

<b><u>DATE</u></b>	October 9, 2024
<b><u>SUBJECT</u></b>	
<u>Certificate of Appropriateness Request:</u>	H-20-24
<u>Applicant:</u>	Brian Cone
<u>Location of subject property:</u>	61 Spring St NW
<u>PIN:</u>	5620-78-4354
<u>Staff Report prepared by:</u>	Kim Wallis, AICP, Senior Planner

### **BACKGROUND**

- The subject property, 61 Spring St NW, is designated as “Fill/Intrusive” in the North Union Street Historic District (Exhibit A).
- “Two-story, plain brick main building contains paired vertical six-over-six windows with concrete lintels and sills. An inobtrusive auditorium with a simple arcade at the front was built around 1930 and is located at the rear of the main structure. A one-story, "low-slung" brick building with gable roof sheathed in white gravel is situated below street level. Location of the latter building and the landscaping prevent the school from being a noticeable intrusion in the district (Exhibit A).

### **DISCUSSION**

On September 20, 2024, Brian Cone for Cabarrus County Board of Education, submitted a Certificate of Appropriateness application for the demolition of the Coltrane-Webb school at 61 Spring St. NW (Exhibit B).

#### **Overview**

The Coltrane-Webb Elementary School site consists of six (6) brick-and-mortar buildings and two (2) mobile units, totaling 58,200 square feet. Along with the buildings, all plumbing, mechanical, and electrical components associated with the structures, including covered walkway canopies and chain link fencing will be demolished. All existing site paving, stairs, ramps, retaining walls and other improvements are to remain. Forty-one (41) trees and mature shrubbery are in the area of demolition. The trees and shrubs required for the demolition of the buildings that are not in street view will be removed down to grade, leaving stumps and root systems in place.

The demolition and removal of the buildings, site features and trees will allow for the grading and construction of new driveways, parking lots, and the updated and modern 115,000-sqaure-foot STEM replacement elementary school.

#### **Buildings**

Two of the original buildings, a gym/auditorium and a classroom building, date back to pre-1938, with one of them being reconstructed as part of a 1979 addition. In 1948, a two-story brick classroom building and administrative offices were added, followed by a cafeteria in 1958, which was adjacent to the 1938 structure and later renovated during the 1979 classroom addition. A media center was added in 1970, and the 1979 expansion also included a single-story classroom building along Spring Street, along with renovations to other structures. The most recent addition was two offices built in 1988, located next to the 1948 administration building.

## Trees

There are forty-one (41) trees in the area of demolition. Of these, twelve (12) Crape Myrtle trees along Spring St NW are planned to remain. The City Arborist, Robert Stroud, did assessments of the trees on 10/2/2024 and of the remaining 29, there are: six (6) Willow Oak, six (6) Sugar Maple, three (3) Loblolly Pine, three (3) Hackberry, two (2) Pecan, two (2) Red Maple, and one each of the following: Water Oak, Shumard Oak, Black Cherry, Cherry Blossom, Bradford Pear, Southern Magnolia and a Live Oak. All were given a low risk of failure. The Live Oak was identified as a significant species and the City Arborist remarked that the *“Tree is in remarkably good health. Preservation [is] strongly recommended due to species.”*

The applicant states that they understand the sensitivity to existing, mature trees and the role they play within the historic district. They will make every effort possible to save these trees so long as the grading operations associated with the development of the site do not impact the area directly below the tree canopy. If they begin to intrude under the canopy, there is a much greater chance the tree will not survive. The applicant will work with the City Arborist, Robert Stroud, on the landscape features that are a part of this site so that we can align the municipal needs with the district needs as best they can.

The applicant states that they will provide a landscape plan at the November 13th HPC meeting, that will show locations of existing trees to remain, new replacement trees and required city plantings.

## **Pre-Demolition Work**

- The applicant has provided photographs completely documenting the buildings and site that will be demolished to the Concord Planning & Neighborhood Development Department for their files and to share with SHPO, if needed.
- The applicant states that hazardous materials have been tested on-site and will be safely removed before demolition begins. Utility relocations will also be carried out to improve service for both the school and the surrounding community, and stormwater management systems will be installed to control water flow across the site.
- The Historic Preservation Commission staff was carbon copied on a letter from the State Historic Preservation Office (SHPO) to the NC Department of Public Instruction regarding the demolition and new construction with the following comments:

*“The [National Register] nomination’s assessment of the school is as “Fill/Intrusion” meaning that the property as “Fill” has neither a positive nor an especially negative impact on the characteristics of the district. As an “Intrusion” the school has a definite negative impact on the historical, architectural and/or cultural characteristics for which the district is significant.*

*While contained within a NRHP-listed district, the replacement of the Coltrane-Webb Elementary School will not adversely affect the North Union Historic District and does not require a comment from the North Carolina Historical Commission. However, removal and replacement of the school may require a Certificate of Appropriateness from the Concord Historic Preservation Commission.*

*Based on our knowledge of the area, it is unlikely that any archaeological resources that may be eligible for inclusion in the National Register of Historic Places will be affected by the project. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.”*

## **Time of Day and Notification of the Demolition Work**

The applicant states that demolition work will occur between 7:00 AM and 6:00 PM, Monday through Saturday. Due to the project's size and scope, notifications to nearby property owners and the community will only be sent for significant events that may affect them. These could include early concrete pours required by weather conditions or large equipment and material deliveries that may temporarily stage on

adjacent roads. As a school district, there are minimal resources to send mailings to everyone and would seek the assistance of the City of Concord and their communications team to help notify the community. The district will have a website dedicated to the project that will provide updates on the schedule and activities taking place. They will provide information on access to this site to the adjacent community and surrounding area.

### **Securing the Site during Demolition**

A 6' chain link safety and security fence will be installed around the entire property with screening to maintain a controlled working environment. Demolition crews will water down structures during demolition to reduce dust. Should additional needs arise for dust control and adjacent property protection, the contractor of record will be required to address these issues before proceeding further.

### **Post Demolition**

The applicant states that for this project, the demolition COA and new construction COA are being submitted at different times to ensure that all components are met for both the Historic Preservation Commission and the Concord Development Ordinance. Additionally, there are financial and timeline components that the applicant is working to coordinate so that they can continue toward the opening of the school in August of 2026. The site plan was presented at the City of Concord's Design Review Committee (DRC) meeting on September 26 and the applicant is working closely with City Staff to address all comments prior to the November meeting of the Historic Preservation Commission. Planning Staff was consulted and felt that this was the best path forward.

Site development will follow demolition and begin in December 2024 or January 2025 (Exhibits D, E, F).

### **ATTACHMENTS**

Exhibit A: National Register of Historic Places Inventory

Exhibit B: Application for Certificate of Appropriateness

Exhibit C: Subject Property Map

Exhibit D: Applicant Submitted Description, Site Plans, and Photographs

Exhibit E: Staff Submitted Tree Assessments and Photographs

Exhibit F: GS-24-1988-NAE Memo from the State Historic Preservation Office (SHPO)

### **HISTORIC HANDBOOK DESIGN RECOMMENDATIONS**

#### **Approval Requirement Needs Table:**

**Tree Removal:** Removal of damaged, unhealthy or healthy trees in any location on the property requires Planning Staff Approval (Replacement is required).

**Demolition:** The demolition of any building or part thereof requires Commission Hearing and Approval.

#### **Chapter 5-1: Landscaping and Trees**

##### **Design Standards**

- Removal of trees with a diameter at breast height (DBH) of 6" or more requires a COA. Consult with the City of Concord's City Arborist before removing these trees.
- All trees that are removed shall be replaced by a tree of similar species in an appropriate location unless no suitable location exists on the subject site. Refer to the Arbor Day Foundation website for information on tree replanting. Refer to the Acceptable Plant Species Table in the City of Concord's Development Ordinance which includes a list of tree species which are preferable for landscaping in this area of North Carolina.
- Trees removed within street view must also have the stumps removed below ground level.
- Consider placement, species and type of new trees to avoid damage to sidewalks, curbs, retaining walls, and foundations.

- Placement of all vegetation shall not interfere with utilities and vehicular traffic (sight-triangles).
- Design new construction or additions so that large trees and other significant site features, such as vistas and views, are preserved.
- Protect trees and plantings from immediate damage during construction and from delayed damage due to construction activities, such as loss of root area or compaction of the soil by equipment. It is especially critical to avoid compaction of the soil within the critical root zone of trees. Consult with the City Arborist to determine best management practices.
- Planting of parking lot landscaping and buffering materials for new or converted non-residential and multi-family dwellings must be in accordance with Article 11 in the City of Concord's Development Ordinance.

### **Chapter 8-1: Demolition**

- Historic Preservation Commission approval is required for any demolition.
- In accordance with The City of Concord Development Ordinance - Historic Preservation Overlay Districts, Delay in Demolition, states that an application for a Certificate of Appropriateness authorizing the demolition of a building or structure within the District may not be denied. However, the effective date of such a certificate may be delayed for a period of up to 365 days from the date of approval. The maximum period of delay authorized by this section shall be reduced by the Historic Preservation Commission where it finds that the owner would suffer extreme hardship or be permanently deprived of all beneficial use of or return from such property by virtue of the delay. During such period, the Historic Preservation Commission may negotiate with the owner and other parties in an effort to find a means of preserving the building. If the Historic Preservation Commission finds that the building has no particular significance or value toward maintaining the character of the District, it shall waive all or part of such period and authorize earlier demolition or removal.

### **Design Standards**

- A COA is required for any demolition of a structure in a historic district.
- Completely document the building in its original location through photographs (black & white and color) and provide a copy of the documentation to the Concord Planning & Neighborhood Development Department and the State Historic Preservation Office.
- Consult with a structural engineer who specializes or is knowledgeable about historic buildings to document the structural integrity of the building and determine if the building can be relocated to save it from demolition.
- A COA for post-demolition site development for the proposed use of the property after the building is removed to the Concord Historic Preservation Commission is required before or simultaneously with the COA for demolition. Refer to the standards for Site and Setting for additional information.
- Protect adjacent buildings and structures during the demolition.
- Protect archaeological resources during demolition.
- Report any archaeological findings to Concord's Planning and Neighborhood Development Department and the N.C. Office of State Archaeology immediately.
- Work with the HPC and other interested parties to salvage usable architectural materials and features.
- Maintain a secure site during the demolition and redevelopment process.
- Conduct demolition activities during specific times of the day and notify neighbors of activities.
- Following demolition, develop the site promptly, in accordance with the approved COA.



## **RECOMMENDATION**

1. The Historic Preservation Commission should consider the circumstances of this application for a Certificate of Appropriateness relative to the North and South Union Street Historic Districts Handbook and act accordingly.
2. If approved, applicant(s) should be informed of the following:
  - City staff and Commission will make periodic on-site visits to ensure the project is completed as approved.
  - Completed project will be photographed to update the historic properties survey.

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Inventory—Nomination Form

For NPS use only

received

date entered

Continuation sheet	Item number	Page
Inventory List - North Union Street Historic District, Concord	#7	61

This church is the second house of worship built by this congregation. The church was first organized in 1886. The original church was of Queen Anne design and was completed in 1889. At that time the church could accomodate two-hundred-and-fifty members. The church was enlarged in 1896 in order to double its seating capacity. The present church replaced the earlier building in 1924 and seats one thousand worshipers.

123. Coltrane-Webb School  
61 Spring Street, N.W.  
c. 1920s  
F/I

Two-story, plain brick main building contains paired vertical six-over-six windows with concrete lintels and sills. An inobtrusive auditorium with a simple arcade at the front was built around 1930 and is located at the rear of the main structure. A one-story, "low-slung" brick building with gable roof sheathed in white gravel is situated below street level. Location of the latter building and the landscaping prevent the school from being a noticeable intrusion in the district.

124. House  
111 Spring Street, N.W.  
ca. 1905  
C

Cottage style, frame house features Queen Anne and Colonial Revival details. The house has a high hip roof with a flat top. Two interior chimneys pierce the roof. Facade features a projecting front shingle gable. Wrap-around porch is supported by paired classical columns. Two sets of these columns have been replaced with wrought iron. There are two projecting bays on the north side of house. House has a rear ell. The southwest wing also has a high hip roof.

125. J.L. Hartsell House  
125 Spring Street, N.W.  
ca. 1905  
P.

Notable two story, frame residence that blends Queen Anne and Colonial Revival architecture. The three-bay facade has typical Queen Anne asymmetrical massing. The projecting three-sided, slanted southern bay is topped with a witches-cap roof that is crowned with a finial. Another Queen Anne feature is the mixture of texture. The first floor facade is covered with weatherboards and the second floor is sheathed with square, slate, cut shingles. Main roof is pyramidal and is topped with a large finial.

# Application for Certificate of Appropriateness

An application will not be placed on the agenda until all required information and attachments, as listed in this document, are submitted and complete

TO BE COMPLETED BY APPLICANT			STAFF USE ONLY				
<b>Application Deadline:</b> Approximately one month (~ 30 days) prior to regularly scheduled HPC meeting. Please check with City Staff to confirm submission deadlines and meeting dates. <b>COA Fee: \$40.00    After-the-Fact Fee: \$120.00</b>			Yes	N/A	Yes	No	N/A
1	<b>Written Description</b> Describe clearly and in detail the project scope of work.	X					
2	<b>Materials Description</b> Type/Width of siding, window trim, height/style of doors, etc.	X					
3	<b>Photos of Existing Conditions</b> Clear digital photos of: <ul style="list-style-type: none"> <li>• All sides of the building(s)</li> <li>• Front yard</li> <li>• Rear yard</li> <li>• Trees to be removed</li> <li>• Significant site features</li> </ul>	X					
4	<b>Context Photographs</b> <ul style="list-style-type: none"> <li>• Photos of structures on same block and across the street, include property address for each photo.</li> <li>• Photos of other properties in District with similar design features, as applicable.</li> </ul>		X				
5	<b>Site Plans - Existing + Proposed.</b> (Property survey, or scaled drawing accepted) <ul style="list-style-type: none"> <li>• Lot Dimensions</li> <li>• Setback dimensions [side,rear,front (porch + thermal wall)]</li> <li>• Setback dimensions of neighboring properties</li> <li>• Drives, walks + alleys</li> <li>• Tree protection and/or tree removal + replanting</li> <li>• HVAC location</li> <li>• Fences/walls</li> <li>• Accessory buildings (garages, sheds, gazebos, etc.)</li> <li>• Easements/public rights of way</li> <li>• % of Rear Yard Coverage</li> </ul>	X					

6	<b>Elevation Drawings - Existing + Proposed</b> All drawings should include dimensions, materials, foundation height, topography, etc. For additions, the existing structure and proposed addition must be clearly shown. The plans must clearly identify the building elements to be demolished. <ul style="list-style-type: none"> <li>• Front</li> <li>• Rear</li> <li>• Left</li> <li>• Right</li> </ul>	X				
7	<b>Architectural Details</b> <ul style="list-style-type: none"> <li>• Porch section (showing the column/beam alignment)</li> <li>• Railing detail</li> <li>Roof detail (soffit, fascia)</li> <li>• Window detail (material, design, dimensions, trim)</li> <li>• Wall section</li> </ul> <i>May include additional information as requested by the Commission as a condition for future review.</i>	X				
8	<b>Floor plans</b> As needed (usually optional).	X				

*(1) I hereby acknowledge and say that the information contained herein and herewith is true and that this application shall not be scheduled for official consideration until all of the required contents are submitted in proper form to the City of Concord Planning & Neighborhood Development. (2) I understand that City staff and/or members of the Historic Preservation Commission may make routine visits to the site to ensure that work being done is the same as the work that was approved. (3) I understand that photographs of the completed project will be used to update the City's historic districts inventory database.*

**SUBJECT PROPERTY**

Address: \_\_\_\_\_

Parcel ID (PIN): \_\_\_\_\_

Area (acres or square feet): \_\_\_\_\_

Current Zoning: \_\_\_\_\_

**OWNER INFORMATION**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

**APPLICANT INFORMATION**

Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Signature of Owner: \_\_\_\_\_ Date: \_\_\_\_\_

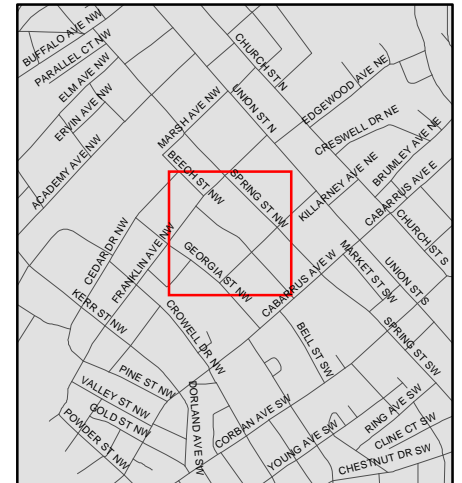
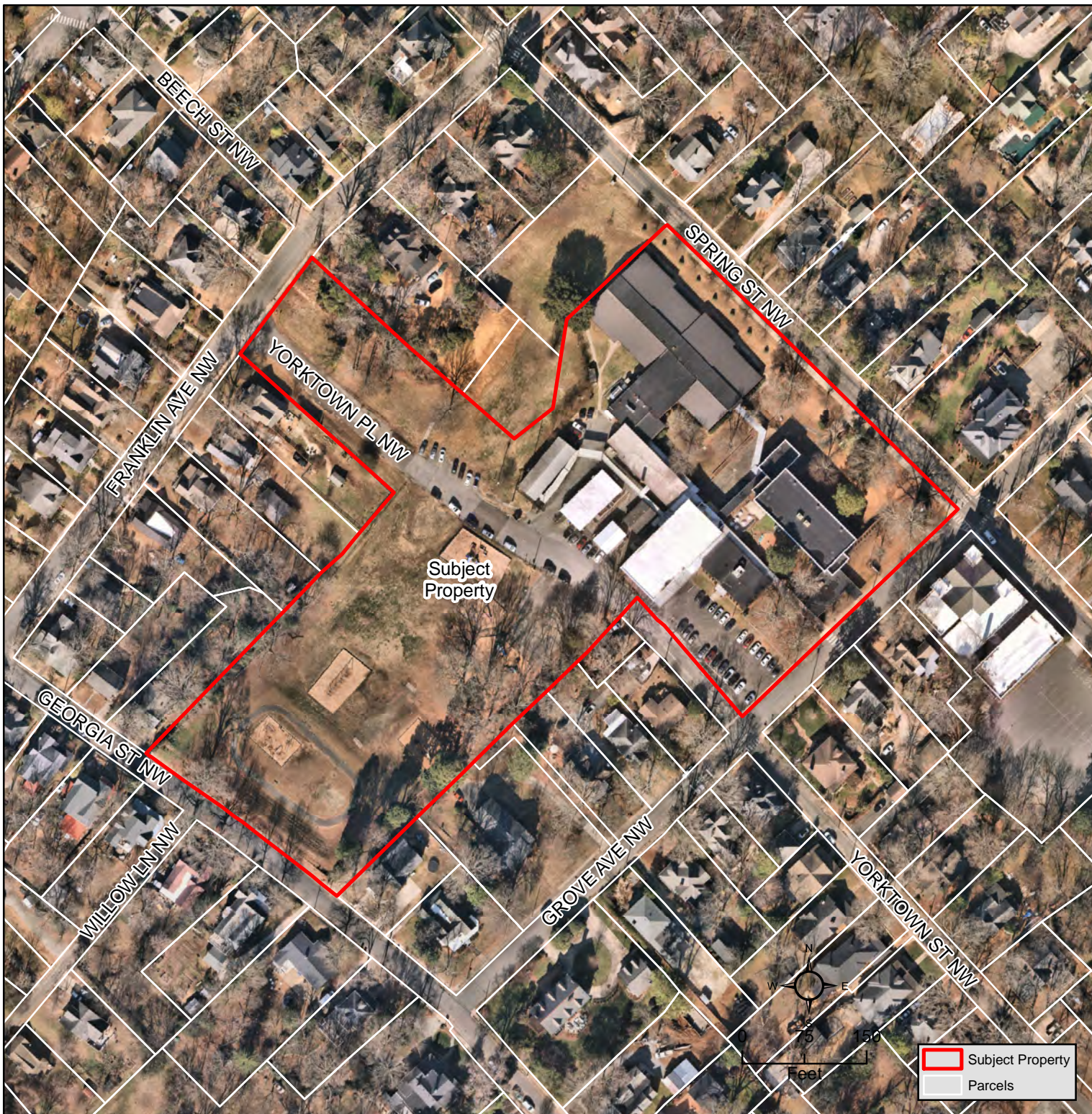
Signature of Applicant: \_\_\_\_\_ Date: \_\_\_\_\_



H-20-24

61 Spring St NW

PIN: 5620-78-4354



Source: City of Concord  
Planning Department

**Disclaimer**

These maps and products are designed for general reference only and data contained herein is subject to change. The City Of Concord, its employees or agents make no warranty of merchantability or fitness for any purpose, expressed or implied, and assume no legal responsibility for the information contained therein. Data used is from multiple sources with various scales and accuracy. Additional research such as field surveys may be necessary to determine actual conditions.





4401 Old Airport Road  
PO Box 388  
Concord, NC 28026-0388

(704) 260-5671

To: Kim Wallis, AICP  
Senior Planner  
City of Concord

From: Cabarrus County Schools  
Department of Construction

Date: September 27, 2024

Re: Demolition Narrative  
Coltrane-Webb STEM Elementary School  
61 Spring St., NW

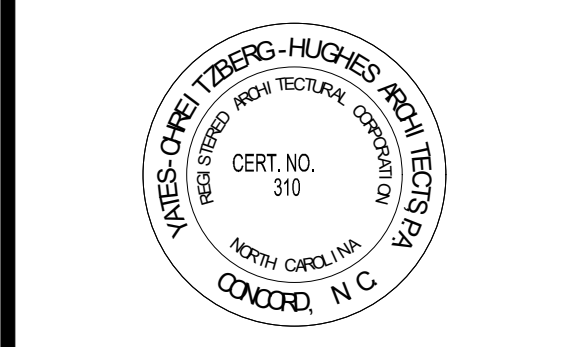
The Coltrane Webb Elementary School site consists of six brick-and-mortar buildings and two mobile units, totaling 58,200 square feet, all slated for demolition to make way for a new 115,000-square-foot elementary school. Two of the original buildings, a gym/auditorium and a classroom building, date back to pre-1938, with one of them being reconstructed as part of a 1979 addition.

In 1948, a two-story brick classroom building and administrative offices were added, followed by a cafeteria in 1958, which was adjacent to the 1938 structure and later renovated during the 1979 classroom addition. A media center was added in 1970, and the 1979 expansion also included a single-story classroom building along Spring Street, along with renovations to other structures. The most recent addition was two offices built in 1988, located next to the 1948 administration building.

All existing structures will be demolished to allow for grading and construction of new driveways, parking lots, and the new school building.

Hazardous materials have been tested on-site and will be safely removed before demolition begins. Utility relocations will also be carried out to improve service for both the school and the surrounding community, and stormwater management systems will be installed to control water flow across the site.

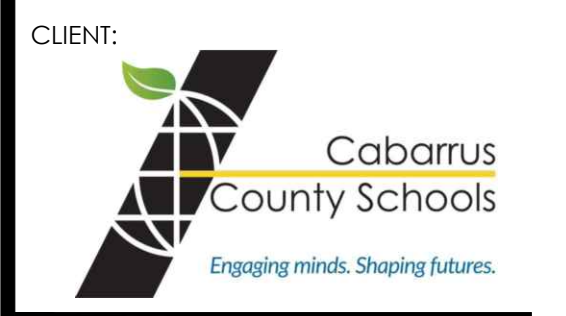




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**Coltrane-Webb / Beverly Hills Replacement Elementary School**

61 Spring St NW, Concord NC 28025

YCHA COM#: 22339.00

PHASE & DATE:  
**DESIGN DEVELOPMENT**

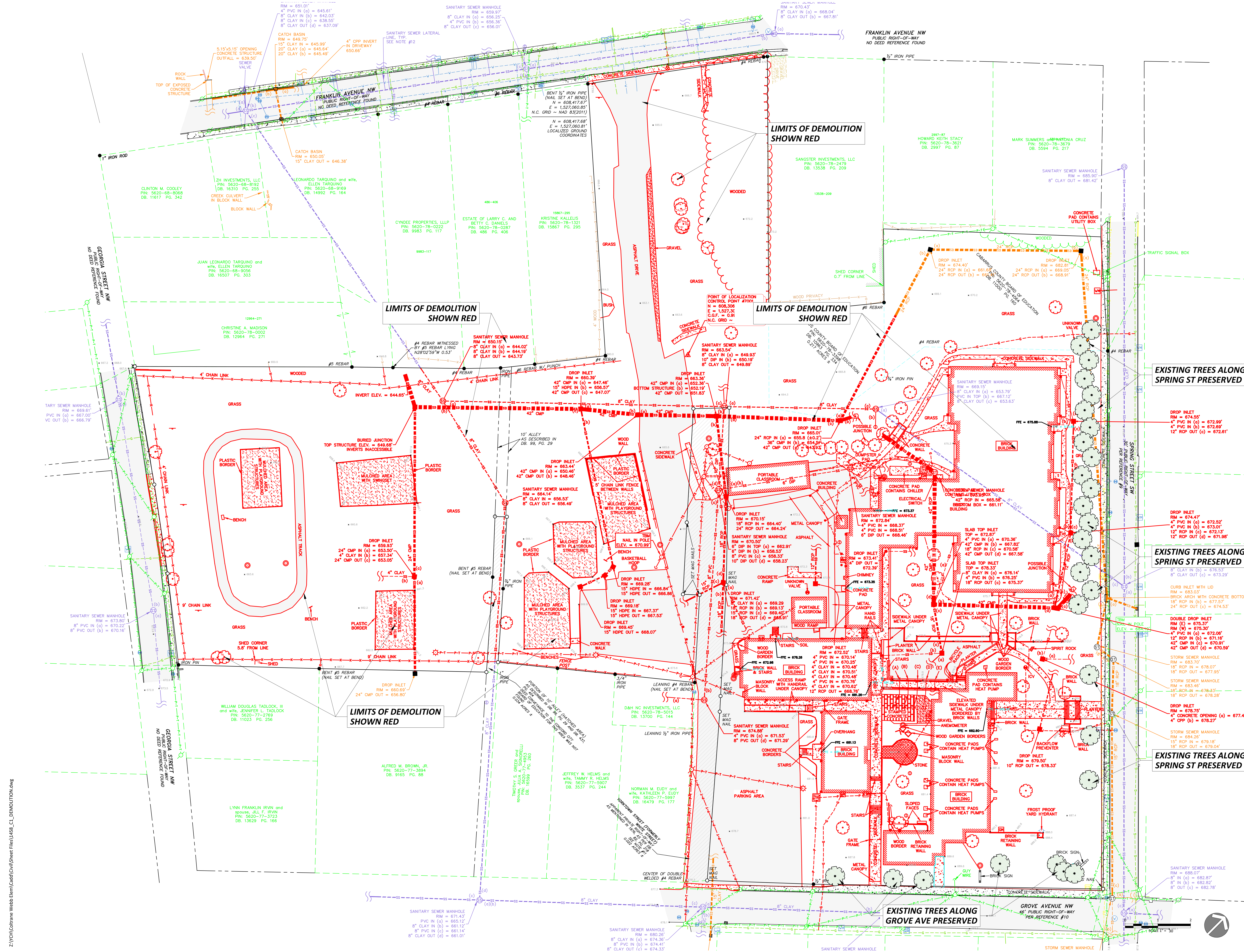
08-23-24

REVISIONS:

SHEET TITLE:  
**SITE DEMOLITION**

ARCHITECTURAL:

**C100**





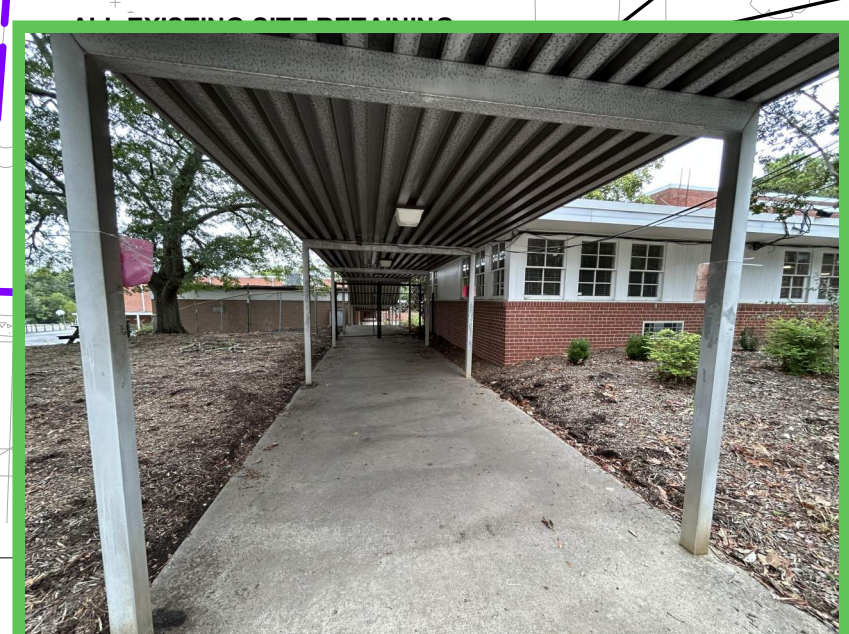
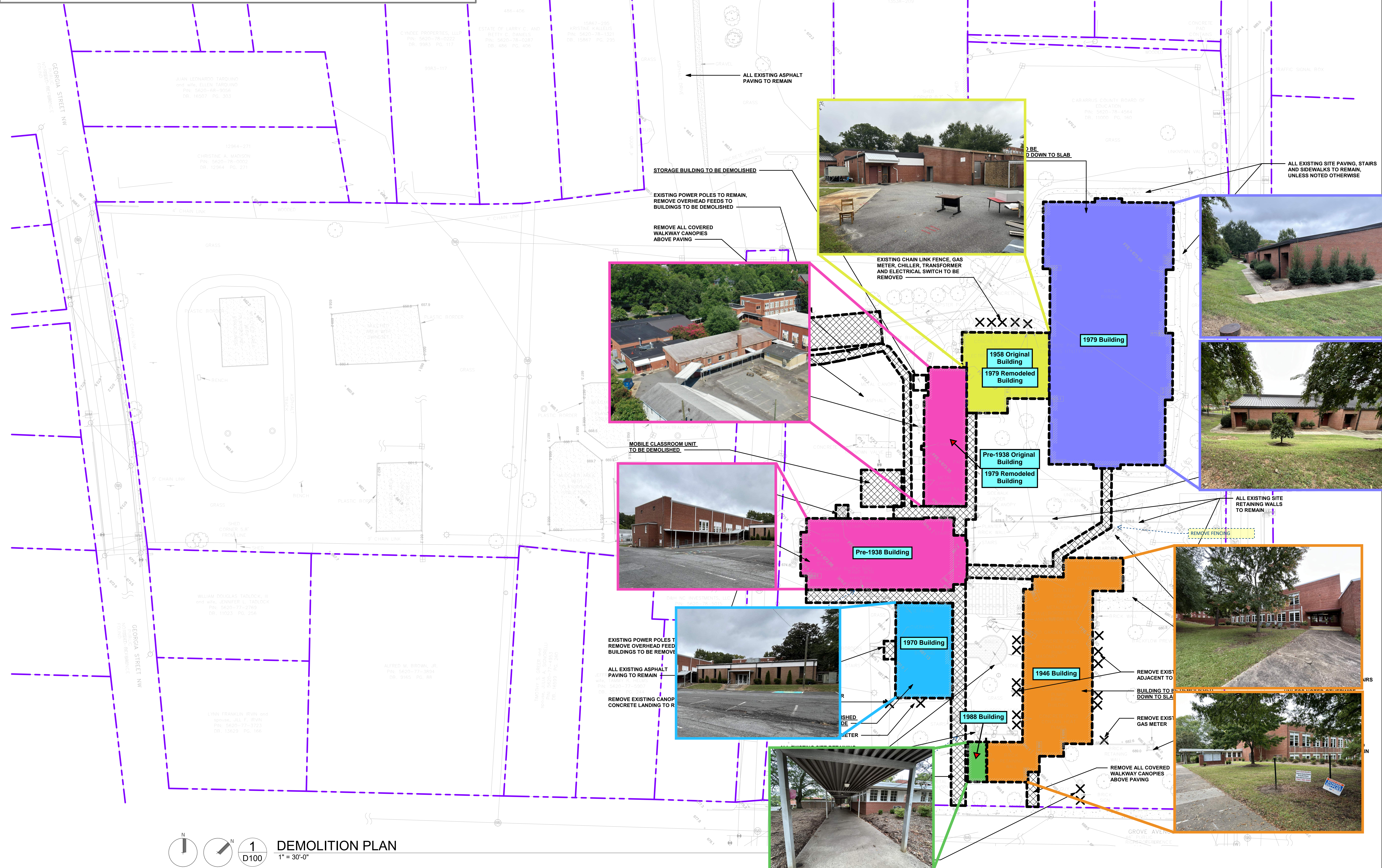
# DEMOLITION NOTES

## PROJECT SCOPE:

The scope of work within this Section is specifically limited to demolition of buildings shown dotted and shaded on the drawings. All existing construction not shown dotted is to remain unless noted otherwise.

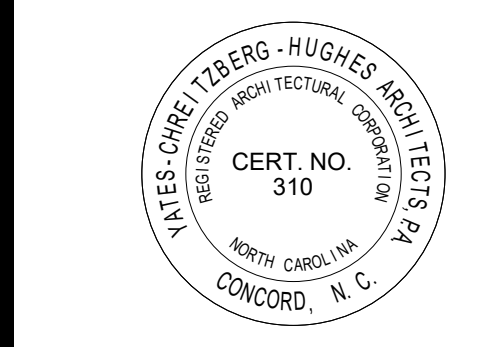
Demolition Work Consists of:

1. Demolition of all vertical construction, consisting of walls, columns, elevated floors over crawl spaces, roofs, and all other construction above slab, including all interior construction and all plumbing, mechanical, electrical components associated with the structures to be demolished.
2. Demolition of all covered walkway canopies.
3. Demolition of trees and shrubs only as required for the demolition of the buildings. Remove these trees and shrubs down to grade, leave stumps and root systems in place.
4. Removal of any furniture, fixtures and / or equipment within the buildings to be demolished.
5. All existing floor slabs on grade and all under slab / below grade construction, including foundation walls, footings, storm drainage structures / piping, utilities etc. are to remain.
6. All existing site paving, stairs, ramps, retaining walls and other improvements are to remain.
7. See Existing Conditions Sheet D000 for survey performed by CESI Dated July 25, 2024 for documentation of existing site conditions that may not be shown on the demolition drawings.



7035 NORTHWINDS DR NW  
CONCORD, NC 28027  
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PROFESSIONAL SEALS:



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CONSULTANT:



**Coltrane-Webb / Beverly Hills  
Replacement Elementary School**

YCHA COM#: 22339.00

PHASE & DATE:  
**DESIGN DEVELOPMENT**

08-23-24

REVISIONS:

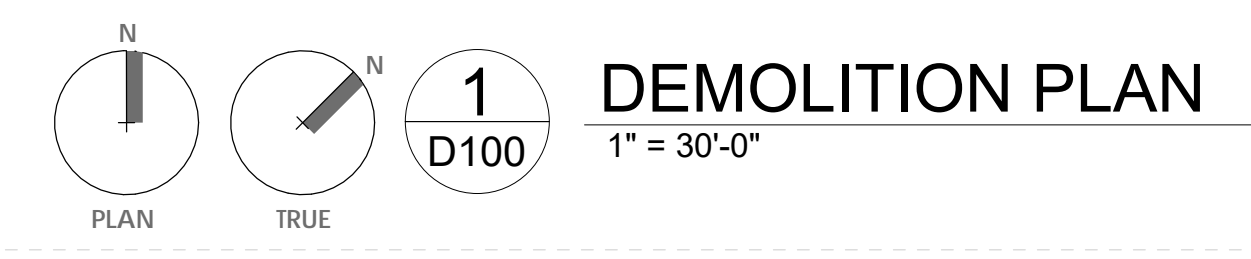
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**DEMOLITION PLAN**

ARCHITECTURAL:

**D100**

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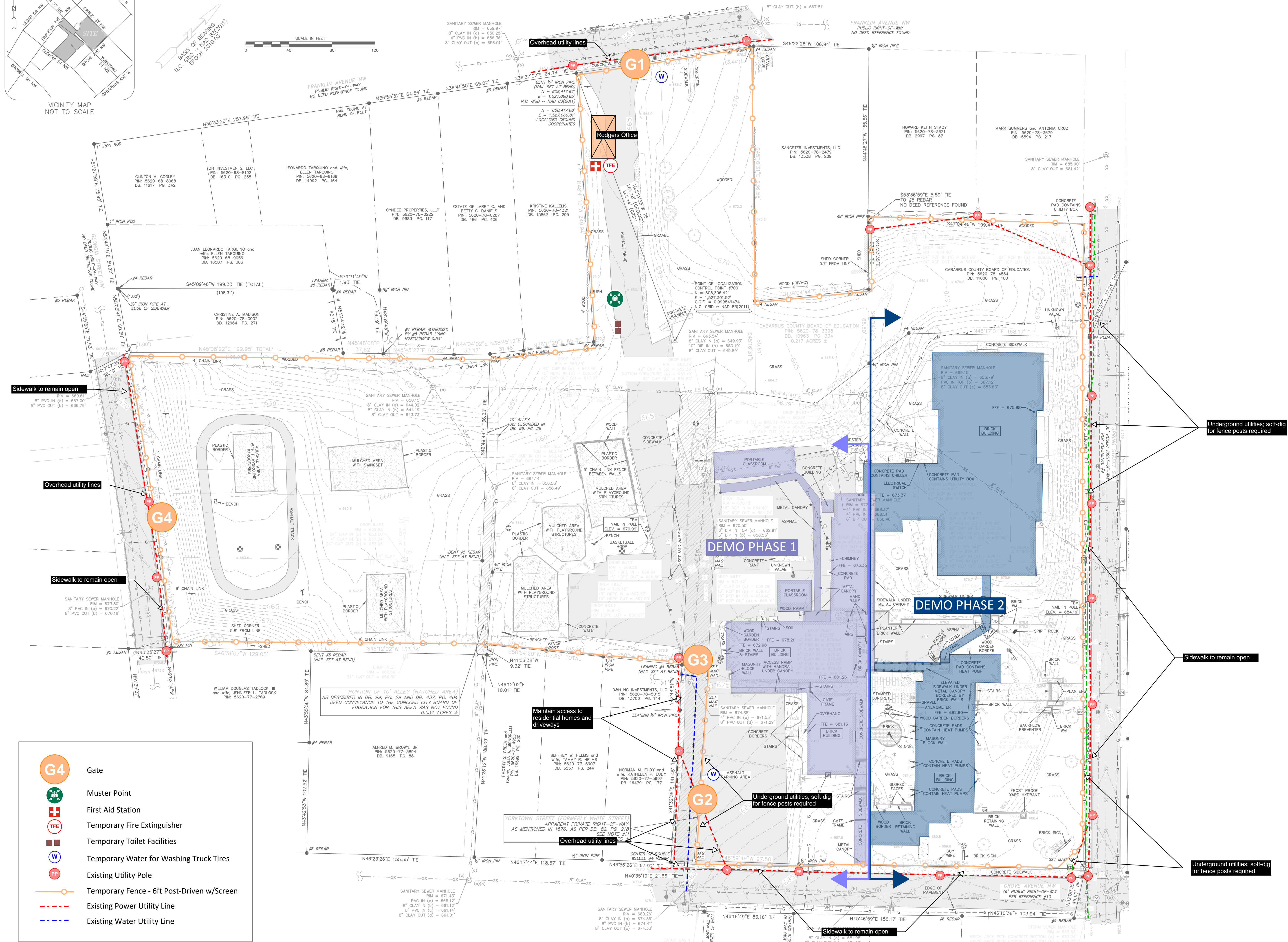
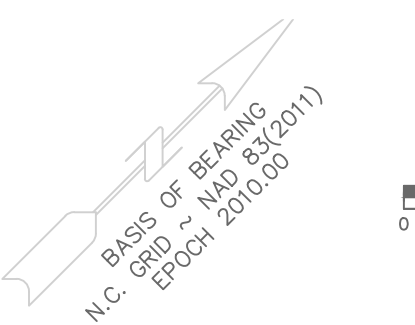
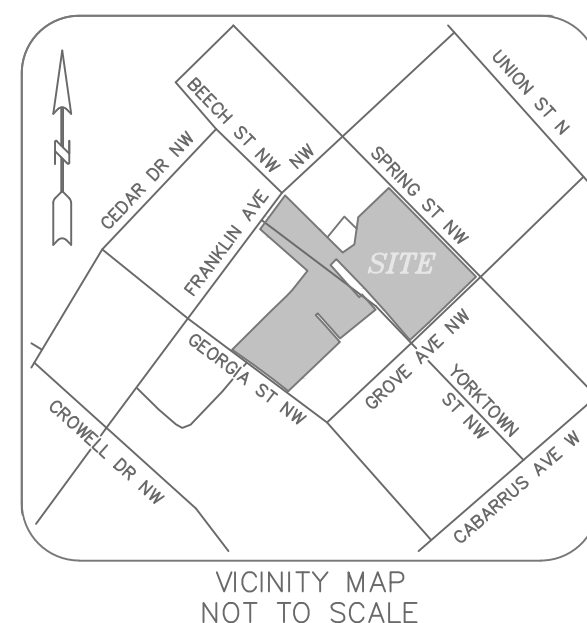


61 Spring St NW, Concord NC 28025



**COLTRANE WEBB/BEVERLY HILLS REPLACEMENT ELEMENTARY**

**SITE STAGING & LOGISTICS PLAN  
BUILDING DEMO PACKAGE - 08.09.2024**



- Gate
- Muster Point
- First Aid Station
- Temporary Fire Extinguisher
- Temporary Toilet Facilities
- Temporary Water for Washing Truck Tires
- Existing Utility Pole
- Temporary Fence - 6ft Post-Driven w/Screen
- Existing Power Utility Line
- Existing Water Utility Line

PORTION OF 10' ALLEY (MULCHED AREA) AS DESCRIBED IN DB 98 PG. 29 AND DB 437 PG. 404 DEED CONVEYANCE TO THE CONCORD CITY BOARD OF EDUCATION FOR THIS AREA WAS NOT FOUND 0.034 ACRES ±

YORKTOWN STREET (FORMERLY WHITE STREET) APPARENT PRIVATE RIGHT-OF-WAY AS MENTIONED IN 1876, AS PER DB 82 PG. 218 SEE NOTE #11

Maintain access to residential homes and driveways

Underground utilities; soft-dig for fence posts required

Underground utilities; soft-dig for fence posts required

Sidewalk to remain open

Underground utilities; soft-dig for fence posts required

Sidewalk to remain open

































# 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

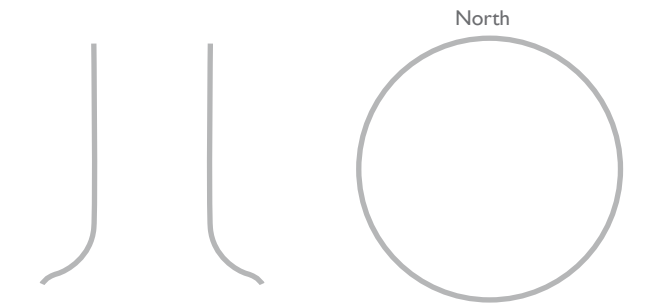
Risk Categorization																							
Condition number	Tree part	Conditions of concern	Part size	Fall distance	Target number	Target protection	Likelihood												Consequences				Risk rating of part (from Matrix 2)
							Failure				Impact				Failure & Impact (from Matrix 1)				Negligible	Minor	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 \_\_\_\_\_



# 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 —

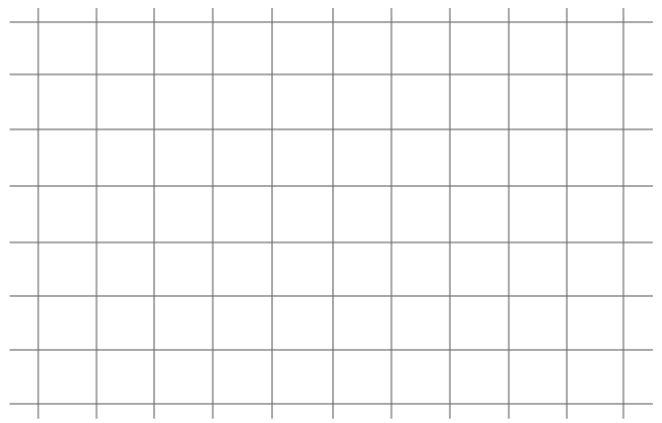
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

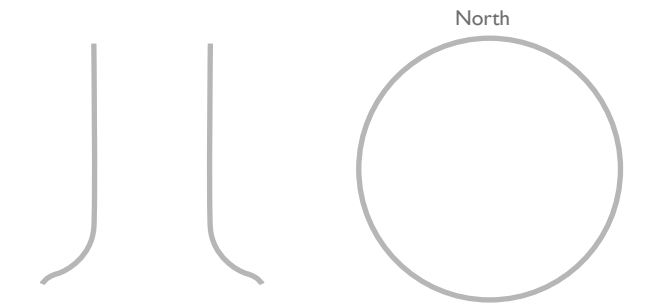
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

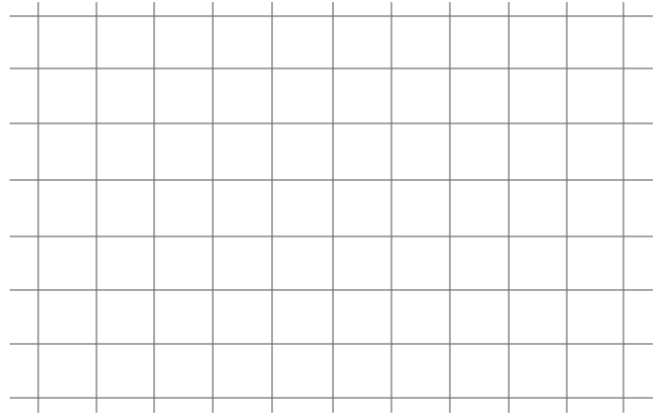
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

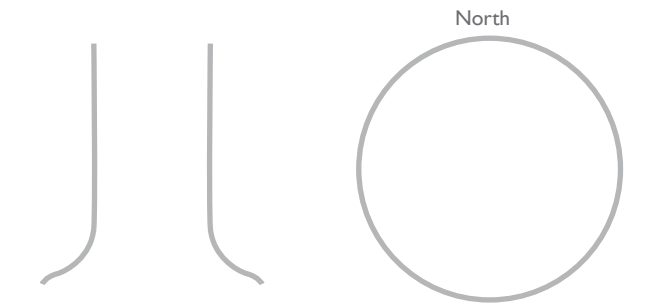
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

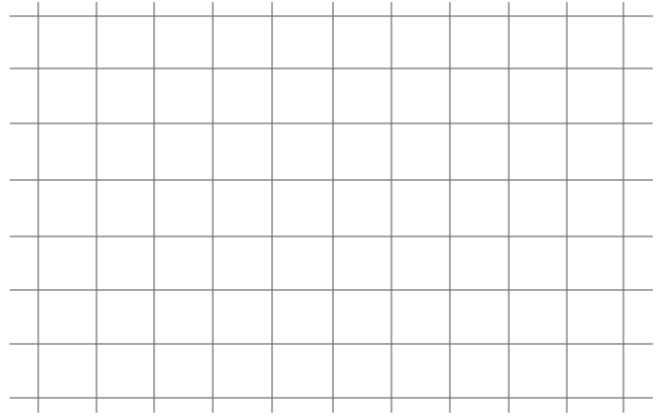
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							
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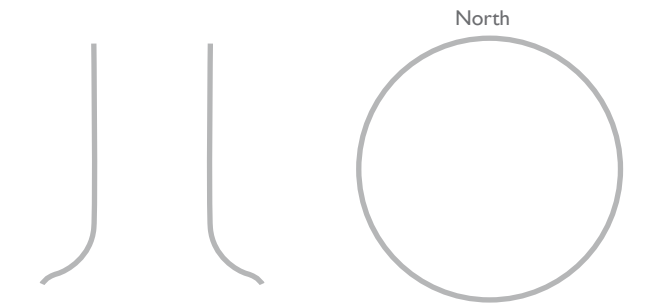
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

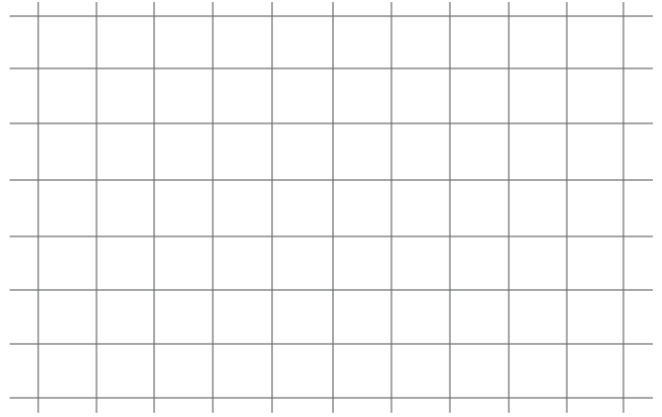
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

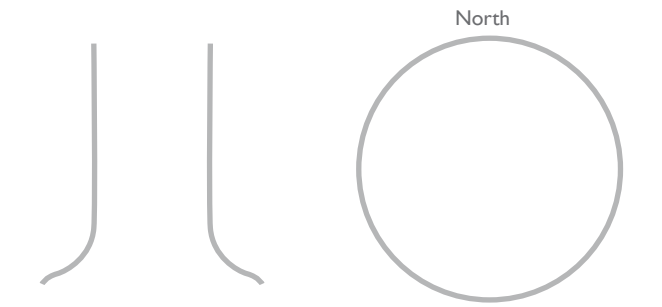
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

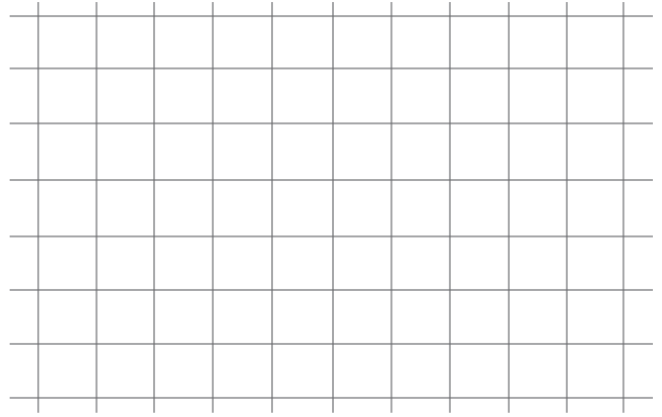
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

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																							

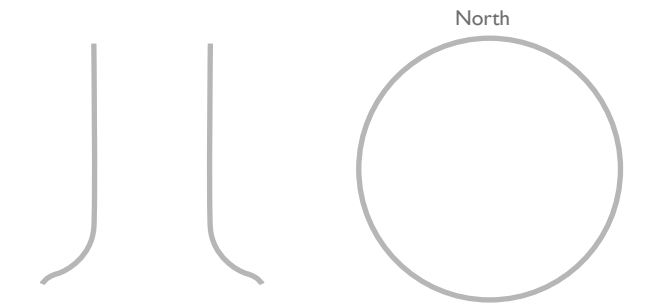
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

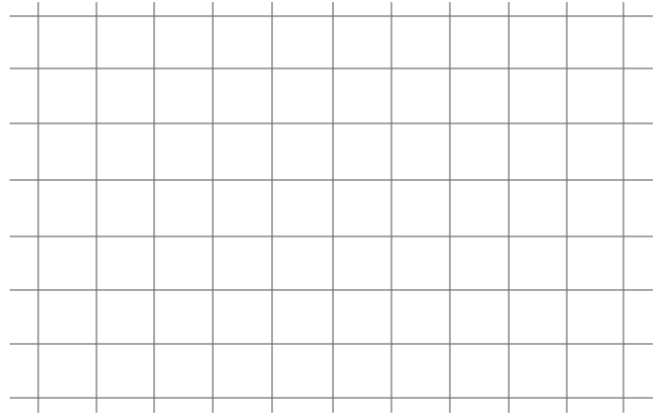
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

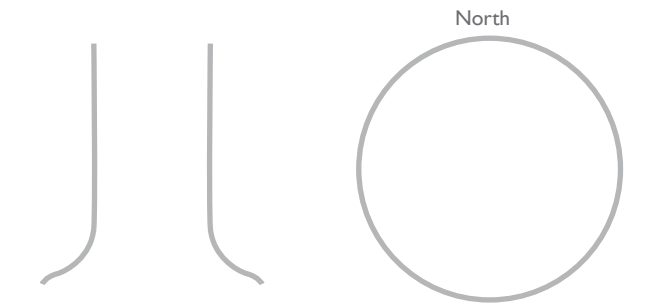
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

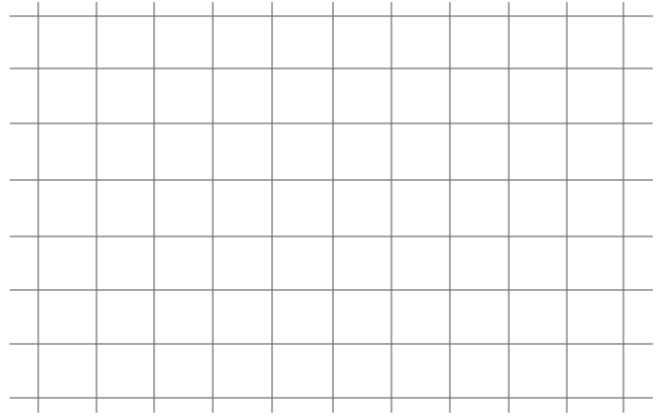
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

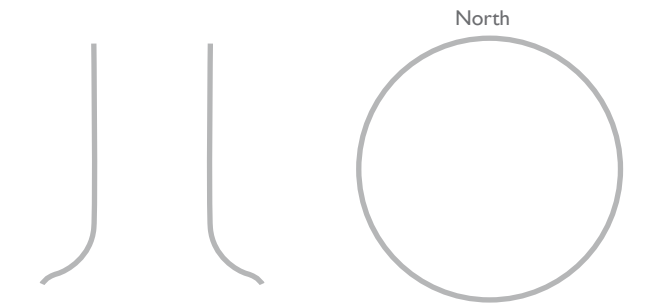
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

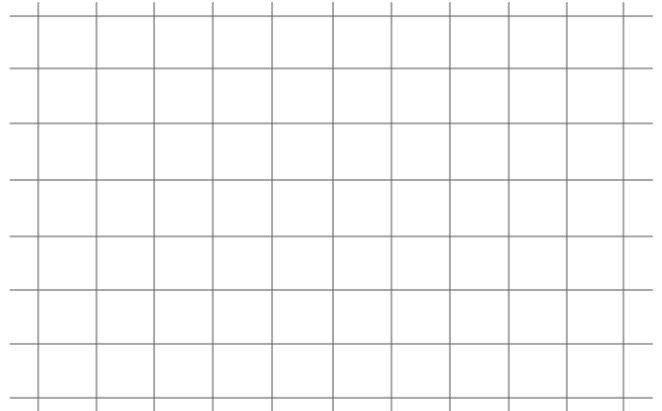
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

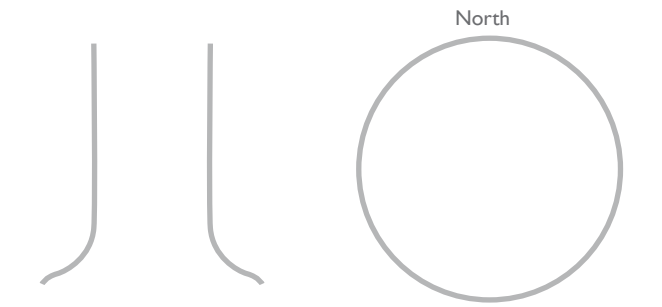
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

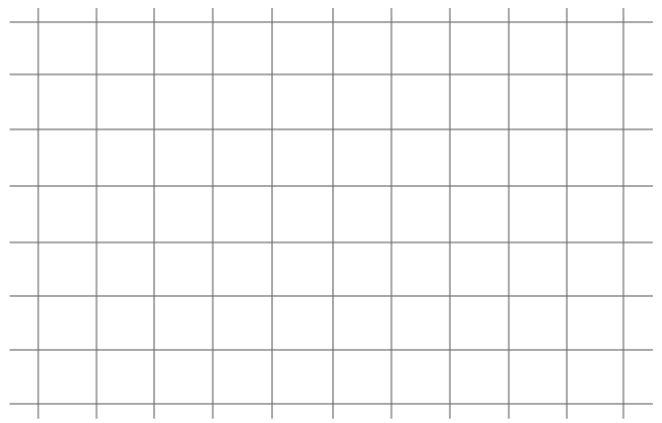
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

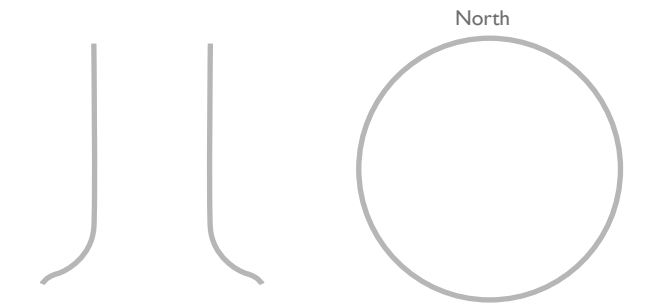
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

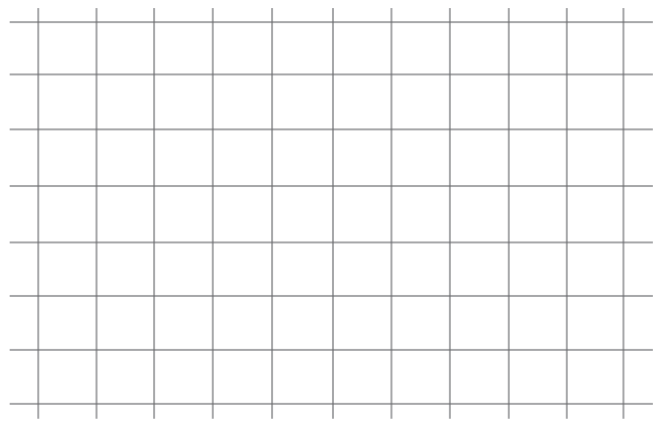
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

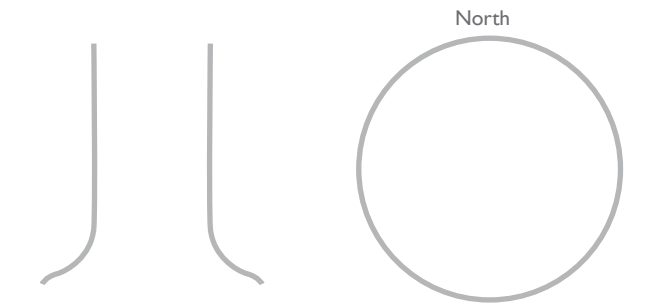
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

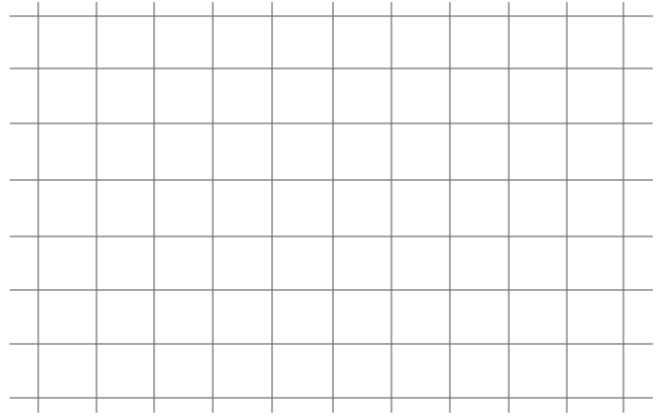
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

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																							

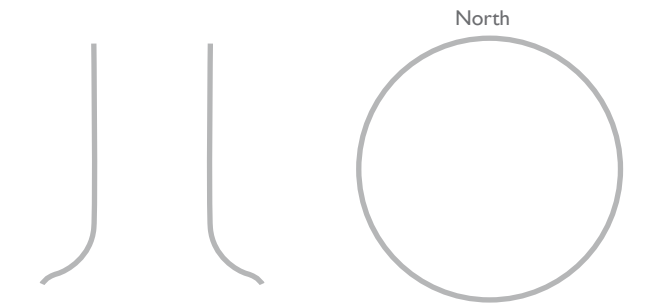
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

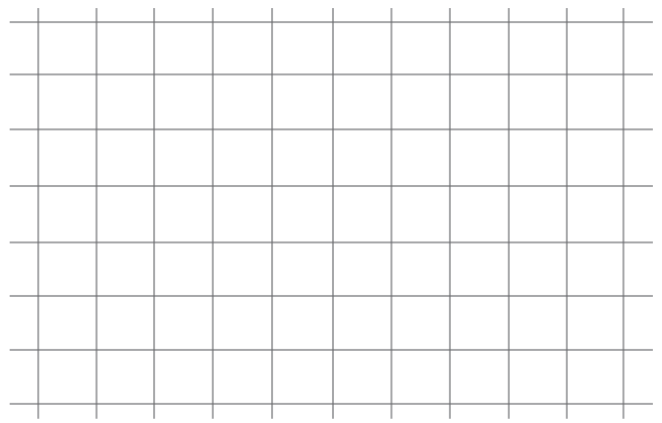
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

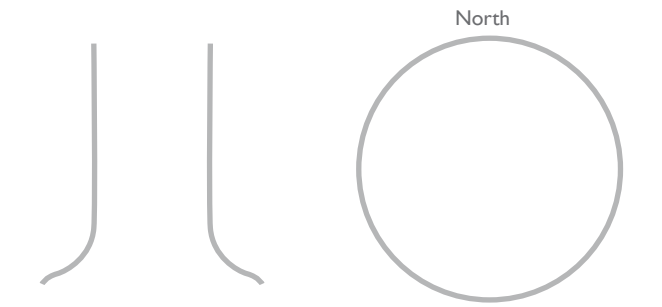
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

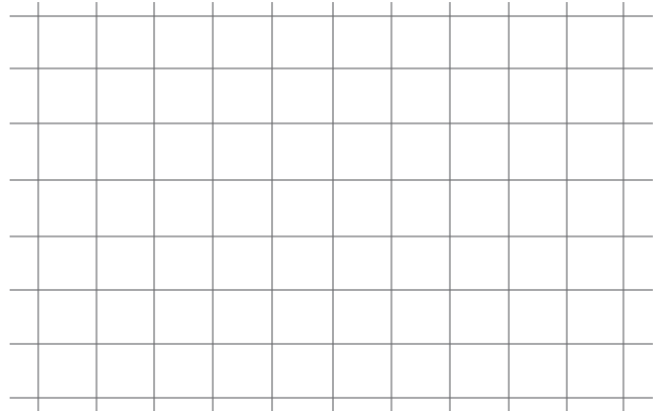
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

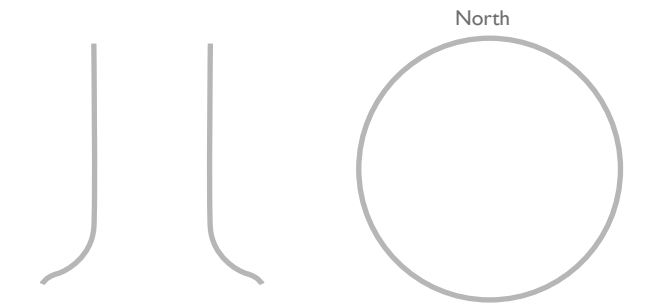
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

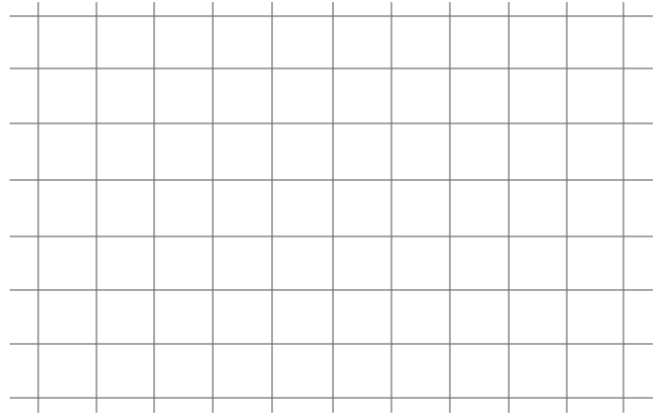
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

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																							

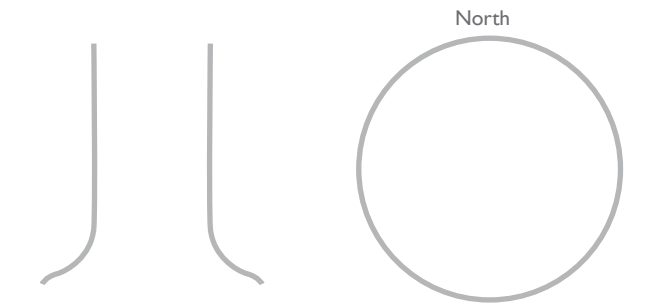
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

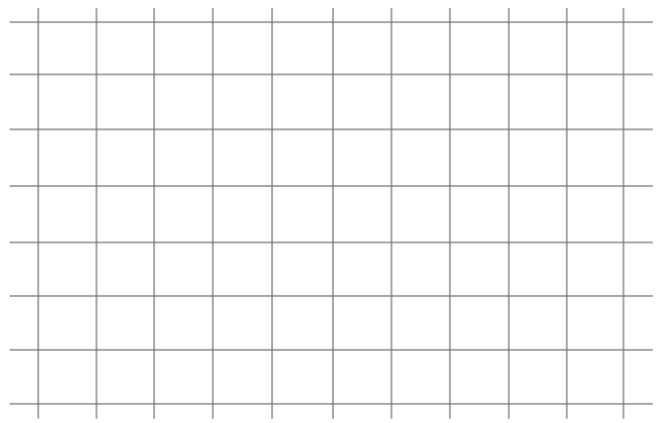
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

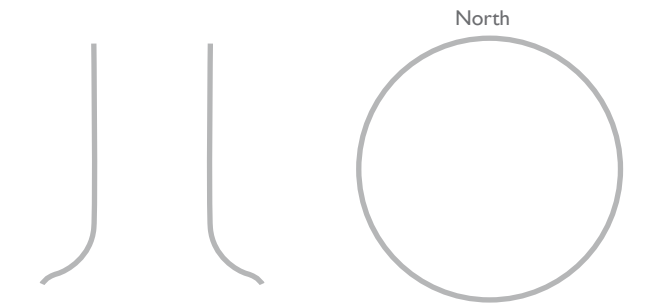
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

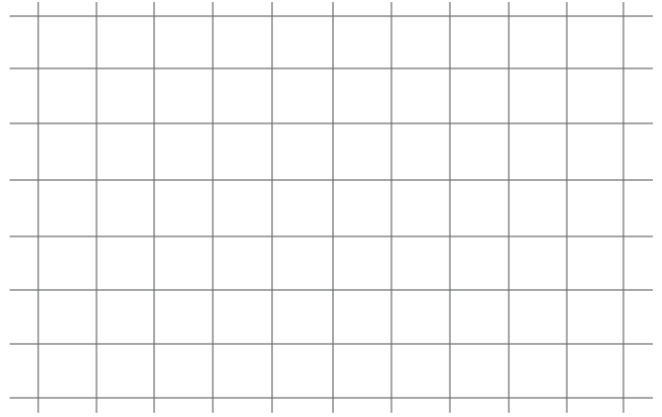
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

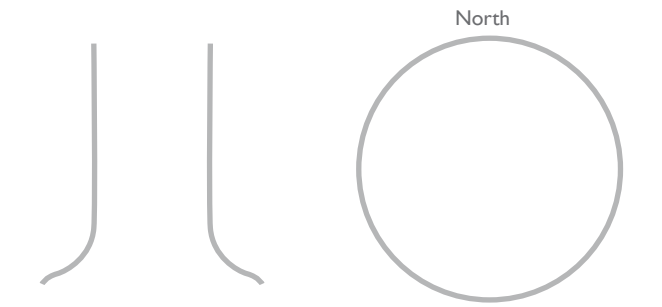
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

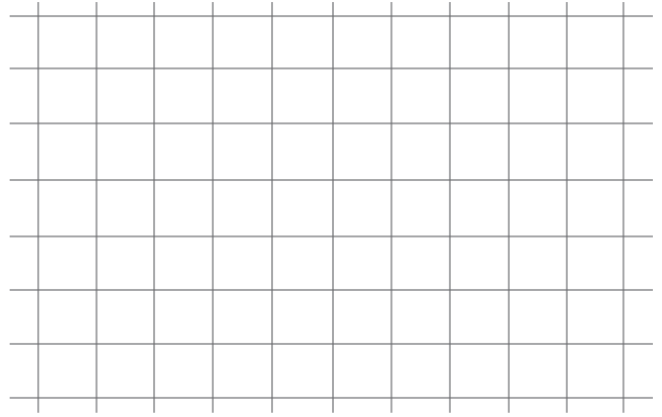
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

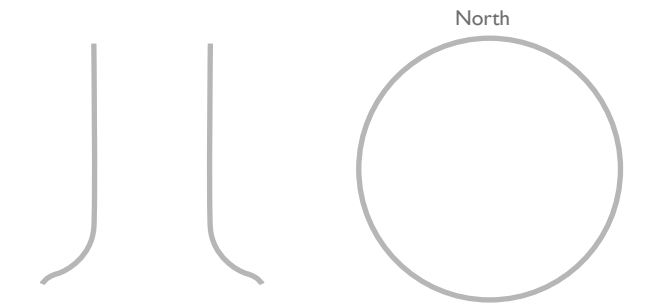
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

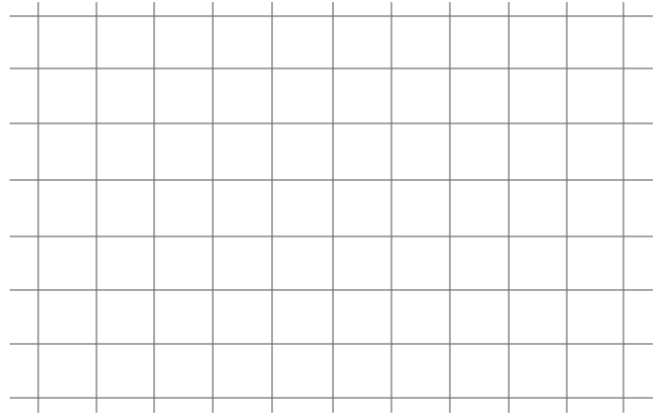
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							
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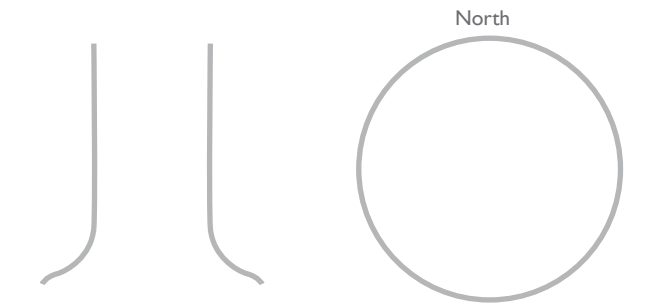
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

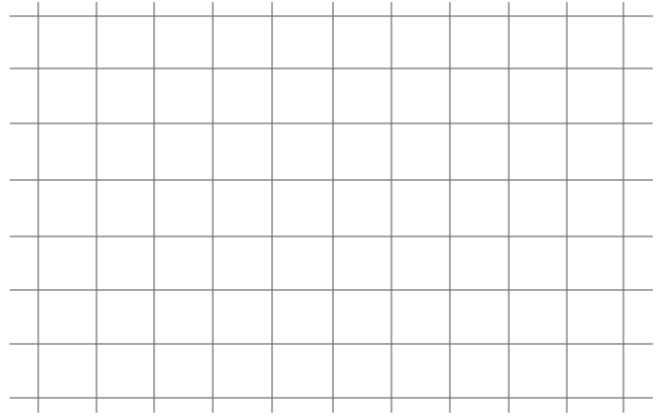
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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	
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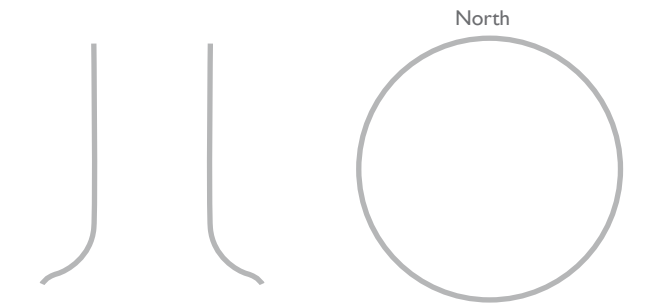
Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impacting Target			
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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 \_\_\_\_\_





# 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 —

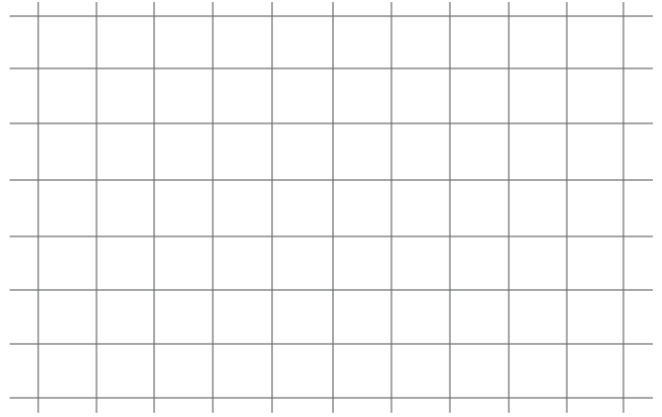
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

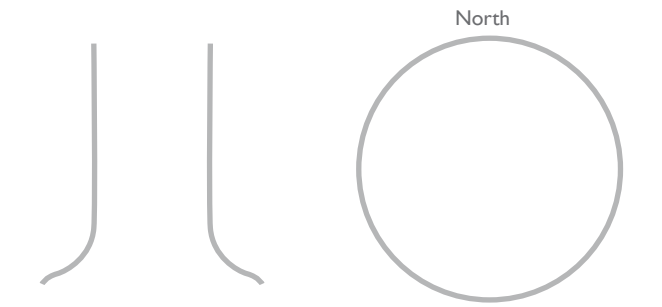
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

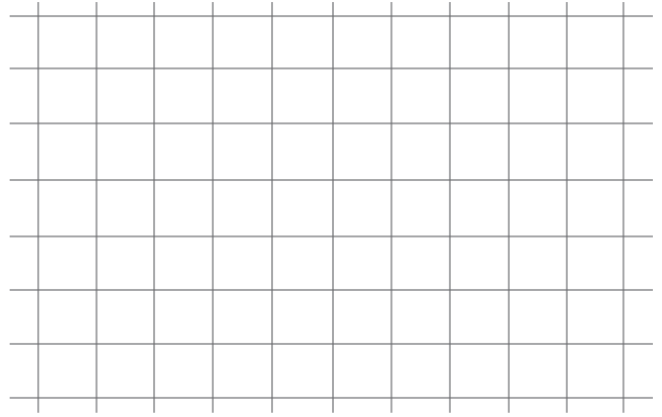
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

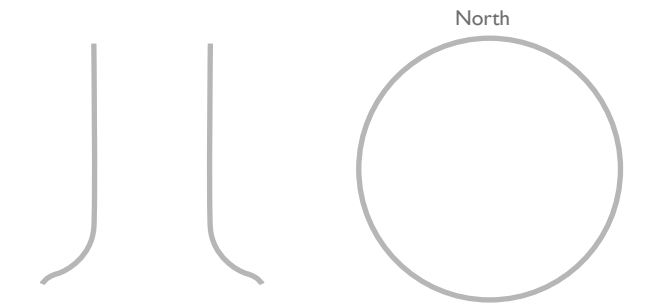
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

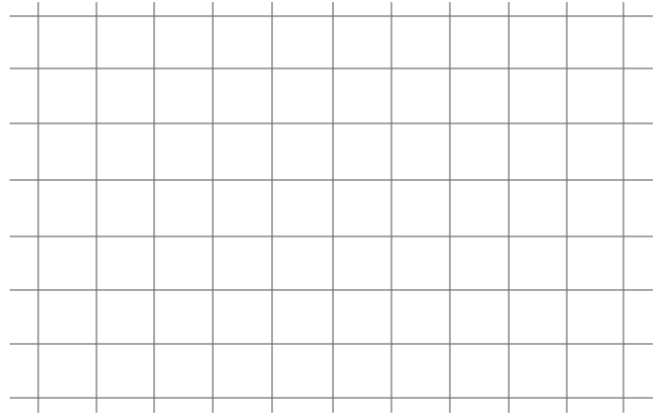
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							
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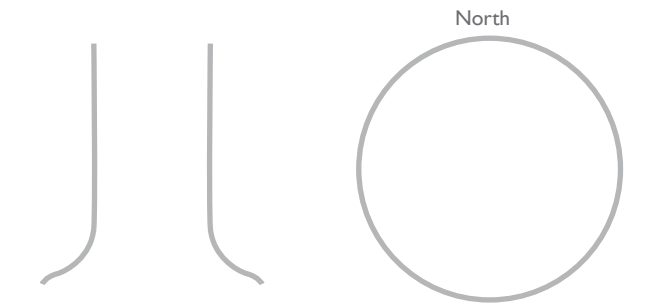
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

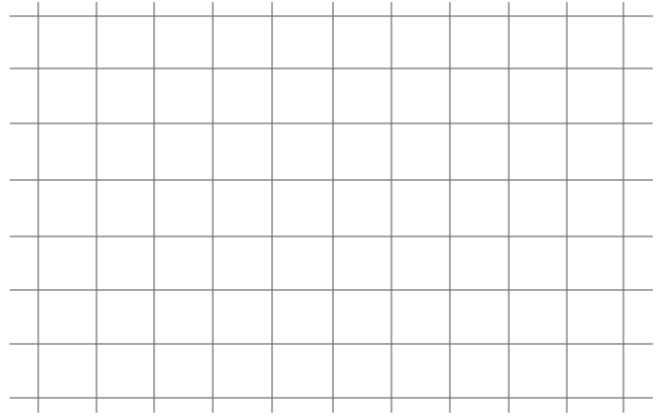
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

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)
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							Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely					
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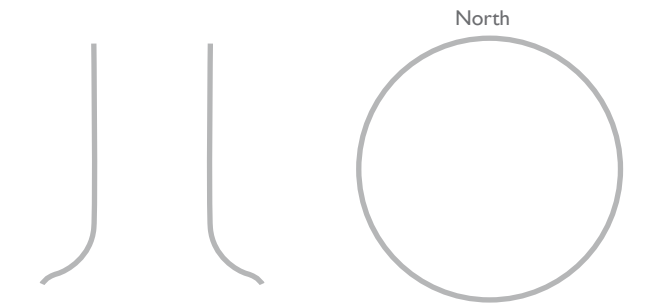
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

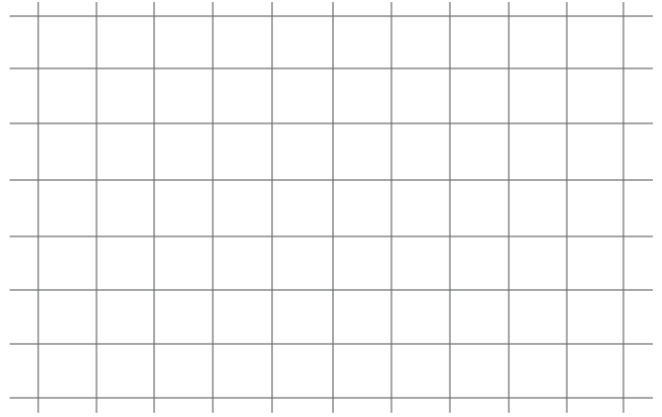
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

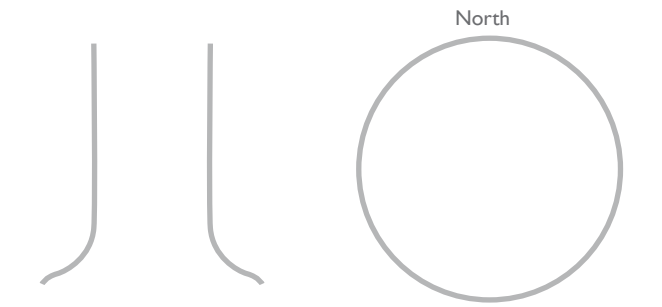
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

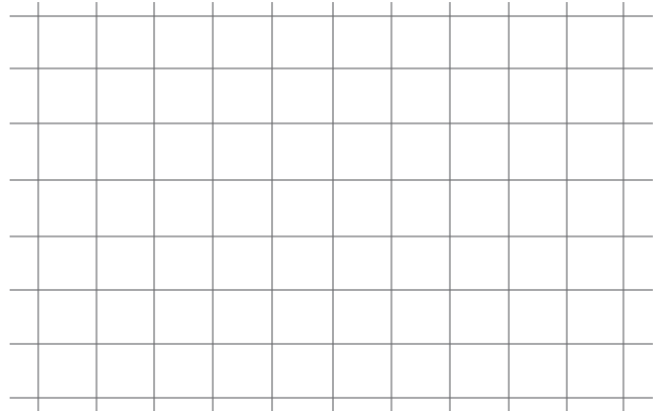
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

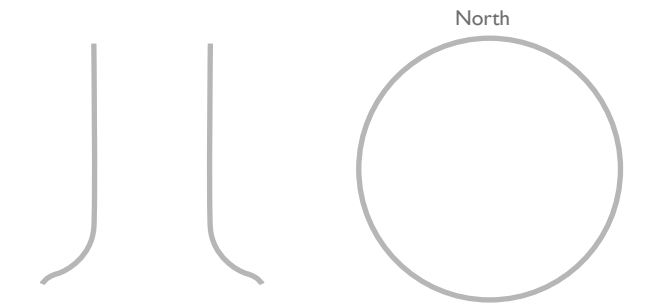
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

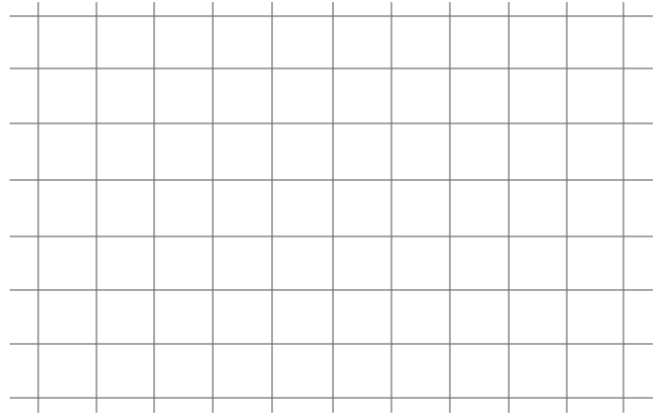
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

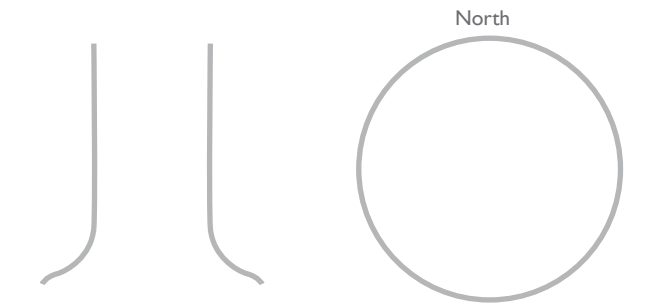
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

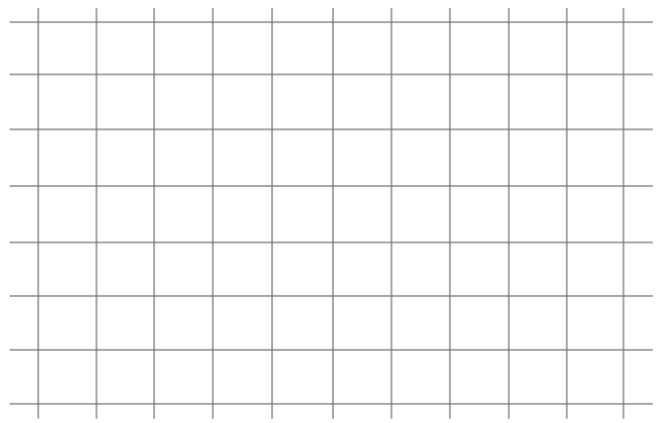
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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					
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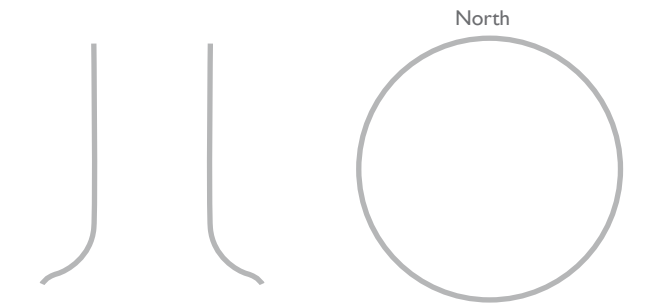
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_





# 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 —

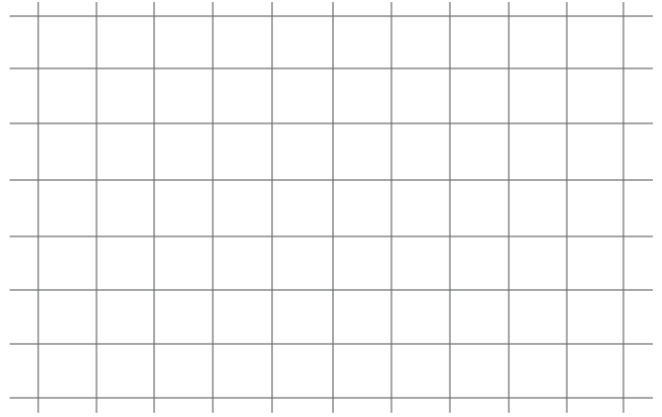
Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_ % circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_

**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																							

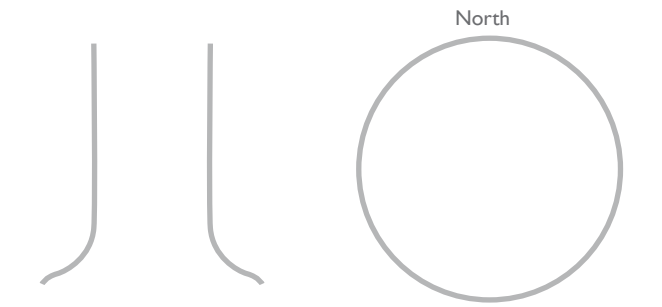
Matrix 1. Likelihood matrix.

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 \_\_\_\_\_



# 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 —

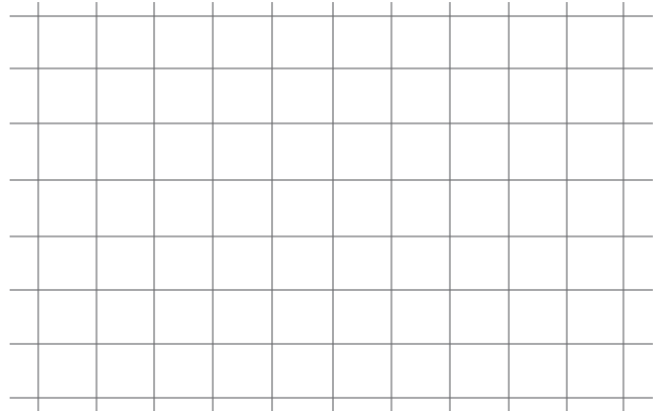
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 Ooze  Cavity  \_\_\_\_\_ % circ.  
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 Root plate lifting  Soil weakness   
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 Main concern(s) \_\_\_\_\_

**Load on defect** N/A  Minor  Moderate  Significant   
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Risk Categorization																							
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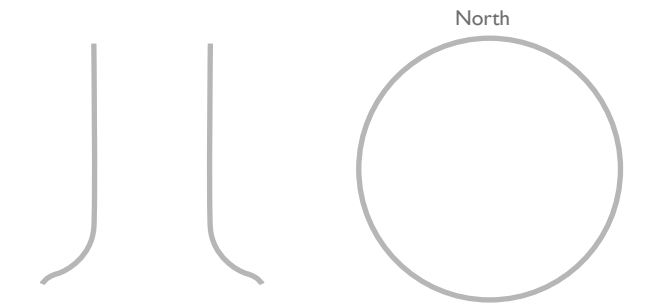
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Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely



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 \_\_\_\_\_





Live Oak











North Carolina Department of Natural and Cultural Resources  
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper  
Secretary D. Reid Wilson

Office of Archives and History  
Deputy Secretary, Darin J. Waters, Ph.D.

October 1, 2024

MEMORANDUM

TO: Jon D. Long [jon.long@dpi.nc.gov](mailto:jon.long@dpi.nc.gov)  
School Planning  
NC Department of Public Instruction

FROM: Ramona M. Bartos, Deputy *Pres for Ramona M. Bartos*  
State Historic Preservation Officer

SUBJECT: Demolish and reconstruct Coltrane-Webb STEM Elementary School, 61 Spring Street NW,  
Concord, Cabarrus County, GS 24-1988

Thank you for your August 28, 2024, letter transmitting the feasibility and cost analysis for the above-referenced school that indicates the desirability of constructing new school buildings in lieu of renovating the existing buildings. We have reviewed the information provided and offer the following comments.

The Coltrane-Webb STEM Elementary School is located within the North Union Street National Register Historic District (CA0611) which is also a locally designated historic district (CA1104).

Listed in the National Register of Historic Places (NRHP) in 1986, the school is described in the 1995 nomination as follows.

Two-story, plain brick main building contains paired vertical six-over six windows with concrete lintels and sills. An inobtrusive auditorium with a simple arcade at the front was built around 1930 and is located at the rear of the main structure. A one-story, "low-slung" brick building with gable roof sheathed in white gravel is situated below street level. Location of the latter; building and the landscaping prevent the school from being a noticeable intrusion in the district.

The nomination's assessment of the school is as "Fill/Intrusion" meaning that the property as "Fill" has neither a positive nor an especially negative impact on the characteristics of the district. As an "Intrusion" the school has a definite negative impact on the historical, architectural and/or cultural characteristics for which the district is significant.

While contained within a NRHP-listed district, the replacement of the Coltrane-Webb Elementary School will not adversely affect the North Union Historic District and does not require a comment from the North Carolina Historical Commission. However, removal and replacement of the school may require a Certificate of Appropriateness from the Concord Historic Preservation Commission.

Based on our knowledge of the area, it is unlikely that any archaeological resources that may be eligible for inclusion in the National Register of Historic Places will be affected by the project. We, therefore, recommend that no archaeological investigation be conducted in connection with this project.

These comments are made in accord with G.S. 121-12(a) and Executive Order XVI. If you have questions regarding them, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or [environmental.review@dncr.nc.gov](mailto:environmental.review@dncr.nc.gov). In all future communication concerning this project, please cite the above-referenced tracking number.

cc: Dr. Darin Waters, SHPO [darin.waters@dncr.nc.gov](mailto:darin.waters@dncr.nc.gov)  
Deans Eatman, Deputy Secretary [deans.eatman@dncr.nc.gov](mailto:deans.eatman@dncr.nc.gov)  
Brian Cone, Cabarrus County Schools [brian.cone@cabarrus.k12.nc.us](mailto:brian.cone@cabarrus.k12.nc.us)  
Kim Wallis, Concord HPC [wallisk@concordnc.gov](mailto:wallisk@concordnc.gov)



