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April 25, 2018

Mr. Frederick L. Hill, Chairman
DC Board of Zoning Adjustment
441 Fourth Street NW, Suite 200S
Washington, DC 20001

RE: BZA Case No. 19377: 3015 4th St NW
Lot 1067, Square 3648, Townhouse and New Paulist Location at 3015 4th Street NW

Dear Chairman Hill and Members of the Board:

Thank you for the opportunity to express my views about the proposed development by Boundary Company on the former St. Paul's campus. I am a Fellow in the American Society of Landscape Architects and resident in the community for 7 years and have lived in the District since 2001.

I am NOT in favor of the currently proposed development due to:

- 79% estimated decrease in usable Open Space
- 88% Loss of Special Trees
 - Removal = 14 out of 33 or 42% of Special Trees
 - Projected Mortality of remaining Special Trees that will not survive the proposed development due to location of site elements and regrading = 15
 - Surviving Special Trees = 4 Special Trees remaining out of the existing 33 or 12%
- 8% decrease in Tree Cover per Casey Trees and Boundary agreement to achieve 30% tree cover
- Lack of Equity and inclusion

Please reference attached powerpoint for supporting images.

The proposed "Green" is overstated

1. The proposed efforts to preserve the existing trees are not sufficient. The Tree Preservation Plan C-14 does not consider and represent the full extent of impact on existing trees and subsequent tree health from proposed site elements and regrading.

I say this because excessive damage to the critical root zone (CRZ) (see appendix) from regrading, compaction from construction vehicles or materials, or removal of roots will cause the tree to go into decline, offer diminishing returns, and typically die back or need to be removed within 5 years of construction. The tree will not die outright during the construction period, but it will go into steady decline and need to be removed.

There are several trees in the proposed plan that are marked for preservation but will not survive the impact from too much damage to the CRZ including:

- **Special Tree #62 Quercus rubra**

Undoubtedly the best tree on the site and one in which the proposed site plan worked to preserve and promote; however there is no way this tree will survive because too much of the CRZ will be damaged. The location and installation of the stormwater vaults, sewer lines, sidewalks, front steps to the surrounding townhomes, and the building structures themselves will be too close to the tree requiring significant pruning of the crown that will all add up to an insurmountable amount of stress for the tree to survive.

- **Special Tree #27 Quercus alba**

Over 50% damage to the CRZ from regrading and proposed structures, alley, and retaining wall units 50 and 60

- **Special Tree #52 Quercus alba**

Over 50% damage to the CRZ from regrading and proposed retaining wall, sidewalk, and roadway

- **The trees in the proposed Sylvan Grove**

Over 50% damage to the CRZ from extensive regrading and installation of proposed pathways, play structures, circular benches, and lily pads

2. The Tree Preservation Plan C-14 does not ensure adequate conditions to develop new tree cover

- The street tree planting strips do not provide sufficient soil volume and are located too close to the homes to grow large and healthy trees as depicted in the plans
- If the soil is the same as Chancellor's Row, it will be clay-like soil whose structure has been destroyed through compaction making it undesirable and impenetrable to tree roots which need pore space to access air and water. 75% of the street trees in Chancellor's Row were in fair or poor condition within 5 years, marked by thin crowns and stunted growth and with many of them having been replaced at least once.

Loss of Open Space, Tree Cover, and Special Trees

This area is one of the last and best open spaces in the vicinity marked by extraordinary historic trees in good condition and over 100 years old. The proposed works will reduce open space by an estimated 79%. Once open space is developed, it is gone forever. If there is no open space, there are no large mature trees.

There is no equivalence in this lifetime. A commitment to replace the 46 trees proposed to be removed at a 3:1 ratio throughout the entire site will take decades to achieve equivalent tree cover and function and cannot replace the power, meaning, symbolism, therapeutic value, and view of even one 100 year old majestic mighty tree.

If DC wants to be a livable, diverse, resilient, safe, and sustainable city it needs to provide open space infrastructure. Open space is democratic and support a civil society. This campus is used in all kinds of weather by students, teachers, staff, and neighbors to meet, play, learn, and relax. The campus is viewed everyday by even more people in the community who ride by. The Chancellor's Row EYA development is at a density of 23.1 units per acre for 237 units on 10.24 acres-- very dense-- and was approved because it had this surrounding open space. If this space is gone, then it would not be fair to the schools and residents who invested to be here, and negatively impact our health, safety and well-being.

Equity and Inclusion

I think the aspect of this proposed development that saddens me the most is the loss of the open space, trees, and views for the students. I remember the parents of the new students were so excited that "their child would be going to a school with a campus and *so much green!*", and "my child will be healthy and safe here" "and feel good about himself" and "do well here". With this proposed development, what little open space remains in the Sylvan Grove will be separated physically and visually by 60 new townhomes and the proposed Paulist building and years of construction.

It's a cruel bait and switch for these students and families.

In addition to the loss of open space and Special Trees, access to the proposed "Sylvan Green" will be most directly by a narrow path between the side of townhome #40 and the front yards of townhomes #41-44 and will not feel welcoming to students or neighbors and giving the appearance of trespassing.

I have watched the students play and participate in the outdoor classroom of the existing grove of specimen and historic trees in high-wind 30 degree temperatures and sweltering heat since Washington Leadership Academy was established. Neighboring children sled, hike, and discover nature there. Adults of all ages connect with each other and enjoy the outdoors together.

Research shows that kids in urban settings are more focused, less aggressive, and perform better on tests when they have access to open space and "green" in their schools and daily life. Teens today average 7 hours of screen time a day and 7 minutes outside.

This proposed development affects the mental and physical health of students, neighbors, and the community. This open space and the historic trees are needed to make urban living livable and desirable.

Recommendations

1. Require Boundary Company to be responsible for the health, maintenance and removal of all preserved trees for a minimum of 5 years after project completion. The homeowners should not be responsible for the cost or work of any trees that are in decline and will need to be removed.
2. Ensure healthy soil is required in the plan specifications for all planting areas
3. Ensure recommended soil volume targets are met to achieve healthy mature shade trees (reference DC standards)
4. Provide stronger physical and visual access for WLA, LM, neighbors, and community to pass through the neighborhood and go to the Sylvan Grove

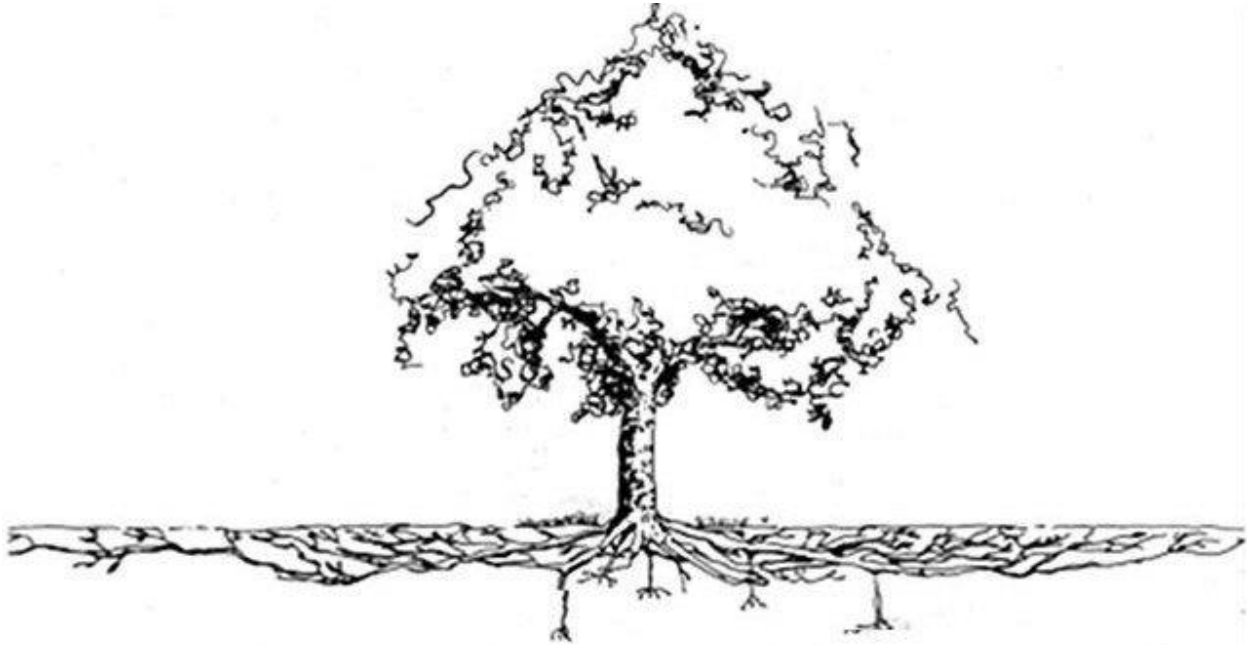
In addition, as there will be other institutional properties up for development in the future, please consider the following:

1. Require measures of existing and proposed tree cover and open space in any development proposals as part of the evaluation process
2. Evaluate open space and tree cover assets in the larger context of the neighborhood and District to plan accordingly and not fall prey to incrementalism or “Death by 1000 Cuts”

Sincerely,

Barbara Deutsch, FASLA

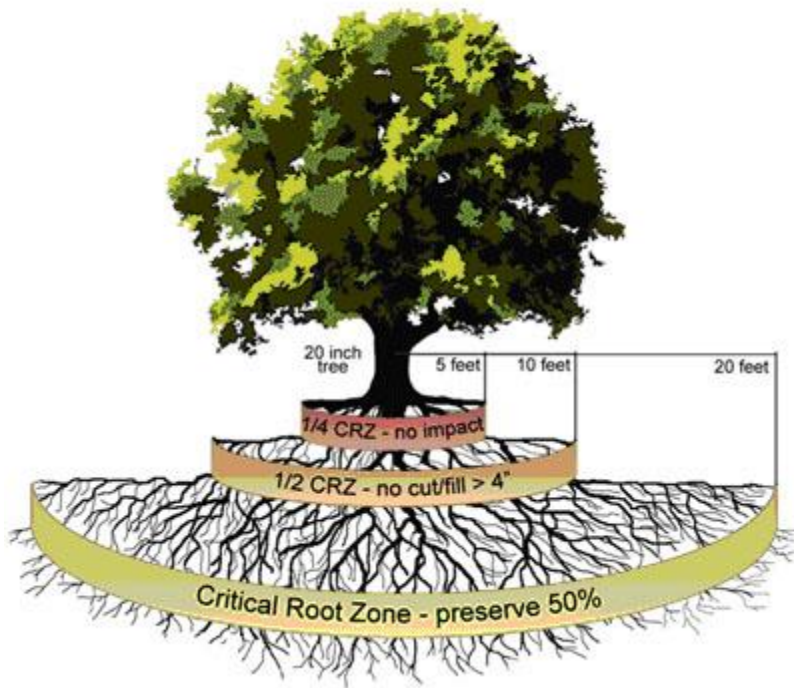
APPENDIX 1



Tree roots extend anywhere from 4-8x the diameter of the crown area and 90% are located within the surface or top 24 inches of soil.

The main requirement to pay attention to when considering tree preservation is the damaging of the root system. Any construction within the “Critical root zone” or CRZ will damage the tree. The CRZ is defined by the size of the tree’s trunk. It is one foot for every 1” of the tree’s diameter. For instance, if the tree is 20” in diameter then the CRZ is 20 feet total from the trunk of the tree. The diagram below outlines how close you can get before you are damaging the root system, and therefore removing the tree. This can be a huge part of site planning as the design team will have coordinate where not only the building, but any paving can be placed in relation to the trees.

The Critical Root Zone - Development Impact Zones



As the diagram shows, within the first $\frac{1}{4}$ of the CRZ there can be no impact at all. Within the first $\frac{1}{2}$ of the CRZ there can be no digging more than 4" down. Within the outer $\frac{1}{2}$ of the CRZ you must preserve at least 50% of the outer ring of CRZ for the tree not to be damaged.