MCPB Item No 8

Date: 1-10-13

## Rock Creek Forest Elementary School, Preliminary Forest Conservation Plan, MR2013014

A.A.

Tina Schneider, Senior Planner, Area 1, Tina.Schneider@montgomeryplanning.org, 301.495.2101

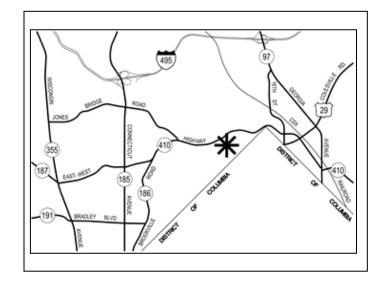


Robert Kronenberg, Acting Chief, Area 1, Robert.Kronenberg@montgomeryplanning.org, 301.495.2187

**Completed:** 12/28/12

## **Description**

- Preliminary Forest Conservation Plan and Tree Variance
- 8330 Grubb Road, Chevy Chase, Maryland
- Approximately 7.9 acres
- Zoned R-60
- Application submitted on 11/01/12
- Applicant: Montgomery County Public Schools (MCPS)



# **Summary**

- Staff recommends approval of the forest conservation plan with conditions.
- Total forest to be removed: 0.29 acres. Total forest to be retained: 0.59. Total afforestation/reforestation required: 0.85 acres will be met offsite.
- Variance request for the removal of two specimen trees and the potential to remove up to 9 additional variance trees.
- The proposed project does not have any activities within any streams, wetlands, or environmental buffers and is in compliance with the Environmental Guidelines.

A County Tree Variance requested the removal of two (2) trees  $\geq$  30 DBH with impacts to 9 specimen trees. Permission to remove the impacted trees has been granted by Montgomery County Department of Environmental Protection should they decline in health and become a potential hazard.

The Board's actions on the PFCP and the associated variance are regulatory and binding.

# **Recommended Conditions for Approval:**

- 1. The Applicant must obtain approval a Final Forest Conservation Plan from the Planning Department prior to issuance of a Sediment Control Permit from the Department of Permitting Services. The Final Forest Conservation Plan must be consistent with the approved Preliminary Forest Conservation Plan.
- 3. Final Forest Conservation Plan must include detailed and specific tree protection measures for on and off-site trees affected by the Limits of Disturbance (LOD).
- 4. The tree save component of the Final Forest Conservation Plan must be appropriately signed by an International Society of Arboriculture certified arborist.
- 5. The sediment and erosion control plan and stormwater management plan must be submitted with the revised Final Forest Conservation Plan to ensure consistency with the Limits of Disturbances (LODs) and the associated tree/forest preservation measures.
- 6. Applicant must record a Category I Conservation Easement over two (2) non-contiguous onsite forests stands (0.44 acres and 0.28 acres) and one (1) Category II Conservation Easement (0.08 acres). All conservation easements must be shown on the record plat. Recordation must occur prior to any clearing, grading or demolition occurring onsite.
- 7. The Applicant must plant 25 three-inch caliper native trees as mitigation for the removal of specimen trees and impacts to the critical root zones of existing trees. The species and location of plantings must be identified on the Final Forest Conservation Plan.
- 8. A copy of the maintenance and management agreement must be kept at the Rock Creek Forest Elementary School and given to the Montgomery County Public Schools (MCPS) maintenance staff to ensure compliance with conditions of the Forest Conservation Plan.
- 9. Applicant must provide a Certificate of Compliance to use an off-site forest mitigation bank prior to any demolition, clearing and grading occurring onsite.
- 10. The certificate of compliance which satisfies the 0.85 acre reforestation requirement must be submitted by applicant then approved by M-NCPPC staff prior to any clearing, grading or construction activity within the project area.

### **DISCUSSION**

This memorandum provides staff's review and recommendations on the Preliminary Forest Conservation Plan (PFCP) and its associated tree variance. The Board will also be reviewing a concurrent mandatory referral for this project. Unlike the review of the Mandatory Referral, the Board's actions on Forest Conservation Plan, pursuant to Chapter 22A of the County Code, are regulatory and binding. The Planning Board must act on the Forest Conservation Plan before it can act on the mandatory referral.

### SITE DESCRIPTION

Rock Creek Forest Elementary School is located at 8330 Grubb Road in Chevy Chase, Montgomery County, Maryland, within the North & West Silver Spring Master Plan (approved and adopted in 2000). The school occupies a 7.9 acre site at the southwest side of Grubb Road, between Colston Drive and Blaine Drive. Vehicular access to the school is currently from Grubb Road and Blaine Drive. Single-family residences border the school site to the southeast, south and west. There is a small commercial center past the northeast corner of the site.

Rock Creek Forest Elementary School is a one-story structure originally built in 1950. Additions were constructed in 1953, 1977, 1989, and 1992 bringing the total area of the school to 54,522 gross square feet. Currently there are 6 movable classrooms on site. Many of these students walk to school with the assistance of crossing guards at the intersections of Grubb Road and East-West Highway, and Grubb Road and Colston Drive. Students who live outside the one mile radius for walking arrive by bus or automobile via parental drop-off. All students arriving at the school by bus, car, or walking are dropped off in the same location causing congestion.



Graphic #1

## **PROJECT DESCRIPTION**

The Montgomery County Public Schools (MCPS) is proposing to replace the existing school with a new 98,000 square foot building that will provide adequate teaching space and will update the schools interior layout. The proposed project includes designs to alleviate parking shortages and improve circulation, while incorporating stormwater management. Tree loss will be minimized with many tree protection measures to protect the protecting the critical root zones of the remaining trees. The two existing forest stands will be protected in Category I Conservation Easements.

The property is within the Lower Rock Creek watershed approximately 2,000 feet from Rock Creek Stream Valley. The site generally slopes to the south and to the southeast towards Rock Creek Park. There are no streams, wetlands, rare, threatened or endangered species on the site.

No stormwater management facilities currently exist on site. Most of the open space is used as a soccer field, two basketball courts, as well as two play areas. There is a designated nature trail and outdoor classroom in forest stand #1 at the corner of Grubb Road and Blaine Road.

#### **ANALYSIS**

### **Environmental Guidelines**

A Natural Resource Inventory/Forest Stand Delineation (NRI/FSD #420111320) was approved by staff on May 12, 2011. With the exception of two non-contiguous small forest stands, (stand #1 is 0.29 acres and Stand #2 is 0.59 acres), the site is predominantly unforested. Both stands were categorized for moderate retention with a mixed deciduous forest structure dominated by yellow poplars, white oaks, beech and ash. There are no streams, wetlands, or environmental buffers on the property. The property is within the Lower Rock Creek watershed — a Use I watershed. The proposed project is in compliance with the *Environmental Guidelines*.

#### **Forest Conservation**

This project is subject to the Montgomery County Forest Conservation law (Chapter 22A of the Code) under section 22A-4(d) which applies to "a government entity subject to mandatory referral on a tract of land 40,000 square feet or larger..." The proposed development includes the clearing of 0.29 acres of existing forest and retention of 0.59 acres of forest on-site. Based on the forest conservation law there is a 0.85 acres planting requirement. The applicant is proposing to meet this requirement in an offsite forest mitigation bank.

As mitigation for the loss of two (2) specimen trees with impacts to the critical root zones of nine (9) additional specimen trees the applicant proposes planting 25-three (3) inch caliper trees onsite. The locations of the specimen trees are shown in graphic on page 7. The tree

placement was selected to shade impervious surfaces and children's play areas, as well as buffer views to and from the community.

### **FOREST CONSERVATION VARIANCE**

Section 22A-12(b) (3) of Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. Any impact to these trees, including removal of the subject tree or 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 no impact to trees that:

- a. measure 30 inches DBH or greater diameter at breast height (DBH);
- b. are part of a historic site or designated with a historic structure; or
- c. are designated as national, state, or county champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or to trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

The applicant submitted a variance request on October  $10^{th}$ , 2012 with revisions on November 21, 2012. The Applicant proposes to remove two (2) trees that are  $\geq 30''$  DBH, and to impact, but not remove, nine (9) additional specimen trees. If impacts to the critical root zones causes tree mortality or renders them hazardous, this variance grants permission to remove the specimen trees outlined in the chart below. However, in an effort to avoid tree loss, significant tree protection measures outlined by the certified arborist will be used including: root pruning, mychorrizae treatment, vertical mulching, and tree pruning.

Two specimen trees will be removed for the construction of micro-bioretention stormwater management systems. The CRZ of the other specimen trees will be impacted by the grading for additional stormwater management facilities, sidewalks, and circulation improvements. .

**Unwarranted Hardship** - As per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state would result in unwarranted hardship. In this case, the unwarranted hardship is caused by:

- the public need for an upgraded and enlarged school that meets all regulatory requirements
- a larger facility to meet increased demand.

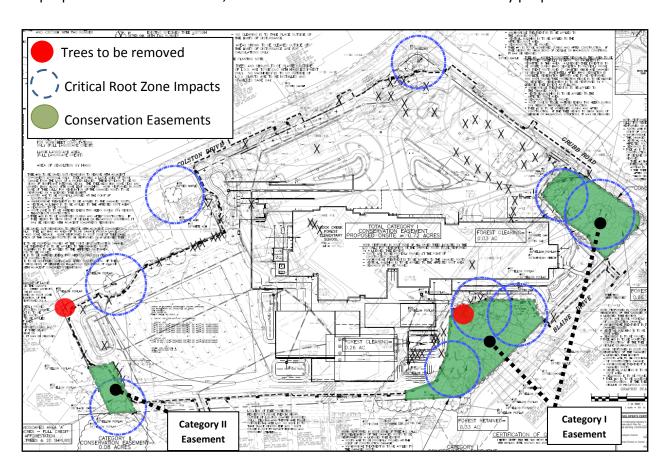
The tables and graphics on the following page identify the trees proposed for removal, trees with critical roots zone impacts, and the areas to be placed in Conservation Easements.

Table 1: Trees ≥ 30" DBH to be removed									
Tree #	Scientific Name	Commo n Name	D.B.H (")	Tree Condition	Comments	cRZ % Impacts			
26	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	FAIR	DEAD&BROKEN LIMBS/CONKS	48%	TO BE REMOVED		
35	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	31	FAIR	DEAD&BROKEN LIMBS/TRUNK DAMAGE/HEART ROT/LARGE TREE STUMP LEANING AGAINST BASE	22%	TO BE REMOVED		

Table 2: Trees ≥ 30" DBH to be impacted but retained									
Tree #	Scientific Name	Common Name	D.B.H (")	Tree Condition	Comments	CRZ % Impacts	Disposition		
3	QUERCUS ALBA	WHITE OAK	30	FAIR	DEAD&BROKEN LIMBS/ <u>POTENTIAL</u> REMOVAL IF DECLINE	38%	SAVE & PROTECT		
6	LIRIODENDR ON TULIPIFERA	YELLOW POPLAR	40	FAIR	SPLIT@5'/DEAD&BROKEN &CUT LIMBS/EXP ROOTS	7%	SAVE & PROTECT		
13	LIRIODENDR ON TULIPIFERA	YELLOW POPLAR	32	GOOD	DEAD&BROKEN LIMBS/ <u>POTENTIAL</u> REMOVAL IF DECLINE	23%	SAVE & PROTECT		
19	QUERCUS ALBA	WHITE OAK	32	GOOD	POTENTIAL REMOVAL IF DECLINE	30%	SAVE & PROTECT		
21	QUERCUS PALUSTRIS	PIN OAK	36	FAIR	DEAD&BROKEN LIMBS/ <u>POTENTIAL</u> REMOVAL IF DECLINE	32%	SAVE & PROTECT		
31	LIRIODENDR ON TULIPIFERA	YELLOW POPLAR	32	FAIR	DEAD&BROKEN LIMBS/IRREGULAR TRUNK	13%	SAVE & PROTECT		
36	LIRIODENDR ON TULIPIFERA	YELLOW POPLAR	35	FAIR	DEAD&BROKEN LIMBS/CONKS/POTENTIA L REMOVAL IF DECLINE	38%	SAVE & PROTECT		

38	FRAXINUS AMERICANA	WHITE ASH	30	POOR	CO-OWNED/BROKEN LIMBS/SEVERE TRUNK DAMAGE/POTENTIAL REMOVAL WITH ADJACENT CO-OWNER APPROVAL	36%	SAVE & PROTECT
41	ACER NEGUNDO	BOXELDER	31	FAIR	BROKEN SCAFFOLD/BROKEN&CUT LIMBS/EXPOSED ROOTS/POTENTIAL REMOVAL IF DECLINE	23%	SAVE & PROTECT

The exhibit below indicates the location of the two specimen trees that are to be removed and the nine (9) trees with impacts to the critical root zones that may result in tree removal. The Applicant has requested these trees be included for removals but proposes the use of many tree preservation measures to protect the trees. If the tree(s) do not survive the impacts from the proposed construction work, the trees will have to be removed for safety purposes.



Section 22A-21 of the County Forest Conservation Law sets forth the findings that must be made by the Planning Board or Planning Director, as appropriate, in order for a variance to be granted. Staff has made the following determinations in the review of the variance request and the proposed forest conservation plan:

**Variance Findings** – Based on the review of the variance request and the proposed preliminary forest conservation plan, staff makes the following findings:

# 1. Will not confer on the applicant a special privilege that would be denied to other applicants.

The school property is constrained and the proposed upgrades and associated modifications are designed to minimally intrude on the existing forested areas. The sites renovation and restoration will substantially reduce stormwater runoff resulting in improved water quality.

# 2. Is not based on conditions or circumstances which are the result of the actions by the applicant.

The requested variance is based on a balance of the proposed site layout and the need to provide a state of the art appropriately sized school. Significant efforts were made to reduce tree impacts, provide stormwater management, while leaving enough space for active recreation for the students.

# 3. Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.

The requested variance is a result of the current application on the subject property and is not related to land or building use on a neighboring property.

# 4. Will not violate State water quality standards or cause measurable degradation in water quality.

The rebuild and expansion of the school site should improve water quality by the addition of modern stormwater management facilities. The trees being planted as mitigation for the loss of specimen trees will substantially replace the form and function of the existing tree canopy. Trees protect water quality by reducing runoff through rainfall interception and water uptake. Additionally, trees provide shade to impervious areas cooling runoff, oxygenating and filtering water, which improves water quality.

A stormwater management plan was not included in this Mandatory Referral submission packet. However, a stormwater management concept plan was approved by the Department of Permitting Services (DPS) for the proposed project on June 8<sup>th</sup>, 2012 (**Attachment D**). The concept plan proposes to meet the required stormwater

management goals via installation of a grass swale, a 4"-thick green roof, and multiple micro bioretention facilities all will significantly improve the quality and quantity of stormwater runoff

## **County Arborist's Recommendations on the Variance**

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 first request was forwarded to the County Arborist on October 10<sup>th</sup>, 2012 with revisions on November 21, 2012. The County Arborist issued a response (Attachment A) to the variance request on December 10<sup>th</sup>, 2012 and recommended the variance be approved with the condition that mitigation is provided.

### MITIGATION for TREES SUBJECT to the VARIANCE PROVISIONS

There are two (2) trees proposed for removal as a result of the proposed project. Nine (9) of the trees will be retained but permission for removal has been requested in the event that impacts to the critical root zones jeopardize the trees health and cause untimely mortality. The trees with impacts to their root zones will be monitored after construction and removed if decline is observed.

Mitigation should be at a rate that approximates the form and function of the trees removed. Therefore, staff is recommending that replacement occur at a ratio of 1" DBH for every 4" DBH removed, using trees that are a minimum of 3" DBH. This means that for the 289 diameter inches of trees removed, 72.25" of caliper replacement is required (289  $\div$  4 = 72.25" caliper replacement). Mitigation requires the tree to be a minimum caliper of three (3") inches. Therefore, the applicant will satisfy this mitigation requirement by providing 25 trees with a minimum 3" caliper. (72.25"  $\div$  3" caliper = 24.08 trees).

## STAFF RECOMMENDATION ON VARIANCE

As a result of the above findings, staff recommends the Board approve the applicant's request for a variance from Forest Conservation Law to remove two (2) specimen trees and impact nine (9) specimen trees associated with the site. The variance approval is assumed into the Planning Board's approval of the Forest Conservation Plan.

### **NOTIFICATION AND OUTREACH**

Adjoining and confronting property owners and other parties of interest will be notified of the upcoming public hearing on the proposed project. As of the date of this report, planning staff has no written inquiries.

# **CONCLUSION**

Staff is recommending <u>approval</u> of Preliminary Forest Conservation Plan <u>with conditions</u> listed on page two (2) of this report. The variance approval is assumed into the Planning Board's approval of the Preliminary Forest Conservation Plan.

### **ATTACHMENTS:**

Attachment A: Variance Recommendation from County Arborist.

Attachment B: Variance request letter

Attachment C: Preliminary Forest Conservation Plan (PFCP)

Attachment D: Stormwater Management Concept approval letter



#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett County Executive

Robert G. Hoyt Director

December 10, 2012

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

RE:

Rock Creek Elementary School - Revised, MR 2013014, NRI/FSD application accepted on 2/18/2011

Dear Ms. Carrier:

The County Attorney's Office has advised that Montgomery County Code Section 22A-12(b)(3) applies to any application required under Chapter 22A submitted after October 1, 2009. Accordingly, given that the application for the above referenced request was submitted after that date and must comply with Chapter 22A, and the Montgomery County Planning Department ("Planning Department") has completed all review required under applicable law, 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, I make the following findings as the result of my review:

- 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 <u>can be granted</u> under this criterion.
- 2. Based on a discussion on March 19, 2010 between representatives of the County, the Planning Department, and the Maryland Department of Natural Resources Forest Service, the disturbance of trees, or other vegetation, as a result of development activity is not, in and of itself, is not interpreted as a condition or circumstance that is the result of the actions by the applicant.

Françoise Carrier December 10, 2012 Page 2

Therefore, the variance <u>can be granted</u> under this criterion, 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 <u>can be granted</u> under this criterion.
- 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 can be granted under this criterion.

Therefore, I recommend a finding by the Planning Board that this applicant qualifies for a variance conditioned upon the applicant mitigating for the loss of resources due to removal or disturbance to trees, and other vegetation, subject to the law based on the limits of disturbance (LOD) recommended during the review by the Planning Department. In the case of removal, the entire area of the critical root zone (CRZ) should be included in mitigation calculations regardless of the location of the CRZ (i.e., even that portion of the CRZ located on an adjacent property). When trees are disturbed, any area within the CRZ where the roots are severed, compacted, etc., such that the roots are not functioning as they were before the disturbance must be mitigated. Exceptions should not be allowed for trees in poor or hazardous condition because the loss of CRZ eliminates the future potential of the area to support a tree or provide stormwater management. Tree protection techniques implemented according to industry standards, such as trimming branches or installing temporary mulch mats to limit soil compaction during construction without permanently reducing the critical root zone, are acceptable mitigation to limit disturbance. Techniques such as root pruning should be used to improve survival rates of impacted trees but they should not be considered mitigation for the permanent loss of critical root zone. I recommend requiring mitigation based on the number of square feet 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.

In the event that revisions to the LOD are approved by the Planning Department, the mitigation requirements outlined above should apply to the removal or disturbance to the CRZ of all trees subject to the law as a result of the revised LOD.

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, Chief

November 21, 2012

Mr. Mark Pfefferle Environmental Planning Division Maryland National Capital Park and Planning Commission (M-NCPPC) 8787 Georgia Avenue Silver Spring, Maryland 20910

> Re: Rock Creek Forest Elementary School Request for Specimen Tree Variance

> > MNCPPC NRI 420111320

Dear Mr. Pfefferle:

On behalf of the Montgomery County Public Schools and 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(s) to allow impacts to or the removal of the following trees identified on the approved Natural Resource Inventory/Forest Stand Delineation for the above-named County construction project:

# **Project Description:**

The existing Rock Creek Forest Elementary School is located at 8330 Grubb Road in Chevy Chase, Montgomery County, Maryland. The site is approximately 7.96 acres and is comprised of one parcel and seven lots owned by The Board of Education. The site currently hosts the existing school, play areas and associated parking. There are two wooded areas on the property. Forest Stand #1 measuring 0.29 acres is used as an outdoor classroom/educational park for the students. The site is surrounded by residential properties and one church.

Proposed construction consists of a new school, improved circulation and parking, additional play areas and ball fields.

### **Requirements for Justification of Variance:**

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.

### **Justification of Variance**

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

Response: As part of the program, the task was to provide the community with an updated elementary school facility that can accommodate a growing number of students as well as a modernized, safe and healthy environment for young students to learn. Efforts have been made to impact as little of the forest on site as possible because forest is a highly valuable resource.

The buildable area is less than 8 acres, which is minimal for an elementary school. The site design is intended to be compact to include the necessary elements while disturbing as little forest and specimen trees as possible. The building is designed with two stories and a basement to provide ample classroom space while minimizing the building footprint.

This work will require disturbance of the root zones of a total of eleven (11) specimen trees. Two (2) of the eleven (11) impacted trees will be required to be removed. Tree #26 is proposed to be removed due to significant impacts to the CRZ for the proposed 15" pipe, sidewalk and associated grading. Tree #35 is proposed to be removed due to impacts within the minimal clearance zone of the tree for the proposed SWM facitly and associated grading for stormwater drainage. If we are not allowed to impact or remove these trees, there would not be adequate room for the development program.

If we are not allowed to impact the trees, the school will not be able to be updated due to the close proximity of specimen trees to the site features. As such, this would cause an *unwarranted hardship* to the community that it serves.

- (2) Describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;
  - Response: If Montgomery County Public Schools were required to keep all improvements outside the root zones of the specimen trees, the building would fail to be rebuilt due to the close proximity of 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;

Response: Tree removals have been minimized by careful design of the layout ensuring the preservation of as many specimen trees as possible. In addition, this property will be developed in accordance with the latest Maryland Department of the Environment criteria for stormwater management. This includes Environmental Site Design to provide for protecting the natural resources to the Maximum Extent Practicable. This includes limiting the impervious areas and providing on-site stormwater management systems. A Stormwater Management Concept is currently under review by the Montgomery County Department of Permitting Services to ensure that this criterion is enforced. Therefore, the proposed activity will not degrade the water quality of the downstream areas and will not result in *measurable degradation in water quality*.

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

Response: The proposed landscape planting is intended to provide the site with more canopy coverage outside of forested areas than was previously onsite.

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;

Response: The Rock Creek Forest Elementary School Modernization is in conformance with the County's General plan. As such, this is not a *special privilege* to be conferred on the applicant.

(2) Is based on conditions or circumstances which are the result of the actions by the applicant;

Response: Montgomery County Public Schools has taken no actions leading to the conditions or circumstances that are the subject of this variance request.

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

Response: The surrounding land uses (residences) do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance.

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

Response: Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.

#### **Specimen Tree Impacts Summary**

Tree	Scientific Name	Common Name	D.B.H	Tree	Comments	CRZ %	Disposition
#			(")	Condition		Impacts	
3	QUERCUS ALBA	WHITE OAK	30	FAIR	DEAD&BROKEN LIMBS/POTENTIAL REMOVAL IF DECLINE	38%	SAVE & PROTECT
6	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	40	FAIR	SPLIT@5'/DEAD&BROKEN&CUT LIMBS/EXP ROOTS	7%	SAVE & PROTECT
13	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	GOOD	DEAD&BROKEN LIMBS/POTENTIAL REMOVAL IF DECLINE	23%	SAVE & PROTECT
19	QUERCUS ALBA	WHITE OAK	32	GOOD	POTENTIAL REMOVAL IF DECLINE	30%	SAVE & PROTECT
21	QUERCUS PALUSTRIS	PIN OAK	36	FAIR	DEAD&BROKEN LIMBS/POTENTIAL REMOVAL IF DECLINE	32%	SAVE & PROTECT
26	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	FAIR	DEAD&BROKEN LIMBS/CONKS	48%	TO BE REMOVED
31	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	FAIR	DEAD&BROKEN LIMBS/IRREGULAR TRUNK	13%	SAVE & PROTECT
35	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	31	FAIR	DEAD&BROKEN LIMBS/TRUNK DAMAGE/HEART ROT/LARGE TREE STUMP LEANING AGAINST BASE	22%	TO BE REMOVED
36	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	35	FAIR	DEAD&BROKEN LIMBS/CONKS/POTENTIAL REMOVAL IF DECLINE	38%	SAVE & PROTECT
38	FRAXINUS AMERICANA	WHITE ASH	30	POOR	CO-OWNED/BROKEN LIMBS/SEVERE TRUNK DAMAGE/ <u>POTENTIAL</u> REMOVAL WITH ADJACENT CO-OWNER APPROVAL	36%	SAVE & PROTECT
41	ACER NEGUNDO	BOXELDER	31	FAIR	BROKEN SCAFFOLD/BROKEN&CUT LIMBS/EXPOSED ROOTS/POTENTIAL REMOVAL IF DECLINE	23%	SAVE & PROTECT

The following specimen trees will be impacted by construction and require specific treatment to enhance survivability based on conditions noted during an updated site visit on June 28<sup>th</sup>, 2012. Some of the impacted trees designated to be saved will require prolonged monitoring due to current health conditions and may require future removal if the condition of the tree begins to decline.

**Tree #3:** Demolition work within the area designated on the plan is to be performed by hand only. Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

**Tree #6:** Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.

**Tree #13:** Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

**Tree #19:** Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

**Tree #21:** The tree has a split in the trunk but shows no apparent signs of decay. Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

**Tree #31:** LOD is far enough from the trunk that measures other than root pruning are not required.

**Tree #36:** The tree has a large amount of large dead and broken limbs in the canopy, which may be hazardous. Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

**Tree #38:** The tree has a large area of trunk damage from the loss of a broken leader. There appears to be no signs of significant internal decay. The tree also has some dead and broken limbs along with some leaf scorching. Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- Root zone is to be watered every two weeks during dry periods throughout construction.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed with adjacent co-owner's permission. MCPS will work with the adjacent neighbor to remove the tree if hazardous conditions arise.

**Tree #41:** The tree has some dead and broken limbs along with some dieback. There is a cavity in the trunk at the point where leaders split. There is some internal decay. Work performed in the root zone of the tree calls for remediation of the damaged roots to be performed by a licensed tree expert.

- Roots are to be properly pruned at the point of construction damage.
- Mychorrizae treatment is to be applied to the damaged roots.
- Vertical mulching is to take place in the area of the affected roots.
- Deadwood is to be pruned.
- \* The tree is to be monitored during and after construction. If the tree begins to show signs of decline or hazardous conditions, it may be removed.

### **Conclusion:**

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/remove the specimen trees in order to allow the construction of this vital project.

The recommendations in this report are based on tree conditions noted at the time the NRI/FSD field work was conducted and updated for specific construction measures prior to the submittal of the forest conservation plan. Tree condition can be influenced by many environmental factors, such as wind, ice and heavy snow, drought conditions, heavy rainfall, rapid or prolonged freezing temperatures, and insect/disease infestation. Therefore, tree conditions are subject to change without notice.

The site plans and plotting of tree locations were furnished for the purpose of creating a detailed Tree Protection Plan. All information is true and accurate to the best of my knowledge and experience. All conclusions are based on professional opinion and were not influenced by any other party.

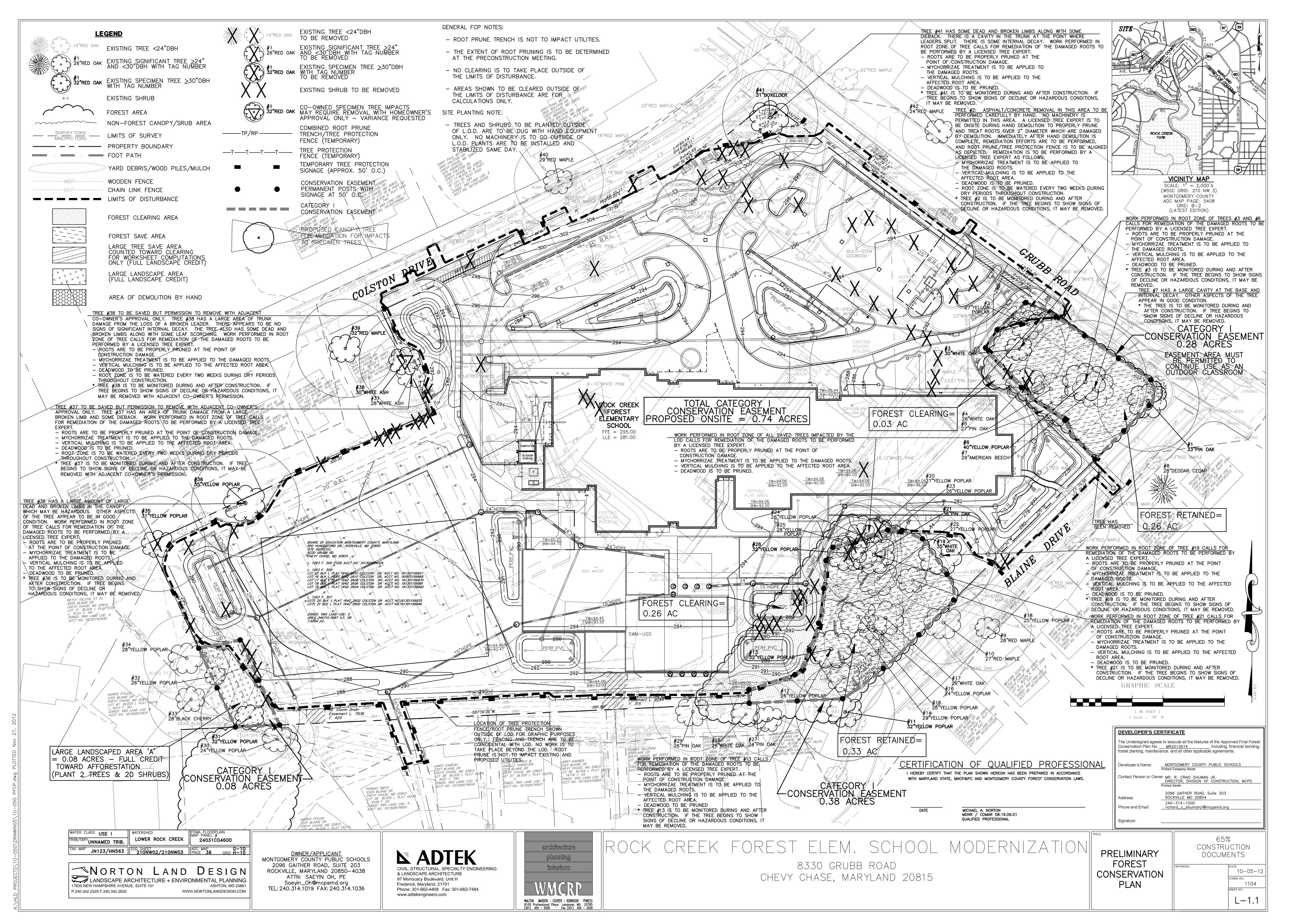
Sincerely,

Michael Norton

Copy to:

Mr. Saeyin Oh, MCPS

Mr. Kevin McPartland, WMCRP Architects





Isiah Leggett

County Executive

Diane R. Schwartz Jones

Director

June 8, 2012

Geoff Campbell, RLA ADTEK Engineers, Inc. 97 Monocacy Blvd., Unit H Frederick, MD 21701

Re:

Stormwater Management CONCEPT Request

for Rock Creek Forest Elementary School

SM File #: 242459

Tract Size/Zone: 7.95 Ac./R-60 Total Concept Area: 6.77 Ac. Lots/Block: 15-22 / I (eye) Watershed: Lower Rock Creek

Dear Mr. Campbell:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is **acceptable**. The stormwater management concept proposes to meet required stormwater management goals via ESD to the MEP, by the use of microbiofilters, bio-swale, and green roof. Due to insufficient storm drain capacity ten year control is also provided.

The following **items** will need to be addressed **during** the detailed sediment control/stormwater management plan stage:

- 1. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
- 2. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
- 3. An engineered sediment control plan must be submitted for this development.
- 4. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
- 5. The grass swale that is proposed may be used for conveyance but may only be used as stormwater management for linear projects (i.e. roads). You may over-compensate in other areas as long as you don't exceed the one year volume.
- 6. Provide access to all structures per MCDPS requirements.
- 7. The green roof will be a minimum of 4" thick and will cover a minimum of 29,927 square feet. This must be designed by a professional with green roof experience. Additional green roof may be added at design.
- 8. Green roof areas are shown as not draining to additional ESD structures. Please provide copy of mechanical roof drain schematic profile showing where the green roofs drain.

255 Rockville Pike, 2nd Floor • Rockville, Maryland 20850 • 240-777-6300 • 240-777-6256 TTY

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 is not required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact David Kuykendall at 240-777-6332.

Sincerel

Richard R. Brush, Manager

Water Resources Section

**Division of Land Development Services** 

RRB: tla CN242459 Rock Creek Forest Elementary School.DWK

CC:

C. Conlon

SM File # 242459

ESD Acres:

STRUCTURAL Acres:

6.77

WAIVED Acres:

0.00