To Whom It May Concern:

Enclosed is a Tree Risk Assessment ordered by Jason and Kristen Thompkins based on my independent field investigation of a 25" Hackberry, *Celtis occidentalis* located on the property at 1102 Osceola Ave, Sullivans Island, SC 29482. It has been prepared for the consideration of their desire to determine the size, health and safety of the tree and to meet the requirements outlined in the municipal ordinance for removal of a Grand tree. I have included my assessment of the tree's current condition, as well as my recommendations for removal.

Please feel free to contact me with any questions you may have about this report, or any other service we can provide.

Best regards,

E. Marshall Badeaux, RCA #742, BCMA SO-7159B
Registered Consulting Arborist
ISA Board Certified Master Arborist
(843) 501-4297
mbadeaux@savatree.com
2851 Maybank Hwy
Johns Island, SC 29455

TREE RISK ASSESSMENT

www.savatree.com
mbadeaux@savatree.com
(843) 952-8300

Report for:
1102 Osceola Ave
Sullivans Island, SC 29482

Prepared for:
Jason and Kristen Thompkins

Prepared By:
Marshall Badeaux, RCA #742, BCMA SO-7159B
ASCA, Registered Consulting Arborist
International Society of Arboriculture Board Certified Master Arborist
Member, American Society of Consulting Arborists
TPAQ, Tree and Plant Appraisal Qualified
TRAQ, Tree Risk Assessment Qualified
CTSP, Certified Treecare Safety Professional #03122
EHAP, Electrical Hazards Awareness Program

January 13, 2025

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NARRATIVE

Summary

After Jason and Kristen Thompkins became concerned with the condition of a 25" Hackberry, *Celtis occidentalis* located on their property, my firm was contacted to provide an independent, objective opinion regarding the health and structural stability of the tree located on the site. I performed a Level 2: Basic Tree Risk Assessment (BTRA).

Based on this level 2 evaluation, I have determined that the tree outlined in this report is diseased, an imminent hazard and should be removed as soon as possible to reduce unnecessary risk of failure or spread of disease.

Background

In December 2024, Jason and Kristen Thompkins contacted my firm and expressed concerns after observing a high-risk tree on their property. My Qualified Arborist, Ash Connelly discussed the terms of my engagement and upon approval of the Arborist Report line item, I was scheduled for a site inspection to perform a BTRA.

Assignment

Prepared for:
Jason and Kristen Thompkins

Parcel location:
1102 Osceola Ave
Sullivans Island, SC 29482

Prepared by:
Marshall Badeaux, RCA #742, BCMA SO-7159B
Charleston Tree Experts
2851 Maybank Hwy
Johns Island, SC 29455

After discussing the terms of my engagement and the levels of assessment with Jason and Kristen Thompkins, they agreed that I would conduct the following:

1. Identify the tree species.
2. Measure and determine the diameter at breast height (DBH).
3. Assess and provide a health grade and risk rating to the tree.
4. Provide recommendations for the tree outlined in this report.
5. Provide my findings in a booklet style report.

Limits of Assignment

My inspection was performed at ground level using visual observations, and my knowledge of the site history was limited to the past-history details provided by Jason and Kristen Thompkins. These were my only limitations in addition to the normal restrictions of a Level 2: BTRA.

Purpose and Use of Report

The purpose of this report is to provide an accurate depiction of defective or hazardous conditions of the Grand tree and site, and develop recommendations based on that data. This report is intended to be used by Jason and Kristen Thompkins to request a tree removal permit. Upon submission, this report will become the property of Jason and Kristen Thompkins and its use will be at their discretion. Reproduction or making of additional copies without explicit consent by the preparing Arborist is strictly prohibited.

OBSERVATIONS

Site

The tree resides on a well-established single family residential homesite.

Analysis

The house and neighboring home are targets of concern within 1x height of the tree.

Tree Condition and Inventory Table

Tree #	(DBH)	Species	Health	Risk Rating	Comments
12	25"	Hackberry, *Celtis occidentalis*	F	High	Diseased, Tip dieback, Severe state of decline, Cavity of decay.

Tree Grading System

A - Specimen tree exhibiting vigorous growth and showing little or no sign of damage.

B - Healthy tree, exhibiting vigorous growth, showing minimal signs of damage.

C - Semi-healthy tree, showing some signs of damage which are perhaps correctable (i.e., some insect infestations, some diseases, root compaction, etc.); still shows signs of growth, but suffered significant damage.

D - Tree in declining health; has suffered extensive damage; hazardous, tree may fail without notice or still live for many years but may not be successfully treated to again become a healthy, specimen tree.

F - Tree which is determined to be irreparably damaged, diseased or hazardous.

Discussion

Trees provide numerous benefits to the urban environment. These benefits increase as the age and size of the trees increase. However, as a tree becomes larger and more mature, it is likely to shed branches or develop decay or other conditions that can predispose it to failure. In assessing and managing trees, we strive to strike a balance between the risk that a tree poses and the benefits that individuals and communities derive from trees.

Tree risk assessment (TRA) is the systematic approach used to identify, analyze and evaluate tree risk. By identifying the tree risk, mitigation can be conducted to reduce risk while preserving the trees that meet acceptable levels of risk.

A primary goal of TRA is to provide the tree owner with resourceful information about the level of risk posed by a tree over a period of time. This is accomplished by conducting a qualitative analysis and determining the likelihood and consequences of a tree failure. If the risk rating defined for a tree exceeds the level of acceptable risk, mitigation is recommended.

Tip dieback is a term used to describe the condition where the tips of a tree's branches or shoots show symptoms of damage or death. This can manifest as browning, wilting, or necrosis (tissue death) at the ends of branches or shoots, and may be accompanied by a loss of leaves or needles.

Tip die-back can be caused by a variety of factors, including environmental stressors such as drought, high temperatures, or exposure to extreme cold. Pest and disease infestations, as well as physical damage or wounds to the tree's bark and branches, can also contribute to tip die-back. When the damage is widespread and severe, it may be necessary to consider whole tree removal to reduce the risk of failure or the chance of spreading the disease to other desirable trees in proximity. Tip die-back can often be a symptom of a larger issue such as root damage, disease, or parasite/insect infestation, rather than a problem in and of itself.

A severe state of decline in trees can be characterized by a variety of symptoms that indicate a significant reduction in the tree's health and vigor. Some common indicators of severe decline include extensive crown dieback, significant canopy thinning, excessive epicormic growth, and a lack of new shoot growth. Additionally, trees in a severe state of decline may exhibit signs of stress, such as yellowing or browning of leaves, premature leaf drop, and reduced vigor.

In severe cases, the tree may also display structural defects, such as large dead branches or extensive decay, which can further compromise its structural integrity and increase the risk of failure. It is important to note that severe decline can be caused by a wide range of factors, including environmental stressors, insect and disease infestations, root damage, and improper management practices.

A cavity in a tree is an opening or hollow space within the trunk, branches or roots of a tree. Cavities can be caused by a variety of factors, including fungal infections,

insect infestations, physical damage or decay. They can vary in size and location within the tree and can have varying negative effects on the tree's health and structural stability.

Cavities weaken the structural integrity of a tree and make it more susceptible to failure or collapse. Cavities can form in several different ways. One of the most common causes is fungal infections, which can cause the wood to decay and soften, creating an opening or hollow space within the tree. Insects can also cause cavities by burrowing into the wood and creating hollow spaces. Physical damage, such as from storms, mechanical impact, or pruning, can also create cavities by removing or damaging the protective bark layer, allowing pathogens or insects to enter the tree. Once inside the tree, pests and diseases can cause additional damage and accelerate the decay process, further weakening the tree's structural integrity.

Cavities can be difficult to detect, especially in larger trees with complex branching structures. Signs of a cavity may include visible openings or holes in the trunk or branches, soft or spongy wood, or a hollow sound when the tree is struck with a mallet. However, not all cavities will be visible or audible.

CONCLUSION

Tree #12 is an imminent hazard and beyond my customer's level of acceptable risk.

RECOMMENDATIONS

Complete removal of Tree #12 utilizing ANSI A300 Standards for Tree Care Operations.

GLOSSARY

acceptable risk--the degree or amount of risk that the owner, manager, or controlling authority is willing to accept.

analysis--detailed examination of the elements or structure of something.

ANSI--American National Standards Institute, a private, nonprofit organization that oversees the development of voluntary consensus standards by accredited representatives of government agencies industry, and other stakeholders.

ANSI A300--in the United States, industry-developed, national consensus standards of practice for tree care.

arborist--professional who possesses the technical competence, through experience and related training, to provide for or supervise the management of trees and other woody plants in residential, commercial, and public landscapes.

booklet style report--booklet reports present information in an abbreviated book form. Booklet reports are probably the most commonly used and readily recognizable report format.

dbh--diameter at breast height [U.S., 4.5 feet above ground] measured in inches.

decay--(1) (noun) an area of wood that is undergoing decomposition. (2) (verb) decomposition of organic tissues by fungi or bacteria.

diameter--the length of a straight line through the center of a circle.

dieback--conditions in which the branches in the tree crown die from the tips toward the center.

failure--breakage of a stem, branch, or roots, or loss of mechanical support in the root system.

hazard--situation or condition that is likely to lead to a loss, personal injury, property damage, or disruption of activities; a likely source of harm. Tree part identified as likely source of harm.

height--tree height either visually estimated or measured. If measured, the tool used for measurement should be noted in Tools used.

high--(risk rating) defined by its placement in the risk rating matrix; consequences are significant and likelihood is very likely or likely, or consequences are severe and likelihood is likely.

imminent--(likelihood of failure) failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load. The imminent category overrides any stated time frame.

inspection--a procedure to inspect a tree or trees. Variables used to describe a tree include position (if not already plotted on a topographical survey), species identity, maturity, various dimensions (main stem diameter, height, crown radius etc.), aspects of form, vigor, condition, incidence of pests, diseases, damage and defects, evidence of past management etc. Site factors, position in the landscape and site usage may also be relevant, usually including its position, species identity, dimensions, age class, condition, conservation value etc. as appropriate, and to identify and evaluate defects. It is also common to make

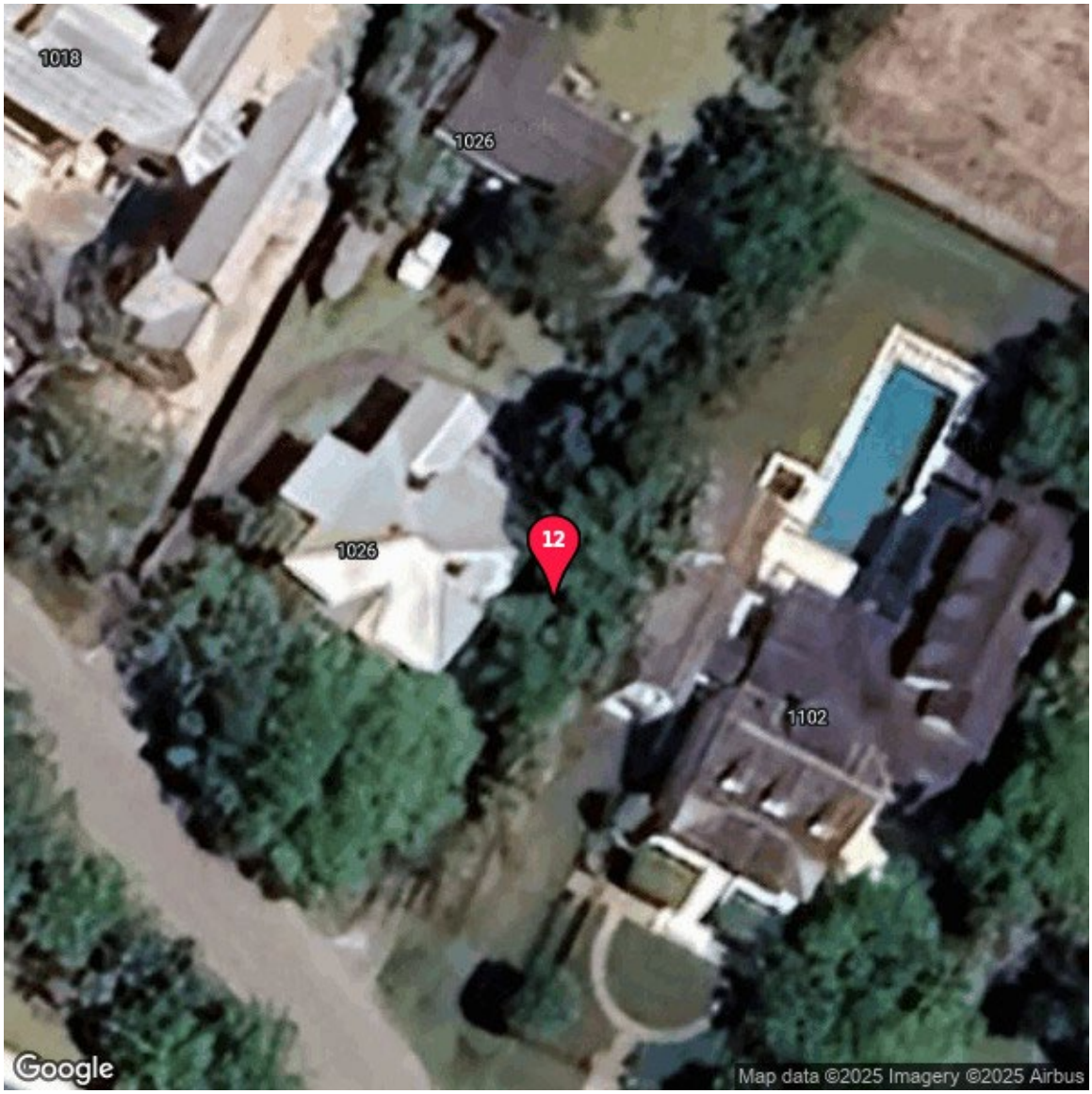
management recommendations. Tree inspection is a fundamental of tree management and advisory practice in arboriculture.

mitigation--in tree risk assessment, the process for reducing risk.

species--taxonomic group of organisms composed of individuals of the same genus that can reproduce among themselves and have similar offspring.

APPENDIXES

Appendix A - Tree Map



APPENDIX B – TREE #12

HACKBERRY, *CELTIS OCCIDENTALIS*


Tip dieback and severe decline we documented in April 2024.


Current state of tip.
Cavity of decay.

APPENDIX C – ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable.

2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible for the accuracy of information provided by others.

3. The consultant/appraiser shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services described in the fee schedule and contract of engagement.

4. Loss or alteration of any report invalidates the entire report.

5. Possession of this report of a copy thereof does not imply right of publication or use for any purpose by any person other than to whom it is addressed, without the prior expressed written consent of the consultant/appraiser.

6. This report and values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

7. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports.

8. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees or property in question may not arise in the future.

APPENDIX D - CERTIFICATION OF PERFORMANCE

I, Marshall Badeaux, certify:

1. That I have personally inspected the trees referred to in the report, and have stated my findings accurately. The extent of the evaluation is stated in the attached report;

2. That I have no bias with respect to the parties involved;

3. That the analysis, opinion and conclusions stated herein is my own and is based on current scientific procedures and facts;

4. That my analysis, opinion and conclusions were developed, and this report has been prepared according to commonly accepted Arboriculture practices;

5. That no one provided significant professional assistance to me, except as indicated within the report;

6. That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results if the assignment of stipulated results, or the occurrence of any subsequent events.

I furthermore certify that I am a member in good standing of the American Society of Arboriculture and the International Society of Arboriculture. I have been involved in the practice of Arboriculture and the care of trees for over 20 years.

Signed: 

Date: January 13, 2025