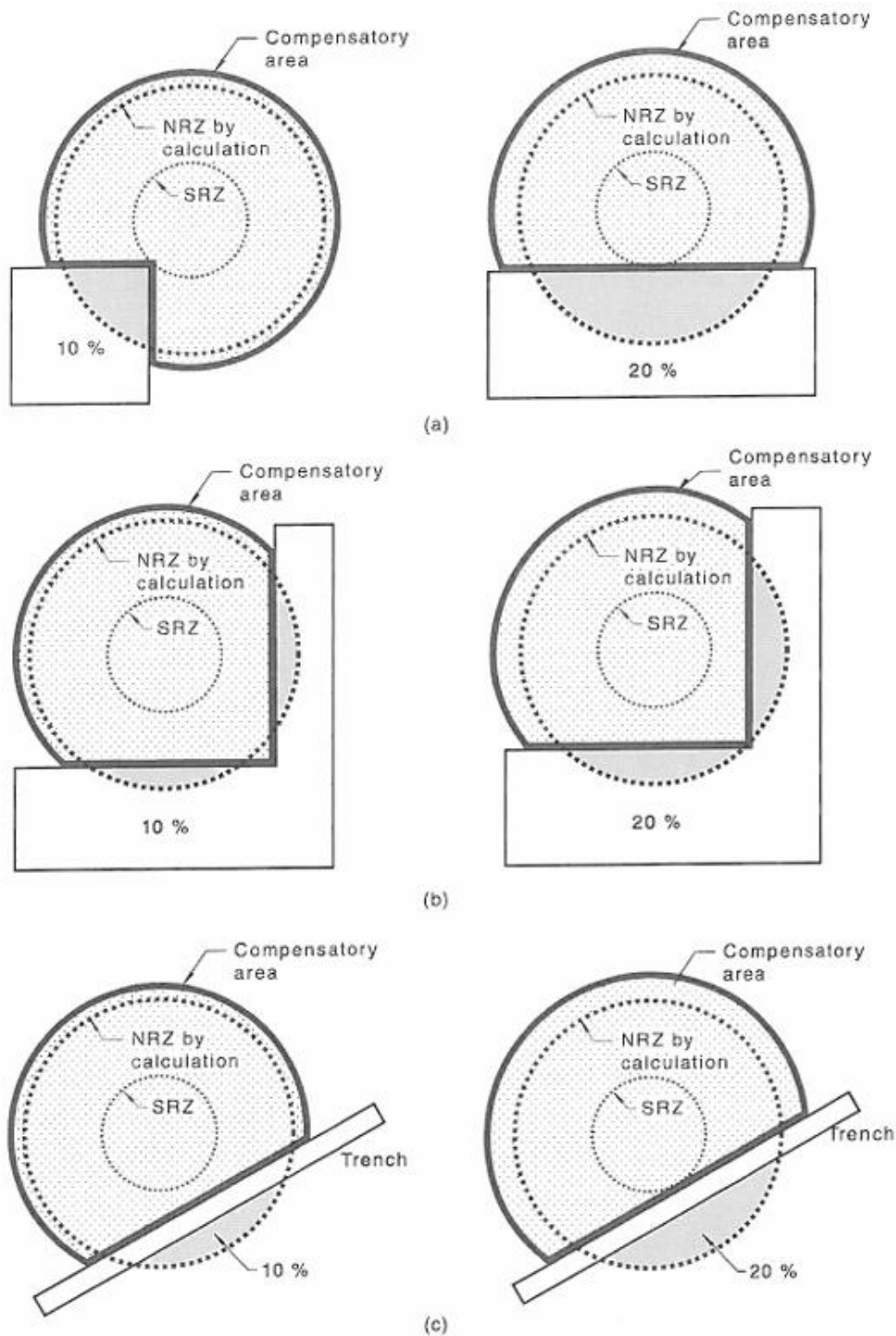


Figure 9. Image of a tree with no encroachment showing all the requirements. Image source from Australian Standard 4970-2025.



NOTE These examples are not to scale and are for illustrative purposes. The proposed encroachment is considered minor if it is less than or equal to 10 % of the area of the NRZ, has not had recent TPZ encroachments and is outside of the SRZ (see [Clause 3.4](#)). The proposed encroachment is considered moderate if it is greater than 10 % and less than or equal to 20 % of the area of the NRZ and is outside of the SRZ (see [Clause 3.4](#)).

Figure 10. Examples of various encroachments. Sources Australia Standard 4970-2025.

Development sites

Development sites incorporating trees need to implement protection measures to ensure the tree remains viable in the future landscape. Damage to trees during development can occur directly to the tree and indirectly to it through its environment.

- Direct damage includes mechanical injury to the trunk, severing roots, or alterations to the soil environment in the immediate vicinity of the roots. This included compaction or loss of organic matter.
- Indirect damage includes soil moisture alterations, changes in water tables and drainage patterns.

On development sites, the protection of trees is achieved with a TPZ (Tree Protection Zone). TPZs are calculated according to *AS 4970-2025 Protections of amenity trees on development sites*. TPZ are based on a NRZ which 12 times the trunk diameter at 1.4 m above ground level. Once the NRZ has been calculated, it can then be adjusted for encroachment and site-specific conditions. This new area becomes the TPZ and a TPZ fence is erected to protect the tree and its environment. These fences must be erected before any work takes place.

Guidelines for TPZ's (Tree Protection Zones):

- No building structures or hard landscape features.
- No building material storage.
- No excavation or soil disturbance work
- No placing or storing of fill.
- No lighting of fire or preparing of chemicals.
- No vehicles or pedestrian access.

TPZ requirements:

- Erect signs along the entire length of the protective fence.
- Construct TPZ to prevent pedestrian and vehicle access.
- Mulch TPZ area to a depth of 150mm with wood chips.
- Irrigate the TPZ periodically, as determined by the arborist.

TPZ Guidelines and requirements need to be adhered to at all stages of the design and development process.

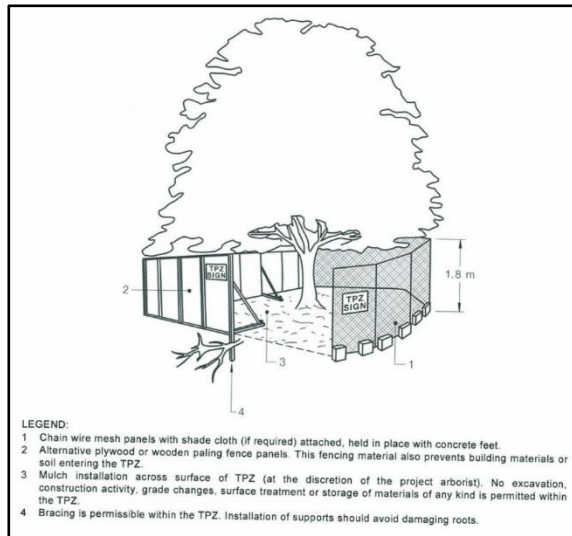


Figure 11. Tree Protection Fence and signs. Image sourced from the Australian Standard 4970-2025.

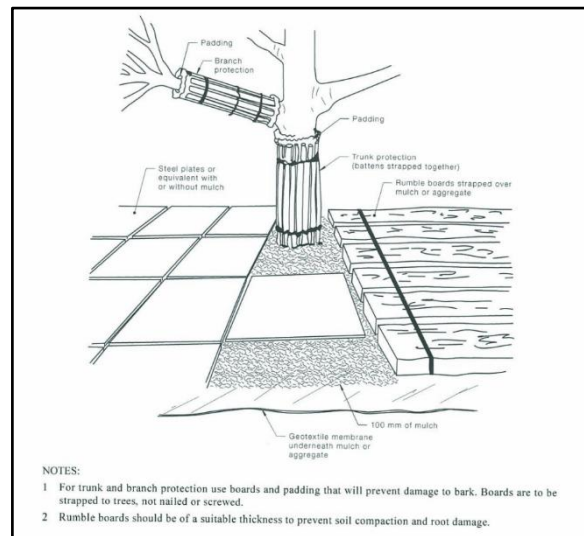


Figure 12. Trunk Protection and ground protection. Imaged sourced from the Australian Standard 4970-2025.

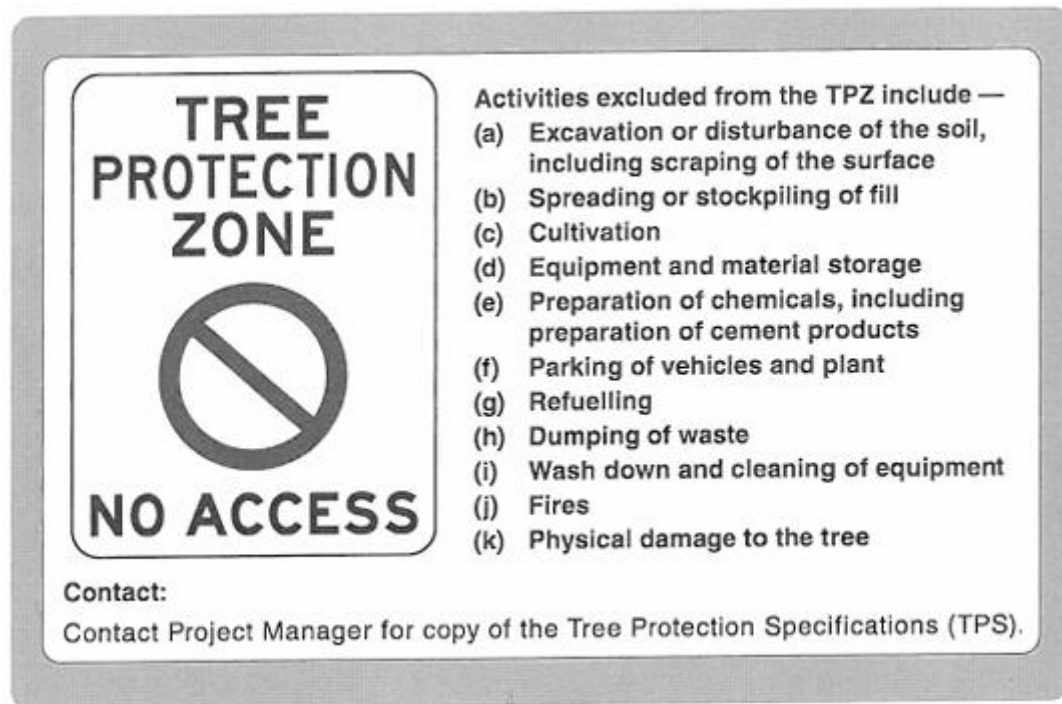


Figure 13. An example of a Tree Protection Zone Sign. Imaged sourced from the Australian Standard 4970-2025.

9. Tree Data

	Tree ID	Common name	Age	Origin	DBH (cm)	TPZ	Retention Value	Notes	Longitude	Latitude
1	Eucalyptus obliqua	Stringybark	Young	Native	0.45	5.4			147.2374	-43.0579
2	Eucalyptus obliqua	Stringybark	Young	Native	0.42	5.04			147.2374	-43.0579
3	Eucalyptus obliqua	Stringybark	Young	Native	0.46	5.52			147.2375	-43.0579
4	Eucalyptus obliqua	Stringybark	Young	Native	0.42	5.04			147.2374	-43.058
5	Eucalyptus obliqua	Stringybark	Young	Native	0.34	4.08			147.2374	-43.0581
6	Eucalyptus obliqua	Stringybark	Young	Native	0.44	5.28			147.2374	-43.0581
7	Eucalyptus obliqua	Stringybark	Young	Native	0.3	3.6			147.2374	-43.0582
8	Eucalyptus obliqua	Stringybark	Dead	Native	0.6	7.2		Dead	147.2373	-43.0582
9	Eucalyptus viminalis	White Gum	Dead	Native	0.7	8.4	Very High	Dead	147.2373	-43.0582
10	Eucalyptus viminalis	White Gum	Young	Native	0.32	3.84	Very High		147.2372	-43.0582
11	Eucalyptus viminalis	White Gum	Young	Native	0.4	4.8	Very High		147.2372	-43.058
12	Eucalyptus viminalis	White Gum	Young	Native	0.34	4.08	Very High		147.2373	-43.058
13	Eucalyptus pulchella	White Peppermint	Mature	Native	0.41	4.92			147.2355	-43.0574
14	Eucalyptus globulus	Blue Gum	Young	Native	0.26	3.12			147.2355	-43.0574
15	Eucalyptus pulchella	White Peppermint	Mature	Native	0.32	3.84			147.2355	-43.0578
16	Eucalyptus globulus	Blue Gum	Mature	Native	0.85	10.2	Very High		147.2354	-43.058
17	Eucalyptus globulus	Blue Gum	Mature	Native	0.62	7.44	High		147.2356	-43.0581
18	Eucalyptus pulchella	White Peppermint	Mature	Native	0.47	5.64			147.2345	-43.0588
19	Eucalyptus pulchella	White Peppermint	Mature	Native	0.45	5.4			147.2344	-43.0588
20	Eucalyptus globulus	Blue Gum	Young	Native	0.37	4.44			147.2344	-43.059
21	Eucalyptus globulus	Blue Gum	Mature	Native	0.46	5.52	High		147.2344	-43.059
22	Eucalyptus pulchella	White Peppermint	Young	Native	0.31	3.72			147.2343	-43.059
23	Eucalyptus pulchella	White Peppermint	Young	Native	0.3	3.6			147.2341	-43.0589
24	Eucalyptus pulchella	White Peppermint	Young	Native	0.4	4.8			147.2341	-43.0589
25	Eucalyptus pulchella	White Peppermint	Young	Native	0.5	6			147.234	-43.059
26	Eucalyptus pulchella	White Peppermint	Mature	Native	0.34	4.08			147.2339	-43.0588
27	Eucalyptus pulchella	White Peppermint	Mature	Native	0.35	4.2			147.2338	-43.0588
28	Eucalyptus pulchella	White Peppermint	Dead	Native	0.44	5.28		Dead	147.2336	-43.0588
29	Eucalyptus globulus	Blue Gum	Young	Native	0.28	3.36			147.2335	-43.059
30	Eucalyptus globulus	Blue Gum	Mature	Native	0.48	5.76	High		147.2335	-43.059
31	Eucalyptus pulchella	White Peppermint	Young	Native	0.32	3.84			147.2334	-43.059
32	Eucalyptus pulchella	White Peppermint	Mature	Native	0.37	4.44			147.2333	-43.0591
33	Eucalyptus pulchella	White Peppermint	Mature	Native	0.38	4.56			147.2333	-43.059

	Tree ID	Common name	Age	Origin	DBH (cm)	TPZ	Retention Value	Notes	Longitude	Latitude
34	Eucalyptus globulus	Blue Gum	Mature	Native	0.54	6.48	High		147.2325	-43.0598
35	Eucalyptus globulus	Blue Gum	Mature	Native	0.7	8.4	Very High		147.2328	-43.0604
36	Eucalyptus globulus	Blue Gum	Mature	Native	0.8	9.6	Very High		147.2328	-43.0604
37	Eucalyptus globulus	Blue Gum	Mature	Native	0.51	6.12	High		147.2328	-43.0604
38	Eucalyptus obliqua	Stringybark	Mature	Native	0.35	4.2			147.2328	-43.0605
39	Eucalyptus globulus	Blue Gum	Mature	Native	0.9	10.8	Very High		147.2328	-43.0605
40	Eucalyptus globulus	Blue Gum	Mature	Native	0.36	4.32			147.2328	-43.0605
41	Eucalyptus obliqua	Stringybark	Mature	Native	0.37	4.44			147.2328	-43.0605

10. References

Australian Standards – AS 4970-2025 Protection of trees on development site.

Australian Standards – AS 4373-2007 Pruning of Amenity trees.

Arboriculture Australia. MIS313 Tree health and Maintenance 2020

Arboriculture Australia, MIS308 Tree pruning 2020

Alex L. Shigo – *Modern Arboriculture: A Systems Approach to the care of trees and their associates*, 1st edition, published January 1991

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Mattheck, C. & Breleor, H. 1994, *The Body Language of Trees: A Handbook for Failure Analysis*. The Stationary Office, London, UK.

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Matheny, N & Clark, J, 1998. Trees and Development: A Practical Guide to Preservation of Trees During Land Development. ISA, Champaign, Ill, USA.

Moore. G. Windthrown Trees: Storm or Management 2015

Stokes. A. Tree Supporting Roots of Trees and Woody Plants: Forms, Function and Physiology 2000

11. Tree Descriptors

AGE

The notation of age is based on the following categories.

Category	Description
Young	Less than 20% of the life expectancy of the tree.
Mature	20 – 80% of the life expectancy of the tree.
Over Mature	>80% of the life expectancy for the tree.
Dead	Tree is no longer alive.

HEALTH

Pertains to the health and growth potential of the tree. The notation of 'health' is based on the following categories.

Category	Description
Good	Full canopy, good foliage density, average leaf colour for species. Average growth indicators such as good extension of growth per growing season, typical leaf size. Little to no dieback in the canopy, minimal deadwood. Good wound wood development. Tree exhibits above average health and minimal to no work is required.
Fair	Tree has <25% deadwood and may have minor canopy dieback. Foliage density and colour may be slightly below average for species. Imperfections in canopy present, pathogen signs present. Average growth indicators such as good extension of growth per growing season, typical leaf size and canopy density. Moderate wound wood development. Tree exhibits below average health, and remedial works may be employed to improve tree health.
Poor	Tree has >25% deadwood and has canopy die back. Foliage density and colour is below average for species. Leaf size distorted and discoloured. Epicormic growth is present throughout the canopy. Canopy is incomplete and has pathogen damage present. Poor wound wood development. Tree exhibits low health and remedial work or removal may be required.
Very Poor	Tree has more than 50% deadwood and extensive canopy dieback. Foliage density is sparse and leaf and colour is atypical for species. Epicormic shoots can make up large sections of canopy. Pathogen and stress agent is present are leading to decline. Very poor wound wood development. Tree exhibits low health and remedial work or removal are required.
Dead	Tree is no longer living.

RETENTION VALUE

Retention Value is rated into three levels: LOW, MEDIUM and HIGH.

Category	Description
Low	Trees that offer little in terms of contributing to the future landscape. Should be considered for removal.
Medium	Trees with some beneficial attributes that may benefit the site. Could be considered for retention if possible.
High	Trees with the potential to positively contribute to the site. Should be considered for retention if possible.

STRUCTURE

Pertains to the physical structure of the tree including main scaffold branches and roots. Structure includes those attributes that may influence the probability of major, trunk, root or limb failure.

Category	Description
Good	Tree has well-defined and balance canopy. Branch unions appear strong and without defects evident. Trunk and branches have nice taper. Tree is unlikely to suffer trunk or branch failure under normal conditions. The tree is considered a good example of the species with well-developed form.
Fair	Tree has some minor problems in the structure of the crown. The crown may slightly out on balance and some branch unions may exhibit structural faults. Tree may have a slight lean. Tree may have slight root damage. These defects are not likely to result in catastrophic trunk or branch failure, although some branch failure may occur under normal conditions.
Poor	Tree may have significant problems in structural scaffold limbs and trunk. Canopy may be lopped sided and have gaps. Limbs crossing in canopy. Branch unions may be poor with faults present. Tree may have substantial lean. Tree may have suffered significant root damage. Tree may have basal or trunk damage. Tree may have co-dominate stems. Tree may have bifurcated unions. These defects <u>may</u> predispose the tree to major truck and branch failure.
Hazardous	Tree has very significant problems in structural scaffold limbs and trunk. Canopy is lopped sided and has gaps. Limbs crossing in canopy causing rubbing and damage. Branch unions are poor with faults at the point of attachment. Tree has substantial lean. Tree has suffered significant root damage. Tree has basal or trunk damage. Tree has co-dominate stems. Tree has bifurcated unions. These defects <u>are</u> likely to predispose the tree to trunk and scaffold limb failure

USEFUL LIFE EXPECTANCY (ULE)

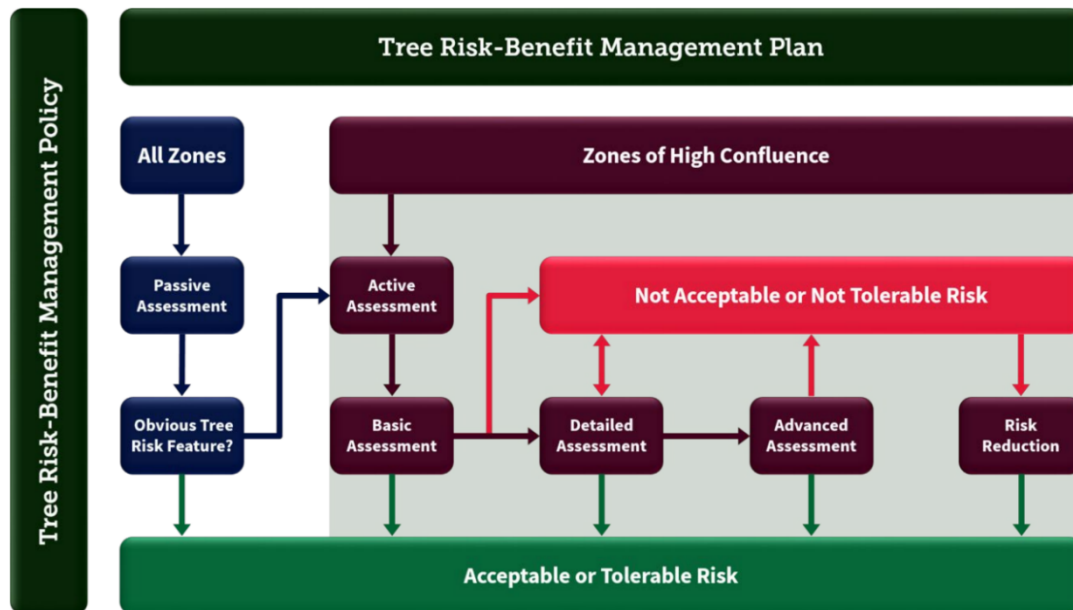
U.L.E. pertains to the span of time that the tree might reasonably be expected to provide useful amenity value with an acceptable level of safety at an acceptable cost. Trees with have varying U.L.E. according to the environment, economical and other factors. **(Note: Useful life expectancy is relevant to the tree if it is maintained and nothing significantly in the environment changes)**

The notation of U.L.E. is based on the following categories.

Category	Description
Short	The tree appears to be retainable with an acceptable level of risk for 5 to 15 years.
Medium	The tree appears to be retainable with an acceptable level of risk for 15 to 40 years.
Long	The tree appears to be retainable with an acceptable level of risk for more than 40 years.
Remove	The tree presents with a high level of risk that would need removal within the next 5 years

RISK

Risk is calculated using the following chart.



Passive Assessment - is simply picking up on Obvious Tree Risk Features you can't help but notice as you got about your daily routine. We carry it out in all zones of use. Passive Assessment is our most valuable risk management asset because it can be done by anyone and it's going on day in day out.

Active Assessment - is where we have trained assessors looking for risks that might not be Acceptable or Tolerable. Or where Passive Assessment has picked up an Obvious Tree Risk Feature that needs a closer look. Active Assessment has three levels to it that increase in depth of investigation from Basic, to Detailed, up to Advanced. We'll carry out Active Assessment in zones of high confluence every 5 years.

Risk Ratings - VALID has applied ISO 31000: Risk Management and the Tolerability of Risk Framework to tree risk-benefit assessment and management, which we've adopted. We're going to manage the risk from our trees and branches falling using four easy-to-understand traffic light signal coloured risk ratings. Red Not Acceptable risks will be reduced to an Acceptable level Amber Not Tolerable risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks Amber Tolerable risks will not be reduced but may require an increased frequency of assessment than green Acceptable risks Green Acceptable risks will not be reduced.

More documentation is attached.

TREE PROTECTION ZONES

The T.P.Z. applied is AS 4970-2025 'Protection of trees on development site'. AS 4970-2009 uses a multiplication method to determine the T.P.Z. based on T.P.Z. radius being 12 times stem diameter measured 1.4 metres above ground.

$$\text{T.P.Z. radius} = \text{DBH} \times 12$$

STRUCTURAL ROOT ZONE

The S.R.Z. applied is AS 4970-2025 'Protection of trees on development site'. The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree.

$$\text{SRZ radius} = (D \times 50)^{0.42} \times 0.64$$

12. Assumptions and limitations

1. Any legal description provided to Tree Pioneers Pty Ltd 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. Tree Pioneers Pty Ltd assumes that any property or project is not in violation of any applicable codes, ordinances, statutes or other local, state or federal government regulations.
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11. All instructions (verbal or written) that define the scope of the report have been included in the report and all documents and other materials that the Tree Pioneers Pty Ltd consultant has been instructed to consider or to take into account in preparing this report have been included or listed within the report.
12. 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 observation.