

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) _____ Time frame _____ Tools used _____

Target Assessment							
Target number	Target description	Target zone			Occupancy rate 1 - rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
		Target within drip line	Target within 1x Ht.	Target within 1.5x 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 _____ **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 planned 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 _____
 Main concern(s) _____
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 _____
 Main concern(s) _____
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 _____
 Main concern(s) _____
Load on defect N/A Minor Moderate Significant
Likelihood of failure Improbable Possible Probable Imminent

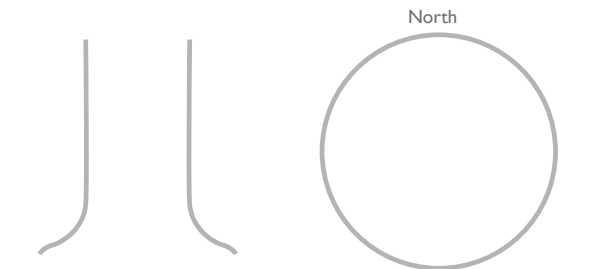
Risk Categorization																				
Condition number	Tree part	Conditions of concern	Part size	Fall distance	Target number	Target protection	Likelihood							Consequences			Risk rating of part (from Matrix 2)			
							Failure				Impact			Failure & Impact (from Matrix 1)						
							Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat		Likely	Very likely	Negligible
1																				
2																				
3																				
4																				

Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impacting Target			
	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 _____

Residual risk _____
 Residual risk _____
 Residual risk _____
 Residual risk _____

Overall tree risk rating Low Moderate High Extreme
 Overall residual risk Low Moderate High Extreme

Work priority 1 2 3 4
 Recommended inspection interval _____

Data Final Preliminary **Advanced assessment needed** No Yes-Type/Reason _____
 Inspection limitations None Visibility Access Vines Root collar buried Describe _____