LOCAL HISTORIC DISTRICT: Wesley Heights

PROPERTY ADDRESS: 408 Walnut Avenue

SUMMARY OF REQUEST: Tree removal and site features

APPLICANT: Ella Drevina

The application was continued from July for the following: 1) Specific fence design and material being requested, including height dimensions noted all around the site plan where the fence changes, 2) Indicate on the site plan transition point where blue stone retaining wall changes to other material(s), 3) Specify the type of lamp post being requested and height.

Details of Proposed Request

Existing Context
The existing home is one story brick Bungalow constructed in 1936. The land slopes approximately 8-10 feet from front to back. It is listed as a contributing structure in the Wesley Heights National Register of Historic Places. A COA for a detached garage and site improvements was issued in 2016. A stop work order was issued due to additional work performed without a COA.

Project
A stop work order was issued for the following:
1. Retaining walls
2. Fencing
3. Porch column addition

Plan Revisions
1. Site plan – Includes full landscape plan, wall materials and light fixture locations
2. Elevations – Fencing and hand rail details included
3. Fixtures – Spec sheet for outdoor lighting is included

Design Guidelines – Landscaping and Site Features, page 23
The project types listed below are eligible for administrative approval by the Historic District Commission Staff, provided the proposal meets all relevant current policies adopted by the Commission. Staff has the discretion to refer any application to the full Commission for any reason.

Landscape & Site Features, including:
1. Fencing
2. Retaining walls
3. Driveways
4. Walkways
5. Removal of small, dead and/or diseased trees
6. Backflow preventers
7. Work in Rear Yards, including
8. Additions to the rear of buildings that are neither taller nor wider than the existing structure
9. Decks
10. Patios
11. New rear yard accessory buildings and structures
12. Rear yard parking plans for non-residential uses

Design Guidelines – Trees, page 8.5

1. Retain existing trees that define the district’s character.
2. When tree removal is needed (due to disease or other reasons) or desired, a certified arborist must be consulted and the written recommendation must be provided to the HDC before removal is granted. This guideline includes trees in front, side and rear yards.
3. Trees less than six inches in diameter may be removed in front, side and rear yards with administrative approval.
4. Identify and take care to protect significant existing trees and other plantings when constructing new buildings, additions or site structures such as garages.
5. New construction that impacts healthy trees must be reviewed by the HDC. Unhealthy mature trees are reviewed by HDC staff. Replacement trees may be required.
6. The HDC may require the planting of additional trees to replace a mature canopy that is removed.

Staff Analysis
The Commission shall determine the corrective action for work performed without a COA and if the proposed projects meet the design guidelines for work in the side and rear yard.
Charlotte Historic District Commission Case 2017-244
HISTORIC DISTRICT: Wesley Heights
TREE REMOVAL/LANDSCAPING/SITE FEATURES

408 Walnut Avenue

Wesley Heights Historic District
Property Lines
Building Footprints

May 3, 2017
0 70 140 280 420 Feet

STEWART CREEK GREENWAY

Wesley Heights Wy
W 4th St
W 4th St Ext
W 2nd St
W 4th St Ext
Walnut Av
Grandin Rd
Litaker Av
Litaker Av
Lela Av
Heathcliff St
W 4th St Ext
W 2nd St
Wesley Heights Wy

STEWART CREEK GREENWAY
TREE REMOVAL
Dear Commissioners!

We write this letter to identify our concerns about the pecan tree growing on the property line between our property and our neighbor’s property, as the tree grows on the edge of our driveway as the driveway extends to the new garage.

Before we decided about our project to build a one-car garage, we did our search step-by-step beginning in January 2016:

- We talked with our potential contractor at that time - Aleksandr Adzhigirey (PDX Construction), who is a real contractor now. He said that the tree could be a problem, if we did not remove it.
- We then talked with our neighbor, Christi Derreberry, trying to learn the history of the tree, particularly when the tree lost a big branch and suffered a large wound on the side of it is upper trunk. At that time she showed interest in removing the tree, how if they were planning to have a pool and didn’t want too many leaves there. In our turn we offered to participate in expenses for the removal of the tree in spite of that the tree looked more belonging them. Soon after that, in January, we were all together, Christi, Ella, and Lockhart, are discussing with a representative from a company to give us an estimate for removal of the tree.
- In any case, we decided to connect with city representatives as well. Online, we were only able to find Laurie Reid Dukes, Urban Forestry Supervisor, Department of Development Services (DDS) in Charlotte NC. She listened attentively and informed us that their duties only concerned trees on the streets, not on private territory.

It looked we became more close to go ahead with our project. Ella drew a plan of the garage and took preliminary consultations with the zoning personnel and technicians in the DDS at first for permission. They directed Ella as a last step to contact with representatives from the Historic District Commission (HDC). So by that way Ella met Kristina Harpst and John Howard for the first time in our property, they looked around and nobody nothing said about the tree at that time. We were given Certificate of Appropriateness on 01 March 2016 to build a garage and to extend and widen a driveway to it and other smaller improvements. So we decided we can safely invest in the home improvement project.

If we would have predicted what would have happened the next, we would have changed our minds and not invested so much time and money in the house, only putting it up for rent for 3 years (because when we bought the house, Lockhart got a contract to work in Belgium) and then to sell it. Staying in Charlotte for remodeling of the house, nobody could know it would take such a long time, we fixed almost all issues reported by an inspector, but there were even more that he wouldn’t know for sure: that it was necessary to install supports in the basement for floor and under the porch to 2 columns, to strengthen walls with cracks there, and to change floors in 3 rooms due to a bow in one of them and termite damage in the other two and etc.

As soon as we started the outside work, a question about the tree came up again and Ella called in to the HDC in order to be sure that we were doing all right. Ella was told to invite an arborist and to take a letter from him. Ella informed Christi that she would like to go ahead and to call to an arborist, asked her to choose a time that is comfortable to be there together. Christi offered to go ahead without her, allowing to pass through her property to conduct an observation of the tree from both sides. Ella had a meeting on 16 September 2016 with Qualified Arborist Santigie Kabia from Heartwood Tree Service. In Ella’s private conversation he said that because of such a big wound and because of the project to build a garage there he would recommend to remove the tree. Ella asked him not to mention about our project in his letter because everybody already knows about the project and if the tree has enough evidence to remove it and without this. But reality showed nobody did take in attention to our project at all in that time when our project means such close work near trunk of the tree. It appears that keeping the tree in its previous condition is incompatible with the project.

Nevertheless, the tree risk assessment letter did show that the tree can be dangerous, it is best to remove it even without attention to the project around (letter attached). We received a letter from representative of Commission Wanda Birmingham, who gave us to know that if we will work it out with our neighbors, we can go ahead with removal (letter attached).

After here is such an important moment which was a big surprise to us and that was too late because of all our investments in the house: Christi changed her mind to remove the tree. At that time, Ella had to...
take attention to her opinion even if she didn’t feel calm at all because of the condition of the tree: to the big wound and 4 branches on top of it there is plus that in last season all leaves were diseased with Pecan Phyloxera and the tree was losing leaves so much during all vegetative season, beginning from April, what is abnormal, plus our contractor and another qualified worker discovered that our house has no foundation (letter attached), which means that roots can grow easily toward the basement and can cause stress cracks or settlement by transpiration (we have attached an information sheet + picture) and we already have cracks in the wall (report of inspector attached). Working with our project, Ella was discovering more reasons to say that in common our project and the tree are incompatible. Workers had to move vehicles and equipment over the roots when building the garage, the driveway, pressing them. And the old pecan tree has many upper smaller roots which grew long more than 20 feet from its trunk.

Ella used a correspondence with our neighbors trying to give them to understand us, why the tree needs to be removed, but they were ignoring our concerns. Without giving us to know before, they pruned the tree and installed support cables what made the tree even more dangerous because there are all four big branches stay right from above the big open wound of the tree’s trunk.

Last one we had to apply to a qualified arborist again, in this time to give us an evaluation of the condition of the tree and his recommendation according to this and plus compatibility with our project. He discovered another important problem with the tree, that there was an old wound to the bottom of the tree flare, which can be part of the reason for the tree leaning toward the neighbor’s property, and he recommends definitely that the tree should be removed due to its condition and our project (letter attached).

Respectfully, Lockhart Simpson and Ella Drevina
To Historic District Commission

My name is Lockhart Simpson. I am the husband of Ella Drevina and the co-owner of the house at 408 Walnut Avenue in Charlotte. I want to add my personal insight and comments to the documents and letters that Ella is submitting for your review at the upcoming meeting on Wednesday, 12 June 2017.

I am currently working for the US Army in Belgium, beginning on 05 April 2016 until at least 31 March 2019. Other than a few brief visits to Charlotte, the latest in April 2017 (at which time when I met 3 of your employees when they came to look at the property with its ongoing project), I have been living in Belgium and have entrusted my wife Ella to handle matters pertaining to repairs, remodeling, and construction, and improvements to the property. Ella is totally dedicated and conscientious and wants to make sure that everything is done correctly and that the appearance of the property will comply with your Commission’s requirements and enhance the neighborhood. I also want to note that Ella has the equivalent of a Master’s Degree in Landscape Architecture and that she has good working experience in both drawing and hands-on landscaping. Our intent is for Ella to join me in Belgium once the entire project is finished and for us to rent out part of the house and possibly the garage for the remainder of my tour in Belgium. Ella is trying to do everything in her power to complete the project and meet requirements.

I want to address the current construction of the garage and the planned lengthening and repaving of the driveway which we plan to connect the garage to the entrance of the driveway on Walnut Street. The construction of the garage was my original idea with the intent to provide shelter for our primary automobile and shelving for storage. Ella drew up the design for the garage and reviewed it with both the contractor and commission. Her primary focus at this time is to complete the construction of the garage and the driveway.

We are very concerned about the Pecan Tree. We sincerely believe that the tree constitutes both a major impediment to our project (for which we have approval) and a significant hazard to both our property and our neighbor’s property. We arranged for an arborist to complete a thorough assessment which spells out the tree’s defects and hazards. Also, the tree would partially block the driveway and require automobiles to drive in a path that is less straight and narrower. This would not only be a permanent inconvenience to us; it would also be an issue to potential tenants when we try to rent the property out. The driveway runs downhill from the street to the garage. We strongly believe that the recommendation to have a gravel-only cover on the section of the driveway where the tree’s roots run in its path is not feasible. This section would collect leaves and dirt which would be very difficult to clean off, and also soak up runoff water, which would likely run into the garage (the water will be running downhill along the driveway to the bottom, where the garage is located). This would result in a perpetual drainage and maintenance problem for our property. The additional water would also draw the tree’s roots closer to the house and garage. Also, the pressure on the roots from the automobiles driving over it would continually damage the roots and worsen the overall health of the tree, thereby increasing the risks and hazards (the only way to reach the garage from the street is to have the driveway in a straight line going over the tree roots, with the cars backing in or out,
with no room to turn around). The tree’s root system also encroaches on the foundations of our house, which could lead to future structural damage. In summary, we cite that the benefits of retaining the tree are far outweighed by the costs and risks and we respectfully ask for permission to remove it.

On a personal note, I want to say that the project in general and the tree removal issue in particular are putting a major strain and both Ella and me. When we bought the house in November 2015 and began the project in 2016, we believed that it would only require hiring a contractor and spending a few months to have it completed (although we did realize that it would be expensive). There have been many delays and complications, some of which were unforeseen and unpreventable. It has been difficult to find workers who will work independently to accomplish the work according to our desire and vision. The issue of the tree is one that we did not foresee and we feel that it is causing us unnecessary stress and delay. This project has become a full-time job for Ella and I call her almost every day to talk about its status and life in general. We both very much want to finish the project so that she can come and join me in Belgium and enjoy Europe with me for the remainder of my tour. Due to Ella’s profession in landscaping and my environmental consciousness, we really dislike the idea of removing the tree and we are very sorry for the friction that it is causing with our neighbors. However, we have concluded that the removal is necessary and we really want to move forward so that we can put this behind us and continue with the rest of the project. We really want our house and yard to look attractive and set a good example for the rest of the neighborhood. I plead to you to grant us permission.

Sincerely,

LOCKHART SIMPSON
My name is Aleksandr Adzhigirey. I am a general contractor of Lockhart Simpson and Ella Drevina. I confirm that when I worked with floor in basement of their house, I saw in first time for all my experience, working for many years in construction industry that the house has no foundation at all, only footings in three layers of bricks which are not deep in soil. We even had to cover a part of the footings, which are more close to front of the house side, with concrete, creating like a curb around them built on an additional installed foundation. We also invited an engineer Donald Cranshaw to check if the soil under the footings is enough solid, compact and to give us recommendations how to do all right. He said we should not worry, the soil, where the house stays, is enough solid clay. In our case best way to keep our house strong is to keep it out of much moisture, roots. Recommendation to stay a gravel instead a concrete on the bottom of the driveway at the foot of the hill without a possibility to direct water running down the driveway during a rain into a drainage system can create a pool there (clay doesn't allow a water to pass through it fast), resulting in the water going into the garage.

I'm also concerned about a pecan tree growing on the property line between theirs and their neighbor's property because with the project to build a garage and a driveway so close that keeping the tree is in principle impossible without serious damage the roots, and that the pecan tree can damage any property with its roots significantly over time as well.

Best Regards,

Aleksandr Adzhigirey
General Contractor
PDX Construction
704-254-2293
To whom it may concern,

My name is Santigie Kabia, an ISA Certified Arborist with Heartwood Tree Service. I am writing this letter in regards to a (32") Pecan growing along the property line dividing 404 and 408 Walnut Ave, 28208. This tree is in close proximity to 2 houses/properties, and has a codominant stem union approximately 20’ aloft. A limited visual inspection revealed a large wound below the codominant stem union, indicative of a previous stem failure. Codominant stem unions are structurally compromised, as they are attached by included bark.

In the event of the failure of this codominant stem union, significant property damage/disruption would occur, including the possibility of personal injury. The adjacent homeowners have conflicting thresholds of acceptable risk in regards to the structural integrity of this Pecan. There is live growth expanding uniformly to the tips of the canopy, which is evident of good vigor/energy/health. The response growth around the wound appears to have been producing for a number of years, compensating for strength loss. Fertilization (to maintain vigor), weight-reduction pruning and the installation of brace rods and/or supplemental support cables are very effective mitigation tactics to reduce the risk of branch/stem failure; however, these attempts will not remove the risk entirely. The removal of this Pecan is the only way to completely remove all risk of branch/stem failure; however, mitigation could sustain this tree’s health and structural integrity for years to come.

Best Regards,

Santigie (“Tig”) Kabia
ISA Certified Arborist & Municipal Specialist (MA-4553AM)
ISA Qualified Tree Risk Assessor (TRAQ)
Heartwood Tree Service, LLC.
Hi Christi, I had been corresponding with Heartwood about the pecan tree in question. The assessment mentioned a large wound, loss of strength in the co-dominant trunks creating a possible liability issue. A Certified Arborist's recommendation to remove a tree with these substantial reasons creates a situation where one can go ahead with removal. I conveyed this to the arborist at Heartwood. However, this still does not allow a person to take out a tree that belongs (or even partially belongs) to another. So you will have to work it out. I have heard that once a tree has been identified as a potential hazard, then one's insurance will not cover any caused damage. I will forward a copy of the letter to you and your neighbor. Thank you. Wanda
Pecan at 408 Walnut Ave Tree Risk Assessment

Prepared for:
Drew Harrison, ISA Certified Arborist
Action Arborists Inc.

Prepared by:
Patrick Anderson, ISA Board-Certified Master Arborist #PD-1536BM
ISA Tree Risk Assessment Qualified
ASCA Registered Consulting Arborist #475
NC Licensed Landscape Contractor #0437
Background:
Drew Harrison of Action Arborists, INC. asked me (Patrick Anderson) to perform a Tree Risk Assessment on the pecan tree located along the lower driveway of 408 Walnut Avenue Charlotte, NC, 28208. On May 16th, 2017 a site visit was made and a level 2 basic tree risk assessment was performed.

Limits of Assessment:
All observations were made from a one time site visit from the ground on the property of 408 Walnut Ave.

Tree:
The tree in question is a mature 31-inch at 4.5ft from grade (DBH) pecan (*Carya illinoniesis*) (Figure 1). One structural root has recently been severed on the north west side of the tree (Figure 3). There are signs of root decay/damage on the south west side of the tree (Figure 2). There are signs of reaction wood growing around the wound, which is a sign of good tree vigor. After some excavation with a soil knife evidence of past structural root severance was revealed along the western side of the tree approximately 22-inches from the root flare (Figure 3). These roots appeared dead and were in various stages of decay.

Figure 1: Pecan tree under investigation
The crown of the tree is asymmetric with crown weight distributed on the eastern side of the tree. There are signs of past limb failure within the crown of the tree. On the south western side of the crown/trunk there is evidence of a past large limb failure with associated cavity/decay (Figure 4). There is a dynamic cable system installed within two large limbs within this area, which should
help to reinforce the branch union in this portion of the crown. There is less than 5% crown dieback within the tree.

Figure 4: Past limb failure and cavity

**Site:**
The pecan is growing between the driveway of 408 Walnut Ave and the residence of 404 Walnut Ave. The root flare/structural root system of the tree interacts with the driveway of 408 Walnut Ave and is approximately 7.5ft from the residence of 404 Walnut Ave (Figure 5).

There are mature trees of similar size within close proximity of the tree, with exception of the western side of the tree.
Discussion:
According to the International Society of Arboriculture’s ‘Best Management Practices: Managing Trees During Construction’ tree stability has been found to be compromised on some species when cuts are made within a distance of of three times the trunk diameter from the trunk. The minimum distance for root severance from this tree would be 93-inches (7.75ft). For the pecan in question, one structural root has recently been severed within this distance and there are signs that additional roots have been severed in the past within this distance. In addition, after performing a percussion test to sample for decay the wounded root flare on the western side of the tree appears to have significant decay. Based upon these observations it’s estimated that approximately 28.5%-30% of the root flare is compromised by damage or decay.

Again referring to International Society of Arboriculture’s ‘Best Management Practices: Managing Trees During Construction’ pecan trees are considered to have relatively good to moderate tolerance of development impact. That being said a tree protection zone (TPZ) should be established for trees in construction areas. Utilizing information from the best management practice a mature pecan tree with a diameter of 31-inches DBH should have a TPZ of approximately 315-inches (26.25ft) in radius from the trunk. According to the resident of 408 Walnut Ave, an addition was constructed within the past 12 months at the 404 Walnut Ave property. This new addition is approximately 7.5ft from the root flare of the pecan. Compaction of soil during the construction process can damage absorptive roots, and compact soil, increasing the difficulty of absorptive roots recovering from damage. Symptoms of construction damage can take 5-8 years to become evident as; branch tip dieback, leaf chlorosis, and/or thinning canopy. Mature trees have a more difficult time recovering from development damage compared to semi-mature or young trees.

It is noted among arborists that pecans are prone to large branch failure due to the decurrent nature of their crown architecture. This tree has already displayed this trait as signs of past large branch failure are evident. In tree risk assessment literature it is noted that tree’s displaying signs
of past failure are thought to have a higher risk of future branch failure. This is partially due to loss of the dampening effect of the branch lost, and portions of the crown may undergo more force than they have previously experienced. The associated cavity may be thought of as another tree defect. There are signs of reaction wood around the cavity formed by the past branch failure, which would indicate good tree vigor.

Conclusion:
Based upon observations on site, a portion of the structural root system is compromised by decay/damage. This is contributing to strength loss which increases this tree’s likelihood of failure at the root flare. A commonly used threshold is to have less than 33% of a root flare/structural root system affected by damage/decay. It’s estimated that 28.5-30% of the pecan’s root flare/structural root system is affected by decay/damage.

It may be difficult for the tree to recover from this in the long term as the drive way at 408 Walnut is directly over the root zone of the pecan and the root flares/structural roots come in contact with the driving plane. Likewise, it may be assumed that a portion of the root zone was affected by development damage from the addition at the residence at 404 Walnut Ave.

The previous large limb failure in combination with the asymmetric canopy and decurrent habit of the crown may also be items to consider as potential for increase in the likelihood of future branch/tree failure.

Using the tree risk assessment matrixes outlined in International Society of Arboriculture’s ‘Best Management Practices: Tree Risk Assessment’ within the next 3 years:

Risk of Large Branch Failure in the Crown
It is probable large branch failure may be expected under normal weather conditions (e.g. summer thunderstorms with high wind). There is a high likelihood that the failed branch will impact the residence at 404 Walnut Ave. The consequences of this would be significant in that it may cause high value property damage. With these in consideration the crown of the tree poses a high risk.

Risk of Root Flare/Structural Root Failure
It is possible failure may occur at the root flare/structural root system but is unlikely during normal weather conditions. Likelihood of failure would increase in exceptionally severe weather events (e.g. tropical storms, abnormally strong thunderstorms) There is a high likelihood that the failed tree will impact the residence at 404 Walnut Ave. The consequences of this would be significant in that it may cause high value property damage. With these in consideration failure at the root flare/structural root system of the tree poses a moderate risk.

Recommendations:
Removing the pecan will eliminate all risk of personal and property damage. There are several defects associated with this tree that would warrant removal. Likewise, there may be some tree
health issues which arise due to perceived damage of the trees absorptive roots and soil over the next 5-8 years.

Should the tree be retained, for whatever reason, the following remedial actions are recommended:

- Prune to remove dead, diseased, crossing, and broken branches 2-inches in diameter and greater
- Perform a crown reduction to decrease crown height and weight by 15%
- Inspect dynamic cable and install structural support system to reduce likelihood of additional large branch failure within the crown
- Apply a layer of mulch based upon industry recommendations to as much of the root zone of the tree as possible
- Perform a soil analysis. Apply fertilizer and amendments based upon results of soil analysis
- Apply a plant growth regulator to redistribute energy from aboveground plant growth and encourage absorptive root growth and plant defense compounds
- Inspect tree annually and after storm events to check for changes in tree structure

*All work should be performed in full compliance with current ANSI Standards Z-133.1

**Limitations of Tree Risk Assessments**

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture’s Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. Tree failure can cause adjacent trees to fail resulting in a “domino effect” that impacts targets outside of the foreseeable target zone of the tree(s). It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigations.

Patrick Anderson, nor Action Arborists Inc., can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or residual risk rating after mitigation. The information in this report should not be considered as making safety, legal, architectural, engineering, landscape architectural, land surveying advice or other professional advice. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the tree owner or tree manager’s knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.
Aerial Tree Risk Assessment

Ella Drezina

408 Walnut Avenue

Charlotte, NC 28208

June 8, 2017

Submitted by:

Randy L. Nelson

Certified Arborist #MN-0210A
The assessment of this tree involved several aspects. Some brief tree/site conditions and history observations were made, followed by an aerial climbing inspection of the crown, and a physical inspection of the soil, root flares and trunk. Then, a series of measurements were taken using a Resistograph. This specialized instrument is used to take measurements to identify wood density involved in determining strength loss in wood of the root flares, the trunk and/or upper limbs of trees. The Resistograph measures and records wood density as it probes from the outside toward the center. These measurements are processed to determine the extent of internal decay and strength loss. After
reviewing the results of the inspection and the percentage of strength loss, a risk rating is determined for the tree(s) and/or tree part(s).

The purpose of the visual inspection of any tree is to detect any structural, developmental, or biological (insects, fungi, etc.) defects obvious from the outside of the tree. Structural defects include, but are not limited to: cracks, broken limbs, cavities, decay and wounds. Developmental defects include, but are not limited to: weak branch unions, poor shape, and excessive lean.

The term “target” is used to refer to anything that may be affected by the failure of the entire tree, or one or more of its parts. The term “target area” is the ground level space where the tree part(s) would likely finish its decent if failure were to occur. Targets would include people that may walk beneath the tree occasionally, cars, buildings, picnic tables, roads, driveways or sidewalks. Targets are ranked/rated based on the likelihood of a tree failure, the likelihood of that failure impacting the target, and the consequences of an impact on that target. As the risk of damages and/or injuries increases, the risk rating increases. In cases where the target is a lawn area, patio, driveway, playground, road, or sidewalk, the frequency of human occupancy of that area is taken into consideration.

In this case Pecan tree in question is in a proposed high target area, meaning that the consequences due to failure of a large tree part or parts, may be severe and the likelihood of impact may be high. The likelihood of failure, causing damage and/or injuries resulting in the event of partial failure of this tree is imminent. The target items that could be affected are the clients’ home with or without occupants, garage, vehicles parked in driveway, neighbors’ home with or without occupants and adjacent utility lines.

Upon visual inspection of the upper portions of the tree, several things were noted. The vigor of this particular tree seems to be low. There are signs of Pecan galls on the foliage. Relative crown size is large and crown density is
sparse. The live crown ratio is approximately 75%. Interior branch growth is normal. The pruning history of this tree includes previous removal of several large lower scaffold limbs to provide crown elevation. There are 2 areas in the upper trunk with large codominant stems with included bark. There is severe decay in one of the large main limbs in the upper canopy with a previous large branch failure. (4) readings were taken in this area with a Resistograph. This tree also displays multiple over extended limbs. There is a synthetic cable that was improperly installed in this tree that displays extreme tension. Also, there is significant deadwood throughout the canopy with a maximum diameter of approximately 2”. The likelihood of failure of a portion or portions of the upper canopy is probable. In the upper trunk area, there is an open cavity from a previous large limb failure. (4) readings were taken in this area with a Resistograph.

Overall, the mid to lower trunk of this tree appear to be in good health. After sounding the tree in these areas, there were no areas of concern noted. The root collar area was also assessed and sounded. There have been several large roots cut and/or damaged. Also, the soil has been graded and compacted on both properties due to construction. A risk rating has been concluded using the Matrixes used in the ISA Basic Tree Risk Assessment form. The risk rating for this tree is EXTREME. This rating has been concluded using the matrixes used in the ISA Basic Tree Risk Assessment form, and the formula used to dictate strength loss with the results from the Resistograph analysis. An exact percentage of strength loss is very difficult to determine. Estimated strength loss due to decay in any tree part that exceeds 33% is considered at high risk for failure. The estimated strength loss of the wood at the areas of concern is 15% for lower cavity in main trunk and 35% for cavity in upper limb. Response growth is good in both areas.

It is in the client’s and the tree’s best interest to consider the remedial procedures to reduce the risk of injury and or property damage and to assist in
improving the health of this tree that your arborist Mark Livingston will prescribe.

Not all potential structure and stability concerns associated with trees can be eliminated. It is the responsibility of the owner to schedule repeat or advance assessments, determine actions, and implement follow-up recommendations, monitoring, and/or mitigation. Arborguard, Incorporated and its’ employees/affiliates cannot be held accountable for unforeseen circumstances and/or severe weather.
6/12/2017

Mark Livingston
Arborguard Tree Specialists

Ella Drevina
408 Walnut Ave
Charlotte, NC 28208

Mrs. Drevina,

After inspecting the Pecan tree and reviewing your construction plans that are yet to be done, my recommendation is to remove the tree. Keeping the Pecan tree is not going to be compatible with your project plans. The tree will be severely impacted from the construction and site disturbance that has already taken place on both properties in which the tree is located and any further disturbance will continue to have a negative effect on the health and structure of this tree. The tree already presents an unreasonable risk in its current condition and any further disturbance will elevate this risk and cause the health of the tree to decline to point of death.

Please contact me with any questions or concerns.

Respectfully,

Mark Livingston | Senior Consulting Arborist
ISA Board Certified Master Arborist  SO-2666B
ISA Qualified Tree Risk Assessor
Arborguard Tree Specialists | Charlotte Office
P.O. Box 26767, Charlotte, NC 28221
P: 704.688.7237 | F: 704.688.7239

Arborguard Tree Specialists
To whom it may concern:  

The Pecan tree located at 408 Walnut Ave, at the end of the driveway, needs to be removed. The tree is in direct conflict with the owner’s driveway project and most likely would not survive the stresses of the construction should it remain (root damage and continued soil compaction). Furthermore, the tree is in poor condition displaying old mechanical damage to the root crown and trunk flair (most likely a result of it’s extension into the driveway). It has a cabling system in the canopy in an attempt to counter the severe damage to the central branch union due to a large limb breaking out in the past. The location of the former limb is now a very large open wound/cavity and will inevitably continue to decay and become an imminent threat for failure and damage to property. Additionally, the tree is structurally out of balance and has a lean toward/over the adjacent dwelling. The lean is opposite the damage to the root system which is very concerning as these are the structural roots that are keeping the tree upright. There are a number of over-extended branches similar to the one that already failed all of which are above significant targets.

In conclusion the tree has multiple defects working against it as well as the fact that it is in direct conflict with the owner’s project. Should it remain, it will only suffer additional damage, decline more rapidly and become a higher risk for failure. No reasonable mitigation option exists other than removal. Consideration for approval/permit in this situation is appreciated.

Thank you,

Drew Harrison, ISA Certified Arborist

Action Arborists Inc
Picture shows a fallen large branch in our neighborhood a few weeks ago as a result of a cay between the branch and the trunk.
PECAN TREE
Do Pecan Tree Roots Hurt Your Foundation?

While fast-growing pecan trees can give your yard a lot of shade and a lot of tasty nuts, they can also wreak havoc on the foundation of your home. That’s because pecan trees are thirsty, and as they grow, they suck up so much moisture from the soil that the ground actually sinks. If that sinking takes place in the vicinity of your home’s foundation, you’ve got a problem; the foundation will go out of level, possibly throwing the whole house out of whack. Doors won’t close properly and stress cracks can appear in the foundation itself.

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Swelling and Shrinking

Pecan trees have extensive taproot systems that pull a lot of water out of the soil. When that water is gone, the dirt compresses, and gravity causes it to sink. Conversely, if the foundation was built and leveled on a site near a large pecan tree and the tree is removed, the soil will swell, causing another problem for your foundation.

Root Barriers

The problem with the water-sucking pecan and other fast-growing deciduous trees can be addressed by placing new trees well away from the home, removing an existing tree or by installing what’s called a root barrier. Root barriers are sheets of 1/4-inch plexiglass that are buried to a depth of 30 inches between the home and tree, blocking the roots from the areas where removing the moisture will cause the ground to settle.

Foundation Support

Texas A&M; University notes that pecan tree roots may require a root barrier that is sunk even deeper than 30 inches because of the tree’s aggressive taproot. Even when the root barrier -- also called a root cap or a root wall -- is installed professionally, you may still encounter some settlement along the outside of the foundation, necessitating the placement of piers in the area where the ground separates from the foundation.

Other Problems

There are other reasons not to have a pecan tree too close to the house. Because the tree can grow to 75 feet in height and canopy width, it needs a lot of room. The University of Arkansas recommends putting a pecan tree no closer than 15 feet from a house and 40 feet from another pecan tree. Putting other trees or structures too close to the pecan tree can limit air movement and lead to scab, a fungus disease. Also, unhealthy pecan trees have a tendency to develop forked lower branches that will split in storms and cause damage to the nearby structure.

Effects of Root Cutting
BRANCH REMOVAL
FROM HICKORY TREE
IN NEIGHBORS YARD
LANDSCAPING/
SITE FEATURES
The application was continued for the following:

- Specific fence design and material being requested; including height dimensions noted all around the site plan where the fence changes
- Indicate on the site plan transition point where blue stone retaining wall changes to other materials
- Specify the type of lamp post being requested and height
EXAMPLES OF STONE IN WESLEY HEIGHTS

325 Grandin Road

425 Grandin Road

609 Walnut Avenue

612 Walnut Avenue
2.0 (1) There are 3 items of concern 1) located on the right elevation there is a crack in the brick veneer 2) located at the front elevation foundation wall (under the front porch) there are 2 cracks in the foundation wall 3) in the attic, at the washer there is a roof truss that was notched which has weakened the truss.

Recommend further evaluation by a licensed structural engineer or a licensed general contractor for possible repairs to these items.

2.0 Item 1(Picture)  
2.0 Item 2(Picture)  
2.0 Item 3(Picture)  
2.0 Item 4(Picture)
IRON RAILINGS IN FRONT OF PORCH
Garden

Retaining wall follows shape of our neighbor's retaining wall.

Prepared fence atop retaining wall. See fence drawing. 5' of minimum fence.
EXAMPLES OF FENCE STYLES

1
2
3
4
Fences, gates

1. Fence has spaces between pickets

2. Gate in aluminum

3. On plan:
   1. Fence around back yard
   2. Gate to driveway
   3. Fence and small gate to garden
<table>
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<tr>
<th>Product</th>
<th>Description</th>
<th>Style</th>
<th>Qty</th>
<th>Price</th>
<th>Total</th>
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<tr>
<td><strong>Casa Sorrento™ 16 3/4” High Bronze Post Mount Light</strong></td>
<td>This Casa Sorrento™ outdoor post mount light will add warmth and style to your home. From our exclusive John Timberland® outdoor lighting collection. Bronze finish cast aluminum construction with marbled glass panels. Pole not included. 16 3/4” high x 9 1/4” wide. Uses one bulb up to 100 watts (incandescent, LED, or CFL). Bulb not included. A traditional Casa Sorrento post light by John Timberland. Post light only; pole not included. Marbled glass, bronze finish.</td>
<td>10455</td>
<td>2</td>
<td>$49.99</td>
<td>$99.98</td>
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<tr>
<td><strong>Hepworth Bronze 75 3/4” High Post and Cap Base</strong></td>
<td>This outdoor lighting base offers a classic look for walkways, garage areas, driveways and more. The decorative base features fluted segments and a classic bronze finish. This is a surface mount base; base mounts onto concrete or other surface. Top light is not included. 75 3/4” high x base footprint is 10 1/4” wide x 3” diameter mounting surface at top. Surface mount style base; mounts onto concrete or other surface. From the John Timberland® outdoor lighting collection. Classic bronze finish post light. Pole base only, top light is not included; accommodates standard size post light.</td>
<td>32978</td>
<td>2</td>
<td>$99.99</td>
<td>$199.98</td>
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<td><strong>Casa Sorrento™ 18 1/2” High Outdoor Wall Light</strong></td>
<td>From John Timberland®, this outdoor wall light in bronze will add warmth to any home. In cast aluminum construction with marbled glass and classical styling. 18 1/2” high x 9 1/4” wide. Extends 11 1/2” from the wall. Uses one 100 watt bulb (incandescent, LED, or CFL). Bulbs not included. Down arm carriage house outdoor light, from the John Timberland brand of lighting. Bronze finish with acanthus leaf detailing on the top arm. Marbled glass.</td>
<td>16457</td>
<td>2</td>
<td>$69.99</td>
<td>$139.98</td>
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<td><strong>Casa Sorrento™ 14 1/2” High Outdoor Wall Light</strong></td>
<td>This bronze finish outdoor wall light adds a warm, traditional touch to your outdoor spaces. The top arm, traditional designs is crafted from cast aluminum and comes in a bronze finish. Marbled glass panels add warm appeal. A great look for a front door, patio, or garage area. 14 1/2” high x 7 1/2” wide. Extends 10” from wall. Backplate is 6 1/2” high x 5” wide. Uses one 60 watt bulb (incandescent, LED, or CFL). Bulb not included. From the John Timberland® brand. Bronze finish light, arm, and backplate. Marbled glass.</td>
<td>43927</td>
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