

ARBORICULTURAL VEGETATION RISK ASSESSMENT

Please note this form must only be completed by a qualified arborist.

Arborist details

Name:	
Qualifications:	
Date of inspection	
Phone	

Tree inspection checklist

Tree number:		Location:	
Genus, species:			
DBH:			
Height and radial spread			
Service request number:			

Site factors and past history

Inspections	Observations
Intensity of use	
Soil condition compaction, paving, grade changes	
Prevailing winds	
Exposure	
Previous mistreatments	
Construction injury	
Incorrect planting (girdling etc...)	

Target

Inspections	Observations
Buildings	
Other structures	
High/low pedestrian use	
High/low vehicle use	
Proximity to power lines	

Decay

Inspections	Observations
Cavities	
Holes	
Cankers	
Branch stubs	
Fruiting structures of decay organisms	
Stem bulge	
Stem swelling	
Amount of sound wood (%)	

Pest and disease

Inspections	Observations
Termites	
Other insects	
Vines or creepers	
Nutrient deficiencies	
Viral	
Fungal	
Canopy status	

Overall health

Refer to Appendix 1 for definitions. Please circle:

Dead Poor Stressed Good Excellent

Environmental features/assessment of significance

Refer to Appendix 2 for definitions and additional information.

Inspections	Observations
Presence of hollows	
Does the tree classify as a large or very large old tree?	
Connectivity to adjacent native vegetation	

Additional notes

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Structure

Inspections	Observations
Form	
Bifurcations	
Included bark	
Wound wood present	

Structural defects

Inspections	Observations
Branch attachment	
Epicormic	
Included bark	
Open cracks	
Decay	
Leaning	
Soil lifting/mounding	
Soil movement/cracks	
Compressed or buckled fibres at base on compression side	
Horizontal tension cracks on tension side	
Severed roots	
Cracks	
Extent of compromise to branch or stem	
Association with other defect	
Mould and cankers	
Dead wood	
Hangers	

Management options

Inspections	Observations
Can horticultural pruning be	

undertaken to retain the tree?	
Can target asset or the threatened audience be diverted away from tree?	
Can nest[??] boxes be installed to offset loss of habitat hollow(s)?	
Can offset planting be undertaken with indigenous plants?	

Risk assessment

Refer to Appendix 3 for Risk assessment table

Inspections	Observations
Assessment of likelihood	
Assessment of consequence	

Risk level

Please circle risk level:

Severe Very high High Medium Low

State reason for selection:	
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Additional recommendations

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Declaration

This must be completed before assessment will be considered.

I, _____ declare that the information described above is true and accurate.

Arborist signature: _____

Date: _____

APPENDIX 1

Health descriptors

0 – DEAD: Tree is completely dead, non-functional crown (no green leaves), stem cambium completely dead, no evidence of root suckers or lignotuberous sprouts.

1 – POOR: Tree is presenting symptoms of strain, large quantities of crown dieback extending from tip dieback to major scaffold branches. Persistent infections of pathogens, borers, fungal cankers and root disease. Irreversible condition ultimately leading to premature death. Any treatments may only be seen as temporary to achieve hazard reduction prior to tree removal.

2 – STRESSED: Tree is presenting symptoms of stress that may be due to seasonal biotic or abiotic conditions, for example water stress, seasonal defoliators. The symptoms may include tip dieback (less than 25mm diameter), crown thinning, defoliation, leaf discoloration, reduced leaf and or internode length (less than 75 per cent normal average size of non-stressed specimen): up to 50 per cent of the crown is epicormic/ juvenile regrowth. These symptoms should be present over more than 25 per cent of the total tree parts concerned. The condition is reversible.

3 – GOOD: Tree is generally free of pests and disease. Symptoms of any biotic or abiotic stress should not be present over more than 25 per cent of the tree parts concerned. Internode length may be variable but generally consistent in length for the last three annual increments.

4 – EXCELLENT: Tree is virtually completely free from evidence of pest or disease organisms. Tree has no signs of abiotic stress such as tip dieback or loss of foliage. Growth is of typical colouration, size and quantity for that species at the location. Internode length is consistent or increasing in length from previous three annual increments. The tree crown appears complete and balanced.

APPENDIX 2

Significance

These definitions are subjective opinions based on the National Trust of Australia (Victoria) criteria used for the Victorian significant tree register.

Historical value: Any tree commemorating a particular occasion (including plantings by royalty) or having associations with an important historical event.

Rare or localised: Any tree of species or variety that is rare or of very localised distribution.

Horticultural value: Any tree, which is of horticultural or genetic value and could be an important source of propagating stock, including specimens that are particularly resistant to disease or exposure.

Curious growth form: Any tree which exhibits a curious growth form or physical feature such as abnormal outgrowths, natural fusion or branches, severe lightning damage, or unusually pruned forms.

Outstanding size: Any tree outstanding for its large height, trunk circumference, or canopy spread.

Outstanding example of species: Any tree that is an outstanding example of the species.

Particularly old: Any tree which is particularly old or vulnerable.

Aesthetic value: Any tree of outstanding aesthetic significance.

Aboriginal culture: Any tree associated with aboriginal activities.

Location or context: Any tree which occurs in a unique location or context and so provides a contribution to the landscape, including remnant native vegetation, important landmarks, and trees which form part of an historic garden, park or town.

Preservation value

In the context of any relevant significance values, make a subjective assessment on the preservation value of the tree.

APPENDIX 3: RISK ASSESSMENT TABLES

Likelihood

Level	Descriptor	Indicative faults
A	Failure certain	Unsupported failure or imminent failure of scaffold branch or equivalent deadwood. Bifurcated structure of trunk or scaffold branch with visible movement indicating imminent failure, recent tree movement as a result of structural failure or imminent visual failure of the structural root plate indicated by apparent or visible heave.
B	Failure likely	Supported failure of a scaffold branch or equivalent deadwood. Scaffold branch or equivalent deadwood protruding into (>0.5 metres) the statutory clearance code, over-weighted limbs or unbalanced tree associated with a visible structural defect, disease or pathogens apparent that have a significance effect on structure (termites, borers, decay), or history of branch failure as a result of advancing senescence.
C	Failure possible	Tree in declining–average condition showing potential for branch drop due to branch over-extension, branch collar formation or developing structural faults. Scaffold branch or equivalent deadwood or major disease symptoms pathogens apparent that may over time (12 months) affect a tree’s vigour or structure. Significant changes in growing environment such as the removal of adjacent trees (wind exposure), disease or pathogens apparent that may have effect on structure (termites, borers, decay, fungal fruiting body). Major obvious root activity (surface roots, damage asset etc).
D	Failure unlikely	Tree in average–good condition showing future potential for branch drop – due to branch over-extension, branch collar formation or developing structural faults. Through normal growth, the tree has the potential to develop over-extension of branches. Minor branch attrition collar development and deadwood (<50mm apparent) may be apparent. Minor obvious root activity.
E	No fault detected	The tree appears healthy with good open branch structure. No apparent sign of disease or damage that would lead to future failure.

Consequence

Level	Descriptor	Example detail of description
5	Catastrophic	Tree is located in close proximity to dwelling or other high use non-portable asset. Fatality and/or severe injury/major damage would result from tree failure.
4	Major	Tree is in an area likely to attract people, such as low use or non-portable structures. Major property damage or minor personal injury would result from tree failure.
3	Moderate	Tree is in an area with a reduced likelihood of attracting people or low use area. Moderate property damage or minor personal injury would result from tree failure.
2	Minor	Tree is in an area unlikely to attract people or have any significant impact on portable or non-portable assets. Minor property damage or minor personal injury would result from tree failure.
1	Insignificant	Tree is in an out-of-the-way location with no significant assets or people attracting structures in close proximity. No significant impacts would result from tree failure.

Risk analysis matrix – level of risk

Likelihood	Consequence				
	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A (Certain)	Low	Medium	Very high	Severe	Severe
B (Likely)	Low	Medium	High	Very high	Very high
C (Possible)	Low	Low	Medium	High	High
D (Unlikely)	Low	Low	Low	Medium	Medium
E (No faults)	Low	Low	Low	Low	Medium