



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 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 _____ **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 _____ % Cracks _____ Lightning damage
 Dead twigs/branches _____ % overall Max. dia. _____ Codominant _____ Included bark
 Broken/Hangers Number _____ Max. dia. _____ Weak attachments _____ Cavity/Nest hole _____ % circ.
 Over-extended branches Previous branch failures _____ Similar branches present
Pruning history
 Crown cleaned Thinned Raised Dead/Missing bark Cankers/Galls/Burls Sapwood damage/decay
 Reduced Topped Lion-tailed Conks Heartwood decay _____
 Flush cuts Other _____ 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 —

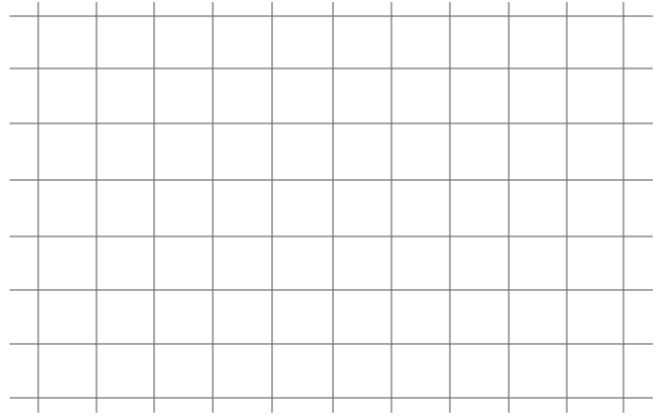
Collar buried/Not visible Depth _____ Stem girdling
 Dead Decay Conks/Mushrooms
 Ooze Cavity _____ % circ.
 Cracks Cut/Damaged roots Distance from trunk _____
 Root plate lifting Soil weakness
 Response growth _____
 Main concern(s) _____

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) | | | | Negligible | Minor | Significant | Severe | |
| | | | | | | | Improbable | Possible | Probable | Imminent | Very low | Low | Medium | High | Unlikely | Somewhat | Likely | Very likely | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | |

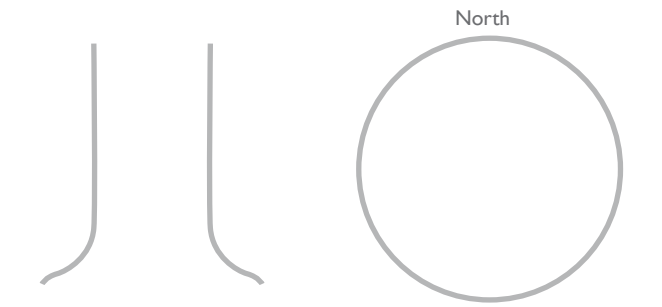
Matrix 1. Likelihood matrix.

| 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 Work priority 1 2 3 4
 Overall residual risk 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 _____