

## October 8, 2016

Columbia Heights Civic Association P.O. Box 41501 Arlington, VA 22204

Dear Association:

The purpose of this letter is to convey information about a tree assessment and inventory located at 1204 South Cleveland Street, Arlington, VA. The tree assessment/inventory was conducted on March 16<sup>th</sup>, 2016 by Barry P. Duncil, ISA (KY-0656A) of Wetland Studies and Solutions, Inc. (WSSI).

The 62" Willow Oak located on 1204 South Cleveland Street, Arlington, VA is located on the easterly side of the property along the edge of the property. Approximately a 4-foot vegetated strip is located on the other side of the property line where ivy grows to the edge of Cleveland St.

On March 16<sup>th</sup>, the general assessment for the mature Willow Oak is that it was in good condition with little or no signs of stress. Factors associated with the assessment include health and structure of the following: roots/root zone, trunk, scaffold limbs, twigs and foliage. Evidence of structural and utility pruning are noticeable and appear to have been conducted by trained arborists. Large deadwood (dead limbs 3" diameter or greater) and included bark, typically an indicator of potentially weak branch unions, were noticed at the time of the assessment.

The Structural Root Zone (SRZ) extends approximately 13' from the base of the tree while the Critical Root Zone (CRZ) extends 93' from the base. Considering that the base of the Willow Oak is located relatively close to the road, it is assumed that most of the existing critical roots are located in the existing vegetated lawn. Conversely, it is assumed that a minimal amount of the CRZ is located underneath South Cleveland Street. This is due to the fact that roots will seek out growing spaces where oxygen, moisture and nutrients are readily available. Typically, with road construction, soils are compacted to establish a solid base for the aggregate base layers and pavement, thus eliminating many of the pore spaces that create a favorable rooting zone. Because this tree currently has ample desirable rooting space on the subject property, it is assumed that relatively few roots would exist beneath the road.

In urban areas, it can be particularly difficult to grow large mature tree such as the one located at 1204 South Cleveland, as the tree needs access to ample water, nutrients and soil rooting space. In regards to potentially preserving large, mature trees, a mantra that one will often hear is to use the "do nothing" approach, meaning that no disturbance to the entire tree is the best approach. For the 62" Willow Oak, at least 70% of the CRZ would ideally be untouched in order to maintain structural stability and ensure long-term health. Preserving and protecting at least 70% the Willow Oak's CRZ during construction would effectively preclude any development activities at 1204 South Cleveland Street.

In order to meet the 20-year canopy coverage requirement, a planting plan has been developed. To help offset the loss of large trees, the planting plan goes above and beyond that which is required by Arlington County. The total required canopy coverage for the proposed development would require 3,346 square feet of tree cover for a 16,730 square foot lot. The proposed planting plan would provide 9,819 square feet of qualified canopy coverage per the DES Stormwater Appendix E – Tree Canopy Requirements. This represents a canopy coverage of about 60%-much greater than the required 20%. Additionally, most of the plants selected for the site are included on the recommended trees for Arlington County.

Discussions with Vincent Verweij with Arlington's Department of Parks and Recreation revealed the following information regarding the 62" Willow Oak:

- The Oak is not currently under the Specimen designation that Arlington recognizes through the County's Tree Preservation Ordinance.
- Nomination to the Specimen designation would need to be submitted by the current or previous owner of the property.
- Development at 1204 South Cleveland would create a scenario where the tree could not be preserved.
- By-Right development would allow for the removal of the Willow Oak, as long as the proposed canopy coverage is met.

Application has been submitted to Arlington County pursuant of Unified Residential Development (URD). If approved, the proposed development would preserve the existing house at 1200 South Cleveland Street and demolish its garage as well as demolish existing house at 1204 South Cleveland Street so as to build two single family homes. If URD is not approved, the owner of the property plans to pursue a By-Right development.

Willow Oak tree removal is recommended for either URD or By-Right development. Preservation of 70% of the CRZ would be near impossible when considering the normal impacts of removing and adding soil, accessing the site with construction equipment and demolishing/constructing new buildings.

In summary, if development activity proceeds on the site, it would not be feasible to protect or preserve enough of the CRZ in order to ensure long-term structural stability and health of the Willow Oak tree. WSSI recommends that it be removed before commencement of construction or demolition work on the site.

Sincerely,

Barry Duncil, ISA (KY-0656A) Certified Tree Risk Assessor

cc: Arlington County Planning and Zoning Department