



Takoma Park Middle School, Preliminary Forest Conservation Plan, MR2018036

TS

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CB

Michael Brown, Planning Supervisor, Area 1 Division, Michael.Brown@montgomeryplanning.org, 301.495.4566

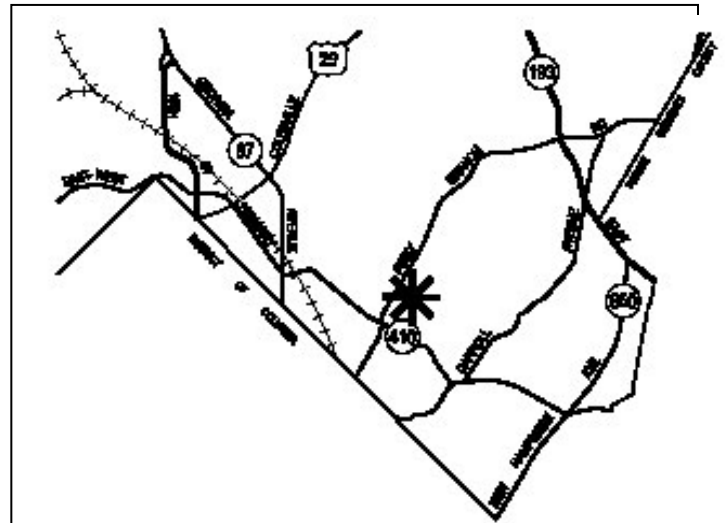
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Mark Pfefferle, Interim Chief, Area 1 Division, Mark.pfefferle@montgomeryplanning.org, 301.495.4730

Description

Completed: 8/31/18

- Preliminary Forest Conservation Plan associated with the Takoma Park Middle School additions;
- Located at 7611 Piney Branch Road, Takoma Park, Maryland;
- 18.10-acre site zoned R-60 in the 2000 *Takoma Park Master Plan* area;
- Applicant: Montgomery County Public Schools;
- Acceptance Date: June 13, 2018.



Summary

- This Preliminary/Final Forest Conservation Plan accompanies Mandatory Referral MR2018017 discussed in a separate staff report.

Staff recommends approval with conditions.

The Applicant proposes to:

- Preserve 1.82 acres of forest; clear 0.21 acres of forest; re/afforestation required, 1.11 acres; onsite reforestation provided, 1.17 acres;
- Remove one specimen tree with impacts to the critical root zones of 5 specimen trees requiring a variance, per Section 22A-12(b)(3);
- Plant (4) 3-inch caliper canopy landscape trees as mitigation for the loss of one 49-inch specimen tree.

Pursuant to Chapter 22A of the County Code, the Board’s actions on Forest Conservation Plans are regulatory and binding.

Recommendation and Conditions of Approval

Staff recommends approval of Preliminary/Final Forest Conservation Plan MR2018036, subject to the following conditions:

1. The Applicant must record a Category I Conservation Easement of 2.99 acres, as shown on the Approved Preliminary Forest Conservation Plan. The Conservation Easement approved by the M-NCPPC Office of the General Counsel must be recorded in the Montgomery County Land Records by deed prior to the start of any demolition, clearing, or grading on the Subject Property, and the Liber Folio for the easement must be referenced on the record plat.
2. The Applicant must plant 1.17 acres of forest on the Takoma Park Middle School property to be included in the total area of the Category I Conservation Easement.
3. The Applicant must plant all reforestation and landscape credit areas within one year of construction completion.
4. The Applicant must prepare a Final Forest Conservation Plan, which must show the planting of four (4), 3-inch caliper native shade trees as mitigation for the loss of one 49-inch specimen tree requiring a variance. The trees must be planted within one year of construction completion. All trees must be planted outside of the Category I Conservation Easement. Adjustments to the planting locations of these trees is permitted with the approval of the M-NCPPC forest conservation inspector.
5. 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.
6. The Applicant must install permanent Conservation Easement signage along the perimeter of the conservation easements.
7. The Applicant must submit a forest conservation maintenance and management agreement and have it approved by the Planning Department prior to any demolition, clearing, or grading on site.
8. The Final Sediment Control Plan must depict the limits of disturbance (LOD) identical to the LOD on the approved Final Forest Conservation Plan.
9. The Final Forest Conservation Plan must be amended to address outstanding items and be consistent with the approved Preliminary Forest Conservation Plan.

PROJECT DESCRIPTION

Montgomery County Public Schools (MCPS) has submitted a mandatory referral for the expansion of the existing Takoma Park Middle School. The project will include the construction of two additions to be built in two phases. The project requires the removal of 0.21 acres of forest due to construction needs, stormdrain lines, and stormwater outfall repairs. One specimen tree will be removed for the phase II of the expansion of the school.

Site Description

The Takoma Park Middle School at 7611 Piney Branch Road is seated on 18.10-acres owned by the Montgomery County Board of Education. The site contains an existing school, associated parking lots, athletic fields, play areas, and a portion of a linear stream valley park and forest. The site is in a residential neighborhood with single family residential (R60) properties on three sides. Two connecting parks abut the school: to the south adjacent to the tennis courts the City of Takoma Park owns a 2.29-acre parcel called Hefner Park; to the southeast is Takoma-Piney Branch Park owned by the Maryland National Capital Park and Planning Commission. Access roads to the school are Piney Branch Road to the north and Grant Avenue to the southwest. Travis Drive, a paper road runs along the south side of the property.



Figure 1: Vicinity Map

The site is located in the Sligo Creek watershed with a Use I Water Category. A channelled unnamed tributary runs along the eastern border of the property and daylights approximately 120-feet before leaving the site.

ANALYSIS

Environmental Guidelines

Staff approved a Natural Resource Inventory/Forest Stand Delineation (NRI/FSD #420180710) (Attachment 1) for the school site on 12/1/2017. Of the 18.10 acres of land, 2.03 acres are contiguous forest associated with adjacent parkland. There is an unnamed channelized stream along the eastern side of the property that daylights approximately 120 feet prior to leaving the site. There are no wetlands on the site.

Forest Conservation

The site is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) and the Applicant has submitted a Preliminary Forest Conservation Plan (Attachment 2) in conjunction with the Mandatory Referral Plan. The site includes 2.03 acres of existing forest onsite containing a mix of deciduous hardwoods dominated by sycamore, sliver maple, and tulip poplar. The forest is dappled with large specimen trees throughout. The forest is considered a moderate priority for retention. The Applicant proposes to clear 0.21 acres of forest and retain 1.82 acres of forest. Most of the forest removal is to accommodate the construction needs of the Phase II addition on the south-eastern side of the existing school. Additional clearing is needed for the repairs of the stormwater discharge facility along the eastern property border. As mitigation for forest removal the Applicant will plant 1.17 acres of forest which will sizably increase the size of the onsite and offsite linear contiguous forest associated with the adjacent parkland. The total forest area including the afforestation area to be put into a Forest Conservation Easement for protection is 2.99 acres.

Forest Conservation Variance

Section 22A-12(b) (3) 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 June 6th, 2018, which was revised on August 21, 2018 for the impacts to specimen trees (Attachment 3). The revision requests removal of one specimen tree (49-inch mulberry) with impacts to the critical root zones of 5 specimen trees. The original application requested the removal of two specimen trees but impact reductions measures requested by the City of Takoma Park were taken allowing for the preservation of one additional

specimen tree. Details of the protected trees to be removed and impacted are provided in Figure 2 and Table 1.

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 middle school expansion and the repairs to the existing stormwater outfalls. The landscape grading has been minimized around the school to reduce impacts and save specimen trees. Forest impacts have been reduced to the extent possible while still providing the repairs and restoration needed for the stormwater outfalls. 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 as needed nor repair and replace the stormwater management outfalls. One specimen tree is proposed for removal.

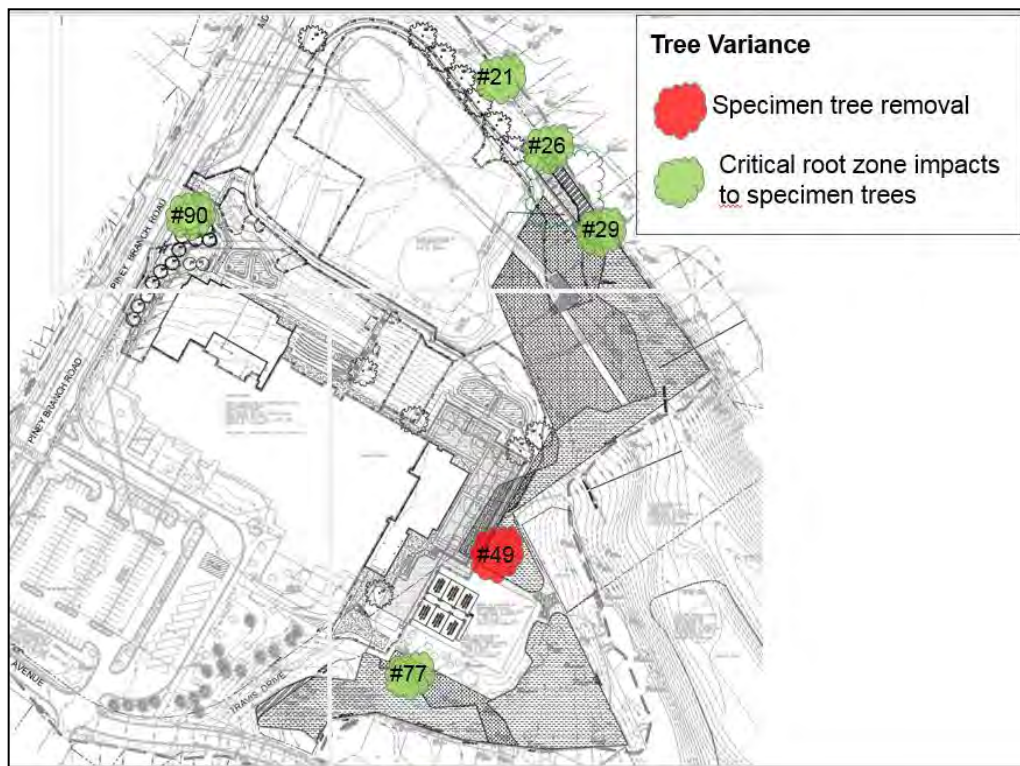


Figure 2: Variance Tree Impacts

Table 1: Variance Tree Table

ID	Species	Size	Condition	Notes
21	White oak	43"	Good	Impacts only
26	Locust	33"	Poor	Impacts only
29	White Oak	44"	Good	Impacts only
49	Mulberry	49"	Poor	Removal
77	Mulberry	32"	Poor	Impacts only
90	Tulip poplar	30"	Good	Impacts only

Variance Findings - Based on the review of the variance request and the proposed Preliminary 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 specified trees is a result of the need to build a new school facility and associated stormwater management improvements. The size and configuration of the school preclude alternative site designs that would allow the variance trees to remain undisturbed. The Applicant has met with the City of Takoma Park arborist to consider alternatives to minimize impacts and provide maximum tree protection measures.

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 the constraints of site, the requirements of the construction for the new additions and necessities for circulation and stormwater management. The Applicant has designed the proposed school to minimize forest and removal.

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 is the minimum disturbance necessary to construct the proposed additions associated upgrades to meet the needs of the growing student population and curriculum.

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

The site will be developed in accordance with the Maryland Department of the Environment criteria for stormwater management, including the provision of Environmental Site Design to protect natural resources to the maximum extent practicable. Water quality should improve with the proposed development and State water quality standards will not be violated. The proposed work will include the construction of two bioretention areas to treat the runoff from the new additions. Upgrades to the stormwater outfall will be made, and the planting of 1.17 acres of forest will occur. As replacement for the loss of the 49-inch Morus (mulberry) tree, the Applicant will plant 4 canopy trees 3-inches in diameter or greater. The intent is to replace the form and function of the variance tree proposed for removal. These measures are provided to improve water quality and the health of the associated community.

Mitigation for Trees Subject to the Variance Provisions

The Applicant is requesting a variance to remove one specimen tree with impacts to the critical root zones of 5 additional specimen trees. Mitigation is required at a rate of 1" caliper per 4" DBH removed,

using a minimum 3” caliper native shade tree. The Applicant will plant (4) 3” caliper trees, which will be shown on the Final Forest Conservation Plan.

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 reviewed the variance request and recommended approval with mitigation (Attachment 4).

Variance Recommendation

Staff recommends that the variance be granted.

CONCLUSION

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

Attachments

1. Approved Natural Resource Inventory
2. Preliminary Forest Conservation Plan
3. Variance request

RITCHIE AVENUE

MD. ROUTE 320

PINEY BRANCH ROAD

NRI/FSD TABULATION TABLE

ACREAGE OF TRACT:	18.12
ACREAGE OF EX. FOREST:	2.03
ACREAGE OF EXISTING WETLANDS:	0.00
ACREAGE OF FORESTED WETLANDS:	0.00
ACREAGE OF WETLAND BUFFERS:	0.00
ACREAGE OF STREAM BUFFERS:	1.67
ACREAGE OF FORESTED STREAM BUFFER:	0.62
ACREAGE OF 100 YEAR FLOODPLAIN:	0.00
ACREAGE OF STEEP SLOPES:	3.19
LINEAR EXTENT OF STREAMS:	101'
AVERAGE WIDTH OF STREAM BUFFER:	150'

LEGEND

- 14" RED OAK EXISTING TREE <24" DBH
- #1 26" RED OAK EXISTING SIGNIFICANT TREE >24" AND <30" DBH WITH TAG NUMBER
- #1 32" RED OAK EXISTING SPECIMEN TREE >30" DBH WITH TAG NUMBER
- FOREST TREELINE
- SCRUB AREA/SCREENING TREES/NON-FOREST CANOPY
- SOIL BOUNDARY
- SURVEY TOPO
- LIMITS OF SURVEY
- STEEP SLOPES ≥ 25%
- MODERATE SLOPES 15% - 25%
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EXISTING STREAM
- SB-SB-SB STREAM BUFFER

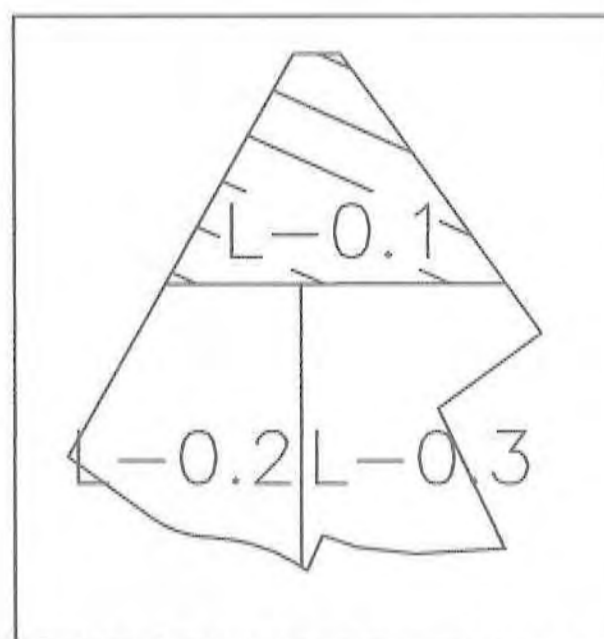
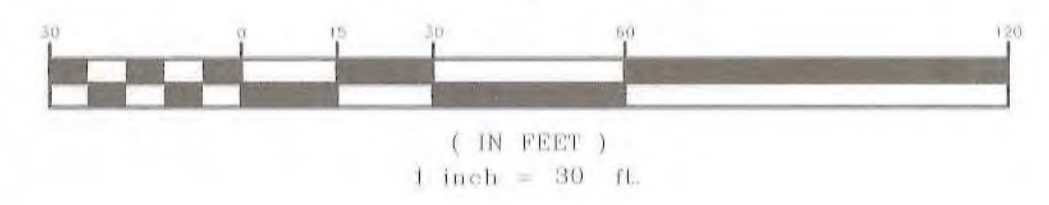
CERTIFICATION OF QUALIFIED PROFESSIONAL

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

11.22.17
DATE

MICHAEL A. NORTON
MONTGOMERY COUNTY REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
COMAR 08.18.06.01
QUALIFIED PROFESSIONAL

GRAPHIC SCALE



DRAWING KEY

**NATURAL RESOURCE INVENTORY/
FOREST STAND DELINEATION**

TAKOMA PARK MIDDLE SCHOOL

PREPARED FOR/APPLICANT
MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDE DRIVE, SUITE 4300
ROCKVILLE, MARYLAND 20850

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5140 DORSEY HALL DRIVE, 2ND FLOOR
ELLSWORTH CITY, MD 21042
BALT. 443.542.9199 DC 240.342.2329 WWW.NORTON.LANDDESIGN.COM

REVISIONS
11.22.17 PER MNCPPC COMMENTS



Received
MNCPPC
NOV 27 2017
Montgomery County
Planning Department

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

NRI/FSD PLAN

Approved

NRI/FSD NO. 470180210
Date Approved: November 3, 2017
Expiration Date: December 3, 2018
Signature: [Signature] Date: 11/03/17

WATER CLASS	USE I, P	WATERSHED	SLIGO CREEK	FEMA FLOODPLAIN MAP PANEL #	24031C 0460D
TAX MAP	JN342	2000 SHEET	209NW01	ADD. MAP PAGE	37 GRID C-11
SCALE	AS SHOWN	DATE	NOVEMBER 2017	PROJ. NO.	16-140
				SHEET NO.	L-0.1

MATCHLINE SHEET L-0.2

MATCHLINE SHEET L-0.3

BOARD OF EDUCATION OF
MONTGOMERY COUNTY
L. 913 F. 353
ACCT NO. 1058277

FOREST STAND #1
43,354.38 SF / 1.00 ACRES
DOMINATED BY 30" OAK
CANOPY INCLUDES AMERICAN BEECH
UNDERSTORY INCLUDES
BEECH
PRIORITY 1. HIGH RETENTION

Tree #	Species Scientific Name	Species Common Name	D.B.H (inches)	Tree Condition	Comments
1	QUERCUS ALBA	WHITE OAK	36	GOOD	
2	QUERCUS ALBA	WHITE OAK	33	GOOD	
3	QUERCUS PHELLOS	WILLOW OAK	24	FAIR	IVY, VINES, LOTS OF GROWTH
4	MORUS RUBRA	RED MULBERRY	24	FAIR	SPLITS AT 2'; 6 LEADERS(4,4.6,7.8,8)
5	MORUS RUBRA	RED MULBERRY	24	GOOD	SPLITS AT 1'; 8 LEADERS(10,8.6,12,14.4,8,3)
6	MORUS RUBRA	RED MULBERRY	30	FAIR	LIMB, DIE BACK, SPLITS AT 2'; 3 LEADERS
7	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
8	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	27	GOOD	
9	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
10	ACER SACCHARUM	CRIMSON KING NORWAY MAPLE	30	GOOD	
11	GLEDTISIA SSP.	LOCUST	24	FAIR	IVY, VINES, LOTS OF GROWTH
12	ULMUS SSP.	ELM	40	GOOD	
13	QUERCUS ALBA	WHITE OAK	27	GOOD	
14	QUERCUS ALBA	WHITE OAK	28	GOOD	
15	QUERCUS ALBA	WHITE OAK	30	GOOD	
16	QUERCUS ALBA	WHITE OAK	26	GOOD	
17	QUERCUS ALBA	WHITE OAK	26	GOOD	
18	QUERCUS ALBA	WHITE OAK	24	GOOD	
19	QUERCUS ALBA	WHITE OAK	24	GOOD	
20	ULMUS SSP.	ELM	28	GOOD	SPLITS AT 2.5'
21	QUERCUS ALBA	WHITE OAK	43	GOOD	
22	LIRODENDRON TULPIFERA	TULIP POPLAR	28	GOOD	
23	QUERCUS ALBA	WHITE OAK	24	FAIR	BROKEN LEADER
24	GLEDTISIA SSP.	LOCUST	25	FAIR	VINES, DEAD LIMBS
25	GLEDTISIA SSP.	LOCUST	28	POOR	VINES, DEAD LIMBS, LEANS TOWARDS BALL FIELD
26	GLEDTISIA SSP.	LOCUST	33	POOR	VINES, IVY, SPLIT TRUNK
27	MAGNOLIA GRANDIFLORA	MAGNOLIA	24	GOOD	
28	GLEDTISIA SSP.	LOCUST	28	POOR	VINES, IVY, TOTALLY CONSUMED
29	QUERCUS ALBA	WHITE OAK	44	GOOD	
30	QUERCUS ALBA	WHITE OAK	24	GOOD	
31	QUERCUS ALBA	WHITE OAK	24	POOR	IVY, DEAD LIMBS
32	FAGUS GRANDIFOLIA	BEECH	25	FAIR	VINES
33	LIRODENDRON TULPIFERA	TULIP POPLAR	24	GOOD	
34	QUERCUS RUBRA	RED OAK	40	POOR	
35	QUERCUS RUBRA	RED OAK	47	FAIR	DEAD LIMBS
36	LIRODENDRON TULPIFERA	TULIP POPLAR	33	GOOD	
37	PRUNUS SEROTINA	BLACK CHERRY	26	FAIR	VINES
38	QUERCUS ALBA	WHITE OAK	28	GOOD	
39	QUERCUS RUBRA	RED OAK	24	GOOD	
40	QUERCUS ALBA	WHITE OAK	27	GOOD	
41	QUERCUS ALBA	WHITE OAK	24	POOR	VINES, IVY
42	LIRODENDRON TULPIFERA	TULIP POPLAR	28	GOOD	
43	LIRODENDRON TULPIFERA	TULIP POPLAR	27	GOOD	
44	QUERCUS ALBA	WHITE OAK	35	GOOD	
45	QUERCUS ALBA	WHITE OAK	27	GOOD	
46	QUERCUS RUBRA	RED OAK	33	GOOD	
47	PLATANUS OCCIDENTALIS	SYCAMORE	24	FAIR	
48	QUERCUS ALBA	WHITE OAK	24	POOR	VINES, IVY
49	MORUS SSP.	MULBERRY	49	POOR	TWIN, IVY, VINES/SPLIT/FALLING
50	QUERCUS RUBRA	RED OAK	41	GOOD	
51	PLATANUS OCCIDENTALIS	SYCAMORE	26	GOOD	
52	LIRODENDRON TULPIFERA	TULIP POPLAR	24	GOOD	
53	LIRODENDRON TULPIFERA	TULIP POPLAR	27	GOOD	
54	LIRODENDRON TULPIFERA	TULIP POPLAR	28	GOOD	
55	LIRODENDRON TULPIFERA	TULIP POPLAR	25	GOOD	
56	PLATANUS OCCIDENTALIS	SYCAMORE	28	GOOD	
57	PLATANUS OCCIDENTALIS	SYCAMORE	36	GOOD	
58	PINUS STROBUS	WHITE PINE	24	GOOD	
59	PINUS STROBUS	WHITE PINE	24	GOOD	
60	ACER SACCHARUM	SILVER MAPLE	40	GOOD	
61	ACER SACCHARUM	SILVER MAPLE	30	FAIR	VINES, IVY
62	PLATANUS OCCIDENTALIS	SYCAMORE	28	DEAD	
63	MORUS SSP.	MULBERRY	40	POOR	SPLIT
64	ACER SACCHARUM	SILVER MAPLE	50	FAIR	DIE BACK, VINES, IVY
65	MORUS SSP.	MULBERRY	26	FAIR	DIE BACK, VINES, IVY
66	LIRODENDRON TULPIFERA	TULIP POPLAR	34	FAIR	IVY, VINES
67	FAGUS GRANDIFOLIA	BEECH	30	GOOD	
68	ACER SACCHARUM	SILVER MAPLE	30	FAIR	IVY
69	ACER RUBRUM	RED MAPLE	24	FAIR	IVY
70	ACER RUBRUM	RED MAPLE	38	FAIR	VINES, TWIN
71	PRUNUS SSP.	CHERRY	18,18,18	POOR	DEAD LIMBS
72	LIRODENDRON TULPIFERA	TULIP POPLAR	30,30,30	GOOD	SPLITS AT 2'
73	ACER SSP.	MAPLE	26	GOOD	
74	JUGLANS NIGRA	BLACK WALNUT	42	FAIR	VINE, IVY
75	GLEDTISIA SSP.	LOCUST	25	FAIR	IVY
76	MORUS SSP.	MULBERRY	35,(21,17,12)	GOOD	SPLITS AT 2'
77	MORUS SSP.	MULBERRY	32	POOR	IVY, VINES, DIE BACK
78	MAGNOLIA GRANDIFLORA	MAGNOLIA	25	FAIR	
79	ACER SACCHARUM	SILVER MAPLE	24	GOOD	SPLITS 3
80	PINUS STROBUS	WHITE PINE	28	POOR	VINES, DIE BACK
81	GLEDTISIA TRIACANTHOS	HONEY LOCUST	25	FAIR	
82	GLEDTISIA TRIACANTHOS	HONEY LOCUST	28	FAIR	
83	GLEDTISIA TRIACANTHOS	HONEY LOCUST	35	FAIR	VINES, IVY
84	ACER RUBRUM	RED MAPLE	30	GOOD	
85	ZELKOVA SERRATA	ZELKOVA	26	GOOD	
86	QUERCUS RUBRA	RED OAK	25	GOOD	TWIN
87	QUERCUS PHELLOS	WILLOW OAK	35	GOOD	
88	QUERCUS RUBRA	RED OAK	32	GOOD	
89	QUERCUS PHELLOS	WILLOW OAK	24	FAIR	PRUNED FOR POWER LINE
90	LIRODENDRON TULPIFERA	TULIP POPLAR	30	GOOD	
91	QUERCUS ALBA	WHITE OAK	24	GOOD	
92	LIRODENDRON TULPIFERA	TULIP POPLAR	25	GOOD	
93	LIRODENDRON TULPIFERA	TULIP POPLAR	25	GOOD	
94	MORUS SSP.	MULBERRY	45	POOR	SPLIT/LEANING

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



Larry Hogan, Governor
 Boyd Battleford, Lt. Governor
 Mark Ballou, Secretary
 Joanne Thomas, Deputy Secretary

April 4, 2017

Mr. Michael Norton
 Norton Land Design, LLC
 5146 Dorsey Hall Drive
 2nd Floor
 Ellicott City, Maryland 21042

RE: Environmental Review for Takoma Park Middle School, 7611 Piney Branch Road, Silver Spring, NORTON #16-140, Montgomery County, Maryland.

Dear Mr. Norton:

The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation.

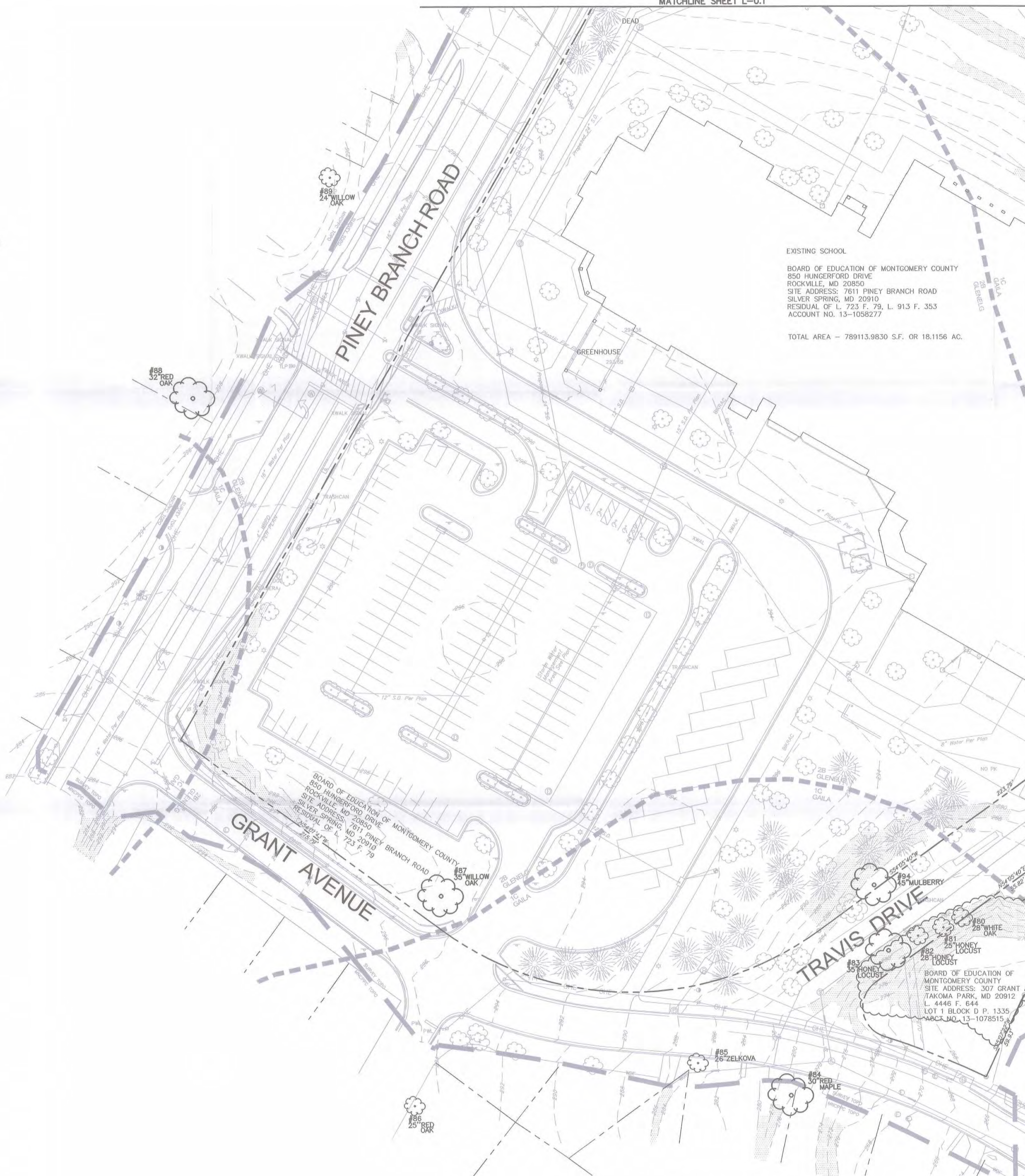
Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
 Environmental Review Coordinator
 Wildlife and Heritage Service
 MD Dept. of Natural Resources

ER# 2017.0470.mo



LEGEND

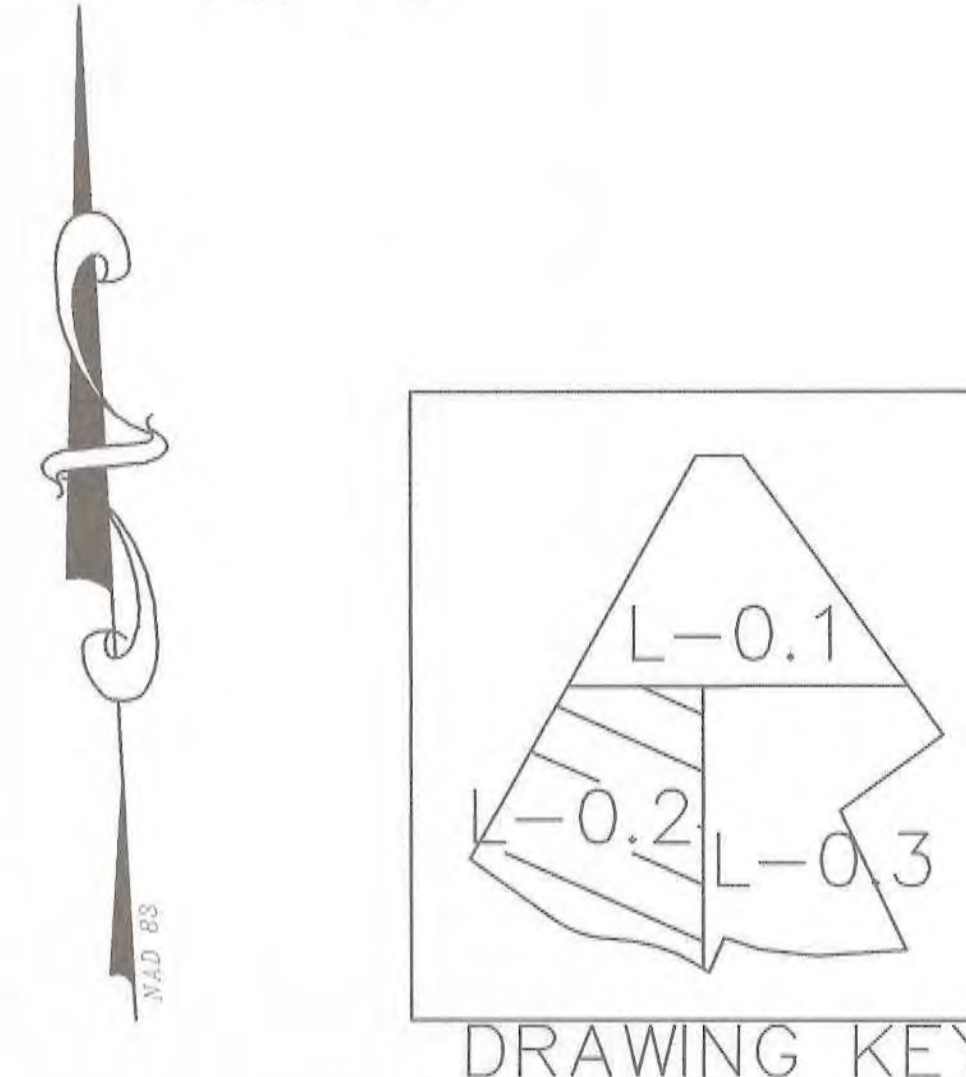
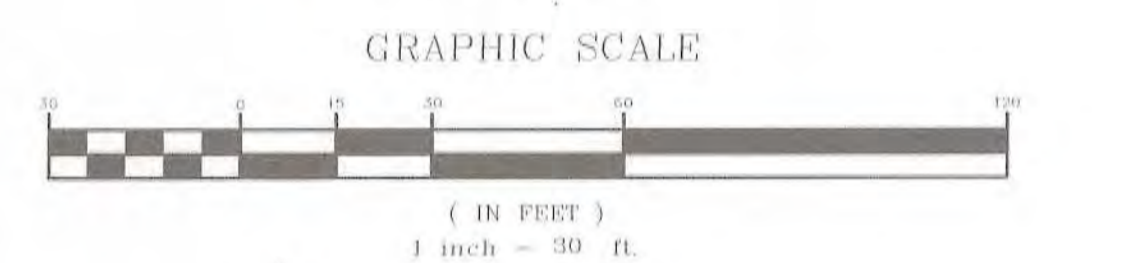
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- #1 26" RED OAK: EXISTING SIGNIFICANT TREE >24" AND <30" DBH WITH TAG NUMBER
- #1 32" RED OAK: EXISTING SPECIMEN TREE ≥30" DBH WITH TAG NUMBER
- Forest Treeline: Dashed line with circles
- Scrub Area/Screening Trees/Non-Forest Canopy: Wavy line
- 18" BRINKLOW ZULI GLENELG: Soil boundary symbol
- SURVEY TOPG / MNCPPC TOPG: Limits of survey lines
- Steep Slopes ≥ 25%: Stippled area
- Moderate Slopes 15% - 25%: Cross-hatched area
- Property Boundary: Solid line
- Adjacent Property Boundary: Dashed line
- Existing Stream: Dotted line
- SB-SB-SB: Stream buffer symbol

EXISTING SCHOOL
 BOARD OF EDUCATION OF MONTGOMERY COUNTY
 850 HUNGERFORD DRIVE
 ROCKVILLE, MD 20850
 SITE ADDRESS: 7611 PINEY BRANCH ROAD
 SILVER SPRING, MD 20910
 RESIDUAL OF L. 723 F. 79, L. 913 F. 353
 ACCOUNT NO. 13-1058277
 TOTAL AREA - 789113.9830 S.F. OR 18,1156 AC.

CERTIFICATION OF QUALIFIED PROFESSIONAL

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

DATE: 11.22.17
 SIGNATURE: MICHAEL A. NORTON
 LICENSE / COMPANY: 0819.08.01
 QUALIFIED PROFESSIONAL



FILE:
**NATURAL RESOURCE INVENTORY/
 FOREST STAND DELINEATION**

PROJECT:
TAKOMA PARK MIDDLE SCHOOL

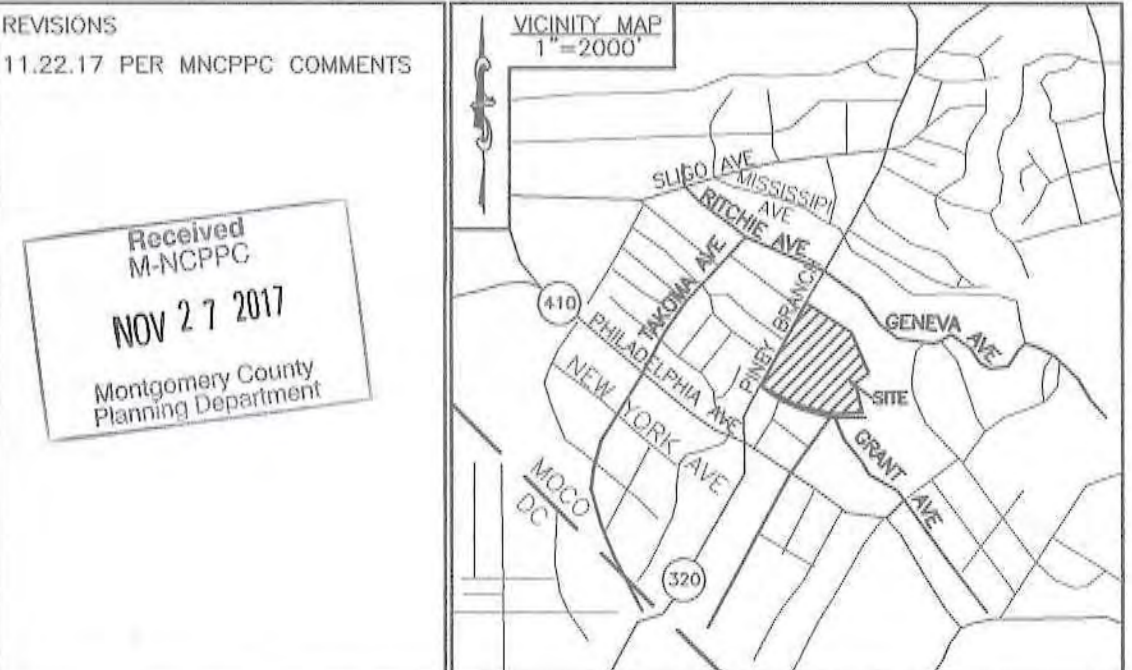
PREPARED FOR/APPLICANT:
**MONTGOMERY COUNTY PUBLIC SCHOOLS
 45 WEST GUDE DRIVE, SUITE 4300
 ROCKVILLE, MARYLAND 20850**

NORTON LAND DESIGN
 LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
 5140 DORSEY HALL DRIVE, 2ND FLOOR, ELLICOTT CITY, MD 21042
 BALI-443.542.9199 DCO 240.342.2329 WWW.NORTONLANDDESIGN.COM

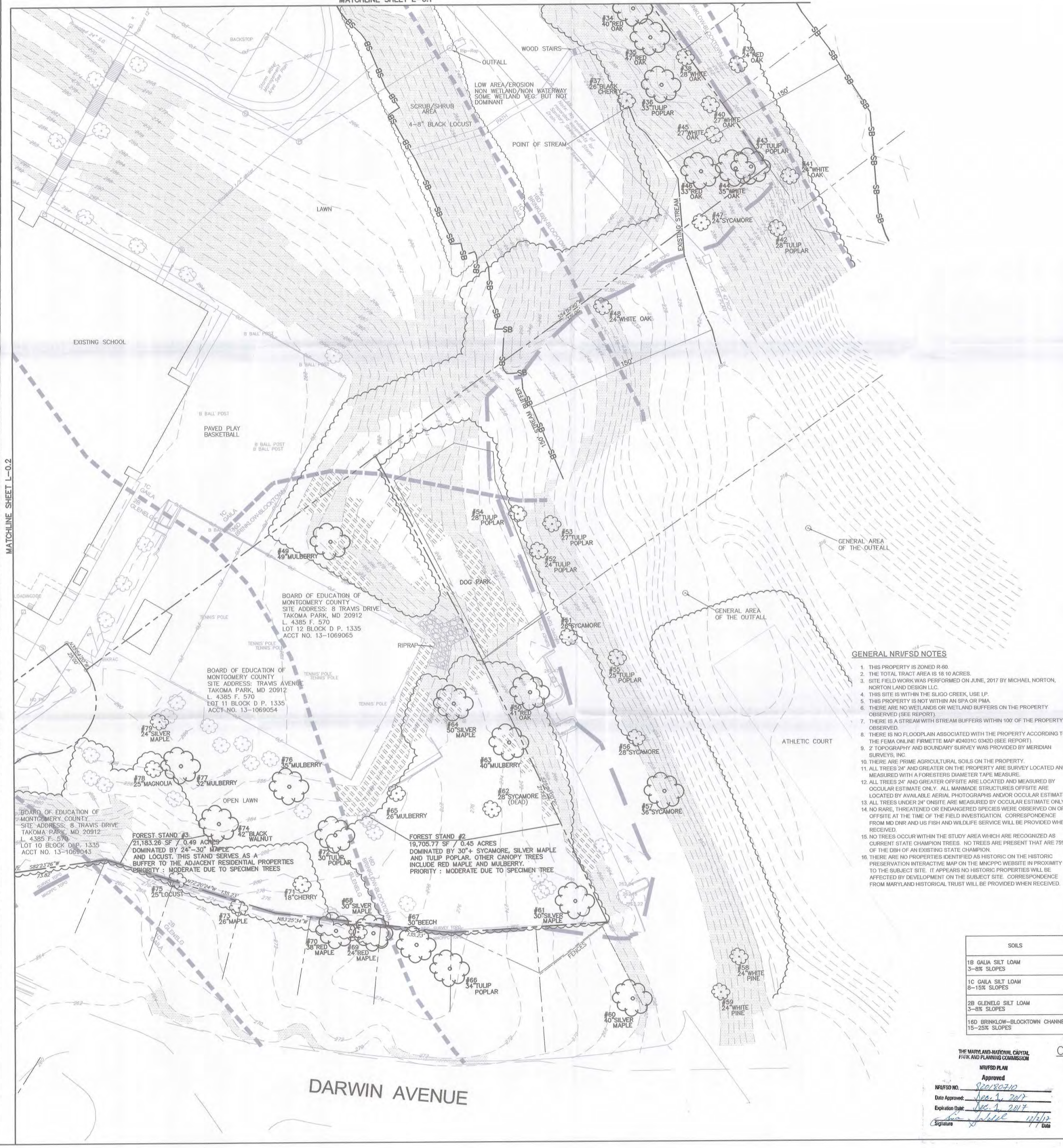
REVISIONS:
 11.22.17 PER MNCPPC COMMENTS

WATER CLASS: USE 1, P WATERSHED: SLIGO CREEK FEMA FLOODPLAIN: 24031C 0460D
 TAX MAP: UNNAMED PAC: MAP PAGE: 57 GRID: C-11
 SCALE: AS SHOWN DATE: NOVEMBER 2017 PROJ. NO: 16-140 SHEET NO: L-0.2

THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION
 NRRSD PLAN
 Approved
 NRRSD NO: 820150710
 Date Approved: Dec 2, 2017
 Expiration Date: Nov 2, 2017
 Signature: [Signature]



Received MNCPPC NOV 27 2017 Montgomery County Planning Department



SITE NARRATIVE AND FOREST SUMMARY

INTRODUCTION

Norton Land Design completed a Natural Resource Inventory & Forest Stand Delineation for the project known as Takoma Park Middle School located in Silver Spring, Montgomery County, MD in June 2017. The delineation was conducted using the guidelines set forth in the MDCR State Forest Conservation Technical Manual and MNCPPC Trees, Approved Technical Manual.

GENERAL INFORMATION

This is a 18.10 acre site that owned by the Montgomery County Board of Education as shown on the plans. The site currently hosts the existing Takoma Park Middle School, tennis court, ball fields and associated parking and circulation. The site is bordered by residential properties on all sides. The site has vehicle access from Piney Branch Road and Grant Avenue. The site lies within the Sligo Creek Watershed, Use I, P.

ENVIRONMENTAL FEATURES

100 YEAR FLOOD PLAIN

There is no 100-yr floodplain associated with the property according to the FEMA flood map Community-Panel # 35055C 0484E. The primary tributary to the site is Sligo Creek.

SOILS

County, The Soil Survey of Montgomery Maryland describes the soil types that are present on the property as follows.

Soil type 1B - Galla silt loam, 3 to 8 percent slopes. The suitability for Wild herbaceous plants, hardwood trees, and coniferous plants is good. The potential as habitat for openland wildlife and woodland wildlife is good. There are only slight limitations of the soils for dwellings with basements and lawns and landscapes.

Soil type 1C is the Galla silt loam, 8 to 15 percent slopes, very deep and well drained. The potential productivity for trees on this soil is moderate. The restrictions to lawn and landscaping are moderate when steep slopes are encountered. The limitations for pond reservoir areas is severe due to seepage and when steep slopes are encountered. The potential for Wild herbaceous plants, hardwood trees, and coniferous trees is good. Potential for wetland plants and shallow water areas is very poor. The Galla soil is not listed on the Hydric soils list of Maryland.

Soil type 2B - Glenelg silt loam, 3 to 8 percent slopes. This soil is very deep and well drained. It is usually found on broad ridges in upland areas. The slopes are generally smooth, but some are dissected by drainageways. This soil is well suited for dwellings and urban development. The only limitation is its moderate permeability which can limit the absorption from septic fields.

Soil type 16D - Brinklow-Blocktown channery silt loams, 15 to 25 percent slopes. These well drained, moderately steep soils are usually located on site slopes in the uplands. The suitability for Wild herbaceous plants, hardwood trees, and coniferous plants is good. The suitability to cultivate crops is very low due to the very low water capacity and severe hazard of erosion. The potential as habitat is good for woodland wildlife. The soil type 16D is classified as erodible soil.

NONTIDAL WETLANDS

There are no wetlands or wetland buffers observed on the property during the field investigations. The US Fish and Wildlife Service Wetlands Mapper shows no wetlands onsite.

STREAMS AND DRAINAGEWAYS

There are streams and associated stream buffers within 100' of the property observed. The site is within the Sligo Creek Watershed, Use I, P.

TOPOGRAPHY AND STEEP SLOPES

The site slopes primarily to the northeast and southwest. There are some areas of steep slopes where terracing was required in the construction of the school. There are no moderate slopes on erodible soils.

CRITICAL HABITATS

There appears to be no critical wildlife habitats from the field inspection. The MDNR and Fish & Wildlife Service have been notified of the project area and description. Copies of their correspondence will be provided when received.

CULTURAL FEATURES

Our research indicates there are no historic properties associated with the site. There are no historic sites found on the Historic Preservation Interactive Map on the MNCPPC website in proximity to the study area. It appears that development of the subject property will not have any effect on historic sites. The Maryland Historical Trust has been notified of the project area and description.

FOREST STAND INFORMATION

The forest stand plot samples were done in a random method as outlined in Natural Resources Measurement, Avery, T. E., 1975, and Simplified Point Sample Cruising, Ashley, B.D., 1991. The plot size was 1/10 acre. The forest stands were generally described while cruising the site. This method was conducted to inventory the most representative area of the forest stand.

The site contains forest on the majority of the eastern half of the property. The total forest on the site is equal to 2.98 acres. There are significant/specimen trees located throughout the property. A list of the significant/specimen trees in the study area along with the visual health is within this document. The forest is summarized below.

FOREST STAND #1

Forest Stand 1 (129,911 sq ft / 2.98 ac) is a lowland hardwood area. The stand is dominated by 18-29' Red Maple and Red Oak. The canopy also includes Black Walnut. The understory consists of Yellow Poplar, Ailanthus and Sycamore. The ground layer contains Greenbrier and vines. There appears to be a small amount of herbaceous cover in the growing seasons. A substantial amount of downed woody material is present throughout the stand. The stand exhibits moderate amount of invasive plant cover (see data sheets) with a higher amount of invasive plant cover in the northern portion of the stand where there appears to be more human disturbance. The forest appears to be healthy and in good condition. Retention and regenerative potential are good. The Priority for this stand is 1: High Retention because of the presence of the stream, wetland and their associated buffers.

FOREST STAND #2

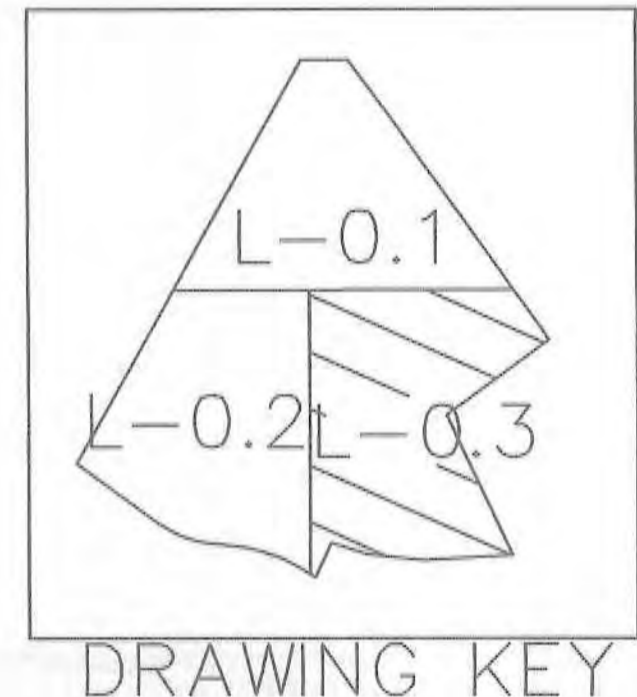
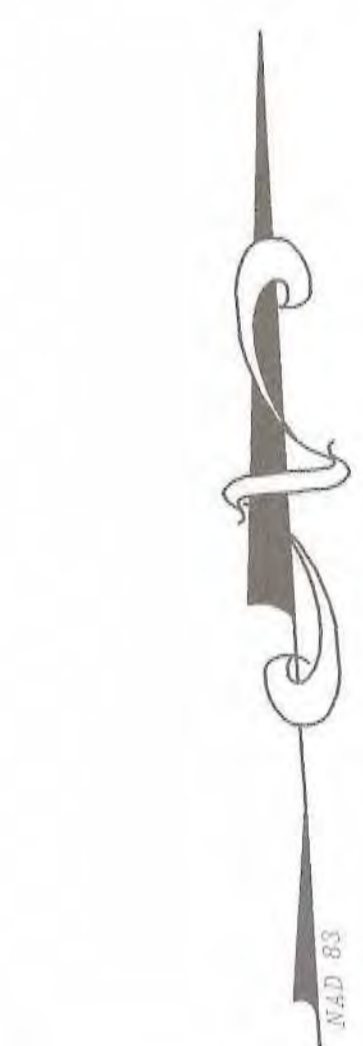
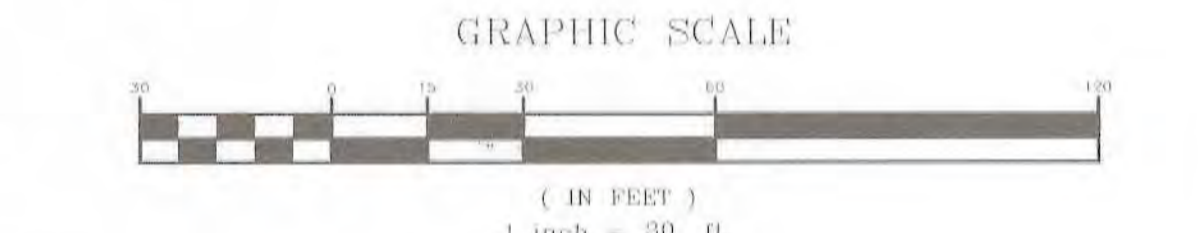
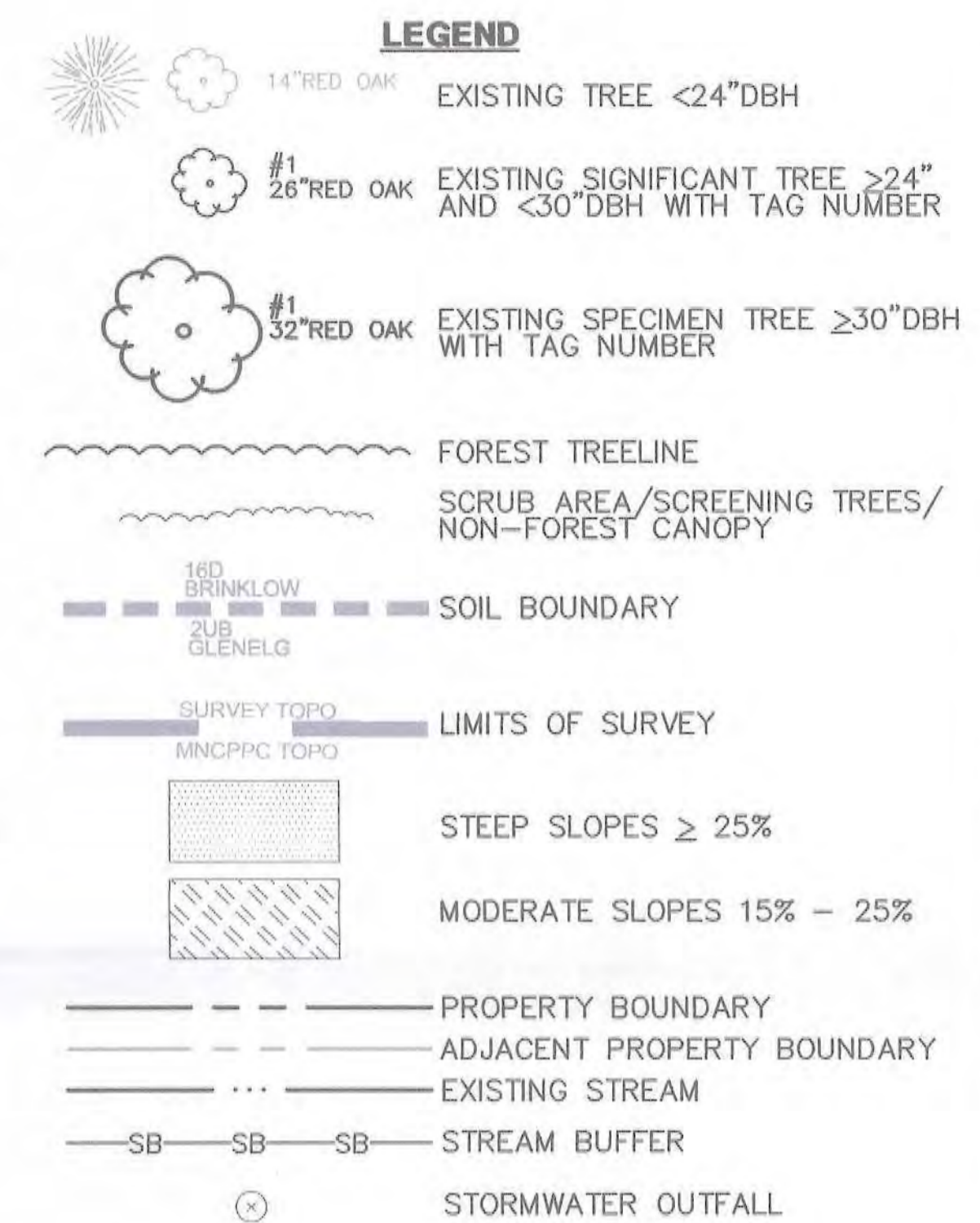
Forest Stand 2 (19,705.77 sq ft / 0.45 ac). The stand is dominated by 30'+ Sycamore, Silver Maple and Tulip Poplar. Other canopy trees include Red Maple and Mulberry. The forest serves as a buffer to the adjacent residential properties. The Priority for this stand is Moderate due to specimen trees.

FOREST STAND #3

Forest Stand 3 (21,183.26 sq ft / 0.49 ac). The stand is dominated by 24'-30" Maple and Locust. This stand serves as a buffer to the adjacent residential properties. The Priority for this stand Moderate.

GENERAL NR/FSND NOTES

1. THIS PROPERTY IS ZONED R-60
2. THE TOTAL TRACT AREA IS 18.10 ACRES
3. SITE FIELD WORK WAS PERFORMED ON JUNE, 2017 BY MICHAEL NORTON, NORTON LAND DESIGN LLC.
4. THIS SITE IS WITHIN THE SLIGO CREEK, USE I, P.
5. THIS PROPERTY IS NOT WITHIN AN SPA OR PMA
6. THERE ARE NO WETLANDS OR WETLAND BUFFERS ON THE PROPERTY OBSERVED (SEE REPORT)
7. THERE IS A STREAM WITH STREAM BUFFERS WITHIN 100' OF THE PROPERTY OBSERVED.
8. THERE IS NO FLOODPLAIN ASSOCIATED WITH THE PROPERTY ACCORDING TO THE FEMA ONLINE FIRMETTE MAP #24031C 042D (SEE REPORT)
9. 2' TOPOGRAPHY AND BOUNDARY SURVEY WAS PROVIDED BY MERIDIAN SURVEYS, INC.
10. THERE ARE PRIME AGRICULTURAL SOILS ON THE PROPERTY.
11. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND MEASURED WITH A FORESTERS DIAMETER TAPE MEASURE.
12. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
13. ALL TREES UNDER 24" ONSITE ARE MEASURED BY OCCULAR ESTIMATE ONLY.
14. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION. CORRESPONDENCE FROM MD DNR AND US FISH AND WILDLIFE SERVICE WILL BE PROVIDED WHEN RECEIVED.
15. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS CURRENT STATE CHAMPION TREES. NO TREES ARE PRESENT THAT ARE 75% OF THE DBH OF AN EXISTING STATE CHAMPION.
16. THERE ARE NO PROPERTIES IDENTIFIED AS HISTORIC ON THE HISTORIC PRESERVATION INTERACTIVE MAP ON THE MNCPPC WEBSITE IN PROXIMITY TO THE SUBJECT SITE. IT APPEARS NO HISTORIC PROPERTIES WILL BE AFFECTED BY DEVELOPMENT ON THE SUBJECT SITE. CORRESPONDENCE FROM MARYLAND HISTORICAL TRUST WILL BE PROVIDED WHEN RECEIVED.



SOIL TABLE

SOILS	ERODIBLE	HYDRIC	CONTAINS 15-20% SLOPES	CONTAINS 25% SLOPES	CAPABILITY SYMBOL	PRIME AGRICULTURAL SOIL
1B GALLA SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	Ile	YES
1C GALLA SILT LOAM 8-15% SLOPES	NO	NO	N/A	YES	Ille	NO
2B GLENELG SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	Ile	YES
16D BRINKLOW-BLOCKTOWN CHANNERY SILT LOAM 15-25% SLOPES	YES	NO	YES	YES	Ile	NO

CERTIFICATION OF QUALIFIED PROFESSIONAL

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

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
 NR/FSND PLAN
 Approved
 NR/FSND NO. 20180710
 Date Approved: Dec 1, 2017
 Expiration Date: Dec 1, 2017
 Signature: [Signature] 11/21/17

11.22.17
 DATE
 MICHAEL A. NORTON
 MDCR / COMAR 08.19.06.01
 QUALIFIED PROFESSIONAL

TITLE: NATURAL RESOURCE INVENTORY/ FOREST STAND DELINEATION

PROJECT: TAKOMA PARK MIDDLE SCHOOL

PREPARED FOR/APPLICANT: MONTGOMERY COUNTY PUBLIC SCHOOLS, 45 WEST GUDE DRIVE, SUITE 4300, ROCKVILLE, MARYLAND 20850

NORTON LAND DESIGN, LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING, 5146 DORSEY HALL DRIVE, 2ND FLOOR, ELICOTT CITY, MD 21142, BALT. 443.542.9199, DC 202.342.2329, WWW.NORTONLANDDESIGN.COM

REVISIONS: 11.22.17 PER MNCPPC COMMENTS

NOV 27 2017, Montgomery County Planning Department

WATER CLASS: USE I, P; WATERSHED: SLIGO CREEK; FEMA FLOODPLAIN MAP PANEL: 24031C 0460D

TAX MAP: JN342; 200 SHEET: 209NW01; ADC MAP: 37; GRID: C-11

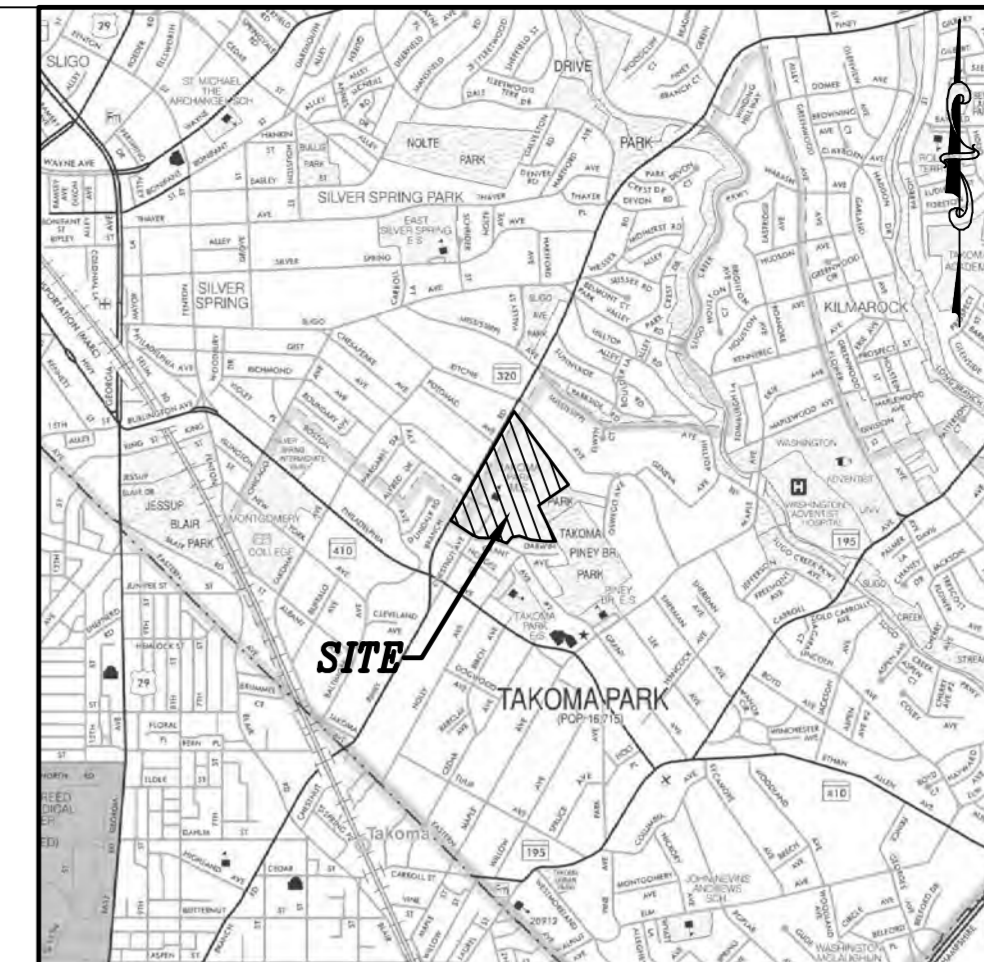
SCALE: AS SHOWN; DATE: NOVEMBER 2017; PROJ. NO.: 16-140; SHEET NO.: L-0.3

DARWIN AVENUE

SITE TABULATIONS:

ACREAGE OF TRACT:	18.12
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	0
ACREAGE OF ROAD AND UTILITY R/W WHICH WILL NOT BE IMPROVED AS PART OF DEV. APPLICATION:	0.00
ACREAGE OF EX. FOREST:	2.03
ACREAGE OF TOTAL FOREST RETENTION:	1.79
ACREAGE OF TOTAL FOREST CLEARED:	0.21
LAND USE CATEGORY:	IDA
AFFORESTATION THRESHOLD:	2.72
CONSERVATION THRESHOLD:	3.62
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS:	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN:	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN STREAM BUFFERS:	0.53/0.03/0.90
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITH PRIORITY AREAS:	0.00/0.15/0.16
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER	101'/150'
TOTAL DBH INCHES OF SPECIMEN TREES REMOVED (OUTSIDE FOREST)	0 X 0.25 = 0 REQUIRED CALIPER INCHES MITIGATION
TOTAL DBH INCHES OF SPECIMEN TREE REMOVED ± 3" CALIPER TREES = TOTAL TREES REQUIRED TO BE PLANTED	

FOREST CONSERVATION WORKSHEET						
TAKOMA PARK MIDDLE SCHOOL						
5-Aug-02						
NET TRACT AREA:						
A. Total tract area						18.12
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						18.12
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 = 2.72						
H. Conservation Threshold ... 20% x F = 3.62						
EXISTING FOREST COVER:						
I. Existing forest cover						2.03
J. Area of forest above afforestation threshold						0.00
K. Area of forest above conservation threshold						0.00
BREAK EVEN POINT:						
L. Forest retention above threshold with no mitigation						0.00
M. Clearing permitted without mitigation						0.00
PROPOSED FOREST CLEARING:						
N. Total area of forest to be cleared						0.21
O. Total area of forest to be retained						1.82
PLANTING REQUIREMENTS:						
P. Reforestation for clearing above conservation threshold						0.00
Q. Reforestation for clearing below conservation threshold						0.42
R. Credit for retention above conservation threshold						0.00
S. Total reforestation required						0.42
T. Total afforestation required						0.69
U. Credit for landscaping (may not exceed 20% of "S")						0.00
V. Total reforestation and afforestation required						1.11



VICINITY MAP
 SCALE: 1" = 2,000'
 (WSSC GRID: 209 NW 01)
 MONTGOMERY COUNTY
 ADC MAP PAGE: 5408
 GRIDS: H & J = 3
 (2008/39TH EDITION)

ARCHITECT

SEI SIMOLEN + EMR
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 9211 CORPORATE BLVD, SUITE 340
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CIVIL
ADTEK ENGINEERS

97 MONOCACY BOULEVARD, UNIT H
 FREDERICK, MD 21701
 301-662-4408(P) 301-662-7484(F)

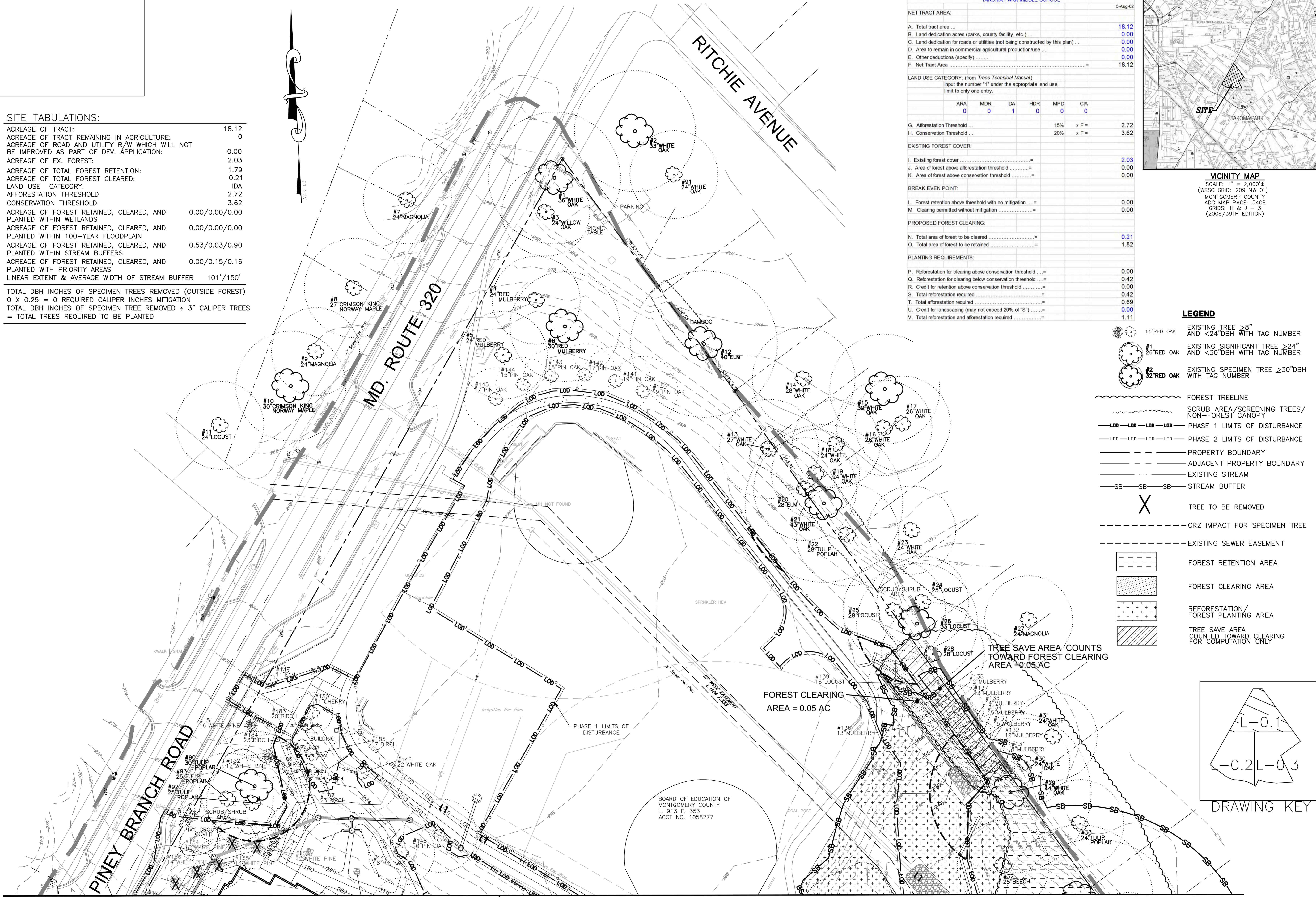
STRUCTURAL
ADTEK ENGINEERS

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MECH./ELECTRICAL/PLUMBING
JAMES POSEY ASSOCIATES

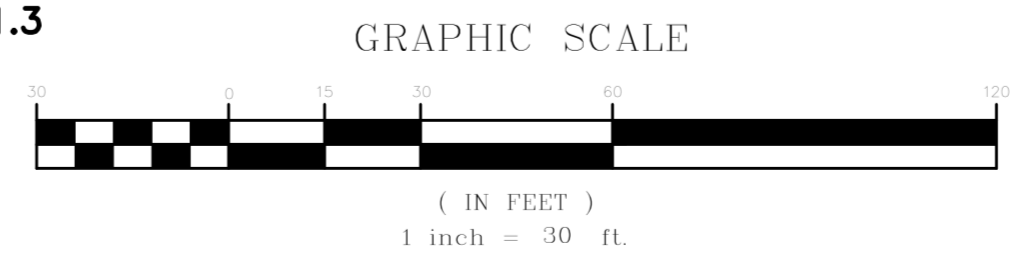
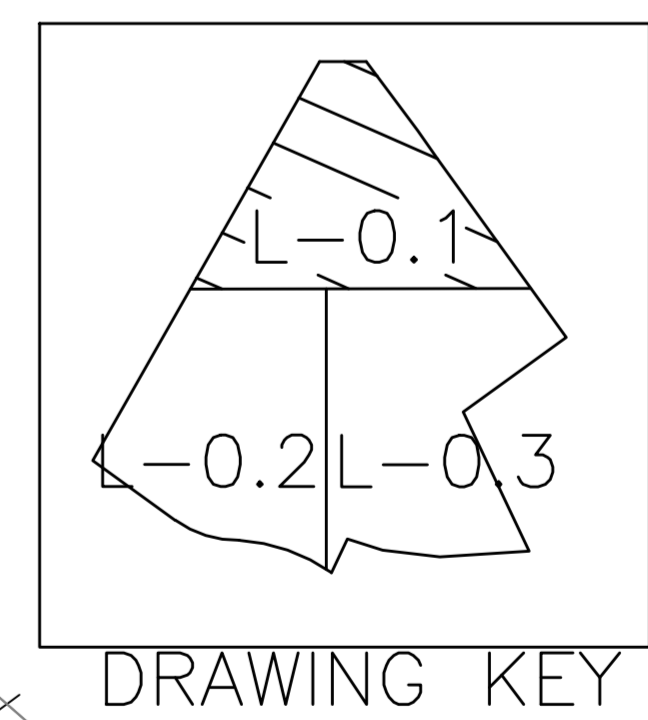
3112 LORD BALTIMORE DRIVE
 BALTIMORE, MD 21244
 301-265-6100(P) 301-298-9820(F)

CONSTRUCTION MANAGER



LEGEND

- EXISTING TREE >8" AND <24" DBH WITH TAG NUMBER
- EXISTING SIGNIFICANT TREE >24" AND <30" DBH WITH TAG NUMBER
- EXISTING SPECIMEN TREE ≥30" DBH WITH TAG NUMBER
- FOREST TREELINE
- SCRUB AREA/SCREENING TREES/ NON-FOREST CANOPY
- PHASE 1 LIMITS OF DISTURBANCE
- PHASE 2 LIMITS OF DISTURBANCE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EXISTING STREAM
- STREAM BUFFER
- TREE TO BE REMOVED
- CRZ IMPACT FOR SPECIMEN TREE
- EXISTING SEWER EASEMENT
- FOREST RETENTION AREA
- FOREST CLEARING AREA
- REFORESTATION/ FOREST PLANTING AREA
- TREE SAVE AREA COUNTED TOWARD FOREST CLEARING FOR COMPUTATION ONLY



CERTIFICATION OF QUALIFIED PROFESSIONAL

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

08-21-18
 DATE

MICHAEL A. NORTON
 MONTGOMERY COUNTY REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT

NORTON LAND DESIGN
 LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
 5146 DORSEY HALL DRIVE, 2ND FLOOR
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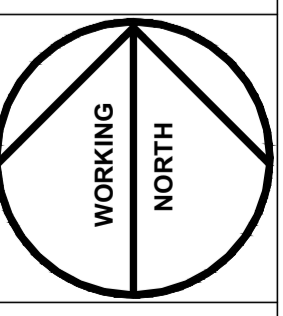
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TRIBUTARY	UNNAMED	SLIGO CREEK	MAP PANEL #
TAX MAP	JN342	200 SHEET	24031C 0460D
SCALE	AS SHOWN	PROJ. NO.	GRID C-11
		16-140	SHEET NO.
			L-1.1

TAKOMA PARK MIDDLE SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

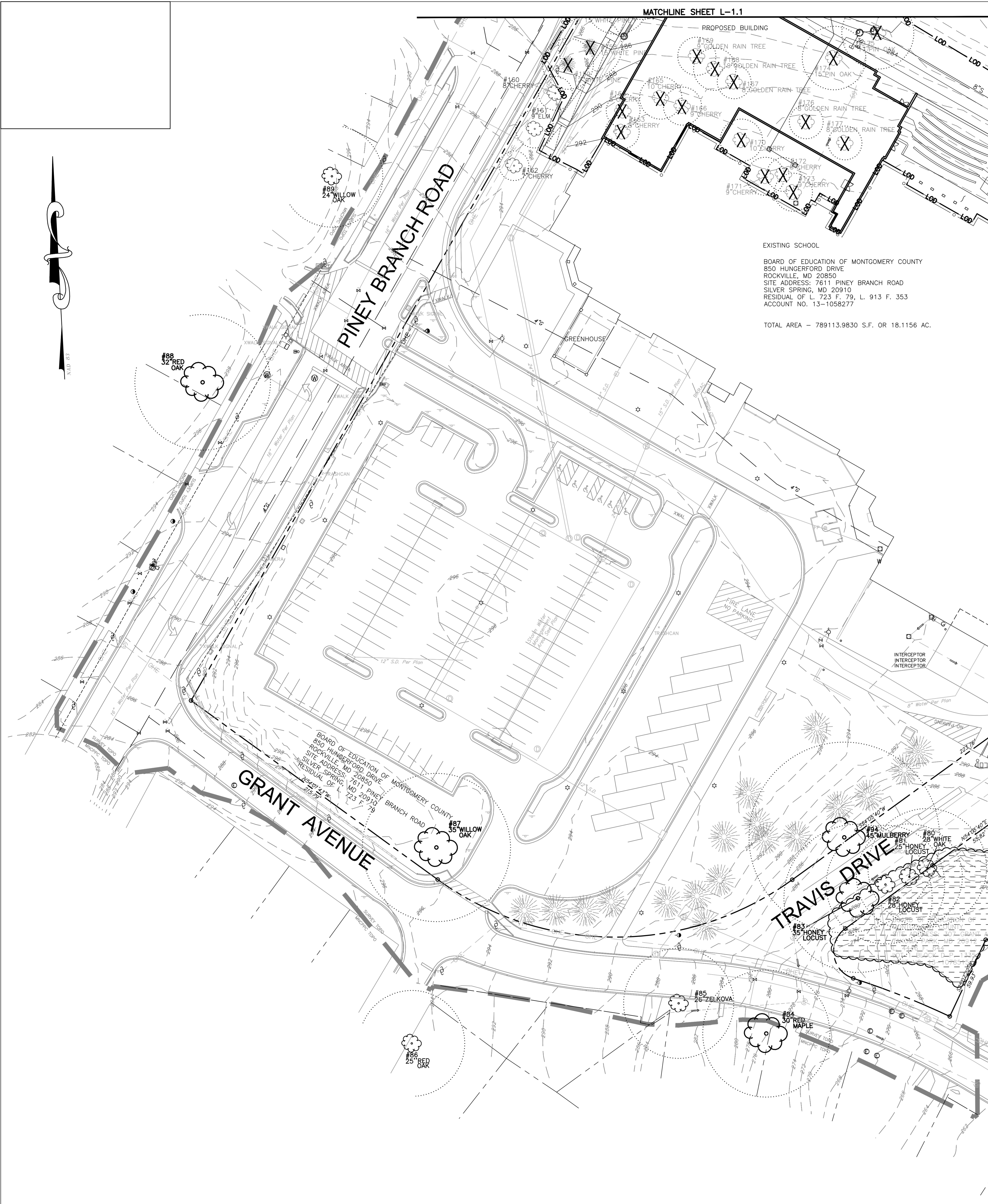
PRELIMINARY FOREST CONSERVATION PLAN

PROJECT NO: 16-140
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 SCALE: 1" = 30'-0"
 SHEET NO:



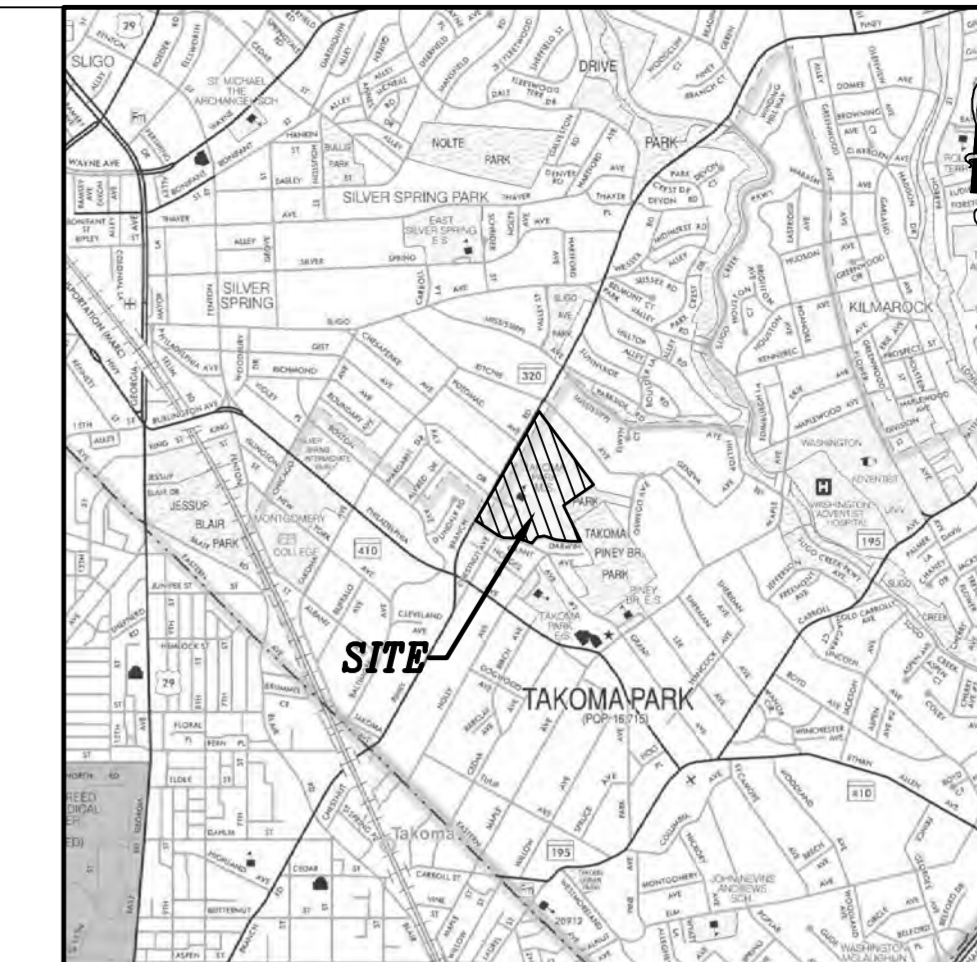
L-1.1

MATCHLINE SHEET L-1.1

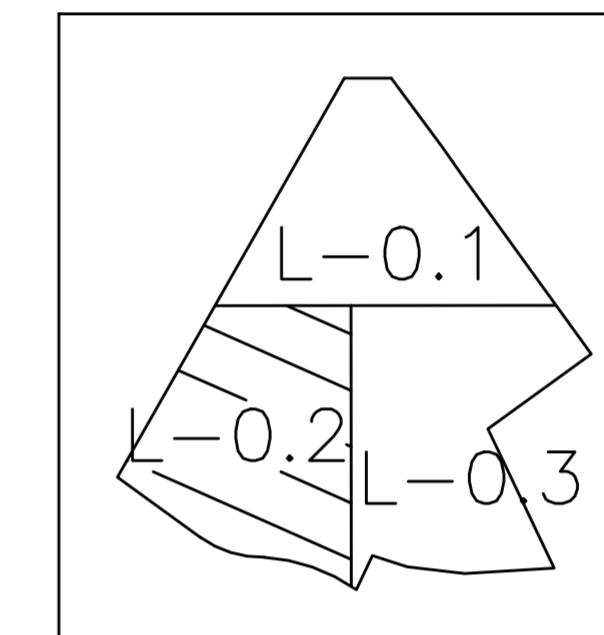


EXISTING SCHOOL
 BOARD OF EDUCATION OF MONTGOMERY COUNTY
 850 HUNGERFORD DRIVE
 ROCKVILLE, MD 20850
 SITE ADDRESS: 7611 PINEY BRANCH ROAD
 SILVER SPRING, MD 20910
 RESIDUAL OF L. 723 F. 79, L. 913 F. 353
 ACCOUNT NO. 13-1058277

TOTAL AREA - 789113.9830 S.F. OR 18.1156 AC.



VICINITY MAP
 SCALE: 1" = 2,000'±
 (WSSC GRID: 209 NW 01)
 MONTGOMERY COUNTY
 ADC MAP PAGE: 5408
 GRIDS: H & J - 3
 (2008/39TH EDITION)

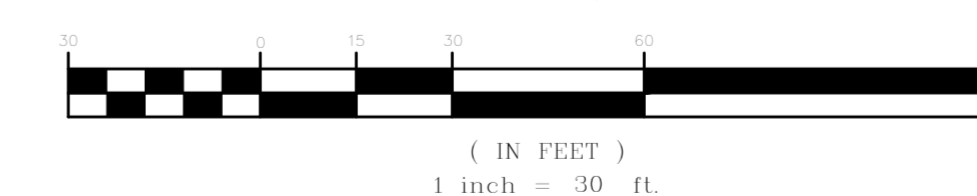


DRAWING KEY

LEGEND

-
-
-
- FOREST TREE LINE
- SCRUB AREA/SCREENING TREES/
NON-FOREST CANOPY
- PHASE 1 LIMITS OF DISTURBANCE
- PHASE 2 LIMITS OF DISTURBANCE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EXISTING STREAM
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- TREE TO BE REMOVED
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- FOREST RETENTION AREA
- FOREST CLEARING AREA
- REFORESTATION/
FOREST PLANTING AREA
- TREE SAVE AREA
COUNTED TOWARD CLEARING
FOR COMPUTATION ONLY

GRAPHIC SCALE



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08-21-18
 DATE

Michael A. Norton
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 MONTGOMERY COUNTY REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 QUALIFIED PROFESSIONAL

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WATER CLASS	USE I,P	WATERSHED	FEMA FLOODPLAIN
TRIBUTARY	UNNAMED	SLIGO CREEK	MAP PANEL # 24031C 0460D
TAX MAP	JN342	200 SHEET	209NW01
SCALE	AS SHOWN	DATE	JUNE 2018
PROJ. NO.	16-140	SHEET NO.	L-1.2

ARCHITECT

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CONSTRUCTION MANAGER

TAKOMA PARK
 MIDDLE SCHOOL
 ADDITION

MONTGOMERY
 COUNTY PUBLIC
 SCHOOLS

SHEET TITLE:
**PRELIMINARY
 FOREST
 CONSERVATION
 PLAN**

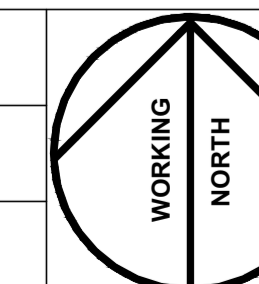
PROJECT NO:
16-140

DATE:
6/06/2018

SCALE:
1" = 30'-0"

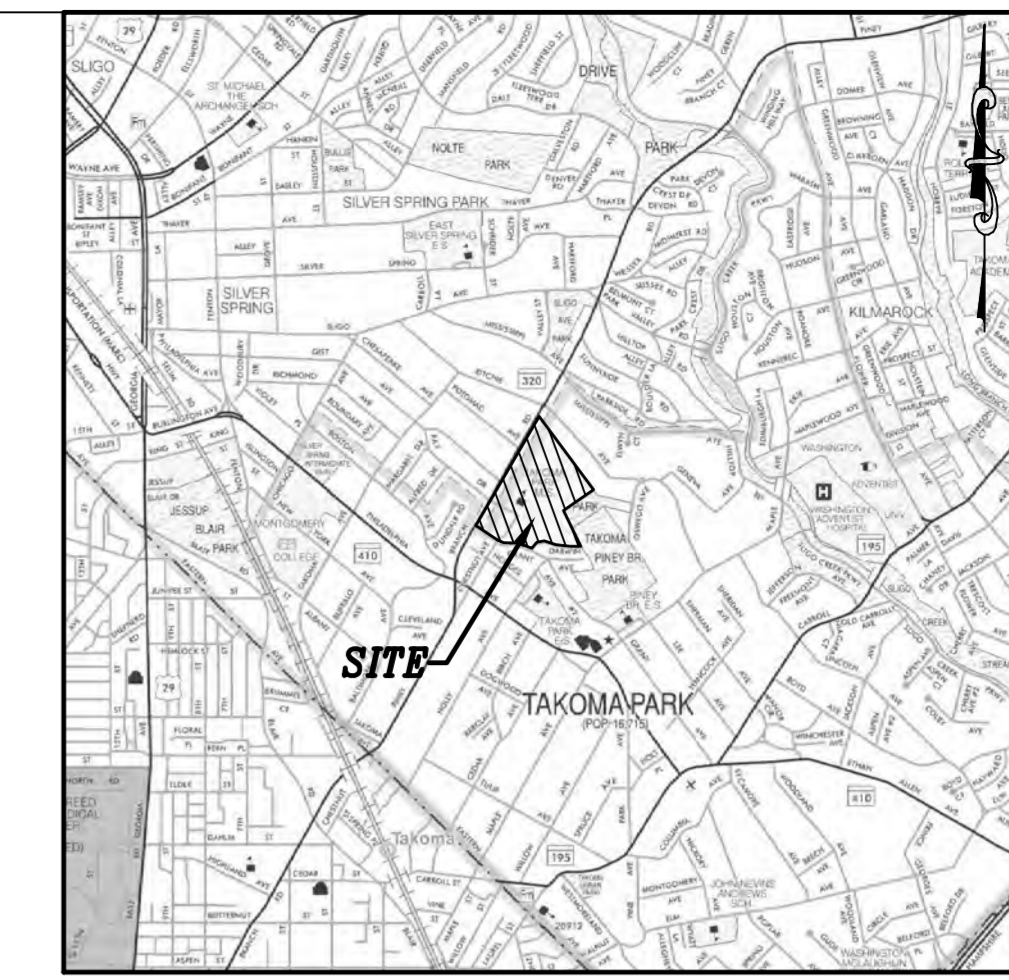
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L-1.2

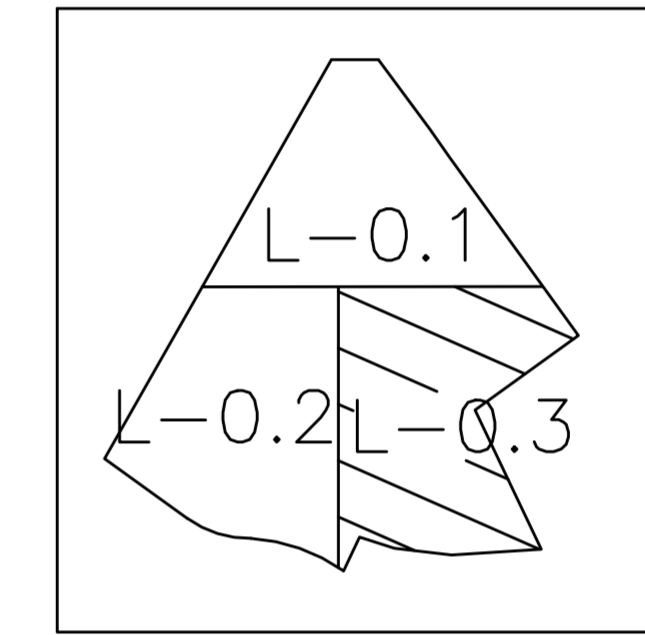




MATCHLINE SHEET L-1.2



VICINITY MAP
 SCALE: 1" = 2,000'
 WSSC GRID: 209 NW 01
 MONTGOMERY COUNTY
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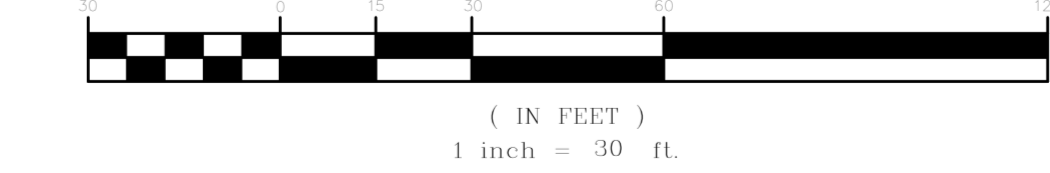


DRAWING KEY

LEGEND

- 14" RED OAK EXISTING TREE >8" AND <24" DBH WITH TAG NUMBER
- 26" RED OAK EXISTING SIGNIFICANT TREE >24" AND <30" DBH WITH TAG NUMBER
- 32" RED OAK EXISTING SPECIMEN TREE >30" DBH WITH TAG NUMBER
- FOREST TREELINE
- SCRUB AREA/SCREENING TREES/NON-FOREST CANOPY
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- TREE SAVE AREA COUNTED TOWARD CLEARING FOR COMPLETION ONLY

GRAPHIC SCALE



CERTIFICATION OF QUALIFIED PROFESSIONAL

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

Michael A. Norton
 MICHAEL A. NORTON
 MONTGOMERY COUNTY REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 LICENSE NO. 16-140

08-21-18
 DATE

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 LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
 5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
 BALT. 443.542.9199 DC 240.342.2329 WWW.NORTONLANDDESIGN.COM

WATER CLASS	USE I, P	WATERSHED	FEMA FLOODPLAIN MAP PANEL #
TAX MAP	UNNAMED	SLUGO CREEK	24031C 0460D
TAX MAP	JN342	200 SHEET 209NW01	ADC MAP PAGE 57 GRID C-11
SCALE	AS SHOWN	DATE	PROJ. NO. SHEET NO.
		JUNE 2018	16-140 L-1.3

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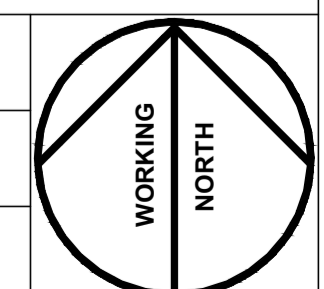
CONSTRUCTION MANAGER

TAKOMA PARK MIDDLE SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
PRELIMINARY FOREST CONSERVATION PLAN

PROJECT NO: 16-140
 DATE: 6/06/2018
 SCALE: 1" = 30'-0"
 SHEET NO: **L-1.3**



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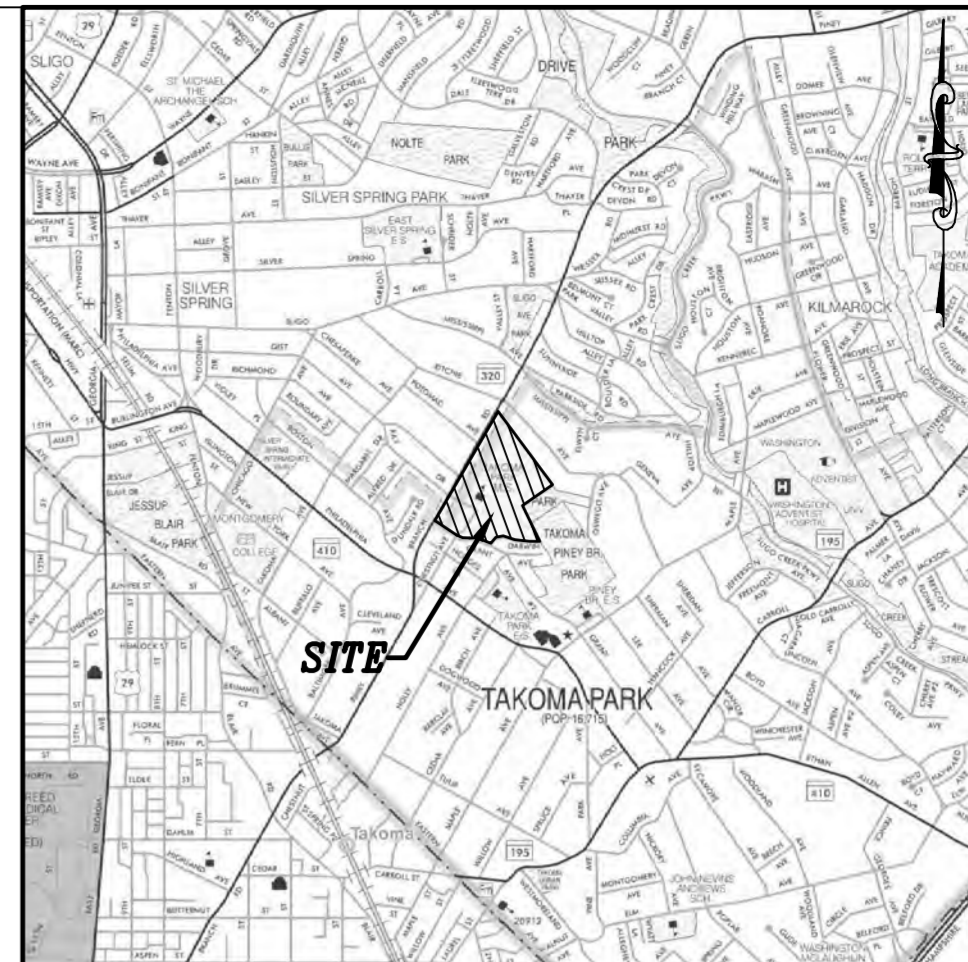
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CONSTRUCTION MANAGER



VICINITY MAP
SCALE: 1" = 2,000'
(WSSC GRID: 209 NW 01)
MONTGOMERY COUNTY
ADD. MAP PAGE: 5408
GRIDS: H & J = 3
(2008/39TH EDITION)

Tree Summary 8" + table with columns: Tree #, Species, Species Name, D.B.H., Critical Root Zone, Critical Root Zone Impacts, Percent of CRZ Impacted (SF), Tree Condition, Comments, Status, Variance, Mitigation (Y/N). Rows 1-110.

Tree Summary 8" + table with columns: Tree #, Species, Species Name, D.B.H., Critical Root Zone, Critical Root Zone Impacts, Percent of CRZ Impacted (SF), Tree Condition, Comments, Status, Variance, Mitigation (Y/N). Rows 111-210.

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...
2. No clearing or grading shall begin before stress-reduction measures have been implemented.
3. A Maryland-licensed tree expert or an International Society of Arboriculture-certified arborist must perform all stress reduction measures...

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 requested. 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

INSPECTIONS

All field inspections must be requested by the applicant. Inspections must be conducted as follows:

Tree Save Plans and Forest Conservation Plans without Planting Requirements

- 1. After the limits of disturbance have been staked and flagged, but before any clearing or grading begins
2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begins
3. After completion of all construction activities, but before removal of tree protection fencing...

Additional Requirements for Plans with Planting Requirements

- 4. Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities...
5. Temporary protection devices shall be maintained and installed by the contractor for the duration of construction project...
6. Forest retention area signs shall be installed as required by the forest conservation inspector...
7. Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details...

CERTIFICATION OF QUALIFIED PROFESSIONAL

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

08-21-18 DATE

MICHAEL A. NORTON MONTG. / COMAR 08-18-06-01 QUALIFIED PROFESSIONAL

NORTON LAND DESIGN LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING 5148 DORSEY HALL DRIVE, 2ND FLOOR BALTIMORE, MD 21204

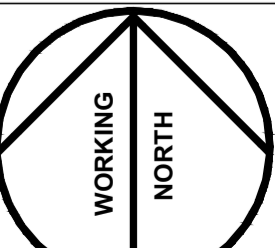
Table with project details: WATER CLASS UNNAMED, USE I,P, WATERSHED SLIGO CREEK, FLOODPLAIN MAP PANEL # 24031C 0460D, TAX MAP JN342, ZONING 209NW01, ADD. MAP PAGE 5407, GRID C-11, SCALE AS SHOWN, DATE JUNE 2018, PROJ. NO. 16-140, SHEET NO. L-1.4

TAKOMA PARK MIDDLE SCHOOL ADDITION

MONTGOMERY COUNTY PUBLIC SCHOOLS

PRELIMINARY FOREST CONSERVATION PLAN

PROJECT NO: 16-140 DATE: 6/06/2018 SCALE: SHEET NO:



August 21, 2018

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

Re: Takoma Park Middle School
Request for Specimen Tree Variance
MNCPPC NRI# 420180710
MR# 2018036

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 Takoma Park Middle School is located at 7611 Piney Branch Rd in Silver Spring, Montgomery County, Maryland. This is a 18.10-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 all sides. The site has vehicle access from Piney Branch Rd and Grant Avenue.

Proposed construction consists of an addition, new hardcourt play surfaces, improved pedestrian circulaiton, 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;

- (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 school facility that can accommodate a growing number of students as well as a modernized, safe and healthy environment for young students to learn.

This work will require disturbance of the root zones of a total of six (6) specimen trees. One (1) of the six (6) impacted trees will be required to be removed. The removal of specimen trees are due to the proposed pathway and utilities in relationship to the narrow property.

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, parking and ballfield 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. Specimen trees within the open space (outside of forest) is shown to be mitigated for on the Preliminary Forest Conservation Plan. Additional improvements to the property include control of erosion and outfall stabilization before entering the stream just offsite.

Therefore, the proposed activity will not degrade the water quality of the downstream areas and will not result in *measurable degradation in water quality*.

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

Response: Presently there is forest along the edges of the property that will be retained to the greatest extent possible. Additional reforestation is proposed within the designated stream valley buffer. 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 circumstances* that are the subject of this variance request.

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

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

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

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

Significant/Specimen Tree Summary 24" +										
Tree #	Species	Species	D.B.H	Critical Root	Critical Root Zone	Percent of CRZ	Tree	Comments	Status	Variance
	Scientific Name	Common Name	(Inches)	Zone (Sq.Ft)	Impacts	Impacted (SF)	Condition			
21	QUERCUS ALBA	WHITE OAK	43	13070	92	11%	GOOD		IMPACTS ONLY	YES
26	GLEDTISIA SSP.	LOCUST	33	7698	746	10%	POOR	VINES, IVY, SPLIT TRUNK	IMPACTS ONLY	YES
29	QUERCUS ALBA	WHITE OAK	44	13685	2652	19%	GOOD		IMPACTS ONLY	YES
49	MORUS SSP.	MULBERRY	49	16972	6121	36%	POOR	TWIN, IVY, VINES/SPLIT/FALLING	TO BE REMOVED	YES
77	MORUS SSP.	MULBERRY	32	7238	35	<1%	POOR	IVY, VINES, DIE BACK	IMPACTS ONLY	YES
90	LIRIODENDRON TULIPIFERA	TULIP POPLAR	30	6362	1997	31%	GOOD		IMPACTS ONLY	YES
* BOLD TYPE DENOTES SPECIMEN TREES										
			Condition Scoring System							
			No Apparent Problems							
			Minor Problems							
			Major Problems							
			Extreme Problems							
			Excellent							
			Good							
			Fair							
			Poor							

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,

A handwritten signature in black ink, appearing to read 'M. Norton', written in a cursive style.

Michael Norton

City of Takoma Park

DEPARTMENT OF PUBLIC WORKS

Telephone: 301-891-7633
FAX: 301-585-2405



31 Oswego Avenue
Silver Spring, MD 20910

May 24, 2018

ADTEK Engineering Inc.
97 ManoClay Blvd. Unit H
Frederick MD 21710

Attn: Mr. Aron Jolin

RE: Takoma Park Middle School
Stormwater Management (SWM) Concept Application
SWMC 18-04-23

Gentlemen:

Our review of your Stormwater Management Concept application for the referenced project is completed. The SWM Concept submitted is deemed generally acceptable.

The following comments should be addressed and limits of disturbance finalized prior to permit application.

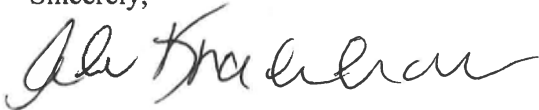
1. Available computations and details for existing SWM facilities (SW97-07) along with any inspection reports or maintenance records done by MGCPs or MGCDEP must be submitted for review. In the absence of such documents, the current system conditions must be evaluated to verify the adequacy and functionality of the existing system.
2. Please clearly delineate LOD for phases 1 and 2 of the project. Show the LOD for each phase separately tabulating the LOD area and the impervious area within LOD for each phase.
3. Please expand on the Reduced Curve Number (RCN) methodology description and computation of each component that are tabulated on page 8 of your narrative. Also, index references of relevant sections of MDE Stormwater Manual and TR55.
4. Please calculate the groundwater recharge (Rev) and channel protection (CPv) volumes and verify the adequacy of storage provided in the proposed bioretention storage volume.

Adtek Engineering Inc.
97 ManoClay Blvd. Unit H
Frederick, MD 21710

5. Please check the capacity of the SWM bioretentions to ensure that each bioretention pond holds 75% of ESDv as ponding volume and apply adjustment to all volume, if necessary.

Thank you for your diligent work on this project. Should you have any questions or if I can provide additional information, please call.

Sincerely,



Ali Khalilian, P.E.

cc: Montgomery County Public School
Construction Division
850 Hungerford Drive, Room #123
Rockville, MD 20850
Michael Horton
File