ISA Basic Tree Risk Assessment Form

Client _____ Date _____ Time _____

Address/Tree location _____ Tree no. _____ Sheet ____ of ____

Tree species _____ dbh_____ Height _____ Crown spread dia. _____

Assessor(s) _____ Tools used _____ **Time frame** _____

Target Assessment

Target number	Target description	Target protection	Target zone			Occupancy rate 1–rare 2–occasional 3–frequent 4–constant	Practical to move target?	Restriction practical?
			Target within drip line	Target within 1 x Ht.	Target within 1.5 x Ht.			
1								
2								
3								
4								

Site Factors

History of failures _____ **Topography** Flat ☐ Slope ☐ _____ % **Aspect** ____

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 _____ **Common weather** Strong winds ☐ Ice ☐ Snow ☐ Heavy rain ☐ Describe _____

Tree Health and Species Profile

Vigor Low ☐ Normal ☐ High ☐ **Foliage** None (seasonal) ☐ None (dead) ☐ Normal ____ % 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 _____ %

Dead twigs/branches ☐   _____ % overall   Max. dia. _____

Broken/Hangers   Number _____   Max. dia. _____

Over-extended branches ☐

Pruning history

Crown cleaned ☐   Thinned ☐   Raised ☐

Reduced ☐   Topped ☐   Lion-tailed ☐

Flush cuts ☐   Other _____

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 _____

Part Size _____   Fall Distance _____

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

Likelihood of failure Improbable ☐ Possible ☐ Probable ☐ Imminent ☐

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 _____

Part Size _____   Fall Distance _____

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	Possible	Probable	Imminent	Impact: Very low	Low	Medium	High	Failure & Impact *(from Matrix 1)*: Unlikely	Somewhat	Likely	Very likely	Consequences: Negligible	Minor	Significant	Severe	Risk rating *(from Matrix 2)*

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
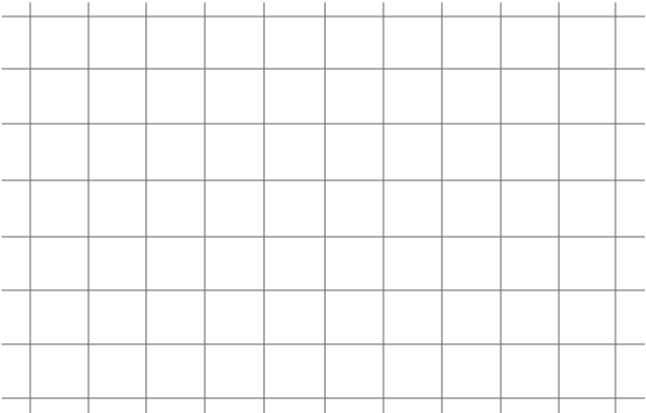
Matrix 2. Risk rating matrix.

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

North
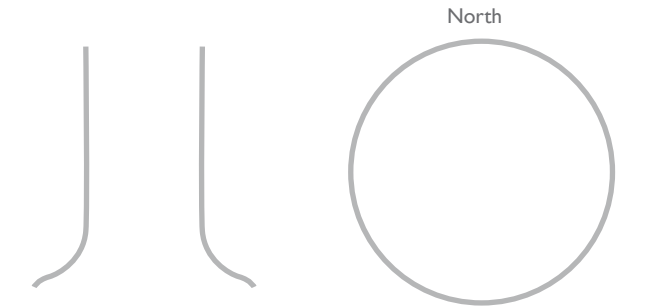
Notes, explanations, descriptions

_____
_____
_____
_____
_____

Mitigation options

1._____ **Residual risk** _____
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** _____

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

Inspection limitations ☐None ☐Visibility ☐Access ☐Vines ☐Root collar buried Describe _____

Existing Conditions – Stephens Lake Park Ash Tree #4

Tree Canopy – Leaf

Leaf Loss