



DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Hadi Mansouri
Acting Director

December 30, 2019
Revised December 31, 2019

Mr. Todd Reddan
Gutthick, Little, Weber, P.A.
3909 National Dr.
Burtonsville, MD 20866

Re: COMBINED STORMWATER MANAGEMENT
CONCEPT/SITE DEVELOPMENT
STORMWATER MANAGEMENT PLAN for
Meadowbrook Stables
Preliminary Plan #: NA
SM File #: 285657
Tract Size/Zone: 10.06 ac.
Total Concept Area: 1.31 ac.
Lots: 24-34
Watershed: Lower Rock Creek

Dear Mr. Reddan:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above-mentioned site is **acceptable**. The stormwater management concept proposes to meet required stormwater management goals via bioswales.

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

- A detailed review of the stormwater management computations will occur at the time of detailed plan review.
- An engineered sediment control plan must be submitted for this development.
- All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.

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

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

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

If you have any questions regarding these actions, please feel free to contact Bill Musico at 240-777-6340.

Sincerely,

Mark C. Etheridge, Manager
Water Resources Section
Division of Land Development Services

CERTIFICATION OF THE QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 110 CUBIC YARDS OF EXCAVATION, 302 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE 56,994 SQUARE FEET.

SIGNATURE

3.25.20
DATE

TODD REDDAN FOR GLWPA
PRINTED NAME AND TITLE

17285
REGISTRATION NUMBER

*NOTE: EARTHWORK NUMBERS ARE
ESTIMATED, CONTRACTOR TO
VERIFY FINAL NUMBERS BEFORE
CONSTRUCTION

DESIGN CERTIFICATION/PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL," MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-40, 7-02AM AND 36-10, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN CRITERIA" DATED AUGUST 1988.

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

DESIGN ENGINEER SIGNATURE

TODD REDDAN FOR GLWPA
PRINTED NAME

3.25.20
DATE

17285
REGISTRATION NUMBER
MARCH 17, 2021
EXPIRATION DATE



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 17285
EXPIRATION DATE: MARCH 17, 2021



PREPARED FOR:

OWNER/DEVELOPER
MEADOWBROOK FOUNDATION, INC.
8200 MEADOWBROOK LANE
CHEVY CHASE, MARYLAND 20815
TEL: (301) 589-9026
ATTN: KATRINA WEING

SCALE

1" = 100'

DATE

MAR., 2020

ZONING

R-60

TAX MAP - GRID

HN63



3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:

TMS

DRAWN BY:

TMS

CHECKED BY:

TMR

DATE

REVISION

BY

REVISION

BY

APPR.

MAINTENANCE CERTIFICATION

I hereby certify that the M-NCPPC Montgomery County Department of Parks will assume non-structural maintenance responsibilities for all stormwater management (SWM) structures as listed and shown, hereon, in accordance with the Right of Entry between M-NCPPC and the Department of Environmental Protection dated 5/7/2007. If, for any reason, future improvements on Parkland are planned that would impact any of the SWM facilities included herein, M-NCPPC will notify the Department of Environmental Protection during the facility planning/preliminary design stages for such improvements.

DATE

Owner/Developer

Printed Name

Title

OWNER'S/DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE

2-19-2020
DATE

KATRINA WEING, EXECUTIVE DIRECTOR, MEADOWBROOK STABLES
PRINTED NAME AND TITLE

RECORD DRAWING CERTIFICATION

A record set of approved Sediment Control/Stormwater Management plans must be maintained on-site at all times. In addition to stormwater management items, these plans must include the number and location of all trees proposed to be planted to comply with the Tree Canopy Law. Any approved modifications or deletions of stormwater practices or tree canopy plantings or information must be shown on this record set of plans and on the Tree Canopy Requirements table. Upon completion of the project, this record set of plans, including hereon this signed Record Drawing Certification, must be submitted to the MCDPS inspector. In addition to this Record Drawing Certification, a formal Stormwater Management As-Built submission [X] is required [] is not required for this project.

If this project is subject to a Stormwater Management Right of Entry and Maintenance Agreement, that document is recorded in Montgomery County Land Records at:

Liber N/A Folio N/A. This Record Drawing will serve as referenced in the recorded document.

"This record drawing accurately and completely represents the stormwater management practices and tree canopy plantings as they were constructed or planted. All stormwater management practices were constructed per the approved Sediment Control / Stormwater Management plans or subsequent approved revisions."

Owner/Developer Signature

DATE

FIELD CHECK OF RECORD DRAWING BY MCDPS INSPECTOR: INITIALS:

DATE:

TECHNICAL REVIEW OF SEDIMENT CONTROL	ADMINISTRATIVE REVIEW	DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.
REVIEWED DATE	REVIEWED DATE	
TECHNICAL REVIEW OF STORMWATER MANAGEMENT	SMALL LOT DRAINAGE APPROVAL	SEDIMENT CONTROL PERMIT NO.
REVIEWED DATE	N/A: <input type="checkbox"/> OR	SC-285775
REVIEWED DATE	REVIEWED DATE	SM. FILE NO. SM-285657
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED.	NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.	"ESD to MEP" - No Waivers. Bio-Swale #1 & #2

COVER SHEET

MEADOWBROOK STABLES
COVERED ARENA RING 'C'
LOTS 24-34, HICKEY & OFFUTT SUBDIVISION
L. 562 P. 228

G. L. W. FILE NO.

98109

SC/SWM SHEET

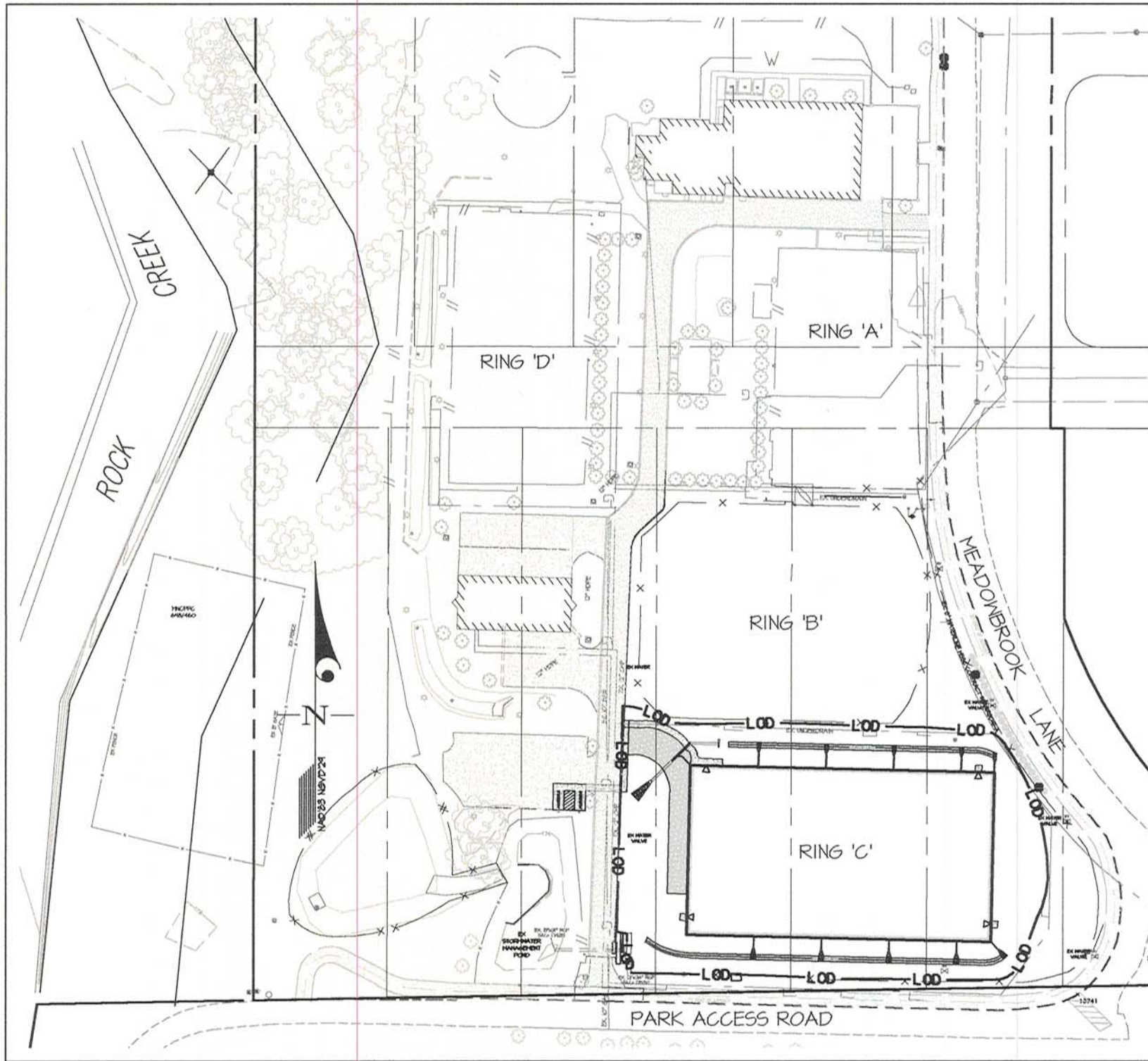
1 OF 6

ELECTION DISTRICT NO. 7

MONTGOMERY COUNTY, MARYLAND

ATTACHMENT G

MEADOWBROOK STABLES COVERED ARENA IN RING 'C' SEDIMENT & EROSION CONTROL AND STORMWATER MANAGEMENT PLAN



SITE LOCATION MAP

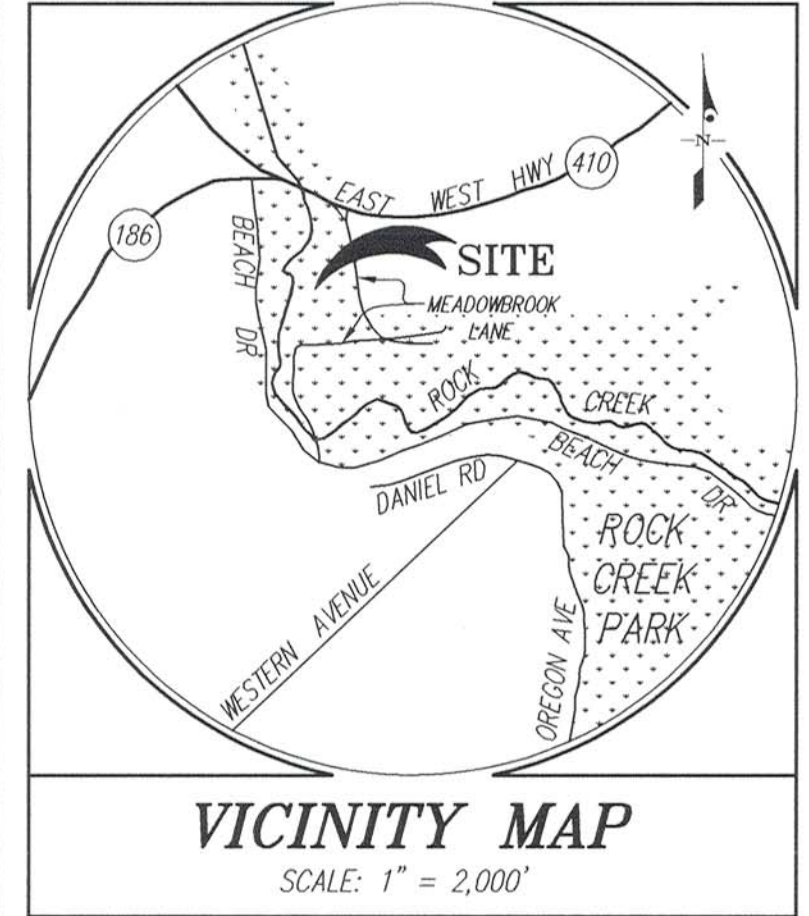
SCALE: 1" = 100'

SHEET INDEX

COVER SHEET	1 OF 6
SD-SWM PLANVIEW & DETAILS	2 OF 6
SD PROFILES & SCHEDULES	3 OF 6
SWM LANDSCAPE PLAN	4 OF 6
* EROSION & SEDIMENT CONTROL PLAN & DETAILS	5 OF 6
EROSION & SEDIMENT CONTROL NOTES	6 OF 6

* SEQUENCE OF CONSTRUCTION ON SHEET 5

48 Hours Before You Dig Call "MISS UTILITY" Service Protection Center
MEMBER ONE CALL SYSTEMS INTERNATIONAL
CALL TOLL FREE 1-800-257-7777

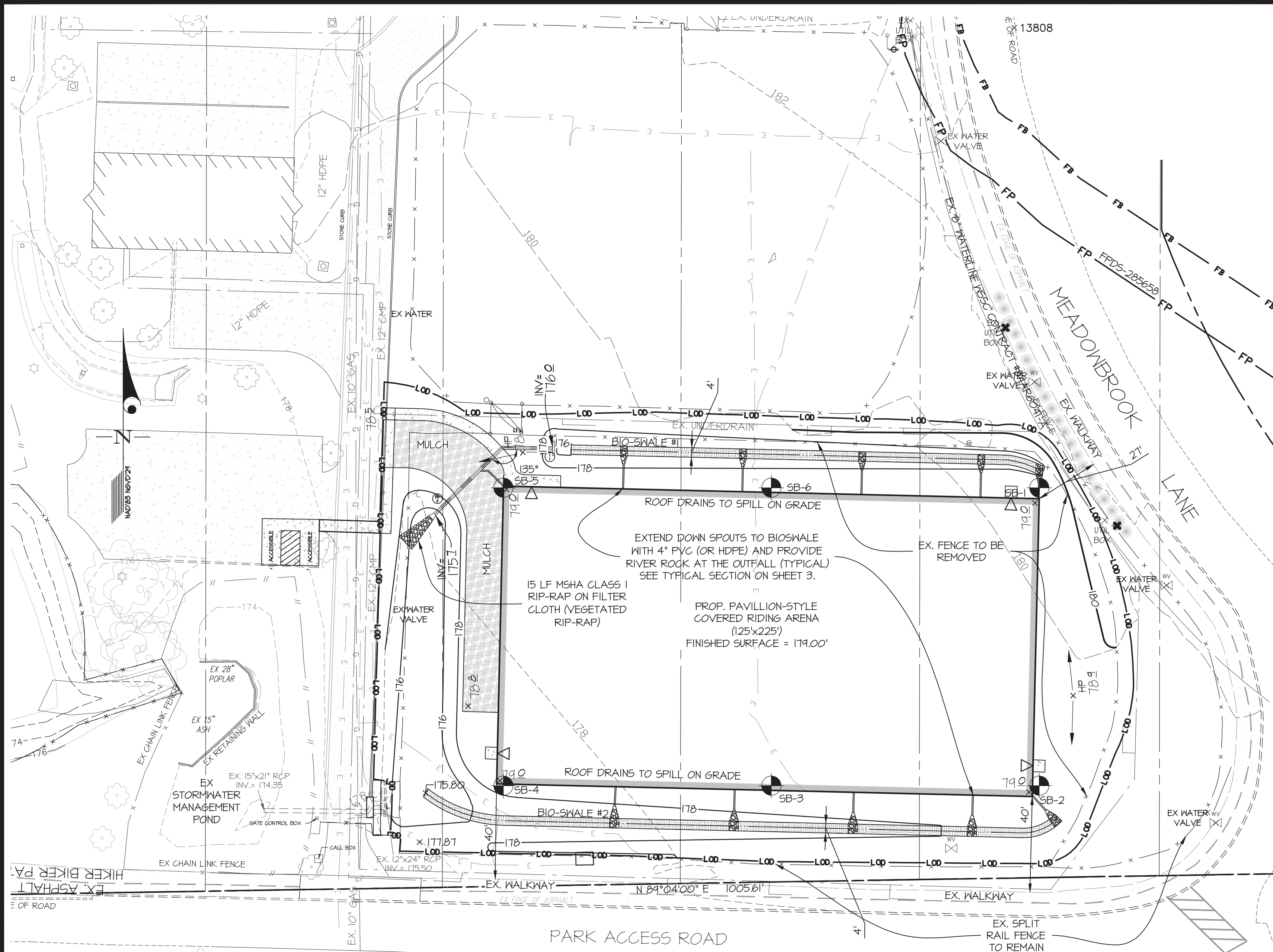


VICINITY MAP

SCALE: 1" = 2,000'

TREE CANOPY REQUIREMENTS TABLE

To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.	
Exempt: Yes <input type="checkbox"/> No <input type="checkbox"/> If exempt under Section 55-5 of the Code, please check the applicable exemption category below.	
Total Property Area	Total Disturbed Area
518,364 square feet	56,994 square feet
Shade Trees Required	Shade Trees Proposed to be Planted
N/A EXEMPT	
Fee in Lieu (Trees Required - Trees Planted) x \$250	\$
Required Number of Shade Trees	
Area (sq. ft.) of the Limits of Disturbance	Number of Shade Trees Required
FROM TO	
0 6,000	3
6,001 8,000	6
8,001 12,000	9
12,001 14,000	12
14,001 40,000	15
If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula: (Number of Square Feet in Limits of Disturbance ÷ 40,000) x 15	
EXEMPTION CATEGORIES:	
<input type="checkbox"/> 55-5(a) any activity that is subject to Article II of Chapter 22A. <input type="checkbox"/> 55-5(b) any commercial logging or similar harvesting operation with an approved exemption from Article II of Chapter 22A. <input checked="" type="checkbox"/> 55-5(c) any activity conducted by the County Parks Department. <input type="checkbox"/> 55-5(d) routine or emergency maintenance of an existing stormwater management facility, including an existing access road, if the person performing the	<input type="checkbox"/> maintenance has obtained all required permits; <input type="checkbox"/> 55-5(f) any stream restoration project if the person performing the work has obtained all necessary permits; <input type="checkbox"/> 55-5(g) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law governing safety of dams; <input type="checkbox"/> OTHER: Specify per Section 55-5 of the Code.



WASHED ASTM C33 FINE AGGREGATE CONCRETE SAND IS UTILIZED FOR STORMWATER MANAGEMENT APPLICATIONS IN MONTGOMERY COUNTY. IN ADDITION TO THE ASTM C33 SPECIFICATION, SAND MUST MEET ALL OF THE FOLLOWING CONDITIONS:

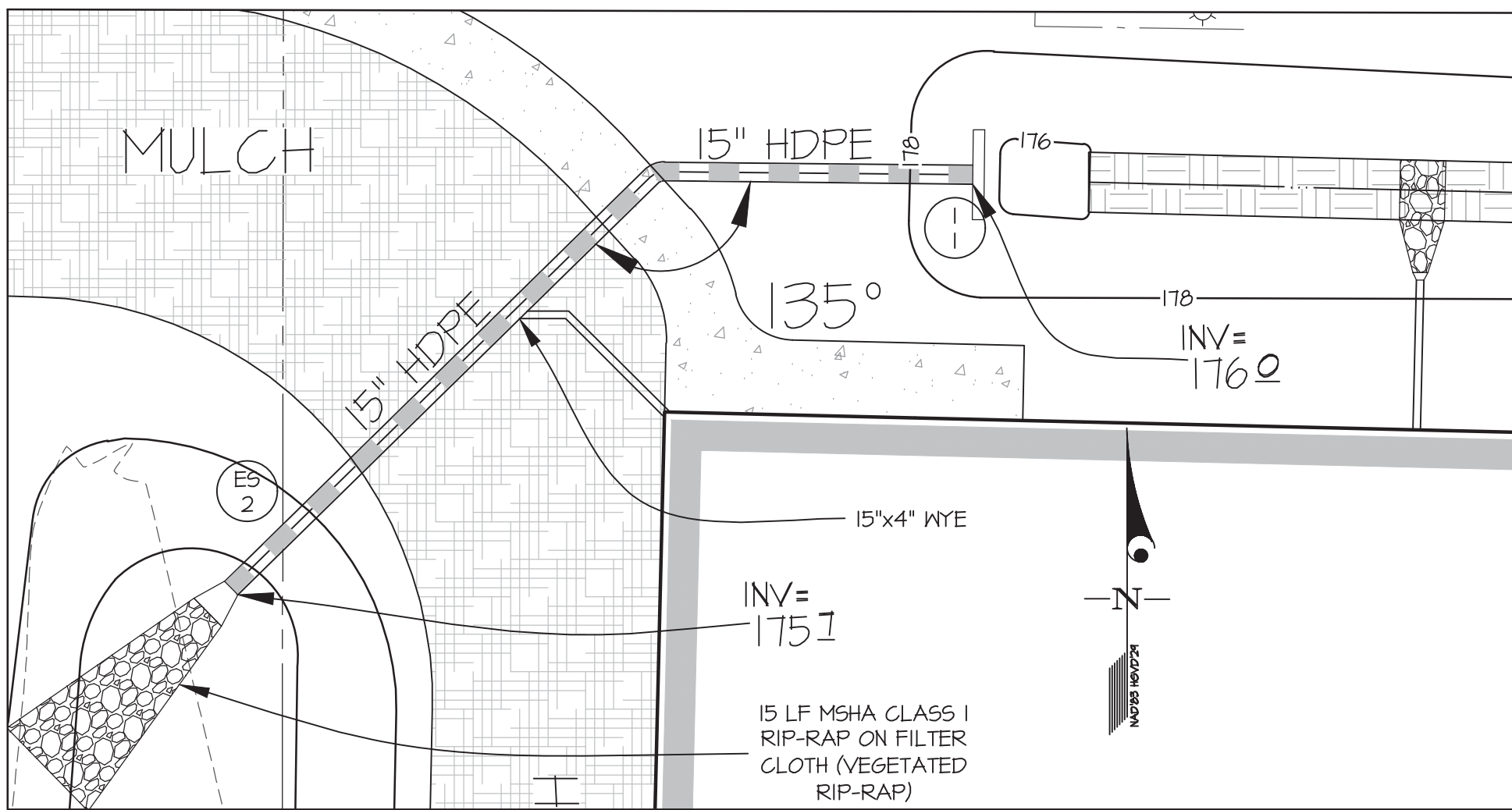
- SAND MUST MEET GRADATION REQUIREMENTS FOR ASTM C33 FINE AGGREGATE CONCRETE SAND. AASHTO M-6 GRADATION IS ALSO ACCEPTABLE.
- SAND MUST BE SILICA BASED. LIMESTONE BASED PRODUCTS MAY BE USED, IF THE MATERIAL IS WHITE OR GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE.
- SAND MUST BE CLEAN. NATURAL, UNWASHED SAND DEPOSITS MAY NOT BE USED. LIKEWISE, SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED.
- MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE UNDER ANY CIRCUMSTANCE.

- 1) GRAVEL BED:
THE GRAVEL LAYER MUST MEET MSHA SIZE #1 (TABLE 901A), AND SHALL BE 12-INCHES IN DEPTH. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED TO BE PLACED HORIZONTALLY ANYWHERE WITHIN THE FILTER MEDIA, EXCEPT AT DRIVEWAY CROSSINGS, AS SHOWN IN THE TYPICAL SECTION.
- 2) SAND BED:
A MINIMUM 6-INCH FINE AGGREGATE SAND LAYER SHALL BE PROVIDED BELOW THE PLANTING MEDIA. ASTM C33 OR AASHTO M6 FINE AGGREGATE CONCRETE SAND IS REQUIRED PER MONTGOMERY COUNTY SAND SPECIFICATIONS.
- 3) PLANTING MEDIUM:
THE PLANTING MEDIA SHALL BE 24" THICK AND SHALL CONSIST OF 1/3 PERLITE OR SOLITE, 1/3 COMPOST AND 1/3 TOPSOIL. THE PERLITE SHALL BE COARSE GRADE HORTICULTURAL PERLITE. THE COMPOST SHALL BE HIGH GRADE COMPOST FREE OF STONES AND PARTIALLY COMPOSTED WOODY MATERIAL. THE TOPSOIL SHALL MEET THE FOLLOWING MINIMUM CRITERIA: CONTAIN NO MORE THAN 10% CLAY, 10-25% SILTS AND 60-75% SAND. THE SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES.

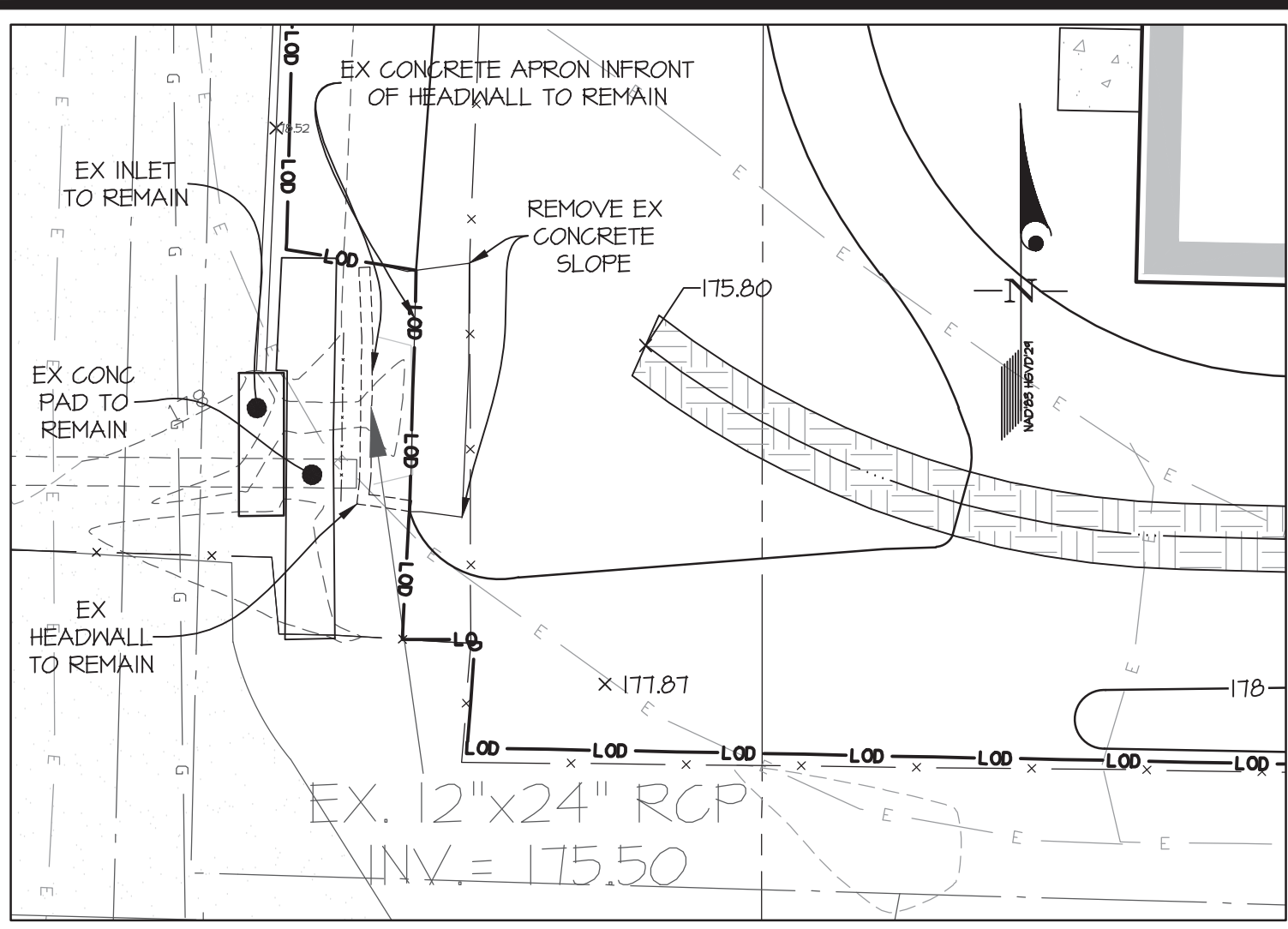
THE FIRST LAYER OF THE PLANTING MEDIUM SHALL BE LIGHTLY TILLED TO MIX IT INTO THE SAND LAYER, SO AS NOT TO CREATE A DEFINITIVE BOUNDARY. THE PLANTING MATERIAL SHALL BE FLOODED AFTER PLACEMENT. ANY SETTLEMENT THAT OCCURS SHALL BE FILLED BACK TO THE DESIGN ELEVATION.

- 4) MULCH:
WHEN VEGETATED WITH GRASS, THE BIO-SWALE DOES NOT REQUIRE A MULCH LAYER. A TYPICAL LOCATION FOR A GRASSED BIO-SWALE WOULD BE IN A PUBLIC RIGHT-OF-WAY. WHEN THE BIO-SWALE IS LANDSCAPED WITH VEGETATION OTHER THAN GRASS, A MULCH LAYER IS REQUIRED. THE SURFACE MULCH LAYER WILL CONSIST OF STANDARD DOUBLE SHREDDED AGED HARDWOOD MULCH. THE MULCH SHOULD BE APPLIED UNIFORMLY TO A DEPTH OF 3 INCHES. YEARLY REPLENISHING MAY BE NECESSARY. PINE BARK IS NOT ACCEPTABLE.

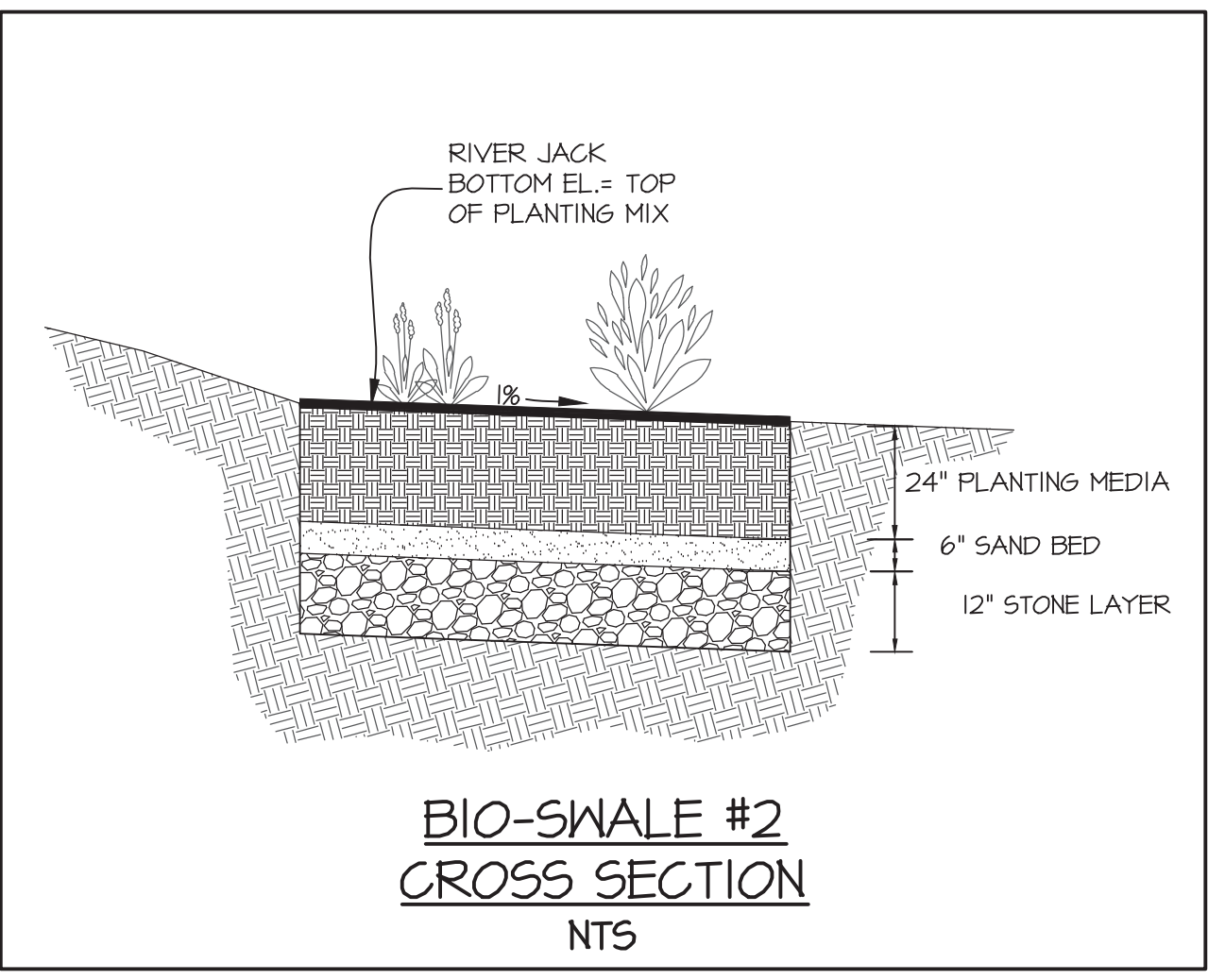
SWM PLAN
SCALE: 1" = 30'



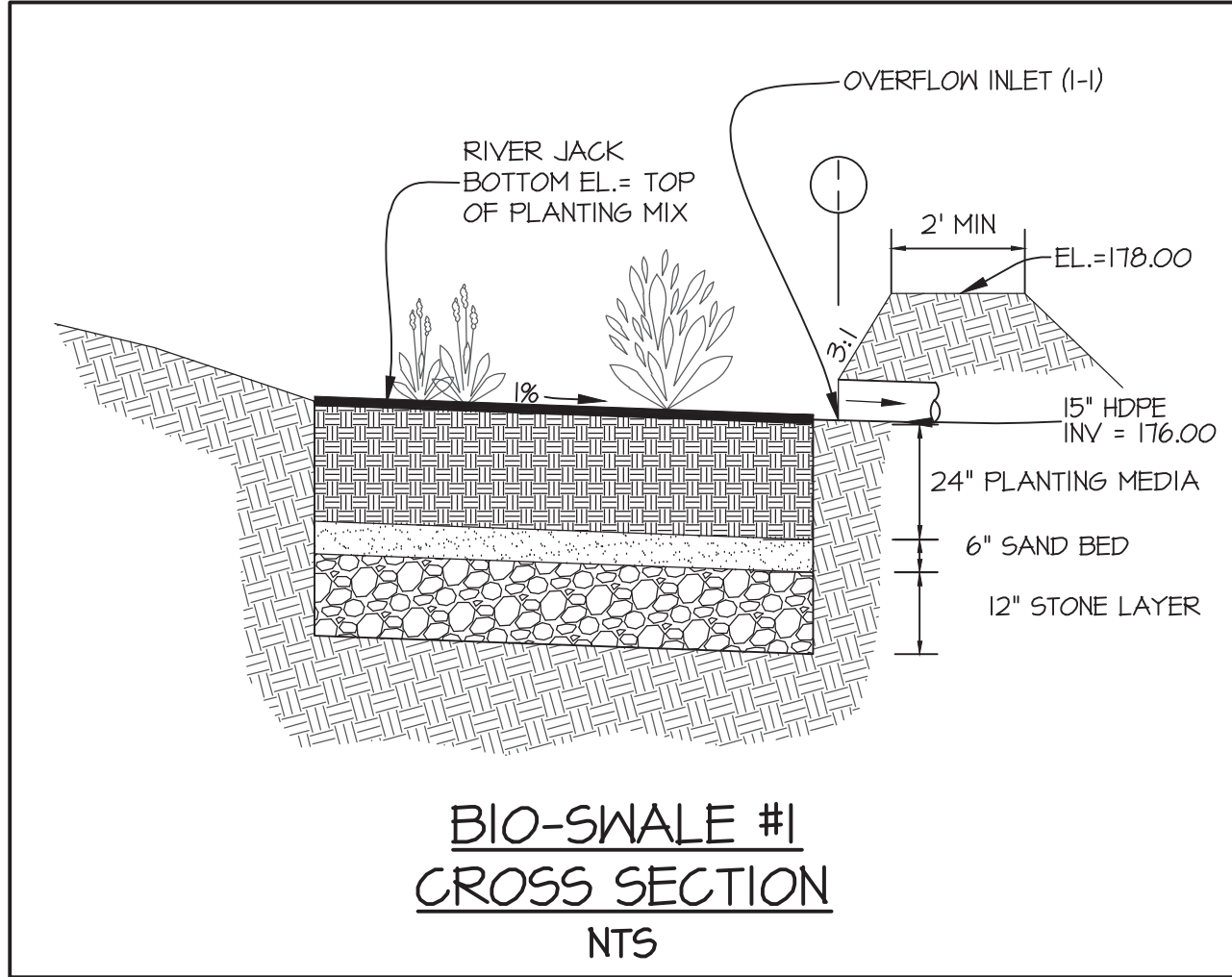
BIO-SWALE #1 DETAIL
SCALE: 1" = 10'



BIO-SWALE #2 OUTFALL DETAIL
SCALE: 1" = 10'



BIO-SWALE #2 CROSS SECTION
NTS



BIO-SWALE #1 CROSS SECTION
NTS

48 Hours
Before You Dig
Call
"MISS UTILITY"
Service Protection Center

MEMBER

ONE CALL SYSTEMS INTERNATIONAL

CALL TOLL FREE
1-800-257-7777

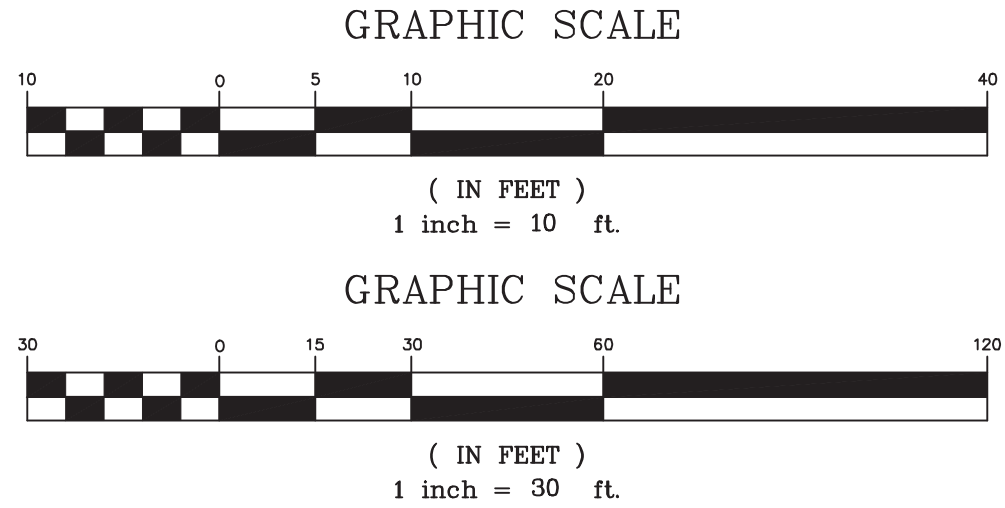
VICINITY MAP
SCALE: 1" = 2,000'

SEDIMENT CONTROL LEGEND

- | | |
|----------------------------------|--|
| EXISTING TREES | |
| EXISTING CURB & GUTTER | |
| PROPOSED SUPER SILT FENCE | |
| PROPOSED STORM DRAIN | |
| EXISTING STORM DRAIN | |
| STABILIZED CONSTRUCTION ENTRANCE | |
| PROPOSED RIP RAP | |
| PROPOSED LIMITS OF DISTURBANCE | |
| PROPOSED CONTOURS | |
| EXISTING CONTOURS | |
| EXISTING ELECTRIC | |
| EXISTING GAS | |
| PROPOSED BIO-SWALE | |
| PROPERTY LINE | |
| EXISTING BUILDING | |
| PROPOSED BUILDING | |

EXISTING UTILITY NOTES

- For marking locations of existing utilities, notify "MISS UTILITY" at 1-800-257-7777, 48 hours prior to any excavation or construction.
- Information concerning underground utilities was obtained from available records. The contractor must determine the exact locations and elevations of the utilities by digging test pits by hand at all utility crossings well in advance of trenching. If clearances are less than specified on this plan or less than 12 inches when not specified, contact the Engineer, and the owner of the other involved utility before proceeding with construction.
- For field location of gas line services, notify Washington Gas Light Co., 703-750-1000, 48 hours prior to the start of any excavation or construction.
- Omissions and/or additions of utilities found during construction shall be the sole responsibility of any contractor engaged in excavation at this site. Gutschick, Little & Weber, P.A., shall be notified immediately of any and all utility information, omissions and additions found by any contractor.
- Due to the proximity of live underground and overhead utilities, we are not responsible for any damage or injury sustained during construction by any persons, trucks, trailers, or equipment used on or adjacent to the site.



3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
PHONE: 301-421-4024 | BAL: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

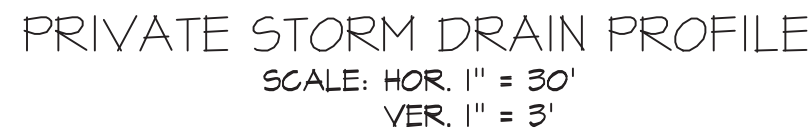
DESIGNED BY:	TMS
DRAWN BY:	TMS
CHECKED BY:	TMR
DATE:	
REVISION:	
BY:	
APP'R:	

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17285
EXPIRATION DATE: MARCH 17, 2021
03-25-2020

PREPARED FOR:
OWNER/DEVELOPER
MEADOWBROOK FOUNDATION, INC.
8200 MEADOWBROOK LANE
CHEVY CHASE, MARYLAND 20815
TEL: (301) 589-9026
ATTN: KATRINA WEINIG

SCALE	AS SHOWN	ZONING	R-60
DATE	MAR., 2020	TAX MAP - GRID	HN63

STORMWATER MANAGEMENT PLAN & DETAILS		G. L. W. FILE No.
MEADOWBROOK STABLES COVERED ARENA RING 'C' LOTS 24-34, HICKEY & OFFUTT SUBDIVISION L. 562 F. 228		98109
ELECTION DISTRICT NO. 7		SC/SWM SHEET 2 OF 6



PRIVATE PIPE SCHEDULE	
TYPE	LENGTH (L.F.)
15" HDPE	61
TOTAL	61

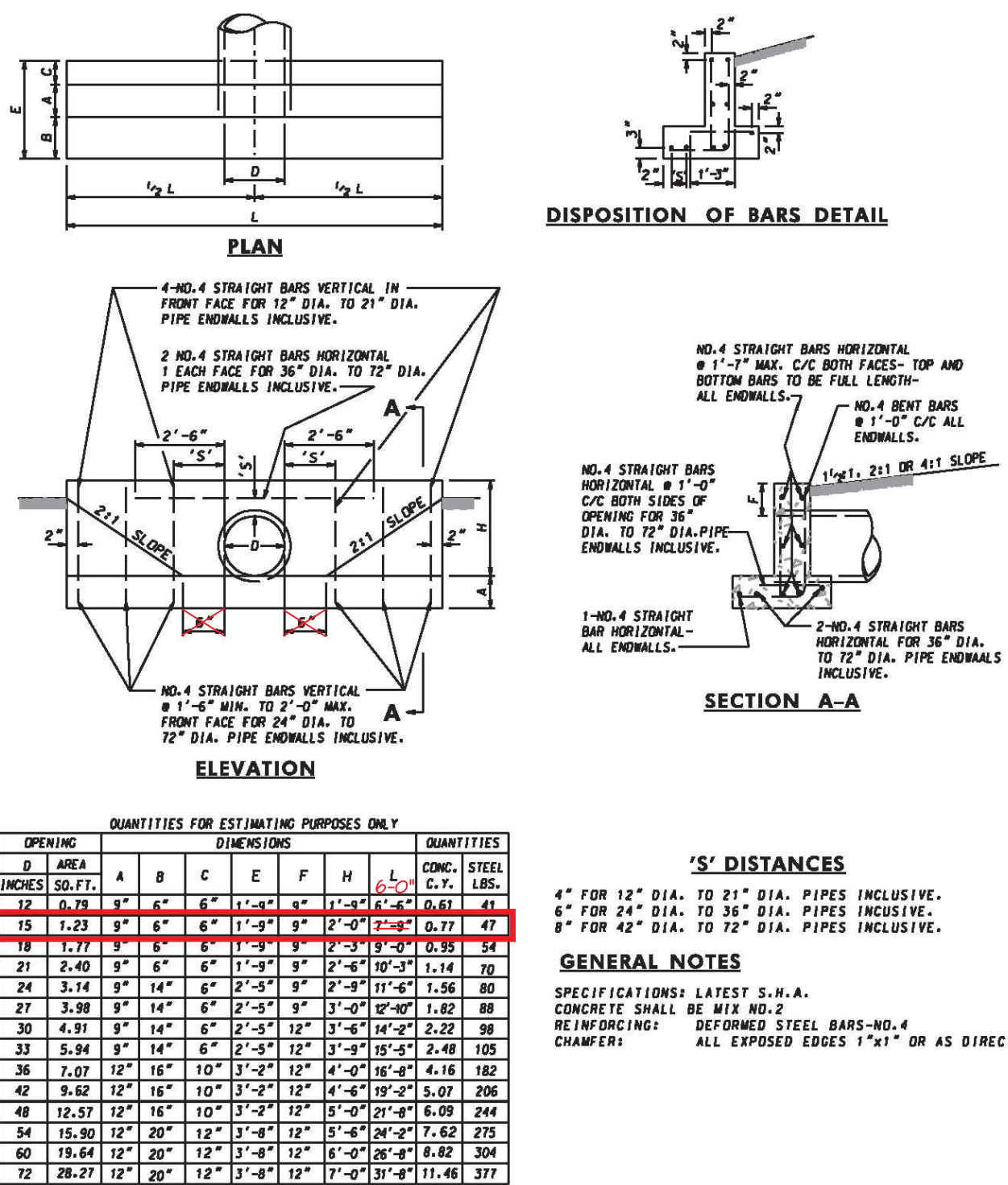
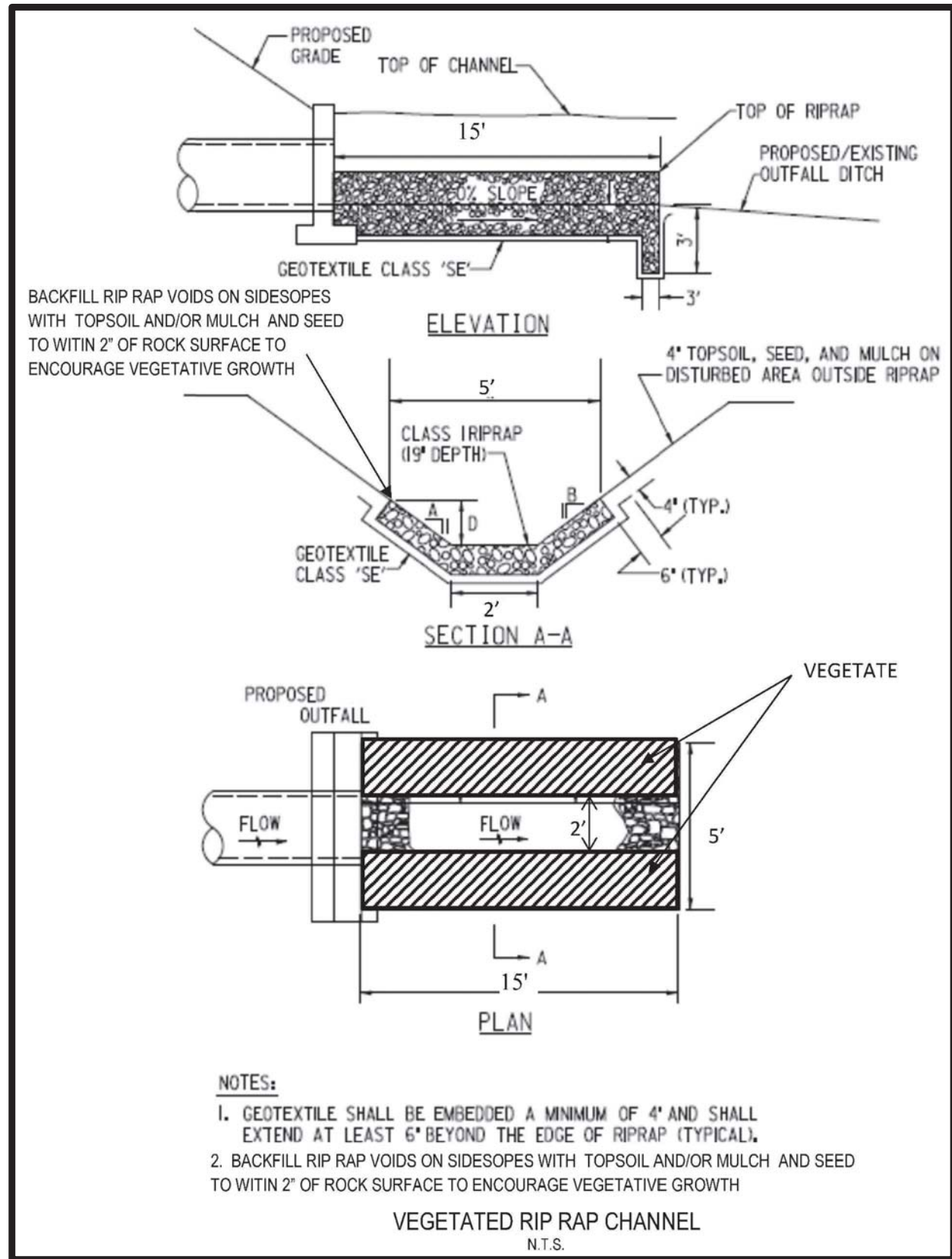
*HIGH DENSITY POLYETHELENE (HDPE,
ADS, INC N-12 OR EQUIVALENT




CONSTRUCTION INSPECTION CHECK-OFF LIST FOR SWALES #2		
STAGE	MCDCPS INSPECTOR INITIALS/DATE	OWNER/ DEVELOPER INITIALS/DATE
<p>MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDCPS Inspector twenty-four (24) hours notice (DPS telephone 240-777-0311). The DPS Inspector may waive an inspection, and allow the owner/developer to make the required inspection per a prior scheduled arrangement which has been confirmed with the DPS inspector in writing. Work completed without MCDCPS approval may result in the permittee having to remove and reconstruct the unapproved work. The permittee must maintain a "record set" of approved SC/SM plans on-site at all times. Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDCPS unless a Record Drawing Certification has been allowed instead. Each of the steps listed below must be verified by either the MCDCPS Inspector OR the Owner/Developer.</p>		
<ol style="list-style-type: none"> 1. Placement of backfill of underdrains and installation of diaphragms, forebays, check dams, or weirs conforms to approved plans, FILTER MEDIA 2. Final grading and establishment of permanent stabilization conforms to approved plans 		

TOTAL NUMBER OF BIO-SWALE FACILITIES INSTALLED PER THIS PERMIT:

APPROVED _____ CONSTRUCTED _____



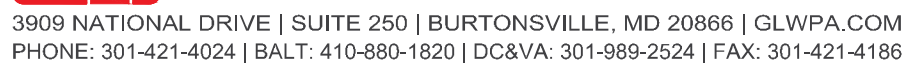
QUANTITIES FOR ESTIMATING PURPOSES ONLY										
OPENING		DIMENSIONS						CONC. OF STEEL		
0	4 AREA (INCHES SQ.FT.)	A	B	C	E	F	H	6-3/4	CONC. CY.	STEEL LBS.
12	0.79	5"	6"	6"	1"-1/4"	4"	1"	6-3/4	6.61	41
15	1.23	5"	6"	6"	1"-1/4"	5"	2"-1/4"	6-3/4	6.77	47
18	1.67	5"	6"	6"	1"-1/4"	6"	3"	6-3/4	6.93	53
21	2.10	5"	6"	6"	1"-1/4"	7"	4"	6-3/4	7.10	59
24	2.54	5"	6"	6"	1"-1/4"	8"	5"	6-3/4	7.27	66
27	3.98	5"	14"	6"	2"-5/8"	9"	2"-1/4"	11-1/4"	5.56	80
30	3.14	9"	6"	6"	2"-5/8"	9"	3"-1/4"	10-1/4"	1.82	88
33	4.91	12"	6"	6"	2"-5/8"	12"	5"	14-1/4"	2.22	98
36	6.71	15"	6"	6"	2"-5/8"	15"	6"	17-1/4"	2.62	108
39	7.07	12"	16"	10"	3"-1/2"	12"	4"	16-1/4"	4.16	182
42	9.52	12"	16"	10"	3"-1/2"	12"	5"	15-1/4"	5.07	206
48	15.27	12"	16"	10"	3"-1/2"	12"	6"	14-1/4"	6.09	244
54	19.90	20"	12"	12"	3"-1/2"	12"	6"	14-1/4"	6.09	244
60	25.35	20"	12"	12"	3"-1/2"	12"	7"	14-1/4"	6.82	304
66	28.27	20"	12"	12"	3"-1/2"	12"	7"	14-1/4"	6.16	377

SPECIFICATION 305	CATEGORY CODE ITEMS	
APPROVED	<i>Karl G. McCall</i> DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT	
	APPROVAL - SHA REVISIONS	APPROVAL - FEDERAL HIGHWAY ADMINISTRATION
	APPROVAL 6-28-86	APPROVAL 12-12-86
	REVISION 10-1-01	REVISION
	REVISION	REVISION

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

STANDARD TYPE C ENDWALL METAL OR CONCRETE ROUND PIPE

STANDARD NO. MD 354.01



DESIGNED BY: TMS				
DRAWN BY: TMS				
CHECKED BY: TMR				
	DATE	REVISION	BY	APP'R.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 17285
EXPIRATION DATE: MARCH 17, 2021

03-25-2020

PREPARED FOR:
OWNER/DEVELOPER
MEADOWBROOK FOUNDATION, INC.
8200 MEADOWBROOK LANE
CHEVY CHASE, MARYLAND 20815
TEL: (301) 589-9026
ATTN: KATRINA WEINIG

SCALE AS SHOWN	ZONING R-60
DATE MAR., 2020	TAX MAP - HN63

STORM DRAIN PROFILES & SCHEDULES

MEADOWBROOK STABLES
COVERED ARENA RING 'C'
LOTS 24-34, HICKEY & OFFUTT SUBDIVISION
 L. 562 F. 228

ELECTION DISTRICT NO. 7

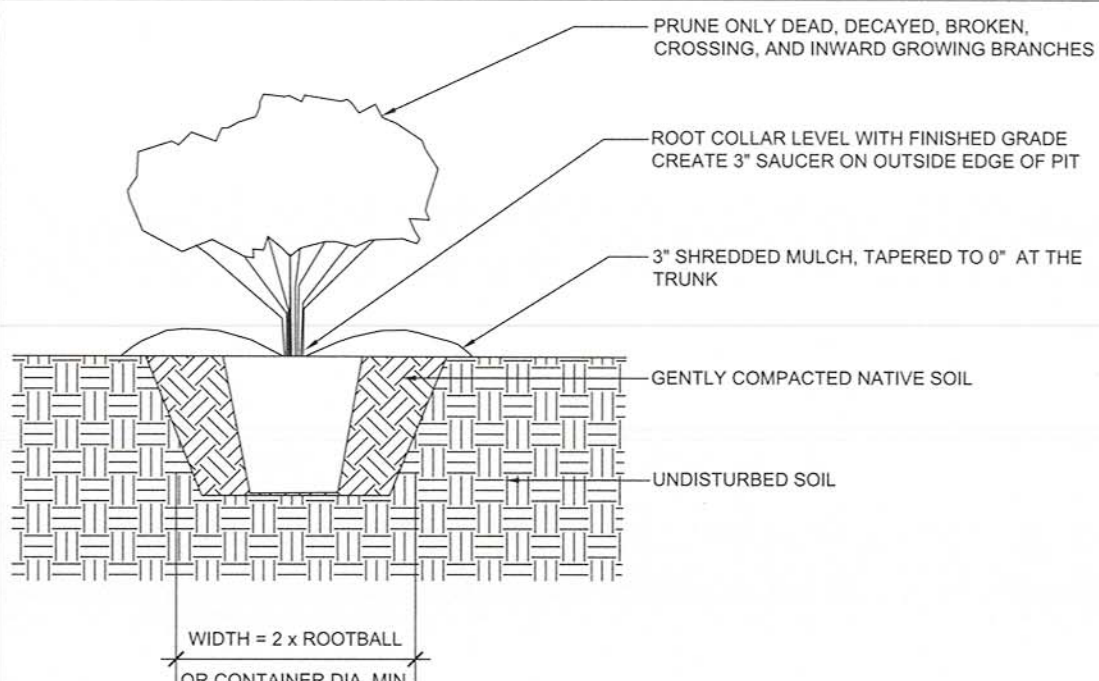
MONTGOMERY COUNTY, MARYLAND

G. L. W. FILE No.

98109

SC/SWM

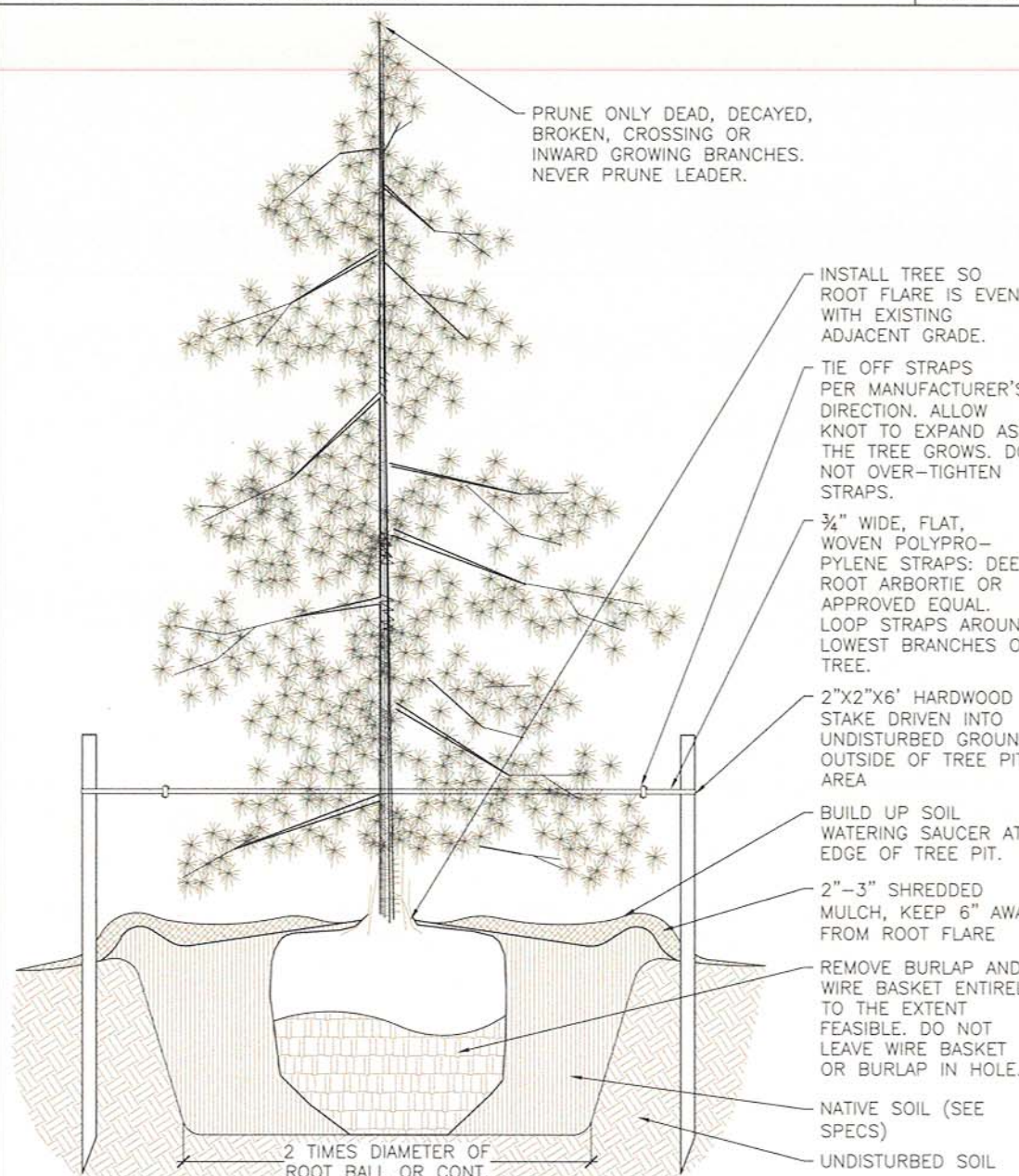
3 OF 6



NOTES:

1. REMOVE ALL POTS AND WIRE AND CUT CONTAINER CLEANLY WAY FROM ROOTS.
2. REMOVE BURLAP FROM TOP HALF OF ROOT BALL.
3. CONTAINER PLANTINGS MAKE 4 TO 5 VERTICAL CUTS TO THE ROOT BALL BEFORE SETTING IN PLACE.
4. PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS AND ROOTS.
5. CLEANLY PRUNE ALL DAMAGED ROOT ENDS TEASE ROOTS OF CONTAINER GROWN STOCK.
6. DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLATION PROCESS.
7. DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB N.T.S.
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
Detail No. OCTOBER 2007

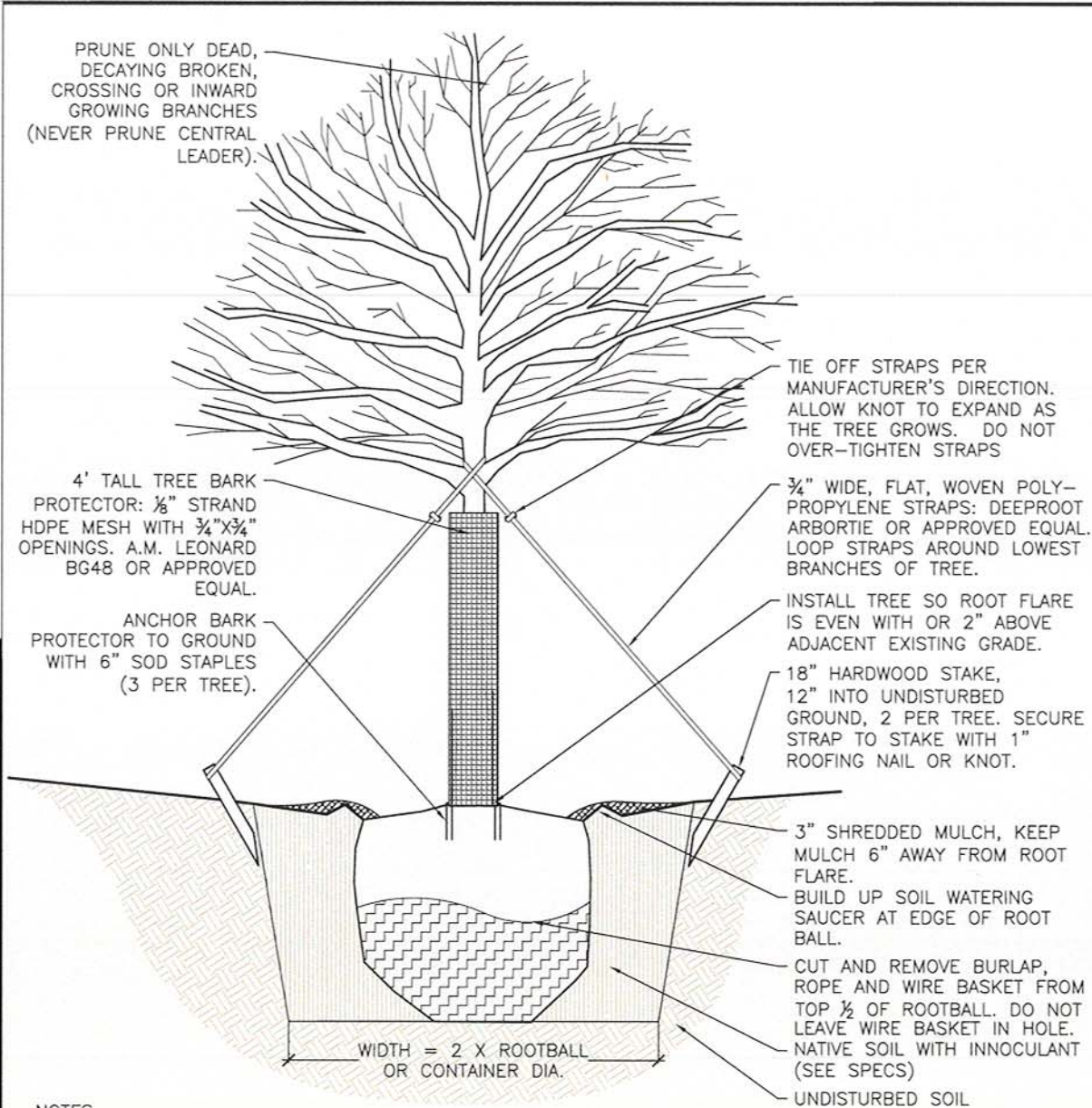


NOTES:

1. GUY TREES UP TO 12' HEIGHT WITH 2 STAKES PER TREE. GUY TREES 12'-20' HEIGHT WITH 3 GUY STAKES PER TREE. GUY TREES OVER 20' HEIGHT WITH 3 GROUND ANCHORS OR DEADEN PER TREE.
2. REMOVE ALL STAKES AND TIES NO LATER THAN 12 MONTHS AFTER PLANTING.
3. PLANTING HOLE SHALL BE DUG BY A BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
4. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC CONSTRUCTION MANAGER, AN AREA UP TO 5 TIMES THE DIAMETER OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED UP TO 12\"/>

2. EVERGREEN TREE PLANTING DETAIL

QUANTITY	KEY	BOTANICAL NAME/ COMMON NAME	SPACING	SIZE	REMARKS
TREES					
6	BN	Betula nigra 'Dura Heat' River Birch		12'-14' Ht.	B&B, single-stemmed matched
ORNAMENTALS					
7	MV	Magnolia virginiana Sweetbay magnolia		10'-12' Ht.	B&B, multi-stemmed matched, (min. 3 cones)
SHRUBS					
19	CA	Clethra alnifolia Summersweet	3' o.c.	24\" - 30\" ht.	container
6	IVR	Ilex verticillata 'Red Sprite' Winterberry	4' o.c.	24\" - 30\" ht.	container
1	IVJ	Ilex verticillata 'Jim Dandy' Winterberry	4' o.c.	24\" - 30\" ht.	container
78	IG	Ilex glabra 'Shamrock' Inkberry	3' o.c.	18\" - 24\" ht.	container
70	VS	Itea virginica 'Little Henry' Virginia Sweetspire	3' o.c.	24\" - 30\" ht.	container
11	VN	Viburnum nudum 'Winterthur' Winterthur Viburnum	5' o.c.	24\" - 30\" ht.	container
PERENNIALS, GROUND COVER, AND ORNAMENTAL GRASSES					
20	SM	Asclepias incarnata 'Ice Ballet' Swamp Milkweed	24\" o.c.	1 gal.	container
228	JE	Juncus effusus Soft Rush	18\" o.c.	1 gal.	container
196	RF	Rudbeckia fulgida var. fulgida Black-eyed Susan	24\" o.c.	1 gal.	container
210	CG	Corex glauca 'Blue Zinger' Blue Zinger Sedge	24\" o.c.	1 gal.	container
326	PV	Panicum virgatum 'North Wind' Switchgrass	36\" o.c.	1 gal.	container

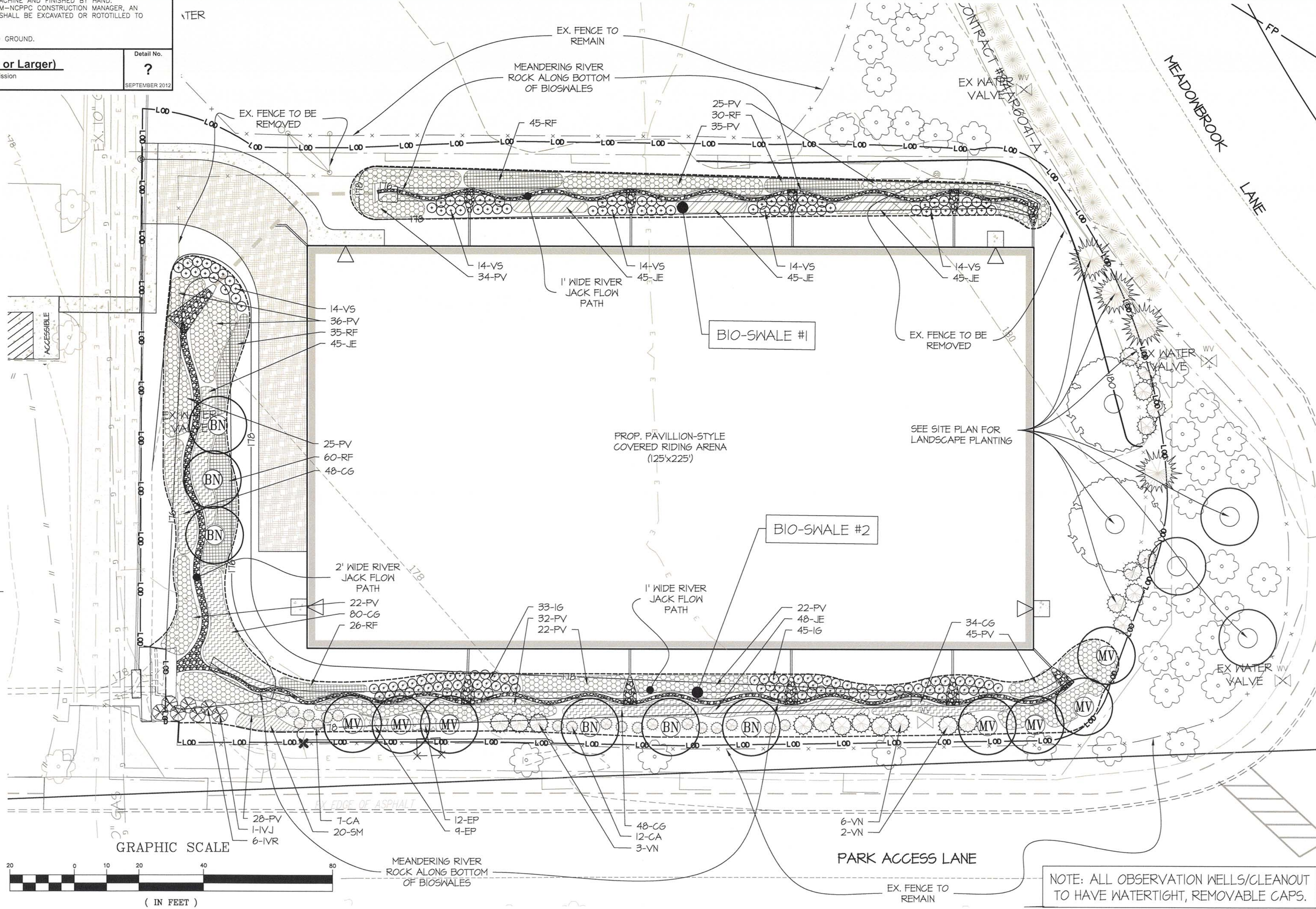


NOTES:

1. STAKES AND WIRES MUST BE REMOVED 12 MONTHS AFTER PLANTING.
2. PLANTING HOLE SHALL BE DUG BY BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
3. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC CONSTRUCTION MANAGER, AN AREA UP TO 5 TIMES THE DIAMETER OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1\"/>

DECIDUOUS PLANTS - (2 1/2\" Caliper or Larger)

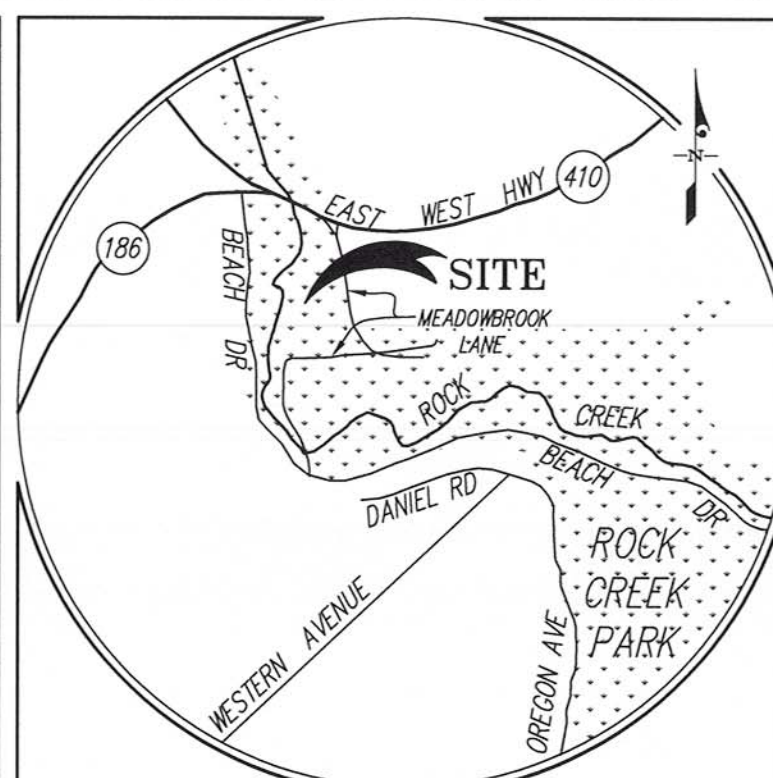
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
Detail No. SEPTEMBER 2012



LANDSCAPING NOTES

1. Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet No.1 shall apply.
2. Field verify underground utility locations and existing conditions before starting planting work. Contact Construction Manager or Owner if any relocations are required.
3. Plant Quantities shown on the plan list are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
4. All shrubs shall be dense, heavy to the ground, and well grown, showing evidence of being sheared regularly, and shall be sound, free of plant disease or insect eggs and shall have a healthy normal root system. Plants shall be freshly dug and not heeled-in stock from cold storage. All plants shall be nursery grown (except as noted below). Plants shall not be pruned immediately prior to delivery. The shape of the plant shall in general conform to its natural growth proportions unless otherwise specified. Trees shall conform to the branching, caliper, and height specifications of the American Nursery and Landscape Association, American Standard for Nursery Stock (ANSI z 60.1), and shall have a well-shaped, heavy branch structure for the species. Evergreen trees shall have an intact central leader and shall be uniformly well shaped. All plant sizes shall average at least the middle of the range given in the plant list.
5. The contractor will verify the plant quantities prior to bidding and any discrepancies shall be brought to the attention of the landscape architect. The contractor shall furnish and plant all plants required to complete the work shown on the drawings. No substitution shall be made without the written consent of the owner or representative.
6. All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded in accordance with the project specifications for seeding.
7. The contractor shall notify the owner in writing if he/she encounters soil drainage conditions that may be detrimental to the growth of the plants.
8. All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per the planting details.
9. Do not plant within the public water and utility easement.
10. All trees to branch symmetrically around central leader. No forked leader stock will be accepted.
11. Any damage to the existing utilities, buildings, paving, curb, and walls, and vegetation (not so designated for removal on these plans) shall be repaired to previous condition or replaced by the contractor at his expense.
12. All oaks and pines shall be planted during the spring planting season only.
13. All planting procedures and specifications shall conform to the latest edition of "Landscape Specification Guidelines for Baltimore-Washington Metropolitan area".

48 Hours
Before You Dig
Call
"MISS UTILITY"
Service Protection Center
MEMBER
ONE CALL SYSTEMS INTERNATIONAL
CALL TOLL FREE
1-800-257-7777



VICINITY MAP

SCALE: 1" = 2,000'

EXISTING UTILITY NOTES

1. For marking locations of existing utilities, notify "MISS UTILITY" at 1-800-257-7777, 48 hours prior to any excavation or construction.
2. Information concerning underground utilities was obtained from available records. The contractor must determine the exact locations and elevations of the utilities by digging test pits by hand at all utility crossings well in advance of trenching. If clearances are less than specified on this plan or less than 12 inches when not specified, contact the Engineer, and the owner of the other involved utility before proceeding with construction.
3. For field location of gas line services, notify Washington Gas Light Co., 703-750-1000, 48 hours prior to the start of any excavation or construction.
4. Omissions and/or additions of utilities found during construction shall be the sole responsibility of any contractor engaged in excavation at this site. Outtschick, Little & Weber, P.A., shall be notified immediately of any and all utility information, omissions and additions found by any contractor.
5. Due to the proximity of live underground and overhead utilities, we are not responsible for any damage or injury sustained during construction by any persons, trucks, trailers, or equipment used on or adjacent to the site.

LEGEND

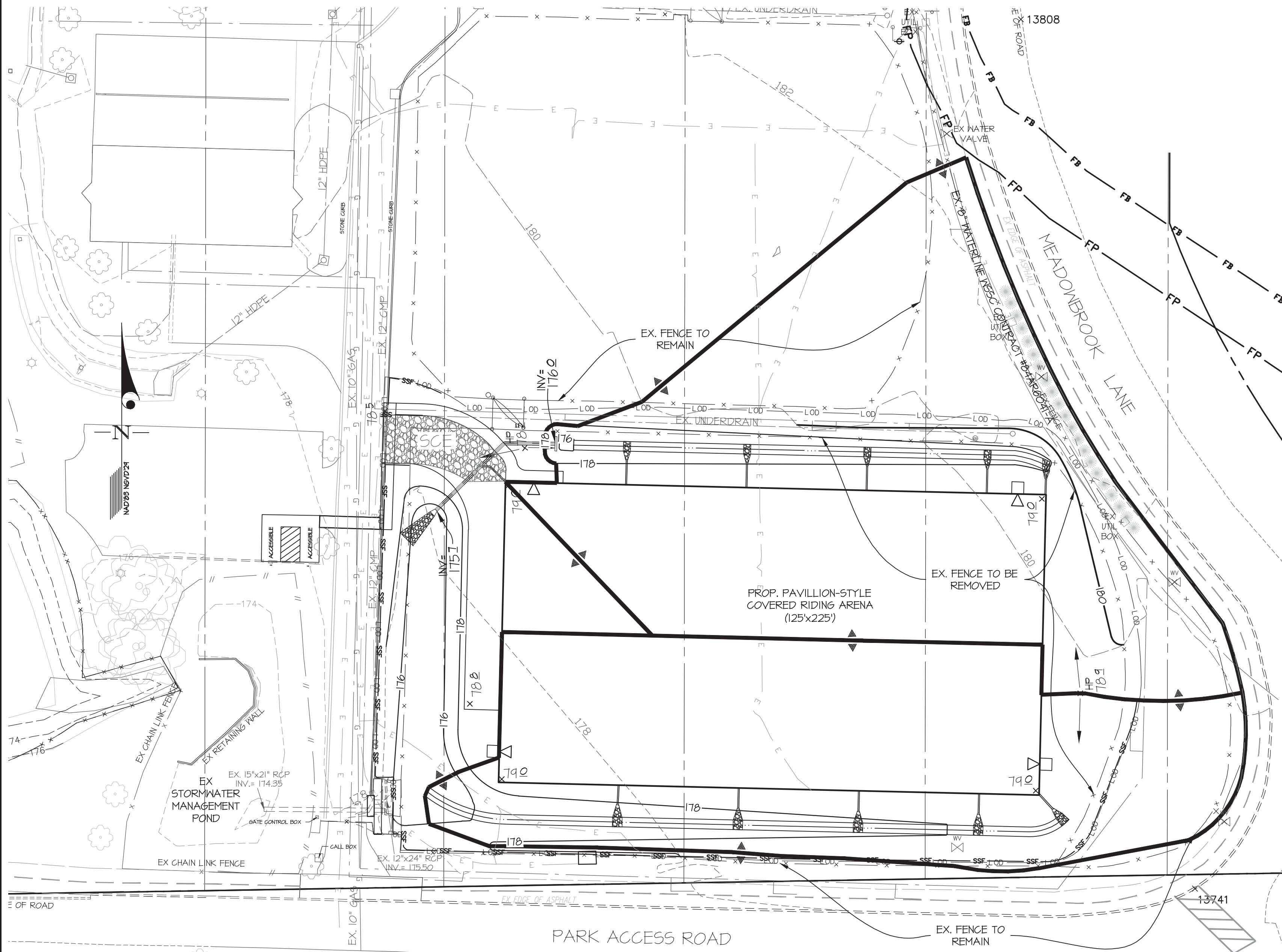
- EXISTING BUILDING
- PROPOSED BUILDING
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CURB
- PROP. STORM DRAIN
- PROPOSED BIO-SWALE
- PROPOSED RIP RAP OR RIVER JACK
- PROPOSED LIMITS OF DISTURBANCE
- PROPERTY LINE
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED GROUND COVER
- EXISTING TREES



GLW
PLANNING | ENGINEERING | SURVEYING
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-889-2524 | FAX: 301-421-4186

DESIGNED BY:					
DRAWN BY:					
CHECKED BY:					
TMR	DATE	REVISION	BY	APP'R.	

PREPARED FOR: OWNER/DEVELOPER MEADOWBROOK FOUNDATION, INC. 8200 MEADOWBROOK LANE CHEVY CHASE, MARYLAND 20815 TEL: (301) 589-9026 ATTN: KATRINA WEING	SCALE 1"=20'	ZONING R-60	SWM LANDSCAPE PLAN MEADOWBROOK STABLES COVERED ARENA RING 'C' LOTS 24-34, HICKEY & OFFUTT SUBDIVISION L. 562 F. 228	G. L. W. FILE NO. 98109 SC/SWM SHEET 4 OF 6
DATE MAR., 2020	TAX MAP - GRID HN63	ELECTION DISTRICT NO. 7	MONTGOMERY COUNTY, MARYLAND	



- SEQUENCE OF CONSTRUCTION
1. Prior to clearing of trees, installing sediment control measures, or grading, a pre-construction meeting must be conducted on-site with the Montgomery County Department of Permitting Services (MCDPS) Sediment Control Inspector (240) TTT-0311 (48 hours notice) and the MNCPPC, Planning Department, Parks Enforcement Inspector (301) 445-4550 (48 hours notice), M-MCPC Montgomery Parks Construction Manager (301-445-2514), the Owners representative, and the Site Engineer.
 2. The limits of disturbance must be field marked prior to clearing of trees, installation of sediment control measures, construction, or other land disturbance activities.
 3. The permittee must obtain written approval from the MNCPPC Inspector, certifying that the limits of disturbance and tree protection measures are correctly marked and installed prior to commencing any clearing.
 4. Install sediment control devices, Super Silt Fence & Stabilized Construction Entrance.
 5. Once the sediment control devices are installed, the permittee must obtain written approval from the MCDPS Inspector before proceeding with any additional clearing, grubbing or grading.
 - *6. Rough grade within limits of disturbance.
 - *7. Install storm drain, and other utilities. Do not install bio-swale filter media until drainage areas are stabilized.
 - *8. Construct building.
 - *9. Install landscaping.
 10. Stabilize all disturbed areas.
 11. Install filter media in bio-swales, with prior approval of DPS Inspector.
 12. With permission of the Inspector, remove all remaining sediment controls and stabilize according to permanent seeding notes.
 13. Submit Asbuilt/Record drawings for review and approval.
- *NOTE: Sequence Items No. 6 thru No. 9 can be done concurrently or in any order.

48 Hours

Before You Dig

Call

"MISS UTILITY"

Service Protection Center

MEMBER

ONE CALL SYSTEMS INTERNATIONAL

CALL TOLL FREE

1-800-257-7777

VICINITY MAP
SCALE: 1" = 2,000'

SEDIMENT CONTROL LEGEND

- EXISTING TREES

EXISTING CURB & GUTTER

PROPOSED DRAINAGE DIVIDE

EXISTING DRAINAGE DIVIDE

PROPOSED SUPER SILT FENCE

PROPOSED STORM DRAIN

EXISTING STORM DRAIN

STABILIZED CONSTRUCTION ENTRANCE

PROPOSED RIP RAP

PROPOSED LIMITS OF DISTURBANCE

PROPOSED CONTOURS

EXISTING CONTOURS

EXISTING ELECTRIC

EXISTING GAS
-

EXISTING UTILITY NOTES

1. For marking locations of existing utilities, notify "MISS UTILITY" at 1-800-257-7777, 48 hours prior to any excavation or construction.
2. Information concerning underground utilities was obtained from available records. The contractor must determine the exact locations and elevations of the utilities by digging test pits by hand at all utility crossings well in advance of trenching. If clearances are less than specified on this plan or less than 12 inches when not specified, contact the Engineer, and the owner of the other involved utility before proceeding with construction.
3. For field location of gas line services, notify Washington Gas Light Co., 703-750-1000, 48 hours prior to the start of any excavation or construction.
4. Omissions and/or additions of utilities found during construction shall be the sole responsibility of any contractor engaged in excavation at this site. Otschick, Little & Weber, P.A., shall be notified immediately of any and all utility information, omissions and additions found by any contractor.
5. Due to the proximity of live underground and overhead utilities, we are not responsible for any damage or injury sustained during construction by any persons, trucks, trailers, or equipment used on or adjacent to the site.

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT), USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 4:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
--	------	---

DETAIL E-3 SUPER SILT FENCE

CONSTRUCTION SPECIFICATIONS

1. INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 6 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
--	------	---

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS 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. 17288
EXPIRATION DATE: MARCH 17, 2021



PREPARED FOR:

OWNER/DEVELOPER
MEADOWBROOK FOUNDATION, INC.
8200 MEADOWBROOK LANE
CHEVY CHASE, MARYLAND 20815
TEL: (301) 589-9026
ATTN: KATRINA WEINIG

SCALE

1" = 30'

ZONING

R-60

DATE

MAR., 2020

TAX MAP - GRID

HN63

EROSION AND SEDIMENT CONTROL PLAN & DETAILS

MEADOWBROOK STABLES
COVERED ARENA RING 'C'
LOTS 24-34, HICKEY & OFFUTT SUBDIVISION
L. 562 F. 228

ELECTION DISTRICT NO. 7

MONTGOMERY COUNTY, MARYLAND

G. L. W. FILE No.

98109

SC/SWM SHEET

5 OF 6

PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

<div>MONTGOMERY COUNTY DPS STANDARD EROSION AND SEDIMENT CONTROL NOTES</div>		<div>MONTGOMERY COUNTY DPS STANDARD EROSION AND SEDIMENT CONTROL NOTES CONT'D</div>		<div>14.0 STANDARDS AND SPECIFICATIONS LAND GRADING</div> <div>DEFINITION RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.</div> <div>PURPOSE THE PURPOSE OF A LAND GRADING SPECIFICATION IS TO PROVIDE FOR EROSION CONTROL AND VEGETATION ESTABLISHMENT ON THOSE AREAS WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED BY GRADING ACCORDING TO PLAN.</div> <div>DESIGN CRITERIA THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDINGS TO AVOID EXTREME GRADE MODIFICATIONS. INFORMATION SUBMITTED MUST PROVIDE SUFFICIENT TOPOGRAPHIC SURVEYS AND SOIL INVESTIGATION TO DETERMINE LIMITATIONS TO THAT MUST BE IMPOSED ON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES AND DRAINAGE PATTERNS, MEASURES FOR DRAINAGE AND WATER REMOVAL AND VEGETATIVE TREATMENT, ETC.</div>		<div>IX. MAINTENANCE A. IRRIGATE - APPLY MINIMUM 1" OF WATER EVERY 3 TO 4 DAYS DEFENDING SOIL TEXTURE, WHEN SOIL MOISTURE BECOMES DEFICIENT TO PREVENT LOSS OF STAND OR PROTECTIVE VEGETATION. B. REPAIRS - IF STAND PROVIDES BETWEEN 40% AND 45% COVER, REPAIRS ARE REQUIRED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND PROVIDES LESS THAN 40% COVERAGE, REESTABLISH STAND FOLLOWING ORIGINAL RATES AND PROCEDURES. NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.</div>	
<div>1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY- EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.</div> <div>2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS: A. AT THE REQUIRED PRE-CONSTRUCTION MEETING. B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY. C. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY. D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S). E. PRIOR TO FINAL ACCEPTANCE.</div> <div>3. THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE. SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.</div> <div>4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.</div> <div>5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.</div> <div>6. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN: A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND B) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.</div>		<div>12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.</div> <div>13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.</div> <div>14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.</div> <div>15. FOR FINISHED GRADING, THE PERIMETTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDINGS ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.</div> <div>16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.</div> <div>17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.</div> <div>18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.</div> <div>19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.</div> <div>20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.</div> <div>21. SEDIMENT CONTROL TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE NET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE NET STORAGE DEPTH FOR ST-II) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.</div> <div>22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.</div> <div>23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE, THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FURTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.</div> <div>24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.</div> <div>25. OFF - SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.</div> <div>26. SEDIMENT TRAP/BASIN DENATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DENATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED: A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.</div> <div>REMEMBER: DENATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.</div> <div>27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.</div> <div>28. TOPSOIL MUST BE APPLIED TO ALL PVIOUSLY AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS.</div>		<div>1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO A BUILDING DOWN SLOPE TO INSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.</div> <div>2. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THAN 2:1. WHERE THE SLOPE IS TO BE MOVED, THE SLOPE SHOULD BE NO STEEPER THAT 3:1. 4:1 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOWING STEEP SLOPES.) SLOPES EXCEEDING 2:1 SHALL REQUIRE SPECIAL DESIGN AND STABILIZATION CONSIDERATIONS THAT SHALL BE ADEQUATELY SHOWN ON THE PLANS.</div> <div>3. REVERSE BENCHES SHALL BE PROVIDED WHEREVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:1 SLOPE EXCEEDS 20 FEET; FOR 3:1 SLOPE IT SHALL BE INCREASED TO 30 FEET AND FOR 4:1 TO 40 FEET.</div> <div>BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPE FACE AS EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE OUTLET, SOILS, SEEPS, ROCK OUTCROPS, ETC., SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES.</div> <div>A. BENCHES SHALL BE A MINIMUM OF SIX- FEET WIDE TO PROVIDE FOR EASE OF MAINTENANCE.</div> <div>B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OR FLATTER TO THE TOE OF THE UPPER SLOPE AND A WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS.</div> <div>C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800' UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION SEE TEMPORARY SWALE.</div> <div>4. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES, AND SWALES OR CONVEYED DOWNSLOPE BY THE USE OF A DESIGN STRUCTURE, EXCEPT WHERE: A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPE SHALL BE PROTECTED FROM SURFACE RUNOFF UNTIL THEY ARE STABILIZED.</div> <div>B. THE FACE OF THE SLOPE SHALL NOT BE SUBJECT TO ANY CONCENTRATED FLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINAGEWAYS, GRADED SWALES, DOWNSPOUTS, ETC.</div> <div>C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO, APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION 6), RIP-RAP OR OTHER APPROVED STABILIZATION METHODS.</div> <div>5. CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED AS SHOWN ON THE FOLLOWING DIAGRAM (DET. 28). THESE SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OF SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS WILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 1:1. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER, AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVERLAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO A SUITABLE OUTLET.</div> <div>6. SUBSURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY PROTECTING SUCH PROPERTIES AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.</div> <div>7. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES. SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.</div> <div>9. STOCKPILES, BORROW AREAS, AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS.</div> <div>10. ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION.</div>		<div>2.0.0 VEGETATIVE STABILIZATION</div> <div>PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING</div> <div>I. SITE PREPARATION PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED WITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, SEDIMENT CONTROL BASINS, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND WITHIN 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS AS TEMPORARY COVER WHERE VEGETATION IS NOT FEASIBLE OR WHERE SEEDING CANNOT BE COMPLETED BECAUSE OF WEATHER.</div> <div>II. SEEDBED PREPARATION AND SEEDING APPLICATION LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURE OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3</div>	