



# 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 \_\_\_\_\_  
 \_\_\_\_\_ Condition(s) of concern \_\_\_\_\_  
 Part Size \_\_\_\_\_ Fall Distance \_\_\_\_\_  
**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 \_\_\_\_\_

### — 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 —

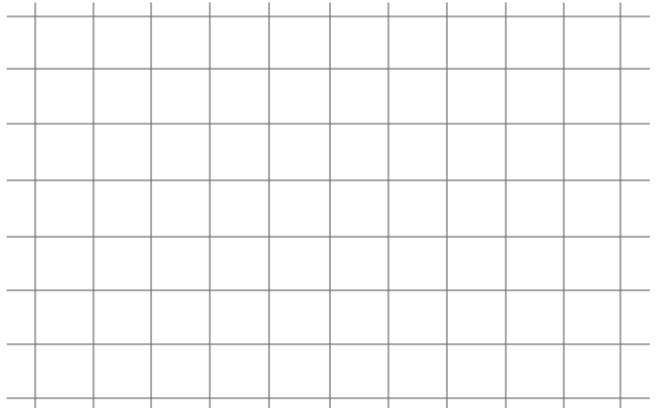
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Condition(s) of concern \_\_\_\_\_  
 Part 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											Consequences				Risk rating (from Matrix 2)			
			Failure				Impact				Failure & Impact <small>(from Matrix 1)</small>			Negligible	Minor	Significant	Severe				
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely						Very likely		

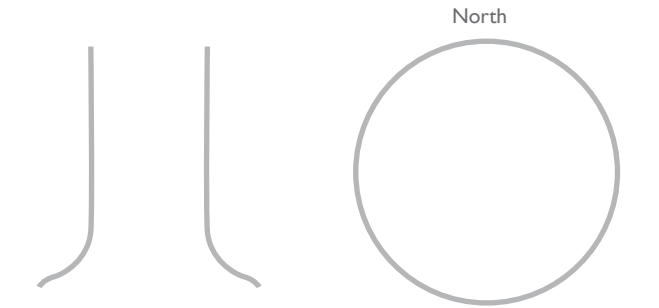
*Matrix 1.* Likelihood matrix.

Likelihood of Failure	Likelihood of Impact			
	Very low	Low	Medium	High
<b>Imminent</b>	Unlikely	Somewhat likely	Likely	Very likely
<b>Probable</b>	Unlikely	Unlikely	Somewhat likely	Likely
<b>Possible</b>	Unlikely	Unlikely	Unlikely	Somewhat likely
<b>Improbable</b>	Unlikely	Unlikely	Unlikely	Unlikely



*Matrix 2.* Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
<b>Very likely</b>	Low	Moderate	High	Extreme
<b>Likely</b>	Low	Moderate	High	High
<b>Somewhat likely</b>	Low	Low	Moderate	Moderate
<b>Unlikely</b>	Low	Low	Low	Low



**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 #2



Tree Canopy – Leaf



Leaf Loss