

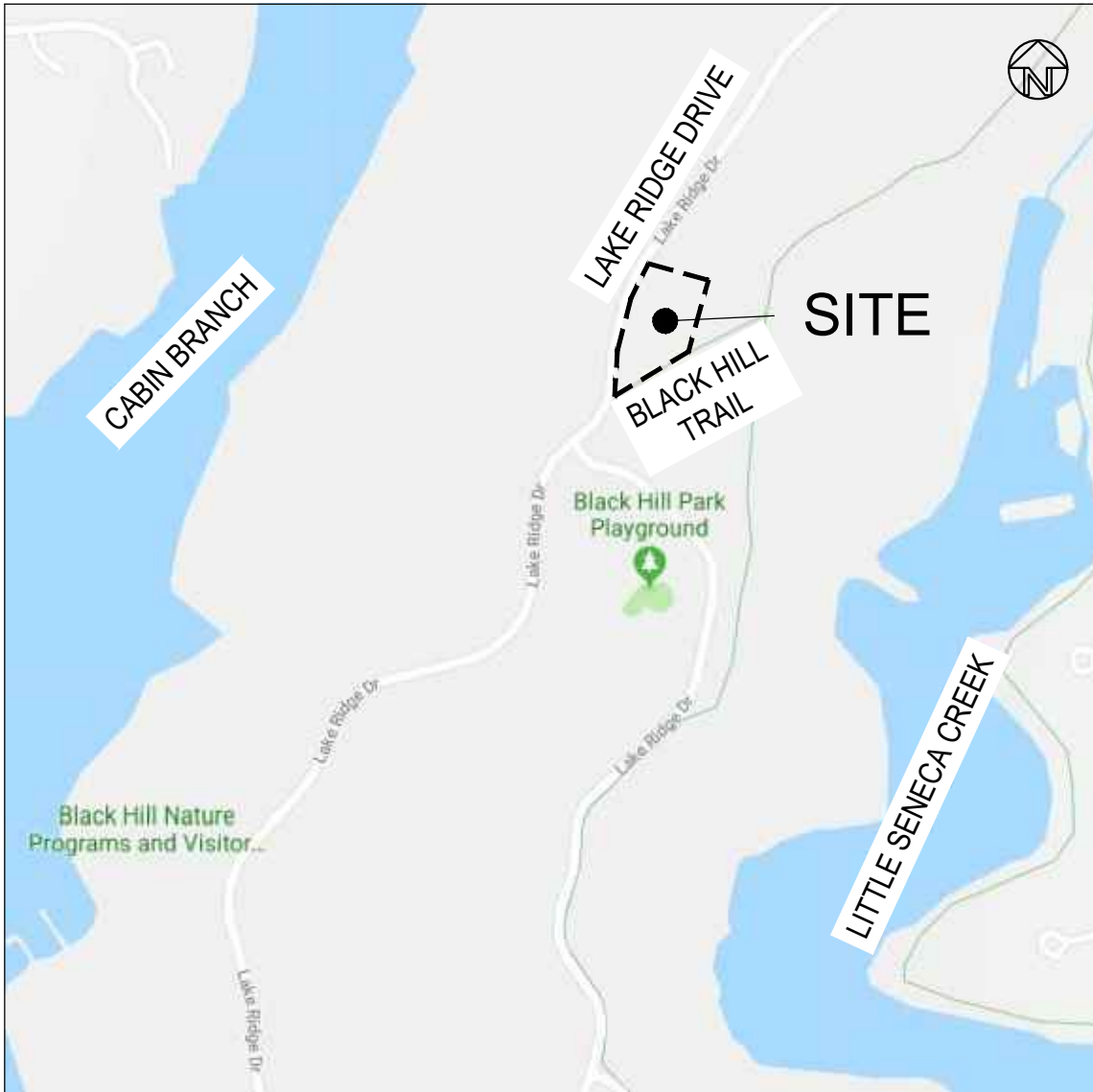
The Maryland National Capital Park and Planning Commission

BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN

20941 LAKE RIDGE DRIVE, BOYDS, MD 20841



RENDERED SITE PLAN



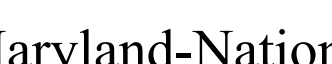
VICINITY MAP
WSSC GRID MAP 228NW14

PROPERTY OWNER / APPLICANT
MARYLAND-NATIONAL CAPITAL PARK AND
PLANNING COMMISSION (M-NCPPC)
9500 BRUNETT AVENUE
SILVER SPRING, MD 20901
ATTN: WEN HUANG
PH: (301) 495-2466
EM: WEN.HUANG@MONTGOMERYPARKS.COM

NOT FOR CONSTRUCTION

INDEX OF DRAWINGS

DPS SHEET #	SHEET #	DESCRIPTION
	L001	COVER SHEET
	C-1	COMBINED SWM CONCEPT/SITE DEVELOPMENT SWM PLAN
	C-2	COMBINED SWM CONCEPT/SITE DEVELOPMENT SWM PLAN
	L002	SIMPLIFIED NRI/FC EXEMPTION
	L003	SIMPLIFIED NRI/FC EXEMPTION
	L101	REFERENCE PLAN
	L301	CONSTRUCTION DETAILS
	L302	CONSTRUCTION DETAILS
	L401	PLANTING PLAN
	L411	PLANTING DETAILS

LSG LANDSCAPE ARCHITECTURE		DESIGN		Professional Certification. I hereby 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 Maryland. License No. _____ Expiration Date _____	 The Maryland-National Capital Park and Planning Commission Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535	REVIEW AND APPROVAL		ISSUED FOR PROCUREMENT ON _____		Cover Sheet Black Hill Regional Park SEED Classroom SCALE: AS SHOWN PLAN NUMBER: 42019149E TAX MAP: EU123 WSSC GRID: 228NW14	L001 SHT. # 01 OF 10			
Designer's Name DAVE NORDEN		Landscape Architect	Date			Checked By:	Project Manager		Date			REVISIONS		
Address 1775 GREENSBORO STATION PLACE, SUITE 110		Architect	Date			Checked By:	Construction Manager		Date			Rev. No.	Date	Description
City/State/Zip TYSONS, VIRGINIA, 22102		Engineer	Date			Checked By:	Park Manager		Date					
Telephone Number 703-821-2045		Drawn by	Date			Checked By:								

FINAL SCANNED: PLAN SCANNED: C10 PARK CODE: C10 Plotted By: Matt Edelman, 6/25/2019 2:57 PM, --- J:\145-003 - Black Hill Park SEED Classroom\CAD\CONCEPTS\C-1 - Stormwater Management Concept\dwg C-1

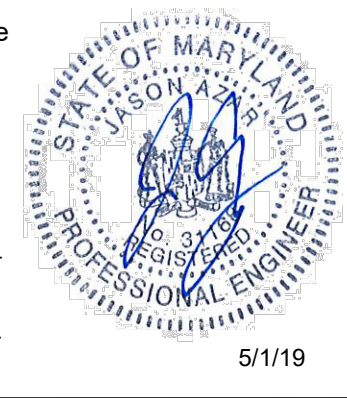
SWM Concept Summary Table	
General Property Information:	
SM#: STORMWATER-284767	
Type of Concept: SWM Concept	
MNCP&PC Process/No: N/A	
Property Address: 20941 Lake Ridge Drive, Boyds, Maryland 20841 (Black Hill Regional Park)	
Property Legal Description: GARNKIRK ETC	
Property Size (ac./sq.ft.): 19.170 ac. / 835,045 sq. ft.	
Total Concept Area (ac./sq.ft.): 1.332 ac. / 58,036 sq. ft.	
Zoning: RE-2	
Watershed and Stream Class: Little Seneca Creek; Class I-P	
Special Protection Area: N/A	
100 YR Floodplain: N/A	
Ex. % Impervious/Redevelopment or New Development: 7.43% - New Development	
SWM Summary:	
Target P ₂ /Proposed P ₂ : 1.0 in. / 1.04 in.	
Target ESDv/Provided ESDv: 1,590 cu. ft. / 1,656 cu. ft.	
ESD Measures: 1 - Micro-bioretentation Facility	
Structural Storage Required/Provided: N/A	
Structural Measures: N/A	
Waiver Request/QL/QN/Both: No	
Provided ESDv + Structural Storage Provided + Requested to be Waived = 1,656 cu. ft.	
Other Information: N/A	

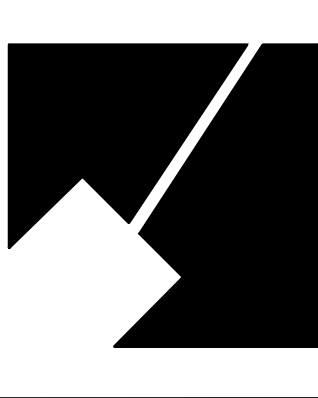


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LSG LANDSCAPE ARCHITECTURE			DESIGN			Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.			REVIEW AND APPROVAL			ISSUED FOR PROCUREMENT ON			BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN 20941 LAKE RIDGE DRIVE, BOYDS, MARYLAND 20841 Combined SWM Concept / Site Development SWM Plan LEGAL DESCRIPTION: GARNKIRK ETC PLAN NUMBER: 42019149E TAX MAP: EU123 WSSC GRID: 228NW14			DWG. # C-1 SHT. # 1 OF 2					
Designer's Name DAVE NORDEN			Landscape Architect			Date			Date			Date									Date		
Address 1775 GREENSBORO STATION PLACE, SUITE 110			Architect			Date			Date			Date									Date		
City/State/Zip TYSONS, VIRGINIA, 22102			CLARK AZAR & ASSOCIATES			4/12/19			DC			Date									Date		
Telephone Number 703-821-2045			Engineer			Date			Date			Date									Date		
			ME			4/12/19			JA			Date			Date								
			Drawn by			Date			Checked By:			Date			Date								

Designer's Name DAVE NORDEN	Landscape Architect	Date	Checked By:
Address 1775 GREENSBORO STATION PLACE, SUITE 110	Architect	Date	Checked By:
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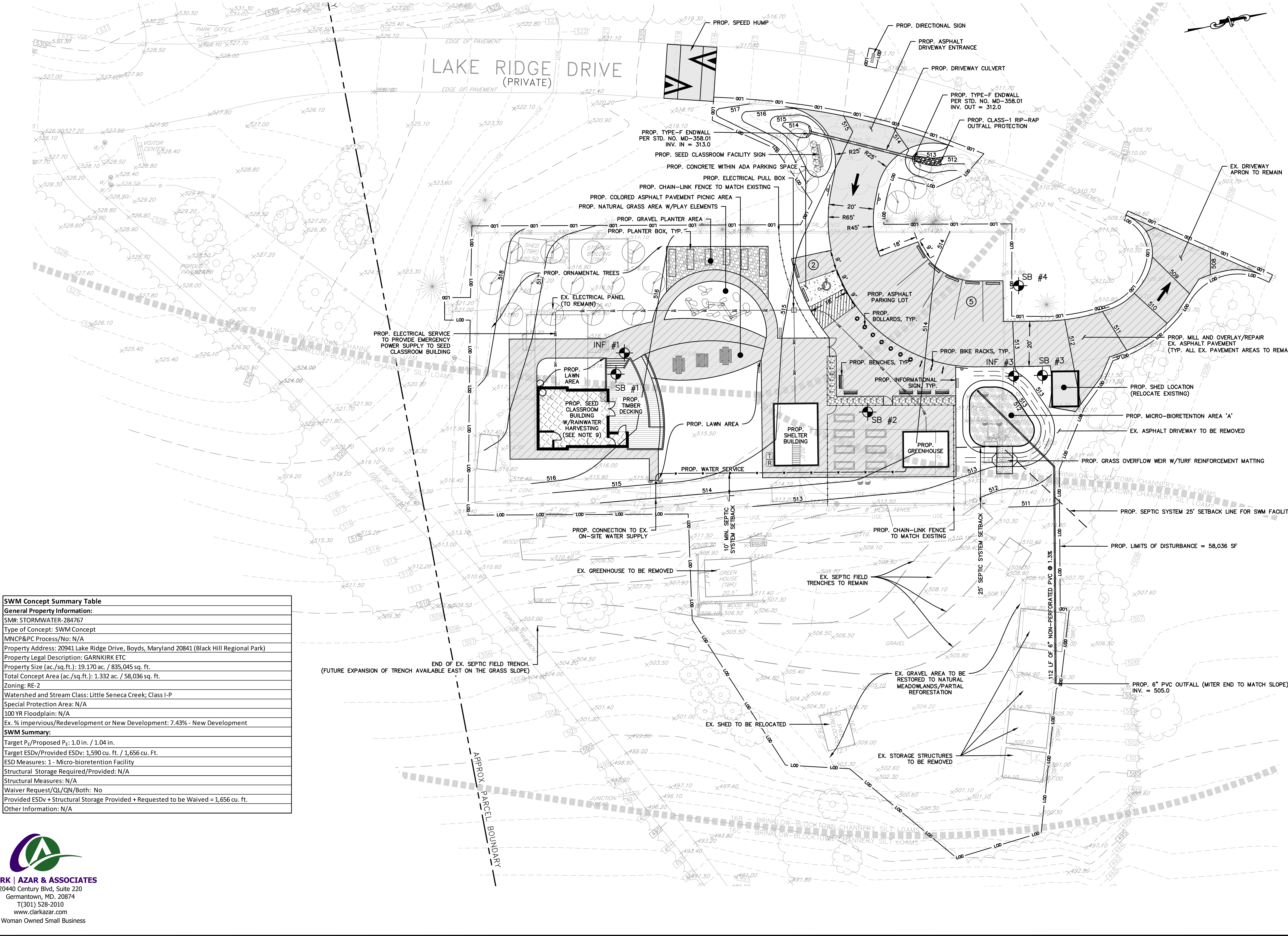


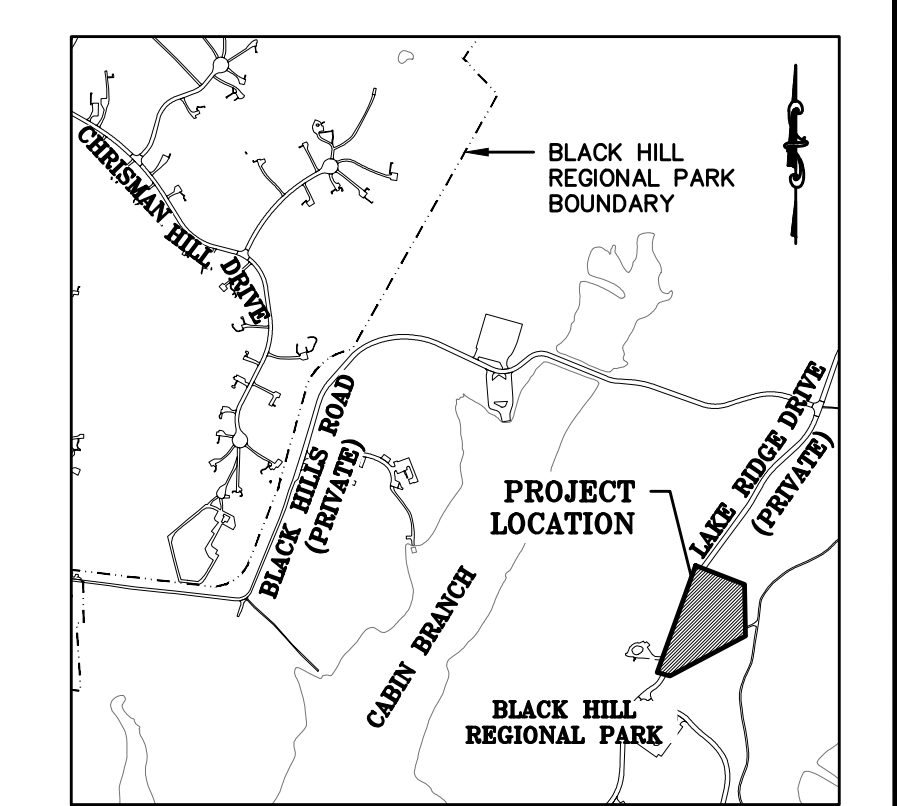
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
9500 Brunett Avenue
Silver Spring, Maryland 20901
(301) 495-2535

REVIEW AND APPROVAL		ISSUED FOR PROCUREMENT ON	
		REVISIONS	
Project Manager	Date	Rev. No.	Date
Construction Manager	Date	1	03/27/19
Park Manager	Date	2	05/01/19

**BLACK HILL REGIONAL PARK
SEED CLASSROOM FACILITY PLAN**
20941 LAKE RIDGE DRIVE, BOYDS, MARYLAND 20841
Combined SWM Concept / Site Development SWM Plan
LEGAL DESCRIPTION: GARNKIRK ETC
PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14

**DWG. #
C-1**
SHT. # 1 OF 2





VICINITY MAP
SCALE: 1" = 1000'

GENERAL NOTES

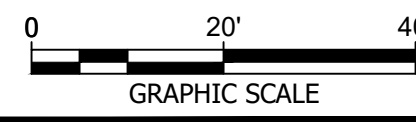
OWNER: MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING, MARYLAND 20910

CONTACT: WEN HUANG, PROJECT MANAGER
(301) 495-2466
WEN.HUANG@MONTGOMERYPARKS.ORG

- WSSC MAP GRID: 228NW14, 229NW14
- TAX MAP: EV-21
- ZONING: RE-2
- ELECTION DISTRICT: 2
- TOPOGRAPHY SURVEY PERFORMED BY POTOMAC VALLEY SURVEYS, LLC APRIL 12, 2016 AND SUPPLEMENTED BY MONTGOMERY COUNTY GIS DATA.
- THE LOCATION OF UNDERGROUND UTILITIES ARE SHOWN APPROXIMATE IN NATURE AND PER AVAILABLE PLANS. ABOVE GROUND UTILITIES & IMPROVEMENTS FIELD LOCATED BY POTOMAC VALLEY SURVEYS, LLC. INVERT ELEVATIONS HAVE BEEN OBTAINED WHERE ACCESS IS AVAILABLE. ALL CONTRACTORS MUST CALL "MISS UTILITY" PRIOR TO ANY EXCAVATIONS.
- NRCS WEB SOIL SURVEY IDENTIFIES SOILS AT THIS SITE AS OCCOQUAN LOAM (HSC-B), BLOCKTOWN CHANNERY SILT LOAM (HSC-D), AND BRINKLOW-BLOCKTOWN CHANNERY SILT LOAMS (HSC-C).
- THERE IS NO MAPPED FLOODPLAIN ASSOCIATED WITH THIS SITE PER FEMA FLOOD INSURANCE RATE MAP NUMBER 24031C01600, DATED SEPTEMBER 29, 2006.
- PROPOSED SEED CLASSROOM BUILDING TO UTILIZE RAINWATER HARVESTING VIA INTERNAL CISTERN TO COLLECT ROOFTOP RUNOFF. BUILDING FOOTPRINT HAS BEEN EXCLUDED FROM MICRO-BIORETENTION AREA 'A' DRAINAGE AREA AND NO STORMWATER MANAGEMENT HAS BEEN CREDITED.
- THERE IS AN EXISTING SEPTIC FIELD ON-SITE TO REMAIN. THE PROPOSED MICRO-BIORETENTION FACILITY IS LOCATED OUTSIDE OF THE MINIMUM 25' SETBACK FROM THE EXISTING SEPTIC FIELD AND ANY FUTURE TRENCHES. THERE ARE NO EXISTING/PROPOSED WELLS ON SITE.

LEGEND

- PROPOSED LIMITS OF DISTURBANCE
- PROPOSED GRAVEL (ASSUMED IMPERVIOUS)
- PROPOSED ASPHALT PAVEMENT
- EXISTING ASPHALT PAVEMENT (MILL & OVERLAY/REPAIR)
- PROPOSED CONCRETE PAVEMENT
- PROPOSED MICRO-BIORETENTION AREA
- PROPOSED RAINWATER HARVEST AREA (NO SWM CREDITED)
- SOIL BORING/INFILTRATION TEST LOCATION



FINAL SCANNED:

PLAN SCANNED:

PARK CODE: C10

Plotted By: Matt Edelman, 6/25/2019 2:57 PM, -----

J:\145.003 - Black Hill Park SEED Classroom\CONCEPTS\C-1 - Stormwater Management Concept.dwg C-2



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Designer's Name DAVE NORDEN		Landscape Architect	Date
Address 1775 GREENSBORO STATION PLACE, SUITE 110		Architect	Date
City/State/Zip TYSONS, VIRGINIA, 22102		Engineer	Date
Telephone Number 703-821-2045		ME	Date
		Drawn by	Date

Professional Certification. I hereby 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 Maryland.

License No. 31168

Expiration Date 01/12/2021



5/1/19



The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
9500 Brunett Avenue
Silver Spring, Maryland 20901
(301) 495-2535

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		REVISIONS	
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BLACK HILL REGIONAL PARK
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20941 LAKE RIDGE DRIVE, BOYDS, MARYLAND 20841
Combined SWM Concept / Site Development SWM Plan
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PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14

DWG. #
C-2
SHT. # 2 OF 2

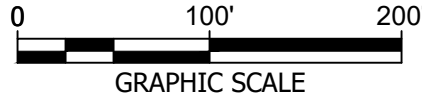
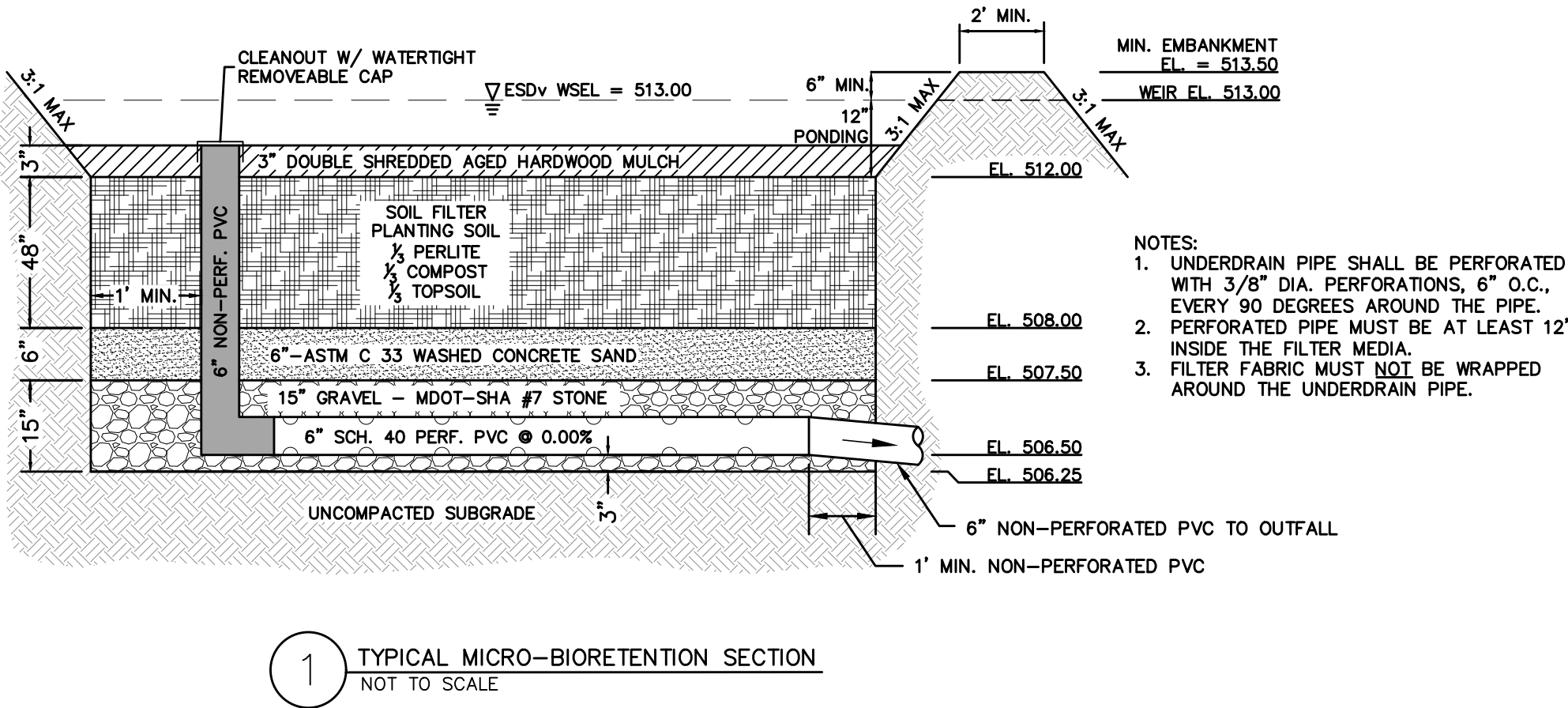


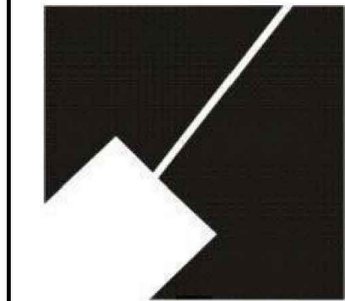
LOD AREA:
TOTAL AREA = 58,036 SF (1.332 AC)
PERVIOUS AREA = 40,063 SF (0.919 AC)
IMPERVIOUS AREA = 17,973 SF (0.413 AC)
PERCENT IMPERVIOUS = 31.0%

DRAINAGE AREA (DA-1):
TOTAL AREA = 17,218 SF (0.395 AC)
PERVIOUS AREA = 9,681 SF (0.222 AC)
IMPERVIOUS AREA = 7,537 SF (0.173 AC)
PERCENT IMPERVIOUS = 43.8%

DRAINAGE AREA (DA-2):
TOTAL AREA = 817,827 SF (18.775 AC)
PERVIOUS AREA = 783,016 SF (17.988 AC)
IMPERVIOUS AREA = 34,271 SF (0.787 AC)
PERCENT IMPERVIOUS = 4.2%

SWM SUMMARY TABLE							
Measure Number	Type of Measure	Drainage Area to Measure	Impervious Area to Measure	% Impervious	Rv for ESD Calculations	Min ESDv	Credited Volume
ESD							
'A'	MBR	17,218 sf	7,537 sf	43.80%	0.444	637 cf	1,656 cf
Total		17,218 sf	7,537 sf				1,656 cf
Structural							
Total		0	0				0
Does not drain to a SWM measure							
QN Waiver acres and % impervious							N/A
QL Waiver acres and % impervious							N/A
Project							
Total		0	0	0	0		0
ESDv Required		1,590					
ESDv Provided		1,656					
Structural Required		0					
Structural Provided		0					





MONTGOMERY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

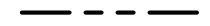
APPROVED - 42019149E

Michael Sharp (michael.sharp@montgomeryplanning.org)

05/29/19

4

PLANNING APPROVAL

- 

PROPERTY OR PARCEL BOUNDARY
- 

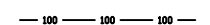
LIMIT OF DISTURBANCE / TREE PROTECTION FENCING
- 

EXISTING MINOR TREE
- 

EXISTING SPECIMEN TREE (30" OR GREATER) & TREE NUMBER
- 

EXISTING SIGNIFICANT TREE (24" OR GREATER) & TREE NUMBER
- 

TREE TO BE REMOVED
- 

CRITICAL ROOT ZONE
- 

100' STUDY AREA
- 

SOIL TYPE BOUNDARY
- 

TREE PROTECTION FENCE
- 

EXISTING CONTOUR, 1' INTERVAL
- 

EXISTING CONTOUR, 2' INTERVAL
- 

SOURCED FROM GIS DATA
- 

ROOT PRUNING
- 

SLOPES GREATER THAN 25%
- 

SLOPES BETWEEN 15 - 25% ON HIGHLY ERODIBLE SOILS
- 

EXISTING ASPHALT TO BE MILLED AND OVERLAID
- 

RESURFACED AND PAINTED ASPHALT
- 

PAVEMENT TO BE REMOVED IN CRZ SEE NOTES: 3/L003

5

LEGEND

THIS PLAN WAS PREPARED BY DAVE NORDEN, MARYLAND REGISTERED LANDSCAPE ARCHITECT 3694 AND IS A CERTIFIED ARBORIST MA5513A.

ADDRESS: LSG LANDSCAPE ARCHITECTURE
1775 GREENSBORO STATION PL., STE. 110
TYSONS, VIRGINIA 22182
PHONE: 703-821-2045
EMAIL: DNORDEN@LSGNC.COM



6

QUALIFIED PROFESSIONAL CERTIFICATION

LSG LANDSCAPE ARCHITECTURE				DESIGN				Professional Certification. I hereby 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 Maryland.			
Designer's Name DAVE NORDEN				Landscape Architect		Date	Checked By:	License No.		Expiration Date	
Address 1775 GREENSBORO STATION PLACE, SUITE 110				Architect		Date	Checked By:				
City/State/Zip TYSONS, VIRGINIA, 22102				Engineer		Date	Checked By:				
Telephone Number 703-821-2045				Drawn by		Date	Checked By:				

Landscape Architect		Date	Checked By:
Architect		Date	Checked By:
Engineer		Date	Checked By:
Drawn by		Date	Checked By:

3

NATURAL RESOURCE INVENTORY PLAN

1" = 20' 0"



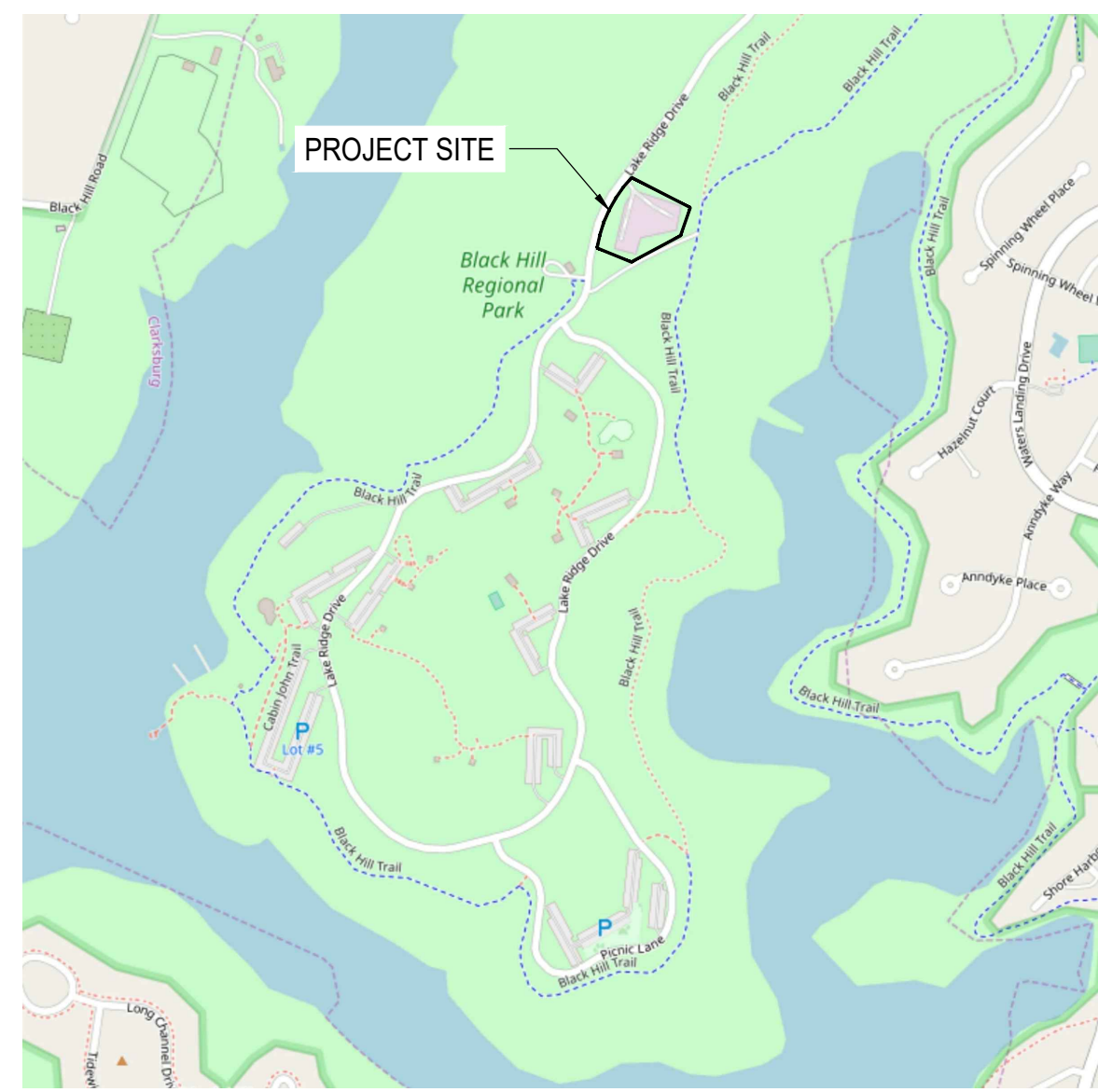
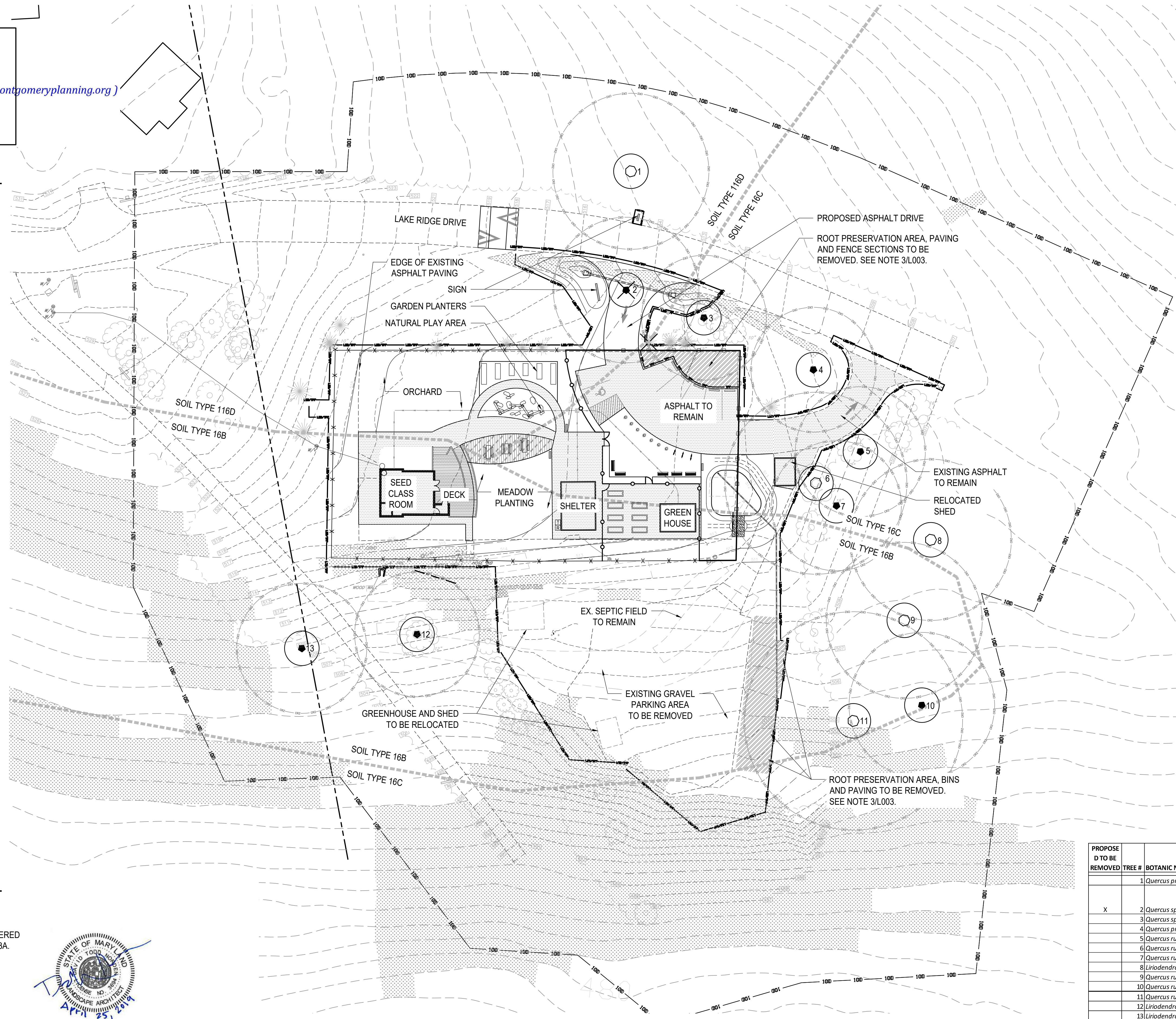
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Rev. No.	Date	Description	
1	03/27/19	Simplified NRI & FC Exemption	
2	04/24/19	Revised Per Comments	
Project Manager		Date	
Construction Manager		Date	
Park Manager		Date	

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BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN
Simplified NRI & FC Exemption
PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14

DWG. #
L002
SHT. # 04 OF 10



20930 LAKE RIDGE DRIVE
BOYDS, MD 20841
FORMER MAINTENANCE YARD
VICINITY MAP
SCALE: 1" = 2000'

PROPOSED TO BE REMOVED	TREE #	BOTANIC NAME	DBH	CONDITION	REMARKS
	1	Quercus prinus	30"	Good	
X	2	Quercus sp.	24"	Poor	Unbalanced canopy, large cavities at the base of the trunk. Determined by Andy Driscoll of Montgomery Parks
	3	Quercus sp.	24"	Good	
	4	Quercus prinus	24"	Good	
	5	Quercus rubra	25"	Good	
	6	Quercus rubra	35"	Good	
	7	Quercus rubra	25"	Good	
	8	Liriodendron tulipifera	31"	Good	
	9	Quercus rubra	30"	Good	
	10	Quercus rubra	28"	Good	
	11	Quercus rubra	42"	Good	
	12	Liriodendron tulipifera	24"	Good	
	13	Liriodendron tulipifera	25"	Good	

2

SIGNIFICANT/SPECIMEN TREE INVENTORY

FINAL SCANNED:

PLAN SCANNED:

PARK CODE: C10

Plotted By: Matthew Stowell, 7/1/2019 11:43 AM.

G:\2012\1213608 - Black Hills SEED Classroom FP01 Caddocs\002_BHRP.dwg L002

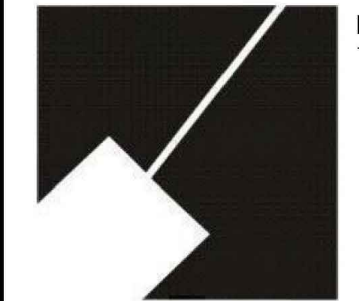
FINAL SCANNED:

PLAN SCANNED:

PARK CODE: C10

Plotted By: Matthew Stowell, 7/1/2019 11:34 AM, -----

G:\2012\1213608 - Black Hills SEED Classroom FPO\03_Caddex\003_BHPP.dwg L003



MONTGOMERY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

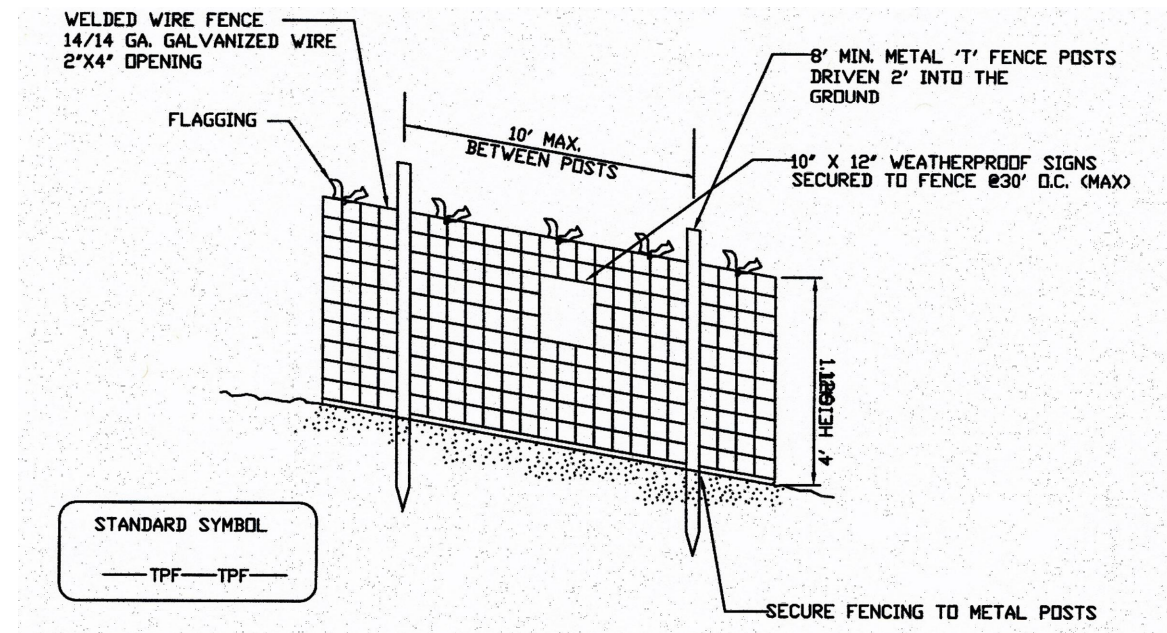
APPROVED - 42019149E

Michael Sharp (michael.sharp@montgomeryplanning.org)

05/29/19

8

PLANNING APPROVAL



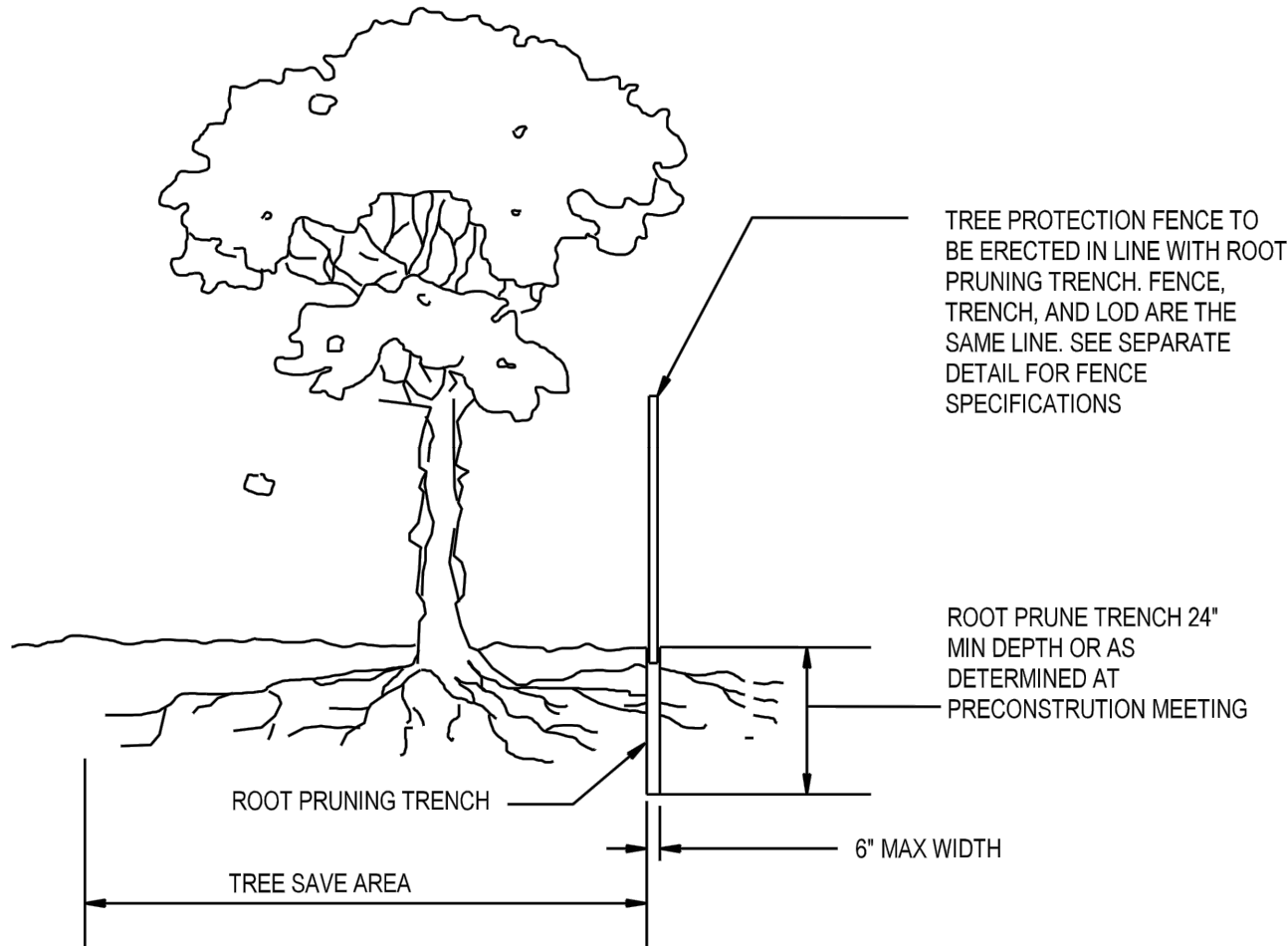
NOTES

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

9

TREE PROTECTION FENCE

NTS



NOTES:

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

10

ROOT PRUNING

NTS

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

- An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
- The property owner must arrange for the meeting and following people should must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
 - Typical tree protection devices include:
 - Chain link fence (four feet high)
 - Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
 - 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
 - Typical stress reduction measures may include, but are not limited to:
 - Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
 - Crown Reduction or pruning
 - Watering
 - Fertilizing
 - Vertical mulching
 - Root aeration systemsMeasures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.
- A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.
- Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. 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.
- Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
 - Parking or driving of equipment, machinery or vehicles of any type.
 - Storage of any construction materials, equipment, stockpiling, fill, debris, etc.
 - Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder, trash, garbage, or debris of any kind.
 - Felling of trees into a protected area.
 - Trenching or grading for utilities, irrigation, drainage, etc.
- Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish.

During Construction

- Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the Inspector.
- The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

- After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
 - Removal, and possible replacement, of dead, dying, or hazardous trees
 - Pruning of dead or declining limbs
 - Soil aeration
 - Fertilization
 - Watering
 - Wound repair
 - Clean up of retention areas, including trash removal
- After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.
- Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

7

FCP SEQUENCE OF EVENTS

- FOR PAVEMENT REMOVAL NEAR TREES 3 & 11:
 - AFTER PROTECTION FENCE INSTALLATION, PROCEED WITH DEMOLITION OF THE ASPHALT BY STARTING AT THE POINT INSIDE TREE PRESERVATION FENCING THAT IS FARTESTH FROM THE ENTRANCE. WORK INCREMENTALLY BACKWARDS. KEEP ALL EQUIPMENT ONLY ON THE ASPHALT THAT HAS NOT YET BEEN REMOVED. REMOVE ASPHALT AND STONE BASE COURSE ONLY, WHERE INDICATED ON PLAN. TO PROTECT TREE ROOTS, DO NOT DISTURB SUBGRADE. THE USE OF LARGE MOTORIZED EQUIPMENT IN THIS AREA IS PROHIBITED.
 - AFTER PORTION OF ASPHALT DRIVE HAS BEEN REMOVED FROM THE SITE, INSTALL 6-INCHES OF TOPSOIL AND 3" OF WOOD CHIPS. FOLLOWING ASPHALT REMOVAL, THE ROUTE IS CLOSED AND SHALL NOT BE USED AS A CONSTRUCTION ACCESS ROUTE.

3

NOTES

RESOURCE DATA TABLE	
Resources Within Tract	ACRES
Acres of Forest	0
Acres of Wetlands	0
Acres of Forest in Wetlands	0
Acres of Floodplain	0
Acres of Forest in Floodplain	0
Acres of Stream Buffers	0
Acres of Forest in Stream Buffers	0

4

RESOURCE DATA TABLE

LSG DETERMINED NO FOREST STAND EXISTS WITHIN THE LIMIT OF DISTURBED AREA BASED ON SITE OBSERVATIONS PERFORMED MARCH, 2019.

5

FOREST STAND TABLE



March 1, 2019

Mr. Dave Norden
LSG Landscape Architecture
1775 Greensboro Station Place
Suite 110
Tysons, VA 22102

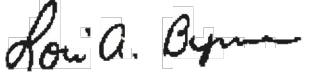
RE: Environmental Review for Site Upgrades, Black Hill Regional Park SEED Classroom Facility Plan, Boyds, Montgomery County, Maryland.

Dear Mr. Norden:

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

ER# 2019.0279.mo

Tawes State Office Building – 580 Taylor Avenue – Annapolis, Maryland 21401
410-260-8DNR or toll free in Maryland 877-620-8DNR – dnr.maryland.gov – TTY Users Call via the Maryland Relay

6

DNR RESPONSE LETTER

THIS PLAN WAS PREPARED BY DAVE NORDEN, MARYLAND REGISTERED LANDSCAPE ARCHITECT 3694 AND IS A CERTIFIED ARBORIST MA5513A.

ADDRESS: LSG LANDSCAPE ARCHITECTURE
1775 GREENSBORO STATION PL., STE. 110
TYSONS, VIRGINIA 22182
PHONE: 703-821-2045
EMAIL: DNORDEN@LSGINC.COM



11

QUALIFIED PROFESSIONAL CERTIFICATION

APPLICANT INFORMATION

The Maryland National Capital Park and Planning Comission, M-NCPPC

PROPERTY INFORMATION

Forest Conservation Exemption Requested: 22A-5(t)
Tax Identification Number: 00024893
Owner: M-NCPPC
Address: 20930 Lake Ridge Drive, Boyds, MD 20841
Total Tract Size: 83,973 Sq. Ft./1.93 Acres
Tax Map: EU123
Zoning: RE-2
WSSC Grid: 228NW14

SITE DESCRIPTION

20930 Lake Ridge Drive is located centrally within Black Hills Regional Park at the intersection of Lake Ridge Drive and the Black Hill Hiker-Biker Trail. The site was previously purposed as a storage yard for the park land which has since been relocated. Currently on site there is a large fenced in asphalt lot with existing portable shed and storage structures which were recently removed, a gravel drive and parking area, storage bins, a green house and an septic field.

Located South-West of the site adjacent to the Chadwick House is a Black Hills Gold Mine and Bomb Shelter site which is classified as a Park Owned Historic Site. The trees on site range in age, size and type. A site investigation determined by the NRI/FSO determined that the site does not contain forest stands within the limit of work, however it is surrounded by forest stands on all sides outside of the facility plan study area. The most dense cluster of vegetation on site is located along the east edge of the asphalt yard and ranges from 5' to 10' in width.

WATERSHED

The site lies within the Little Seneca Creek Watershed which is use III-P as defined by the County Forest Conservation Law in the Guidelines for the Environmental Management of Development in Montgomery County (January, 2000).

STREAMS

No streams were observed draining the project tract. Source of Floodplain Data is the Federal Emergency Mangement Agency (FEMA) Flood Insurance Rate Map 24031C0160D.

SPECIAL PROTECTION AND PRIMARY MANAGEMENT AREAS

The project site is not located within a Special Protection Area of the Patuxent River Primary Management Area. Refer to Guidelines for the Environmental Management of Development in Montgomery County (January, 2000) for more information.

FLOODPLAINS

According to the FEMA Flood Insurance Rate Map 24031C0160D the project site is in Zone X which has a .2% annual chance of flood hazard. According to MCAtlas.org the project site is not within a 100 year floodplain boundary.

WETLANDS

No wetlands were observed on site. The National Wetlands Inventory (NWI) Map for Montgomery County, Maryland (USFWS, 1981-2002) identifies no waterway and no wetlands within the study area.

RARE, THREATENED OR ENDANGERED SPECIES

Rare, threatened, or endangered species were not observed in the study area. We requested determination from DNR Wildlife and Heritage Service that there are no recorded RTE species on site, refer to the attached letter on sheet L003.

HISTORIC SITES

The facility plan study area is not identified on the Locational Atlas and Index of Historic Sites. Adjacent to the study area but not within the 100' offset is the Black Hills Gold Mine and Bomb Shelter, which is classified as an Archeology Site and a Park Owned Historic Site according to MCAtlas.org.

TREES

No National, State or County Champion Trees or trees within 75% of the current State Champion where located on site.

FIELD WORK

Individual trees listed in the Variance Tree Schedule were measured with a diameter tape to the nearest tenth-inch at 4.5 feet above ground (DBH), except for multiple stem trees that split below 4.5 feet above ground, which were measured at the narrowest point between the split and the ground in accordance with American Forests Tree Measuring Guidelines. Site observations were conducted within the study area on March 13, 2019 by Colter B of Montgomery Parks. Trees and other features on private property are inaccessible and were estimated visually from the subject property.

1

PLAN NOTES

SOIL CHARACTERISTICS AND LIMITATIONS					
MAP SYMBOL	MAP UNIT NAME	PRIME OR UNIQUE FARMLAND	HYDRIC STATUS	HIGHLY ERODIBLE	RESTRICTIONS AND LIMITATIONS
16B	Brinklow-Blocktown channery silt loams, 3 - 8 percent slopes	YES, Farmland of statewide importance	NO	NO	Somewhat ltd. due to depth of bedrock
16C	Brinklow-Blocktown channery silt loams, 8 - 15 percent slopes	YES, Farmland of statewide importance	NO	NO	Somewhat ltd. due to slope and depth of bedrock
116D	Blocktown channery silt loam, 15 - 25 percent slopes	NO	NO	MODERATELY	Somewhat ltd. due to slope and rock outcrops

2

SOILS TABLE

LSG LANDSCAPE ARCHITECTURE		DESIGN		Professional Certification. I hereby 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 Maryland.
Designer's Name	DAVE NORDEN	Landscape Architect	Date	
Address	1775 GREENSBORO STATION PLACE, SUITE 110	Architect	Date	
City/State/Zip	TYSONS, VIRGINIA, 22102	Engineer	Date	
Telephone Number	703-821-2045	Drawn by	Date	

License No. _____
Expiration Date _____



The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
9500 Brunett Avenue
Silver Spring, Maryland 20901
(301) 495-2535

REVIEW AND APPROVAL		ISSUED FOR PROCUREMENT ON _____	
		REVISIONS	
Rev. No.	Date	Description	
1	03/27/19	Simplified NRI & FC Exemption	
2	04/24/19	Revised Per Comments	

Project Manager	Date
Construction Manager	Date
Park Manager	Date

BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN
Simplified NRI & FC Exemption

SCALE: AS SHOWN

PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14

L003

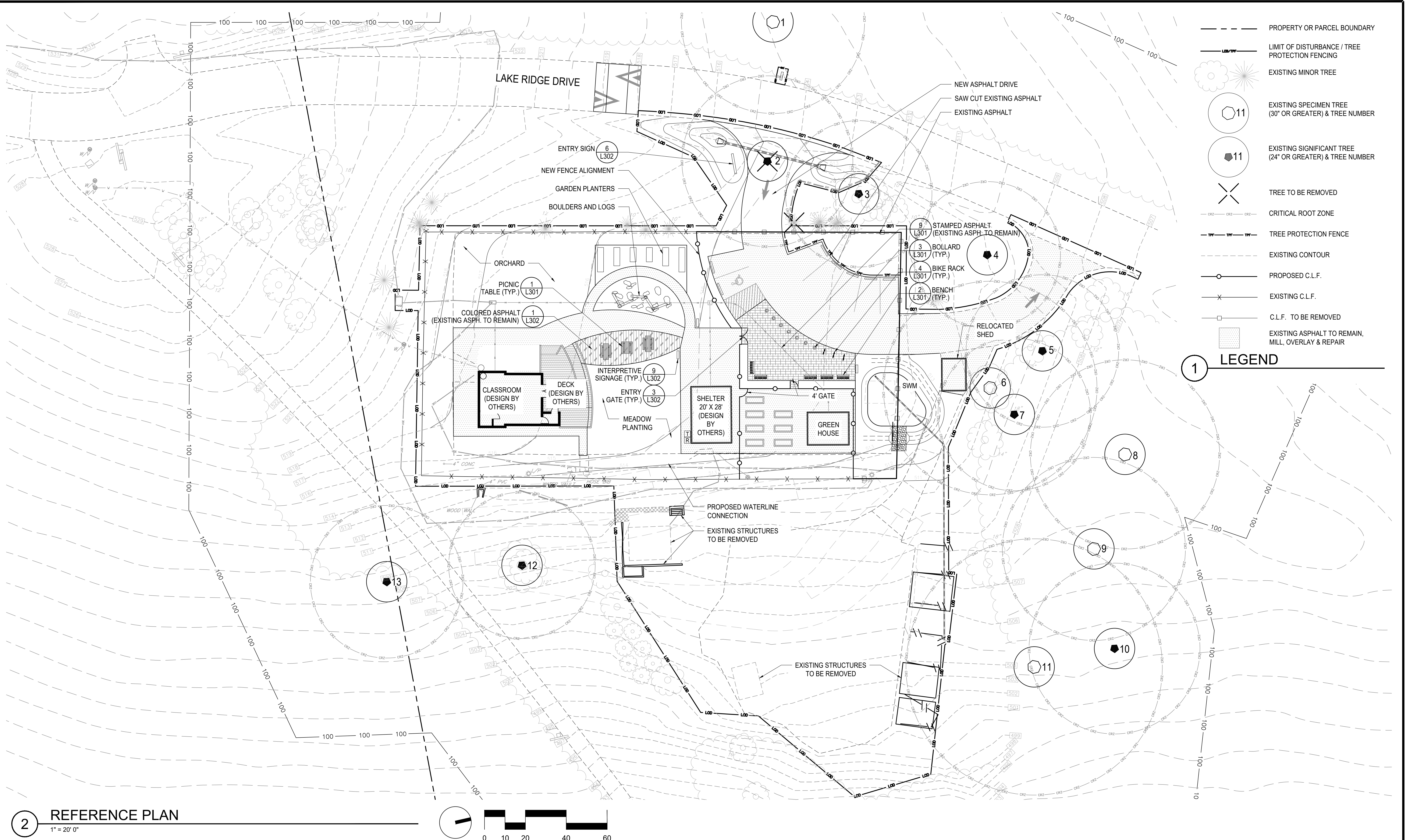
SHT. # 05 OF 10

FINAL SCANNED:

PLAN SCANNED:

PARK CODE: C10

G:\2012\1213608 - Black Hills SEED Classroom.FP\01_Caddocs\L101_LBHRP.dwg L101 Plotted By: Matthew Stowell: 7/1/2019 11:43 AM. -----



2 REFERENCE PLAN
1" = 20' 0"

LSG LANDSCAPE ARCHITECTURE			DESIGN			Professional Certification. I hereby 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 Maryland. License No. _____ Expiration Date _____
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Address 1775 GREENSBORO STATION PLACE, SUITE 110			Architect	Date	Checked By:	
City/State/Zip TYSONS, VIRGINIA, 22102			Engineer	Date	Checked By:	
Telephone Number 703-821-2045			Drawn by	Date	Checked By:	



The Maryland-National Capital
Park and Planning Commission

Montgomery County Department of Parks
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		REVISIONS	
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Construction Manager	Date	1	03/27/19 Simplified NRI & FC Exemption
Park Manager	Date	2	04/24/19 Revised Per Comments

**BLACK HILL REGIONAL PARK SEED
CLASSROOM FACILITY PLAN**

Reference Plan

SCALE: AS SHOWN

PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14

L101

SHT. # 06 OF 10



10 EXISTING GREEN HOUSE

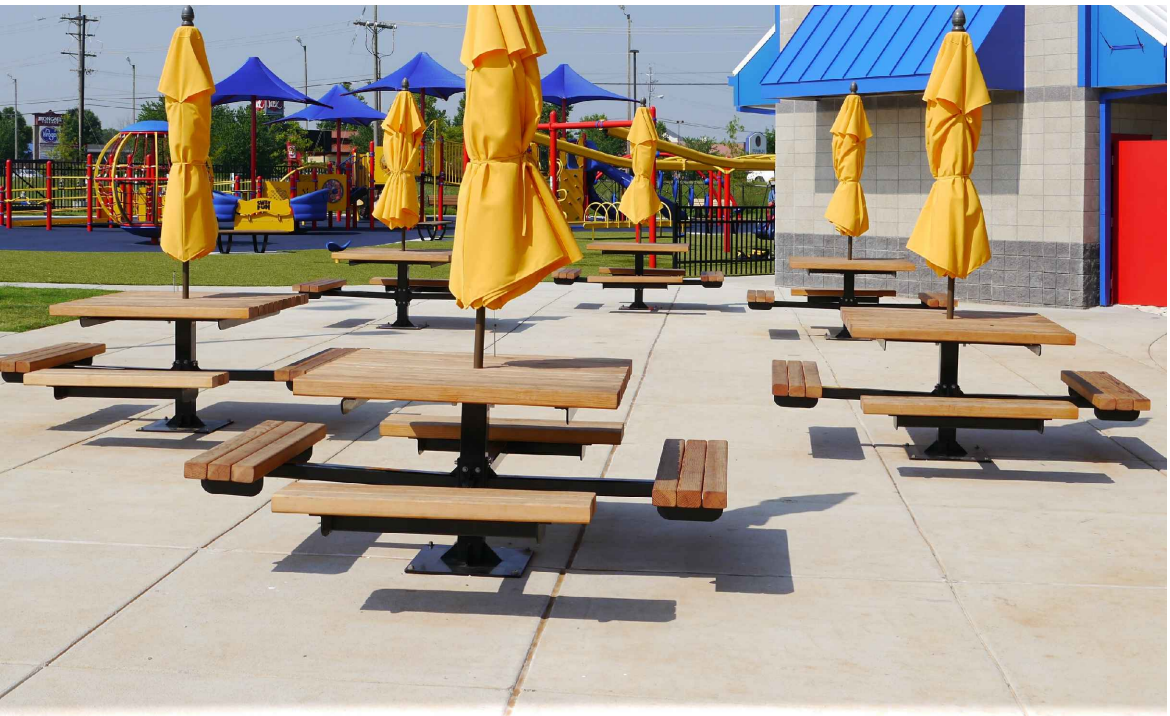


7 PLANT PRODUCTION TABLES



4 BIKE RACK

NOTES:
1. MANUFACTURER: DUMOR
2. FINISH: POWDER COATED
3. COLOR: RECYCLED GREEN, SAFETY YELLOW AND OTHERS



1 PICNIC TABLE

NOTES:
1. MANUFACTURER: DUMOR
2. WOOD: DOUGLAS FIR
3. METAL: POWDER COAT
4. ACCESSIBLE & STANDARD TYPES SPECIFIED
5. WITH CLOSEABLE UMBRELLA



11 EXISTING SHED



8 PICNIC SHELTER

NOTES:
1. SIZE AND HEIGHT TO BE DETERMINED



5 INTERPRETIVE SIGANAGE

NOTES:
1. CUSTOM HIGH PRESSURE LAMINATE SIGNAGE
2. INTERPRETIVE SITE MESSAGES



2 BENCH

NOTES:
1. MANUFACTURER: DUMOR
2. WOOD: DOUGLAS FIR
3. METAL: POWDER COAT
4. COLOR: BLACK OR OTHERS



12 EXISTING ASPHALT

NOTES:
1. TO BE RETAINED AND MILLED / OVERLAID AS NEEDED



9 STAMPED ASPHALT

NOTES:
1. WHERE INDICATED
2. TO BE CLEANED, HEALED AND IMPRINTED



6 RAISED PLANTER BED

NOTES:
1. CUSTOM FABRICATED
2. 2X8" REDWOOD LUMBER, 30" HT.



3 BOLLARD

NOTES:
1. MANUFACTURER: VICTOR STANLEY
2. FINISH: POWDER COATED
3. COLORS: LIME GREEN, ORANGE, YELLOW AND OTHERS

LSG LANDSCAPE ARCHITECTURE			DESIGN			Professional Certification. I hereby 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 Maryland. License No. _____ Expiration Date _____
Designer's Name DAVE NORDEN			Landscape Architect	Date	Checked By:	
Address 1775 GREENSBORO STATION PLACE, SUITE 110			Architect	Date	Checked By:	
City/State/Zip TYSONS, VIRGINIA, 22102			Engineer	Date	Checked By:	
Telephone Number 703-821-2045			Drawn by	Date	Checked By:	



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Rev. No.	Date	Description		
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2	04/24/19	Revised Per Comments		

BLACK HILL REGIONAL PARK SEED
CLASSROOM FACILITY PLAN
Details

SCALE: AS SHOWN

PLAN NUMBER: 42019149E
TAX MAP: EU123
WSSC GRID: 228NW14



- NOTES:
1. INSIDE FENCED AREA: PLUGS
 2. OUTSIDE FENCED AREA: SEEDED
 3. SHOWY WILDFLOWER / GRASS SPECIES

8 MEADOW PLANTING



- NOTES:
1. VINYL COATED CHAIN LINK
 2. 8' HEIGHT
 3. GATE LEAF WIDTHS: 4'

4 CHAIN LINK FENCE



- NOTES:
1. COLORED ACRYLIC RESURFACER TYPE COATING
 2. WITH OR WITHOUT STAMPED PATTERNS / SIMULATED PAVING JOINTS

1 ASPHALT PAVEMENT COATING



- NOTES:
1. STORMWATER MANAGEMENT FEATURE
 2. OPPORTUNITY FOR INTERPRETIVE MESSAGING

9 MICRO BIORETENTION BASIN



- NOTES:
1. SEED CLASSROOM SIGN PANEL WITH LOGO
 2. CAST IN PLACE CONCRETE BASE
 3. BACKGROUND MATCHES WOOD SCREEN FENCE

6 ENTRY SIGNAGE



- NOTES:
1. ARTIST INSPIRED
 2. PAINTED ON ASPHALT PAVING

2 POTENTIAL PAVEMENT ART



- NOTES:
1. FRUITING TREES
 2. SUCH AS APPLE, PAW PAW, AND PEAR

10 ORCHARD TYPE TREES

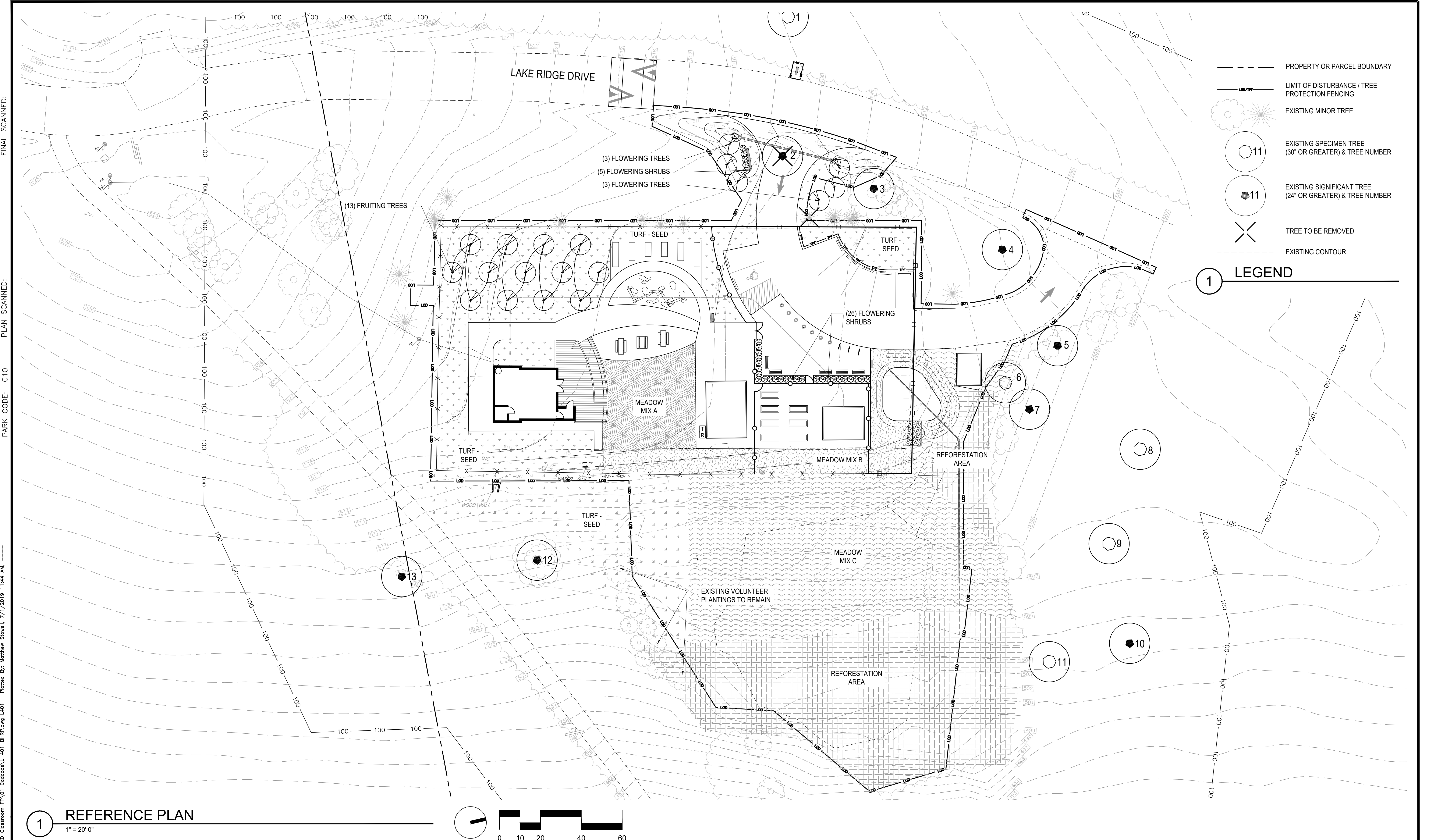


- NOTES:
1. REPURPOSED WOOD LOGS AND FIELDSTONE BOULDERS

7 NATURAL LANDSCAPE ELEMENTS

3 NOT IN USE

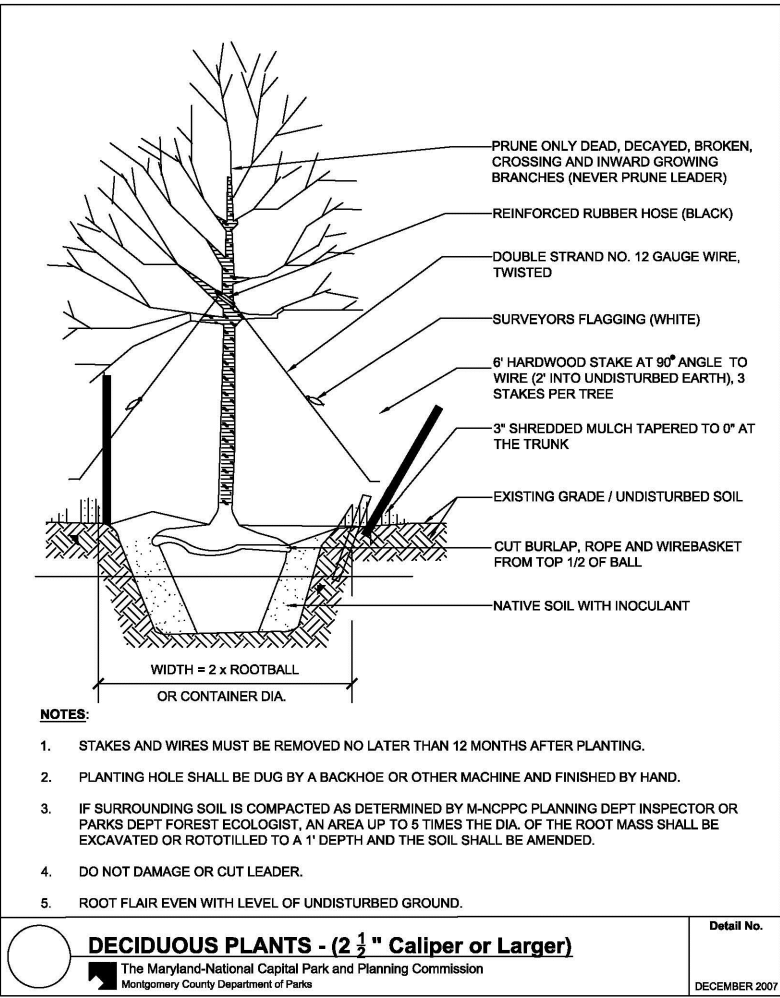
FINAL SCANNED: PLAN SCANNED: C10 PARK CODE: C10 Plotted By: Matthew Stowell: 7/1/2019 11:44 AM. G:\2012\1213608 - Black Hills SEED Classroom FPA01 Caddocs\L401_BHRR.dwg L401



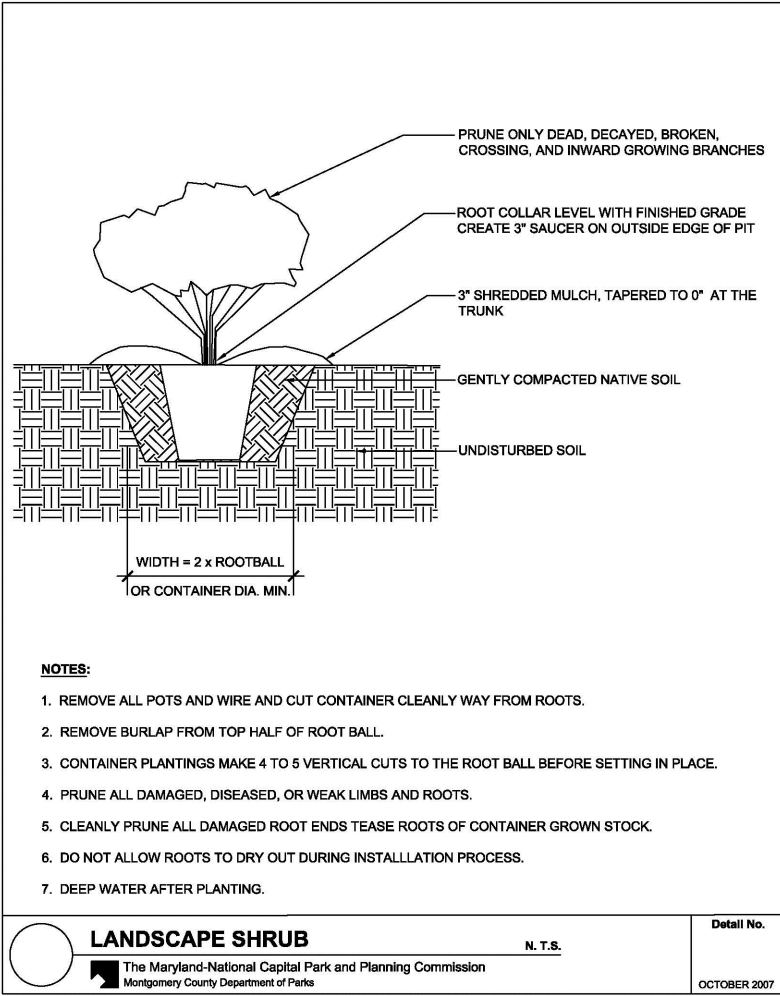
LSG LANDSCAPE ARCHITECTURE		DESIGN		Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. _____ Expiration Date _____	 The Maryland-National Capital Park and Planning Commission Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535	REVIEW AND APPROVAL		ISSUED FOR PROCUREMENT ON _____		BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN Planting Plan PLAN NUMBER: 42019149E TAX MAP: EU123 WSSC GRID: 228NW14 SCALE: AS SHOWN	L401 SHT. # 09 OF 10	
Designer's Name DAVE NORDEN	Landscape Architect	Date	Checked By:					REVISIONS				
Address 1775 GREENSBORO STATION PLACE, SUITE 110	Architect	Date	Checked By:			Project Manager	Date	Rev. No.	Date			Description
City/State/Zip TYSONS, VIRGINIA, 22102	Engineer	Date	Checked By:			Construction Manager	Date	1	03/27/19			Simplified NRI & FC Exemption
Telephone Number 703-821-2045	Drawn by	Date	Checked By:			Park Manager	Date	2	04/24/19			Revised Per Comments

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	SPACING	REMARKS
REFORESTED AREA - POSSIBLE SPECIES OPTIONS							
	35	MIX OF NATIVE SPECIES TYPES	MIX OF NATIVE SPECIES TYPES	2 - 3" CALIPER	CONT.	100 TREES PER ACRE	
FRUITING ORNAMENTAL TREES - POSSIBLE SPECIES OPTIONS							
	19	MIX OF NATIVE SPECIES TYPES	MIX OF NATIVE SPECIES TYPES	3" CAL.	B&B	AS SHOWN	FRUITING TYPE
FLOWERING ORNAMENTAL TREES - POSSIBLE SPECIES OPTIONS							
	6	MIX OF NATIVE SPECIES TYPES	MIX OF NATIVE SPECIES TYPES	3" CAL.	B&B	AS SHOWN	FLOWERING TYPE
SHRUBS - POSSIBLE SPECIES OPTIONS							
	35	ILEX GLABRA	INKBERRY	18" HT. MIN.	CONT.	AS SHOWN	
		CORNUS SERICEA 'CARDINAL'	RED TWIG DOGWOOD	24" HT. MIN.	CONT.	AS SHOWN	
		ITEA VIRGINICA	VIRGINIA SWEETSPIRE	18" HT. MIN.	CONT.	AS SHOWN	
MEADOW PLANTS - ERNST SEED MIX							
MIX A		ERNMX-153	SHOWY NORTHEAST NATIVE WILDFLOWER AND GRASS MIX	-	SEED	-	BROADCAST SEED AT 20 LB PER ACRE DRILL SEED AT 10 LB PER ACRE
MIX B		ERNMX-127	RETENTION BASIN WILDLIFE MIX	-	SEED	-	
MIX C		ERNMX-173	EASTERN NATIVE HABITAT & CREP MIX	-	SEED	-	
TURF							
SEED		TALL FESCUE BLEND	" "	-	SEED	-	

3 PLANT SCHEDULE



1 TREE PLANTING



2 SHRUB PLANTING

LSG LANDSCAPE ARCHITECTURE

Designer's Name
DAVE NORDEN

Address
1775 GREENSBORO STATION PLACE, SUITE 110

City/State/Zip
TYSONS, VIRGINIA, 22102

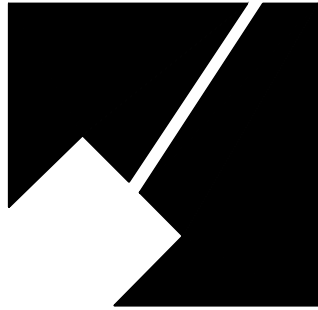
Telephone Number 703-821-2045

DESIGN		
Landscape Architect	Date	Checked By:
Architect	Date	Checked By:
Engineer	Date	Checked By:
Drawn by	Date	Checked By:

Professional Certification. I hereby 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 Maryland.

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BLACK HILL REGIONAL PARK SEED CLASSROOM FACILITY PLAN

Details

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TAX MAP: EU123
WSSC GRID: 228NW14

L411

SHT. # 10 OF 10