

ISA Basic Tree Risk Assessment Form

Client San Mateo County Parks Date January 6, 2021 Time 1:30pm
 Address/Tree location 215 Bay Road, Menlo Park, CA Tree no. 13 Sheet 1 of 2
 Tree species Quercus agrifolia - Coast live oak dbh 59" Height 50' Crown spread dia. 66'x66'
 Assessor(s) Daniel Krug Tools used Mallet, Probe, IML Resistance Drill Time frame 1 year

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 1x Ht.	Target within 1.5x Ht.			
1	Multi-use trail	—	X	X	X	4	NO	YES
2	Park users / Picnickers	—	X	X	X	1	YES	YES
3	PAGE Electrical distribution lines	—		X	X	4	NO	NO
4								

Site Factors

History of failures Visual evidence of limb breakage and large limb removal Topography Flat Slope % Aspect N/A
 Site changes None Grade change Site clearing Changed soil hydrology Root cuts Describe _____
 Soil conditions Limited volume Saturated Shallow Compacted Pavement over roots 20 % Describe Multi-use trail NE & S
 Prevailing wind direction N 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 5 %
 Pests/Biotic Bark beetles, Borer Exit holes Abiotic utility pruning - minor
 Species failure profile Branches Trunk Roots Describe Species fail at branching unions, co-dominant stems & @

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 N/A
 Recent or expected change in load factors Tree was pruned in 2019, reduction cuts in upper canopy.

Tree Defects and Conditions Affecting the Likelihood of Failure

— Crown and Branches —

Unbalanced crown Dead twigs/branches Broken/Hangers _____ Over-extended branches
 LCR 60 % Number 10 % overall Max. dia. 2" Max. dia. N/A
 Pruning history Crown cleaned Thinned Raised
 Reduced Topped Lion-tailed
 Flush cuts Other utility clearance
 Condition(s) of concern N/A
 Part Size _____ Fall Distance _____
 Load on defect N/A Minor Moderate Significant
 Likelihood of failure Improbable Possible Probable Imminent
 Cracks Stress cracks Lightning damage
 Codominant Included bark Weak attachments Cables present Cavity/Nest hole _____ % circ.
 Previous branch failures Similar branches present
 Dead/Missing bark Cankers/Galls/Burls Sapwood damage/decay
 Conks Heartwood decay Several small cavities
 Response growth Callus wood observed

— 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 N/A
 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 Rams horns around basal cavity
 Condition(s) of concern Decay at root collar
 Part Size 59" dbh Fall Distance 60'
 Load on defect N/A Minor Moderate Significant
 Likelihood of failure Improbable Possible Probable Imminent

Risk Categorization

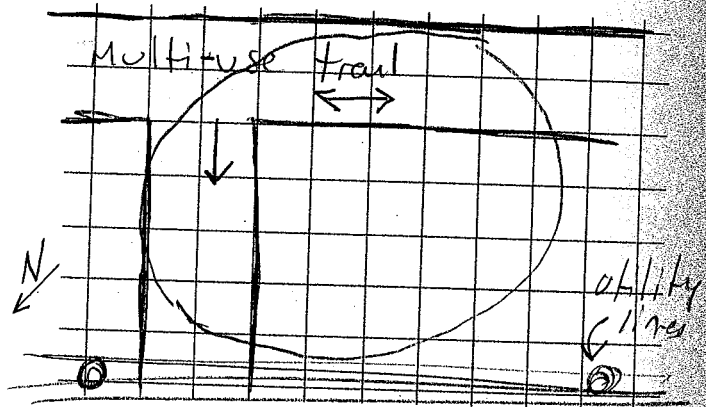
Target (Target number or description)	Tree part	Condition(s) of concern	Likelihood												Risk rating (from Matrix 2)								
			Failure				Impact				Failure & Impact (from Matrix 1)					Consequences							
			Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely		Negligible	Minor	Significant	Severe				
1 Multi-use trail	Trunk	Decay at root crown		X						X			X			X							Low
2 Picnickers	Trunk	Decay at root crown		X				X		X												X	Low
3 Utility lines	Trunk	Decay at root crown		X					X	X				X									Low

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



Notes, explanations, descriptions

Risk rating may not fully reflect tree condition due to unknown level of trunk & basal decay. Mitigation options

Mitigation options

1. Restrict access within dripline to picnickers Residual risk Low
2. Restrict use or move Multi-use trail - Not Practical Residual risk N/A
3. Request utility relocate distribution wires - Not Practical Residual risk N/A
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 Resistance drill test

Inspection limitations None Visibility Access Vines Root collar buried Describe Unable to identify extent of internal decay
 ** Resistance drill test returns illustrate significant internal decay, which elevate tree risk to High with no reasonable mitigation options.