# LYNNBROOK CENTER

#### **GENERAL NOTES**

- 1. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON WAS PROVIDED BY MERIDIAN SURVEYS, INC., P.O. BOX 549, FREDERICK, MD. PHONE: (301) 721-9400 FAX: (301) 840-0334
- 2. THE HORIZONTAL DATUM OF THIS SURVEY IS MARYLAND STATE PLANE (NAD83), UTILIZING W.S.S.C. TRAVERSE NO. 20976, EL. 318.90.
- 3. THE VERTICAL DATUM OF THIS SURVEY IS NGVD29.

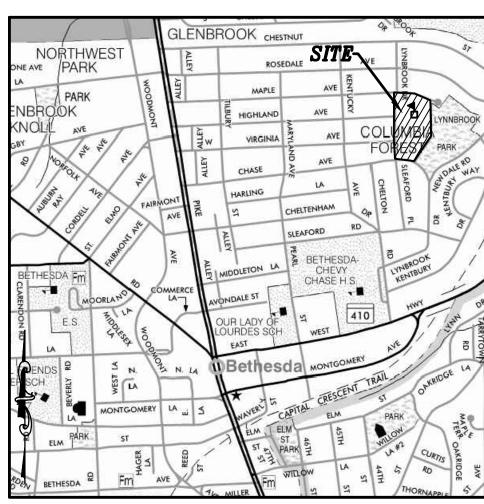
DATED JULY 28, 2017.

- 4. THE LOCATION OF UNDERGROUND UTILITIES SUCH AS STORM DRAIN AND SANITARY SEWER ARE SHOWN APPROXIMATE IN NATURE AND OBTAINED WHERE PLANS ARE AVAILABLE. UNDERGROUND UTILITIES SUCH AS GAS, WATER AND ELECTRIC MARKED BY A.M.T. AND FIELD LOCATED. ABOVE GROUND UTILITIES & IMPROVEMENTS FIELD LOCATED BY MERIDIAN SURVEYS. INVERT ELEVATIONS HAVE BEEN OBTAINED WHERE ACCESS IS AVAILABLE. ALL CONTRACTORS MUST CALL "MISS UTILITY" PRIOR TO ANY EXCAVATIONS..
- 5. THIS PROPERTY APPEARS ON TAX MAP HN343, PARCEL N719 AND IS CURRENTLY ZONED R60 AND IS IN ELECTION DISTRICT NO. 7, MONTGOMERY COUNTY, MARYLAND.
- 6. 100' BUFFER AROUND PROPERTY LINES IS TAKEN FROM MNCP&PC TOPO SHOWING EXISTING TOPOGRAPHY AND EXISTING CONDITIONS WHERE ACCESS IS NOT AVAILABLE TO ADJACENT PRIVATE PROPERTIES. THIS DATA IS ONLY APPROXIMATE IN NATURE.
- 7. SOILS TYPE TAKEN FROM MONTGOMERY COUNTY SOILS MAP 1996.
- 8. THIS PROPERTY HAS A MAILING ADDRESS OF 8001 LYNNBROOK DRIVE, BETHESDA MD, 20814
- 9. PROPERTY SHOWN HEREON LIES WITHIN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE OF FLOODING AS ESTABLISHED BY THE US FEDERAL EMERGENCY MANAGEMENT AGENCY, NATIONAL FLOOD INSURANCE

PROGRAM, FLOOD INSURANCE RATE MAP, COMMUNITY PANEL # 24031 C0455D.

- 10. DETAIL DRAWINGS AND SCHEDULES DESCRIBE CONSTRUCTION AT GIVEN AREAS. ALL CONTRACTORS SHALL UTILIZE EQUIVALENT CONSTRUCTION METHODS IN ALL AREAS NOT DETAILED.
- 11. ALL NOTES ON DRAWINGS SHALL BE ASSUMED AS TYPICAL, UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS.
- 12. ALL NOTES SUPPLEMENT THE PLANS AND ARE IN NO WAY TO BE CONSIDERED AS EXCLUDING IN ANY ITEM IN THEM.

- 13. IT SHALL BE THE DUTY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS GIVEN ON THE DRAWINGS AND TO REPORT TO THE ARCHITECT AND CIVIL ENGINEER OF RECORD ANY ERROR OR INCONSISTENCY WITH THE ACTUAL CIRCUMSTANCES IN THE FIELD BEFORE COMMENCING WORK. TEST PITS FOR ALL UTILITY CONNECTIONS AND CROSSINGS SHALL BE PROVIDED TO ADTEK BY THE CONTRACTOR PRIOR TO COMMENCING ANY WORK.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL ITEMS REQUIRED TO PROVIDE A SITE CLEAR OF OBSTRUCTIONS (ABOVE & BELOW GRADE) AND GRADED TO SPECIFIED ELEVATIONS.
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL STAKEOUT. BENCHMARKS SHALL BE ESTABLISHED BY THE CONTRACTOR IN AREAS THAT WILL REMAIN UNDISTURBED THROUGHOUT CONSTRUCTION.
- 16. ALL BIDDERS: THE CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE HIM/HERSELF WITH THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED PRIOR TO SUBMITTING BID.
- 17. AFTER THIS PROJECT HAS BEEN AWARDED, THE SUCCESSFUL CONTRACTOR MAY REQUEST A COPY OF THE SITE ELECTRONIC FILES FROM THE OWNER FOR USE IN STAKEOUT.
- 18. SURVEY CONTROL SHOWN HEREON IS FOR THE CONVENIENCE OF THE CONTRACTOR. IF ADDITIONAL CONTROL IS REQUIRED, THE CONTRACTOR SHALL ESTABLISH HIS OR HER OWN CONTROL PRIOR TO DEMOLITION OF EXISTING CONTROLS AT HIS OR HER OWN COST.
- 19. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL SITE SUB—CONTRACTORS/BIDDERS WITH FULL AND COMPLETE SETS OF ALL CIVIL DRAWINGS AND SPECIFICATIONS FOR THEIR USE IN PREPARING BIDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DELAYS AND COSTS ARISING DURING CONSTRUCTION FROM BIDS BASED UPON INCOMPLETE SETS OF SITE BID DOCUMENTS.
- 20. ALL EARTHWORK OPERATIONS TO COMPLY WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARDS AND SPECIFICATIONS, LATEST EDITION.
- 21. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION," DATED JULY 2008 OR MOST CURRENT EDITION.
- 22. ALL WORK SHALL COMPLY WITH THE LATEST STANDARDS OF THE AMERICANS WITH DISABILITIES ACT.
- 23. CONTRACTOR SHALL SHEET/SHORE AND BRACE ANY AND ALL STRUCTURES EXPOSED BY EXCAVATION/CONSTRUCTION.
- 24. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING PAVING/FEATURES THAT ARE NOT SHOWN FOR DEMOLITION/REMOVAL



WCINITY MAP

SCALE: 1" = 1,000'±

(WSSC GRID: 209 NW 04)

MONTGOMERY COUNTY

ADC MAP PAGE: 5407

GRID: F-3

(2008/39TH EDITION)

	SHEET LIST TABLE						
Sheet Number	Sheet Title						
C-0	COVER SHEET						
C-1	EXISTING CONDITIONS & DEMOLITION PLAN						
C-2	EROSION & SEDIMENT CONTROL AND SWM COVER SHEET						
C-2A	EROSION & SEDIMENT CONTROL PLAN						
C-2B	EROSION & SEDIMENT CONTROL DETAILS & CERTIFICATIONS						
C-2C	EROSION & SEDIMENT CONTROL NOTES						
C-3A	OVERALL SITE PLAN						
C-3B	SITE DETAILS						
C-4A	OVERALL GRADING & STORMWATER MANAGEMENT PLAN						
C-4B	STORMDRAIN PROFILES, DETAILS & NOTES						
C-4C	MICROBIORENTENTION SWM-21 AND SWM-22 DETAILS						
C-4D	MICROBIORENTENTION SWM-23 AND SWM-24 DETAILS						
C-0A	DRAINAGE AREA MAP						
L-2.1	STORMWATER MANAGEMENT PLANTING PLAN						

## TRAVERSE INFORMATION

No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	482364.0340	1287570.1390	330.93	REBAR & CAP
101	482404.9012	1287775.5439	326.87	REBAR & CAP
102	482697.9887	1287869.1466	314.95	REBAR & CAP
103	482353.9411	1288067.4112	317.43	REBAR & CAP
104	482288.0780	1288293.4589	297.64	REBAR & CAP
105	482128.9104	1288118.9137	307.35	REBAR & CAP
106	482006.4894	1287896.9101	320.60	REBAR & CAP
107	482005.6238	1287711.1685	326.09	REBAR & CAP
108	482111.5655	1287465.0769	334.58	REBAR & CAP
109	482508.4346	1287460.6062	344.81	REBAR & CAP

	BENCHMARK TABLE										
NO.	NORTHING	EASTING	ELEVATION	LOCATION							
1	482634.6766	1287908.7833	313.33	X-CUT RIGHT FRONT CORNER CATCH BASIN IN CUL-DE- SAC, MAPLE AVENUE 70' SOUTH TRAVERSE STATION 102							
2	482122.3430	1288099.6734	310.41	X-MARK FRONT BONNET BOLT FIRE HYDRANT, 20' WEST TRAVERSE STATION 105							
3	482380.7880	1287459.9319	340.38	X-MARK LEFT FRONT CORNER CATCH BASIN, 112' NORTHWEST TRAVERSE STATION 100							

# MISS UTILITY

CALL "MISS UTILITY AT 8-1-1 OR 1-800-257-7777 OR LOG ON TO <a href="https://www.call811.com">www.call811.com</a> or <a href="https://www.missutility.net">www.missutility.net</a> 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY.

THE CONTRACTOR IS ALSO RESPONSIBLE FOR LOCATING ALL PRIVATE UTILITIES (NOT LOCATED BY MISS UTILITY) WITHIN MCPS PROPERTY AT THEIR EXPENSE. ALL UTILITIES SHOWN ON THE PLANS ARE PROVIDED FOR INFORMATION ONLY AND SHALL BE CONSIDERED APPROXIMATE. MCPS SHALL NOT BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. ANY UTILITIES OR OTHER UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S SOLE EXPENSE.

#### PROPOSED LEGEND

PROPOSED STORM DRAIN	HDPE
PROPOSED SWM UNDERDRAIN W/ CLEANOUT	PERF. PVC
PROPOSED MANHOLE	
PROPOSED CONTOUR	<del>9</del> 6
PROPOSED CHAIN—LINK FENCE PROPOSED DEPRESSED CONCRETE CURB	oo
PROPOSED BIOFILTER/SAND FILTER SEE STORMWATER DETAILS, SHEETS C-4C & C-4D	
PROPOSED LIGHT DUTY ASPHALT SEE DETAIL 1, SHEET C-3B	
PROPOSED 2"MILL & OVERLAY (MIN 5' OUTSIDE SAW CUT)	

EXISTING FEATURE TO BE REMOVED

**EXISTING LEGEND** 

**BENCHMARK** 

SANITARY SEWER

OVERHEAD UTILITY LINE

— ОНU——

— E —

—— G ——

——X"W——

 $GV\bowtie$ 

STORM DRAIN

ELECTRIC LINE

GAS LINE

GAS VALVE

WATER LINE

RIPRAP

LIGHT

WATER VALVE

FIRE HYDRANT

WATER METER

TELEPHONE LINE

CHAIN LINK FENCE

ROOT ZONES AND

DEMO LEGEND

REMOVED

EXIST ASPHALT TO BE

TREE TO BE REMOVED

EXISTING ASPHALT TO BE

MILLED (2" DEPTH)

SOIL TYPE

EXISTING TREE WITH CRITICAL

STRUCTURAL ROOT ZONES

UTILITY POLE

MANHOLE

SEDIMENT CONTROL LEGEND

INLET PROTECTION DEVICE

CONCRETE WASHOUT STATION

v cws

PROFESSIONAL SEAL:

**ARCHITECT** 

SMOLEN • EMR
• ILKOVITCH
ARCHITECTS

1355 PICCARD DRIVE SUITE 200 ROCKVILLE, MD 20850

301-770-0177(P) 301-330-3224(F)

CIVIL / STRUCTURAL ADTEK ENGINEERS

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

MECH./ELECTRICAL/PLUMBING
JAMES POSEY ASSOCIATES

BALTIMORE, MARYLAND 21244 301-265-6100(P) 301-298-9820(F)

CONSTRUCTION MANAGER
HESS CONSTRUCTION

804 WEST DIAMOND AVENUE, SUITE 300 GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

PRINTS ISSUED

NO: DESCRIPTION: DATE:

RFP-040 03/01/18

8001 LYNNBROOK

BETHESDA, MD 20814 L. 850 F. 1462 PARCEL N719 ZONED: R60 LAND USE: EC ACCT NO.

LYNNBROOK
CENTER
STORMWATER
IMPROVEMENTS
MONTGOMERY
COUNTY PUBLIC

07-00417763

SHEET TITL

**COVER SHEET** 

SCHOOLS

PROJECT NO: 177702 DATE: 03/02/2018 SCALE:

OWNER/APPLICANT

MONTGOMERY COUNTY PUBLIC SCHOOLS

45 WEST GUDE DRIVE, SUITE 4300

ROCKVILLE, MARYLAND 20850-4038

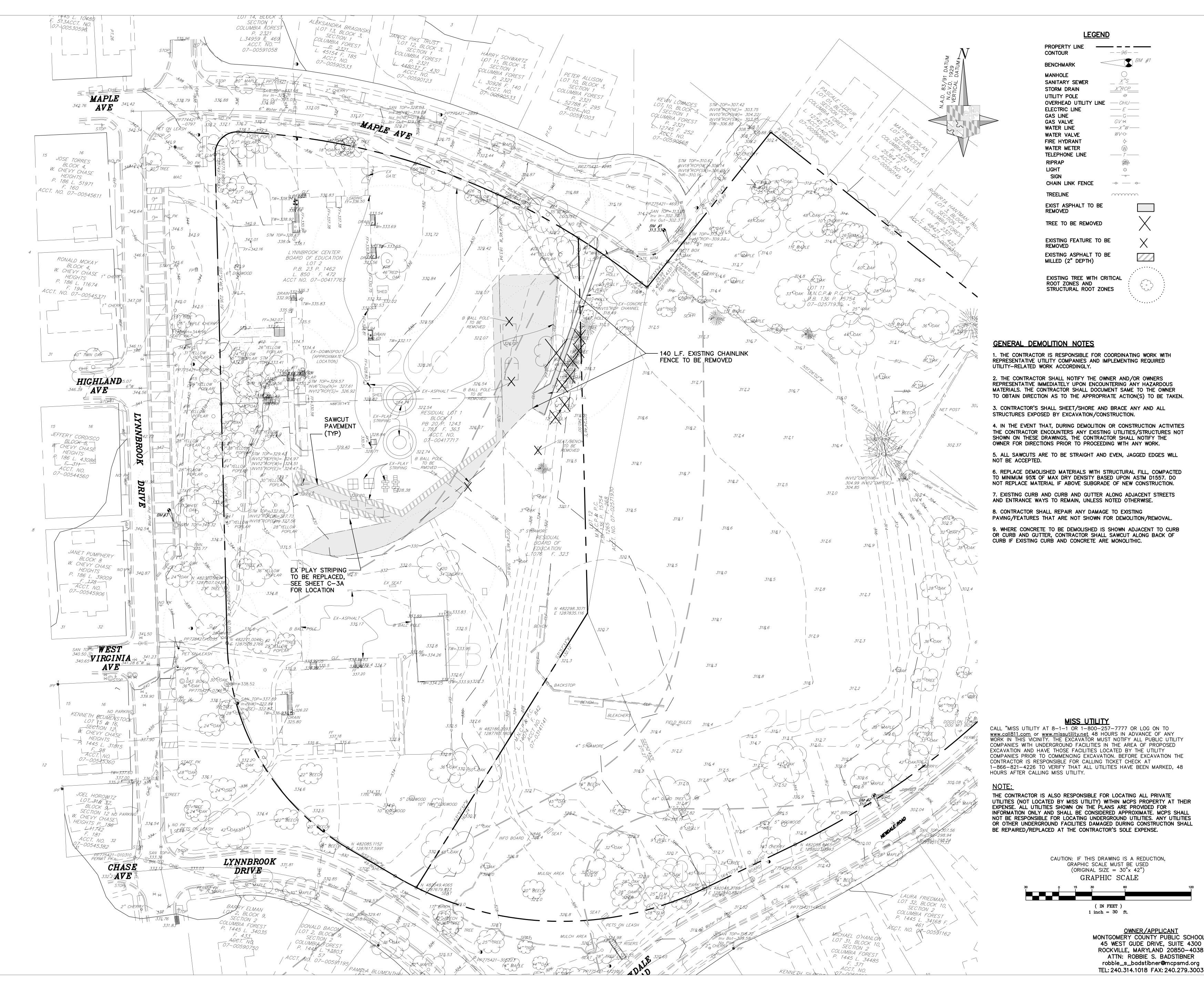
ATTN: ROBBIE S. BADSTIBNER

robbie\_s\_badstibner@mcpsmd.org

TEL: 240.314.1018 FAX: 240.279.3003

**C-0** 

NORTH



**ARCHITECT** 

SMOLEN • EMR
• ILKOVITCH
ARCHITECTS

1355 PICCARD DRIVE SUITE 200 ROCKVILLE, MD 20850 301-770-0177(P) 301-330-3224(F)

CIVIL / STRUCTURAL **ADTEK ENGINEERS** 97 MONOCACY BOULEVARD, UNIT H FREDERICK, MARYLAND 21701

301-662-4408(P) 301-662-7484(F)

MECH./ELECTRICAL/PLUMBING JAMES POSEY ASSOCIATES

> 3112 LORD BALTIMORE DRIVE **BALTIMORE, MARYLAND 21244**

**CONSTRUCTION MANAGER** 

301-265-6100(P) 301-298-9820(F)

**HESS CONSTRUCTION** 

**804 WEST DIAMOND AVENUE, SUITE 300** GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH REPRESENTATIVE UTILITY COMPANIES AND IMPLEMENTING REQUIRED

2. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR OWNERS REPRESENTATIVE IMMEDIATELY UPON ENCOUNTERING ANY HAZARDOUS MATERIALS. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER TO OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.

THE CONTRACTOR ENCOUNTERS ANY EXISTING UTILITIES/STRUCTURES NOT SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE OWNER FOR DIRECTIONS PRIOR TO PROCEEDING WITH ANY WORK.

5. ALL SAWCUTS ARE TO BE STRAIGHT AND EVEN, JAGGED EDGES WILL

6. REPLACE DEMOLISHED MATERIALS WITH STRUCTURAL FILL, COMPACTED TO MINIMUM 95% OF MAX DRY DENSITY BASED UPON ASTM D1557. DO NOT REPLACE MATERIAL IF ABOVE SUBGRADE OF NEW CONSTRUCTION.

7. EXISTING CURB AND CURB AND GUTTER ALONG ADJACENT STREETS AND ENTRANCE WAYS TO REMAIN, UNLESS NOTED OTHERWISE.

8. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING

PAVING/FEATURES THAT ARE NOT SHOWN FOR DEMOLITION/REMOVAL.

9. WHERE CONCRETE TO BE DEMOLISHED IS SHOWN ADJACENT TO CURB OR CURB AND GUTTER, CONTRACTOR SHALL SAWCUT ALONG BACK OF CURB IF EXISTING CURB AND CONCRETE ARE MONOLITHIC.

**PRINTS ISSUED** 

PROFESSIONAL SEAL:

RFP-040

**8001 LYNNBROOK** 

**DRIVE** BETHESDA, MD 20814

L. 850 F. 1462 PARCEL N719 **ZONED: R60** LAND USE: EC ACCT NO. 07-00417763

**LYNNBROOK CENTER STORMWATER IMPROVEMENTS MONTGOMERY COUNTY PUBLIC** SCHOOLS

SHEET TITLE:

**EXISTING CONDITIONS & DEMOLITION PLAN** 

PROJECT NO: 177702 DATE: 03/02/2018 WORKING NORTH

SCALE: OWNER/APPLICANT MONTGOMERY COUNTY PUBLIC SCHOOLS 45 WEST GUDE DRIVE, SUITE 4300 ROCKVILLE, MARYLAND 20850-4038 ATTN: ROBBIE S. BADSTIBNER

# EXISTING & PROPOSED LEGEND

EXISTING	BOUNDARY LINE -		EXISTING CURB & GUTTER	====
EXISTING	PUE/PIE LINE -	· — · · — · · –	EXISTING LIGHT	ф
EXISTING	CONTOUR	<i>− −96−−</i>	EXISTING SIGN	
EXISTING	BENCHMARK	BM 1	EXISTING BOLLARD	•
EXISTING	SEWER MANHOLE	S	EXISTING RIPRAP	AR.
EXISTING	WATER MANHOLE	W	EXISTING CHAIN LINK FENCE	-00
EXISTING	STORM MANHOLE	D	EXISTING WOOD FENCE	<del></del>
EXISTING	TELEPHONE MANHOLE		EXISTING BARBED WIRE FENCE	-XXX
EXISTING	ELECTRIC MANHOLE	E	EXISTING TREE LINE	
EXISTING	GAS MANHOLE	<u>(G</u> )	EXISTING TREE LINE	€°3 <b>¾</b>
EXISTING	SANITARY SEWER	X"S		
EXISTING	WATER LINE	X"W	EXISTING BORING LOCATION	SW
EXISTING	STORM DRAIN	X"RCP	DDODOCED CTORM DDAIN	HDPE
EXISTING	UTILITY POLE	<u> </u>	PROPOSED STORM DRAIN PROPOSED SWM UNDERDRAIN	
EXISTING	OVHD UTILITY LINE	— OHU—	W/ CLEANOUT	PERF. PV
	U/G ELECTRIC LINE	—— E ——	•	
	U/G GAS LINE	—— G——	PROPOSED MANHOLE	
	U/G TELE LINE	—— <i>T</i> ——	PROPOSED CONTOUR	<del>9</del> 6
	U/G CABLE LINE	—— C——	PROPOSED CHAIN-LINK FENCE	<u> </u>
	U/G FIBER OPTIC	——F/O—	PROPOSED DEPRESSED	
	GAS VALVE		CONCRETE CURB	
	WATER VALVE	ф	PROPOSED BIOFILTER/SAND FILTER	
	FIRE HYDRANT	ф- О	SEE STORMWATER DETAILS,	
EXISTING	WATER METER	(WM)	SHEETS C-4C & C-4D	

#### SEDIMENT CONTROL LEGEND

LIMITS OF DISTURBAN	<i>ICE</i> — LOD —
	LOD
SUPER SILT FENCE	—— SSF —— SSF
CONTRACTOR STAGING	AREA
TEMP CONSTRUCTION	<u> </u>
FENCE (6'HIGH)	

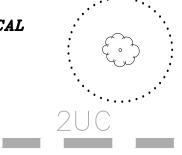
CONCRETE WASHOUT STATION

INLET PROTECTION DEVICE

EXISTING TREE WITH CRITICAL ROOT ZONES AND

STRUCTURAL ROOT ZONES

SOIL TYPE



#### TRFF PROTECTION:

ANY TREE WITHIN THE LIMITS OF DISTURBANCE, NOT SHOWN TO BE PROTECTED SHALL BE REMOVED, U.N.O. FLOODPLAIN CERTIFICATION

THIS SITE DOES NOT FALL WITHIN ANY 100-YEAR FLOODPLAIN AS MAPPED BY THE FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION, DATED SEPTEMBER 09, 2006, COMMUNITY PANEL NO. 240049-0200C. PROPOSED SLOPES:

THERE ARE NO PROPOSED FINISH GRADES EXCEEDING 3:1. OFF-SITE DRAINAGE

THERE IS NO OFF-SITE DRAINAGE ENTERING THE SITE.

County Executive

97 Monocacy Blvd, Unit H.

Mr. Jim Barto

Dear Mr. Barto:

management plan slage:

ADTEK Engineers

Frederick, MD 21701

# MISS UTILITY

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

DEPARTMENT OF PERMITTING SERVICES

November 17, 2017

#### RELATED REQUIRED PERMITS IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT TYPE OF PERMIT | REQ'D | NOT PERMIT # FXPIRATION RESTRICTION DATES DATE WATERWAYS/WETLAND(S -√ | a. CORPS OF ENGINEERS CERTIFICATION MDE DAM SAFETY \*DPS ROADSIDE TREE PROTECTION PLAN DATE FILED NOTICE OF INTENT N/A FEMA LOMR (REQ'D POST CONSTRUCTION) OTHERS (PLEASE LIST): \*A COPY OF THE APPROVED ROADSIDE TREES PROTECTION PLAN MUST BE DELIVERED TO THE SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING.

#### SEDIMENT CONTROL PLANS GENERAL NOTES:

DISTURBED AREA NOT TO EXCEED 20 ACRES

Diane R. Schwartz Jones

Director

Revision to COMBINED STORMWATER

MANAGEMENT CONCEPT/SITE

DEVELOPMENT STORMWATER

4301 East-West Highway, Bethesda

Tract Size/Zone: 16.36 ac/R-60

Watershed: Lower Rock Creek

SM File #: 276775

Parcel(s): 153

Based on a review by the Department of Permitting Services Review Staff, the revised combined

management concept proposes to meet required stormwater management goals via ESD to the MEP with

stormwater management concept for the above-mentioned site is acceptable. The stormwater

six micro-bioretention facilities and one underground sand filter on the BCCHS site and four micro-

properties are within the Lower Rock Creek watershed so the facilities at the Lynbrook site will be

bioretention facilities at the Lynbrook Center. No new development is proposed at Lynbrook and both

constructed to offsel a portion of BCCHS's requirement. In addition, 10-year control will be provided due

to inadequate capacity of the existing 54" storm drain to adequately convey the developed flow from the

1. All conditions of the October 28, 2015 approval letter are to remain in place and must be met.

is present to correctly calculate the Composite Target PE

and the permit is released by the DPS inspector.

2. A detailed review of the stormwater management computations will occur at the time of detailed

3. The submission for SC Permit for the construction on the Lynbrook Genter property should be

plan review but the computations for Target ESDv must be done in conformance with MDE and

made utilizing separate application however both plans should include a note that the permit for

BBCHS 9SC#281584) will not be released until such time as the as-built for Lynbrook is approved.

255 Rockville Pike, 2nd Floor, Rockville, Maryland 20850 | 240-777-0311 www.montgomerycountymd gov/permittingsar//

DPS guidance including the methodology for prorating when more than one hydrologic soil group

The following items will need to be addressed during the detailed sediment control/stormwater

MANAGEMENT PLAN for Addition to

Total Concept Area: 5.78 on-site acres

Bethesda Chevy Chase High School (BCCHS)

- 2. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE AT ALL TIMES
- 3. CONTRACTOR SHALL RESTORE ANY DISTURBANCE WITHIN PUBLIC RIGHTS-OF-WAYS IN CONFORMANCE WITH THESE PLANS TO ORIGINAL CONDITIONS
- 4. FOR ALL SITE DEMOLITION, REFER TO DEMOLITION PLAN.
- 5. PER NOTE # 3 OF THE DPS APPROVAL LETTER, FOUND ON THIS SHEET, THE PERMIT FOR BETHESDA CHEVY CHASE HIGH SCHOOL (BCCHS), SC#281584, WILL NOT BE RELEASED UNTIL SUCH TIME AS THE AS-BUILT FOR LYNNBROOK IS APPROVED AND THE PERMIT IS RELEASED BY THE DPS INSPECTOR.

Mr. James Barto November 17, 2017

4. Please conact DPS staff prior to preparing the revision to the approved plan for BBCHS to

Payment of a stormwater management contribution in accordance with Section 2 of the

plan at its initial submittal. The concept approval is based on all stormwater management structures

Right of Way liness specifically approved on the concept plan. Any divergence from the information

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

If you have any questions regarding these actions, please feel free to contact Mary Fertig at 240-

Sincerely,

Mark C. Etheridge, Manager

Division of Land Development Services

Water Resources Section

being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public

provided to this office; or additional information received during the development process; or a change in

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

This letter and the October 2015 must appear on the sediment control/stormwater management

discuss the methodology to be used to illustrate the modifications to the plan.

Stormwater Management Regulation 4-90 is not required.

777-6202 or at mary fertig@montgomerycountymd gov.

ESD: Provided BCCHS/Lynnwood/Total 6,291 cu. ft. / 9501 cu. ft./25,792 cu. ft.

Page 2 of 2

required.

MCE: mmf

SM File # 276775

ESD: Required 30,539 cuft

STRUCTURAL 6500 CM. ft.

WAIVED: n/a

PE Target/Achieved: 1.9"/1.6"

#### 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□ NO☑ IF EXEMPT UNDER SECTION 55-5 OF THE CODE, PLEASE LIST THE APPLICABLE EXEMPTION CATEGORY BELOW THIS TABLE. TOTAL PROPERTY AREA TOTAL DISTURBED AREA \_\_\_\_23,453\_\_\_\_ SQUARE FEET \_\_\_\_\_183,528 \_\_\_ SQUARE FEET \*SHADE TREES PROPOSED SHADE TREES REQUIRED TO BE PLANTED \_\_\_\_\_0 FEE IN LIEU (TREES REQUIRED - TREES PROPOSED) X \$250 REQUIRED NUMBER OF SHADE TREES NUMBER OF SHADE AREA (SQ. FT.) OF THE LIMITS TREES REQUIRED OF DISTURBANCE 6.001 8.000 8.001 12,000 12,001 14,000 14.001 40,000 IF THE SQUARE FOOTAGE OF THE LIMITS OF DISTURBANCE IS MORE THEN 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:** ☐ 55-5(a) ANY ACTIVITY THAT IS SUBJECT ☐ 55-5(h) ANY STREAM RESTORATION PROJECT IF THE PERSON PERFORMING THE TO ARTICLE II OF CHAPTER 22A;\* WORK HAS OBTAINED ALL NECESSARY PERMITS; ☐ 55-5(b) ANY COMMERCIAL LOGGING OR ☐ 55-5(i) CUTTING OR CLEARING ANY TREE TIMBER HARVÉSTING OPERATION WITH AN APPROVED EXEMPTION FROM ARTICLE II OF TO COMPLY WITH APPLICABLE PROVISIONS OF CHAPTEER 22A; ANY FEDERAL, STATE, OR LOCAL LAW GOVERNING SAFETY OF DAMS; ☐ 55-5(f) ANY ACTIVITY CONDUCTED BY TH ☐ OTHER: SPECIFY PER SECTION 55-5 OF COUNTY PARKS DEPARTMENT: THE CODE. ☐ 55-5(g) ROUTINE OR EMERGENCY MAINTENANCE OF AN EXISTING STORMWATER MANAGEMENT FACILITY, INCLUDING AN EXISTING ACCESS ROAD, IF THE PERSON PERFORMING THE MAINTENANCE HAS OBTAINED ALL REQUIRED PERMITS:

#### **SEQUENCE OF CONTRUCTION:**

- PRIOR TO CLEARING 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 240.777.6311 (48 HOURS NOTICE). THE MNCPPC, PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR 301.495,4550 (48 HOURS NOTICE). THE OWNER'S REPRESENTATIVE 240.314.1008 AND THE SITE ENGINEER 301.662.4408 (48 HOURS NOTICE). IN ORDER FOR THE MEETING TO OCCUR, THE CONTRACTOR MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRE-CONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR
- THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES,
- 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 CLEARING.
- 4. THE NEED FOR AND LOCATIONS OF A STABILIZED CONSTRUCTION ENTRANCE SHALL BE AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR. THE CONTRACTOR SHALL ASSUME THE COST IF REQUIRED. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE SEDIMENT IS NOT TRACKED ONTO PAVEMENT OR LEAVES THE SITE FROM CONSTRUCTION TRAFFIC.
- 5. CLEAR AND GRADE FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.

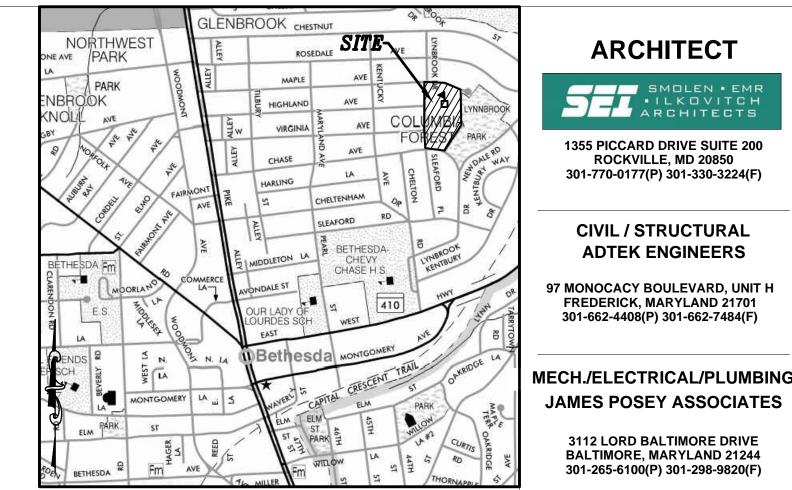
CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.

- 6. INSTALL PERIMETER SEDIMENT CONTROL DEVICES, INCLUDING SUPER SILT FENCE, TEMPORARY CONSTRUCTION FENCE AND WASH STATION.
- 7. BEGIN DEMOLITION OF EX-TREES, ASPHALT, SAWCUT ASPHALT, PARTIAL CONCRETE FLUME/CHANNEL, REMOVE ALL FEATURES ASSOCIATED WITH BASKETBALL COURT AND PARK BENCH. BASKETBALL POLES AND BENCH TO BE RELOCATED, CONTRACTOR TO COORDINATE WITH MCPS FOR RELOCATION OF BASKETBALL COURTS AND BENCH.
- 8. BEGIN CONSTRUCTION OF EW-4, MH-3, MH-2 & MH-1, ABANDON EXISTING 15"RCP OUT AT EX INLET, EX-A, AND CONNECT PROPOSED 15"HDPE TO INLET.
- 9. CONSTRUCT CONCRETE DEPRESSED CURB.
- 10. CONSTRUCT SWM-21 & I-5, PLUG I-5, PER PLAN. HAUL OFF TO BE DISPOSED OF OFF SITE AT A DPS APPROVED LOCATION.
- 11. CONSTRUCT SWM-22 & I-6, PLUG I-6, PER PLAN. HAUL OFF TO BE DISPOSED OF OFF SITE AT A DPS APPROVED LOCATION.
- 12. CONSTRUCT SWM-23 & I-7, PLUG I-7, PER PLAN. HAUL OFF TO BE DISPOSED OF OFF SITE AT A DPS APPROVED LOCATION.
- 13. CONSTRUCT SWM-24 & I-8, PLUG I-8, PER PLAN. HAUL OFF TO BE DISPOSED OF OFF SITE AT A DPS APPROVED LOCATION.
- 14. CONTACT MCDPS INSPECTOR PRIOR TO INSTALLING MEDIA, WITH WRITTEN PERMISSION OF MCDPS INSPECTOR, REMOVE PLUGS, ADD PIPING AND MEDIA TO SWM-21, SWM-22, SWM-23 AND SWM-24. REMOVE INLET PROTECTION ONCE MEDIA IS SET AND WITH PERMISSION FROM DPS
- INSPECTOR. PRIOR TO COMPLETING EACH FACILITY ADD SOD, DO NOT ADD MULCH OR PLANTINGS AT THIS TIME. 15. AT THIS TIME, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AN AS-BUILT SURVEY OF EACH FACILITY TO ENSURE VOLUMES ARE ACCEPTABLE.
- 16. REMOVE TEMPORARY FENCE AND INSTALL PERMANENT FENCE.
- 17. INSTALL BASKETBALL COURT AND PLAY STRIPING PER PLAN.
- 18. ONCE ENGINEER HAS CONFIRMED AND APPROVED AS-BUILT SURVEY, INSTALL MULCH AND PLANTINGS.
- 19. REMOVE ALL REMAINING SEDIMENT CONTROLS ANY AREAS DISTURBED SHALL BE IMMEDIATELY STABILIZED
- 20. OBTAIN A MCDPS APPROVED RECORD DRAWING OF ALL STORMWATER MANAGEMENT FACILITIES. RECORD DRAWINGS SHALL BE IN ACCORDANCE WITH MCPS REQUIREMENTS OUTLINED ON THE DRAWINGS
- 21. PRIOR TO FINAL CLOSEOUT, AND AFTER THE AS-BUILTS ARE APPROVED, THE CONTRACTOR SHALL ENSURE THAT ALL STORMWATER MANAGEMENT AREAS ARE FREE OF DEBRIS AND SEDIMENT. SHOULD A FACILITY NEED TO BE CLEANED OUT, THE CONTRACTOR SHALL DO SO AT THIS TIME, ANY MATERIAL REMOVED FROM THESE FACILITIES SHALL NOT BE FLUSHED DOWN THE STORM DRAIN SYSTEM: IT SHALL BE DISPOSED OF OFF-SITE. ANY FACILITY THAT IS COMPROMISED BY SEDIMENT SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

  NOTE THAT MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE AS-BUILTS

  ARE APPROVED, THIS INCLUDES WEEDING AND INSURING THAT MULCH ON TOP OF FACILITIES ARE MAINTAINED.
- 22. ARRANGE FOR AND OBTAIN ANY REQUIRED FINAL SITE INSPECTIONS AND CERTIFICATIONS.

		SHEET LIST TABLE
Sheet Number	MCDPS ePlan file name	Sheet Title
C-2	SC0001	EROSION & SEDIMENT CONTROL AND SWM COVER SHEET
C-2A	SC0002	EROSION & SEDIMENT CONTROL PLAN
C-2B	SC0003	<b>EROSION &amp; SEDIMENT CONTROL DETAILS &amp; CERTIFICATIONS</b>
C-2C	SC0004	EROSION & SEDIMENT CONTROL NOTES
C-4A	SC0005	OVERALL GRADING & SWM PLAN
C-4B	SC0006	STORMDRAIN PROFILES, DETAILS & NOTES
C-4C	SC0007	MICROBIORENTENTION SWM-21 AND SWM-22 DETAILS
C-4D	SC0008	MICROBIORENTENTION SWM-23 AND SWM-24 DETAILS
C-0A	SC0009	DRAINAGE AREA MAP
L-2.1	SC0010	STORMWATER MANAGEMENT PLANTING PLAN



**MCINITY MAP** SCALE:  $1'' = 1.000' \pm$ (WSSC GRID: 209 NW 04) MONTGOMERY COUNTY ADC MAP PAGE: 5407 GRID: F-3 (2008/39TH EDITION)

**ARCHITECT** 1355 PICCARD DRIVE SUITE 200 ROCKVILLE, MD 20850 301-770-0177(P) 301-330-3224(F) CIVIL / STRUCTURAL **ADTEK ENGINEERS** 97 MONOCACY BOULEVARD, UNIT H FREDERICK, MARYLAND 21701

> 301-265-6100(P) 301-298-9820(F) **CONSTRUCTION MANAGER**

301-662-4408(P) 301-662-7484(F)

JAMES POSEY ASSOCIATES

3112 LORD BALTIMORE DRIVE **BALTIMORE, MARYLAND 21244** 

HESS CONSTRUCTION

804 WEST DIAMOND AVENUE, SUITE 300 GATHERSBURG. MD 20878 301-670-9000(P) 301-670-9009(F)

PROFESSIONAL SEAL:

PRINTS ISSUED **DESCRIPTION:** RFP-040 03/01/18

**8001 LYNNBROOK DRIVE** BETHESDA, MD 20814 L. 850 F. 1462

PARCEL N719

**ZONED: R60** 

LAND USE: EC

ACCT NO.

07-00417763

**LYNNBROOK** 

CENTER

**STORMWATER** 

**IMPROVEMENTS** 

**MONTGOMERY** 

**COUNTY PUBLIC** 

**SCHOOLS** 

SC/SWM SHEET NO. 1 of 10

TECHINCAL REVIEW OF SEDIMENT CONTROL REVIEWED TECHNICAL REVIEW OF STORMWATER MANAGEMENT REVIEWED ADMINISTRATIVE REVIEW REVIEWED SMALL LOT DRAINAGE APPROVAL N/A:⊠ OR REVIEWED

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.

YEARS FROM THE DATE OF APPROVAL IF THE

DPS APPROVAL OF A SEDIMENT CONTROL OR

ONTO ANY ADJACENT PROPERTY WITHOUT THAT

SEDIMENT CONTROL PERMIT NO.

SM. FILE NO. STORMWATER MANAGEMENT

OWNER/APPLICANT

MONTGOMERY COUNTY PUBLIC SCHOOLS

45 WEST GUDE DRIVE, SUITE 4300

ROCKVILLE, MARYLAND 20850-4038

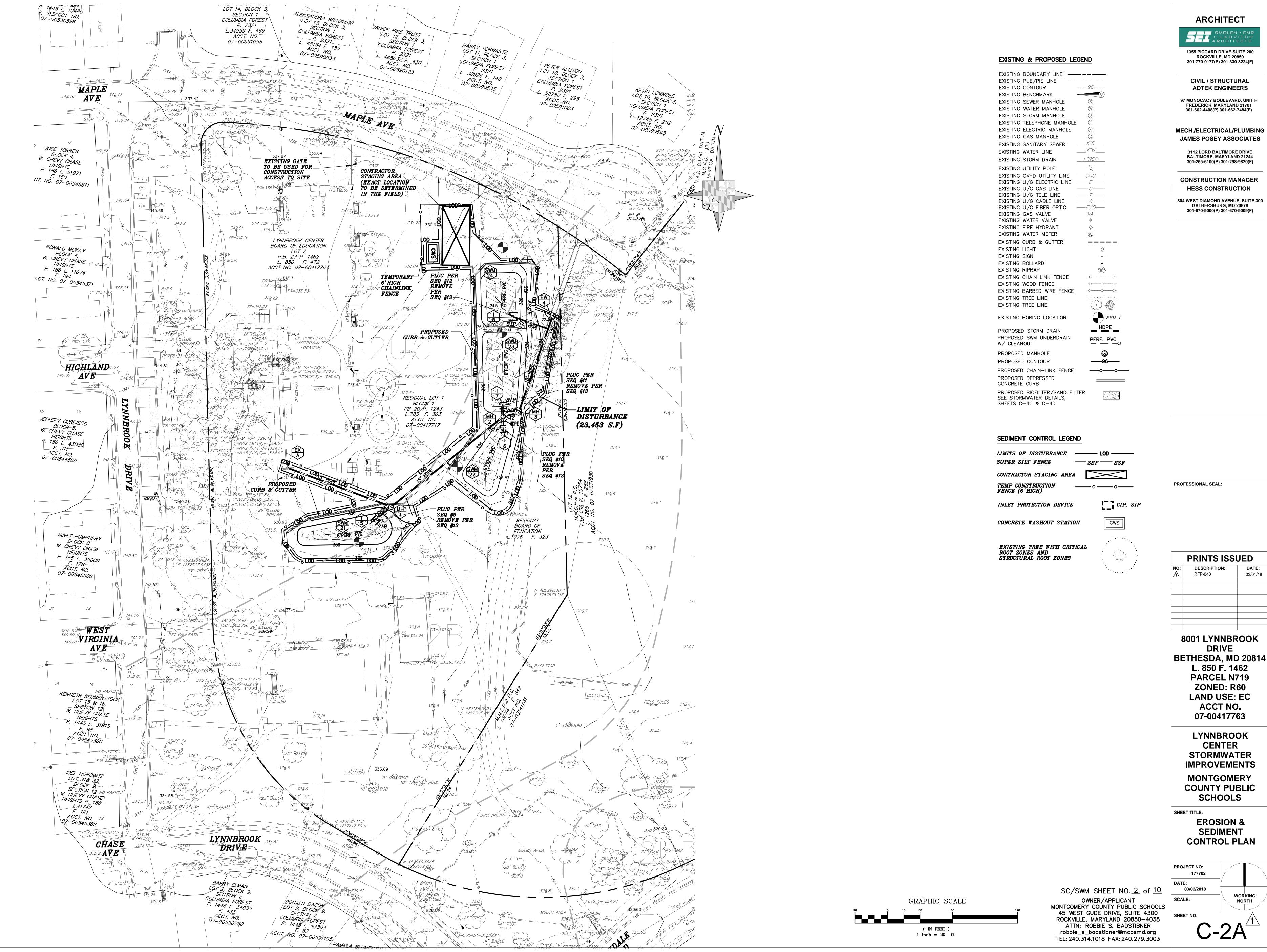
ATTN: ROBBIE S. BADSTIBNER robbie\_s\_badstibner@mcpsmd.org TEL: 240.314.1018 FAX: 240.279.3003 PROJECT HAS NOT STARTED.

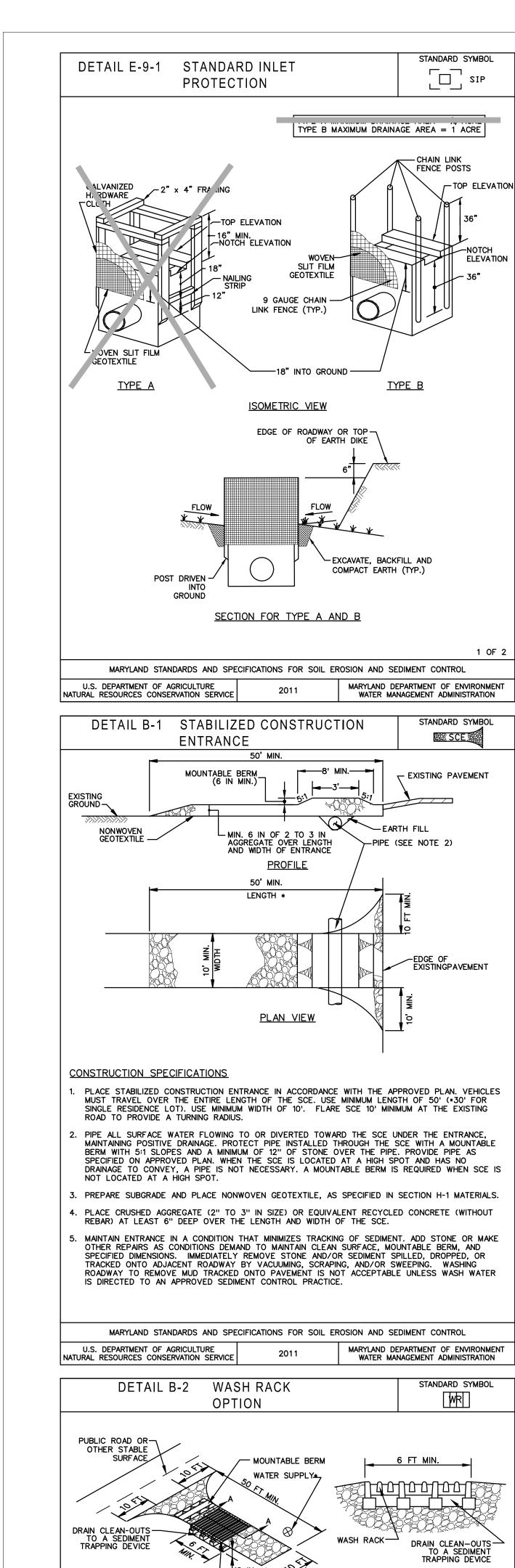
SHEET TITLE: **EROSION & SEDIMENT CONTROL AND SWM** MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO **COVER SHEET** 

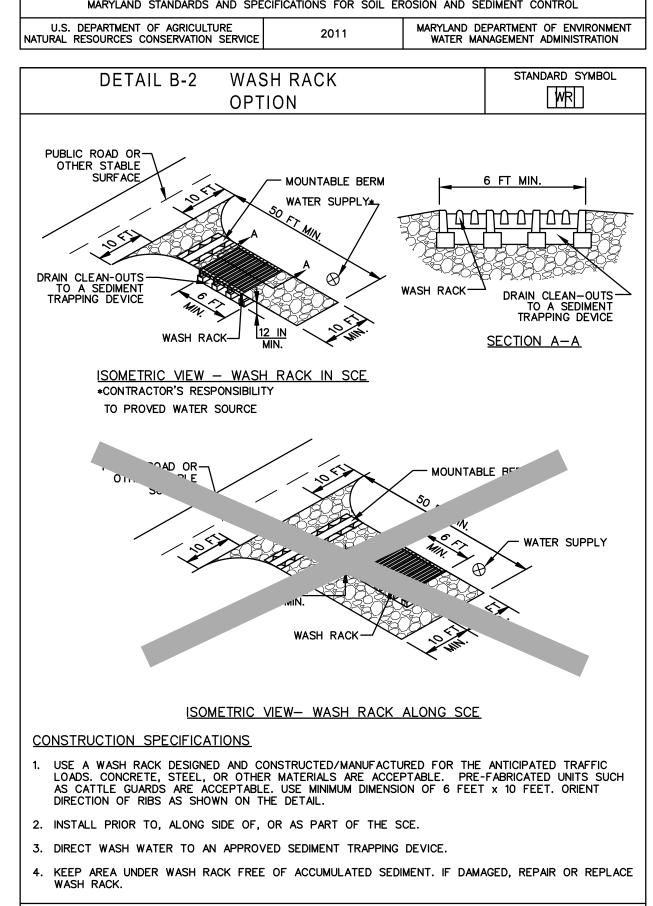
DPS APPROVAL OF A SEDIMENT CONTROL OR
STORMWATER MANAGEMENT PLAN IS FOR DEMONSTRATED
COMPLIANCE WITH MINIMUM ENVIRONMENTAL RUNOFF
TREATMENT STANDARDS AND DOES NOT CREATE OR
IMPLY ANY RIGHT TO DIVERT OR CONCENTRATE RUNOFF PROJECT NO: 177702 PROPERTY OWNER'S PERMISSION. IT DOES NOT RELIEVE
THE DESIGN ENGINEER OR OTHER RESPONSIBLE PERSON
OF PROFESSIONAL LIABILITY OR ETHICAL RESPONSIBILITY
FOR THE ADEQUACY OF THE DRAINAGE DESIGN AS IT
AFFECTS UPHILL OR DOWNHILL PROPERTIES. 03/02/2018 WORKING SCALE: NORTH

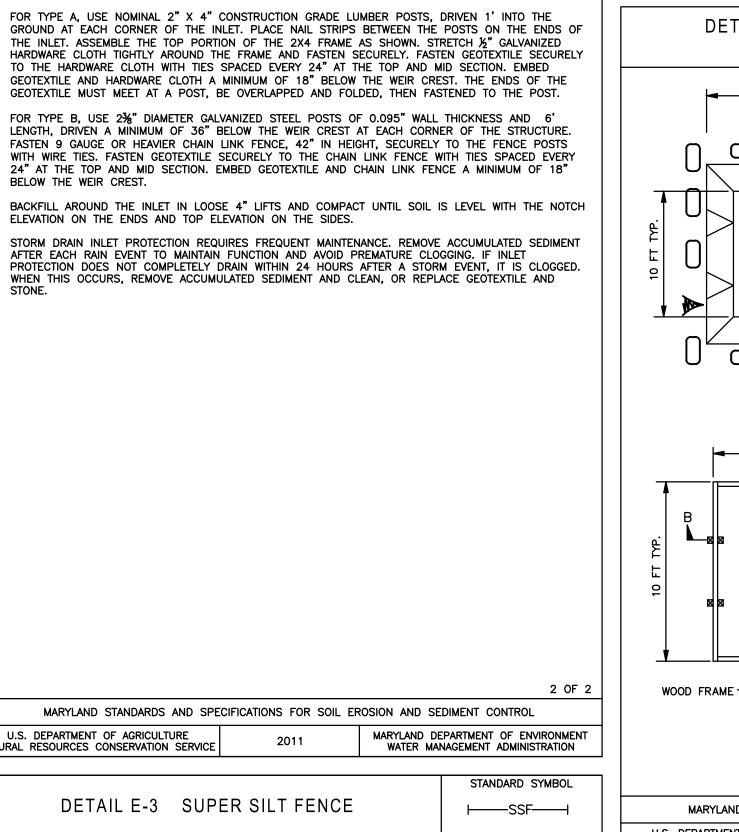
SHEET NO:

THIS PLAN IS FOR EROSION AND SEDIMENT CONTROL ONLY. NOTE TO CONTRACTOR: EROSION AND SEDIMENT CONTROL WILL BE STRICTLY ENFORCED! PRIOR TO VEGETATIVE STABILIZATION, ALL DISTURBED AREAS MUST BE TOPSOILED PER MONTGOMERY COUNTY STANDARD.









STANDARD SYMBOL

SIP

DETAIL E-9-1 STANDARD INLET

USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.

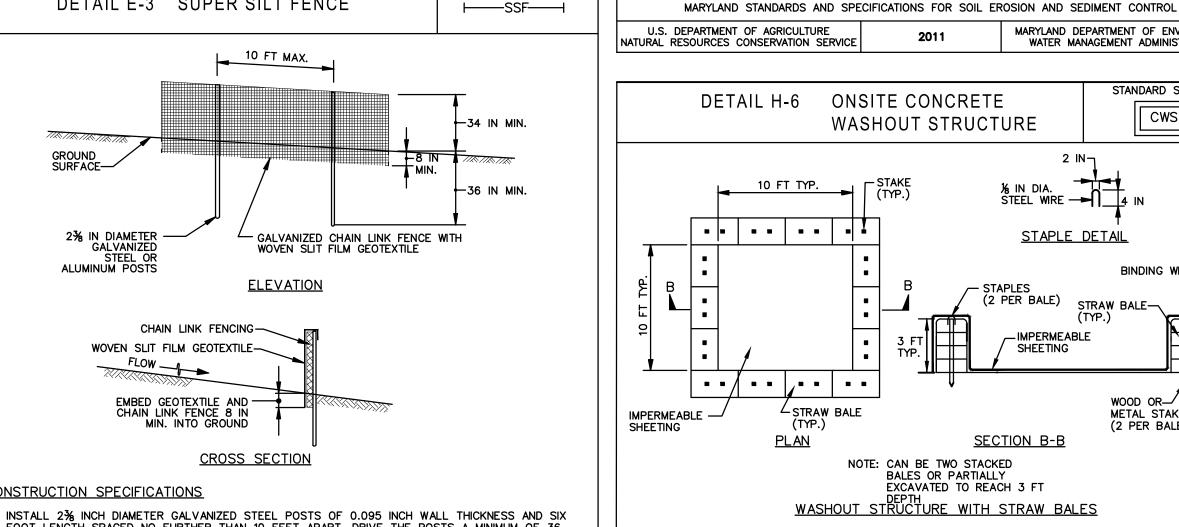
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.

CONSTRUCTION SPECIFICATIONS

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

DETAIL E-3 SUPER SILT FENCE

1 OF 2



CONSTRUCTION SPECIFICATIONS FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36

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. FASTEN WOVEN SLIT 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 8 INCHES INTO THE GROUND. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS. 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. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING
- THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- 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 SPE	CIFICATIONS FOR SOIL ER	OSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

OWNER'S / DEVELOPER'S CERTIFICATION

STANDARD SYMBOL

CWS

-1:1 OR FLATTER

SIDE SLOPE

OR EQUIVALENT-

SECTION A-A

WOOD FRAME SECURELY FASTENED AROUND

ENTIRE PERIMETER WITH

10 FT TYP.

SECTION B-B

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STEEL WIRE -4 IN

STAPLE DETAIL

STRAW BALE

WOOD OR-

METAL STAKES

2 OF 2

(2 PER BALE)

SECTION B-B

LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN

SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND

MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3

PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF

HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.

KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT

WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING.

MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

. CONCRETE WASHOUT STRUCTURES MUST BE LOCATED A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS,

I. EXCAVATED WASHOUT STRUCTURES MUST BE LOCATED SO THAT THEY DO NOT INTERCEPT SURFACE RUNOFF. I RUNOFF DRAINS TOWARD AN EXCAVATED STRUCTURE, A DIVERSION MUST BE PROVIDED AROUND THE STRUCTURE.

4. PREFABRICATED CONTAINERS ARE AN ACCEPTABLE ALTERNATIVE TO FABRICATED WASHOUT STRUCTURES PROVIDED THE VOLUME IS ADEQUATE TO CONTAIN ALL WASH WATER AND SOLIDS WHILE MAINTAINING AT LEAST 4 INCHES OF

IT IS CRITICAL THAT THE CONCRETE WASHOUT STRUCTURE BE WATERTIGHT. THE IMPERMEABLE LINER NEEDS TO BE

REPLACED IF DAMAGED (E.G., RIPPED OR PUNCTURED). A WASHOUT STRUCTURE THAT IS 75 PERCENT FULL MUST

THE ACCUMULATED MATERIAL MUST BE DISPOSED OF PROPERLY. THE LINER MAY NOT BE REUSED. PREFABRICATED

CONTAINERS REQUIRE LESS MAINTENANCE. STORED LIQUIDS THAT HAVE NOT EVAPORATED CAN BE WET VACUUMED AND DISPOSED OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER

HE STRUCTURE TO PREVENT OVERFLOWS. HARDENED SOLIDS CAN BE REMOVED WHOLE OR BROKEN UP FOR

FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER.

PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.

INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM

STANDARD SYMBOL

| cws |

1 OF 2

DETAIL H-6 ONSITE CONCRETE

<u>PLAN</u>

**CONSTRUCTION SPECIFICATIONS** 

<u>ONSITE CONCRETE WASHOUT STRUCTURE DESIGN CRITERIA</u>

ONSITE CONCRETE WASHOUT STRUCTURE MAINTENANCE

MAINTAINED UNTIL THE STRUCTURE IS REMOVÈD.

STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS, AND WATERWAYS.

THE LOCATION OF THE WASHOUT STRUCTURE MUST BE AWAY FROM CONSTRUCTION TRAFFIC.

CONSTRUCTION TRAFFIC.

WASHOUT STRUCTURE

EXCAVATED WASHOUT STRUCTURE

-IMPERMEABLE

WASHOUT STRUCTURE WITH WOOD PLANKS

- IMPERMEABLE SHEETING

"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 PROJECT."

SIGNATURE SETH ADAMS P.E., DIRECTOR DIVISION OF CONSTRUCTION PRINTED NAME AND TITLE

MONTGOMERY COUNTY PUBLIC SCHOOLS MAINTENANCE CERTIFICATION

"I HEREBY CERTIFY THAT MONTGOMERY COUNTY PUBLIC SCHOOLS (MCPS) WILL ASSUME MAINTENANCE RESPONSIBILITIES FOR ALL STORMWATER MANAGEMENT FACILITIES AS LISTED ON DRAWINGS IN ACCORDANCE WITH THE MEMORANDUM OF UNDERSTANDING BETWEEN MCPS AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 5, 1987. IF, FOR ANY REASON, FUTURE IMPROVEMENTS TO THE SITE ARE PLANNED THAT WOULD IMPACT ANY OF THE STORMWATER MANAGEMENT FACILITIES INCLUDED HEREIN, MCPS WILL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES DURING THE PLANNING OR EARLY DESIGN STAGE FOR

DIRECTOR, DIVISION OF CONSTRUCTION

**DESIGN 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 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS

"I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE 1,056 CUBIC YARDS OF EXCAVATION, 177 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE 23,453 SQUARE FEET OR 0.54

DESIGN ENGINEER SIGNATURE

CONTRACTOR AS A BASIS OF BID.

EARTHWORK VOLUMES SHOWN HAVE BEEN PROVIDED FOR REVIEW BY MCDPS IN CONNECTION WITH SEDIMENT CONTROL AND ARE NOT TO BE USED BY ANY

SUCH IMPROVEMENTS".

AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED NOVEMBER, 2013."

SIGN ENGINEER SIGNATURE	DATE
AWN P. BENJAMINSON, P.E.	26524
NTED NAME	MD REGISTRATION NO.

CERTIFICATION OF THE QUANTITIES

SHAWN P. BENJAMINSON, P.E. 26524 PRINTED NAME MD REGISTRATION NO. **ARCHITECT** 

SMOLEN • EMR
• ILKOVITCH
ARCHITECTS 1355 PICCARD DRIVE SUITE 200 ROCKVILLE, MD 20850

301-770-0177(P) 301-330-3224(F) CIVIL / STRUCTURAL

**ADTEK ENGINEERS** 97 MONOCACY BOULEVARD, UNIT H FREDERICK, MARYLAND 21701

MECH./ELECTRICAL/PLUMBING JAMES POSEY ASSOCIATES

301-662-4408(P) 301-662-7484(F)

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

**CONSTRUCTION MANAGER** 

**HESS CONSTRUCTION** 

**804 WEST DIAMOND AVENUE, SUITE 300** GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

PROFESSIONAL SEAL:

**PRINTS ISSUED** 

RFP-040 03/01/18

**8001 LYNNBROOK** 

BETHESDA, MD 20814 L. 850 F. 1462 PARCEL N719 **ZONED: R60** LAND USE: EC

> **LYNNBROOK CENTER STORMWATER IMPROVEMENTS**

ACCT NO.

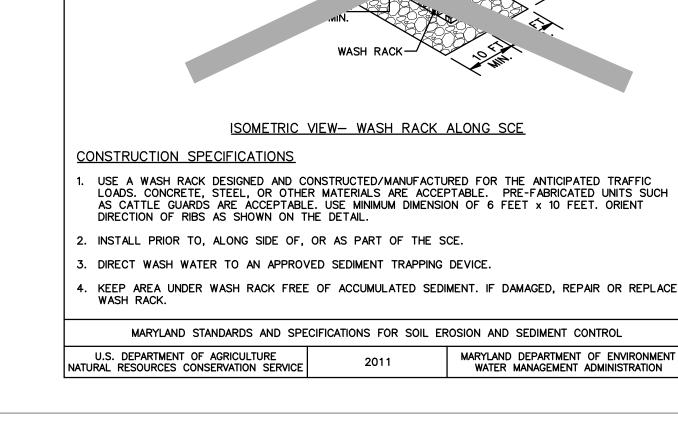
07-00417763

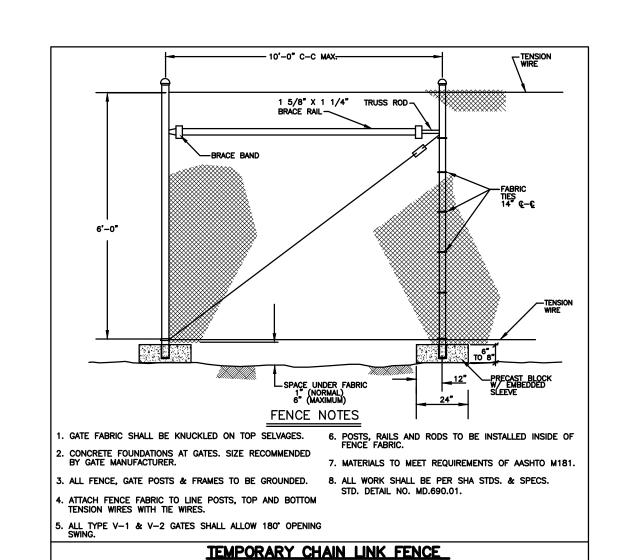
MONTGOMERY **COUNTY PUBLIC** SCHOOLS

SHEET TITLE: **EROSION & SEDIMENT CONTROL DETAILS** & CERTIFICATIONS

PROJECT NO: 177702 03/02/2018 WORKING NORTH SHEET NO:

SC/SWM SHEET NO. 3 of 10 **OWNER/APPLICANT** MONTGOMERY COUNTY PUBLIC SCHOOLS 45 WEST GUDE DRIVE, SUITE 4300 ROCKVILLE, MARYLAND 20850-4038 ATTN: ROBBIE S. BADSTIBNER robbie\_s\_badstibner@mcpsmd.org TEL: 240.314.1018 FAX: 240.279.3003





- 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.
- 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.
- 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.
- 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.
- 5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES 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 <u>BY THE PERMITTEE OR ANY OTHER PERSON.</u>
- 6. FOLLOW 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.
- ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.
- 7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS. SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.
- 8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL STABILIZE ALI CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL. USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.
- 9. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED B EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- 11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN 3 CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- 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.
- 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
- 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.
- 15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING 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
- 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
- 17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- 19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING
- 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 21. SEDIMENT 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 WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT
- 22. SEDIMENT REMOVED FROM TRAPS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- 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 FARTHER APART THAN 8 FEET HAVE MESH OPENINGS NO GREATER THE 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.
- 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.
- 25. OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.
- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING 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 I 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.
- REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS
- 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.
- 28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS"

- 1. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS. 2. PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR
- 3. SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES.
- SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

TEMPORARY SEEDING.

SECTION I — VEGETATIVE STABILIZATION METHODS AND MATERIALS

- 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF MARYLAND OR A RECOGNIZED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY.
- 2. FERTILIZERS SHALL ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTEE OF THE
- 3. LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE AND 98 - 100% WILL PASS THROUGH A #20 MESH
- 4. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

#### SEEDBED PREPARATION

SITE PREPARATION

- TEMPORARY SEEDING A. SEEDBED PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3" TO 5" BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED IT SHOULD NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPED AREAS (GREATER THAN 3:1) SHOULD BE TRACKED LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
- B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3-5" OF SOIL
- BY DISKING OR OTHER SUITABLE MEANS.
- 2. PERMANENT SEEDING A. MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE
  - ESTABLISHMENT: a. SOIL PH SHALL BE BETWEEN 6.0 AND 7.0
  - b. SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION
  - c. THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (> 30% SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS IF LOVEGRASS OR SERECIA LESPEDEZA IS TO BE

PLANTED, THEN A SANDY SOIL (< 30% SILT PLUS CLAY) WOULD BE

- **ACCEPTABLE** d. SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT. e. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE
- ROOT PENETRATION. f. IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH SECTION 21 STANDARD AND SPECIFICATION FOR TOPSOIL.
- B. AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS SHALL BE MAINTAINED IN A TRUE AND EVEN GRADE, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 - 5" TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREA AND TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.
- C. APPLY SOIL AMENDMENTS AS PER SOIL TEST OR AS INCLUDED ON THE
- D. MIX SOIL AMENDMENTS INTO THE TOP 3-5" OF TOPSOIL BY DISKING OR OTHER SUITABLE MEANS. LAWN AREAS SHOULD BE RAKED TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION, LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE. STEEP SLOPES (STEEPER THAN 3:1) SHOULD BE TRACKED BY A DOZER LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP I - 3" OF SOIL SHOULD BE LOOSE AND FRIABLE. SEEDBED LOOSENING MAY NOT BE NECESSARY ON NEWLY DISTURBED AREAS. d. SEED SPECIFICATIONS
- ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED SHALL BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED SHALL HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON THIS JOB. NOTE: SEED TAGS SHALL BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE
- AND RATE OF SEED USED. 2. INOCULANT - THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES SHALL BE A PURE CULTURE OF NITROGEN-FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS SHALL NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANT AS DIRECTED ON PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75-80°F. CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

#### METHODS OF SEEDING

- HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER), BROADCAST OR DROP SEEDER, OR A CULTIPACKER
- A. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES AMOUNTS WILL NOT EXCEED THE FOLLOWING: NITROGEN; MAXIMUM OF 100 LBS. PER ACRE TOTAL OF SOLUBLE NITROGEN;
- P205 (PHOSPHOROUS): 200 LBS/AC; K20 (POTASSIUM): 200 LBS/AC. B. LIME — USE ONLY GROUND AGRICULTURAL LIMESTONE, (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
- C. SEED AND FERTILIZER SHALL BE MIXED ON SITE AND SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.
- DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST
- A. SEED SPREAD DRY SHALL BE INCORPORATED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON THE TEMPORARY OR PERMANENT SEEDING SUMMARIES OR TABLES 25 OR 26. THE SEEDED AREA SHALL THEN BE
- ROLLED WITH B. A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
- C. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH

A. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A

- DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
- MUST BE FIRM AFTER PLANTING. B. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH
- FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED

#### SEED MIXTURE (HARDINESS ZONE 6b) FERTILIZER LIME RATE (FROM TABLE 26) APPLICATION SEEDING RATE (lb/gc) DATES SEEDING (10-10-10)SPECIES DEPTHS RATE (lb/ac) 150 3/1-10/15 RYE PLUS FOXTAIL MILLE 3/1-4/30 1/4"-1/2" RYEGRASS 8/15–11/1 50 600 lb/ac 2 tons/ac (15 lb/1000 st) | (100 lb/1000 st) WEEPING 5/1-8/14 1/4"-1/2" LOVEGRASS

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 25 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 5) AND ENTER THEM MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

STRAW SHALL CONSIST OF THOROUGHLY THRESHED WHEAT, RYE OR OAT STRAW,

WCFM SHALL BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE

THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL

WCFM MATERIALS SHALL BE MANUFACTURED AND PROCESSED IN SUCH A

SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED,

MULCH MATERIAL SHALL FORM A BLOTTER-LIKE GROUND COVER, ON

WCFM MATERIAL SHALL CONTAIN NO ELEMENTS OR COMPOUNDS AT

NOTE: ONLY STERILE STRAW MULCH SHOULD BE USED IN AREAS WHERE ONE SPECIES OF

1. IF GRADING IS COMPLETED OUTSIDE OF THE SEEDING SEASON, MULCH ALONE SHALL

2. WHEN STRAW MULCH IS USED, IT SHALL BE SPREAD OVER ALL SEEDED AREAS AT

DEPTH OF BETWEEN 1" AND 2". MULCH APPLIED SHALL ACHIEVE A UNIFORM

ANCHORING TOOL IS TO BE USED, THE RATE SHOULD BE INCREASED TO 2.5

WOOD CELLULOSE FIBER USED AS A MULCH SHALL BE APPLIED AT A NET DRY

SECURING STRAW MULCH (MULCH ANCHORING): MULCH ANCHORING SHALL BE PERFORMED

PRACTICE SHOULD BE USED ON THE CONTOUR IF POSSIBLE.

IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY

BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON SIZE

1. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH

WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS

SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS/ACRE. THE WOOD

CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL

AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF TWO (2) INCHES. THIS

PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES

WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER

CONTAIN A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS

OF WATER. APPLICATION OF LIQUID BINDERS SHOULD BE HEAVIER AT THE EDGES

WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS.

SYNTHETIC BINDERS - SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET,

MANUFACTURER'S RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4'

TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED AT

4. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO

1. ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED AND MULCHED AS THE

WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL

THAT WILL BE USED TO CONVEY RUNOFF FROM THE EXCAVATION.

NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM

REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE

OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL

EMBANKMENTS SHALL BE CONSTRUCTED IN LIFTS AS PRESCRIBED ON THE PLANS.

SLOPES SHALL BE STABILIZED IMMEDIATELY WHEN THE VERTICAL HEIGHT OF THE

MULTIPLE LIFTS REACHES 15', OR WHEN THE GRADING OPERATION CEASES AS

3. AT THE END OF EACH DAY, TEMPORARY BERMS AND PIPE SLOPE DRAINS SHOULD BE

RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER TO A

METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.

D. PLACE FINAL PHASE EMBANKMENT, DRESS AND STABILIZE. OVERSEED

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS

FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF

VEGETATION - ANNUAL GRASS OR GRAIN USED TO PROVIDE COVER ON DISTURBED AREAS FOR

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 26 FOR

PLANS AND COMPLETED, THEN TABLE 26 MUST BE PUT ON THE PLANS.

B. FOR SITES HAVING SOIL TESTS PERFORMED, THE RATES SHOWN ON THIS TABLE

TEMPORARY SEEDING SUMMARY

THE APPROPRIATE PLANT HARDINESS. ZONE (FROM FIGURE 5) AND ENTER THEM IN

THE TEMPORARY SEEDING SUMMARY BELOW, ALONG WITH APPLICATION RATES,

SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE

SHALL BE DELETED AND THE RATES RECOMMENDED BY THE TESTING AGENCY

SHALL BE WRITTEN IN. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.

UP TO 12 MONTHS. FOR LONGER DURATION OF VEGETATIVE COVER, PERMANENT SEEDING IS

TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN

THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL

PLACE PHASE 2 EMBANKMENT, DRESS AND STABILIZE

NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

B. PLACE PHASE 1 EMBANKMENT, DRESS AND STABILIZE.

PREVIOUSLY SEEDED AREAS AS NECESSARY

CONSTRUCTED ALONG THE TOP EDGE OF THE EMBANKMENT TO INTERCEPT SURFACE

A. EXCAVATE AND STABILIZE ALL TEMPORARY SWALES, SIDE DITCHES, OR BERMS

THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SLOPE

SILT FENCE ON LOW SIDE OF FILL AS SHOWN IN FIGURE 5, UNLESS OTHER

A. EXCAVATE AND STABILIZE ALL TEMPORARY SWALES, SIDE DITCHES, OR BERMS

C. PERFORM PHASE 2 EXCAVATION, DRESS, AND STABILIZE. OVERSEED PHASE I

PERFORM FINAL PHASE EXCAVATION, DRESS, AND STABILIZE. OVERSEED

GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF

RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH.

TO IS' FEET WIDE AND 300 TO 3,000 FEET LONG.

2. CONSTRUCTION SEQUENCE (REFER TO FIGURE 3 BELOW):

B. PERFORM PHASE 1 EXCAVATION, DRESS, AND STABILIZE.

NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

PREVIOUSLY SEEDED AREAS AS NECESSARY

4. CONSTRUCTION SEQUENCE: REFER TO FIGURE 4 (BELOW).

INCREMENTAL STABILIZATION OF EMBANKMENTS - FILL SLOPES

PRESCRIBED IN THE PLANS.

SEDIMENT TRAPPING DEVICE.

SECTION II - TEMPORARY SEEDING

SEED MIXTURES - TEMPORARY SEEDING

REQUIRED.

INCREMENTAL STABILIZATION - CUT SLOPES

INCREMENTS NOT TO EXCEED 15'.

THE REMAINDER OF AREA SHOULD BE APPEAR UNIFORM AFTER BINDER APPLICATION.

WEIGHT OF 1,500 LBS. PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED

WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LBS. OF WOOD

THE RATE OF 2 TONS/ACRE. MULCH SHALL BE APPLIED TO A UNIFORM LOOSE

DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. IF A MULCH

BE APPLIED AS PRESCRIBED IN THIS SECTION AND MAINTAINED UNTIL THE SEEDING

SEASON RETURNS AND SEEDING CAN BE PERFORMED IN ACCORDANCE WITH THESE

MULCHING SEEDED AREAS - MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY

F. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER

LENGTH TO APPROXIMATELY 10 MM., DIAMETER APPROXIMATELY 1 MM., PH

RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6% MAXIMUM AND WATER HOLDING

WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.

AND SHALL COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL

MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM

FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE

APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES

C. WCFM, INCLUDING DYE, SHALL CONTAIN NO GERMINATION OR GROWTH

REASONABLY BRIGHT IN COLOR. AND SHALL NOT BE MUSTY. MOLDY. CAKED.

DECAYED, OR EXCESSIVELY DUSTY AND SHALL BE FREE OF NOXIOUS WEED

A. WCFM SHALL CONSIST OF SPECIALLY PREPARED WOOD CELLULOSE

PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATED.

INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW.

2. WOOD CELLULOSE FIBER MULCH (WCFM)

CAPACITY OF 90% MINIMUM.

CELLULOSE FIBER PER 100 GALLONS OF WATER.

GRASS IS DESIRED.

TONS/ACRE.

OF AREA AND EROSION HAZARD:

AFTER SEEDING.

SECTION III: PERMANENT SEEDING

1. SEED MIXTURES - PERMANENT SEEDING

IN THE PERMANENT SEEDING SUMMARY BELOW, ALONG WITH APPLICATION RATES AND SEEDING DATES. SEEDING DEPTHS CAN BE ESTIMATED USING TABLE 26., IF THIS SUMMARY IS NOT PUT ON THE CONSTRUCTION PLANS AND COMPLETED, THEN TABLE 25 MUST BE PUT ON THE PLANS. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAMBANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-SCS TECHNICAL, FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. FOR SPECIAL LAWN MAINTENANCE AREAS, SEE SECTIONS IV SOD AND V TURFGRASS.

SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OF

ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

- B. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, THE RATES SHOWN ON THIS TABLE SHALL BE DELETED AND THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY SHALL BE WRITTEN IN.
- C. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREAFORM FERTILIZER (46-0-0) AT 3 1/2 LBS/1000 SQ.FT. (150 LBS/AC), IN ADDITION TO THE ABOVE SOIL AMENDMENTS SHOWN IN THE TABLE BELOW, TO BE PERFORMED AT THE TIME OF SEEDING.

#### SECTION III: PERMANENT SEEDING

SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OFONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE. <u>PERMANENT SEEDING SUMMARY</u>

	•	HARDINESS ZONE M TABLE 25)		FERTILIZER R (10-20-20	—	LIME	
MIX NO.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	N	K20	RATE	
3	TALL FESCUE(85%) PERENNIAL RYEGRASS(10%) KENTUCKY BLUEGRASS(5%)	125 15 10	3/1-5/15 8/15-10/15	90 lb/ac	175 lb/ac	175 lb/ac	2 tons/ac
10	TALL FESCUE(80%) HARD FESCUE(20%)	120 30	3/1-5/15 8/15-10/15	(2.0 lb/ 1000 st)	(4 lb/ 1000 st)	(4 lb/ 1000 st)	(100 lb/ 1000 st)

#### FLATTER) 1. GENERAL SPECIFICATIONS

A. CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED OR APPROVED. SOD LABELS SHALL BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.

SECTION IV - SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR

- B. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4", PLUS OR MINUS 1/4", AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIERS WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
- D. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS
- E. SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD SHALL BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
- SOD INSTALLATION DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, THE SUBSOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD.
- B. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
- WHEREVER POSSIBLE, SOD SHALL BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. SOD SHALL BE ROLLED AND TAMPED, PEGGED OR OTHERWISE SECURED TO PREVENT SLIPPAGE ON SLOPES AND TO ENSURE SOLID CONTACT BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
- D. SOD SHALL BE WATERED IMMEDIATELY FOLLOWING ROLLING OR TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.
- SOD MAINTENANCE
- A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4". WATERING SHOULD BE DONE DURING THE HEAT OF THE DAY TO PREVENT
- B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
- C. THE FIRST MOWING OF SOD SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2" AND 3" UNLESS OTHERWISE SPECIFIED.

#### SECTION V - TURFGRASS ESTABLISHMENT

- AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREAS TO RECEIVE SEED SHALL BE TILLED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVELED AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
- NOTE: CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE, CERTIFICATION. PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE. TURFGRASS MIXTURES
- A. KENTUCKY BLUEGRASS FULL SUN MIXTURE FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS/1000 SQUARE FEET. A MINIMUM OF THREE BLUEGRASS CULTIVARS SHOULD BE CHOSEN RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF

35% OF THE MIXTURE BY WEIGHT.

- B. KENTUCKY BLUEGRASS/PERENNIAL RYE FULL SUN MIXTURE FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE/1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM 10% TO 35% OF THE MIXTURE BY WEIGHT.
- C. TALL FESCUE/KENTUCKY BLUEGRASS FULL SUN MIXTURE FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 100%. CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 5%. SEEDING RATE: 5 TO 8 LB/1000 SF. ONE OR MORE CULTIVARS MAY BE BLENDED.
- D. KENTUCKY BLUEGRASS/FINE FESCUE SHADE MIXTURE FOR USE IN AREAS

WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30-40% AND CERTIFIED FINE FESCUE AND 60-70%. SEEDING RATE: 1 1/2 3 LBS/1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.

NOTE: TURFGRASS VARIETIES SHOULD BE SELECTED FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MIMEO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND".

2. IDEAL TIMES OF SEEDING WESTERN MD: MARCH 15 JUNE 1, AUGUST 1 - OCTOBER 1 (HARDINESS ZONES

CENTRAL MD: MARCH 1 MAY 15, AUGUST 15 - OCTOBER 15 (HARDINESS ZONE

(HARDINESS ZONES 7A, 7B) IRRIGATION IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2" I" EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED . THIS IS ESPECIALLY TRUE WHEN

SOUTHERN MD, EASTERN SHORE: MARCH 1 - MAY 15, AUGUST 15 OCTOBER 15

- SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES 4. REPAIRS AND MAINTENANCE
- INSPECT ALL SEEDED AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON. A. ONCE THE VEGETATION IS ESTABLISHED, THE SITE SHALL HAVE 95%

GROUNDCOVER TO BE CONSIDERED ADEQUATELY STABILIZED.

B. THE STAND PROVIDES LESS THAN 40% GROUND COVERAGE, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS. C. IF THE STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE,

OVERSEEDING AND FERTILIZING USING HALF OF THE RATES ORIGINALLY

D. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDINGS ARE SHOWN IN TABLE 24. FOR LAWNS AND OTHER MEDIUM TO HIGH MAINTENANCE TURFGRASS AREAS, REFER TO THE UNIVERSITY OF MARYLAND PUBLICATION "LAWN CARE IN MARYLAND" BULLETIN NO. 171.

#### STANDARDS AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TOPSOIL SPECIFICATIONS — SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY DPS. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS, AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.

2. THE SUBSOIL SHALL BE TILLED TO A MINIMUM DEPTH OF 6 INCHES BEFORE PLACEMENT OF TOPSOIL.

3. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 LBS PER 1000 SQ FT) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL.

4. TOPSOIL SHALL BE TESTED AND AMENDED AS PER SOIL TEST RECOMMENDATIONS.

REPAIRED/REPLACED AT THE CONTRACTOR'S SOLE EXPENSE.

#### MISS UTILITY

THE CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL UNDERGROUND UTILITIES IN THE AREA OF PROPOSED WORK ARE LOCATED PRIOR TO COMMENCING CONSTRUCTION WORK. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

THE CONTRACTOR IS ALSO RESPONSIBLE FOR LOCATING ALL PRIVATE UTILITIES (NOT LOCATED BY MISS UTILITY) WITHIN MCPS PROPERTY AT THEIR EXPENSE. ALL UTILITIES SHOWN ON THE PLANS ARE PROVIDED FOR INFORMATION ONLY AND SHALL BE CONSIDERED APPROXIMATE. MCPS SHALL NOT BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. ANY UTILITIES OR OTHER UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION SHALL BE

#### **CONSTRUCTION MANAGER HESS CONSTRUCTION**

**ARCHITECT** 

SMOLEN • EMR
• ILKOVITCH
ARCHITECTS

1355 PICCARD DRIVE SUITE 200

ROCKVILLE, MD 20850

301-770-0177(P) 301-330-3224(F)

CIVIL / STRUCTURAL

**ADTEK ENGINEERS** 

97 MONOCACY BOULEVARD, UNIT H

301-662-4408(P) 301-662-7484(F)

MECH./ELECTRICAL/PLUMBING

JAMES POSEY ASSOCIATES

3112 LORD BALTIMORE DRIVE

**BALTIMORE, MARYLAND 21244** 

301-265-6100(P) 301-298-9820(F)

FREDERICK, MARYLAND 21701

**804 WEST DIAMOND AVENUE, SUITE 300** GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

PROFESSIONAL SEAL:

PRINTS ISSUED DESCRIPTION: RFP-040 03/01/18

**8001 LYNNBROOK** 

BETHESDA, MD 20814 L. 850 F. 1462 PARCEL N719 ZONED: R60 LAND USE: EC

ACCT NO.

07-00417763

LYNNBROOK CENTER **STORMWATER IMPROVEMENTS** 

MONTGOMERY

**COUNTY PUBLIC** 

SHEET TITLE:

**EROSION & SEDIMENT** CONTROL NOTES

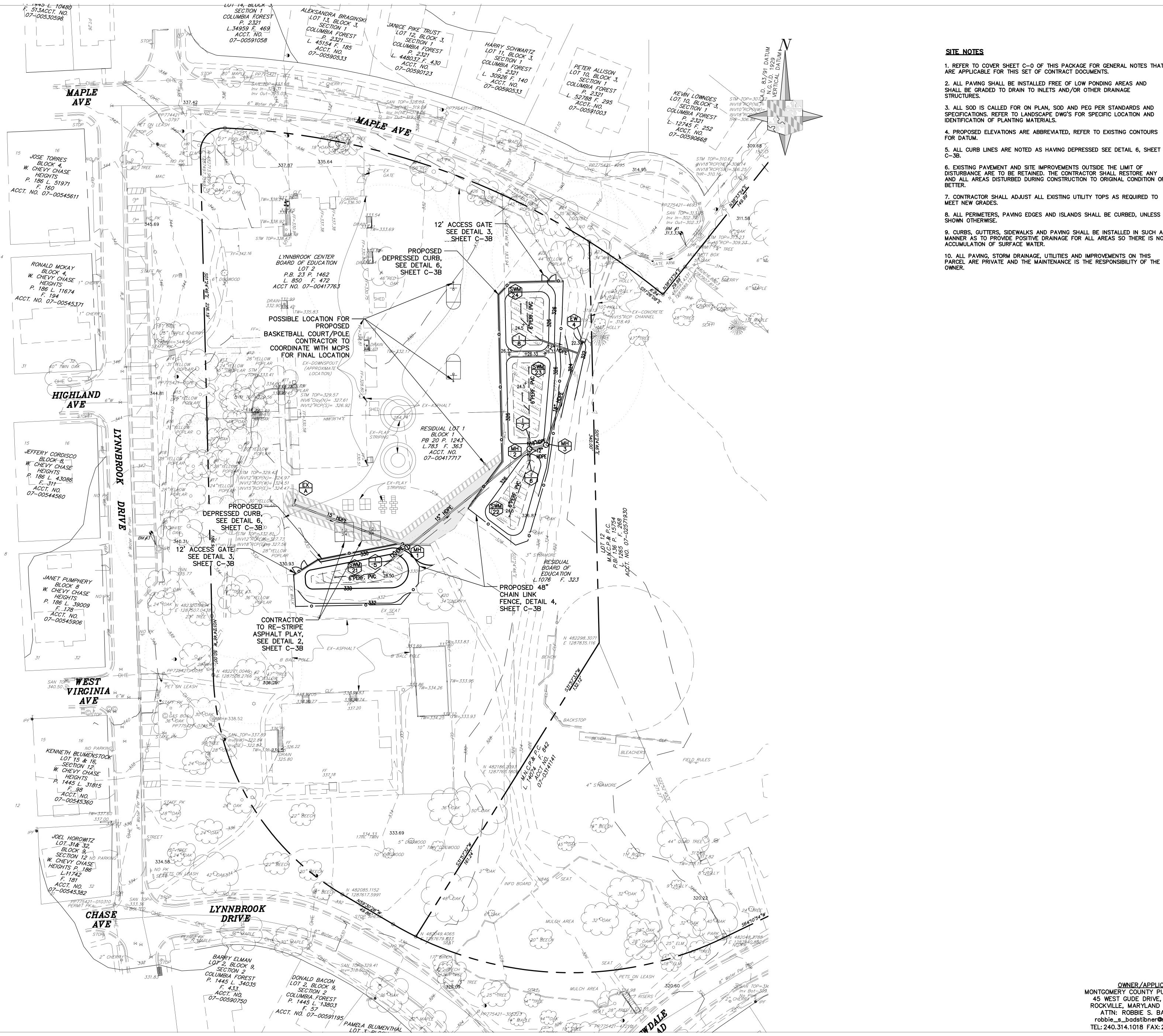
PROJECT NO: 177702 SC/SWM SHEET NO. 4 of 10 03/02/2018 WORKING SCALE: NORTH MONTGOMERY COUNTY PUBLIC SCHOOLS 45 WEST GUDE DRIVE, SUITE 4300

<u>OWNER/APPLICANT</u>

ROCKVILLE, MARYLAND 20850-4038

ATTN: ROBBIE S. BADSTIBNER

robbie\_s\_badstibner@mcpsmd.ora TEL: 240.314.1018 FAX: 240.279.3003 SHEET NO:



#### SITE NOTES

1. REFER TO COVER SHEET C-O OF THIS PACKAGE FOR GENERAL NOTES THAT ARE APPLICABLE FOR THIS SET OF CONTRACT DOCUMENTS.

2. ALL PAVING SHALL BE INSTALLED FREE OF LOW PONDING AREAS AND SHALL BE GRADED TO DRAIN TO INLETS AND/OR OTHER DRAINAGE STRUCTURES.

3. ALL SOD IS CALLED FOR ON PLAN, SOD AND PEG PER STANDARDS AND SPECIFICATIONS. REFER TO LANDSCAPE DWG'S FOR SPECIFIC LOCATION AND IDENTIFICATION OF PLANTING MATERIALS.

4. PROPOSED ELEVATIONS ARE ABBREVIATED, REFER TO EXISTING CONTOURS FOR DATUM.

6. EXISTING PAVEMENT AND SITE IMPROVEMENTS OUTSIDE THE LIMIT OF DISTURBANCE ARE TO BE RETAINED. THE CONTRACTOR SHALL RESTORE ANY AND ALL AREAS DISTURBED DURING CONSTRUCTION TO ORIGINAL CONDITION OR

7. CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY TOPS AS REQUIRED TO MEET NEW GRADES.

8. ALL PERIMETERS, PAVING EDGES AND ISLANDS SHALL BE CURBED, UNLESS SHOWN OTHERWISE.

9. CURBS, GUTTERS, SIDEWALKS AND PAVING SHALL BE INSTALLED IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE FOR ALL AREAS SO THERE IS NO ACCUMULATION OF SURFACE WATER.

10. ALL PAVING, STORM DRAINAGE, UTILITIES AND IMPROVEMENTS ON THIS PARCEL ARE PRIVATE AND THE MAINTENANCE IS THE RESPONSIBILITY OF THE

**ARCHITECT** 

1355 PICCARD DRIVE SUITE 200 ROCKVILLE, MD 20850 301-770-0177(P) 301-330-3224(F)

CIVIL / STRUCTURAL

**ADTEK ENGINEERS** 

301-662-4408(P) 301-662-7484(F)

97 MONOCACY BOULEVARD, UNIT H FREDERICK, MARYLAND 21701

MECH./ELECTRICAL/PLUMBING JAMES POSEY ASSOCIATES

> 3112 LORD BALTIMORE DRIVE **BALTIMORE, MARYLAND 21244**

> 301-265-6100(P) 301-298-9820(F)

**CONSTRUCTION MANAGER HESS CONSTRUCTION** 

804 WEST DIAMOND AVENUE, SUITE 300 GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

**PROFESSIONAL SEAL:** 

**PRINTS ISSUED** 

**8001 LYNNBROOK DRIVE** 

BETHESDA, MD 20814 L. 850 F. 1462 PARCEL N719

**ZONED: R60** LAND USE: EC ACCT NO. 07-00417763

**LYNNBROOK CENTER STORMWATER IMPROVEMENTS** 

**MONTGOMERY COUNTY PUBLIC SCHOOLS** 

SHEET TITLE:

**OVERALL SITE PLAN** 

**PROJECT NO:** 177702 03/02/2018

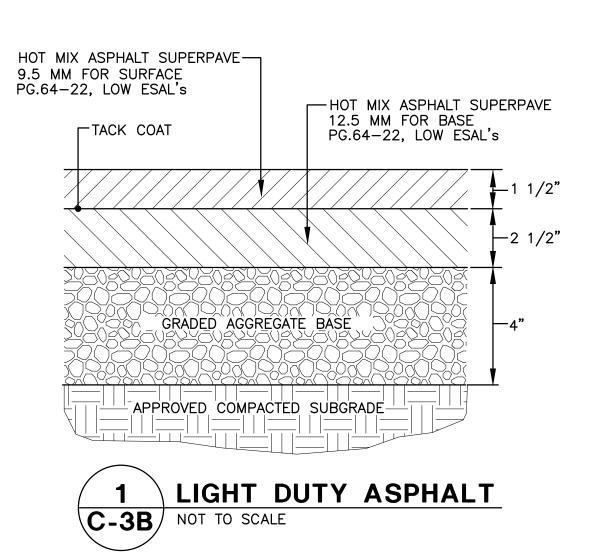
OWNER/APPLICANT
MONTGOMERY COUNTY PUBLIC SCHOOLS

45 WEST GUDE DRIVE, SUITE 4300 ROCKVILLE, MARYLAND 20850-4038

ATTN: ROBBIE S. BADSTIBNER robbie\_s\_badstibner@mcpsmd.org

TEL: 240.314.1018 FAX: 240.279.3003

WORKING SCALE: NORTH



—10'-0" C-C MAX. (TYP)———

LTENSION WIRE

1. GATE FABRIC SHALL BE KNUCKLED ON TOP SELVAGES.

3. ALL FENCE, GATE POSTS & FRAMES TO BE GROUNDED.

7. MATERIALS TO MEET REQUIREMENTS OF AASHTO M181.

ATTACH FENCE FABRIC TO LINE POSTS, TOP AND BOTTOM TENSION WIRES WITH TIE WIRES.

5. ALL TYPE V-1 & V-2 GATES SHALL ALLOW 180° OPENING

6. POSTS, RAILS AND RODS TO BE INSTALLED INSIDE OF FENCE

INTERMEDIATE POST

LSPACE UNDER FABRIC

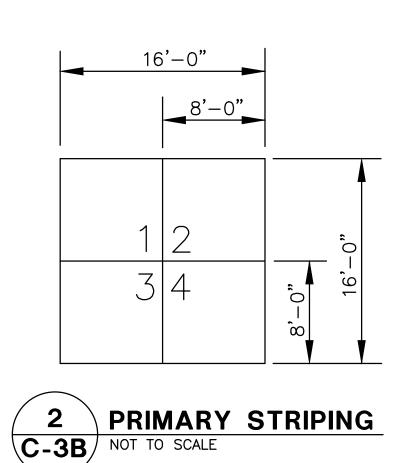
1" (NORMAL) 6" (MAXIMUM)

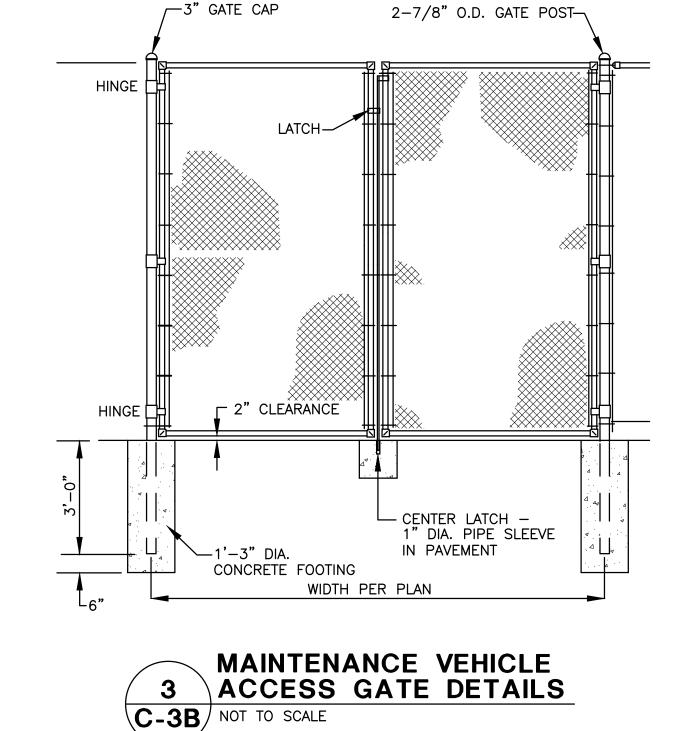
2. FABRIC TO BE BLACK CORE BONDED VINYL.

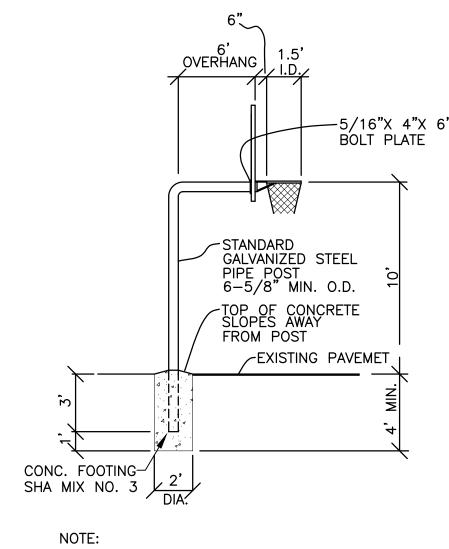
4 48" HIGH CHAIN-LINK FENCE DETAIL

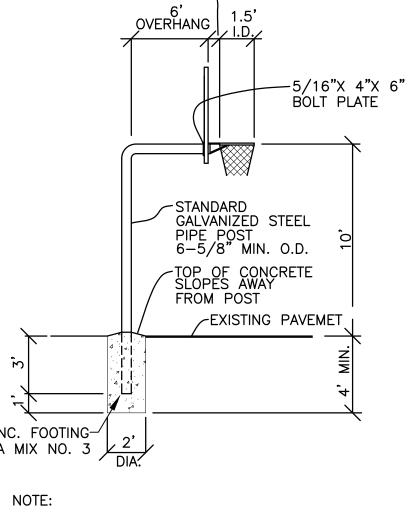
C-3B NOT TO SCALE

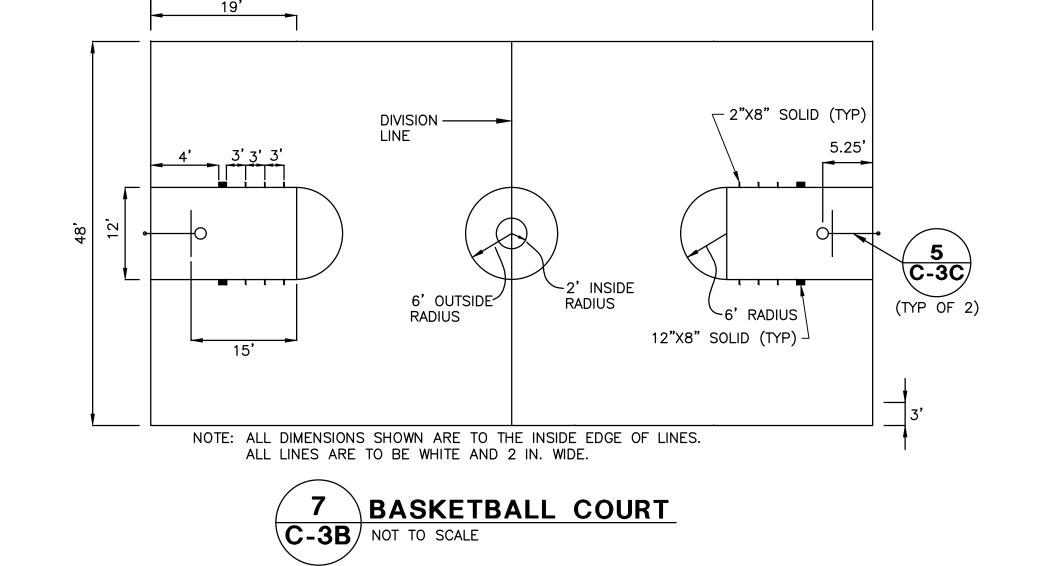
1 5/8"ø BRACE RAIL (TYP.)







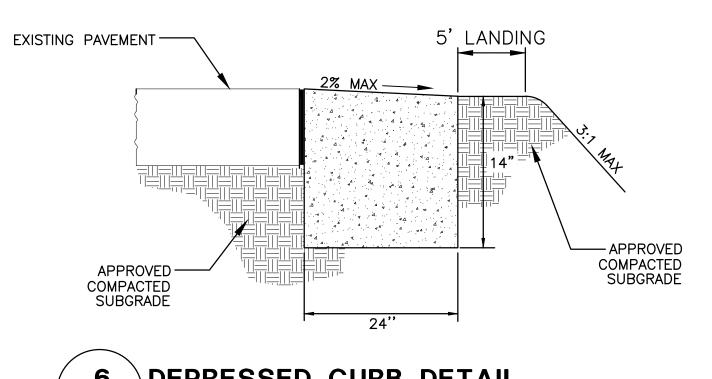




C-3B NOT TO SCALE



BASKETBALL BACKSTOPS SHALL BE MANUFACTURED BY AALCO, MODEL G66-601. ALL BACKSTOPS SHALL HAVE SAFETY PIN IN POST TO PREVENT BACKSTOP SLIPPAGE.



6 DEPRESSED CURB DETAIL C-3B NOT TO SCALE

**ARCHITECT** 

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**CONSTRUCTION MANAGER** 

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HESS CONSTRUCTION

**PROFESSIONAL SEAL:** 

**PRINTS ISSUED** DESCRIPTION: RFP-040 03/01/18

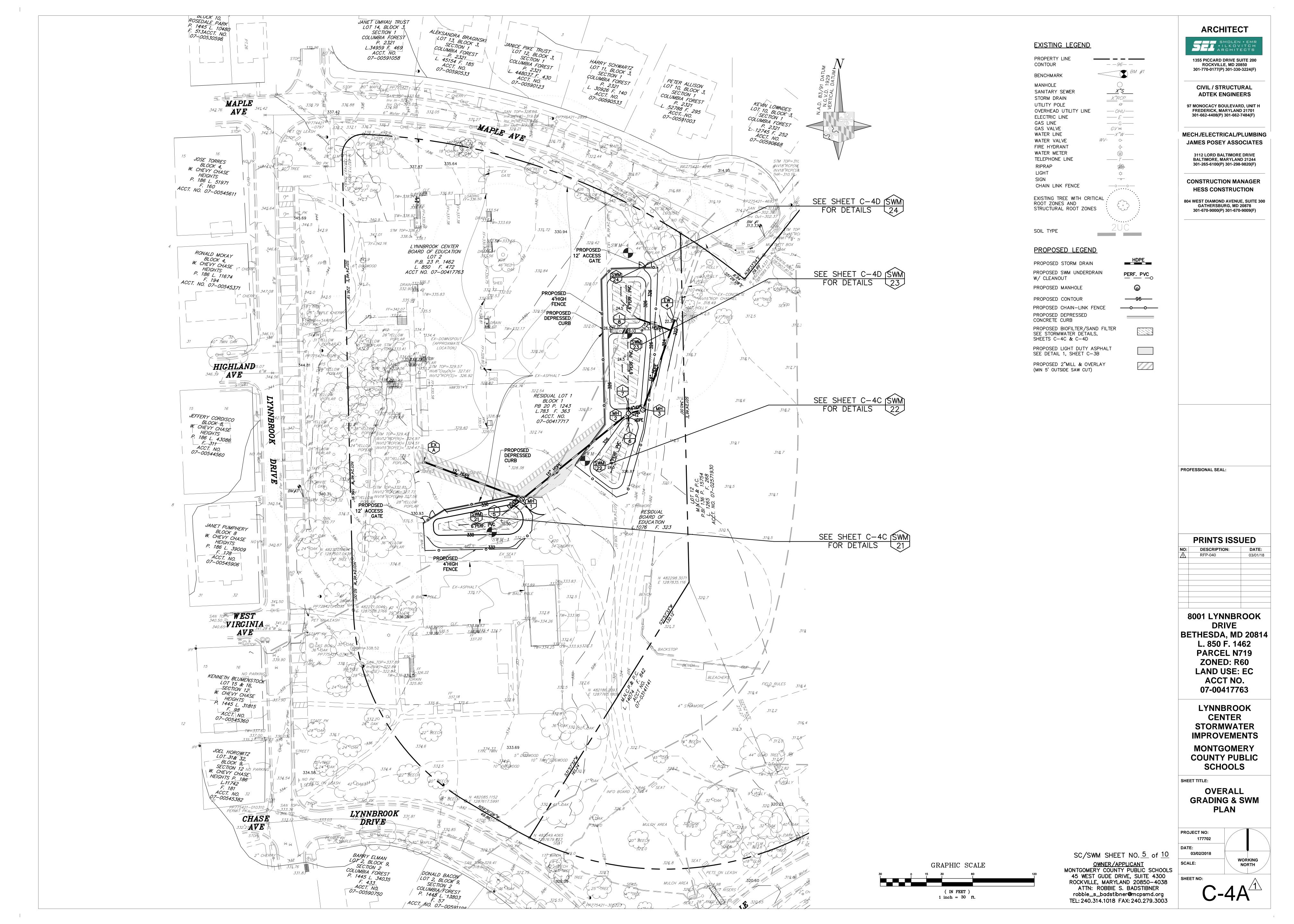
**8001 LYNNBROOK DRIVE** BETHESDA, MD 20814

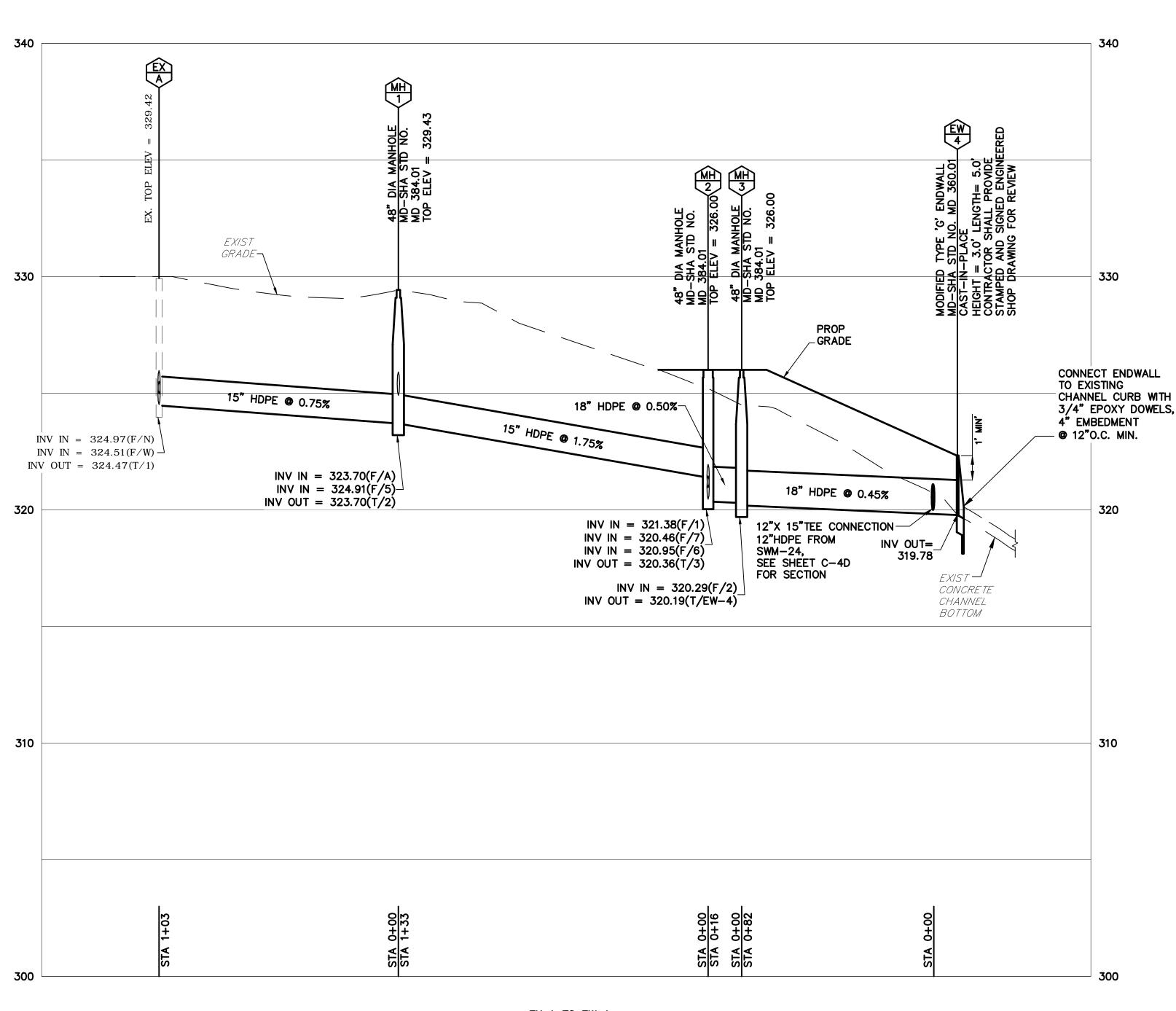
L. 850 F. 1462 PARCEL N719 **ZONED: R60** LAND USE: EC ACCT NO. 07-00417763

LYNNBROOK **CENTER STORMWATER IMPROVEMENTS MONTGOMERY COUNTY PUBLIC** 

**SCHOOLS** 

SITE DETAILS





EX A TO EW 4SCALE: 1" = 30'(HORIZ) 1" = 3'(VERT)

# MCPS STORMWATER MANAGEMENT AS—BUILT INSPECTION AND CERTIFICATION REQUIREMENTS:

- 1. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND/OR THE CONSTRUCTION MANAGER (GC/CM) TO HIRE THE CIVIL ENGINEER OF RECORD (CER) AND THE GEOTECHNICAL ENGINEER OF RECORD (GER) TO PERFORM AND DOCUMENT ANY AND ALL INSPECTIONS, OBSERVATIONS, AS-BUILT SURVEYS AND MEASUREMENTS REQUIRED TO PREPARE COMPLETE AND ACCURATE AS-BUILT PLANS, PROVIDE REQUIRED CERTIFICATIONS AND OBTAIN APPROVAL THEREOF FROM MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS).
- 2. REQUIRED SERVICES INCLUDE, BUT ARE NOT LIMITED TO, PROVIDING AND CERTIFYING THE ACCURACY AND CORRECTNESS OF ALL INFORMATION AND AS-BUILT PLANS IN STRICT CONFORMANCE WITH THE MOST CURRENT APPLICABLE MCDPS AS-BUILT RECORD DRAWING PLAN REVIEW CHECKLIST.
- 3. THESE SERVICES MUST BE PERFORMED BY AND/OR UNDER THE DIRECT SUPERVISION OF THE CER/GER AND MUST BE BASED UPON DIRECT OBSERVATIONS AND INFORMATION OBTAINED IN THE FIELD BY AND/OR UNDER THEIR DIRECT SUPERVISION.
- 4. THE GC/CM SHALL COLLECT AND PROVIDE ANY AND ALL SUPPORTING CERTIFICATIONS REQUIRED BY THE CER/GER TO SATISFY ALL MCDPS CHECKLIST REQUIREMENTS. THE GC/CM SHALL PROVIDE CERTIFICATIONS FROM SUPPLIERS FOR MATERIALS USED IN THE CONSTRUCTION OF THE FACILITY (PRINCIPAL SPILLWAY, CONTROL STRUCTURE, PVC PIPE, AGGREGATE, WETLAND PLANTINGS, ETC.)
- 5. UNDER NO CIRCUMSTANCES SHALL ANY CONSTRUCTION OR MATERIALS DEVIATE FROM THE APPROVED STORMWATER MANAGEMENT/SEDIMENT CONTROL PLANS WITHOUT PRIOR APPROVAL OF THE CER, MCDPS.
- ANY CHANGES TO THE DESIGNS OR CONSTRUCTION SHOWN ON THE APPROVED STORMWATER MANAGEMENT PLANS MUST BE APPROPRIATELY PRE—APPROVED AND PERMITTED BY THE CER, MCDPS PRIOR TO BEING IMPLEMENTED IN THE FIELD AND/OR SUBMITTED FOR REVIEW AND APPROVAL AS AN AS—BUILT CONDITION.
- 7. THE CER/GER SHALL CONFIRM AND DOCUMENT TO MCPS, VIA PHYSICAL MEASUREMENT AND SURVEY, THAT ALL PIPES, STRUCTURES AND FACILITIES HAVE BEEN SET TO THE APPROVED FINAL DESIGN GRADE PRIOR TO BEING BACKFILLED. IN THE EVENT THAT THE STRUCTURES HAVE NOT BEEN SET TO THE APPROVED ELEVATIONS AND CONFIGURATION, THE GC/CM SHALL REMOVE AND RESET THE STRUCTURE AND/OR PIPES TO THE APPROVED ELEVATIONS AND PROVIDE THE APPROPRIATE DOCUMENTATION OF THAT WORK AT NO ADDITIONAL COST TO MCPS.
- 8. THE GC/CM SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS, DAMAGES AND DELAYS ARISING FROM OR IN CONNECTION WITH CORRECTIVE MEASURES, RE—DESIGNS, RE—APPROVALS, RE—REVIEWS AND THE LIKE REQUIRED FOR AS—BUILT APPROVAL THEREOF BY THE MCDPS.
- 9. PRIOR TO PREPARING AND/OR SUBMITTING ANY AS-BUILT DOCUMENTATION TO MCDPS, THE GC/CM SHALL ARRANGE AND ATTEND A SITE MEETING WITH THE CER/GER, THE COUNTY SEDIMENT CONTROL INSPECTOR AND REPRESENTATIVE(S) OF THE MCPS DIVISION OF CONSTRUCTION TO OBSERVE THE STORMWATER MANAGEMENT FACILITIES AND SITE CONDITIONS/STABILIZATION AND TO OBTAIN MCDPS' INSPECTOR APPROVAL TO PREPARE AND SUBMIT AS-BUILT DOCUMENTS AND CERTIFICATIONS TO MCDPS FOR REVIEW. ALL REQUIRED DOCUMENTATION WILL BE SUBMITTED TO MCDPS FOR INITIAL REVIEW WITHIN FORTY-FIVE (45) DAYS OF THAT MEETING.
- 10. ANY AND ALL CORRECTIONS, EITHER TO PLANS OR CONSTRUCTION, IDENTIFIED DURING REVIEW OF THE AS-BUILT DOCUMENTS SHALL BE MADE, RE-INSPECTED AND CORRECTED AS-BUILT DOCUMENTATION MUST BE RE-CERTIFIED BY THE CER AND RE-SUBMITTED TO MCDPS SUCH THAT FINAL AS-BUILT APPROVAL WILL BE OBTAINED WITHIN TWO (2) WEEKS OF THE CER'S RECEIPT OF MCDPS COMMENTS ON THE INITIAL SUBMITTAL AT NO ADDITIONAL COST TO THE OWNER.
- 11. THE CER SHALL PROVIDE TO THE MCPS DIVISION OF CONSTRUCTION (MCPS-DOC) ELECTRONIC FILES, IN PDF FORMAT, FOR ALL SUBMITTALS AND OF ALL REVIEW COMMENTS RECEIVED FROM THE
- 12. IN ADDITION TO THE MCDPS REQUIREMENTS, THE GC/CM SHALL PROVIDE THE FOLLOWING DOCUMENTATION TO THE MCPS-DOC IN HARD COPY AND ELECTRONIC FORMAT.

  DATE/TIME-STAMPED DIGITAL (.JPG) PHOTOGRAPHS DOCUMENTING THE
- A. CHRONOLOGY OF THE CONSTRUCTION OF ALL STORMWATER MANAGEMENT FACILITIES FROM BEGINNING TO END. ELECTRONIC FILES, AUTOCAD AND/OR .PDF FORMAT, OF THE STORMWATER
- B. MANAGEMENT FACILITIES AS—BUILT CONSTRUCTION INCLUDING, BUT NOT LIMITED <u>SIGNED/APPROVED</u> AS—BUILT TO, MONTGOMERY COUNTY CERTIFICATIONS AND THE LIKE.

#### STORM STRUCTURE NOTES

1. CONTRACTOR SHALL SUBMIT CERTIFICATION THAT ALL STRUCTURES SUPPORT  $H\!-\!20$  TYPE TRAFFIC LOADING. FOR REVIEW AND APPROVAL BY THE DESIGN ENGINEER.

2. TOP OF CURB HEAD PIECE ON ALL INLETS MUST MATCH ON—LINE AND AT GRADE WITH ADJACENT CURB.

3. INSTALL FLEXIBLE GASKET ADAPTER FOR ALL STRUCTURES WHERE PVC PIPE ENTERS/EXITS A CONCRETE STRUCTURE IN ACCORDANCE WITH WSSC STANDARDS AND SPECIFICATIONS.

4. ALL EXPOSED METAL SURFACES (I.E. LINTELS, GRATES, MANHOLE COVERS, ETC.) SHALL BE PAINTED WITH TWO (2) COATS OF BATTLESHIP GRAY PAINT (ZINC RICH).

5. TOP/GRADE ELEVATIONS ARE TO THE TOP CENTER OF STRUCTURE, NOT TO FLOW LINE.

6. ALL INLET TOP SLAB FRONT FACES SHALL BE PAINTED WITH THE FOLLOWING STORM DRAIN SIGN "CHESAPEAKE BAY DRAINAGE" & "DO NOT DUMP".

7. ALL MANHOLE FRAMES SHALL BE SECURELY ANCHORED TO THE TOP SLAB PER WSSC DETAIL 5/S4.3. (MAX. MANHOLE FRAME HEIGHT = 9")

9. ALL STORM STRUCTURES INCLUDING MANHOLES, INLETS, END WALLS, AND PIPE SUPPORTS SHALL BE PRECAST. IT IS THE CONTRACTORS RESPONSIBILITY TO HAVE THE PRECAST MANUFACTURER DESIGN AND SUBMIT SIGNED AND SEALED SHOP DRAWINGS FOR REVIEW PRIOR TO PRECASTING BY A MARYLAND LICENSED P.E.

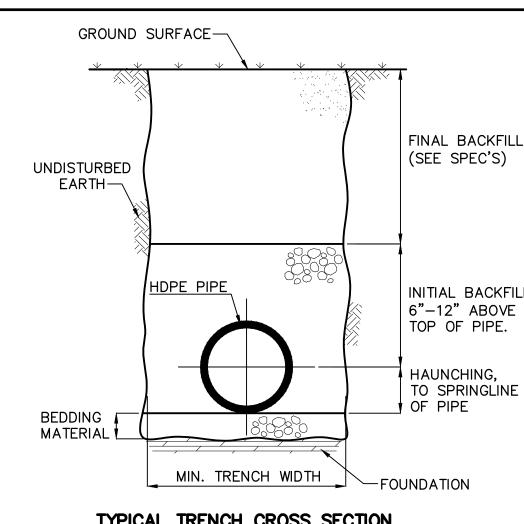
10. CONTRACTOR SHALL PROVIDE GRADE ADJUSTMENT RINGS AS REQUIRED TO MEET FINISH GRADES; HOWEVER THE TOTAL HEIGHT OF ALL GRADE ADJUSTMENT RINGS SHALL NOT EXCEED 9"

#### STORM DRAIN NOTES:

1. HDPE PIPE SHALL BE ADS TYPE N-12 OR APPROVED EQUAL. ALL JOINTS OF THE HDPE PIPE MUST MEET A MODIFIED ASTM 3212 AT 3.5 PSI HELD FOR 10 MINUTES. AS CERTIFIED BY AN INDEPENDENT TESTING LAB, AND HAVE DOUBLE GASKETS.

8. ALL INLET GRATES SHALL BE BOLTED TO FRAME.

2. ALL PVC PIPE MUST BE SCH-40 OR THICKER, U.N.O.



# TYPICAL TRENCH CROSS SECTION NOT TO SCALE

REFERENCE SECTION X-2, "RECOMMENDATIONS FOR INCORPORATION INTO CONTRACT DOCUMENTS" OF ASTM SPECIFICATION D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS".

#### NOTES:

1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY—FLOW APPLICATIONS," LATEST EDITION; AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE

2. <u>BEDDING</u>: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR FOR 4"-24" AND 42"-48" CORRUGATED POLYETHYLENE PIPE (CPEP); 6" FOR 30"-36" CPEP.

3. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

	ILESS OTHERWISE SPECIFII OTHS SHALL BE AS FOLLO	•	MINIMUM	TRENCH
•	NOMINAL Ø in 4 6 8 10 12 15	MIN. RECOMMENDED TRENCH WIDTH, in 21 23 25 28 31 34		
	18 24	39 48		
	30 36 42	66 78 83		

5. MINIMUM COVER: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE MI
LOADING CONDITION
H25 (FLEXIBLE PAVEMENT)
H25 (RIGID PAVEMENT)

MINIMUM RECOMMENDED

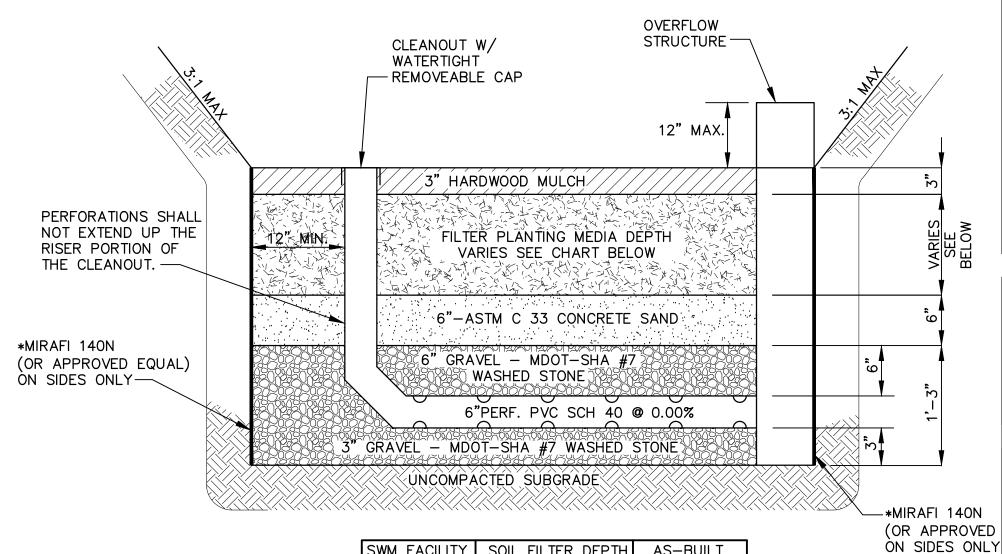
COVER, in

12\*

12

\*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION

ON-SITE STORM DRAIN TRENCH INSTALLATION DETAIL



SWM FACILITY | SOIL FILTER DEPTH | AS-BUILT |
SWM-21 | 2.00' |
SWM-22 | 2.00' |
SWM-23 | 2.50' |
SWM-24 | 2.50' |
\*NOTE: PROVIDE MIRAFI 140N (OR APPROVED EQUAL) ON ALL SIDES OF FACILITY. NO FILTER FABRIC SHALL BE PLACED ON THE BOTTOM OR

MICROBIORETENTION FACILITY - TYPICAL SECTION

HORIZONTALLY ACROSS THE BOTTOM.

MULCH SPECIFICATIONS

THE MULCH LAYER IS AN IMPORTANT PART OF THE MICRO-BIORETENTION DEVICE. MUCH OF THE POLLUTANT REMOVAL CAPACITY OF THE MICRO-BIORETENTION SYSTEM IS WITHIN THE MULCH LAYER. 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.

#### SOIL FILTER/PLANTING MEDIA SPECIFICATIONS

PLANTING MEDIAL SHALL BE 24"-48"THICK AND CONSIST OF ½ PERLITE OR SOLITE, ½ COMPOST AND ½ 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 COMPONENT SHALL MEET THE FOLLOWING CRITERIA: CONTAIN NO MORE THAN 10% CLAY, 10%-25% SILT AND 60%-75% SAND AND SHALL BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES. THE FIRST LAYER OF THE PLANTING MEDIA SHALL BE LIGHTLY TILLED TO MIX IT INTO THE SAND LAYER, SO 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.

#### SAND SPECIFICATIONS

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 C-33 FINE AGGREGATE CONCRETE SAND.
 AASHTO M-6 GRADATION IS ALSO ACCEPTABLE.
 SAND MUST BE SILICA BASED. NO LIMESTONE BASED PRODUCTS MAY BE USED. IF THE MATERIAL IS

WHITE OR GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE.

3. 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

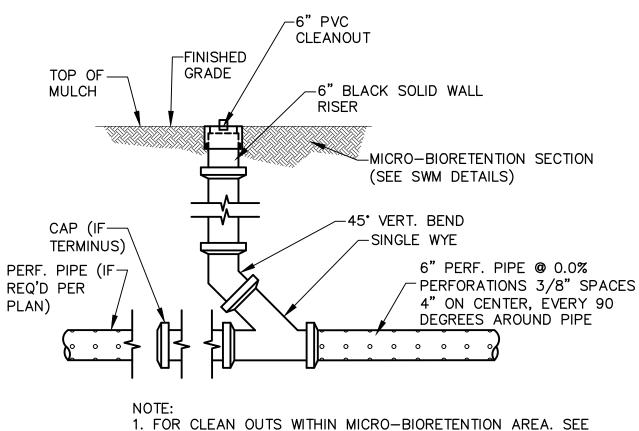
4. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE UNDER ANY CIRCUMSTANCE.

# GRAVEL SPECIFICATIONS THE GRAVEL LAYER SURROUNDING THE UNDERDRAIN PIPE(S) MUST MEET MSHA SIZE #7

THE GRAVEL LAYER SURROUNDING THE UNDERDRAIN PIPE(S) MUST MEET MSHA SIZE #7, AND MUST PROVIDE A MINIMUM OF 6 INCHES COVER OVER THE PIPE(S), AND MINIMUM 3 INCHES UNDER THE PIPE. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED TO BE PLACED HORIZONTALLY ANYWHERE WITHIN THE FILTER MEDIA. THE GRAVEL MUST BE CLEAN AND MUST BE STORED AND INSTALLED IN SUCH A MANNER THAT IT DOES NOT BECOME CONTAMINATED WITH SEDIMENT BEFORE OR AFTER INSTALLATION.

#### UNDERDRAIN SPECIFICATIONS

THE UNDERDRAIN PIPE CONSISTS OF 6-INCH DIAMETER SCHEDULE 40 OR STRONGER PERFORATED PVC PIPE AT 0.00% SLOPE. PERFORATIONS MUST BE 3/8 INCH IN DIAMETER AND MUST BE LOCATED 4 INCHES ON CENTER, EVERY 90 DEGREES AROUND THE PIPE. PERFORATED PIPE MUST BEGIN AT LEAST 12"INSIDE THE FILTER MEDIA. FILTER FABRIC MUST NOT BE WRAPPED AROUND THE UNDERDRAIN PIPE. WATERTIGHT CLEAN-OUTS FOR EACH PIPE SHALL BE LEVEL WITH THE TOP OF THE MULCH. ALL CLEANOUTS SHALL HAVE A REMOVABLE WATERPROOF CAP. CLEANOUTS MUST BE CAPPED IMMEDIATELY AFTER THE FILTER MEDIUM IS IN PLACE.



PLAN FOR EXACT LOCATION.

2. USE COMPRESSION GASKET IN CONJUNCTION WITH CLEANOUT.

1 MICRO-BIORETENTION CLEANOUT
NOT TO SCALE

SC/SWM SHEET NO. 6 of 10

OWNER/APPLICANT

MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDE DRIVE, SUITE 4300

ROCKVILLE, MARYLAND 20850-4038

ATTN: ROBBIE S. BADSTIBNER

robbie\_s\_badstibner@mcpsmd.org

TEL: 240.314.1018 FAX: 240.279.3003

ARCHITECT

SMOLEN • EMR
• IL KOVITCH
ARCHITECTS

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ROCKVILLE, MD 20850

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CIVIL / STRUCTURAL

**ADTEK ENGINEERS** 

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FREDERICK, MARYLAND 21701 301-662-4408(P) 301-662-7484(F)

MECH./ELECTRICAL/PLUMBING

JAMES POSEY ASSOCIATES

3112 LORD BALTIMORE DRIVE BALTIMORE, MARYLAND 21244

301-265-6100(P) 301-298-9820(F)

**CONSTRUCTION MANAGER** 

HESS CONSTRUCTION

804 WEST DIAMOND AVENUE, SUITE 300

GATHERSBURG, MD 20878

301-670-9000(P) 301-670-9009(F)

ZONED: R60
LAND USE: EC
ACCT NO.
07-00417763

LYNNBROOK
CENTER
STORMWATER
IMPROVEMENTS
MONTGOMERY

**COUNTY PUBLIC** 

PRINTS ISSUED

8001 LYNNBROOK

**DRIVE** 

BETHESDA, MD 20814

L. 850 F. 1462

PARCEL N719

DATE:

03/01/18

**DESCRIPTION:** 

RFP-040

PROFESSIONAL SEAL:

SHEET TITLE:

STORMDRAIN

PROFILE,

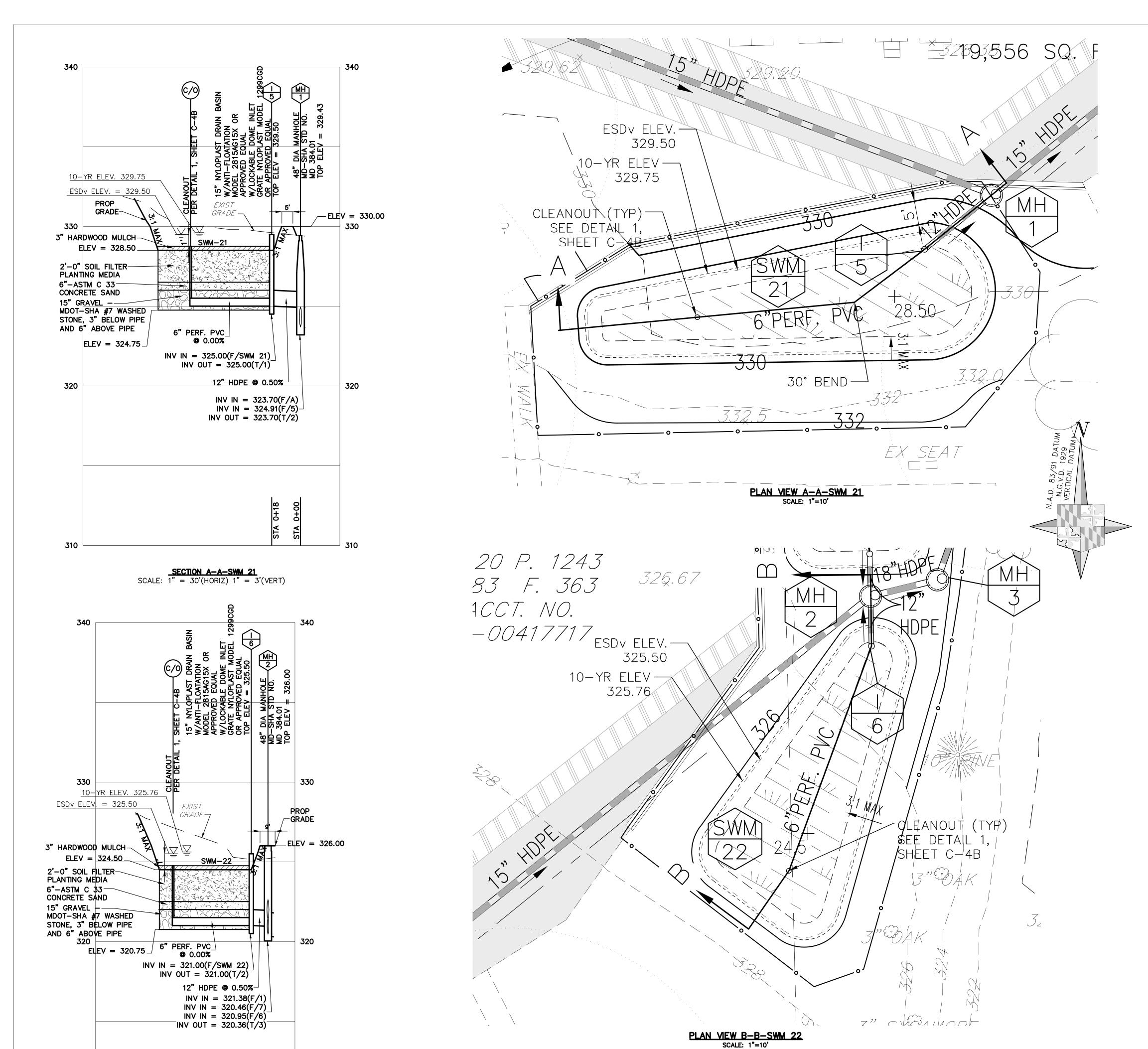
DETAILS &

PROJECT NO:
177702

DATE:
03/02/2018

SCALE:
WORKING
NORTH

C-4B



	APPROXIMATE DIMENSIONS OF STORMWATER FACILITIES									
FACILITY	LENGTH (	OF MEDIA(FT)		MEDIA (FT)		RF PVC	SURFACE AREA	OF MEDIA (sq.ft.)	ESD PROVI	DED (cu. ft.)
	DESIGN	AS-BUILT	DESIGN	AS-BUILT	DESIGN	AS-BUILT	DESIGN	AS-BUILT	DESIGN	AS-BUILT
SWM-21	77'		14'		49'		974		1,949	
SWM-22	58.5		25.5'		49'		977		1,907	

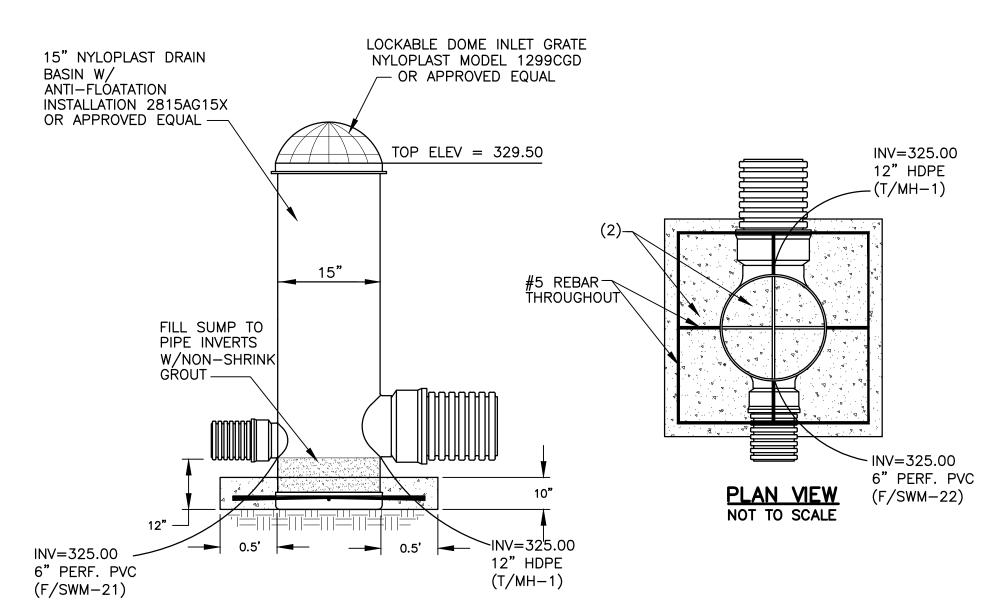
## CONSTRUCTION INSPECTION

SCALE: 1" = 30'(HORIZ) 1" = 3'(VERT)

STA	GE Control of the con	MCDPS INSPECTOR	OWNER/DEVELOPER
at give 031 to con app una Mar Cer	NDATORY NOTIFICATION: Inspection and approval of each practice is required these points prior to proceeding with construction. The permittee is required to the MCDPS Inspector twenty—four (24) hours notice (DPS telephone 240—777—1). The DPS inspector may waive an inspection, and allow the owner/developer make the required inspection per a prior scheduled arrangement which has been firmed with the DPS inspector in writing. Work completed without MCDPS proval may result in the permittee having to remove and reconstruct the approved work. Upon completion of the project, a formal Stormwater magement As—built must be submitted to MCDPS unless a Record Drawing tification has been allowed instead. Each of the steps listed below must be fied by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
•	Excavation for Micro Bioretention Facility conforms to approved plans		
2.	Placement of stone backfill underdrain system conforms to approved plans		
3.	Placement of filter media conforms to approved plans		
4.	Connecting pipes, overflow structure, and/or grading conveyance to the facility constructed per the approved plans		
5.	Final grading and permanent stabilization conforms to approved plans		

CONSTRUCTION INSPECTION CHECK OFF LIST FOR MICRO PROPETENTION FACILITY SWM 22

STAC	GE CONTRACTOR OF THE	MCDPS INSPECTOR	OWNER/DEVELOPER
at t give 0311 to r conf appr unap Man Cert	IDATORY NOTIFICATION: Inspection and approval of each practice is required these points prior to proceeding with construction. The permittee is required to the MCDPS Inspector twenty—four (24) hours notice (DPS telephone 240—777—1). The DPS inspector may waive an inspection, and allow the owner/developer make the required inspection per a prior scheduled arrangement which has been firmed with the DPS inspector in writing. Work completed without MCDPS roval may result in the permittee having to remove and reconstruct the pproved work. Upon completion of the project, a formal Stormwater agement As—built must be submitted to MCDPS unless a Record Drawing tification has been allowed instead. Each of the steps listed below must be fied by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
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4.	Connecting pipes, overflow structure, and/or grading conveyance to the facility constructed per the approved plans		
5.	Final grading and permanent stabilization conforms to approved plans		

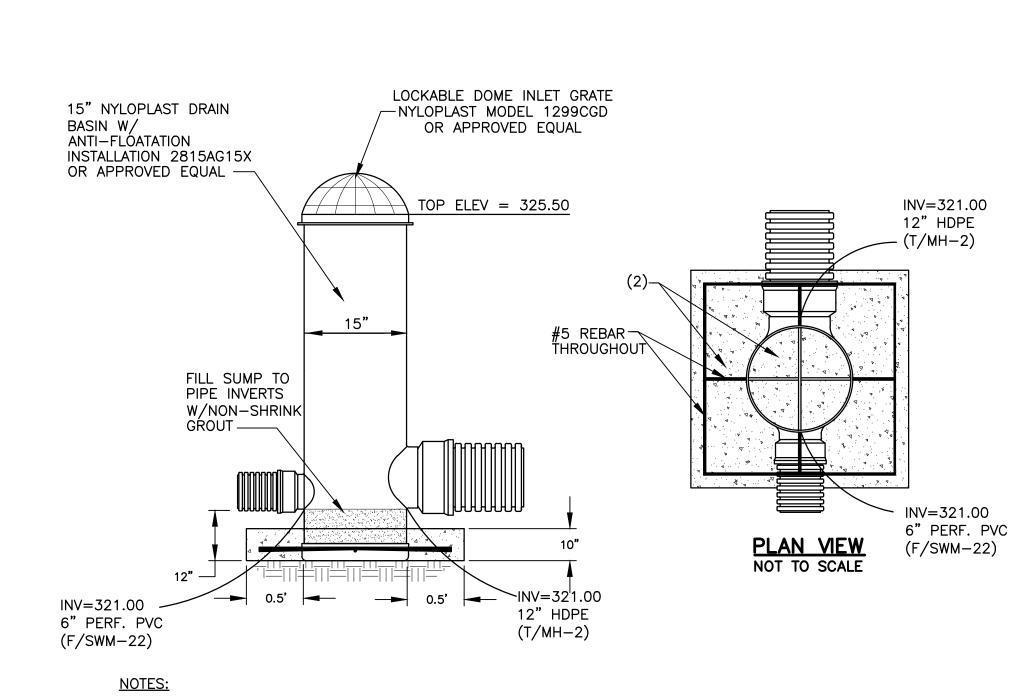


3. STRUCTURE MUST BE WATERTIGHT

1. CONCRETE ANTI-FLOATATION FOOTING WITH REBAR REINFORCEMENT (APPROX. 3900 LBS PER CU YD). 2. IF THE STRUCTURE IS ABOVE GRADE OR WILL HAVE PROLONGED EXPOSURE TO UV RAYS, THE EXPOSED SURFACES SHOULD BE COATED IN A LATEX BASED PAINT OR SIMILAR COATING THAT WILL NOT DEGRADE THE PVC MATERIAL.

DETAIL FOR INLET I-5

NOT TO SCALE



1. CONCRETE ANTI-FLOATATION FOOTING WITH REBAR REINFORCEMENT (APPROX. 3900 LBS PER CU YD). 2. IF THE STRUCTURE IS ABOVE GRADE OR WILL HAVE PROLONGED EXPOSURE TO UV RAYS, THE EXPOSED SURFACE SHOULD BE COATED IN A LATEX BASED PAINT OR SIMILAR COATING THAT WILL NOT DEGRADE THE PVC MATERIAL. 3. STRUCTURE MUST BE WATERTIGHT

DETAIL FOR INLET I-6

**ARCHITECT** 

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JAMES POSEY ASSOCIATES

**BALTIMORE, MARYLAND 21244** 

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3112 LORD BALTIMORE DRIVE

301-265-6100(P) 301-298-9820(F)

**CONSTRUCTION MANAGER** HESS CONSTRUCTION

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**PROFESSIONAL SEAL:** 

**PRINTS ISSUED DESCRIPTION:** RFP-040 03/01/18

**8001 LYNNBROOK** 

**DRIVE** BETHESDA, MD 20814 L. 850 F. 1462

PARCEL N719 **ZONED: R60** LAND USE: EC ACCT NO. 07-00417763

**LYNNBROOK CENTER STORMWATER IMPROVEMENTS** 

**MONTGOMERY COUNTY PUBLIC SCHOOLS** 

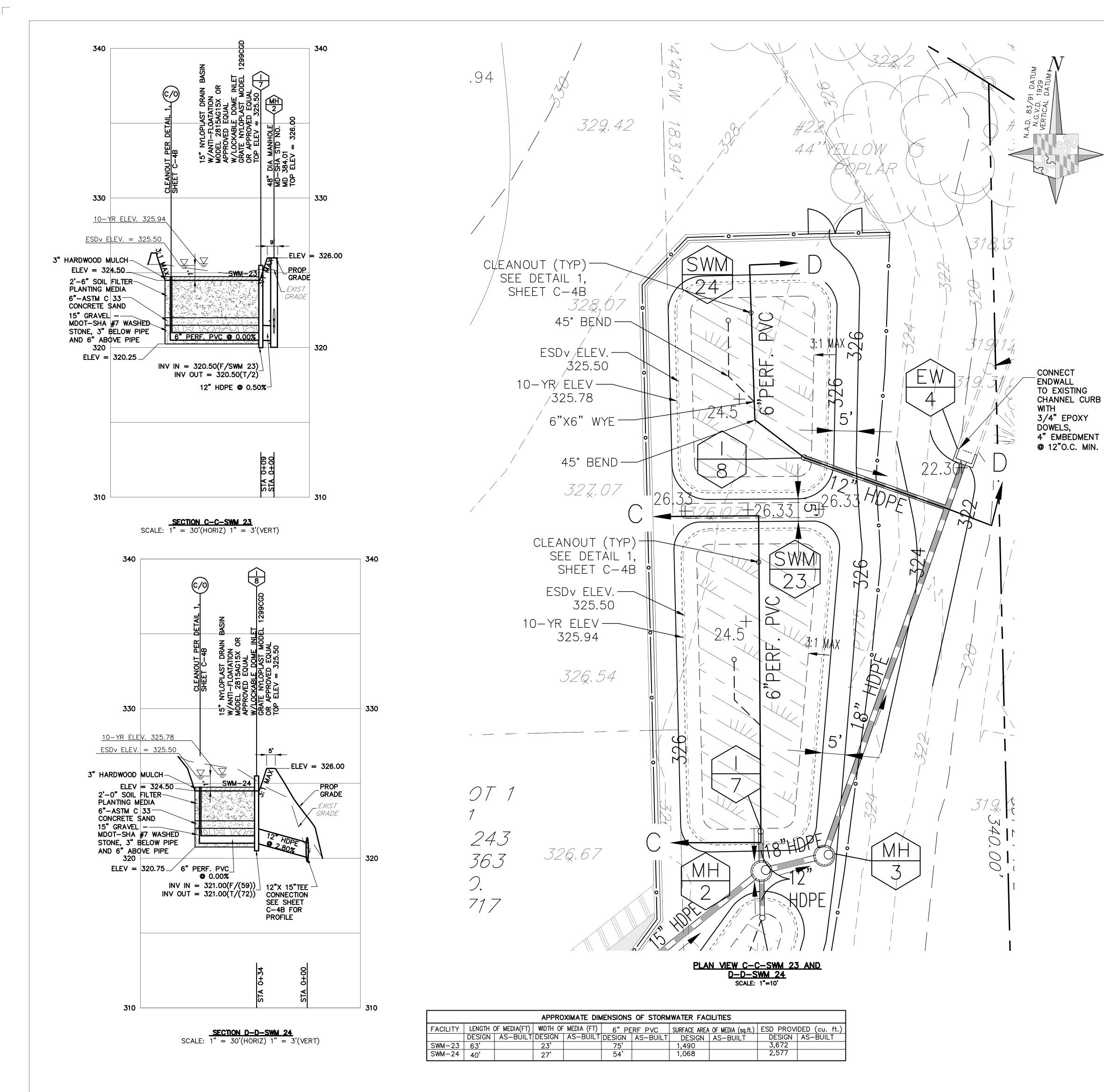
SHEET TITLE:

**MICROBIORETENTION** SWM-21 AND **SWM-22 DETAILS** 

NORTH

SC/SWM SHEET NO. 7 of 10 OWNER/APPLICANT
MONTGOMERY COUNTY PUBLIC SCHOOLS 45 WEST GUDE DRIVE, SUITE 4300 ROCKVILLE, MARYLAND 20850-4038 ATTN: ROBBIE S. BADSTIBNER robbie\_s\_badstibner@mcpsmd.org

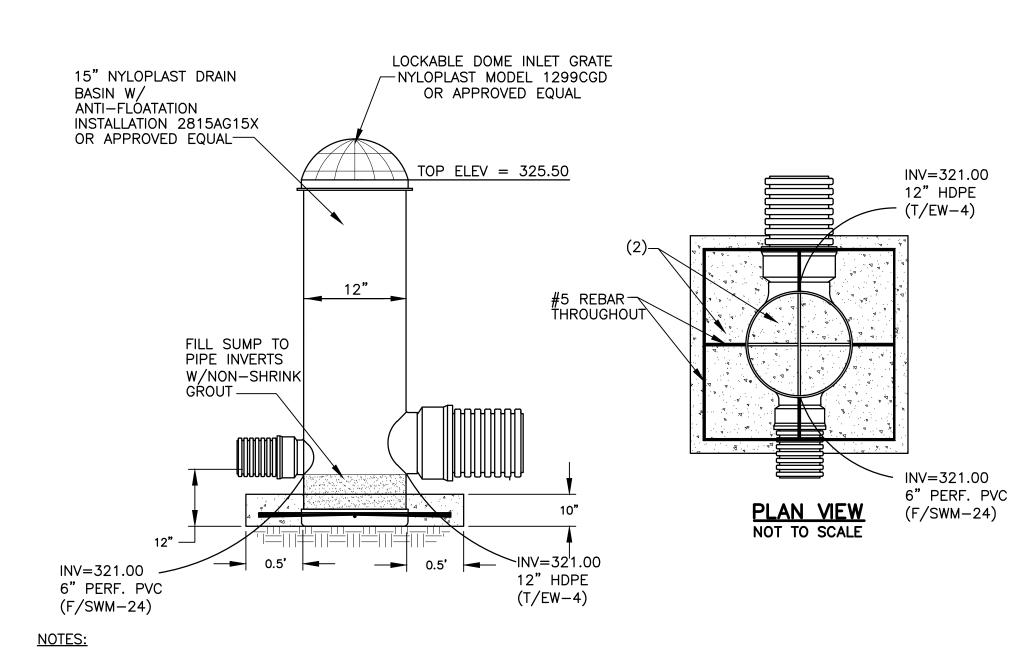
TEL: 240.314.1018 FAX: 240.279.3003



LOCKABLE DOME INLET GRATE
NYLOPLAST MODEL 1299CGD
OR APPROVED EQUAL 15" NYLOPLAST DRAIN BASIN W/ ANTI-FLOATATION INSTALLATION 2815AG15X OR APPROVED EQUAL -TOP ELEV = 325.50INV=320.50 12" HDPE (T/MH-2)#5 REBAR THROUGHOUT FILL SUMP TO PIPE INVERTS W/NON-SHRINK GROUT INV=320.50 6" PERF. PVC (F/SWM-23)NOT TO SCALE INV=320.50 INV=320.50 -12" HDPE 6" PERF. PVC (T/MH-2)(F/SWM-23)

CONCRETE ANTI-FLOATATION FOOTING WITH REBAR REINFORCEMENT (APPROX. 3900 LBS PER CU YD).
 IF THE STRUCTURE IS ABOVE GRADE OR WILL HAVE PROLONGED EXPOSURE TO UV RAYS, THE EXPOSED SURFACES SHOULD BE COATED IN A LATEX BASED PAINT OR SIMILAR COATING THAT WILL NOT DEGRADE THE PVC MATERIAL.
 STRUCTURE MUST BE WATERTIGHT

# DETAIL FOR INLET I-7 NOT TO SCALE



CONCRETE ANTI-FLOATATION FOOTING WITH REBAR REINFORCEMENT (APPROX. 3900 LBS PER CU YD).
 IF THE STRUCTURE IS ABOVE GRADE OR WILL HAVE PROLONGED EXPOSURE TO UV RAYS, THE EXPOSED SURFACES SHOULD BE COATED IN A LATEX BASED PAINT OR SIMILAR COATING THAT WILL NOT DEGRADE THE PVC MATERIAL.
 STRUCTURE MUST BE WATERTIGHT

# DETAIL FOR INLET I-8 NOT TO SCALE

# CONSTRUCTION INSPECTION CHECK-OFF LIST FOR MICRO BIORETENTION FACILITY SWM-24

3 I A	GE CONTRACTOR CONTRACT	MCDPS INSPECTOR	OWNER/DEVELOPER
at give 031 to con app una Mar Cer	NDATORY NOTIFICATION: Inspection and approval of each practice is required these points prior to proceeding with construction. The permittee is required to the MCDPS Inspector twenty—four (24) hours notice (DPS telephone 240—777—1). The DPS inspector may waive an inspection, and allow the owner/developer make the required inspection per a prior scheduled arrangement which has been firmed with the DPS inspector in writing. Work completed without MCDPS proval may result in the permittee having to remove and reconstruct the approved work. Upon completion of the project, a formal Stormwater magement As—built must be submitted to MCDPS unless a Record Drawing tification has been allowed instead. Each of the steps listed below must be fied by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
1.	Excavation for Micro Bioretention Facility conforms to approved plans		
2.	Placement of stone backfill underdrain system conforms to approved plans		
3.	Placement of filter media conforms to approved plans		
٠.	Connecting pipes, overflow structure, and/or grading conveyance to the		
4.	facility constructed per the approved plans		

STAGE	MCDPS INSPECTOR	OWNER/DEVELOPER
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 MCDPS 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 MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. Upon completion of the project, a formal Stormwater Management As—built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead. Each of the steps listed below must be verified by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
1. Excavation for Micro Bioretention Facility conforms to approved plans		
2. Placement of stone backfill underdrain system conforms to approved plans		
3. Placement of filter media conforms to approved plans		
4. Connecting pipes, overflow structure, and/or grading conveyance to the facility constructed per the approved plans		
5. Final grading and permanent stabilization conforms to approved plans		

SC/SWM SHEET NO. 8 of 10

OWNER/APPLICANT

MONTGOMERY COUNTY PUBLIC SCHOOLS
45 WEST GUDE DRIVE, SUITE 4300

ROCKVILLE, MARYLAND 20850-4038

ATTN: ROBBIE S. BADSTIBNER

robbie\_s\_badstibner@mcpsmd.org

TEL: 240.314.1018 FAX: 240.279.3003

ARCHITECT

SMOLEN · EMR
• IL K O V IT C H
ARCHITECTS

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MECH./ELECTRICAL/PLUMBING

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3112 LORD BALTIMORE DRIVE BALTIMORE, MARYLAND 21244

JAMES POSEY ASSOCIATES

301-265-6100(P) 301-298-9820(F)

CONSTRUCTION MANAGER
HESS CONSTRUCTION

804 WEST DIAMOND AVENUE, SUITE 300 GATHERSBURG, MD 20878 301-670-9000(P) 301-670-9009(F)

PROFESSIONAL SEAL:

PRINTS ISSUED

NO: DESCRIPTION: DATE:

⚠ RFP-040 03/01/1

8001 LYNNBROOK DRIVE

BETHESDA, MD 20814 L. 850 F. 1462 PARCEL N719 ZONED: R60

ZONED: R60 LAND USE: EC ACCT NO. 07-00417763

LYNNBROOK
CENTER
STORMWATER
IMPROVEMENTS
MONTGOMERY
COUNTY PUBLIC
SCHOOLS

MICROBIORETENTION
SWM-23 AND
SWM-24 DETAILS

