

## BZA CASE NO 19377 TESTIMONY APRIL 25, 2018

Board of Zoning Adjustment District of Columbia CASE NO.19377 EXHIBIT NO.136A



#### **NOT IN FAVOR**

- 79% Decrease Usable Open Space
- 88% Loss of Special Trees
  - Removal = 14
  - Projected mortality from site works = 15
  - Surviving = 4 out of 33
- 8% Decrease in Tree Cover
- Lack of Equity and Inclusion



## Children with Attention Deficit Hyperactivity Disorder (ADHD) concentrate better after a walk in a city park than after walks in other urban settings.

Faber Taylor, Andrea, Kuo, Frances E., (2009). Children with attention deficits concentrate better after walk in the park. Journal of Attention Disorders, 12, 402-409.



An 8-year longitudinal study suggests that if all children had commensurate access to parkland and recreation programs, 9.5% of boys and 8.3% of girls would move from being overweight to normal weight.

Berhane, Kiros, Brady, Kirby, Chang, Roger, Dahmann, Nicholas, Gilliland, Frank, Jerrett, Michael, McConnell, Rob, Reynolds, Kim, Su, Jason G., Wolch, Jennifer, (2011) Childhood obesity and proximity to urban parks and recreational resources: A longitudinal cohort study. *Health & Place* 17, 207-214.



Parks and open space increase nearby property values. A review of numerous studies indicates that a 20% increase is a reasonable estimate, though the impact varies with park size, use, and design.

Crompton, John L., (2005). The impact of parks on property values: Empirical evidence from the past two decades in the United States. *Managing Leisure*, 10, 203-218.



Empirical evidence indicates "livable" street treatments are safer than conventional roadway designs. In analyzing crash data, livable sections had fewer accidents and pedestrian crashes.

Dumbaugh, Eric. (2005). Safe Streets, Livable Streets. *Journal of the American Planning Association* 71(3), 283-300.



A Modesto, California study found that asphalt on streets shaded by large canopy trees lasts longer than asphalt on unshaded streets, reducing maintenance costs by 60% over 30 years.

McPherson, E. Gregory, Muchnick, Jules, (2005). Effects of Street Tree Shade on Asphalt Concrete Pavement Performance. Journal of Arboriculture, 31, 303-310.



Recovering surgery patients with window views of trees had 10% shorter hospital stays, took fewer potent pain killers, and had fewer negative notes recorded by their attending nurses than patients with views of a brick wall.

Ulrich, Roger S., (1984) View through a window may influence recovery from surgery. Science, 224(4647) 420-421.

## 23.1 UNITS/ACRE Chancellor's Row DENSITY

#### **NEED FOR OPEN SPACE**





#### **PROPOSED GREEN OVERSTATED**

- Survivability of Preserved Special Trees
  - #62 Quercus rubra
  - #27 Quercus alba
  - #52 Quercus alba
  - Sylvan Grove
- Damage to Critical Root Zone
  - Need to look below the surface



## Roots typically SPREAD 2X the HEIGHT of the tree

## NO REGRADING more than 4 inches within the DRIPLINE

#### TREE SCIENCE

The Critical Root Zone - Development Impact Zones

Example: 20 inch diameter tree



#### **SPECIAL TREE #62 QUERCUS RUBRA**



## SPECIMAN TREE over 100 YEARS OLD



#### **SPECIAL TREE #62 QUERCUS RUBRA**

- Cut crown to fit
  - Crown diameter = 78 feet
  - Space between buildings = 52 feet
- Cut > 50% of roots
  - Location of townhomes
  - Front steps
  - Sidewalks
  - Sewers
  - Stormwater vaults
- Soil Compaction from construction
- NO WAY THIS TREE WILL SURVIVE



#### **SPECIAL TREE #52 QUERCUS ALBA**

- Cut > 50% of roots
  - Location of townhomes
  - Retaining wall
  - Alley
  - Water lines
  - Sewers
  - Stormwater vaults
- Soil Compaction from construction
- NO WAY THIS TREE WILL SURVIVE

#### SPECIAL TREES IN SYLVAN GROVE







# Low SURVIVABILITY from >50% damage to CRITICAL ROOT ZONE





#### **INADEQUATE CONDITIONS FOR NEW TREES**

- Location too close to buildings
- Soil Compaction from construction limits root growth outside of tree pit like a potted plant
- Not enough soil volume for tree roots

#### **USABLE PUBLIC OPEN SPACE**



## 79% DECREASE in public open space and ELIMINATION of school PARKING

#### **USABLE PUBLIC OPEN SPACE**



MULTIPLE USES and USERS of public OPEN SPACE

#### **EQUITY AND INCLUSION**



"I am SO EXCITED that my child is going to a school with SO MUCH GREEN !"

#### **EQUITY AND INCLUSION**



## Teens spend 7 HOURS a day on SCREENS and 7 MINUTES OUTDOORS

#### RECOMMENDATIONS



- Boundary Company responsible for health, maintenance, and removal of any preserved trees for 5 years
- The homeowners should not have to pay for any trees that are in decline and need to be removed
- Example Chancellor's Row HOA now needing to remove mature tree in decline and hazard 5 years post construction

## Require LANDSCAPE PERFORMANCE for 5 YEARS

#### RECOMMENDATIONS



- Specify healthy soil for all planting areas
- Ensure soil volume supports design objectives for trees
- Monitor performance toward achieving tree cover objectives over time

# Ensure HEALTHY SOIL and sufficient SOIL VOLUME to meet TREE COVER OBJECTIVES

#### RECOMMENDATIONS



- Townhomes cut off Sylvan Grove from the Schools privatizing the open space
- Direct access to Sylvan Grove from the school is through a narrow pathway abutting homeowners' properties
- Provide stronger physical and visual access for Schools and neighbors to Sylvan Grove

Make neighborhood WELCOMING and INCLUSIVE



### Barbara Deutsch FASLA 202.550.3679

barbaradeutsch@hotmail.com

### **THANK YOU**