## 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

<table>
<thead>
<tr>
<th>Target number</th>
<th>Target description</th>
<th>Target zone</th>
<th>Target within drip line</th>
<th>Target within 1x Ht.</th>
<th>Target within 1.5x Ht.</th>
<th>Occupancy rate</th>
<th>Practical to move target?</th>
<th>Restriction practical?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</table>

### 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 wind □ Strong winds □ Ice □ Snow □ Heavy rain □ Describe

### Tree Health and Species Profile

**Vigor:** Low □ Normal □ High □

**Foliage:** None (seasonal) □ None (dead) □ Normal □ % Chlorotic □ % Necrotic □

**Abiotic:**

**Species failure profile:** Branches □ Trunks □ 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 __

**Main concern(s):**

**Load on defect:** N/A □

**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 □

**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 □

**Likelihood of failure:** Improbable □ Possible □ Probable □ Imminent □
<table>
<thead>
<tr>
<th>Condition number</th>
<th>Tree part</th>
<th>Conditions of concern</th>
<th>Part size</th>
<th>Fail distance</th>
<th>Target number</th>
<th>Target protection</th>
<th>Likelihood of Failure</th>
<th>Likelihood of Impacting Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td></td>
<td>Improbable</td>
<td>Likely</td>
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<td>Likely</td>
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</table>

Matrix 1. Likelihood matrix.

<table>
<thead>
<tr>
<th>Failure &amp; Impact</th>
<th>Improbable</th>
<th>Negligible</th>
<th>Minor</th>
<th>Severe</th>
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</thead>
<tbody>
<tr>
<td>Very likely</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>Extreme</td>
</tr>
<tr>
<td>Likely</td>
<td>Low</td>
<td>Moderate</td>
<td>High</td>
<td>High</td>
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<tr>
<td>Somewhat likely</td>
<td>Low</td>
<td>Low</td>
<td>Moderate</td>
<td>Moderate</td>
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<tr>
<td>Unlikely</td>
<td>Low</td>
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</table>

Matrix 2. Risk rating matrix.

<table>
<thead>
<tr>
<th>Consequences of Failure</th>
<th>Negligible</th>
<th>Minor</th>
<th>Significant</th>
<th>Severe</th>
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</thead>
<tbody>
<tr>
<td>Very likely</td>
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<td>Moderate</td>
<td>High</td>
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<tr>
<td>Unlikely</td>
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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 __________________

This datasheet was produced by the International Society of Arboriculture (ISA) and is intended for use by Tree Risk Assessment Qualified (TRAQ) arborists – 2013