Arborist Report
YR-2022/1106

Tree Risk Assessment (TRA)

134 Hereford Road, Mt Evelyn

Original report prepared by: (Grad Cert Arboriculture, ISA Tree Risk Assessment Qualified)

Report Date: 28 September 2022

Amendment prepared by: (Adv Cert Arboriculture, ISA Tree Risk Assessment Qualified)

Amended Report Date: 14 December 2022

Contents

1. Summary of Assessment

1.1 The original scope of this report was to inspect trees in the road reserve (the site) and assess tree risk relative to the use of 134 Hereford Road, Mt Evelyn. During the course of the assessment, the site was attended on four occasions between 1/9/2022 – 27/9/2022. Trees have been tagged with identification numbers (numbered 1 to 25). **However, this amended report is only for eight trees recommended for removal by Council at the 22 November Council meeting.** Trees were assessed with the aid of a soil probe, diameter measuring tape, GIS software, camera phone and the ISA Tree Risk Assessment Form.

1.2 The site slopes down approximately 10 degrees to the south and is partially exposed to the prevailing south-westerly winds as well as easterly winds. The site is protected from northerly winds by a ridge line and tall trees on private property.

1.3 The house at 134 Hereford Road, Mt Evelyn, which is adjacent to the site, is nestled amongst a stand of mature eucalypt. Over time numerous trees in the road reserve bordering this property have been subjected to excavation, level changes, pavement and/or compaction within root zones.

1.4 At the time of the assessment parts of the site were very wet and subject to overland stormwater flows. In particular, the soils directly north of 134 Hereford Road and the table drain along the west side of Kookaburra Lane were saturated.

1.5 In the past 18 months a tree fell from the edge of the table drain on Kookaburra Lane and impacted the house at 134 Hereford Road, Mt Evelyn. Numerous other trees around the site and on adjoining private property have also fallen – many as a result of a severe storm event that impacted the Yarra Ranges in June 2021.

1.6 This amended report considers eight trees in the road reserve that were recommended for retention in the original report but approved for removal by Council at the 22 November Council meeting. Risk assessments were undertaken by Nicholas Magree (Arborist) to determine risk ratings and suggest risk mitigation options for each tree (see appendix 1). Risk mitigation options were reviewed by the Coordinator of Trees (Paul Mechelen) and subsequent actions have been recommended (see section 3).

2. Tree Plan

Road Reserve North of 134 Hereford Road, Mt Evelyn Planning Application Site Plan (proposed trees circled in red and tagged onsite)

3 Tree Assessment Table

Tree No.	Botanic Name	Tree within 10m of dwelling?	Vitality	DBH (cm)	Height (m)	Spread dia. (m)	Overall Risk	Recommended Action
3	*Eucalyptus obliqua*	No	Normal	80	25	16	Low	No action
4	*Eucalyptus obliqua*	No	Normal	70	30	9	Low	No action
8	*Eucalyptus obliqua*	No	Normal	66	30	14	Low	No action
16	*Eucalyptus obliqua*	Yes	Normal	84	30	10	Low	Clean crown of dead wood and undertake aerial inspection of the crown
17	*Eucalyptus obliqua*	Yes	Low	70	25	8	Low	Clean crown of dead wood and undertake aerial inspection of the crown
19	*Eucalyptus obliqua*	Yes	Normal	77	30	13	Low	Clean crown of dead wood and undertake an aerial inspection of the crown
21	*Eucalyptus obliqua*	Yes	Normal	45	20	6	Low	No action
22	*Eucalyptus obliqua*	No	Low	60	30	8	Low	Clean crown of dead wood and undertake an aerial inspection of the crown

Appendix 1 Tree Risk Assessment Forms

ISA Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 1/09/2022 Time 1:55:00 PM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3797553, -37.76969164 Tree no. 3 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 80 cm Height 25 m Crown spread dia. 16 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House	Other trees		✓	✓	4	N	N
3	Cars		✓	✓	✓	3	N	N
4	People using yard		✓	✓	✓	2	N	N

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☐ Root cuts ☑ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☑ Pavement over roots ☑ 50 % Describe Gravel driveway

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☑ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐ ✓

Crown density Sparse ☐ Normal ☑ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☑ LCR 40 %

Dead twigs/branches ☑ 5 % overall Max. dia. 150mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☑ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure — Condition (s) of concern ____

Part Size 300mm Fall Distance 25m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☐ Probable ☑ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☑ ____ Similar branches present ☑

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☑ Included bark ☐ Cracks ☐

Sapwood damage/decay ☑ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole ____ % circ. Depth ____ Poor taper ☐

Lean 5 ° Corrected? No - phototropic lean

Response growth Yes, around stem union and sapwood damage

Condition (s) of concern Stem union failure

Part Size 400mm Fall Distance 15m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☑ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ____ % circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☐

Response growth ____

Condition (s) of concern Root plate failure

Part Size whole tree Fall Distance 25m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

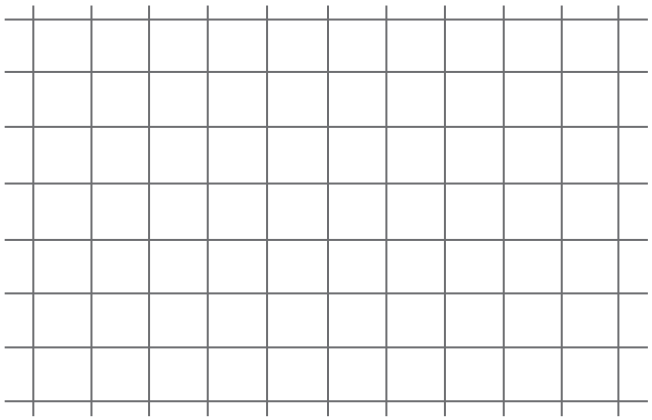
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure			✓		✓				✓				✓				L
	Stem union		✓				✓				✓					✓			L
	Root plate			✓				✓			✓							✓	L
House	Branch	Failure			✓			✓			✓					✓			L
	Stem union		✓					✓			✓					✓			L
	Root plate			✓				✓			✓						✓		L
Cars	Branch	Failure			✓				✓			✓				✓			L
	Stem union		✓						✓		✓					✓			L
	Root plate			✓				✓			✓					✓			L
People using front yard	Branch	Failure			✓			✓			✓							✓	L
	Stem union		✓					✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

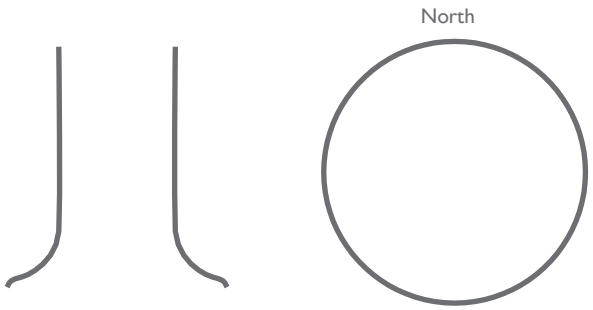
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. _____ — **Residual risk** _____
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☑Final ☐ Preliminary **Advanced assessment needed** ☒No ☐Yes-Type/Reason _____

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 1/09/2022 Time 2:07:00 PM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3797886, -37.769691 Tree no. 4 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 70 cm Height 30 m Crown spread dia. 9 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House	Other trees		✓	✓	4	N	N
3	Cars		✓	✓	✓	3	N	N
4	People using yard		✓	✓	✓	2	N	N

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☐ Root cuts ☑ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☑ Pavement over roots ☑ 75 % Describe Gravel road and driveway

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☑ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☐ Normal ☑ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 25 %

Dead twigs/branches ☑ 5 % overall Max. dia. 100mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☑ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure

Condition (s) of concern ____

Part Size 200mm Fall Distance 30m

Load on defect N/A ☐ Minor ☐ Moderate ☑ Significant ☐

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☐ ____ Similar branches present ☐

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☑ ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole ____ % circ. Depth ____ Poor taper ☐

Lean 3 ° Corrected? Yes

Response growth Yes, around sapwood damage

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ____ % circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size whole tree Fall Distance 30m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

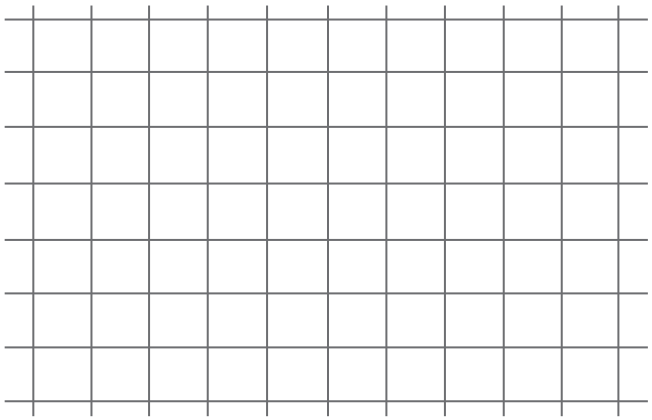
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure		✓			✓				✓				✓				L
	Root plate			✓				✓			✓							✓	L
House	Branch	Failure		✓				✓			✓					✓			L
	Root plate			✓				✓			✓						✓		L
Cars	Branch	Failure		✓					✓		✓					✓			L
	Root plate			✓						✓		✓				✓			L
People using front yard	Branch	Failure		✓				✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

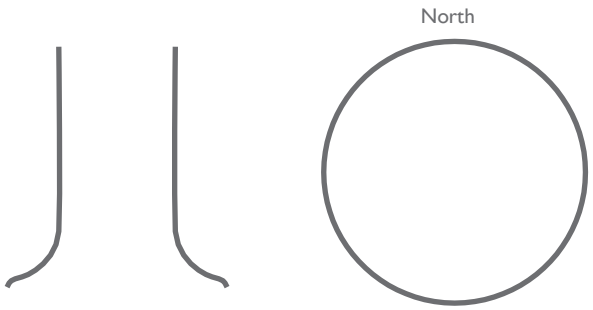
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. _____ — **Residual risk** _____
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☑Final ☐ Preliminary **Advanced assessment needed** ☐No ☐Yes-Type/Reason _____

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Date 1/09/2022 Time 2:52:00 PM

Client Yarra Ranges Council Tree no. 8

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3796618, -37.76959311 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 66 cm Height 30 m Crown spread dia. 14 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House			✓	✓	4	N	N
3	Cars		✓	✓	✓	3	N	N
4	People using yard		✓	✓	✓	2	N	N

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☐ Root cuts ☑ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☑ Pavement over roots ☑ 50 % Describe Conc. pad & gravel driveway

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ✓ ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ ✓ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☐ ✓ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 30 %

Dead twigs/branches ☑ 10 % overall Max. dia. 100 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure

Part Size 200 mm dia. Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☑ Significant ☐

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☐ ____ Similar branches present ☐

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ✓ ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ ✓ Conks/Mushrooms ☐

Cavity/Nest hole ____ % circ. Depth ____ Poor taper ☐

Lean 5 ° Corrected? Yes

Response growth Yes, above buttress root

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ____ % circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ✓ Probable ☐ Imminent ☐

Risk Categorization

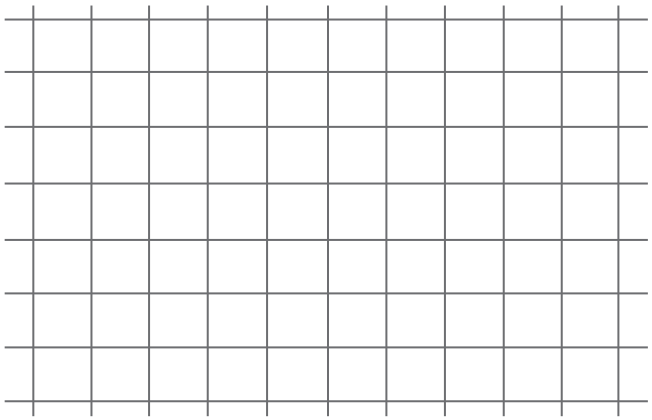
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch Root plate	Failure		✓			✓				✓				✓				L
				✓					✓		✓							✓	L
House	Branch Root plate	Failure		✓			✓				✓					✓			L
				✓					✓		✓						✓		L
Cars	Branch Root plate	Failure		✓						✓		✓				✓			L
				✓					✓			✓				✓			L
People using front yard	Branch Root plate	Failure		✓				✓			✓							✓	L
				✓				✓			✓							✓	L

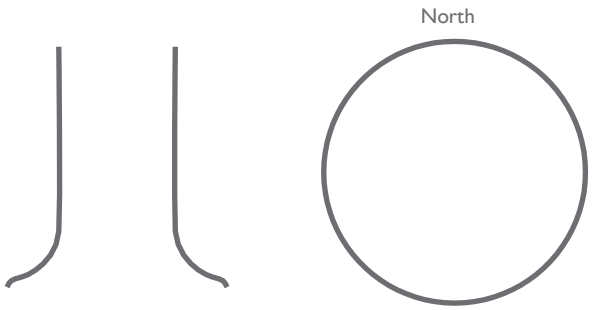
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. _____ — **Residual risk** _____
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☑Final ☐ Preliminary **Advanced assessment needed** ☐No ☐Yes-Type/Reason _____

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 6/09/2022 Time 9:04:00 AM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3795095 -37.76965717 Tree no. 16 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 84 cm Height 30 m Crown spread dia. 10 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House			✓	✓	4	N	N
3	People using yard		✓	✓	✓	2	N	N
4								

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☐ Root cuts ☑ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☐ Pavement over roots ☑ <10 % Describe Concrete slab in SRZ

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 50 %

Dead twigs/branches ☑ 5 % overall Max. dia. 150 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure

Part Size 150 mm dia. Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☑ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☑ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☑ ____ Similar branches present ☑

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole__ % circ. Depth ____ Poor taper ☐ Lean 3 ° Corrected? No

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ __ % circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

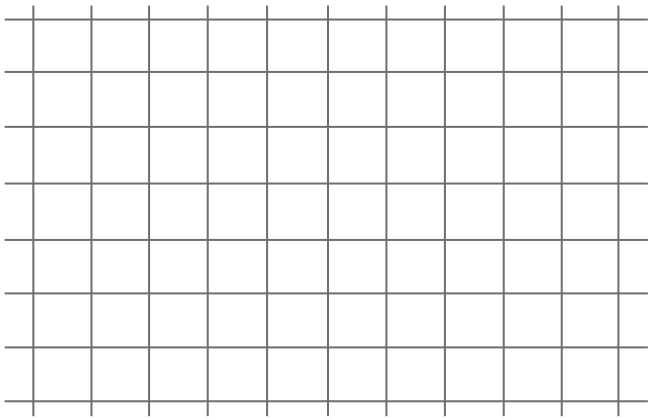
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure			✓		✓				✓						✓		L
	Root plate			✓					✓		✓							✓	L
House	Branch	Failure			✓			✓			✓					✓			L
	Root plate			✓					✓		✓						✓		L
People using yard	Branch	Failure			✓			✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

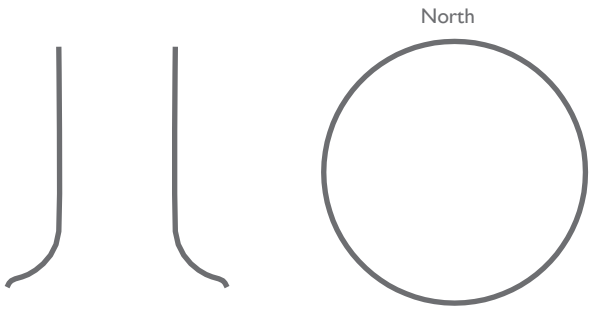
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. Clean crown of dead wood — **Residual risk** Low
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☐Final ☑Preliminary **Advanced assessment needed** ☐No ☑Yes-Type/Reason Aerial inspection of crown to check for weak branch attachments

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 6/09/2022 Time 9:15:00 AM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3794601, -37.76967431 Tree no. 17 Sheet ____ of ____

Tree species Eucalyptus goniocalyx dbh 70 cm Height 25 m Crown spread dia. 8 m

Assessor(s) ____ Tools used DBH tape, soil probe **Time frame** 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House	✓	✓	✓	3	N	N
2	House		✓	✓	✓	4	N	N
3	People using yard		✓	✓	✓	2	N	N
4								

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☐ Root cuts ☑ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☐ Pavement over roots ☑ <10 % Describe Concrete slab in SRZ

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☑ Normal ☐ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 20 %

Dead twigs/branches ☑ 10 % overall Max. dia. 150 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure

Part Size 150 mm dia. Fall Distance 25 m

Load on defect N/A ☐ Minor ☐ Moderate ☑ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☑ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☑ ____ Similar branches present ☑

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole__ % circ. Depth ____ Poor taper ☐ Lean 2 ° Corrected? No

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ __ % circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 25 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

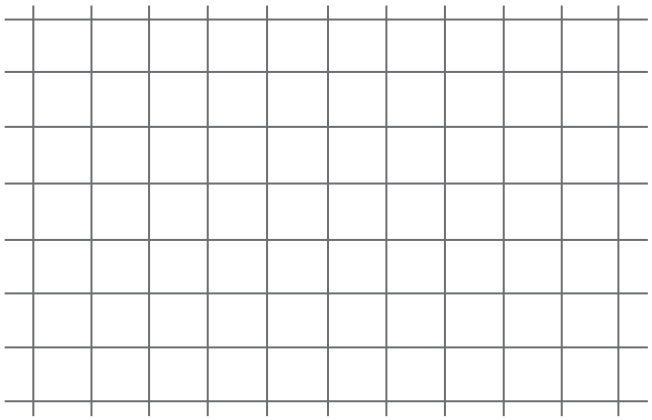
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure			✓		✓				✓						✓		L
	Root plate			✓					✓		✓							✓	L
House	Branch	Failure			✓				✓			✓				✓			L
	Root plate			✓					✓		✓						✓		L
People using yard	Branch	Failure			✓			✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

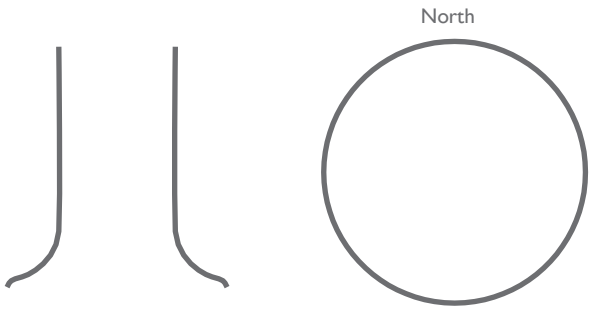
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. Clean crown of dead wood — **Residual risk** Low
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☐Final ☑Preliminary **Advanced assessment needed** ☐No ☑Yes-Type/Reason Aerial inspection of crown to check for weak branch attachments

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 6/09/2022 Time 9:49:00 AM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.379404, -37.76970191 Tree no. 19 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 77 cm Height 30 m Crown spread dia. 13 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House			✓	✓	4	N	N
3	People using yard		✓	✓	✓	2	N	N
4								

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☑ Root cuts ☑ Describe Stump holes dug in SRZ

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☐ Pavement over roots ☐ ___% Describe ____

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☑ LCR 30 %

Dead twigs/branches ☑ 15 % overall Max. dia. 150 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☑

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure — Condition (s) of concern ____

Part Size 150 mm dia. Fall Distance 30 m

Load on defect N/A ☐ Minor ☑ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☑ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ___% circ.

Previous branch failures ☐ ____ Similar branches present ☐

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole__ % circ. Depth ____ Poor taper ☐ Lean 3 ° Corrected? No

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ___% circ.

Cracks ☐ Cut/Damaged roots ☑ Distance from trunk in SRZ

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

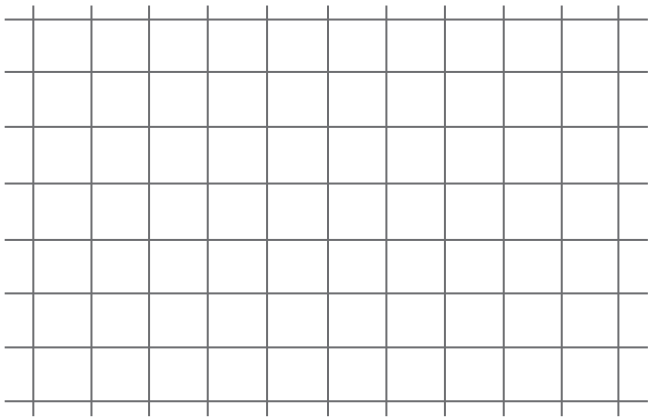
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Somewhat	Likely	Very likely	Consequences: Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure			✓			✓			✓					✓			L
	Root plate			✓					✓		✓							✓	L
House	Branch	Failure			✓				✓			✓				✓			L
	Root plate			✓					✓		✓						✓		L
People using yard	Branch	Failure			✓			✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

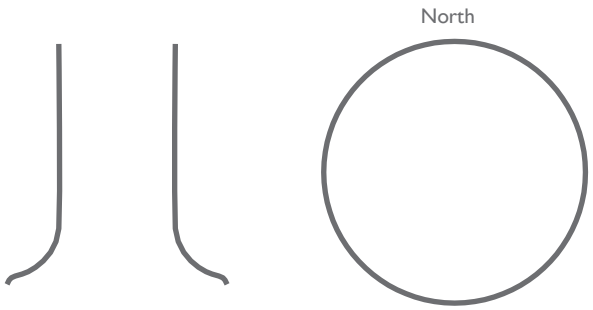
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. Clean crown of dead wood — **Residual risk** Low
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** _____

Data ☐Final ☑Preliminary **Advanced assessment needed** ☐No ☑Yes-Type/Reason Aerial inspection of crown to check for weak branch attachments

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 6/09/2022 Time 10:01:00 AM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.37936, -37.76969555 Tree no. 21 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 45 cm Height 20 m Crown spread dia. 6 m

Assessor(s) ____ Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House	Other trees		✓	✓	4	N	N
3	People using yard	Other trees	✓	✓	✓	2	N	N
4								

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☑ Root cuts ☐ Describe ____

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☐ Pavement over roots ☐ ☐% Describe ____

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe ____

Tree Health and Species Profile

Vigor Low ☐ Normal ☑ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ **Abiotic** ____

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe ____

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐ ____

Recent or expected change in load factors ____

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 50 %

Dead twigs/branches ☑ 5 % overall Max. dia. 100 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other ____

Branch failure

Part Size 100 mm dia. Fall Distance 20 m

Load on defect N/A ☐ Minor ☑ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Cracks ☐ ____ Lightning damage ☐

Codominant ☐ ____ Included bark ☐

Weak attachments ☐ ____ Cavity/Nest hole ____ % circ.

Previous branch failures ☐ ____ Similar branches present ☐

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole __ % circ. Depth ____ Poor taper ☐ Lean 5 ° Corrected? No - phototropic lean

Response growth ____

Condition (s) of concern ____

Part Size ____ Fall Distance ____

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ☐% circ.

Cracks ☐ Cut/Damaged roots ☐ Distance from trunk ____

Root plate lifting ☐ Soil weakness ☑

Response growth ____

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 20 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

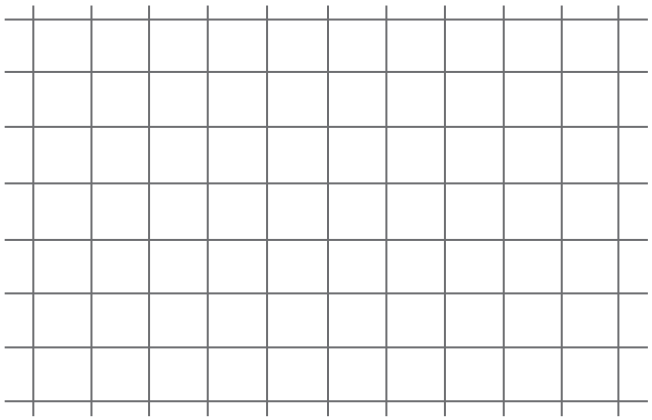
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Failure & Impact: Somewhat	Failure & Impact: Likely	Failure & Impact: Very likely	Consequences: Negligible	Consequences: Minor	Consequences: Significant	Consequences: Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure		✓			✓				✓					✓			L
	Root plate			✓				✓			✓							✓	L
House	Branch	Failure		✓			✓				✓					✓			L
	Root plate			✓				✓			✓						✓		L
People using yard	Branch	Failure		✓				✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

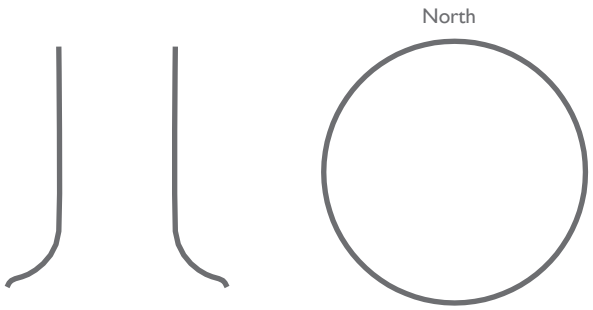
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection **Residual risk** L
2. **Residual risk**
3. **Residual risk**
4. **Residual risk**

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** 2 years

Data ☑Final ☐ Preliminary **Advanced assessment needed** ☐No ☐Yes-Type/Reason

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only

Basic Tree Risk Assessment Form

Client Yarra Ranges Council Date 6/09/2022 Time 10:08:00 AM

Address/ Tree location 134 Hereford Rd, Mount Evelyn VIC 3796 / 145.3793413, -37.76972934 Tree no. 22 Sheet ____ of ____

Tree species Eucalyptus obliqua dbh 60 cm Height 30 m Crown spread dia. 8 m

Assessor(s) I Tools used DBH tape, soil probe Time frame 2 years

Target Assessment

Target number	Target description	Target protection	Target zone: Target within drip line	Target zone: Target within 1 x Ht.	Target zone: Target within 1.5 x Ht.	Occupancy rate (1 – rare, 2 – occasional, 3 – frequent, 4 – constant)	Practical to move target?	Restriction practical?
1	People in house	House		✓	✓	3	N	N
2	House	Other trees		✓	✓	4	N	N
3	People using yard		✓	✓	✓	2	N	N
4								

Site Factors

History of failures Yes **Topography** Flat ☐ Slope ☑ 10% **Aspect** South

Site changes None ☐ Grade change ☑ Site clearing ☑ Changed soil hydrology ☑ Root cuts ☐ Describe

Soil conditions Limited volume ☐ Saturated ☑ Shallow ☐ Compacted ☐ Pavement over roots ☐ ☐% Describe

Prevailing wind direction SW **Common weather** Strong winds ☐ Ice ☑ Snow ☐ Heavy rain ☐ Describe

Tree Health and Species Profile

Vigor Low ☑ Normal ☐ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal 90 % Chlorotic ____ % Necrotic ____ %

Pests/Biotic **Abiotic**

Species failure profile Branches ☑ Trunk ☐ Roots ☐ Describe

Load Factors

Wind exposure Protected ☐ Partial ☐ Full ☐ Wind funneling ☐ ☐ **Relative crown size** Small ☐ Medium ☐ Large ☐

Crown density Sparse ☑ Normal ☐ Dense ☐ **Interior branches** Few ☐ Normal ☑ Dense ☐ **Vines/Mistletoe/Moss** ☐

Recent or expected change in load factors

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown ☐ LCR 25 %

Dead twigs/branches ☑ 20 % overall Max. dia. 150 mm

Broken/Hangers Number ____ Max. dia. ____

Over-extended branches ☐

Pruning history

Crown cleaned ☐ Thinned ☐ Raised ☐

Reduced ☐ Topped ☐ Lion-tailed ☐

Flush cuts ☐ Other

Branch failure

Part Size 150 mm dia. Fall Distance 30 m

Load on defect N/A ☐ Minor ☑ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☑ Imminent ☐

Cracks ☐ Lightning damage ☐

Codominant ☐ Included bark ☐

Weak attachments ☐ Cavity/Nest hole ____ % circ.

Previous branch failures ☑ Similar branches present ☑

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐

Response growth

Condition (s) of concern

Part Size Fall Distance

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Trunk —

Dead/Missing bark ☐ Abnormal bark texture/color ☐

Codominant stems ☐ Included bark ☐ Cracks ☐

Sapwood damage/decay ☐ Cankers/Galls/Burls ☐ Sap ooze ☐

Lightning damage ☐ Heartwood decay ☐ Conks/Mushrooms ☐

Cavity/Nest hole ____ % circ. Depth ____ Poor taper ☐

Lean ____ ° Corrected?

Response growth

Condition (s) of concern

Part Size Fall Distance

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☐

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

— Roots and Root Collar —

Collar buried/Not visible ☐ Depth ____ Stem girdling ☐

Dead ☐ Decay ☐ Conks/Mushrooms ☐

Ooze ☐ Cavity ☐ ☐% circ.

Cracks ☐ Cut/Damaged roots ☐ Distance from trunk ____

Root plate lifting ☐ Soil weakness ☑

Response growth

Condition (s) of concern Root plate failure

Part Size Whole tree Fall Distance 30 m

Load on defect N/A ☐ Minor ☐ Moderate ☐ Significant ☑

Likelihood of failure Improbable ☐ Possible ☑ Probable ☐ Imminent ☐

Risk Categorization

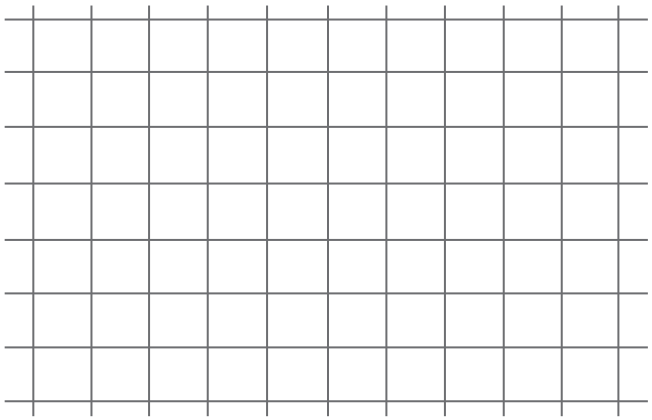
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood: Failure: Improbable	Failure: Possible	Failure: Probable	Failure: Imminent	Impact: Very low	Impact: Low	Impact: Medium	Impact: High	Failure & Impact (from Matrix 1): Unlikely	Somewhat	Likely	Very likely	Consequences: Negligible	Minor	Significant	Severe	Risk rating (from Matrix 2)
People in house	Branch	Failure			✓		✓				✓					✓			L
	Root plate			✓					✓		✓							✓	L
House	Branch	Failure			✓		✓				✓					✓			L
	Root plate			✓					✓		✓						✓		L
People using yard	Branch	Failure			✓			✓			✓							✓	L
	Root plate			✓				✓			✓							✓	L

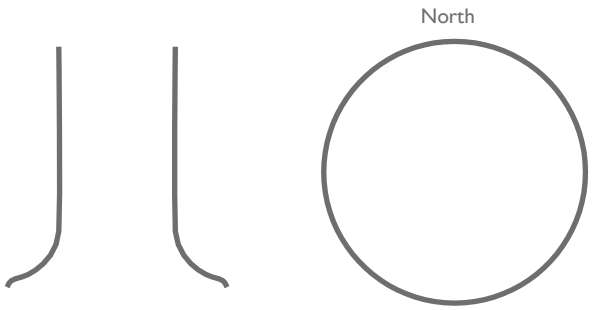
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact: Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure: Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low





Notes, explanations, descriptions

Mitigation options

1. Periodic re-inspection — **Residual risk** Low
2. Clean crown of dead wood — **Residual risk** Low
3. _____ — **Residual risk** _____
4. _____ — **Residual risk** _____

Overall tree risk rating Low ☑ Moderate ☐ High ☐ Extreme ☐

Overall residual risk None ☐ Low ☑ Moderate ☐ High ☐ Extreme ☐ **Recommended inspection interval** _____

Data ☐Final ☑Preliminary **Advanced assessment needed** ☐No ☑Yes-Type/Reason Aerial inspection of crown to check for weak branch attachments

Inspection limitations ☐None ☑Visibility ☐Access ☐Vines ☐Root collar buried Describe Inspection undertaken from ground level only