ISA Basic Tree Risk Assessment Form

Client **Irving Ericksen** Date **April 17th** Time **3pm**

Address/Tree location **2054 47th Ct. NE Salem** Tree no. ____ Sheet ____ of ____

Tree species **Sequoiadendron giganteum** dbh **150"** Height **105'** Crown spread dia. **45**

Assessor(s) **Tim Jones** Tools used **Tape, Phone, Clinometer** Time frame **1 year**

Target Assessment

Target number	Target description	Target protection	Target zone — Target within drip line	Target zone — Target within 1 x Ht.	Target zone — Target within 1.5 x Ht.	Occupancy rate 1–rare 2–occasional 3–frequent 4–constant	Practical to move target?	Restriction practical?
1	Surrounding homes	None	X			4	N	N
2								
3								
4								

Site Factors

History of failures **Top broke out impacted home** 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 **Backyard of property**

Prevailing wind direction **N-NE** Common weather Strong winds ☒ Ice ☐ Snow ☐ Heavy rain ☒ Describe **Valley Conditions**

Tree Health and Species Profile

Vigor Low ☐ Normal ☒ High ☐ Foliage None (seasonal) ☐ None (dead) ☐ Normal **98** % Chlorotic ____ % Necrotic ____ %

Pests/Biotic ____ Abiotic ____

Species failure profile Branches ☒ Trunk ☐ Roots ☐ Describe **limb loss**

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 **Broken Top**

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 ____

(4) one sided stems leaning at home Condition(s) of concern ____

Part Size **30'-40'** Fall Distance **100'**

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 ☒ **Broken Top** Similar branches present ☐

Dead/Missing bark ☐ Cankers/Galls/Burls ☐ Sapwood damage/decay ☐

Conks ☐ Heartwood decay ☐ ____

Response growth ____

Condition(s) of concern **Severe wound in South stem.**

Part Size ____ Fall Distance **100'**

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 **10**° Corrected? **No**

Response growth ____

Condition(s) of concern **4 codominate Attachments**

Part Size **30-40"** Fall Distance **100'**

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				Likelihood — Impact				Failure & Impact (from Matrix 1)				Consequences				Risk rating (from Matrix 2)
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely	Negligible	Minor	Significant	Severe	
Homes	Codominate Stems	Poor Attachments unbalanced loads		X						X		X						X	MOD

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

- Recent failures leaving home unlivable
- Poor Growth pattern
- Significant load on codominate attachments
- Several home in impact zone

Mitigation options

1. Remove & Stump Grind — Residual risk _None_
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 _____