MCPB

Item No. 10 Date: 10-06-11

Woodside Urban Park Facility Plan, Forest Conservation and Variance, PP22012003

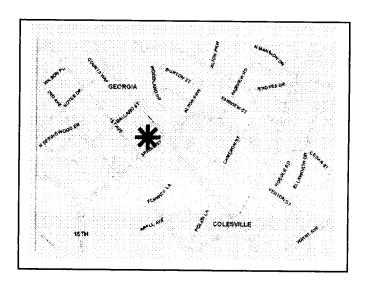


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Description

Woodside Urban Park Facility Plan, Forest Conservation Plan and Variance, PP22012003

- 8800 Georgia Avenue (MD 97)
- 5.02 Acres zoned R-60. The park is located within the boundary of the 2000 North and West Silver Spring Master Plan.
- Approval of a Preliminary Forest Conservation Plan and Tree Variance
- The Parks Department is proposing a park revitalization plan that will impact the critical root zones of all site specimen and significant trees. Post construction benefits proposed include groundwater infiltration, soil aeration and amendments, and improved habitat.



Summary

- Staff recommends APPROVAL with conditions of the Preliminary Forest Conservation Plan
 - The applicant has submitted a Preliminary Forest Conservation Plan with proposed cut and fill that will impact the critical root zones (CRZ) of 17 specimen trees greater than 30 inches in diameter and 21 significant trees with a diameter between 24 and 30 inches. Six trees ranging from 20-24" DBH will be removed. Extensive protection measures are proposed and identified in the tree variance and on the FCP plan. Treatment within the critical root zones of the specimen trees include: construction sequencing, supersonic air spading, the use of hand tools for soil removal and replacement, aeration matting, soil amendments, and post construction elevated boardwalks. Additional details will be necessary at the time the final forest conservation plan is submitted.

Staff recommends APPROVAL with Conditions of the Tree Variance

The applicant has submitted a variance request as part of the FCP for impacts within the CRZ of 17 specimen trees. None of the trees are slated for removal. Each tree has been evaluated by arborists outlining specific methods for either the removal (cut) or addition (fill) of topsoil. Some trees will receive multiple treatments due to both grading and fill occurring within the CRZ. Soil removal will occur using a blower (supersonic spade) or hand tools. To help mitigate impacts to the trees, a Park arborist and independent arborist will be onsite during the construction period.

Conditions for Approval

Staff recommends approval of the forest conservation subject to the following conditions: Submission

- 1) The applicant must submit a revised preliminary forest conservation plan to:
 - a. Show the exact percentage of critical root disturbance to the specimen trees
 - b. Correct the land use category on the forest conservation worksheet from high density residential to institutional development area.
- 2) The applicant must submit a final forest conservation consistent with Section 109.B of the forest conservation regulations.
 - a. The final forest conservation plan must provide further descriptive details for the protection of all trees.
 - b. Show the locations and dimensions of proposed stock pile areas
 - c. Provide MNCPPC Standard Notes (typical sequence of events and inspection)
 - d. Provide confirmation that DPS will accept the proposed trenchless sediment control devices
 - e. Show that afforestation requirements will be met (location, species, size, tree protection measures, and acreage of trees to be planted)
 - f. The final forest conservation plan must be approved prior to any land disturbing activities occurring on site.

SITE DESCRIPTION

The Woodside Urban Park facility plan is a 5.02 acre site comprising eight parcels (tax identification numbers: 1090211, 1091237, 1090200, 1091181, 1091385, 1088332, 1091396, and 1091636). The site is located at 8800 Georgia Avenue in Silver Spring, on the north side of Spring Street directly outside Central Business District. All the parcels are zoned R-60. There are no streams, wetlands or forests onsite.

The proposed park renovation intends to create a state-of-the-art 21st Century park and gateway to Silver Spring. Among other things, the design intends to restore habitat, promote stormwater infiltration, aerate the soil, provide public gardening opportunities, and promote biodiversity. Implementation of the plan design will result in impacts to the critical root zones (CRZ) of all trees on site including 17specimen trees and 21 significant trees. Six significant trees will be removed.

Given the impacts to the CRZ of so many large and healthy trees on site, innovative protective measures are proposed for tree survival. In addition, the aspiration is to enhance soil conditions and nourish the trees with inoculants, fertilizers and root stimulators. However the results of such activities will not be evident until after construction is complete. The Parks Department is working closely with their arborists and consultants to help ensure maximum success.

Figure 1: 2010 Aerial Photograph of Project Site and Vicinity



BACKGROUND

M-NCPPC purchased seven of the park parcels from 1970-1973, while the parcel furthest to the north was purchased in 1991 by Montgomery County. The present park was established in 1976 and expanded to include a tennis court and picnic area in 1991. Recently a small but heavily used skateboard park was constructed.

Parts of the park are in relatively good condition while other portions are aging and antiquated. The many mature trees scattered throughout the landscape provide shade, reduced heat island effect, and habitat in an otherwise urbanized area.

The renovation plans for the park proposes extensive grading and fill within the CRZ of the site's significant and specimen trees. Since the impacts to the specimen trees could result in tree mortality, the design and forest conservation plan proposes the use of intensive oversight, tree protection measures and best management practices to achieve maximum tree survival.

The arborists and consultants working on the tree protection measures developed a chart

recommending treatments for each specimen tree (see table 2). Treatments are described below under Forest Conservation Variance.

SITE DESIGN AND PERFORMANCE GOALS

- 1. Individual tree protection measures based on the impacts to each tree will include aeration matting, elevated boardwalks, soil amendments, and intensive care when soil is being removed.
- 2. Protection and restoration of natural hydrology (groundwater recharge)
- 3. Reduce flow to storm drain inlets and sewer systems
- 4. Incorporate porous pavements
- 5. Incorporate curbside bioretention planters (aesthetic stormwater treatment systems)
- 6. Improve soil porosity and nutrient content
- 7. Improve water quality

Forest Conservation Variance

Section 22A-12(b)(3) of the County Forest Conservation Law identifies certain individual trees as high priority for retention and protection. Any impact to these trees, including removal of the subject tree or any disturbance within the tree's critical root zone (CRZ) requires a variance. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. The law requires that a variance be granted for impact to trees that measure 30 inches DBH or greater; trees that are part of a historic site or designated with a historic structure; trees that are designated as a national, State, or County champion tree; trees that are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

The applicant submitted a variance request on September 2, 2011 (Attachment A) for impacts to all specimen trees within the proposed limits of disturbance and one specimen tree on private property west of Woodside Park. The variance does not propose the removal of any specimen trees but there will be extensive impacts to the CRZ of all 17 specimen trees. The variance identifies grading activities including fill and cut, often both, within the CRZ of singular specimen trees. The application has not identified the amount of impact to the specimen trees and all specimen trees are within the limits of disturbance.

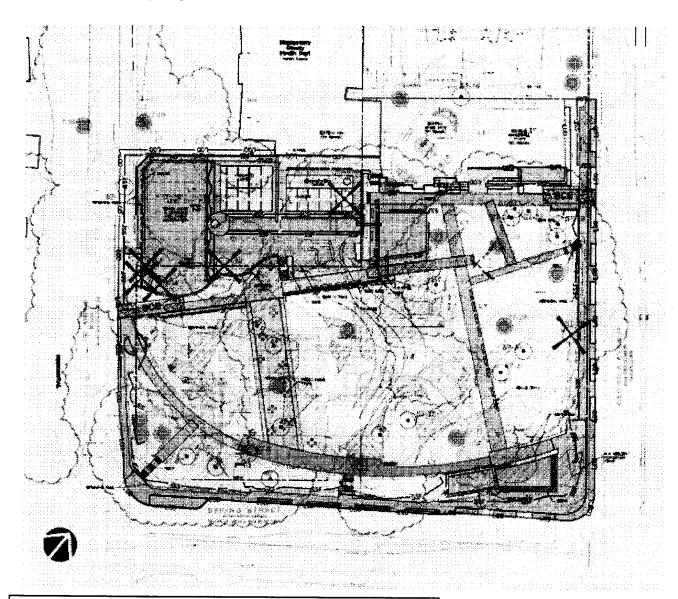
In an effort to protect the specimen trees the Parks Department has worked with their team of urban foresters and experienced arborists to develop strategies to maximize tree survival. A variety of tree protection approaches and best management practices will be applied to each tree based on the proposed work and design objective. Tree preservation methods include:

- Use of Supersonic air spade to expose roots, remove grade, decompact and aerate soil.
- Inoculate soil with fungal tea, humate fertilizer, kelp, and fish hydtolisate to reduce shock and improve tree survival and health.
- Coordinate soil testing for nutrient and biological properties to be used as a soil amendment.
- Incorporate different types of root protection and aeration matting to fit the specific fill requirements for each tree.

- Develop a short-term, mid-term, and long-term plan to monitor tree health and take additional steps needed to protect trees from mortality.
- Mandate site arborist as a 3rd party inspector to coordinate tree protection and construction activities

| Tree # | Species | DBH | Tree Condition | Arborist Recommendations | | | | | | | | | | | |
|--------------------|-------------------------|------|-------------------|--------------------------|-------------|----------|------------|------------|--------|--------------------|----------------------|----------------------|-----------------|------------|---------|
| | | | | A Demo | B ≤ 6" fill | C≥6″fill | □ ≤ 6" cut | E ≥ 6" cut | F pave | © pave with 6" cut | 11 pervious above | pervious with 6" cut | [Bio. 2.5' cut | K. Helical | £ prune |
| ST-5 | Liriodendron tulipifera | 51 | Fair | X | Х | Х | Х | х | Х | Х | X | | | | Х |
| ST-6 | Acer rubrum | 36 | Fair | X | X | Х | Х | X | Х | Х | Х | | | | Х |
| ST-7 | Acer rubrum | 32 | Fair | Х | Х | Х | Х | Х | Х | X | X | | | | X |
| ST-10 | Ginkgo biloba | 43 | Good/Fair | Х | X | | | Х | | Х | Х | Х | <u></u> | Х | Х |
| ST-11 | Ulmus parvifolia | 44.5 | Fair | Х | Х | | Х | X | Х | Х | | | Х | Х | Х |
| ST-13 | Liriodendron tulipifera | 38 | Good/Fair | Х | | Х | | Х | Х | | | | | | X |
| ST-14 | Quercus phellos | 33 | Good/Fair | Х | | X | | Х | Х | | | | X | | Х |
| ST-15 | Catalpa speciosa | 47 | Fair | Х | " | | | | Х | X | | | | | X |
| ST-17 | Paulonia tomentosa | 33 | Poor | Х | | | | | X | | | | | | X |
| ST-18 | Ulmus americana | 34 | Fair | Х | | | | | X | | | | | | Х |
| ST-21 | Liriodendron tulipifera | 41 | Fair | Х | | | | Х | X | | | | | Х | Х |
| ST-26 | Liriodendron tulipifera | 36 | Fair | Х | Х | | | | X | | | | | Х | Х |
| ST-27 | Quercus phellos | 31.5 | Good | Х | | Х | | | Х | | | | Х | Х | X |
| ST-28 | Quercus phellos | 31.5 | Good | Х | | | | | | | Х | | | | X |
| ST-32 | Quercus phellos | 32 | Good | Х | Х | | | | | | Х | Х | | | Х |
| r ' -55 | Catalpa speciosa | 33 | Good/Fair | Х | | Х | X | | | | | | | | Х |
| Г-56 | Acer saccharinum | 39 | Fair | X | | | _ | | | | | | | | X |

Figure 2: Trees Requiring a Variance





Indicates non-specimen (significant) trees to be removed



Indicates Specimen Trees

Table 2: Arborist Recommendations

The arborist recommendations provided below relate to the overall FCP plan and identify specific treatments proposed to mitigate impacts to the critical root zones for each specific tree. The arborist recommendations are the minimum steps necessary to ensure survivability of the trees. The recommendations may be adjusted by the arborist in the field in coordination with appropriate personell if the arborist believes additional measures for tree protection and survivability are necessary.

| Type | Impact Type | Arborist Recommendations | | | | | | | | |
|------|--|--|--|--|--|--|--|--|--|--|
| Α | Demolition & Construction | Install tree protection in accordance with M-NCPPC Planning and Park Standards. Phase the tree protection during the demolition and construction to protect root system as necessary | | | | | | | | |
| В | Fill < 6" (either new fill or to backfill demolition voids within CRZs). | Arborist to SSAT blend new well drained topsoil with existing topsoil within designated CRZs. Use blower to install topsoil without equipment or slow wheel burrows. Roots will grow up into new medium. Inoculate with beneficial fungi tea, kelp, fish hydrolisate, and humate. | | | | | | | | |
| С | Fill > 6" (either new fill or to backfill demolition voids within CRZs) | Arborist to install Root Aeration Matting prior to filling. SSAT soil beneath concrete after demo then inoculate with fungal tea, humate, kelp, fish hydtolisate. | | | | | | | | |
| D | Cut < 6" | Arborist to SSAT to gently peel back layers of soil until root refusal at> 1" diameter roots. Smaller roots may be depressed or clipped off. Recommend SSAT subsurface investigation during design in select areas to determine depth and extent of roots. | | | | | | | | |
| E | Cut > 6" | SSAT Root Re-direction- uncover roots, prune larger stiff roots but bend smaller roots to parallell same plane as root prune and pin down with burlap or natural fiber mat with compost and moisture gel then backfill. | | | | | | | | |
| F | Non pervious Concrete or pavement located on top of existing grade. | Majority of pervious paving section installed above grade unless SSAT is used to lower grade to root refusal; SSAT decompaction after demo prior to installation; install select geocomposite for separation, stabilization, and aeration; No compaction of sub grade. Compact crushed aggregate above RAM to achieve desired compaction. | | | | | | | | |
| G | Non pervious Concrete or pavement with< 6" cut. | Recommend SSAT Root Investigation during design to determine depth and size of roots; Arborist then SSAT down to depth of root refusal; prune or redirect roots within 6" of cut; Install RAM as above. | | | | | | | | |
| Н | Pervious Pavement or Playground Surface over the top of exiting grade. | No compaction of topsoil subgrade; Install Geotextile on grade as separator and stabilizer, #57 washed stone 2"-4" and compact until no movement but do not crush; install final pervious pavement section per civil detail. Recommend flexible pervious paving with 22% pore space for minimal maintenance, ADA compliance, and no black ice. | | | | | | | | |
| 1 | Pervious Pavement Playground Surface with < 6" cut. | Recommend SSAT Root Investigation during design to determine depth and size of roots; Arborist then SSAT down to depth of root refusal; prune or redirect roots within 6" of cut; Install Pervious Paving section as above. | | | | | | | | |
| J | Bioretention 2.5' cut. | Arborist to SSAT Root Re-direction; expose and uncover to prune stiffer larger roots, redirect as prior. | | | | | | | | |
| K | Boardwalk on helical piers | Designate temporary RPM over work area for equipment access and work area; Arborist to review pre-construction layout of piers to determine need for SSAT Investigation within inner 50% CRZ of high profile trees | | | | | | | | |
| L | Sanitation Pruning | Remove all dead or dying limbs greater than one inch to improve the health and appearance of the tree. The crown will be thinned where necessary to reduce the canopy density by a maximum of twenty-five percent to compensate for root loss and construction stress | | | | | | | | |

The applicant has offered the following justification of the variance request:

(1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship;

Applicant response: The 2000 Approved and Adopted Silver Spring CBD Sector Plan envisions a downtown serving both the surrounding residential community and a broader market; an active place with mixed uses attracting people at all times and an upgraded urban environment that attract private investment. The Sector Plan articulates the shared goals and vision into the themes of "the transitoriented downtown, commercial downtown, residential downtown, civic downtown, green downtown, and pedestrian-friendly downtown."

"Urban parks are designed to meet the recreation and open space needs of the residential and employee community, as an amenity and as elements in a linked green system. The park system contributes to realizing the theme of the Green Downtown, Civic Downtown and Pedestrian-friendly Downtown and Residential Downtown."

Staff response: Staff believes the park renovation will greatly enhance the community and offer new and innovative ways to explore nature, learn, play, and engage in their environment. At the same time, tree impacts are significant. Staff supports using arborists and tree specialists who are experts at applying tried and true techniques to protect trees from construction impacts.

(2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;

Applicant response: "Were the applicant to be denied the requested variance to impact the critical root zone of the above listed trees, it would cause an unwarranted hardship and deprive M-NCPPC and the community they have been tasked to serve of implementing the park in conjunction with the CBD Sector Plan. Moreover, it would deprive the landowner of rights commonly enjoyed by others in similar areas by not providing a park system to the people of Montgomery County and the people in Silver Spring and Woodside a park that is enjoyable, accessible, safe and promotes a strong sense of community through shared spaces and experiences and is treasured by the people it serves and that protect and interpret our valuable natural and cultural resources; balance the demand for recreation with the need for conservation; offer a variety of enjoyable recreational activities that encourage healthy lifestyles; and provide clean, safe, and accessible places for leisure-time activities."

Staff Response: Staff supports the recommendations and implementation of the Sector Plans. The existing park provides active and passive recreation and is serving the community. At the same time portions of the park are deteriorating. Because Staff understands that proposed plan will unify, upgrade, and provide a sustainable park that serves many human and ecological functions, staff has been willing to accept the fact that the proposed redevelopment will have impacts many mature, healthy specimen trees.

(3) Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance;

Applicant Response: "The specimen trees that are directly disturbed are not located near any perennial, intermittent or ephemeral streams, nor is it part of any environmental buffer. Since all the trees of 30" will be mitigated and monitored by an arborist during construction, the trees will continue to provide water quality and quantity benefits comparable to existing conditions. Furthermore, the project is treating (through ESD measures) additional water beyond that which is being treated on the site. For the above reasons, the removal or disturbance of the CRZ's of the specimen trees would not violate the aforementioned standards, nor would it result in a measurable degradation in water quality."

Staff Response: Staff agrees that State water quality standards will not be violated and that a measurable degradation in water quality will not occur. The Environmental Site Design (ESD) features proposed such as bioretention systems, underground catchment area, and a cistern are aimed to replicate the natural hydrology of the pre-developed site aiding in stormwater infiltration, reduce pollution, a high volume runoff reduction.

(4) Provide any other information appropriate to support the request;

Applicant Response: The applicant and its experts believe that the impact to these trees is offset by the following environmental benefits provided by the proposed plan:

- The Plan encourages the use of alternatives to automobile transportation to reduce air pollution
- The Plan incorporates recycling and energy efficiency programs in new development
- The Plan creates green space and enhance water quality through ESD techniques for the treatment of on-site stormwater management
- The Plan implements strategies including reduction of existing impervious surfaces and implementation of new porous hardscape to treat storm water.

Staff Response: Staff agrees that there will be many ecological benefits when the proposed plan is constructed. These benefits do not outweigh the services provided by healthy, mature trees, but staff is hopeful that tree survival will be high.

In addition to the proposed soil aeration, amendments and nutrient enrichment, staff believes the proposed removal of impervious surfaces will further augment tree survivability.

County Arborist's Recommendation

In accordance with Montgomery County Code, Section 22A-21(c) the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The request was forwarded to the County Arborist on September 15, 2011. On September 22, 2011 the County Arborist issued her recommendations on the Variance request (Attachment B). The County Arborist's recommendation for the Variance request was that it should be *granted*.

The Planning Board must make findings that the applicant has met all requirements of Section 22A-21 of the County Code before granting the Variance. Staff has made the following determination on the required findings:

1. Will confer on the applicant a special privilege that would be denied to other applicants.

Arborist Response: "The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance **can be granted** under this condition."

2. Is based on conditions or circumstances which are the result of the actions by the applicant.

Arborist Response: "Based on a discussion on March 19, 2010 with representatives of the Maryland Department of Natural Resources Forest Service and the MNCPPC, the disturbance of trees, or other vegetation, in not interpreted as a condition or circumstance that is the direct result of the actions by the applicant and, therefore, the variance <u>can be</u> <u>granted</u> under this condition, as long as appropriate mitigation is provided for the resources disturbed.

3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or

Arborist Response: "The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance <u>can be granted</u> under this condition.

4. Will violate State water quality standards or cause measurable degradation in water quality.

Arborist Response: "The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance <u>can be granted</u> under this condition.

Additional Arborist Comments: "I recommend that this applicant qualify for a variance conditioned upon mitigation for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law. Until other guidelines are developed, I recommend requiring mitigation based on the area of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

CONCLUSION

Staff recommends the Planning Board grant approval under the conditions listed above.

ATTACHMENTS:

Attachment A: Variance Request

Attachment B: County Arborist Response



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Robert G. Hoyt

Director

September 21, 2011

Françoise Carrier, Chair Montgomery County Planning Board Maryland National Capital Park & Planning Commission 8787 Georgia Avenue Silver Spring, Maryland 20910

RE: Woodside Park, PP 2012003, NRI/FSD application accepted on 5/11/2011

Dear Ms. Carrier:

The County Attorney's Office has advised me that the provisions contained in Section 5-1607 of Title 5 (Natural Resources) of the Maryland Code apply to any application required by Chapter 22A of the Montgomery County Code submitted after October 1, 2009. Since the application for the above referenced request is required to comply with Chapter 22A based on a review by the Maryland National Capital Park & Planning Commission (MNCPPC) and was submitted after this date, I am providing the following recommendation pertaining to this request for a variance.

Section 22A-21(d) of the Forest Conservation Law states that a variance must not be granted if granting the request:

- 1. Will confer on the applicant a special privilege that would be denied to other applicants;
- 2. Is based on conditions or circumstances which are the result of the actions by the applicant;
- 3. Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
- 4. Will violate State water quality standards or cause measurable degradation in water quality.

Applying the above conditions to the plan submitted by the applicant results in the following findings:

1. The granting of a variance in this case would not confer a special privilege on this applicant that would be denied other applicants as long as the same criteria are applied in each case. Therefore, the variance can be granted under this condition.

- 2. Based on a discussion on March 19, 2010 with representatives of the Maryland Department of Natural Resources Forest Service and the MNCPPC, the disturbance of trees, or other vegetation, is not interpreted as a condition or circumstance that is the direct result of the actions by the applicant and, therefore, the variance <u>can be granted</u> under this condition, as long as appropriate mitigation is provided for the resources disturbed.
- 3. The disturbance of trees, or other vegetation, by the applicant does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property. Therefore, the variance can be granted under this condition.
- 4. The disturbance of trees, or other vegetation, by the applicant will not result in a violation of State water quality standards or cause measurable degradation in water quality. Therefore, the variance <u>can be granted</u> under this condition.

Therefore, I recommend that this applicant qualify for a variance conditioned upon mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law. Until other guidelines are developed, I recommend requiring mitigation based on the area of the critical root zone lost or disturbed. The mitigation can be met using any currently acceptable method under Chapter 22A of the Montgomery County Code.

If you have any questions, please do not hesitate to contact me directly.

Sincerely,

Laura Miller County Arborist

cc: Robert Hoyt, Director
Walter Wilson, Associate County Attorney
Mark Pfefferle, Acting Chief





August 29, 2011

Mr. Mark Pfefferle

Environmental Planning Division Maryland National Capital Park and Planning Commission (M-NCPPC) 8787 Georgia Ave. Silver Spring, MD 20910

> Re: Woodside Urban Park AMT File No. 108-157.009

Dear Mr. Pfefferle:

On behalf of the Montgomery County Parks Development Division in pursuant to Section 22A-21 Variance provisions of the Montgomery County Forest Conservation Ordinance and recent revisions to the State Forest Conservation Law enacted by S.B. 666, we are writing to request a variance for 17 trees having a diameter at breast height (dbh) of greater than 30 inches at 4.5 feet from the ground. This request is being made in concert with the facility and preliminary forest conservation plans for Woodside Urban Park.

The trees listed in table 1 have been evaluated by AMT and arborists from M-NCPPC and Davey Trees. The table lists the trees located on the project site that have impacts to the CRZ's of 17 trees with the proposed practices to protect and mitigate the disturbance. None of the trees are slated for removal. To help mitigate any impacts to the trees, the contractor will be required to hire an independent arborist that will be on site during the construction period.

| Tree # | Species | DBH | Tree Condition | Arl | Arborist Recommendations | | | | | | | | | | |
|--------|-------------------------|------|----------------|--------|--------------------------|------------|-------------------|----------|-----------------|--------------------|------------------|------------------------|-----------------|-----------|---------|
| | | | | A Demo | B ≤ 6" fill | C ≥ 6"fill | D ≤ 6" cut | E≥6" cut | F pave above | G pave with 6" cut | H pervious above | I pervious with 6" cut | J Bio. 2.5' cut | K Helical | L prune |
| ST-5 | Liriodendron tulipifera | 51 | Fair | х | Х | Х | Х | х | Х | X | Х | | | i | X |
| ST-6 | Acer rubrum | 36 | Fair | Х | Х | Х | х | х | X | X | X | | | | X |
| ST-7 | Acer rubrum | 32 | Fair | Х | X | Х | Х | Х | X | X | X | | | | X |
| ST-10 | Ginkgo biloha | 43 | Good/Fair | Х | Х | | | Х | | X | X | X | | x | Х |
| ST-11 | Ulmus parrifolia | 44.5 | Fair | X | Х | | X | Х | X | X | | | X | Х | X |
| ST-13 | Liriodendron tulipifera | 38 | Good/Fair | Х | | Х | | Х | X | | | | | | X |
| ST-14 | Quercus phellos | 33 | Good/Fair | X | | X | | Х | X | | | | X | | X |
| ST-15 | Catalpa speciosa | 47 | Pair | X | | | | | Х | X | | | | | X |
| ST-17 | Paulonia tomentosa | 33 | Poor | Х | | | | | Х | | | | | | X |
| ST-18 | Ulmus americana | 34 | Fair | X | | | | | X | - | | | | | X |
| ST-21 | Liriodendron tulipifera | 41 | Fair | Х | | | | х | Х | | | | | х | X |
| ST-26 | Liriodendron tulipifera | 36 | Fair | Х | X | | | | Х | | | | | Х | X |
| ST-27 | Quercus phellos | 31.5 | Good | Х | | Х | | | X | | | | X | X | X |
| ST-28 | Quercus phellos | 31.5 | Good | X | | | | | | | Х | | | | X |
| ST-32 | Quercus phellos | 32 | Good | X | Х | | | | | | X | X | | | X |
| T-55 | Catalpa speciosa | 33 | Good/Fair | Х | | Х | Х | | | | | | | | X |
| T-56 | Acer saccharinum | 39 | l'air | Х | | | | | | | | | | | X |

Arborist Recommendations

| Type | Impact Type | Arborist Recommendations | | | | | |
|------|--|--|--|--|--|--|--|
| A | Demolition & Construction | Install tree protection in accordance with M-NCPPC Planning and Park Standards. Phase the tree protection during the demolition and construction to protect root system as necessary | | | | | |
| В | Fill < 6" (either new fill or to backfill demolition voids within CRZs). | Arborist to SSAT blend new well drained topsoil with existing topsoil within designated CRZs. Use blowe install topsoil without equipment or slow wheel burrows. Roots will grow up into new medium. Inoculate beneficial fungi tea, kelp, fish hydrolisate, and humate. | | | | | |
| С | Fill > 6" (either new fill or to backfill demolition voids within CRZs) | Arborist to install Root Acration Matting prior to filling. SSAT soil beneath concrete after demo then inoculate with fungal tea, humate, kelp, fish hydtolisate. | | | | | |
| D | Cut < 6" | Arborist to SSAT to gently peel back layers of soil until root refusal at> 1" diameter roots. Smaller roots may be depressed or clipped off. Recommend SSAT subsurface investigation during design in select areas to determine depth and extent of roots. | | | | | |
| E | Cut > 6" | SSAT Root Re-direction- uncover roots, prune larger stiff roots but bend smaller roots to parallel to same plane as root prune and pin down with burlap or natural fiber mat with compost and moisture gel then backfill. | | | | | |
| F | Non pervious Concrete or pavement located on top of existing grade. | Majority of pervious paving section installed above grade unless SSAT is used to lower grade to root refusal; SSAT decompaction after demo prior to installation; install select geocomposite for separation, stabilization, and aeration; No compaction of sub grade. Compact crushed aggregate above RAM to achieve desired compaction. | | | | | |
| G | Non pervious Concrete or pavement with < 6" cut. Recommend SSAT Root Investigation during design to determine depth and size of roots; Arbor down to depth of root refusal; prune or redirect roots within 6" of cut; Install RAM as above. | | | | | | |
| Н | Pervious Pavement or Playground Surface over the top of exiting grade. | No compaction of topsoil subgrade; Install Geotextile on grade as separator and stabilizer, #57 washed stone 2"-4" and compact until no movement but do not crush; install final pervious pavement section per civil detail. Recommend flexible pervious paving with 22% pore space for minimal maintenance, ADA compliance, and no black ice. | | | | | |
| I | Pervious Pavement Playground Surface with < 6" cut. | Recommend SSAT Root Investigation during design to determine depth and size of roots; Arborist then SSAT down to depth of root refusal; prune or redirect roots within 6" of cut; Install Pervious Paving section as above. | | | | | |
| J | Bioretention 2.5' cut. | Arborist to SSAT Root Re-direction; expose and uncover to prune stiffer larger roots, redirect as prior. | | | | | |
| K | Boardwalk on helical piers | Designate temporary RPM over work area for equipment access and work area; Arborist to review pre- construction layout of piers to determine need for SSAT Investigation within inner 50% CRZ of high profile trees | | | | | |
| L | Sanitation Pruning | Remove all dead or dying limbs grater than one inch to improve the health and appearance of the tree. The crown will be thinned where necessary to reduce the canopy density by a maximum of twenty-five percent to compensate for root loss and construction stress | | | | | |

Section 22A-21(b) Application requirements states that the applicant must:

- (1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship;
- (2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;
- (3) Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance; and
- (4) Provide any other information appropriate to support the request.

Pursuant to "(1) Describe the special conditions peculiar to the property which would cause the unwarranted hardship and "(2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas" the attached "Exhibit 1", show the impacted areas of the project site and its surroundings. (See the Approved NRI and Preliminary FCP for more information about the site).

Background

Silver Spring CBD Sector Plan

The 2000 Approved and Adopted Silver Spring CBD Sector Plan envisions a downtown serving both the surrounding residential community and a broader market; an active place with mixed uses attracting people at all times and an upgraded urban environment that attract private investment. The Sector Plan articulates the shared goals and vision into the themes of "the transit-oriented downtown, commercial downtown, residential downtown, civic downtown, green downtown, and pedestrian-friendly downtown." 'Urban parks are designed to meet the recreation and open space needs of the residential and employee community, as amenity and as elements in a linked green system. The park system contributes to realizing the theme of the Green Downtown, Civic Downtown and Pedestrian-friendly Downtown and Residential Downtown."

• Green Downtown

The Plan envisions shaded, tree-lined streets and well-placed green parks and plazas, creating a comprehensive system of open spaces that provide economic, environmental, and aesthetic benefits throughout downtown.

• Civic Downtown

The Plan views civic facilities as partners in economic revitalization. New and regenerated facilities will draw people downtown, returning it to the center of community life and creating opportunities for economic and social connections.

Pedestrian-Friendly Downtown

The Plan encourages the development of active streets and sidewalks, busy with people walking to shop, commute, or for pleasure.

• Residential Downtown

The Plan Seeks to create a mix of housing choices, supported by parks, shopping, cultural, civic and employment uses with transit and Beltway access to make a convenient and thriving community.

Corridors and Gateways

'Woodside Urban Park at the corner of Spring Street and Georgia Avenue is outside the CBD boundaries, but still marks the entrance into downtown Silver Spring as the buildings and streetscape change character at this point. Intersection improvement should be made here."

Woodside Urban Park is a gateway to the Silver Spring CBD, an anchor of the urban green boulevard, and a green hub for the pedestrian-friendly downtown. The Plan envisions Georgia Avenue as an urban boulevard, linking the downtown's revitalization areas while balancing the needs of public transportation, bicyclists, pedestrians and car traffic. The Plan recommends implementing streetscape, specially paved crosswalks, and a tree-lined median to create a safe and pleasant pedestrian environment; street furniture and landscaping that emphasizes public transportation with distinctive bus shelters to enhance the urban experience.

Land Use and Transportation

The park is conveniently located near the Metro station and serviced by intracity and intercity buses. The Plan envisions a future transit center two blocks west from the park on Spring Street. With proximity to public parking facility and Spring Street planned to accommodate an on-road bikeway people can easily access the park by car, bike and walking. The nearby recommended public housing site will further expand the mixed use community. Besides local residences, the park will serve a broad audience including communities of the mixed use, public, hotel, retail and commercial services already planned for future development of the area.

Parks, Recreation and Open Space

The Plan shared the same goal with The County's Parks, Recreation and Open Space (PROS) Plan of physically and socially linking urban parks to the surrounding community, making the parks safer and more accessible, and making the downtown a greener and more varied place.

"The open spaces will vary in size, ownership, and activity, responding to their urban surroundings and should offer a variety of public open spaces to accommodate a wide range of activities associated with urban life, gathering places, and active and passive recreation."

The PROS Plan and research completed for the Urban Park and Open Space Concept survey users and found a growing interest in walking as a leisure time activity. The Plan also identify opportunities for urban recreation including skate boarding, in-line skating, rock climbing wall, fitness facilities, sculpture play ground, water play fountain and garden areas. The Plan recommend introducing special urban recreational facilities to the CBD,

including a skateboard park, exploring integrating other recreational uses into public and private CBD development; and working with the Parks and Recreation Departments to identify and locate unique play features.

Community Facilities

The Plan encourage opportunities to create a variety of cultural and civic facilities.

"At every opportunity, community facilities including the civic and cultural facilities, and the parks, recreation, and open spaces should be viewed as engines of economic development and as investments in Silver Spring's future."

The Plan recommends public/private partnership to attract contribution of park fund through developmental incentives such as establishing an off-site transfer of open space mechanism to encourage redevelopment and an open space fund alterative for optional method development.

"Private sector development will be supported with public/private partnership investments in streetscape improvements, the proposed Transit Center, park projects, and community facilities. By capitalizing on existing and proposed developments, Silver Spring will meet the goal of Smart Growth initiative."

Were the applicant to be denied the requested variance to impact the critical root zone of the above listed trees, it would cause an unwarranted hardship and deprive M-NCPPC and the community they have been tasked to serve of implementing the park in conjunction with the CBD Sector Plan. Moreover, it would deprive the landowner of rights commonly enjoyed by others in similar areas by not providing a park system to the people of Montgomery County and the people in Silver Spring and Woodside a park that is enjoyable, accessible, safe and... promotes a strong sense of community through shared spaces and experiences and is treasured by the people it serves" and that protect and interpret our valuable natural and cultural resources; balance the demand for recreation with the need for conservation; offer a variety of enjoyable recreational activities that encourage healthy lifestyles; and provide clean, safe, and accessible places for leisure-time activities." (Montgomery County Parks Department Vision and Mission).

Pursuant to "(3) Verify that State water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance" the specimen trees that are directly disturbed are not located near any perennial, intermittent or ephemeral streams, nor is it part of any environmental buffer. Since all the trees of 30" will be mitigated and monitored by an arborist during construction, the trees will continue to provide water quality and quantity benefits comparable to existing conditions. Furthermore, the project is treating (through ESD measures) additional water beyond that which is being treated off the site. For the above reasons, the removal or disturbance of the CRZ's of the specimen trees would not violate the aforementioned standards, nor would it result in a measurable degradation in water quality.

Pursuant to "(4) Provide any other information appropriate to support the request" the applicant and its experts believe that, The applicant and its experts believe that the impact to these trees is offset by the following environmental benefits provided by our proposed plan:

- The Plan encourage the use of alternatives to automobile transportation to reduce air pollution
- incorporate recycling and energy efficiency program in new development
- create green space and enhance water quality through ESD techniques for the treatment of on-site stormwater management
- Implimenting strategies including reduction of existing impervious surfaces and implementation of new porous hardscape to treat storm water.

As further basis for its variance request, the applicant can demonstrate that it meets the Section 22A-21(d) *Minimum criteria*, which states that a variance must not be granted if granting the request:

(1) Will confer on the applicant a special privilege that would be denied to other applicants;

- (2) Is based on conditions or circumstances which are the result of the actions by the applicant;
- (3) Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
- (4) Will violate State water quality standards or cause measurable degradation in water quality

Pursuant to "(1) Will confer on the applicant a special privilege that would be denied to other applicants, the use of this site for a park is part of the approved 2007 Master plan and will be operated as part of the vision and mission of M-NCPPC. As such, this is not a special privilege to be conferred on the applicant.

Pursuant to "(2) Is based on conditions or circumstances which are the result of the actions by the applicant and "(3) Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property, the applicant has taken no actions leading to the conditions or circumstances that are the subject of this variance request. Furthermore, the surrounding land uses (residences and parkland) do not have any inherent characteristics that have created this particular need for a variance.

Finally, pursuant to "(3) Will violate State water quality standards or cause measurable degradation in water quality, the applicant cites the reasoning previously provided in response to requirement 22A-21(b)(3), and restates its belief that granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.

For the above reasons, the applicant respectfully requests that the Planning Board APPROVE its request for a variance from the provisions of Section 22A of the Montgomery County Forest Conservation Ordinance, and thereby, GRANTS permission to impact the CRZ's of the stated specimen trees in order to allow construction of this project.

Sincerely,

A. MORTON THOMAS and Associates, Inc.

Gregory J. Osband, MLA, RLA, ISA, GRP Associate

