MCPB
Item No. 7A
Date: 7-11-19

Montgomery Knolls Elementary School, Forest Conservation Plan Amendment, MR2009743

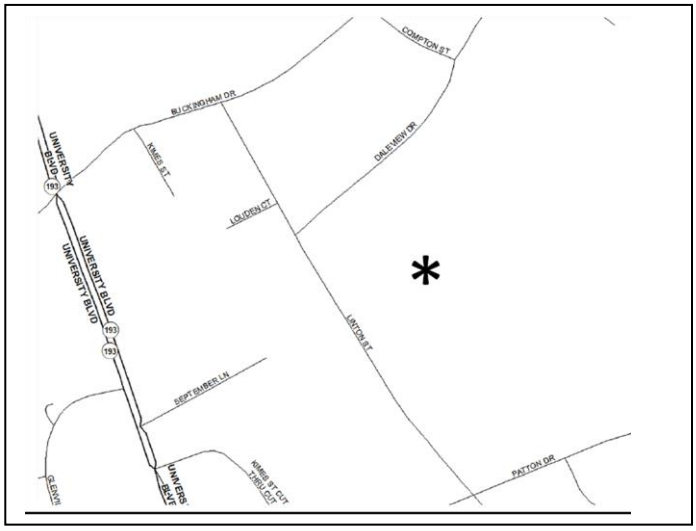
Tina Schneider, Area 1 Division, Tina.schneider@montgomeryplanning.org, 301.495.2101

Mark Pfefferle, Interim Chief, Area 1 Division, Mark.pfefferle@montgomeryplanning.org, 301.495.4730

Description

Completed: 6/27/19

- Amendment to an existing Forest Conservation Plan associated with Montgomery Knolls Elementary School;
- Located at 807 Daleview Drive, Silver Spring, Maryland;
- 10.33-acre site zoned R-60 in the *East Silver Spring Master Plan (2000)* area;
- Applicant: Montgomery County Public Schools;
- Acceptance Date: March 27, 2019.



Summary

Request to amend the Forest Conservation Plan for the Montgomery Knolls Elementary School at 807 Daleview Drive, Silver Spring by:

1. Removing approximately 0.08 acres (3,485 square feet) of Category I Conservation Easement for the construction of stormwater drainage lines associated with the proposed bioretention facilities.
2. Impact the critical root zones of 10-specimen trees.

STAFF RECOMMENDATION AND CONDITIONS

Staff recommends approval of the amendment to Forest Conservation Plan MR2009743 with the conditions listed below:

1. Within 60 days of the mailing date of the Planning Board resolution approving the Amendment, the property owners must submit an executed Certificate of Compliance to the Planning Department that provides 0.16 acres of mitigation credit for the removal of 0.08 acres of Category I Conservation Easement.
2. Within 7 days of the Planning Department's approval of the Certificate of Compliance, the Certificate of Compliance must be recorded in the Montgomery County Land Records.
3. Within 100 days of the mailing date of the Planning Board's resolution approving the amendment, the property owners must submit a Deed of Release, in a form approved by the M-NCPPC Office of the General Counsel, for the release of 0.08 acres of conservation easement.
4. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the approved Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector.
5. The Final Sediment Control Plan must depict the limits of disturbance (LOD) identical to the LOD on the approved Final Forest Conservation Plan.

SITE DESCRIPTION

Montgomery Knolls Elementary School is situated on a 10.33-acre property located at 807 Daleview Drive, Silver Spring, Maryland (Exhibit 1). The site is bounded to the east by Northwest Branch Stream Valley Park owned by the Maryland National Capital Park and Planning Commission. To the south and west by R-60 residential development, and to the north by Daleview Drive. The site contains an existing school, associated parking lots, athletic fields, play areas, and a contiguous forest connecting to Northwest Branch Stream Valley Park.

There is a tree-lined boarder along the eastern and western sides of the property. A few trees are scattered throughout the present parking lot. Most of the property runoff flows into Northwest Branch Park and its associated tributaries. The site is located in the Anacostia River watershed with a Use I Water Category.

The site contains a 2.53-acre Category I Conservation Easement along the southeastern, south, and southwestern portion of the site.

Vicinity Map

Exhibit 1

Category I Conservation Easement & Proposal

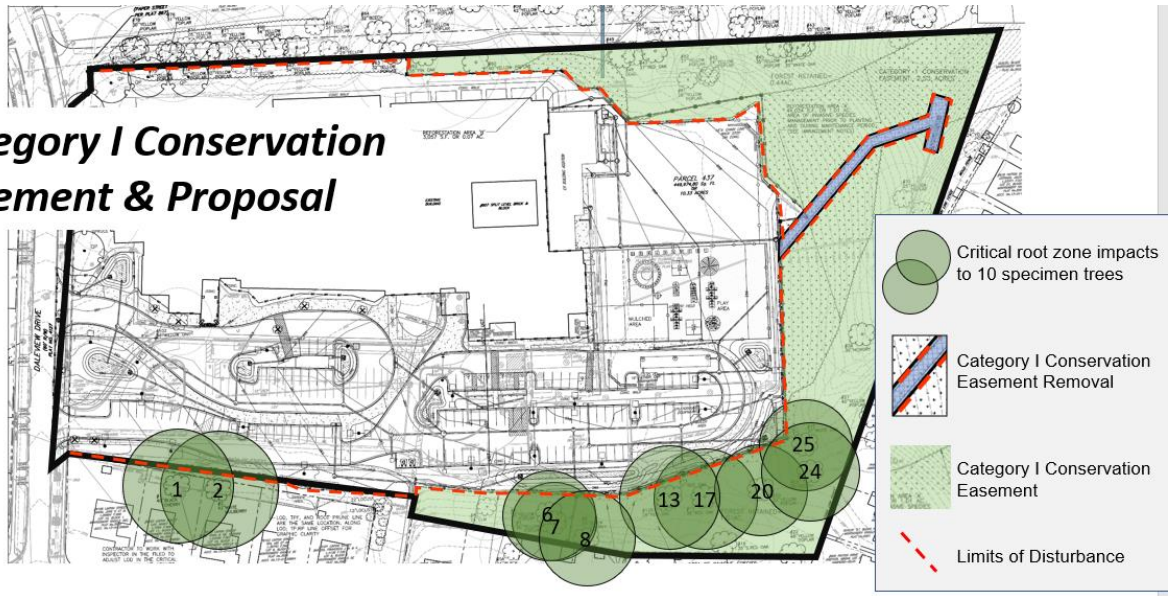


Exhibit 2

Background

A Forest Conservation Plan (MR2009743) was originally approved on February 12, 2010 (Attachment 1) and was associated with a previously expansion for the school reviewed by the Planning Board in 2009. The forest conservation plan included the removal of 0.79 acres of forest, the preservation of 1.45 acres of forest, 1.08 acres of onsite forest planting, and 0.20 acres of credit for on-site landscaping. The preserved forest and onsite forest plantings were then put into a 2.53-acre Category I Conservation Easement (Exhibit 2) and was recorded on August 17, 2010 (Attachment 2).

Proposed Project and Amendment

On March 27, 2019 Montgomery County Public Schools (MCPS) submitted a mandatory referral for renovations to the existing bus loop, a new student drop off, additional parking, new playgrounds, and necessary stormwater management facilities. The renovations will impact the critical root zones of 10-specimen trees along the southwestern property line and requires the removal of 0.08 acres of the existing 2.53-acre Category 1 Conservation Easement for the construction of an outfall associated with the stormwater management systems. The total easement reductions will be 0.08 acres. The remaining Category I Conservation Easement will be 2.45 acres. An amended Forest Conservation Plan has been submitted (Attachment 3) with the changes indicated above.

Forest Conservation Variance

Section 22A-21 Variance of Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. The law requires a variance to impact trees that: measure 30 inches or greater diameter at breast height (DBH); are part of a historic site or designated with a historic structure; 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 trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species. Any impact to these trees, including removal 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.

Variance Request

Pursuant to Section 22A-21 Variance provisions of the Montgomery County Forest Conservation Ordinance the Applicant submitted a variance request on May 31, 2019 (Attachment 4) for the impact to the critical root zones of 10 specimen trees: 1, 2, 6, 7, 8, 13, 17, 20, 24 and 25.

Unwarranted Hardship for Variance Tree Impacts

Per Section 22A-21, a variance may only be granted if the Planning Board finds that leaving the requested trees in an undisturbed state will result in unwarranted hardship. The requested variance is necessary due to the construction needs of the proposed elementary school

expansion. The landscape grading will be minimized around the school to reduce impacts to the critical root zone of as many specimen trees as possible without inhibiting the project intentions. Leaving the requested trees in an undisturbed state would result in an unwarranted hardship because the applicant would not be able to expand the school and associated parking lot.

Figure 1: Variance Tree Impacts

Table 1: Variance Tree Table

Tree Id #	Species	Size	Condition	Intent	Critical Root Zone Impacts
1	Black cherry	40	Good	Impacts only	35%
2	White mulberry	42	Good	Impacts only	40%
6	Yellow poplar	33	Good	Impacts only	23%
7	Yellow poplar	30	Good	Impacts only	10%
8	Black cherry	35	Good	Impacts only	1%
13	Red oak	37	Good	Impacts only	31%
17	Red oak	36”	Good	Impacts only	17%
20	Yellow poplar	33”	Good	Impacts only	4%

24	American beech	35”	Good	Impacts only	2%
25	White oak	33”	Good	Impacts only	12%

Variance Findings - Based on the review of the variance request and the proposed amended Forest Conservation Plan, staff makes the following findings:

1. Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.

Granting this variance will not confer a special privilege on the Applicant as disturbance of the specimen trees is a result of the need to expand parking and driveway circulation improvements associated with the mandatory referral school expansion in 2019. The size and configuration of the lot, the location of the existing school, and parking lots preclude alternative site designs. The impacts to the critical root zones indicated above are based on the limit of disturbance shown on the plan. However, it is possible that reductions to the critical root zones of specimen trees may occur in the field when the MNCPPC Forest Conservation inspector conducts the pre-construction field meeting.

2. The need for the variance is not based on conditions or circumstances which are the result of the actions by the applicant.

The requested variance is not based on conditions or circumstances that are the result of actions by the Applicant. The variance is necessary due to objectives of the project to meet the needs of a growing student population. The Applicant has designed the school to minimize tree impacts and forest clearing to the degree possible given the project intentions.

3. The need for the variance 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 impacts by the proposed layout of the school facility and not a result of land or building use on a neighboring property. The impact to the trees have been minimized and reflect the critical root zone disturbance necessary to construct the proposed building addition and associated upgrades to meet the needs of the intended student population.

4. *Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.*

According the Stormwater Management Concept Report submitted by the applicant in April 2019, the “required environmental site design (ESD) volume of 17,438 cubic feet cannot be met due to the lack of space on site”. However, the applicant proposes the construction of (9) micro-bioretention facilities on site primarily along the south and west

side of the parking lots. Since there are no ESD facilities onsite presently, the proposed facilities should improve the quality of stormwater runoff and therefore the State water quality standards will not be violated. In addition, the specimen trees are not be removed and will retain their capacity to slow and absorb runoff.

County Arborist's Recommendation 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 County Arborist has not commented on this variance as of the date of this staff report.

Variance Recommendation

Staff recommends that the variance be granted.

PLANNING BOARD REVIEW AUTHORITY

The Planning Board has authority under the Forest Conservation Law (Chapter 22A of the Montgomery County Code) to review amendments to approved plans. In addition, the Planning Board has directed Staff to bring all requests for modifications to conservation easements to be considered in a public forum before them.

STAFF REVIEW AND RECOMMENDATION

The Property Owner proposes to remove 0.08 acres of Category I Conservation Easement area from the Montgomery Knolls Elementary School located on 807 Daleview Drive, Silver Spring. The property owner will mitigate for the removal of the conservation easement offsite in a forest mitigation bank. As a result, the property owner will need to acquire 0.16 acres of forest mitigation bank credits to mitigate for the onsite removal of the conservation easement. The proposal is consistent with the Planning Board's policy of requiring 2 square feet of offsite forest planting for every 1 square foot of conservation easement released and is consistent with the settlement agreement. Staff recommends approval of the amendment to Forest Conservation Plan MR2009743 with the conditions identified on page 2 of this staff report.

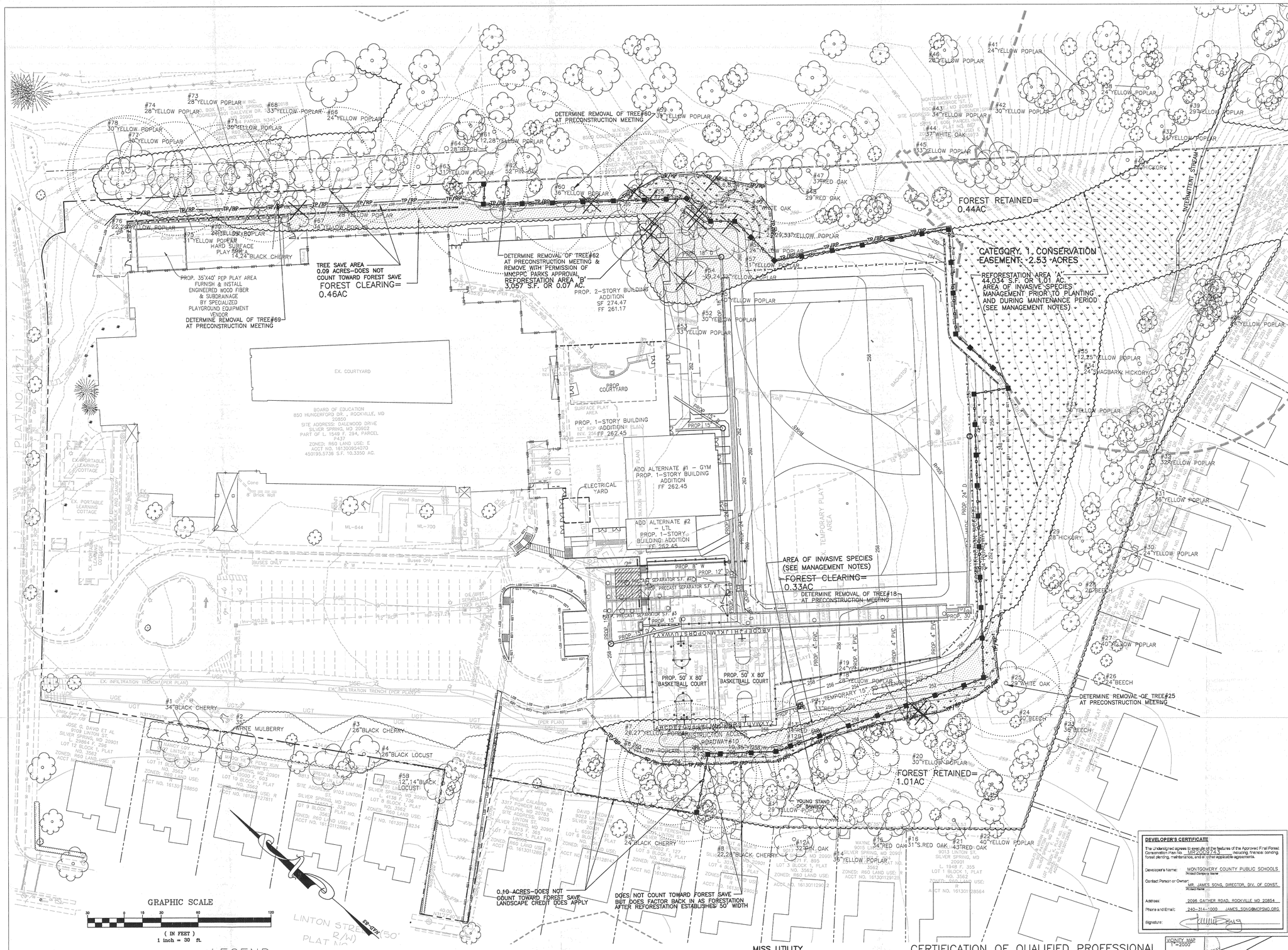
CONCLUSION

Staff concludes that the proposed Amendment to the Forest Conservation Plan meets the requirements of Chapter 22A Forest Conservation Law. Staff recommends that the Planning Board approve the Amended Forest Conservation Plan and associated variance, with the above conditions.

Attachments

1. Approved 2010 Forest Conservation Plan
2. Approved 2010 Forest Conservation Easement
3. Amended Forest Conservation Plan
4. Variance request

Attachment 1



KEY PLAN

LEGEND

- 8" PIN CHERRY — EXISTING TREE TO BE REMOVED
- SIGNIFICANT TREE W/CRZ TO BE REMOVED
- 8" PIN CHERRY — EXISTING TREE
- EXISTIN HEDGE/SCRUB AREA
- EXISTING FOREST BOUNDARY
- LOD — LIMITS OF DISTURBANCE
- TREE PROTECTION FENCE
- TP/RP — COMBINED ROOT PRUNE TRENCH/TREE PROTECTION FENCE
- CATEGORY I CONSERVATION EASEMENT
- PERMANENT TREE PROTECTION MEASURE SPLIT RAIL FENCE W/ TREE PROTECTION SIGNAGE AROUND REFORESTATION AND FOREST SAVE AREA SEE SHEET L-1.2
- FOREST CLEARING AREA
- REFORESTATION AREA

MISS UTILITY

CALL "MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

CHAMPION TREE NOTE

NO COUNTY CHAMPION TREES WERE PRESENT ON THE SITE ACCORDING TO THE LATEST REGISTER OF CHAMPION TREES AND NO UNLISTED POTENTIAL CHAMPION TREES WERE EVIDENT ON THE SITE. ONE MOCKERNUT HICKORY & ONE VIRGINIA PINE IS WITHIN 75% OF THE COUNTY CHAMPIONS.

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

2/11/10
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL

NORTON LAND DESIGN LLC
811 RUSSELL AVENUE, SUITE 301
GAITHERSBURG, MD 20879
p.301.216.9650 f.301.216.9649
www.NORTONLANDDESIGN.com

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR 2009743 including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS
Printed Company Name

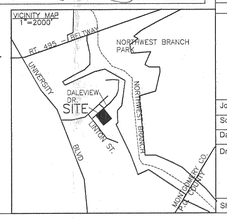
Contact Person or Owner: MR. JAMES SONG, DIRECTOR, DIV. OF CONST.
Printed Name

Address: 2096 GAITHER ROAD, ROCKVILLE MD 20854

Phone and Email: 240-314-1000 JAMES_SONG@MCPSMD.ORG

Signature:

VICINITY MAP 1"=2000'



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. MR 2009743

Signature Date 2/12/2010

GREVES WORRALL WRIGHT & O'HATDEK INCORPORATED

GWO

ARCHITECTS
800 WYMAN PARK DRIVE, SUITE 300
BALTIMORE, MARYLAND 21211, 410-333-1059

Seal:

© 2009 GWWO INC.

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF A MARYLAND, LICENSE NUMBER
EXPIRATION DATE

Revisions:

No.	Date	Description

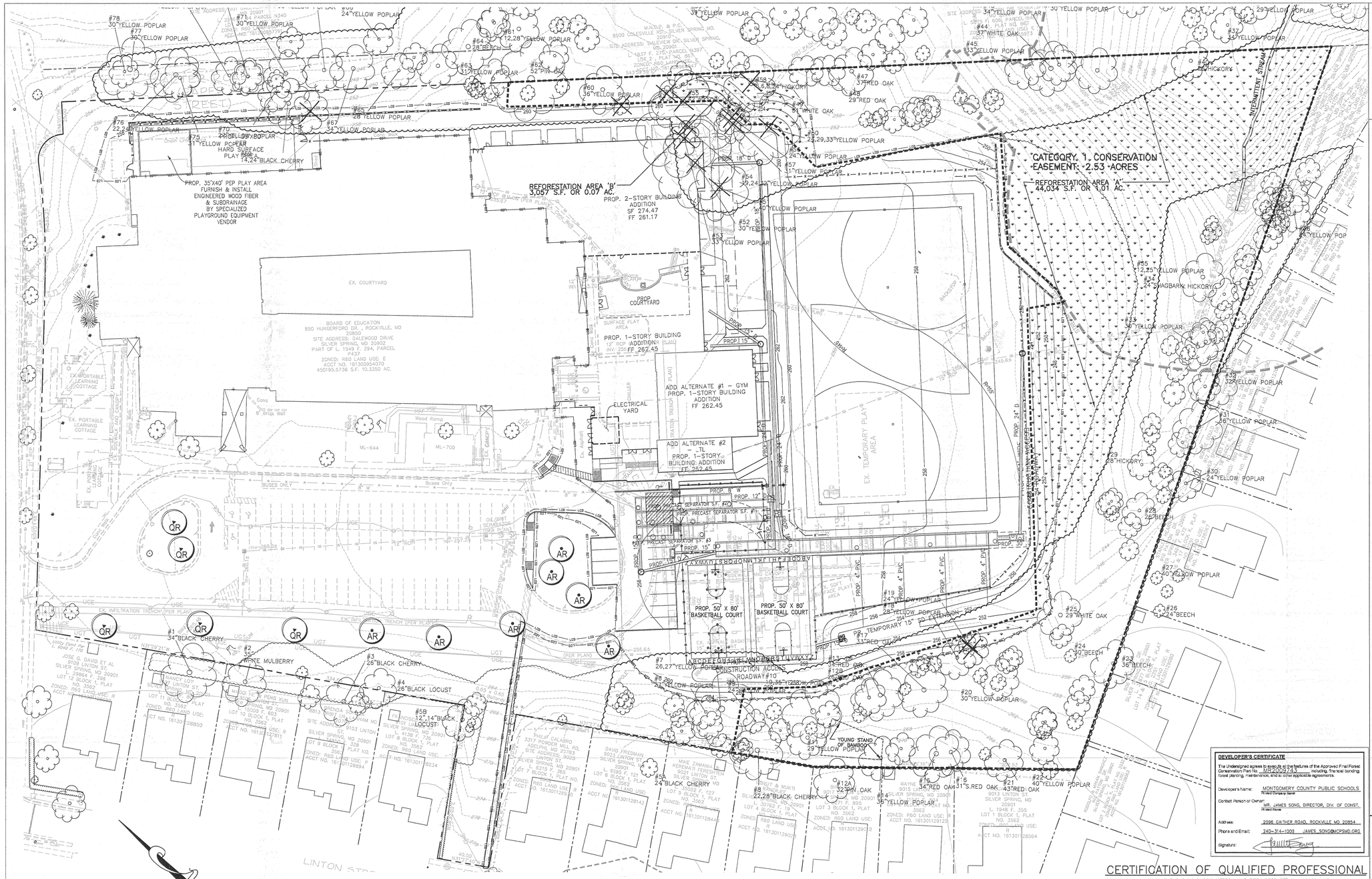
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
RECEIVED
FEB - 5 2010
DEVELOPMENT REVIEW DIVISION

MONTGOMERY KNOLLS ELEMENTARY SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

Job No.	27052.01	MAN	Drawn
Scale	AS SHOWN	MAN	Checked
Date	10/06/2009		Approved
Drawing Title	FINAL FOREST CONSERVATION PLAN	Drawing Number	L-1.0
Sheet	1	Of	4

Attachment 1



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- LCD — LIMITS OF DISTURBANCE
- CATEGORY I CONSERVATION EASEMENT
- REFORESTATION AREA

FOREST CONSERVATION - LANDSCAPE CREDITS

TREE SPECIES	QUANTITY	20 YR CANOPY COVERAGE	1/4 CANOPY COVERAGE	TOTAL CREDIT (SF)
ACER RUBRUM	7	48' DIA.	452	3164
QUERCUS RUBRA	5	35' DIA.	240	1200
			TOTAL	4364

0.10 AC SITE LANDSCAPING REQUIRED FOR PARTIAL FOREST CONSERVATION CREDITS.

0.1 AC / 4,356 SF IS PROVIDED.

LANDSCAPE PLANT LIST

KEY	QTY.	BOTANICAL NAME / COMMON NAME	SIZE	COND.	REMARKS
AR	7	ACER RUBRUM 'OCTOBER GLORY' / OCTOBER GLORY MAPLE	2-2½" CAL.	B&B	
QR	5	QUERCUS RUBRA / NORTHERN RED OAK	2-2½" CAL.	B&B	

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2/4/10
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL

NORTON LAND DESIGN LLC
811 RUSSELL AVENUE, SUITE 301
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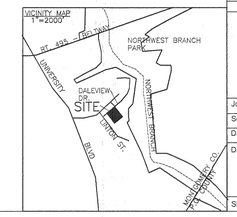

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. HR 2009743
Signature Date 2/12/2010

GREENIES WORRALL WRIGHT & GYATNICK INCORPORATED
GWWO
ARCHITECTS
800 WYMAN PARK DRIVE, SUITE 330
BALTIMORE, MARYLAND 21211; 410-332-1009

Seal:

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF A MARYLAND, LICENSE NUMBER _____, EXPIRATION DATE _____

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MONTGOMERY COUNTY PUBLIC SCHOOLS

Job No.	27052.01	MAN	Drawn
Scale	AS SHOWN	MAN	Checked
Date	10/06/2009		Approved

Drawing Title: FINAL FOREST CONSERVATION CANOPY COVERAGE CREDIT PLAN

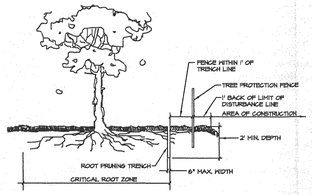
Drawing Number: L-1.1

Sheet 2 Of 4

Attachment 1

STRESS REDUCTION MEASURE

ROOT PRUNING



NOTE:

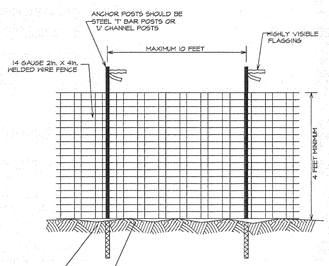
1. Retention Areas will be set as part of the review process.
2. Boundaries of Retention Areas should be staked and flagged prior to trenching
3. Exact location of trench should be identified.
4. Trench should be immediately backfilled with soil removed or other high organic soil.
5. Roots should be cleanly cut being vibratory knife of other acceptable equipment.

SOURCE : City of Gaithersburg, Maryland CITY TREE MANUAL
Adapted from Maryland State FOREST CONSERVATION MANUAL

NOT TO SCALE

TREE PROTECTION FENCING

WIRE MESH



NOTES:

1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLATION OF DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE IS REQUIRED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.
7. ALTERNATIVE TREE PROTECTION DEVICES: SUPER SILT FENCE OR SNOW FENCE

NOT TO SCALE

PLANTING SCHEDULE

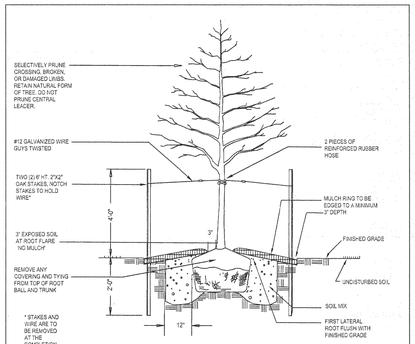
TASKS	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER												
PLANTING SEEDINGS, WHIPS												
MINIMUM MONITORING	*					*				*		
FERTILIZER * (IF NEEDED)												
WATER **												
PRUNING												

KEY

- * ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS
- GREATLY RECOMMENDED
- RECOMMENDED WITH ADDITIONAL CARE
- RECOMMENDED
- * DEPENDENT UPON SITE CONDITIONS
- ** DEPENDENT UPON SITE CONDITIONS; WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

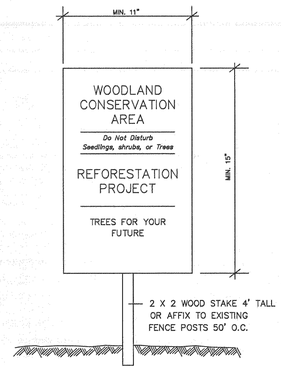
NOTES:

The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.



PLANTING DETAIL FOR DECIDUOUS AND EVERGREEN
TREES - 1 - 4" CALIPER - NOT TO SCALE

SIGNAGE



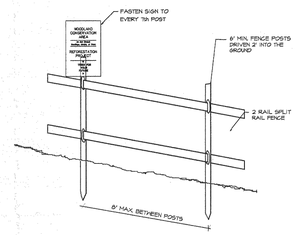
NOT TO SCALE

NOTE:

1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.

*INSTALL SIGNS 50' ON CENTER AROUND PLANTING AREA

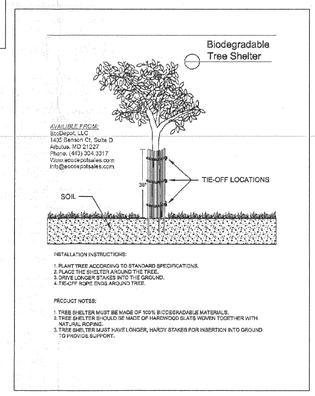
PERMANENT TWO RAIL, SPLIT RAIL FENCE



NOTE:

1. Retention area will be set as part of the review process.
2. Boundaries of Retention & Reforestation Areas should be staked prior to installing protective device.
3. Root damage should be avoided.
4. Protective signage is required.

PERMANENT TREE PROTECTION NO SCALE



FOREST CONSERVATION WORKSHEET

MONTOMGERY KNOLLS MIDDLE SCHOOL

5-Aug-02

NET TRACT AREA:

A. Total tract area ...	10.34
B. Land dedication acres (parks, county facility, etc.) ...	0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...	0.00
D. Area to remain in commercial agricultural production/use ...	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area .....=	10.34

LAND USE CATEGORY: (from *Trees Technical Manual*)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

G. Afforestation Threshold ...	15%	x F =	1.55
H. Conservation Threshold ...	20%	x F =	2.07

EXISTING FOREST COVER:

I. Existing forest cover .....=	2.24
J. Area of forest above afforestation threshold .....=	0.69
K. Area of forest above conservation threshold .....=	0.17

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation ....=	2.10
M. Clearing permitted without mitigation .....=	0.14

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared .....=	0.79
O. Total area of forest to be retained .....=	1.45

PLANTING REQUIREMENTS:

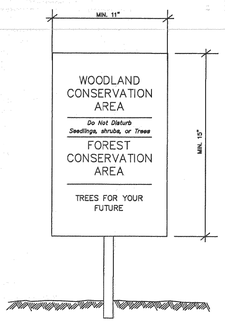
P. Reforestation for clearing above conservation threshold ....=	0.04
Q. Reforestation for clearing below conservation threshold ....=	1.24
R. Credit for retention above conservation threshold .....=	0.00
S. Total reforestation required .....=	1.28
T. Total afforestation required .....=	0.00
U. Credit for landscaping (may not exceed 20% of "S") .....=	0.20
V. Total reforestation and afforestation required .....=	1.08

FOREST CREDIT TABULATION	ACRES
ONSITE LANDSCAPE CREDIT	0.10 (TREE SAVE AREA 0 0.10 ACRES)
ONSITE CANOPY COVERAGE	0.10 (SEE WORKSHEET L-1.1)
REFORESTATION	1.08
OFFSITE PLANTING REQUIRED	0

Significant/SpecimenTree Summary 24" +

Tree #	Species	D.B.H (inches)	Critical Root Zone (Sq. Ft.)	Tree Condition	Comments	Status
1	BLACK CHERRY	34	8171	GOOD	OFFSITE	SAVE AND PROTECT
2	WHITE MULBERRY	35	8659	GOOD	OFFSITE	SAVE AND PROTECT
3	BLACK CHERRY	26	4778	GOOD	OFFSITE	SAVE AND PROTECT
4	BLACK LOCUST	26	4778	GOOD		SAVE AND PROTECT
5A	BLACK CHERRY	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
5B	BLACK LOCUST	12,14	5542	GOOD	CO-OWNED	SAVE AND PROTECT
6	YELLOW POPLAR	27	5153	GOOD		SAVE AND PROTECT
7	YELLOW POPLAR	26,27	22565	GOOD		SAVE AND PROTECT
8	BLACK CHERRY	22,28	20612	GOOD		SAVE AND PROTECT
9	YELLOW POPLAR	24	4072	GOOD		SAVE AND PROTECT
10	YELLOW POPLAR	19,35	25447	FAIR		SAVE AND PROTECT
11	YELLOW POPLAR	29	5945	POOR	ALMOST DEAD	SAVE AND PROTECT
12A	PIN OAK	32	7238	GOOD	OFFSITE	SAVE AND PROTECT
12B	RED OAK	28	4778	GOOD		SAVE AND PROTECT
13	RED OAK	34	8171	GOOD		SAVE AND PROTECT
14	YELLOW POPLAR	36	9161	GOOD		SAVE AND PROTECT
15	RED OAK	34	8171	POOR		SAVE AND PROTECT
16	SOUTHERN RED OAK	31	6793	GOOD		SAVE AND PROTECT
17	RED OAK	33	7698	GOOD		SAVE AND PROTECT
18	YELLOW POPLAR	28	5542	FAIR		DETERMINE REMOVAL AT PRECONSTRUCTION
19	YELLOW POPLAR	24	4072	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
20	YELLOW POPLAR	30	6362	GOOD		SAVE AND PROTECT
21	RED OAK	43	13070	POOR	SPLIT BY LIGHTENING	SAVE AND PROTECT
22	YELLOW POPLAR	40	11310	GOOD	OFFSITE	SAVE AND PROTECT
23	AMERICAN BEECH	36	9161	GOOD	OFFSITE	SAVE AND PROTECT
24	AMERICAN BEECH	30	6362	GOOD		SAVE AND PROTECT
25	WHITE OAK	29	5945	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
26	AMERICAN BEECH	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
27	YELLOW POPLAR	40	11310	GOOD	OFFSITE	SAVE AND PROTECT
28	AMERICAN BEECH	28	4778	GOOD		SAVE AND PROTECT
29	PIGNUT HICKORY	28	5542	GOOD		SAVE AND PROTECT
30	YELLOW POPLAR	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
31	YELLOW POPLAR	36	9161	GOOD	POSSIBLE CO-OWNED	SAVE AND PROTECT
32	YELLOW POPLAR	32	7238	GOOD	OFFSITE	SAVE AND PROTECT
33	YELLOW POPLAR	30	6362	GOOD		SAVE AND PROTECT
34	SHAGBARK HICKORY	24	4072	GOOD		SAVE AND PROTECT
35	YELLOW POPLAR	12,25	12469	POOR		SAVE AND PROTECT
36	YELLOW POPLAR	24	4072	GOOD		SAVE AND PROTECT
37	YELLOW POPLAR	38	10207	GOOD	OFFSITE	SAVE AND PROTECT
38	YELLOW POPLAR	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
39	YELLOW POPLAR	29	5945	GOOD	OFFSITE	SAVE AND PROTECT
40	PIGNUT HICKORY	26	4778	GOOD		SAVE AND PROTECT
41	YELLOW POPLAR	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
42	YELLOW POPLAR	30	6362	GOOD	OFFSITE	SAVE AND PROTECT
43	YELLOW POPLAR	34	8171	GOOD		SAVE AND PROTECT
44	WHITE OAK	37	9677	GOOD		SAVE AND PROTECT
45	YELLOW POPLAR	33	7698	GOOD		SAVE AND PROTECT
46	YELLOW POPLAR	28	5542	GOOD	OFFSITE	SAVE AND PROTECT
47	RED OAK	37	9677	GOOD		SAVE AND PROTECT
48	RED OAK	29	5945	GOOD		SAVE AND PROTECT
49	WHITE OAK	31	6793	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
50	YELLOW POPLAR	24,29,33	39761	GOOD		REMOVE
51	YELLOW POPLAR	40	11310	FAIR	HEARTROT	REMOVE
52	YELLOW POPLAR	27,30	25873	FAIR	HEARTROT	REMOVE
53	YELLOW POPLAR	33	7698	FAIR	HEARTROT	REMOVE
54	YELLOW POPLAR	19,24,32	36664	GOOD	10"LEADER DEAD	REMOVE
55	WILLOW OAK	42	12469	FAIR	CODOMINANT LEADER DEAD	REMOVE
56	YELLOW POPLAR	24	4072	POOR	HEARTROT	REMOVE
57	YELLOW POPLAR	31	6793	GOOD		REMOVE
58	PIGNUT HICKORY	6,6,8,24	11310	GOOD		REMOVE
59	YELLOW POPLAR	39	10751	GOOD	OFFSITE	SAVE AND PROTECT
60	YELLOW POPLAR	36	9161	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
61	YELLOW POPLAR	12,28	14957	GOOD	OFFSITE	SAVE AND PROTECT
62	SOUTHERN RED OAK	52	19113	FAIR	POSSIBLE CO-OWNED	DETERMINE REMOVAL AT PRECONSTRUCTION & WITH PERMISSION OF MNCPPC PARKS
63	YELLOW POPLAR	31	6793	GOOD	OFFSITE	SAVE AND PROTECT
64	AMERICAN BEECH	28	5542	GOOD	OFFSITE	SAVE AND PROTECT
65	YELLOW POPLAR	28	5542	GOOD	OFFSITE	SAVE AND PROTECT
66	YELLOW POPLAR	24	4072	GOOD	OFFSITE	SAVE AND PROTECT
67	YELLOW POPLAR	34	8171	GOOD	OFFSITE	SAVE AND PROTECT
68	YELLOW POPLAR	33	7698	GOOD	OFFSITE	SAVE AND PROTECT
69	BLACK CHERRY	14,24	12469	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
70	YELLOW POPLAR	27	5153	GOOD		SAVE AND PROTECT
71	YELLOW POPLAR	30	6362	GOOD	OFFSITE	SAVE AND PROTECT
72	NO TREE					
73	YELLOW POPLAR	28	5542	GOOD	OFFSITE	SAVE AND PROTECT
74	YELLOW POPLAR	28	5542	GOOD	OFFSITE	SAVE AND PROTECT
75	YELLOW POPLAR	31	6793	GOOD	OFFSITE	SAVE AND PROTECT
76	YELLOW POPLAR	22,24	16972	GOOD	OFFSITE	SAVE AND PROTECT
77	YELLOW POPLAR	30	6362	GOOD	OFFSITE	SAVE AND PROTECT
78	YELLOW POPLAR	30	6362	GOOD	OFFSITE	SAVE AND PROTECT

*** BOLD TYPE DENOTES SPECIMEN TREE**

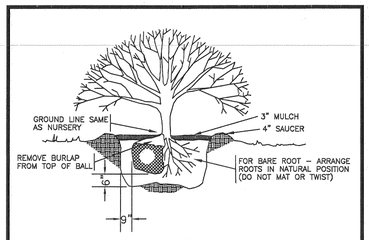


NOT TO SCALE

NOTE:

1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.
4. Signage is to be 50'O.C. and on all corners, minimum.

NO SCALE SIGNAGE



NOTE:
EVERGREEN AND DECIDUOUS SHRUBS TO BE PLANTED IN SAME MANNER

NO SCALE SHRUB PLANTING

NORTON LAND DESIGN LLC
811 RUSSELL AVENUE, SUITE 301
GAITHERSBURG, MD 20879
p.301.216.9650 f.301.216.9649
www.NORTONLANDDESIGN.com

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

2/4/10
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL

WATER CLASS I	WATERSHED	FEMA FLOODPLAIN MAP PANEL #	
TRIBUTARY NORTHWEST BR.	NORTHWEST BRANCH	24031C0390D	
TAX MAP JP561	200 SHEET 211NE01	ADC MAP PAGE 37 GRID F7/F8	
SCALE AS SHOWN	DATE OCT. 2009	NLD PROJ. NO. 09-041	SHEET NO. L-1.2

KEY PLAN

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. HR 2009743

Signature Date 2/12/2010

GREIVES WORRALL WRIGHT & DYATNICK INCORPORATED
GWWO
ARCHITECTS
600 WYMAN PARK DRIVE, SUITE 300
BALTIMORE, MARYLAND 21211, 410-332-0009

Seal:

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF A MARYLAND.
LICENSE NUMBER EXPIRATION DATE

Revisions:

No.	Date	Description

RECEIVED
FEB - 5 2010
MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
ENVIRONMENTAL PLANNING DIVISION

MONTGOMERY KNOLLS ELEMENTARY SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

Job No.	27052.01	MAN	Drawn
Scale	AS SHOWN	MAN	Checked
Date	10/06/2009		Approved

Drawing Title: FINAL FOREST CONSERVATION NOTES & DETAILS

Drawing Number: L-1.2

Sheet 3 Of 4

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. HR 2009743, including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS
Printed Company Name

Contact Person or Owner: MR. JAMES SONG, DIRECTOR, DIV. OF CONST.
Printed Name

Address: 2096 GAITHER ROAD, ROCKVILLE MD 20854

Phone and Email: 240-314-1000 JAMES_SONG@MCPSMD.ORG

Signature:

Attachment 1

SITE PLANTING & REFORESTATION
GENERAL NOTES

1. Drawings are for tree conservation and reforestation purposes only. As-built conditions may vary. The Contractor shall verify all existing conditions and utility locations shown and described on the drawings, and shall inform Norton Land Design, Tel No. 301-216-9650 of any discrepancies or potential problems prior to commencing work.

2. In reforestation areas all branched deciduous trees shall be planted with random spacing 20.90' on center. Shrubs and container growth evergreens not in planting beds shall be planted in random spacing 36.2' on center.

4. Do not plant trees or shrubs within 3'-0" of the centerline of swales or ditches.

5. "MISS UTILITY" (1-800-257-7777) must be contacted a minimum of 48 hours prior to proceeding with any excavation for plant material installation.

6. No plant material shall be planted directly in front of roadway sign sight lines.

7. Plant materials and planting measures shall conform with the "Landscape Specification Guidelines For The Baltimore-Washington Metropolitan Areas", latest edition.

8. All plants shall be watered for a two year period as required. The Contractor shall provide sufficient manpower and equipment to complete the watering as required.

9. The following list of plants shall be planted only during the spring planting season: Acer Rubrum, Liquidambar Styraciflua, and Quercus spp. (all oak species).

10. All evergreen species plantings, such as hollies, shall require 10% male plants to 90% female plants, with a minimum of one male plant per grouping.

11. All existing trash and impervious areas shown on the plan to be removed must be removed and any disturbed soil must be stabilized and seeded. It may be necessary to scarify and/or aerate the soil.

12. Plants shall be inspected by the contractor and any material that is either damaged or which has root ball compaction, j-rooted or kinked root systems will be replaced. No plants will be stored on-site. Plants will be planted imediately once received from the nursery.

13. Stock will be planted in random order to reflect natural growth of the forest.

14. Planting field should be 2X root ball diameter. Native soil material will be used to backfill plant site and area will be packed to remove air pockets. Rake soil evenly over the planting field and cover hole with three inches of mulch. Water to settle soil and provide moisture as needed.

15. Deer protection measures to be provided for all planted trees. Specific measures to be determined as part of the pre-planting meeting.

Sequence of Events for Property Owners Required to Comply With Forest Conservation and/or Tree-Save Plans

Pre-Construction

1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged, but before any clearing or grading begins. The property owner should contact the Montgomery County Planning Department inspection staff before construction to verify the limits of disturbance and discuss tree protection and tree care measures. The developer's representative, construction superintendent, ISA certified arborist or Maryland-licensed tree expert that will implement the tree protection measures, forest conservation inspector, and Department of Permitting Services (DPS) sediment control inspector should attend this pre-construction meeting.

2. No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include, but are not limited to:
   a. Root pruning
   b. Crown reduction or pruning
   c. Watering
   d. Fertilizing
   e. Vertical mulching
   f. Root aeration matting

Measures not specified on the forest conservation plan may be required as determined by the forest conservation inspector in coordination with the arborist.

3. A Maryland-licensed tree expert or an International Society of Arboriculture- certified arborist must perform all stress reduction measures. Documentation of stress reduction measures must be either observed by the forest conservation inspector or sent to the inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The forest conservation inspector will determine the exact method to convey the stress reductions measures during the pre-construction meeting.

4. Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities. Tree protection fencing locations should be staked prior to the pre-construction meeting. The forest conservation inspector, in coordination with the DPS sediment control inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. Temporary tree protect devices may include:
   a. Chain link fence (four feet high)
   b. Super silt fence with wire strung between support poles (minimum 4 feet high) with high visibility flagging.
   c. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

5. Temporary protection devices shall be maintained and installed by the contractor for the duration of construction project and must not be altered without prior approval from the forest conservation inspector. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No vehicle or equipment access to the fenced area will be permitted. Tree protection shall not be removed without prior approval of forest conservation inspector.

6. Forest retention area signs shall be installed as required by the forest conservation inspector, or as shown on the approved plan.

7. Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details. Installation will occur at the appropriate time during the construction project. Refer to the plan drawing for long-term protection measures to be installed.

During Construction

8. Periodic inspections by the forest conservation inspector will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the forest conservation inspector, must be made within the timeframe established by the inspector.

Post-Construction

9. After construction is completed, an inspection shall be requestec. Corrective measures may include:
   a. Removal and replacement of dead and dying trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering
   f. Wound repair
   g. Clean up of retention areas

10. After inspection and completion of corrective measures have been undertaken, all temporary protection devices shall be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the Department of Permitting Services and the forest conservation inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

Sequence of Construction

1. Stake and flag limits of disturbance, sediment control devices, tree protection limits, root pruning lines and planting areas or specific plant locations. Take soil samples from afforestation area and have soils analyze for planting recommendations.
2. Call the M-NCPPC and MCDPS for first inspection.
3. Conduct tree stress reduction measures and implement forest or tree protection measures as specified on the plan and begin eradication of invasive plants in the afforestation areas.
4. Call the M-NCPPC and MCDPS for second inspection.
5. Conduct site sediment control measures and building construction by following the sequence of construction as specified on the sediment control plan.
6. After the building exterior and site utility work has been completed and the owner and construction superintendent authorizes the planting work to proceed the site landscaping contractor is to inspect job site conditions and note any problems prior to commencement of work.
7. Call "Miss Utility" at 1-800-257-7777 prior to any work for the location of all utilities.
8. Adjust existing sediment control measures for landscape construction or planting as required.
9. Call the M-NCPPC for the third inspection.
10. Continue with invasive plant eradication and modify specified species, final placement and selection of plant species and make a determination of the regeneration potential of existing plants to remain with the inspection staff of the M-NCPPC.
11. Proceed with soil amendments and site planting preparation, site planting and reforestation planting. Install protective fence and site protection signs for reforestation planting area.
12. After ALL planting has been completed notify owner and MNCPPC to begin two(2) year maintenance program.
13. Maintain plants by watering, fertilizing, mulching, and implementing a weed control and wildlife depredation control program.
14. After two years of plant establishment call the M-NCPPC for the fourth inspection.
15. After final inspection, turn over maintenance of planting to the owner or, if planting deficiencies exist, conduct additional planting or conduct corrective measures to release bond for afforestation planting. 100% of the total trees planted per acre must be alive and in good condition for afforestation area A and 100% of the shrubs must also be alive and in good condition after two years to release the bond.

Maintenance Description

1. Forest planting to commence as early as possible during construction. Forest planting areas to be covered by a two-year maintenance program, with a two-year bond. The landscape contractor will inspect all planted areas every six months after planting for two years. At the end of the two year inspection, the contractor will request MNCPPC inspection and will ensure that 100% of the original stock is in good condition for forestation areas.

2. In years one and two each forest planting area will be maintaned by either mowing or chemical treatment. Control of exotic and invasive species is to be done without the use of herbicides as much as possible. If use of chemical is unavoidable, contact MNCPPC 301-495-4540 for approval prior to application of chemicals.

3. During each inspection following planting, the contractor will evaluate the need for additional watering, additional fertilizer or lime and any additional steps to control competing vegetation. The contractor will also assess any disease potential of, if any outside influences is having a deletrious affect on the mitigation sites.

Site Inspections, Sequence of Construction, and Specific Reforestation Planting Specifications

Inspections (per Section 110 of the Forest conservation Regulation)

There shall be six inspections for forest conservation or reforestation planting operations.

A. The Planning Department must conduct field inspections of a site subject to an approved forest conservation plan as follows:

1. after the limits of disturbance have been staked and flagged, but before any clearing or grading begins (the purpose of the meeting should be to field verify the limits of clearing specified on the approved plan, authorize necessary adjustments, and to authorize necessary stress reduction measures and installation of protection devices);

2. after necessary stress reduction measures have been completed and the protection measures have been installed, but before any clearing or grading begins (the purpose of the meeting should be to field verify that both measures have been done correctly and to authorize clearing and grading);

3. after completion of all construction activities to determine the level of compliance with the provisions of the forest conservation plan;

4. before start of any required reforestation and afforestation planting (the purpose of the meeting should be to determine whether necessary pre-planting measures have been completed and authorize any necessary adjustments to the planting specifications);

5. after required reforestation and afforestation planting has been completed to verify that the planting is acceptable and begin the 2-year maintenance perido; and

6. at the end of the 2-year maintenance agreement to determine the level of compliance with the provisions of the planting plan and, if appropriate, authorize release of the financial security.

B. These inspections must be requested by the applicant at the designated points.

Notes

1. The attendants at the pre-construction meeting should include: developer's representative, construction superintendent, MD licensed tree expert/ISA certified arborist, M-NCPPC inspection staff, and sediment control inspector.

2. Tree protection measures not specified on the forest conservation plan may be required as determined by M-NCPPC inspector in coordination with the MD licensed tree expert/ISA certified arborist. MD licensed tree expert/ISA certified arborist to be retained by Contractor.

SITE TABULATIONS:

ACREAGE OF TRACT:	
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	10.34
ACREAGE OF ROAD AND UTILITY R/W WHICH WILL NOT BE IMPROVED AS PART OF DEV. APPLICATION:	0
ACREAGE OF EX. FOREST:	2.24
ACREAGE OF TOTAL FOREST RETENTION:	1.45
ACREAGE OF TOTAL FOREST CLEARED:	0.79
LAND USE CATEGORY:	IDA
AFFORESTATION THRESHOLD	1.55
CONSERVATION THRESHOLD	2.07
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0/0/0
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN	0/0/0
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN STREAM BUFFERS	0.40/0/0.67
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITH PRIORITY AREAS	0.40/0/0.67
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER	264/250

PROPOSED REFORESTATION PLANT MATERIALS

AREA A	AREA B	TOTAL	BOTANICAL NAME	COMMON NAME	SIZE	UNIT/ROOT	SPACING	FORM
11	3	14	ACER RUBRUM	RED MAPLE	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
11	–	11	QUERCUS PRINUS	CHESTNUT OAK	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
8	2	10	HAMMAMELIS VIRGINIANA	WITCH HAZEL	24" HEIGHT	CONT.	RANDOMLY 36.2' O.C.	SHRUB
11	–	11	CARYA TOMENTOSA	MOCERNUT HICKORY	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
8	–	8	LINDERA BENZOIN	SPICEBUSH	12" HEIGHT	CONT.	RANDOMLY 36.2' O.C.	SHRUB
8	–	8	AMELANCHIER CANADENSIS	SERVICEBERRY	18" HEIGHT	CONT.	RANDOMLY 36.2' O.C.	SHRUB
12	1	13	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
12	1	13	NYSSA SYLVATICA	BLACK GUM	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
11	–	11	PINUS VIRGINIANA	VIRGINIA PINE	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
11	–	11	QUERCUS RUBRA	RED OAK	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
11	–	11	LIQUIDAMBER STYRACIFLUA	SWEETGUM	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
11	2	13	QUERCUS ALBA	WHITE OAK	2" CALIPER	B&B	RANDOMLY 20.90' O.C.	TREE
9	–	9	VIBURNUM ACERFIUM	MAPLE LEAF VIBURNUM	18"HEIGHT	CONT.	RANDOMLY 36.2' O.C.	SHRUB
81 lbs.	7 lbs.	88 lbs.	–	SYLVA FIELD AND FOREST MIX OR EARNST NATIVE UPLAND WILDLIFE FORAGE AND COVER MEADOW MIX: OR EQUIVALENT	–	–	80 LBS. ACRE	SEED
35 lbs.	4 lbs.	39 lbs.	–	COMPANION SEED MIX OF 50% ANNUAL RYE GRASS 25% REDTOP GRASS 25% SHEEP FESCUE	–	–	8 LBS. PER 10,000 SF	SEED

NOTE: 100% SURVIVAL AFTER 2 YEARS OF GROWING SEASON IS REQUIRED FOR ALL REFORESTATION AREAS SHOWN.
STABILIZE DISTURBED OR BARE AREAS WITH NATIVE UPLAND MIX INDICATED AND COMPANION SEED MIX.
TREES ARE TO BE PROTECTED WITH INDIVIDUAL TREES SHELTERS PER DETAIL SHEET L-1.2 OR APPROVED EQUAL.

ERADICATION AND CONTROL OF COMPETING VEGETATION
IN REFORESTATION AREA

1. ERADICATION EFFORTS ARE AIMED AT THE REMOVAL OF INVASIVE, EXOTIC SPECIES (TARGET SPECIES) WHICH DISPLACE OR PREVENT THE ESTABLISHMENT OF NATIVE FORESTS. ON THIS SITE, ERADICATION EFFORTS ARE FOCUSED PRIMARILY UPON TREE OF HEAVEN (AILANTHUS ALTISSIMA), MULIFLORA ROSE (ROSA MULTIFLORA), AND JAPANESE HONEYSUCKLE VINE (LONICERA JAPONICA). OTHER LISTED SPECIES SHALL ALSO BE CONTROLLED.
2. ERADICATION EFFORTS SHALL INCLUDE THE INITIAL REMOVAL OR TREATMENT OF THE TARGET SPECIES AND THE MAINTENANCE REQUIRED TO CONTROL REGROWTH. IMPLEMENTATION AND CHOICE OF TREATMENT AND METHOD SHALL BE SUCH THAT NEITHER THE INVASIVE SPECIES NOR THE METHOD OF CONTROL ADVERSELY AFFECTS THE ESTABLISHMENT AND SURVIVAL OF NATIVE SPECIES. THE TARGET SPECIES ARE PERSISTENT AND TOTAL ERADICATION MAY NOT BE PRACTICAL OR REQUIRED. THE GOAL IS TO SUPPRESS THE TARGET SPECIES TO ALLOW THE NATIVE SPECIES TO FORM A DENSE CANOPY. THE ADDITIONAL SHADE WILL THEN MANAGE THE REGROWTH OF THE TARGET SPECIES. QUESTIONS REGARDING THE APPROPRIATENESS, OR EXTENT OF CONTROL, WILL BE AT THE DISCRETION OF THE FREDERICK COUNTY DEPARTMENT OF PUBLIC WORKS INSPECTOR; HOWEVER, A MINIMUM OF FOUR (4) APPLICATIONS OR TREATMENTS SHALL BE MADE DURING THE 2 YEAR PERIOD.
3. ERADICATION AREAS ARE DENOTED ON SHEET L-1.0 AND WITHIN ALL FORESTATION AREAS. ERADICATION AND CONTROL EFFORTS WITHIN THE PROPOSED PROPERTY SHALL TAKE PLACE IN ALL FORESTATION AREAS, TREE SAVE AREAS AND ALL FOREST RETENTION AREAS (SAVED FOREST AREAS). ERADICATION AND CONTROL EFFORTS SHALL ALSO TAKE PLACE IN THE EXISTING FOREST AREAS RETAINED ON THE NEWLY CREATED PROPERTY TO SATISFY THE FRO REQUIREMENTS. AS NOTED ON THIS SHEET, ALL OF THE RETAINED EXISTING FOREST TYPE IS INCLUDED IN THE ERADICATION AREA DUE TO THE PRESENCE OF TARGET SPECIES THROUGHOUT THIS YOUNG STAND.
4. ERADICATION EFFORTS SHALL BEGIN IN FOREST RETENTION AND TREE SAVE AREAS AS LISTED IN THE SEQUENCE OF CONSTRUCTION THIS SHEET. INITIAL REMOVAL AND TREATMENT OF THE TARGET SPECIES MUST OCCUR PRIOR TO PLANTING FORESTATION AREAS.
5. TARGET VEGETATION WITHIN THE ERADICATION AREA SHALL BE CLEARLY FLAGGED BY THE LANDSCAPE CONTRACTOR, AND APPROVED BY MNCPPC INSPECTOR, WITH SURVEYOR'S RIBBON, OR OTHERWISE IDENTIFIED, SO AS TO PREVENT REMOVAL OF DESIRABLE SPECIES ALONG WITH THE TARGET SPECIES.
6. ERADICATION AND CONTROL OF THE TARGET SPECIES SHALL BE BY MECHANICAL MEANS ONLY. MECHANICAL CONTROLS INCLUDE MOWING OR CHOPPING AT OR NEAR THE GROUND LEVEL, OR THE REMOVAL OF THE PLANT BY DIGGING, OR PULLING. MOWING OR CHOPPING WILL LIKELY RESULT IN REGROWTH FROM STUMP OR ROOT SPROUTS WHICH MUST ALSO BE TREATED. REMOVAL OF THE ROOTS BY SOME MEANS OF EXCAVATION WILL DISTURB THE SOIL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. HOLES CREATED BY THE REMOVAL OF ROOTS ARE TO BE FILLED WITH TOPSOIL. ALL BARE GROUND AREAS RESULTING FROM MECHANICAL CONTROL METHODS ARE TO BE IMMEDIATELY STABILIZED. DISTURBED AREAS WITH SUFFICIENT LIGHT SHALL BE SEEDED PER THE IMPROVEMENT PLAN SPECIFICATIONS. DENSELY SHADED AREAS SHALL BE MULCHED WITH 2" OF SHADED HARDWOOD MULCH OR WOOD CHIPS. THE USE OF HEAVY EQUIPMENT WITHIN NON WETLAND, FLOODPLAIN AREAS IS PROHIBITED UNLESS THE SOIL IS DRY ENOUGH FOR THE EQUIPMENT TO BE SUPPORTED WITHOUT EXCESSIVE DAMAGE TO THE SOIL OR DESIRABLE GROUND COVER PLANTS. HEAVY EQUIPMENT IS NOT ALLOWED IN WETLANDS OR STREAMS.
7. **CHEMICAL CONTROLS ARE NOT TO BE UTILIZED ANYWHERE ON SITE. ONLY MECHANICAL MEANS SHALL BE USED TO CONTROL COMPETING VEGITATION.**
8. BRUSH, ROOT MATS, AND DEBRIS RESULTING FROM MECHANICAL CONTROLS ARE TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
9. RECOMMENDED TREATMENTS ARE EXTRACTED FROM THE FOLLOWING FOREST SERVICE INFORMATION PUBLICATIONS BY PHILIP D. PANNILL, REGIONAL WATERSHED FORESTER, WESTERN REGION, MARYLAND DNR-FOREST SERVICE, 1260 MARYLAND AVENUE, HAGERSTOWN, MD 21740, PHONE (301)791-4010:
   "PROBLEM WEED SPECIES FOR FORESTRY IN MARYLAND"
   "AILANTHUS ALTISSA-CONTROLLING TREE OF HEAVEN"
   "CONTROL OF ALANTHUS IN FOREST MANAGEMENT"
   CONTRACTOR SHALL CONSULT THESE PUBLICATIONS FOR RECOMMENDED OPTIONS.
   * JAPANESE HONEYSUCKLE:MANUALLY CUT OR PULL VINES.
   * MULTIFLORA ROSE: REPEATED MOWING OR CUTTING.
   * TREE OF HEAVEN: INITIAL CUTTING OF TREES FOLLOWED BY FREQUENT CUTTING AND MOWING OF SPROUTS THAT CANNOT BE PULLED.
10. THE CONTRACTOR IS TO CHOOSE THE APPROPRIATE CONTROL MEASURES TO MATCH BOTH LOCAL CONDITIONS AND AVAILABLE SKILLED LABOR SO AS TO MINIMIZE IMPACTS TO THE ENVIRONMENT.
11. FOLLOWING INITIAL TREATMENT, THE ERADICATION AREAS SHALL BE MONITORED/INSPECTED AND RE-GROWTH/RE-INFESTATION SHALL BE TREATED AT LEAST TWO (2) ADDITIONAL TIMES PER YEAR DURING THE 2-YEAR MAINTENANCE PERIOD. RE-GROWTH AND RE-INFESTATION SHALL BE TREATED AS INDICATED. MONITORING AND MAINTENANCE ACTIVITIES SHALL BE DOCUMENTED BY MCPS FOR REVIEW BY MNCPPC AS REQUIRED. ANNUAL INSPECTIONS SHALL OCCUR DURING THE GROWING SEASON AFTER THE 2-YEAR MAINTENANCE PERIOD. LONG TERM CONTROL OF INVASIVE, EXOTIC SPECIES SHALL BE PER THE EXECUTED FOREST CONSERVATION MAINTENANCE AND MANAGEMENT AGREEMENT FOR PROJECT.

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

2/4/10
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01
QUALIFIED PROFESSIONAL

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR 2009743 including financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS
Printed Company Name

Contact Person or Owner: MR. JAMES SONG, DIRECTOR, DIV. OF CONST.
Printed Name

Address: 2096 GAITHER ROAD, ROCKVILLE MD 20854

Phone and Email: 240-314-1000 JAMES_SONG@MCPSMD.ORG

Signature:

WATER CLASS I	WATERSHED NORTHWEST BRANCH	FEMA FLOODPLAIN MAP PANEL # 24031C0390D	
TRIBUTARY NORTHWEST BR.			
TAX MAP JP561	200 SHEET 211NE01	ADC MAP PAGE 37 GRID F7/F8	
SCALE AS SHOWN	DATE OCT. 2009	NLD PROJ. NO. 09-041	SHEET NO. L-1.3

NORTON LAND DESIGN LLC
811 RUSSELL AVENUE, SUITE 301
GAITHERSBURG, MD 20879
p.301.216.9650 f.301.216.9649
www.NORTONLANDDESIGN.com

KEY PLAN

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

FINAL FOREST CONSERVATION PLAN

APPROVAL

Plan No. MR 2009743
Signature Date 2/12/2010

GREIVES WORRALL WRIGHT & GHATTICIX INCORPORATED
GWWO ARCHITECTS
802 WYMAN PARK DRIVE, SUITE 200
BALTIMORE, MARYLAND 21211, 410-332-1339

Seal:

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF A MARYLAND, LICENSE NUMBER _____ EXPIRATION DATE _____

Revisions:

No.	Date	Description

MONTGOMERY KNOLLS ELEMENTARY SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

Job No.	27052.01	MAN	Drawn
Scale	AS SHOWN	MAN	Checked
Date	10/06/2009		Approved
Drawing Title	FINAL FOREST CONSERVATION NOTES & DETAILS	Drawing Number	L-1.3
Sheet	4	Of	4

RECEIVED
FEB - 5 2010
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Attachment 1

MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

February 12, 2010

Montgomery County Public Schools
c/o James Song
2096 Gaither Road
Rockville, MD 20850

Re: Final Forest Conservation Plan
Property Name: Montgomery Knolls Elementary School
Plan Number: MR2009743
Tract size/Zone: 10.34 acres/R60

Dear Mr. Song:
Based on the review by Environmental Planning staff of the Montgomery County Planning Department, the final forest conservation plan mentioned above is approved. The final forest conservation plan consists of 1.45-acres of forest saved, 0.79-acres of forest removed, 0.20-acres credit for on-site landscaping, and 1.08-acres of forest planted on-site.

The plan is subject to the following conditions:

1. All areas of forest retention and planting will be covered by a Category I conservation easement. Conservation easements to be recorded in the land records. Agreements must be acceptable to M-NCPPC prior to recordation.
2. Inspections consistent with Section 110 of the Forest Conservation Regulation.
3. A two year maintenance and management agreement must be approved prior to MNCPPC accepting any on-site planting. The maintenance and management agreement must include invasive management control measures for the areas shown on the plan.
    a. A copy of the maintenance and management agreement must be kept on-site and given to MCPS maintenance staff to ensure compliance with conditions of the forest conservation plan.

This letter must be attached to all reproduced copies of the approved final forest conservation plan. Any changes from the approved final forest conservation may constitute grounds to rescind or amend any approval actions taken, and to re-evaluate the site for additional or amended plantings. If there are any subsequent additions or modification planned for this development, a separate amendment must be submitted to M-NCPPC for review and approval prior to those changes occurring. If you have any questions regarding these actions, please feel free to contact Amy Lindsey at (301) 495-2189.

Sincerely,

Stephen D. Federline for

Mark Pfefferle, Acting Division Chief
Environmental Planning Division

CC: Norton Land Design

Attachment 2

39762 063

MONTGOMERY COUNTY, MD

APPROVED BY mp

AUG 17 2010

$ N/A RECORDATION TAX PAID

$ N/A TRANSFER TAX PAID

CONSERVATION EASEMENT AGREEMENT

Category I

DEFINITIONS

Grantor: Board of Education of Montgomery County

Fee simple owner of real property subject to a:

(i) Plan approval conditioned on compliance with a FCP; or

(ii) Plan approval conditioned on compliance with a conservation easement agreement (issued pursuant to Chapter 50 or 59, Montgomery County Code).

Grantee: Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission ("Commission").

FILED LORETTA E. KNIGHT CLERK'S OFFICE MONTGOMERY CO. MD. 2010 AUG 17 PM 12:21

Property: Parcel P437 on tax assessment grid JP61 and recorded among the Land Records of Montgomery County, Maryland at Liber 1549 folio294.

Planning Board: Montgomery County Planning Board of the Maryland-National Capital Park and Planning Commission.

Planning Director: Montgomery County Planning Department of the Maryland-National Capital Park and Planning Commission, Montgomery County, or the Director's designee.

Plan: Mandatory referral reviewed pursuant to Article 28 of Maryland State Code Annotated. Plan Number MR2009743

Forest Conservation Plan ("FCP"): Forest Conservation Plan approved by the Planning Board or Planning Director pursuant to Chapter 22A, Montgomery County Code.

Exhibit A:

FCP approved as a condition of receiving any of the Plan approval noted above.

Exhibit B:

Description and sketch of the easement over and across property to be developed.

WITNESSETH

The Agreement reflects a grant of easement by Grantor to the Grantee.

WHEREAS Grantor has obtained authority to develop pursuant to a Plan in accordance with Montgomery County, Maryland laws; and

WHEREAS, the Planning Board or other approving authority approved Grantor's Plan conditioned upon a requirement that development occur in strict accordance with an FCP approved by

NO FEE

the Planning Board after full review of the FCP pursuant to the provisions of Montgomery County Code Chapter 22A (Forest Conservation); Chapter 50 (Subdivision Regulations); and/or Chapter 59 (Zoning Ordinance); and/or

THE Planning Board approved Grantor's Plan conditioned upon Grantor subjecting the property to be developed ("Property") or a portion of the Property to a conservation easement pursuant to the provisions of Montgomery County Code Chapter 50 (Subdivision Regulations), and/or Chapter 59 (Zoning Ordinance); and

WHEREAS, the location of this easement ("Easement") is as shown on Exhibit A attached hereto and incorporated by reference into the terms of this Agreement; and

WHEREAS, the purpose of this Easement is to protect existing and future forest cover; individual trees; streams and adjacent buffer areas, wetlands and other sensitive natural features; and to maintain existing natural conditions to protect plant habitats, water quality and wildlife; and

WHEREAS, the purpose includes preservation of the natural beauty of the Property subject to the easement and prevention of any alteration, construction or destruction that will tend to mar or detract from such natural beauty; and

WHEREAS, the purpose also includes the protection and preservation of natural features within the area of the Easement which efforts are consistent with the terms and conditions of the approved Plan and applicable law; and

WHEREAS, the Grantor and Grantee (collectively referred to as the "Parties") intend for the conditions and covenants contained in this Agreement to run with the land in perpetuity and to be binding on all subsequent owners and occupants of the Property; and

WHEREAS, the Parties intend that a servitude be placed upon the Property to create a conservation benefit in favor of the Planning Board.

NOW, THEREFORE, the Grantor has executed this Agreement for no monetary consideration but for the purpose of ensuring compliance with development standards imposed in accordance with Montgomery County law as a condition of development approval. The Grantor does hereby grant and convey unto the Planning Board, in perpetuity, an easement on the Property of the size and location described in Exhibit B attached hereto and incorporated by reference into the terms of this Agreement, of the nature and character described herein. This easement agreement constitutes a covenant real running with the title of the land, and is granted to preserve, protect and maintain the general topography and natural character of the land. The Grantor does hereby waive any challenge to the validity of the easement due to its not being shown on a record plat. Grantor, its heirs, successors and assigns covenant to abide by the following restrictions within the Easement:

1. The foregoing recitals are agreed to and incorporated herein and shall be binding upon

the Parties.

2. No living trees or shrubs (of any size or type) shall be cut down, removed or destroyed without prior written consent from the Planning Board. Diseased or hazardous trees or limbs may be removed to prevent personal injury or property damage after reasonable notice to the Planning Board, unless such notice is not practical in an emergency situation or removal of trees is undertaken pursuant to a forest management plan approved by the Planning Director.

3. No plant materials (including, but not limited to brush, saplings, undergrowth, or non-woody vegetation) shall be mowed or cut down, dug up, removed or destroyed unless removed pursuant to the terms and conditions of an approved forest management plan. Noxious weeds (limited to those weeds defined as "noxious" under Maryland State or Montgomery County laws or regulations and "exotic or invasive plants" in the Montgomery County *Trees Technical Manual*) may be removed as required by law, but the method of removal must be consistent with the limitations contained within this Agreement. Vegetation removal shall be limited to noxious weeds only, exotic and invasive weeds only, and protective measures must be taken to protect nearby trees and shrubs.

4. No mowing, agricultural activities, or cultivation shall occur. Grantor may replace dead trees or undergrowth provided that new plantings are characteristic of trees or undergrowth native to Maryland.

5. Nothing in this Agreement precludes activities necessary to implement an afforestation or reforestation efforts pursued pursuant to an approved forest conservation plan or maintenance agreement implemented under Chapters 19 or 22A of the Montgomery County Code.

6. The following activities may not occur at any time within the Easement area:

a. Construction, excavation or grading (except for afforestation and reforestation efforts conducted in compliance with an approved forest conservation plan).

b. Erection of any building or structural improvements on or above ground, including (but not limited to) sheds, dog pens, play equipment and retaining walls.

c. Construction of any roadway or private drive.

d. Activities which in any way could alter or interfere with the natural ground cover or drainage (including alteration of stream channels, stream currents or stream flow).

e. Industrial or commercial activities.

f. Timber cutting, unless conducted pursuant to an approved forest management

plan approved by the Planning Director and DNR.

g. Location of any component of a septic system or wells.

h. Excavation, dredging, or removal of loam, gravel, soil, rock, sand and other materials.

i. Diking, dredging, filling or removal of wetlands.

j. Pasturing of livestock (including horses) and storage of manure or any other suit.

k. Alteration of stream.

7. Nothing in this Agreement shall prevent construction or maintenance of stormwater structures and/or facilities or other utilities, including, but not limited to water and sewer lines, on, over, or under the easement area, if said structures, facilities or utilities are (i) required to implement the Plan, (ii) shown on the approved FCP, and (iii) approved by the appropriate governing bodies or agencies in accordance with applicable laws and regulations.

8. No dumping of unsightly or offensive material, including trash, ashes, sawdust or grass clippings shall occur. Natural biodegradable materials may be allowed in a properly located, designed, managed and maintained compost pile, provided the activity does not damage adjacent trees. Upon prior written approval of the Planning Director, suitable heavy fill and other stabilization measures may be placed to control and prevent erosion, provided that the fill is covered by arable soil or humus and properly stabilized.

9. Fences consistent with the purposes of the Easement may be erected with the Easement area if shown on the FCP or only after written approval from the Planning Director.

10. Unpaved paths or trails consistent with the purposes of the Easement may be created only after written approval from the Planning Director.

11. All rights reserved by or not prohibited to Grantor shall be exercised so as to prevent or minimize damage to the forest and trees, streams and water quality, plant and wildlife habitats, and the natural topographic character of the land within the Easement.

12. Grantor authorizes Planning Board representatives to enter the Property and easement at their own risk and at reasonable hours for the purpose of making periodic inspections to ascertain whether the Grantor, its heirs, successors or assigns have complied with the restrictions, conditions, and easements established herein. Prior to entry, authorized representatives must check in at the main office of the school and display identification at all times. This easement does not convey to the general public the right to enter the Property or easement for any purpose. The easement does not

restrict or enlarge access to the general public in common open space held under community or homeowner association control beyond any access rights created by applicable community or homeowner association covenants and by-laws.

13. Grantor agrees to make specific reference to this Easement in a separate paragraph of any subsequent deed, sales contract, mortgage, lease or other legal instrument by which any possessory or equitable interest in the Property is conveyed.

14. No failure on the part of the Planning Board to enforce any covenant or provision herein shall waive the Planning Board's right to enforce any covenant within this Agreement.

15. Upon finding a violation of any of the restrictions, conditions, covenants and easements established by this easement agreement, the Planning Board shall notify the Grantor in writing of the nature of the violation and subsequent thereto, have the right to enforce such provisions in accordance with any statutory authority (including, if applicable, the imposition of civil monetary fines or penalties in amounts and by such means as may be promulgated from time to time). The Planning Board also may seek injunctive or other appropriate relief in any court of competent jurisdiction, including the right to recover damages in an amount sufficient to restore the property to its original natural state, and Grantor agrees to pay for court costs and reasonable attorney fees if the Planning Board successfully seeks judicial relief.

16. All written notices required by this easement agreement shall be sent as follows:

Planning Director, M-NCPPC
8787 Georgia Avenue
Silver Spring, Maryland 20910

Board of Education of Montgomery County
850 Hungerford Drive
Rockville, Maryland 20850
Attention: Director of Facilities Management

TO HAVE AND TO HOLD unto the Planning Board, its successors and assigns forever, this Grant shall be binding upon the heirs, successors and assigns of the Grantor in perpetuity and shall constitute a covenant real running with the title of the Property.

IN WITNESS WHEREOF, each of the Parties has caused to be executed this Agreement to be signed by its duly authorized officer as of this 12th day of July, 2010

Attachment 2

39762 068

WITNESS:

GRANTOR:

The Board of Education
of Montgomery County, Maryland

Jerry D. Weast, Secretary

Patricia B. O'Neill, President

Approved by the Board of Education of Montgomery County

Jerry D. Weast, Superintendent of Schools

STATE OF MARYLAND

COUNTY OF Montgomery to wit:

I HEREBY CERTIFY that on this 22nd day of April, 20 10, before me, a Notary Public in and for the State and County aforesaid, personally appeared Patricia B. O'Neill, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing and annexed instrument and acknowledged that said individual executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: 8/1/10

[NOTARIAL SEAL]

GLENDA R. ROSE
Notary Public
MONTGOMERY COUNTY
STATE OF MARYLAND

ATTEST:

Barbara Walsh
Acting Secretary-Treasurer

GRANTEE:

Patricia Colihan Barney
Executive Director
Maryland-National Capital Park and
Planning Commission

4/29/10
Approved for legal sufficiency
M-NCPPC Office of General Counsel

Attachment 2

39762 069

STATE OF MARYLAND

COUNTY OF Montgomery to wit:

I HEREBY CERTIFY that on this 12th day of July, 2010, before me, a Notary Public in and for the State and County aforesaid, personally appeared Patricia Colihan Barney, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing and annexed instrument and acknowledged that said individual executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Stephanie L Akerley

My Commission Expires: 1/14/2012

[NOTARIAL SEAL]

STEPHANIE L. AKERLEY
NOTARY PUBLIC
MY COMMISSION EXPIRES 1/14/2012
MONTGOMERY COUNTY, MD

ATTORNEY CERTIFICATION

I certify that this instrument was prepared under the supervision of the undersigned, an attorney admitted to practice before the Court of Appeals of Maryland.

Attachment 2

39762 070

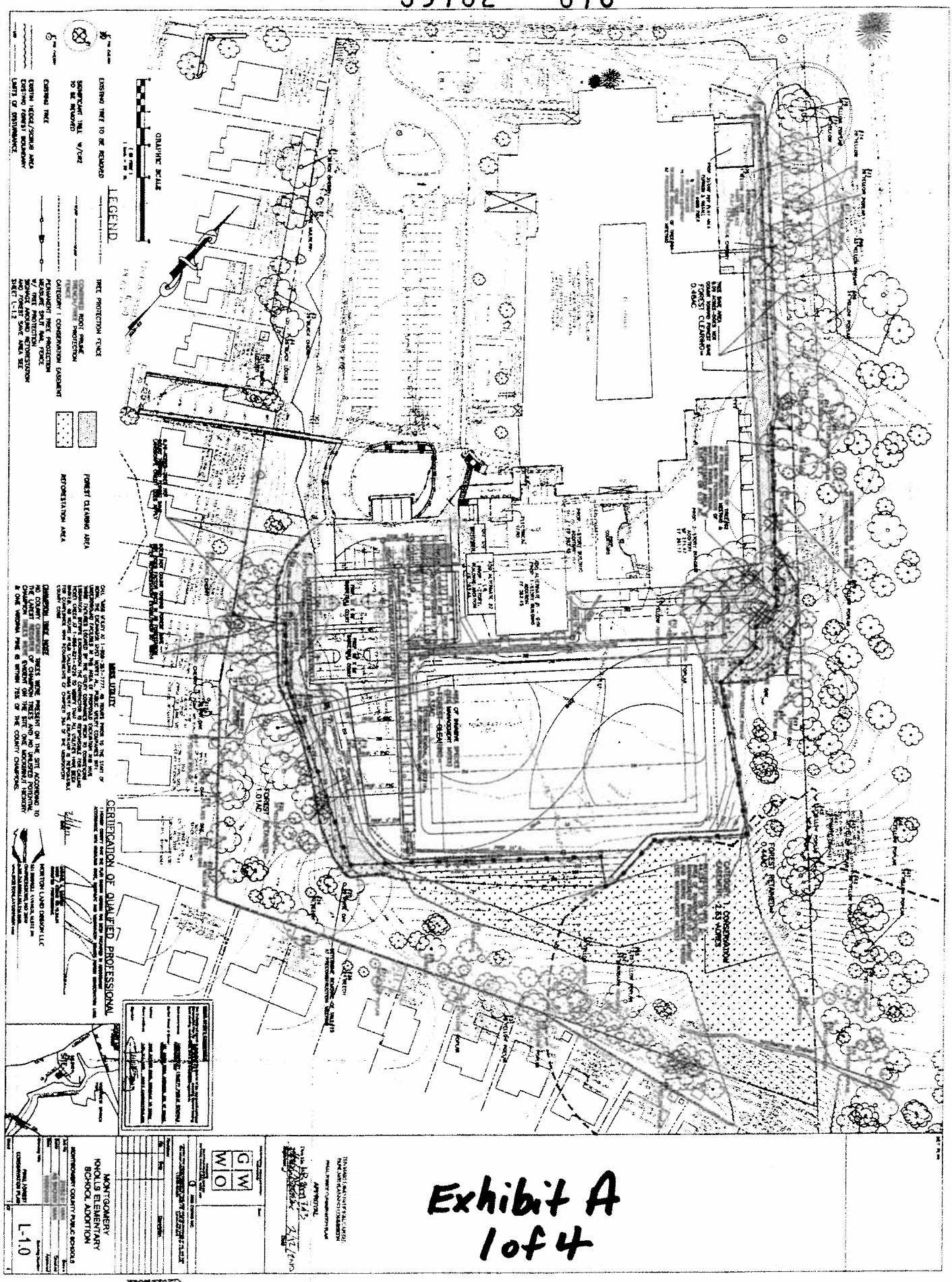


Exhibit A
1 of 4

Attachment 2

39762 071

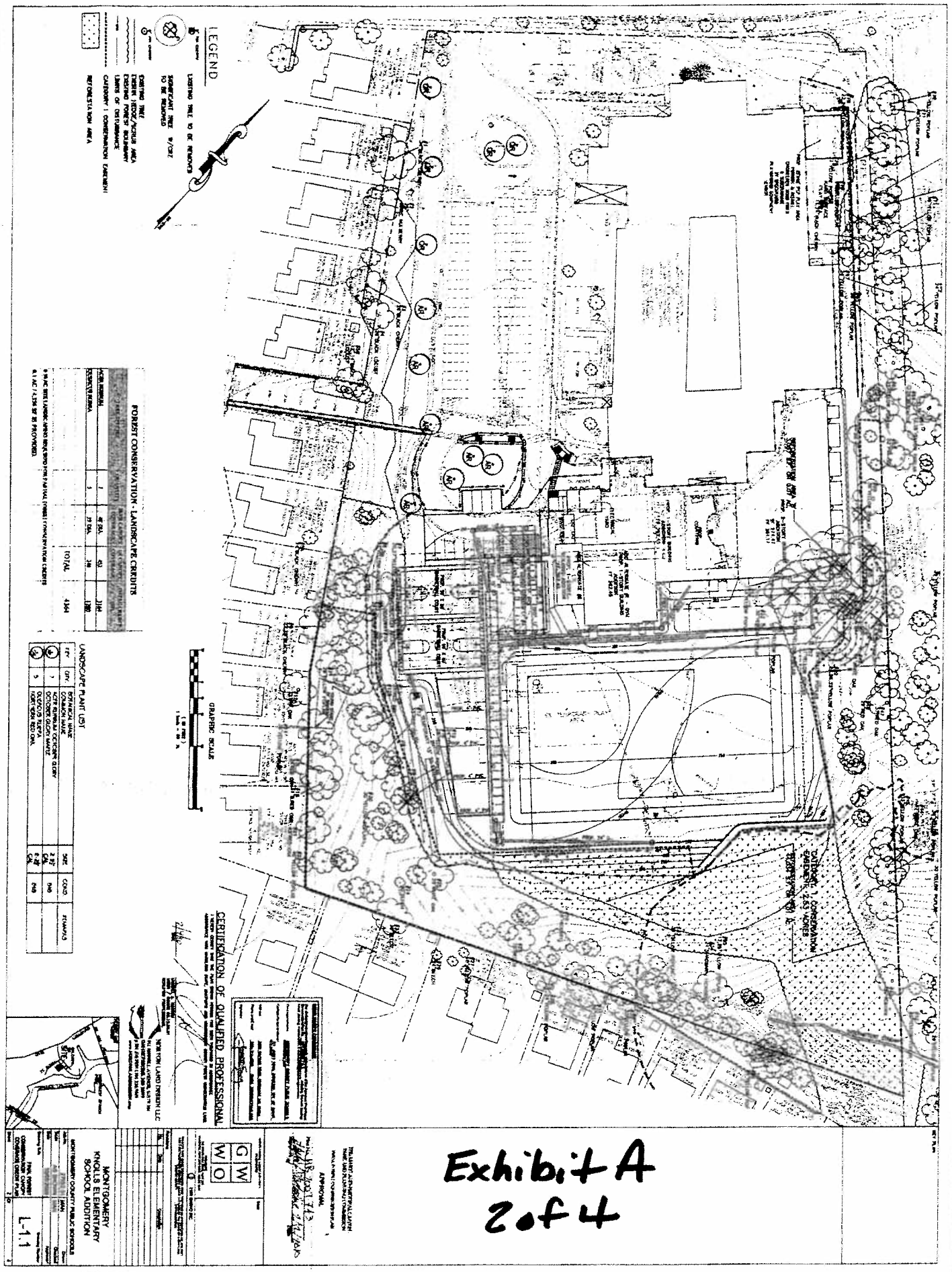


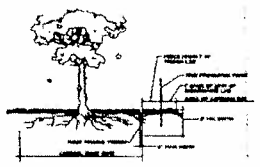
Exhibit A
2 of 4

Attachment 2

39762 072

STRESS REDUCTION MEASURE

ROOT PRUNING

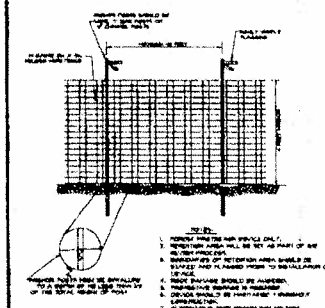


NOTE:

NOT TO SCALE

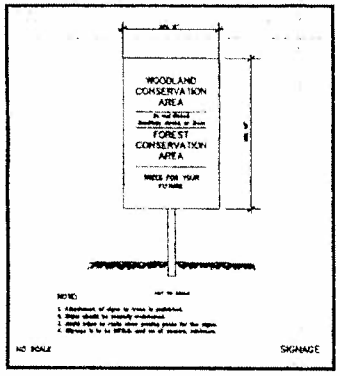
TREE PROTECTION FENCING

WIRE MESH



NOTE:

NOT TO SCALE



NOTE:

NO SCALE

SIGNAGE

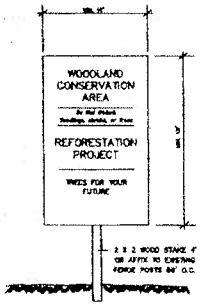
PLANTING SCHEDULE

TASKS	MONTHS
TRANSPLANT OF 2" DIA. OR GREATER	
PLANTING DECIDUOUS TREES	
PLANTING EVERGREEN TREES	
PLANTING SHRUBS	
FOR SLOPES OF MORE THAN 3:1	
MULCH	

KEY

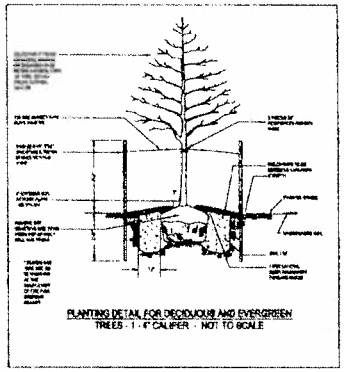
NOTES:

SIGNAGE

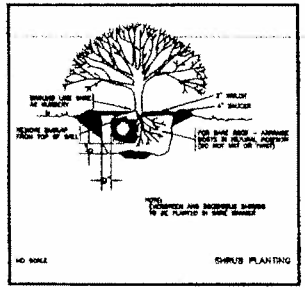


NOT TO SCALE

NOTE:



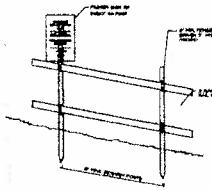
PLANTING DETAIL FOR DECIDUOUS AND EVERGREEN TREES - 1 - 4" CALIPER - NOT TO SCALE



NO SCALE

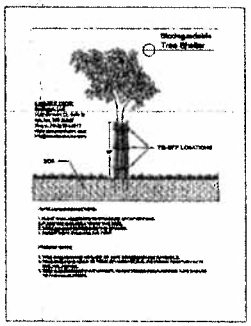
SHRUB PLANTING

PERMANENT TWO RAIL, SPLIT RAIL FENCE



NOTE:

PERMANENT TREE PROTECTION NO SCALE



NORTON LAND DESIGN LLC

CERTIFICATION OF QUALIFIED PROFESSIONAL

2/16/10

AS SHOWN	OCT. 2008	08-041	L-1.2

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. Total tract area	10.34
B. Land dedication acres (parks, county facility, etc.)	0.00
C. Land dedication for roads or utilities (not being constructed by the plan)	0.00
D. Area to remain in commercial agricultural production use	0.00
E. Other deductions (specify)	0.00
F. Net Tract Area	10.34

LAND USE CATEGORY: (from Trees Technical Manual)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	1	0	0	0

G. Afforestation Threshold	15%	x F =	1.55
H. Conservation Threshold	20%	x F =	2.07

EXISTING FOREST COVER:

I. Existing forest cover	2.24
J. Area of forest above afforestation threshold	0.69
K. Area of forest above conservation threshold	0.17

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation	2.10
M. Clearing permitted without mitigation	0.14

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared	0.79
O. Total area of forest to be retained	1.46

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold	0.04
Q. Reforestation for clearing below conservation threshold	1.24
R. Credit for retention above conservation threshold	0.00
S. Total reforestation required	1.28
T. Total afforestation required	0.00
U. Credit for landscaping (may not exceed 20% of "S")	0.20
V. Total reforestation and afforestation required	1.08

FOREST GROWTH TARGETS	ACRES
ONSITE UNDERSTORY CREDIT	0.10 (MEET SAME AREA Q 0.10 ACRES)
ONSITE CANOPY COVERAGE	0.10 (SEE WORKSHEET L-1.1)
REFORESTATION	1.08
OFFSITE PLANTING REQUIRED	0

Significant/Specimen Tree Summary 24" +

Tree #	Species	DBH (Inches)	Critical Root Zone (Dia. ft.)	Condition	Comments	Status
1	BLACK CHERRY	14	17.0	GOOD	OFFSITE	SAVE AND PROTECT
2	WHITE MULBERRY	28	33.6	GOOD	OFFSITE	SAVE AND PROTECT
3	BLACK WALNUT	28	33.6	GOOD	OFFSITE	SAVE AND PROTECT
4	BLACK LOCUST	28	33.6	GOOD	OFFSITE	SAVE AND PROTECT
5A	BLACK CHERRY	24	28.8	GOOD	OFFSITE	SAVE AND PROTECT
5B	BLACK LOCUST	21.5	25.8	GOOD	CO-DOMINANT	SAVE AND PROTECT
6	YELLOW POPLAR	31	37.2	GOOD		SAVE AND PROTECT
7	YELLOW POPLAR	31.5	37.8	GOOD		SAVE AND PROTECT
8	BLACK CHERRY	26.5	31.8	GOOD		SAVE AND PROTECT
9	YELLOW POPLAR	31	37.2	GOOD		SAVE AND PROTECT
10	YELLOW POPLAR	30.5	36.6	FAIR		SAVE AND PROTECT
11	YELLOW POPLAR	30	36.0	POOR	ALMOST DEAD	SAVE AND PROTECT
12A	PIN OAK	33	39.6	GOOD	OFFSITE	SAVE AND PROTECT
12B	RED OAK	29	34.8	GOOD		SAVE AND PROTECT
13	RED OAK	29	34.8	GOOD		SAVE AND PROTECT
14	YELLOW POPLAR	37	44.4	GOOD		SAVE AND PROTECT
15	RED OAK	34	40.8	GOOD		SAVE AND PROTECT
16	SOUTHERN RED OAK	31	37.2	GOOD		SAVE AND PROTECT
17	RED OAK	33	39.6	GOOD		SAVE AND PROTECT
18	YELLOW POPLAR	39	46.8	FAIR		DETERMINE REMOVAL AT PRECONSTRUCTION
19	YELLOW POPLAR	31	37.2	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
20	YELLOW POPLAR	31	37.2	GOOD		
21	RED OAK	33	39.6	POOR	SPLIT BY LIGHTNING	SAVE AND PROTECT
22	YELLOW POPLAR	48	57.6	GOOD	OFFSITE	SAVE AND PROTECT
23	AMERICAN BEECH	30	36.0	GOOD	OFFSITE	SAVE AND PROTECT
24	AMERICAN BEECH	30	36.0	GOOD		SAVE AND PROTECT AT PRECONSTRUCTION
25	WHITE OAK	29	34.8	GOOD		
26	AMERICAN BEECH	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
27	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
28	AMERICAN BEECH	29	34.8	GOOD		SAVE AND PROTECT
29	PIGNUT HICKORY	30	36.0	GOOD		SAVE AND PROTECT
30	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
31	YELLOW POPLAR	33	39.6	GOOD	FORKED CO-DOMINANT	SAVE AND PROTECT
32	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
33	SHAGBARK HICKORY	30	36.0	GOOD		SAVE AND PROTECT
34	YELLOW POPLAR	32.5	39.0	GOOD		SAVE AND PROTECT
35	YELLOW POPLAR	30	36.0	GOOD		SAVE AND PROTECT
36	YELLOW POPLAR	31	37.2	GOOD		SAVE AND PROTECT
37	YELLOW POPLAR	33	39.6	GOOD	OFFSITE	SAVE AND PROTECT
38	PIGNUT HICKORY	30	36.0	GOOD	OFFSITE	SAVE AND PROTECT
39	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
40	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
41	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
42	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
43	WHITE OAK	31	37.2	GOOD		SAVE AND PROTECT
44	YELLOW POPLAR	31	37.2	GOOD		SAVE AND PROTECT
45	RED OAK	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
46	RED OAK	31	37.2	GOOD		SAVE AND PROTECT
47	WHITE OAK	31	37.2	GOOD		SAVE AND PROTECT
48	YELLOW POPLAR	31	37.2	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
49	YELLOW POPLAR	30, 25, 25	39.0	GOOD		
50	YELLOW POPLAR	18	21.6	FAIR	HEAVY VINE	REMOVE
51	YELLOW POPLAR	27, 24	32.4	FAIR	HEAVY VINE	REMOVE
52	YELLOW POPLAR	31	37.2	FAIR	HEAVY VINE	REMOVE
53	YELLOW POPLAR	30, 25, 25	39.0	FAIR	HEAVY VINE, DEAD	REMOVE
54	YELLOW POPLAR	24	28.8	FAIR	CONSIDERABLY LEANING OVER	REMOVE
55	YELLOW POPLAR	21	25.2	FAIR	HEAVY VINE	REMOVE
56	YELLOW POPLAR	31	37.2	GOOD		REMOVE
57	YELLOW POPLAR	24, 24	33.6	GOOD		REMOVE
58	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
59	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT AT PRECONSTRUCTION
60	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
61	YELLOW POPLAR	31	37.2	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
62	SOUTHERN RED OAK	30	36.0	FAIR	FORKED CO-DOMINANT	DETERMINE REMOVAL AT PRECONSTRUCTION IF SEPTIC FIELD
63	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
64	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
65	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
66	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
67	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
68	BLACK CHERRY	24	28.8	GOOD		DETERMINE REMOVAL AT PRECONSTRUCTION
69	YELLOW POPLAR	31	37.2	GOOD		SAVE AND PROTECT
70	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
71	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
72	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
73	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
74	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
75	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
76	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
77	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
78	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT
79	YELLOW POPLAR	31	37.2	GOOD	OFFSITE	SAVE AND PROTECT

* BOLD TYPE DENOTES SPECIMEN TREE

Exhibit 4
3 of 4

KEY PLAN

APPROVAL

MONTGOMERY KNOLLS ELEMENTARY SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

FINAL FOREST CONSERVATION NOTES & DETAILS

L-1.2

3 of 4

Attachment 2 39762 073

Exhibit A 4 of 4

SITE PLANTING & REFORESTATION
GENERAL NOTES

1. Drawings are for tree conservation and reforestation purposes only. Actual conditions may vary. The Contractor shall verify all existing conditions and utility locations shown and described on the drawings, and shall inform Horton Land Design, Tel No. 301-316-9650 of any discrepancies or potential problems prior to commencing work.

2. In reforestation areas all transitional deciduous trees shall be planted with random spacing 20.00' on center. Shrubs and container growth evergreens not in planting beds shall be planted in random spacing 36.0' on center.

4. Do not plant trees or shrubs within 3'-0" of the centerline of bermes or ditches.

5. "MISS UTILITY" (1-800-257-7777) must be contacted a minimum of 48 hours prior to proceeding with any excavation for plant material installation.

6. No plant material shall be planted directly in front of roadway sign sight lines.

7. Plant materials and planting measures shall conform with the "Landscape Specification Guidelines for the Baltimore-Washington Metropolitan Areas", latest edition.

8. All plants shall be watered for a two year period as required. The Contractor shall provide sufficient manpower and equipment to complete the watering as required.

9. The following list of plants shall be planted only during the spring planting season: Ilex Nobilis, Liquidambar Styraciflua, and Quercus spp. (all oak species).

10. All evergreen species plantings, such as hollies, shall require 15% male plants to 85% female plants, with a minimum of one male plant per grouping.

11. All existing brush and inappropriate trees shown on the plan to be removed must be removed and disposed; soil must be stabilized and seeded. It may be necessary to amend and/or aerate the soil.

12. Plants shall be inspected by the contractor and any unhealthy shall be either damaged or which has root ball compaction, J-rooted or girdled root systems will be rejected. All plants will be stored on-site. Plants will be planted immediately upon removal from the nursery.

13. Stock will be planted in random order to refleat natural growth of the forest.

14. Planting hole should be 1X root ball diameter. Holes not material will be used to backfill about site and area will be packed to remove air pockets. Rake soil evenly over the planting hole and cover bare soil with fines fraction of mulch. Water to settle soil and provide moisture as needed.

15. Deer protection measures to be provided for all planted trees. Specific measures to be determined as part of the pre-planting meeting.

Sequence of Events for Property Owners Required to Comply With Forest Conservation and/or Tree-Save Plant

Pre-Construction

1. [illegible]

2. [illegible]
   a. Root pruning
   b. Crown mulch (tree) pruning
   c. Watering
   d. Fertilizing
   e. Pesticide application
   f. Root induction pruning

Inspection not specified on the forest conservation plan may be required at determined by the forest conservation inspector in consultation with the arborist.

3. [illegible]

4. [illegible]
   a. Chain link fence (free-form)
   b. Signs on fence with notice posted between support poles (with from 1 foot high) with high visibility flagging.
   c. 14 gauge (+/-) high visibility wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

5. [illegible]

6. [illegible]

7. [illegible]

During Construction

8. [illegible]

9. [illegible]
   a. Removal and replacement of dead and dying trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering
   f. Mulch repair
   g. Other care of trees as needed

10. After construction is completed, on-site [illegible]
   a. Removal and replacement of dead and dying trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering
   f. Mulch repair
   g. Other care of trees as needed

11. After construction and conversion of reforestation measures have been undertaken, all temporary protective devices shall be removed. Removal of any protection fencing that may operate for weather and unforeseen circumstances in accordance with both the Department of Permitting Services and the forest conservation inspector. No additional grading, trenching, or brush removal takes place after the tree conservation fencing is removed.

Sequence of Construction

1. Stake and flag limits of disturbance, sediment control devices, tree protection fencing, road entering trees and planting areas or specific plant locations. Take soil samples from reforestation areas and have soils analyzed for planting recommendations.

2. Call the M-NCPPC and MCDPS for first inspection.

3. Conduct tree stress reduction measures and implement forest or tree protection measures as specified on the plan and begin installation of tolerant plants in the reforestation areas.

4. Call the M-NCPPC and MCDPS for second inspection.

5. Conduct site sediment control measures and building construction by following the sequence of construction as specified on the sediment control plan.

6. After the building exterior and site utility work has been completed and the owner and construction superintendent, authorize the planting work to proceed the site landscaping contractor to be inspect job site conditions and note any problems prior to commencement of work.

7. Call "Miss Utility" at 1-800-257-7777 prior to any work for the location of all utilities.

8. Adjust existing sediment control measures for landscape construction or planting as required.

9. Call the M-NCPPC for the third inspection.

10. Continue with invasive plant eradication and readily identified species, final placement and selection of plant species and make a determination of the regeneration potential of existing plants to remain with the inspection staff of the M-NCPPC.

11. Proceed with soil amendments and site planting preparation, site planting and reforestation planting tubed protective fence and site protection signs for reforestation planting area.

12. After ALL planting has been completed notify owner and M-NCPPC to begin two(2) year maintenance program.

13. Maintain plants by watering, fertilizing, mulching, and implementing a weed control and wildlife depredation control program.

14. After two years of plant establishment call the M-NCPPC for the fourth inspection.

15. After final inspection, turn over maintenance of planting to the owner or, if planting mitigation exists, conduct additional planting or conduct corrective measures to release bond for reforestation planting. 100% of the total trees planted per area must be alive and in good condition for reforestation area. A total 100% of the shrubs must also be alive and in good condition after two years to release the bond.

Maintenance Guidelines

1. Forest planting is continuous as early as possible during construction. Forest planting areas to be covered by a two-year maintenance program, with a two-year bond. The landscape contractor will inspect all planted areas every six months after planting for two years. At the end of the two year inspection, the contractor will request M-NCPPC inspection and will assure that 100% of the original plant is in good condition for reforestation areas.

2. In years one and two each forest planting area will be maintained by either mowing or chemical treatment. Control of weeds and invasive species is to be done without the use of herbicides on mesh as possible. If use of chemical is unavoidable, contact MNCPPC 301-495-4540 for approval prior to application of chemicals.

3. During each inspection following planting, the contractor will evaluate the need for additional watering, additional fertilizer or lime and any additional chem to control competing vegetation. The contractor will also assess any disease potential or, if any suitable behaviors is having a debilitated effect on the mitigation plant.

Site Inspections, Sequence of Construction, and Specific Reforestation Planting Inspections

Inspections (per Section 110 of the Forest conservation Regulations)

There shall be six inspections for forest conservation or reforestation planting operations.

1. The Planting Department must conduct field inspections of a site subject to an approved forest conservation plan as follows:

   1. after the limits of disturbance have been staked and flagged, but before any clearing or grading begins (the purpose of the meeting should be to field verify the limits of clearing specified on the approved plan, schedule necessary adjustments, and to initiate necessary stress reduction measures and installation of protection devices);

   2. after necessary stress reduction measures have been completed and the protection measures have been installed, but before any clearing or grading begins (the purpose of the meeting should be to field verify that both measures have been done correctly and to initiate clearing and grading);

   3. after completion of all construction activities to determine the level of compliance with the provisions of the forest conservation plan;

   4. before start of any required reforestation and afforestation planting (the purpose of the meeting should be to determine whether necessary pre-planting preparations have been completed and authorize any necessary adjustments to the planting specifications);

   5. after required reforestation and afforestation planting has been completed to verify that the planting is acceptable and begin the 2-year maintenance period; and

   6. at the end of the 2-year maintenance agreement to determine the level of compliance with the provisions of the planting plan and, if appropriate, authorize release of the financial security.

2. These inspections must be requested by the applicant at the designated points.

Notes

1. The standards of the pre-construction meeting should include developer's representative, construction superintendent, MD licensed tree expert/ISA certified arborist, M-NCPPC inspection staff, and sediment control inspector.

2. Tree protection measures not specified on the forest conservation plan may be required as determined by M-NCPPC inspector in coordination with the MD licensed tree expert/ISA certified arborist. MD licensed tree expert/ISA certified arborist to be retained by Owner/Developer.

SITE TABULATIONS:

ACREAGE OF TRACT:	
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	10.34
ACREAGE OF ROAD AND UTILITY R/W WHICH WILL NOT BE IMPROVED AS PART OF DEV. APPLICATION:	0
ACREAGE OF EX. FOREST:	2.24
ACREAGE OF TOTAL FOREST RETENTION:	1.45
ACREAGE OF TOTAL FOREST CLEARED:	0.79
LAND USE CATEGORY:	IDA
AFFORESTATION THRESHOLD	1.55
CONSERVATION THRESHOLD	2.07
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0/0/0
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN	0/0/0
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN STREAM BUFFERS	0.40/0/0.67
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN PRIORITY AREAS	0.40/0/0.67
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER	294/300

PROPOSED REFORESTATION PLANT MATERIALS

AREA A	AREA B	TOTAL	BOTANICAL NAME	COMMON NAME	SIZE	UNIT/ROOT	SPACING	FORM
11	3	14	ACER RUBRUM	RED MAPLE	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
11	-	11	QUERCUS PRINUS	CHESTNUT OAK	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
8	2	10	HAMAMELIS VIRGINIANA	WITCH HAZEL	24" HEIGHT	CONT.	RANDOMLY 36.0' O.C.	SHRUB
11	-	11	CARYA TOMENTOSA	MOCKERNUT HICKORY	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
8	-	8	LINDERA BENZOIN	SPICEBUSH	12" HEIGHT	CONT.	RANDOMLY 36.0' O.C.	SHRUB
8	-	8	AMELANCHIER CANADENSIS	SERVICEBERRY	18" HEIGHT	CONT.	RANDOMLY 36.0' O.C.	SHRUB
12	1	13	LIRIODENDRON TULIPIFERA	TULIP POPLAR	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
12	1	13	NYSSA SYLVATICA	BLACK GUM	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
11	-	11	PINUS VIRGINIANA	VIRGINIA PINE	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
11	-	11	QUERCUS RUBRA	RED OAK	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
11	-	11	LIQUIDAMBER STYRACIFLUA	SWEETGUM	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
11	2	13	QUERCUS ALBA	WHITE OAK	2" CALIPER	B&B	RANDOMLY 20.00' O.C.	TREE
8	-	8	VIBURNUM ACERIFOLIUM	MAPLE LEAF VIBURNUM	18"HEIGHT	CONT.	RANDOMLY 36.0' O.C.	SHRUB
80 lbs.	7 lbs.	80 lbs.	-	[illegible]	-	-	80 LBS. ACRE	SEED
35 lbs.	4 lbs.	39 lbs.	-	[illegible]	-	-	6 LBS. PER 10,000 SF	SEED

NOTE: 100% SURVIVAL AFTER 2 YEARS OF GROWING SEASON IS REQUIRED FOR ALL REFORESTATION AREAS SHOWN.
STABILIZE DISTURBED OR BARE AREAS WITH NATIVE UPLAND MIX INDICATED AND COMPANION SEED MIX.
TREES ARE TO BE PROTECTED WITH INDIVIDUAL TREE SHELTERS PER DETAIL SHEET L-1.2 OR APPROVED EQUAL.

CONDITIONS AND CRITERIA OF COMMON OWNERSHIP
[illegible]

1. [illegible]

2. [illegible]

3. [illegible]

4. [illegible]

5. [illegible]

6. [illegible]

7. [illegible]

8. [illegible]

9. [illegible]

10. [illegible]

11. [illegible]

CERTIFICATION OF QUALIFIED PROFESSIONAL

[illegible]

NORTON LAND DESIGN LLC
[illegible]

KEY PLAN

APPROVAL

GWWO

MONTGOMERY KNOLLS ELEMENTARY SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

L-1.3

Exhibit B

SCHEDULE A
CATEGORY 1 CONSERVATION EASEMENT
OVER AND ACROSSS THE PROPERTY
OF
MONTGOMERY COUNTY BOARD OF EDUCATION
(MONTGOMERY KNOLLS ELEMENTARY SCHOOL)
LIBER 1549 FOLIO0 294
ELECTION DISTRICT NO. 13
MONTGOMERY COUNTY, MARYLAND

Being a piece or parcel of land lying, situate and being in Election District No. 13, Montgomery County, Maryland, said piece or parcel of land being part of that parcel of land received by the owners by that certain deed dated July 1, 1952, as recorded among the Land Records of said county in Liber 1549 at Folio 294, being more particularly described as follows in the meridian of the Maryland State Coordinate System (NAD83):

Beginning for aforesaid piece or parcel of land at a point on the 5th or North 31° 27'40" West 232.56 foot line, said point being 63.45 feet from the beginning thereof, said point also lying on the South 31° 28'10" East 232.56 foot line of Block 1, Section 2, Montgomery Knolls, according to the plat of subdivision recorded among said Land Records in Plat book 47 at Plat No. 3562, thence leaving said plat line and said 5th deed line and running over and across said Liber 1549 at Folio 294 the following 14 courses and distances

1. North 59° 04'15" East 49.79 feet to a point, thence
2. South 43° 13'34" East 54.77 feet to a point, thence
3. South 60° 40' 14" East 180.11 feet to a point, thence
4. North 46° 47'47" East 233.36 feet to a point, thence
5. South 51° 06'22" East 28.66 feet to a point, thence
6. North 20° 05'12" East 10.93 feet to a point, thence
7. North 00° 30'30" East 50.60 feet to a point, thence
8. North 44° 54' 42" East 87.46 feet to a point, thence
9. North 51° 57'18" West 144.50 feet to a point, thence
10. North 04° 15'26" East 46.48 feet to a point, thence
11. North 42° 20'59" West 19.41 feet to a point, thence
12. North 01° 10'23" East 27.24 feet to a point, thence
13. North 43° 07'18" West 165.83 feet to a point, thence
14. North 51° 42'49" East 18.99 feet to a point on the 2nd or South 43° 59'59" East 1019.03 foot line of aforesaid Liber 1549 at Folio 294, said point also being on the North 42° 08'02'West 1415.20 foot line of the plat of subdivision entitled "Division of Martha A. Salter Property Near Clifton Park" as recorded among aforesaid Land Records in Plat Book 13 at Plat No. 867, thence running reversely with said plat line and with part of said 2nd deed line

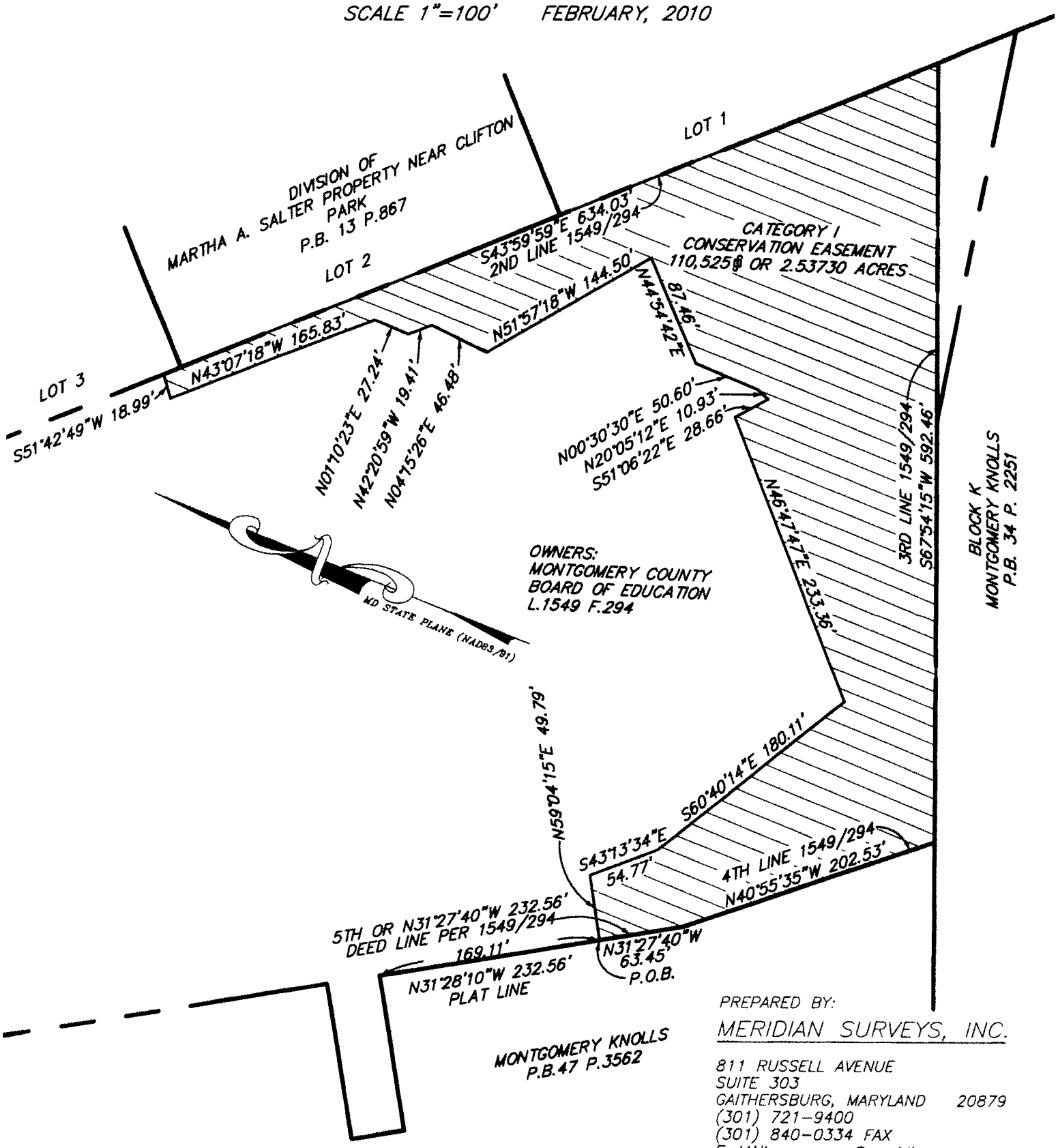
15. South 43° 59'59" East 634.03 feet to a point at the beginning of the 3rd line of aforesaid Liber 1549 at Folio 294, thence running with said 3rd deed line and reversely with part of the North 67° 49'30" East 719.25 foot line of that plat of subdivision entitled "Block K, Montgomery Knolls" as recorded among aforesaid Land Records in Plat Book 34 at Plat No. 2251
16. South 67° 54'15" West 592.46 feet to a point at the beginning of the 4th line of said Liber 1529 at Folio 294, thence running with said 4th deed line and with part of the 5th deed line of aforesaid Liber 1529 at Folio 294 and with the outline of said Plat Book 47 at Folio 3562
17. North 40° 55'35" West 202.53
18. North 31° 27'40" West 63.45 feet to the point of beginning, containing 110,525 square feet of land or 2.53730 acres of land.

Attachment 2

Exhibit B

39762 076

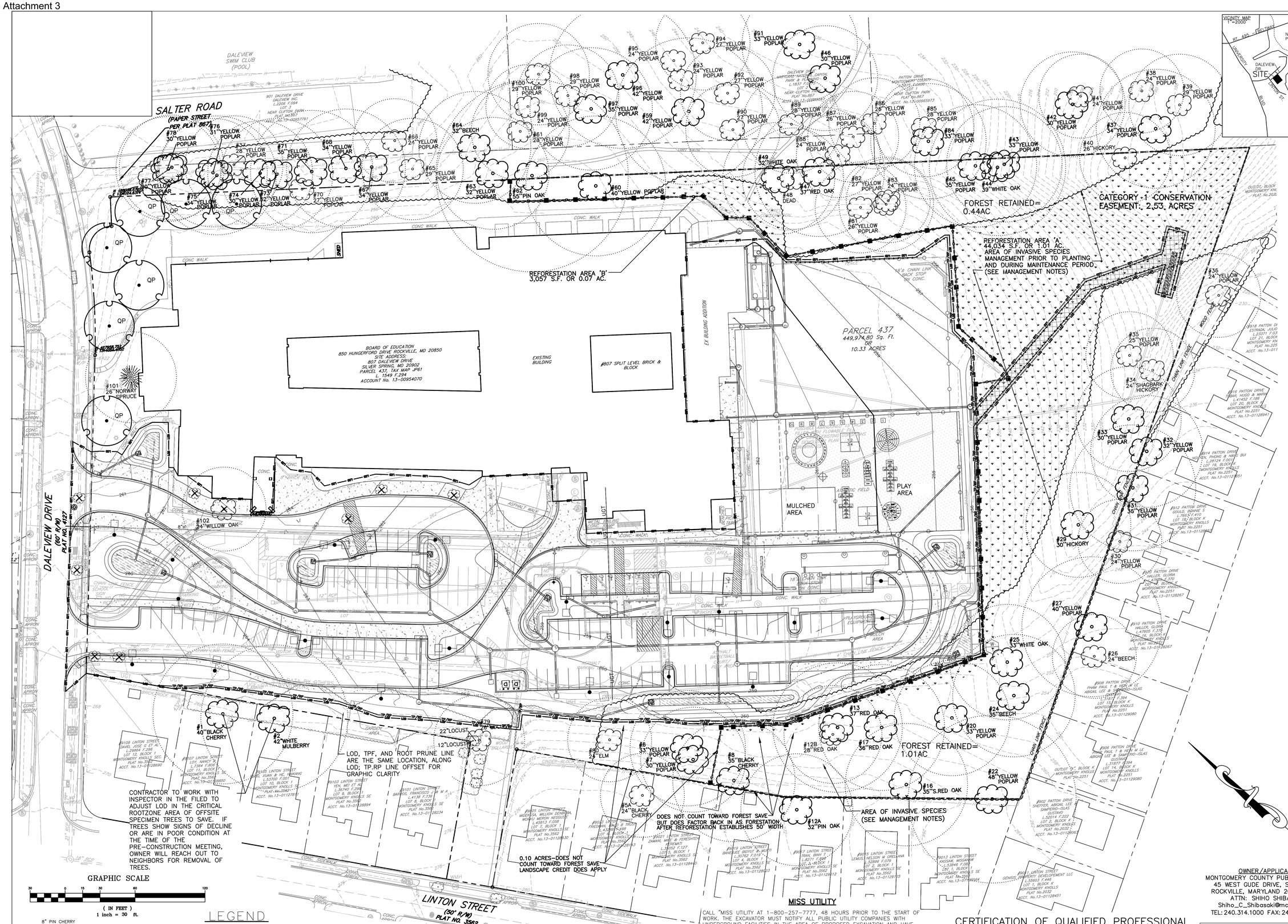
SCHEDULE B
CATEGORY I CONSERVATION EASEMENT
OVER AND ACROSS THE PROPERTY OF
MONTGOMERY COUNTY BOARD OF EDUCATION
(MONTGOMERY KNOLLS ELEMENTARY SCHOOL)
LIBER 1549 FOLIO 294
ELECTION DISTRICT NO. 13
MONTGOMERY COUNTY, MARYLAND
SCALE 1"=100' FEBRUARY, 2010



PREPARED BY:
MERIDIAN SURVEYS, INC.

811 RUSSELL AVENUE
SUITE 303
GAITHERSBURG, MARYLAND 20879
(301) 721-9400
(301) 840-0334 FAX
E-MAIL: surveyor@meridiansurveys.com
MSI# 10-1170

Attachment 3



LEGEND

- 8" PIN CHERRY — EXISTING TREE TO BE REMOVED
- #1 — SIGNIFICANT TREE W/CRZ TO BE REMOVED
- 8" PIN CHERRY — EXISTING TREE
- EXISTIN HEDGE/SCRUB AREA
- EXISTING FOREST BOUNDARY
- LOD — LIMITS OF DISTURBANCE
- TREE PROTECTION FENCE
- TP/RP — COMBINED ROOT PRUNE TRENCH/TREE PROTECTION FENCE
- CATEGORY I CONSERVATION EASEMENT
- PERMANENT TREE PROTECTION MEASURE SPLIT RAIL FENCE W/ TREE PROTECTION SIGNAGE AROUND REFORESTATION AND FOREST SAVE AREA SEE SHEET L-1.2
- FOREST CLEARING AREA
- REFORESTATION AREA
- STORMWATER FACILITY
- MULCH WITH 6" WOODCHIPS
- QP — MITIGATION TREE

MISS UTILITY

CALL "MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

NOTES

LOD IN EXISTING FOREST CONSERVATION FOR STABILIZATION OF EXISTING OUTFALL ONLY. ADJUST LOD AS NECESSARY TO AVOID IMPACT TO EXISTING PLANTING TREES. ANY TREES THAT CANNOT BE AVOIDED MUST BE REPLACED IN-KIND WITH 2" CALIPER MINIMUM CONTRACTOR TO USE 6" WOODCHIPS AND REPLENISH TO MAINTAIN DEPTH FOR ENTIRE LENGTH OF LOD DURING OUTFALL STABILIZATION. EQUIPMENT IS LIMITED TO HAND TOOLS AND SKIDSTEER ONLY. CONTRACTOR IS TO DISTRIBUTE WOODCHIPS THROUGH EASEMENT AREA FOLLOWING CONSTRUCTION ACTIVITY.

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

DATE _____ MICHAEL A. NORTON _____

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
P.443.542.9199 WWW.NORTONLANDDESIGN.COM

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR20XXXXX including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS (Printed Company Name)

Contact Person or Owner: MR. SETH P. ADAMS (Printed Name)

Address: 45 WEST GUDE DRIVE, SUITE 4300

Phone and Email: 240-314-1000 SETH_P_ADAMS@MCPSMD.ORG

Signature: _____

OWNER/APPLICANT
MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDE DRIVE, SUITE 4300
ROCKVILLE, MARYLAND 20850-4038
ATTN: SHIHO SHIBASAKI
Shiho_C_Shibasaki@mcpsmd.org
TEL: 240.314.1000 FAX: 240.279.3003

Proffitt & Assoc. ARCHITECTS
49 SOUTH CARROLL STREET
FREDERICK, MARYLAND 21701
PHONE (301) 662-8532
FAX (301) 662-4192
info@proffittandassociates.com

SEAL

BID DOCUMENTS

CLASSROOM ADDITION AND RENOVATION FOR:
MONTGOMERY KNOLLS ELEMENTARY SCHOOL
MONTGOMERY COUNTY PUBLIC SCHOOLS
807 DALEVIEW DRIVE, SILVER SPRING, MD 20901
PARCEL 437, TAX MAP JP61, LIBER 1549, FOLIO 0294

PROFFITT & ASSOCIATES ARCHITECTS

ISSUE

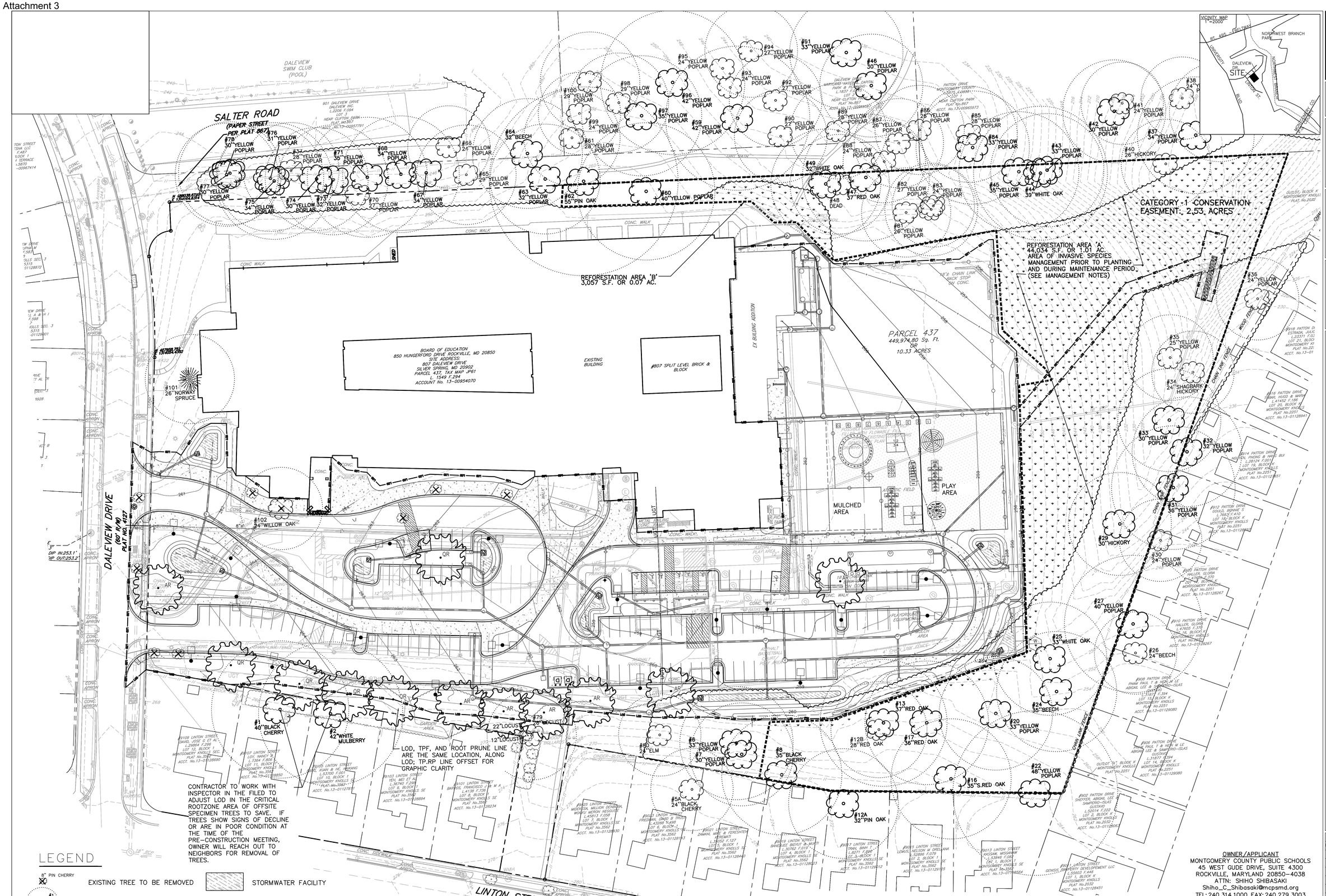
REV	DATE	DESCRIPTION

PROJECT NO.: 18-038
DATE: 05/03/2019

AMDENDED FOREST CONSERVATION PLAN

L-1.0

Attachment 3



LEGEND

- 8" PIN CHERRY — EXISTING TREE TO BE REMOVED
- SIGNIFICANT TREE W/CRZ TO BE REMOVED
- EXISTING TREE
- EXISTIN HEDGE/SCRUB AREA
- EXISTING FOREST BOUNDARY
- LIMITS OF DISTURBANCE
- CATEGORY I CONSERVATION EASEMENT
- REFORESTATION AREA
- STORMWATER FACILITY
- PREVIOUS FOREST CREDIT TREES REPLACEMENT LOCATION

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

LANDSCAPE PLANT LIST

KEY	QTY.	BOTANICAL NAME / COMMON NAME	SIZE	COND.	REMARKS
AR	7	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY MAPLE	2-2½" CAL.	B&B	
QR	5	QUERCUS RUBRA NORTHERN RED OAK	2-2½" CAL.	B&B	

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

DATE MICHAEL A. NORTON

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
P.443.542.9199 WWW.NORTONLANDDESIGN.COM

OWNER/APPLICANT
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45 WEST GUDE DRIVE, SUITE 4300
ROCKVILLE, MARYLAND 20850-4038
ATTN: SHIHO SHIBASAKI
Shiho_C_Shibasaki@mcpsmd.org
TEL: 240.314.1000 FAX: 240.279.3003

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Contact Person or Owner: MR. SETH P. ADAMS (Printed Name)
Address: 45 WEST GUDE DRIVE, SUITE 4300
Phone and Email: 240-314-1000 SETH_P_ADAMS@MCPSMD.ORG
Signature: _____

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PROFFITT & ASSOCIATES ARCHITECTS

ISSUE

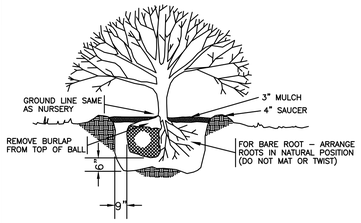
REV	DATE	DESCRIPTION

PROJECT NO.: 18-038
DATE: 05/03/2019

AMDENDED FOREST CONSERVATION CANOPY COVERAGE CREDIT PLAN

L-1.1

Attachment 3



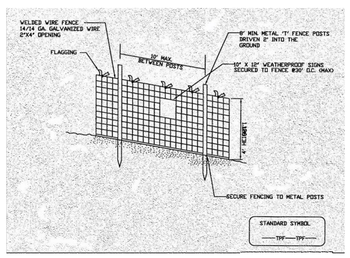
NOTE:
EVERGREEN AND DECIDUOUS SHRUBS TO BE PLANTED IN SAME MANNER

NO SCALE

SHRUB PLANTING

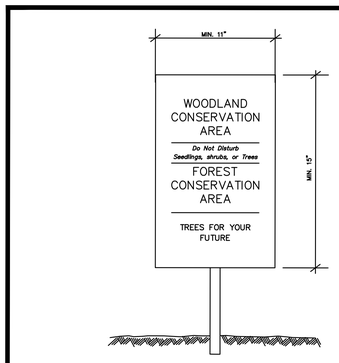
Tree Protection Fence Detail

Not to scale



NOTES

1. Practice may be combined with sediment control fencing.
2. Location and limits of fencing should be coordinated in field with arborist.
3. Boundaries of protection area should be staked prior to installing protective device.
4. Root damage should be avoided.
5. Protection signage is required.
6. Fencing shall be maintained throughout construction.

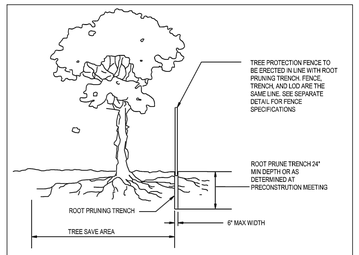


NOT TO SCALE

NOTE:
1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.
4. Signage is to be 50'O.C. and on all corners, minimum.

NO SCALE

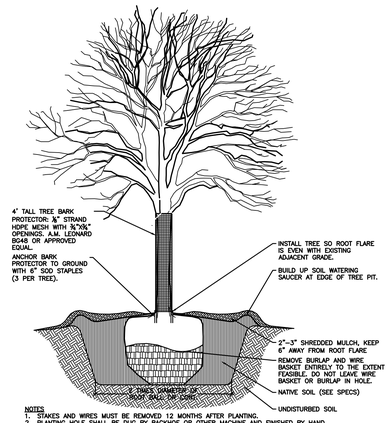
SIGNAGE



NOTES:
1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.
2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.
3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR .
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.
5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.
6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL

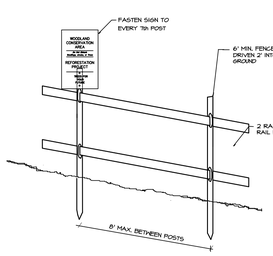
NTS



NOTES
1. STAKES AND WIRES MUST BE REMOVED 12 MONTHS AFTER PLANTING.
2. PLANTING HOLE SHALL BE DUG BY BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
3. 8" SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC CONSTRUCTION MANAGER, AN AREA UP TO 3 TIMES THE DIAMETER OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND SOIL SHALL BE AMENDED.
4. PRUNE ONLY DEAD, DECAYING, BROKEN, CROSSING OR INWARD GROWING BRANCHES. NEVER DAMAGE OR CUT LEADER.

PLANTING DETAIL FOR DECIDUOUS

PERMANENT TWO RAIL, SPLIT RAIL FENCE



NOTE:
1. Retention area will be set as part of the review process.
2. Boundaries of Retention Areas should be staked prior to installing protective device.
3. Root damage should be avoided.
4. Protective signage is required.

PERMANENT TREE PROTECTION

NO SCALE

(INSTALLED AS PART OF PREVIOUS PROJECT)

SPECIMEN TREE MITIGATION PLANT SCHEDULE							
KEY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	SPACING	QUANTITY	COMMENTS
TREES:							
QP	QUERCUS PHELLOS	WILLOW OAK	3" cal.	B&B	AS SHOWN	7	

TOTAL DBH INCHES OF SPECIMEN TREES THAT HAS MORE THAN 30% CRZ IMPACTS
82 X 0.25 = 20.50 REQUIRED CALIPER INCHES MITIGATION
TOTAL DBH INCHES OF SPECIMEN TREE REMOVED ÷ 3" CALIPER TREES
= TOTAL TREES REQUIRED TO BE PLANTED
7 TOTAL 3" CALIPER TREES REQUIRED TO BE PLANTED

PLANTING SCHEDULE

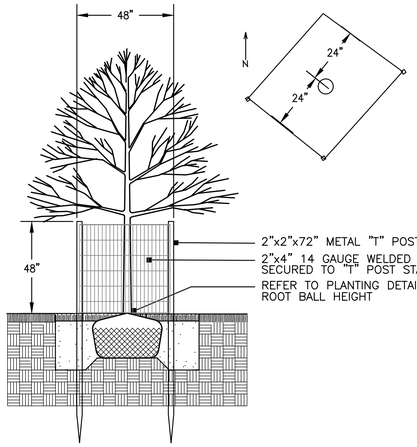
TASKS	MONTHS											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER												
PLANTING SEEDINGS, WHIPS												
MINIMUM MONITORING			*				*				*	
FERTILIZER * (IF NEEDED)												
WATER **												
PRUNING												

KEY

*	ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS
	GREATLY RECOMMENDED
	RECOMMENDED WITH ADDITIONAL CARE
	RECOMMENDED
*	DEPENDENT UPON SITE CONDITIONS
**	DEPENDENT UPON SITE CONDITIONS; WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

NOTES:

The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.



Tree Shelter Detail *

(PLEASE SEE TREE PLANTING DETAILS FOR INSTALLATION OF DECIDUOUS & EVERGREEN TREES)

NOT TO SCALE

*SHELTERS TO BE INSTALLED ON THE FLAGGED TREE STUMPS IN THE FIELD AS WELL

OWNER/APPLICANT
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45 WEST GUDE DRIVE, SUITE 4300
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DATE MICHAEL A. NORTON

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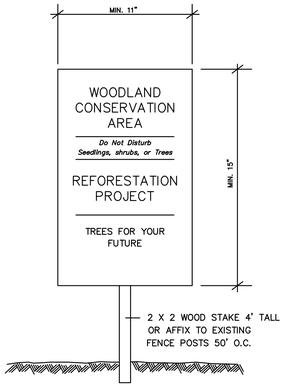
WATER CLASS I	WATERSHED NORTHWEST BRANCH		FEMA FLOODPLAIN MAP PANEL # 24031C0390D
TRIBUTARY NORTHWEST BR.			
TAX MAP JP561	200 SHEET 211NE01	ADC MAP PAGE 37	GRID F7/F8
SCALE AS SHOWN	DATE MAY. 2019	NLD PROJ. NO. 18-038	SHEET NO. L-1.2

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. MR2OXXXX including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: MONTGOMERY COUNTY PUBLIC SCHOOLS
Printed Company Name
Contact Person or Owner: MR. SETH P. ADAMS
Printed Name
Address: 45 WEST GUDE DRIVE, SUITE 4300
Phone and Email: 240-314-1000 SETH_P_ADAMS@MCPSMD.ORG
Signature: _____

SIGNAGE



NOT TO SCALE

NOTE:
1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.

*INSTALL SIGNS 50' ON CENTER AROUND PLANTING AREA

(INSTALLED AS PART OF PREVIOUS PROJECT)

FOREST CONSERVATION WORKSHEET
MONTOMGERY KNOLLS MIDDLE SCHOOL

5-Aug-02

NET TRACT AREA:							
A. Total tract area ...							10.34
B. Land dedication acres (parks, county facility, etc.) ...							0.00
C. Land dedication for roads or utilities (not being constructed by this plan) ...							0.00
D. Area to remain in commercial agricultural production/use ...							0.00
E. Other deductions (specify)							0.00
F. Net Tract Area .....=							10.34
LAND USE CATEGORY: (from *Trees Technical Manual*) Input the number "1" under the appropriate land use, limit to only one entry.							
	ARA	MDR	IDA	HDR	MPD	CIA	
	0	0	1	0	0	0	
G. Afforestation Threshold ...					15%	x F =	1.55
H. Conservation Threshold ...					20%	x F =	2.07
EXISTING FOREST COVER:							
I. Existing forest cover .....=							2.24
J. Area of forest above afforestation threshold .....=							0.69
K. Area of forest above conservation threshold .....=							0.17
BREAK EVEN POINT:							
L. Forest retention above threshold with no mitigation ....=							2.10
M. Clearing permitted without mitigation .....=							0.14
PROPOSED FOREST CLEARING:							
N. Total area of forest to be cleared .....=							0.79
O. Total area of forest to be retained .....=							1.45
PLANTING REQUIREMENTS:							
P. Reforestation for clearing above conservation threshold ....=							0.04
Q. Reforestation for clearing below conservation threshold ....=							1.24
R. Credit for retention above conservation threshold .....=							0.00
S. Total reforestation required .....=							1.28
T. Total afforestation required .....=							0.00
U. Credit for landscaping (may not exceed 20% of "S") .....=							0.20
V. Total reforestation and afforestation required .....=							1.08

FOREST CREDIT TABULATION	ACRES
ONSITE LANDSCAPE CREDIT	0.10 (TREE SAVE AREA O 0.10 ACRES)
ONSITE CANOPY COVERAGE	0.10 (SEE WORKSHEET L-1.1)
REFORESTATION	1.08
OFFSITE PLANTING REQUIRED	0

Significant/Specimen Tree Summary 24"+

	Tree #	Species Scientific Name	Species Common Name	D.B.H (inches)	Critical Root Zone (Sq.Ft)	Critical Root Zone Impacts	Percent of CRZ Impacted (S/F)	Tree Condition	Comments	Status	Variance
*	1	PRUNUS SEROTINA	BLACK CHERRY	40	11310	4001	35%	GOOD	OFFSITE	SAVE AND PROTECT	YES
*	2	MORUS ALBA	WHITE MULBERRY	42	12469	4980	40%	GOOD	OFFSITE	SAVE AND PROTECT	YES
	3	PRUNUS SEROTINA	BLACK CHERRY	26	4778	0	0%	GOOD	OFFSITE	REMOVED	N/A
	4	ROBINIA PSEUDOACACIA	BLACK LOCUST	26	4778	0	0%	GOOD		REMOVED	N/A
	5A	PRUNUS SEROTINA	BLACK CHERRY	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	6	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	1782	23%	GOOD		SAVE AND PROTECT	YES
	7	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	615	10%	GOOD		SAVE AND PROTECT	YES
	8	PRUNUS SEROTINA	BLACK CHERRY	35	8659	95	1%	GOOD		SAVE AND PROTECT	YES
	9	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD		REMOVED	N/A
	10	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	35	8659	0	0%	FAIR	(35,19)	REMOVED	N/A
	11	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0%	POOR	ALMOST DEAD	REMOVED	N/A
	12A	QUERCUS PALUSTRIS	PIN OAK	32	7238	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	12B	QUERCUS RUBRA	RED OAK	28	5542	1066	19%	GOOD		SAVE AND PROTECT	N/A
	13	QUERCUS RUBRA	RED OAK	37	9677	2961	31%	GOOD		SAVE AND PROTECT	YES
	14	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	36	9161	0	0%	GOOD		REMOVED	NO
	15	QUERCUS RUBRA	RED OAK	34	8171	0	0%	POOR		REMOVED	NO
	16	QUERCUS FALCATA	SOUTHERN RED OAK	35	8659	0	0%	GOOD		SAVE AND PROTECT	NO
	17	QUERCUS RUBRA	RED OAK	36	9161	1584	17%	GOOD		SAVE AND PROTECT	YES
	18	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0%	FAIR		REMOVED	N/A
	19	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD		REMOVED	N/A
	20	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	299	4%	GOOD		SAVE AND PROTECT	YES
	21	QUERCUS RUBRA	RED OAK	43	13970	0	0%	POOR	SPLIT BY LIGHTENING	REMOVED	N/A
	22	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	48	16286	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	23	FAGUS GRANDIFOLIA	AMERICAN BEECH	36	9161	0	0%	GOOD	OFFSITE	REMOVED	N/A
	24	FAGUS GRANDIFOLIA	AMERICAN BEECH	35	8659	137	2%	GOOD		SAVE AND PROTECT	YES
	25	QUERCUS ALBA	WHITE OAK	33	7698	924	12%	GOOD		SAVE AND PROTECT	YES
	26	FAGUS GRANDIFOLIA	AMERICAN BEECH	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	27	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	40	11310	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	28	FAGUS GRANDIFOLIA	AMERICAN BEECH	26	4778	0	0%	GOOD		REMOVED	N/A
	29	CARYA GLABRA	PIGNUT HICKORY	30	6362	0	0%	GOOD		SAVE AND PROTECT	N/A
	30	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	31	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	36	9161	0	0%	GOOD	POSSIBLE CO-OWNED	SAVE AND PROTECT	NO
	32	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	7238	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	33	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD		SAVE AND PROTECT	NO
	34	CARYA OVATA	SHAGBARK HICKORY	24	4072	0	0%	GOOD		SAVE AND PROTECT	N/A
	35	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	0	0%	POOR	(12,25)	SAVE AND PROTECT	N/A
	36	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD		SAVE AND PROTECT	N/A
	37	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	38	10207	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	38	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	39	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	40	CARYA GLABRA	PIGNUT HICKORY	26	4778	0	0%	GOOD		SAVE AND PROTECT	N/A
	41	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	42	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	43	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	0	0%	GOOD		SAVE AND PROTECT	NO
	44	QUERCUS ALBA	WHITE OAK	39	10751	0	0%	GOOD		SAVE AND PROTECT	NO
	45	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	35	8659	0	0%	GOOD		SAVE AND PROTECT	NO
	46	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	47	QUERCUS RUBRA	RED OAK	37	9677	0	0%	GOOD		SAVE AND PROTECT	NO
	48	QUERCUS RUBRA	RED OAK	29	5945	0	0%	DEAD		TO BE REMOVED	N/A
	49	QUERCUS ALBA	WHITE OAK	32	7238	0	0%	GOOD		SAVE AND PROTECT	NO
	50	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	0	0%	GOOD	(24,29,33)	REMOVED	N/A
	51	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	40	11310	0	0%	FAIR	HEARTROT	REMOVED	N/A
	52	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	FAIR	HEARTROT, (27,30)	REMOVED	N/A
	53	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	0	0%	FAIR	HEARTROT	REMOVED	N/A
	54	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	7238	0	0%	GOOD	10" LEADER DEAD,(19,24,32)	REMOVED	N/A
	55	QUERCUS PHELLOS	WILLOW OAK	42	12469	0	0%	FAIR	CODOMINANT LEADER DEAD	REMOVED	N/A
	56	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	POOR	HEARTROT	REMOVED	N/A
	57	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	31	6793	0	0%	GOOD		REMOVED	N/A
	58	CARYA GLABRA	PIGNUT HICKORY	24	4072	0	0%	GOOD		REMOVED	N/A
	59	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	42	12469	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	60	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	40	11310	0	0%	GOOD		SAVE AND PROTECT	NO
	61	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0%	GOOD	OFFSITE,(12,28)	SAVE AND PROTECT	N/A
	62	QUERCUS FALCATA	SOUTHERN RED OAK	55	21382	0	0%	FAIR	POSSIBLE CO-OWNED	SAVE AND PROTECT	NO
	63	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	7238	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	64	FAGUS GRANDIFOLIA	AMERICAN BEECH	32	7238	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	65	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	66	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	67	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	34	8171	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	68	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	34	8171	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	69	PRUNUS SEROTINA	BLACK CHERRY	24	4072	0	0%	GOOD	(14,24)	REMOVED	N/A
	70	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0%	GOOD		SAVE AND PROTECT	N/A
	71	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	72		NO TREE		0						
	73	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	32	7238	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	74	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	75	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	34	8171	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	76	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	31	6793	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	77	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	78	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	79	ROBINIA PSEUDOACACIA	BLACK LOCUST	26	4778	1418	30%	GOOD		SAVE AND PROTECT	NO
	80	ULMUS AMERICANA	AMERICAN ELM	24	4072	938	23%	GOOD		SAVE AND PROTECT	N/A
	81	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0%	GOOD		SAVE AND PROTECT	N/A
	82	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0%	GOOD		SAVE AND PROTECT	N/A
	83	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD		SAVE AND PROTECT	N/A
	84	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	85	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	86	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	88	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	89	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	90	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	91	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	92	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	93	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	94	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	95	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	96	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	42	12469	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	97	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	35	8659	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	NO
	98	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	99	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	100	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0%	GOOD	OFFSITE	SAVE AND PROTECT	N/A
	101	PICEA ABIES	NORWAY SPRUCE	26	4778	0	0%	GOOD		SAVE AND PROTECT	N/A
	102	QUERCUS PHELLOS	WILLOW OAK	24	4072	4072	100%	GOOD		TO BE REMOVED	N/A

* BOLD TYPE DENOTES SPECIMEN TREES

Condition Scoring System	
No Apparent Problems	Excellent
Minor Problems	Good
Major Problems	Fair
Extreme Problems	Poor

* CONTRACTOR TO WORK WITH INSPECTOR IN THE FILED TO ADJUST LOD IN THE CRITICAL ROOTZONE AREA OF OFFSITE SPECIMEN TREES TO SAVE. IF TREES SHOW SIGNS OF DECLINE OR ARE IN POOR CONDITION AT THE TIME OF THE PRE-CONSTRUCTION MEETING, OWNER WILL REACH OUT TO NEIGHBORS FOR REMOVAL OF TREES.

Proffitt & Assoc. ARCHITECTS
49 SOUTH CARROLL STREET
FREDERICK, MARYLAND 21701
PHONE (301) 662-8532
FAX (301) 662-4192
info@proffittandassociates.com

SEAL

BID DOCUMENTS

CLASSROOM ADDITION AND RENOVATION FOR:
MONTGOMERY KNOLLS ELEMENTARY SCHOOL
MONTGOMERY COUNTY PUBLIC SCHOOLS
807 DALEVIEW DRIVE, SILVER SPRING, MD 20901
PARCEL 437, TAX MAP JP61, LIBER 1549, FOLIO 0294

PROFFITT & ASSOCIATES ARCHITECTS

ISSUE		
REV	DATE	DESCRIPTION

PROJECT NO.: 18-038
DATE: 05/03/2019

AMDENDED FOREST CONSERVATION PLAN NOTES & DETAILS

L-1.2

Attachment 4

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
BALT.443.542.9199 x101 WWW.NORTONLANDDESIGN.COM

May 31, 2019

Maryland National Capital Park and Planning Commission (M-NCPPC)
8787 Georgia Avenue
Silver Spring, Maryland 20910

Re: Montgomery Knolls Elementary School
Request for Specimen Tree Variance
MR# -
Norton# 18-038

Dear Intake Division,

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 Montgomery Knolls Elementary School is located at 807 Daleview Dr in Silver Spring, Montgomery County, Maryland. This is a 10.34-acre site that owned by the Montgomery County Board of Education. The site currently hosts the existing school, associated parking, athletic fields and play areas. The site is bordered by residential properties on North, West, and South. The site has vehicle access from Daleview Dr.

Proposed construction consists of a new building addition, new play surfaces, improved pedestrian & vehicle circulation, parking, stormwater management and updates for ADA accessibility.

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;

Attachment 4

(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 is to provide the community with an updated safe access to school facility to separate parent & bus drop off.

This work will require disturbance of the root zones of a total of ten (10) specimen trees. None of the ten (10) impacted trees will be required to be removed.

If MCPS is 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 school parking, amenities and stormwater facilities. 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 the County were required to keep all improvements outside the root zones of the specimen trees, the building, safe access drive aisles, and parking 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 compact 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. Additional improvements to the property include control of erosion and outfall stabilization. Therefore, the proposed activity will not degrade the water quality of the downstream areas and will not result in *measurable degradation in water quality*.

Attachment 4

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

Response: Presently there is previously approved existing category 1 conservation easement along the east portion of the property that will be retained. Additional canopy planting will serve to create greater ecological quality while establishing further buffering of adjacent land uses (residential).

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 school addition 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 circumstance*s 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 Summary 30"+

Tree #	Species Scientific Name	Species Common Name	D.B.H (inches)	Critical Root Zone (Sq.Ft)	Critical Root Zone Impacts	Percent of CRZ Impacted (SF)	Tree Condition	Comments	Status	Variance
*1	PRUNUS SEROTINA	BLACK CHERRY	40	11310	4001	35%	GOOD	OFFSITE	SAVE AND PROTECT	YES
*2	MORUS ALBA	WHITE MULBERRY	42	12469	4980	40%	GOOD	OFFSITE	SAVE AND PROTECT	YES
6	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	1782	23%	GOOD		SAVE AND PROTECT	YES
7	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	30	6362	615	10%	GOOD		SAVE AND PROTECT	YES
8	PRUNUS SEROTINA	BLACK CHERRY	35	8659	95	1%	GOOD		SAVE AND PROTECT	YES
13	QUERCUS RUBRA	RED OAK	37	9677	2961	31%	GOOD		SAVE AND PROTECT	YES
17	QUERCUS RUBRA	RED OAK	36	9161	1584	17%	GOOD		SAVE AND PROTECT	YES
20	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	33	7698	299	4%	GOOD		SAVE AND PROTECT	YES
24	FAGUS GRANDIFOLIA	AMERICAN BEECH	35	8659	137	2%	GOOD		SAVE AND PROTECT	YES
25	QUERCUS ALBA	WHITE OAK	33	7698	924	12%	GOOD		SAVE AND PROTECT	YES

*Contractor to work with inspector in the field to adjust LOD in the critical rootzone area of offsite specimen trees to save. If trees show signs of decline or are in poor condition at the time of the pre-construction meeting. Owner will reach out to neighbors for removal of trees.

Attachment 4

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. 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