

July 2, 2024

Ms. Sterling Seay, Administrator Office of Planning and Zoning Zoning Division 2664 Riva Rd. 3rd Floor Annapolis, MD 21401

Re: Lot 23 - 224 Drum Ave. N

G02019636

Dear Ms. Seay:

We are hereby requesting a Variance to Article 18, Subtitle 2, Section 18-4-202(b) and (c). We have included a history of the circumstances and note the following:

Lot Description:

- The Lot is shown as Number 23, PB 31, Pg 98, Plat No. 1673. SDAT has Lot as 18,160 SF. The Plat was approved by Planning and Zoning in 1962. (See attached.) At the time of the Approval, the Lot met the Minimum Area and Dimensional Requirements (18-4-202b) of the applicable Code.
- 2. In Article 18-4-202(c) there is an exception to the General Prohibition, if the Lot was owned by the same family in 1987 (Webster). The family owned Lots; 22, 23, 25, 32, 33 and 34. All Lots except 22 and 23 exceeded the Minimum Area Requirement. Lot 22 being the smallest lot at 16,886 SF per SDAT. An earlier version of the Code 28-2-101c also required merger if the Lot was substandard.) This Bill had been in effect since 1986.
- 3. The Webster family acquired the Lots on October 31, 1984, from the State Highway Administration. (L3843/F183)
- In April of 1989, the Websters sold Lot 22 to the Saubles as recorded in L4835/F743 but maintained ownership of Lot 23.
- 5. In August of 1997, the Websters sold Lot 23 to an S.J.G. Corp. as recorded in L8083/F485. They then flipped the Lot to the Girdanos as recorded in L8429/F540. The Lot was then sold to the Zimmermans in September of 1999, as recorded in L9342/F428. The Zimmermans are the family currently pursuing the Permit and subsequent Variance.
- In June of 2000 a house was built on Lot 22 with the Permit being issued by the County. Since, Lots 22 and 23 were under separate ownership, it does not appear that a Merger was requested or processed. The property with the house was sold to the Twombly family in October of 2000 as recorded in L10029/F86.

At this point, the chain of the title of Lots 22 and 23 have been under separate ownership since 1997, which is now 27 years.

As noted above, Lot 23 was transferred in 1989 and Lot 23 in 1997. Because the County did not require a merger in 2000, Lot 23 has stood on its own.

Current Disposition:

- A. Lot 22 and its improvements have been owned by the Twombley's since 2000.
- B. Lot 23 has been owned by the Zimmerman's since 1999.
- C. The Zimmermans would like to build a new house on the vacant lot for their daughter and family.
- D. The lot size per SDAT is 18,186 SF, per Plat dimensions the Lot is 18,786 SF. Both areas are just short of the 20,000 SF required by Code.

E. The Lots have been under separate ownership for over 27 years.

With the above facts being considered, we are requesting the County grant relief and allow Lot 23 to be developed with a lot size that is approximately 1,314 SF below the Required Minimum Lot Area but can meet the 80 ft. minimum width at the BRL including relief to merge the adjacent Lot 22 (fully developed and under separate ownership).

We believe the proposed Plan and supporting documentation support this Request.

If you have questions or comments or need any additional information, please do not hesitate to contact our office at (410) 266-1160.

Sincerely, TERRAIN

Roy C. Little, P.E. Director of Engineering

RCL/II.3112

SITE DEVELOPMENT AND GRADING PLAN FOR LOT 23 224 N. DRUM AVENUE

1.	1	(WE)	CERTIFY	THAT:

a. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT (AASCD) BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

b. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

RESPONSIBLE PERSONNEL ON SITE:

ANNAPOLIS, MD. 21401

170 CF

567 CF

(Qf)

ESD METHODS

ESD METHODS

RECHARGE VOLUME

CHANNEL PROTECTION

STORAGE VOLUME

OVERBANK FLOOD

PROTECTION

EXTREME FLOOD

C IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY

THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHT, AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE

. FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

. THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.

.THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH FEDERAL, STATE OR COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.

. THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT, AND THE ORDINANCE.

. ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN.

. FIRST PHASE INSPECTION AND APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR SHALL BE REQUIRED UPON COMPLETION OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THE INITIAL APPROVAL BY THE SEDIMENT AND EROSION CONTROL INSPECTOR IS GIVEN. INSPECTION AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.

. APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF SEDIMENT AND EROSION CONTROLS.

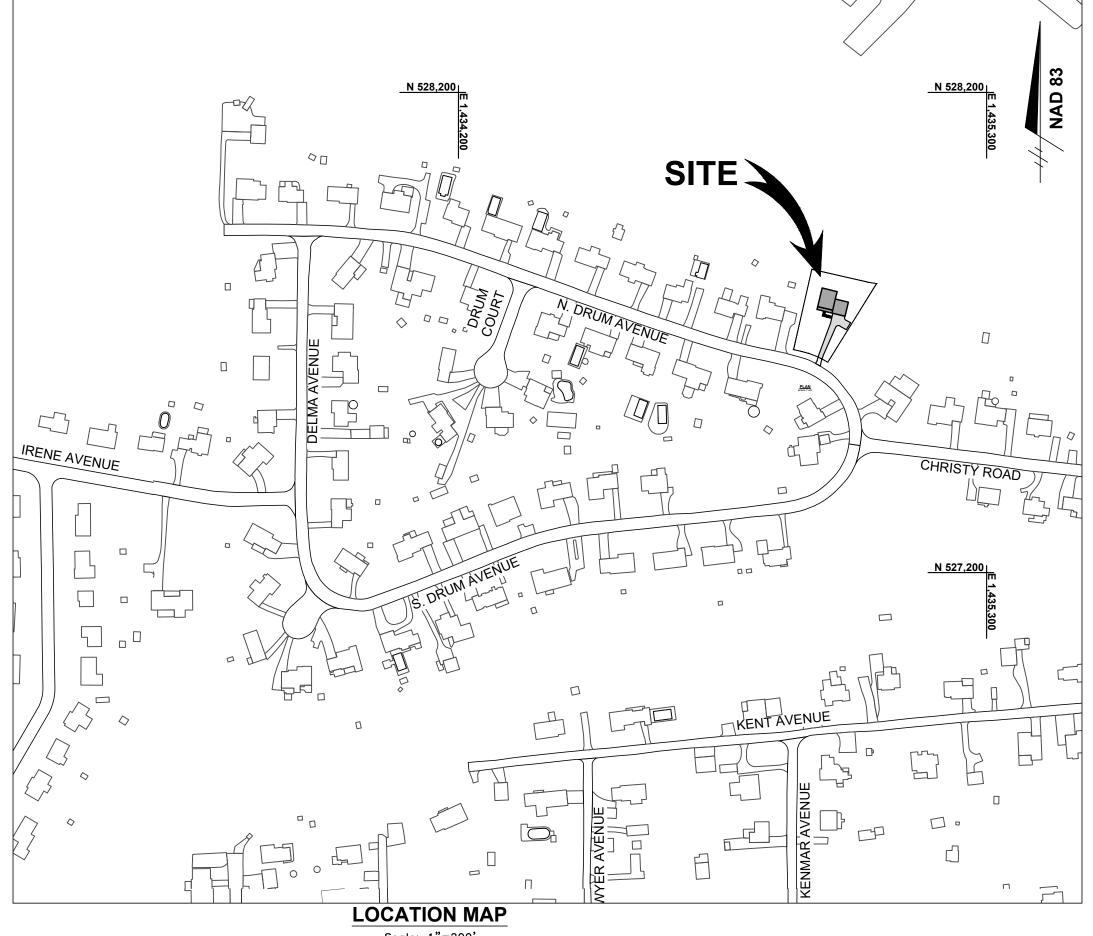
10. EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE

	DIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK. Baval Jammerman URE OF DEVELOPER/OWNER	DATE	6-21-2024	
PRINT:	NAME: DAVID R. ZIMMERMAN	TITLE:	OWNER	
	AFFILIATION:			
	ADDRESS: 309 CHRISTY ROAD PASADENA, MD 2112	22		
	TELEPHONE NUMBER: (443)-618-2738 E	MAIL ADDRESS:	FANCORAL11@/	AOL.COM
	CONSULTANT'S CERTIFICA THE DEVELOPER'S PLAN TO CONTROL SILT AND EROSION I SILT AND EROSION ON THE PROPERTY COVERED BY THE P PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, ACCORDANCE WITH THE REQUIREMENTS OF THE AASCD PLA HE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND WITH THE OWNER/DEVELOPER.	IS ADEQUATE TO C PLAN. I CERTIFY TH A PRACTICAL AND V , AND WAS PREPAF AN SUBMITTAL GUIL FOR SOIL EROSION SEDIMENT CONTRO	IAT THIS WORKABLE RED IN DELINES AND AND OL PLAN	
	SIGNATURE My dittle MD. P.E. LICENSE #_			STE OF MARK
	MD. LAND SURVEYOR LICENSE #	DATE	/	3/11/2
	NAME (PRINT) ROY C. LITTLE, P.E. FIRM			
	ADDRESS 53 OLD SOLOMONS ISLAND RD. SUITE "I"			3 13854 C

STORMWATER MANAGEMENT RECORD DRAWING CERTIFICATION

THIS CERTIFIES TO THE BEST OF MY PROFESSIONAL BELIEF AND KNOWLEDGE, THE APPROVED S.W.M. SYSTEM(S) AS SHOWN HEREON HAVE BEEN CONSTRUCTED IN SUCH A MANNER THAT WOULD BE CONSISTENT WITH THE APPROVED PLANS. ANY CHANGES/MODIFICATIONS ARE SHOWN IN RED.

ROY C. LITTLE, P.E. (EXP. 02/28/25)



STORMWATER MANAGEMENT DATA FORM v1.1/2020

Project Table for Each Drainage Area

224 N. Drum Avenue

224 N. Drum Avenue

G020196360

Pasadena

REVISION BLOCK

DESCRIPTION

PE Addressed (see

MD 8-Digit HUC (see

USGS 12-Digit HUC

				New development											Project Tab
For Each Practice in the	Drainage Ar	ea		(NEWD),											Permit Number
		E, S, or A		Redvelopment (REDE), or Restoration (REST)		MDP Code							New	New	Project Number
							DEVICE	IMPERVIOUS AREA	IMPERVIOUS ACRES	MD NORTH		WQ _V	Maintenance Responsibility		Project Name
TODA ID	TOU NAME	MDE BMP	MDE BMP	CONSTRUCTION	ON OFF SITE	LANDUCE	DRAINAGE	DRAINING TO DEVICE	RESTORED (See Note	COORD	MD EAST COORD	(ft3) (See			StructureAddress
TORM_ID S Rain Garden#1	TRU_NAME	CLASS F	TYPE MRNG	PURPOSE NEWD	ON or OFF SITE	RES RES	AREA (SF)	(Square feet) 1.562 SF	N:527743.54	(NAD83 - FT) E:1435020.77	(NAD83 - FT)	Note 5) 253 CF	Individual Homeowner	Comments	Structure City
Rain Garden#2		E	MRNG	NEWD	ON	RES		1,472 SF		E:1434940.20	-	314 CF	marvidual fromes when		State
NOTES															Structure Zip
				termine ESD goals and siz				opment). If practice	is for restoration, th	hen PE_REQ is 1ind	ch.				Total Drainage Area
		ng to Device when PE A		uctural practices) by the B or restoration only)	overs within the a	rainage area									
		ogic Unit Code) can be fo			https://mde.sta	ate.md.us/pro	ograms/Water/1	TMDL/DataCenter/Pa	ages/8DigitWatersh	ned.aspx					(Acres)
				ge volume in the device o	r the volume fror	n the 1-year 2	24-hour storm fo	or the drainage area	to the device ((2.7"	x Rv x A)/12)					RCN - Pre
6- If other is selec	cted for mainte	nance responsibility, ple	ase explain the	e comments column.											Construction
										_					RCN - Post
STORMV	NATER	R MANAGE	MENT	「SUMMAR	Y TABI	_E			OUT	FALL S	TATEM	<u>ENT</u>			Construction
													TERRAIN INC. IN		RCN - Woods
IINIMUM SIZING CRITERIA	SYMBOL	VOLUME REQUIR (CUBIC-FEET)	ED S'	WM PRACTICE		NOTES							AC LOT IN PASADENA, A HOUSE, GARAGE.		Total Number of
CKITEKIA		(COBIC-I LLI)	_										SWM. THE SITE DRAINS		BMPs
ATER QUALITY	(WQv)	77 CF	E	ESD METHODS	тwo	RAIN GARDE	NS	-	ONT OF THE LO				LOT, THEN NCH), WITH THE		PE Required (see
VOLUME											`		L VEGETATED AND		Note 1)
		470.05						STABLE. THE	OUTFALL CONF	IGURATION, S	OIL TYPE, AND	VEGETATI	/E COVERS ARE SUCH		PF Addressed (see

THAT EROSION OR SEDIMENTATION SHALL NOT OCCUR AS A RESULT OF THE PROPOSED TWO RAIN GARDENS DEVELOPMENT, IF ALL CONSTRUCTION IS IN ACCORDANCE WITH THESE PLANS AND THE AA.CO. DESIGN CRITERIA UTILIZING THE DETAILS AND SPECIFICATION STANDARDS. TWO RAIN GARDENS

RAINAGE TO EXISTING OFF-SITE

STREAM (MAGOTHY BRANCH)

SWM CONCEPT SWM SHALL BE PROVIDED FOR THIS NON CRITICAL AREA DEVELOPMENT BY ESD METHODS TO PROVIDE WATER QUALITY, RECHARGE AND CHANNEL PROTECTION. THE ESD METHODS USED WAS IWO RAIN GARDENS. QP IS NOT REQUIRED DUE TO SITE OUTFALL FLOWING TO AN OFF-SITE STREAM (MAGOTHY BRANCH).

MODIFICATION NOTE

THIS DEVELOPMENT IS SUBJECT TO THE APPROVED MODIFICATIONS MODIFICATION #17390 **(STEEP SLOPE + BUFFER DISTURBANCE SEE SHEET 7 OF 7)

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OTHER WAY WITHOUT THE SPECIFIC WRITTEN
CONSENT OF TERRAIN, INC., 2024

DAVID R. ZIMMERMAN **309 CHRISTY ROAD** PASADENA, MD 21122 TEL:(443)-618-2738





PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS

TAX MAP

Scale: 1"=300'

2. EXISTING ZONING IS: R2 SETBACKS: FRONT-30FT

7. F.E.M.A. #24003C0155E

REAR-25FT

8. SITE IS NOT IN A CRITICAL AREA ZONE.

10. THE SITE IS NOT IN A BOG PROTECTION AREA

3. EXISTING USE OF THE SITE IS VACANT WOODED

5. SITE IS KNOWN AS 224 N. DRUM AVENUE LOT 23

SIDE-7FT

Copyright ADC The Map People

GENERAL NOTES

6. PUBLIC WATER AND PRIVATE SEPTIC TO BE INSTALLED AND UTILIZED.

9. THIS SITE IS LOCATED WITHIN THE MAGOTHY RIVER WATERSHED.

N. DRUM AVENUE IS CLASSIFIED AS A LOCAL COUNTY ROAD.

11. N. DRUM AVENUE IS NOT A SCENIC OR A HISTORIC ROAD.

12. CONTOURS SHOWN ON THIS PLAN ARE TAKEN FROM

SITE CONDITIONS WHICH MAY AFFECT THE WORK.

ENGINEERS ATTENTION IMMEDIATELY.

MASTER PLAN CATAGORIES; SEWER-S5 (FUTURE SERVICE) BROADNECK

INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

**SPECIAL FLOOD HAZARD AREA (SFHAs) SUBJECT TO

A.A.CO. TOPO AND UTILITY OPERATIONS MAPS FOR ON-SITE & OFF-SITE

SURVEY BY TERRAIN INC. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS TO HIS OWN SATISFACTION PRIOR TO STARTING WORK, ANY DISCREPANCIES

AREAS. BOUNDARY SHOWN ON THIS PLAN DERIVED FROM A FIELD

SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.

REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH

THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF

THE CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777,

48 HOURS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

HOUSE MEASURES HAVE BEEN TAKEN TO PREVENT SEDIMENT FROM

TERRAIN INC. HAS NOT FIELD VERIFIED EXISTING UTILITY INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT AND OBTAIN

GRADING OPERATIONS, ANY DISCREPANCIES SHALL BE BROUGHT TO THE

STORMWATER MANAGEMENT PRACTICES WILL BE PROVIDED FOR THIS SITE

IN ACCORDANCE WITH ARTICLE 16, SECTION 4 AND THE FINAL PLAN ON

FILE WITH THE OFFICE OF PLANNING AND ZONING. ESD TO THE MEP

18. ANY PERTINENT INFORMATION WITHIN 100' OF PROPERTY LINE IS SHOWN.

THIS GRADING PERMIT#G02019636 WAS REVIEWED UNDER THE

2010 REGULATIONS FÖR STORMWATER MANAGEMENT.

WAS ACHIEVED THROUGH: TWO RAIN GARDENS.

20. BENCHMARKS: BM#1:(TRAV 902)MAG-NAIL, EL=60.54, NAD88

ALL RECORDS, INFORMATION AND LOCATION PRIOR TO COMMENCEMENT OF

BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO

UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REPLACING

ANY EXISTING FENCES, DRIVEWAYS ETC. DAMAGED OR REMOVED DURING

WATER-W5 (EXISTING SERVICE) GLEN BURNIE LOW

ZONE X/A ELEV. –

1. TOTAL AREA OF SITE IS 0.4312 AC. \pm = 18,786 SQUARE FEET

4. PROPOSED USE OF THE SITE IS SINGLE FAMILY DWELLING

Permitted Use Number 20303126

VICINITY MAP

LOT 23 SECTION 2 PLAT 2

DRAWN BY: D.J.B.

TERRAIN JOB NO. 3112

AS-BUILT NOTE

ALL GRADING, DRAINAGE, STRUCTURES AND EROSION AND SEDIMENT CONTROL PRACTICES INCLUDING FACILITIES AND VEGETATIVE MEASURES HAVE BEEN COMPLETED IN CONFORMANCE WITH THE APPROVED PLANS."

(OWNER)

SITE ANALYSIS

(EARTHWORKS/DISTURBANCE) 1. CUT <u>350</u> ± CUBIC YARDS 2. FILL 300 ± CUBIC YARDS 50 ± CUBIC YARDS SPOIL/BORROW

3. PREDOMINANT SOIL TYPE: PgB-'A' & SME-'C' 4A. TOTAL AREA STRUCTURALLY STABILIZED <u>0.09</u> AC.± <u>4,070</u> SQ. FT.±

4B. TOTAL AREA VEGETATIVELY STABILIZED 0.18 AC. ± 7,987 SQ. FT. ± 4C. TOTAL AREA OF DISTURBANCE IS $\underline{\qquad}$ 0.27 AC. \pm 12,057 SQ. FT. \pm

STRUCTURE/ PARKING ANALYSIS

ZONING <u>R2</u> A. MAXMIUM HEIGHT FOR PRINCIPLE STRUCTURE = 45 FT. (ALLOWED)

B. MAXIMUM COVERAGE(30 % OF GROSS AREA)= 5.636 SQ. FT. (ALLOWED) (12.3) % OF GROSS AREA)=(2.312) SQ. FT. (PROVIDED)

4,624 SO. FT. (TL. FLOORS) C. FLOOR AREA PRINCIPLE STRUCTURE= D. PARKING PROVIDED= 2 ON-SITE PARKING MIN

(*3 ON-SITE WHEN OFF STREET PARKING IS PROHIBITED)

SEQUENCE OF CONSTRUCTION FOR SINGLE FAMILY DWELLING

13. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS AT (410) 222-7780 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. WORK MAY NOT COMMENCE UNTIL THE PERMÍTTEE, OR THE RESPONSIBLE PERSONNEL HAVE MET ON-SITE WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS. NOTE: THE PERMITTEE OR CONTRACTOR SHALL NOT COMMENCE WITH CLEARING OR ANY EARTH DISTURBANCE ACTIVITIES ON THE SITE DURING OR BEFORE WET WEATHER EVENTS. ONCE THE SITE WORK BEGINS, CLEARING AND GRUBBING ACTIVITIES SHALL BE FOR THE INSTALLATION

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND ALL SEDIMENT CONTROLS AS SHOWN ON PLAN. NO CLEARING OR GRADING

PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.__ 16. THIS PLAN IS INTENDED TO PROVIDE SEDIMENT CONTROL DURING THE 4. CLEAR, GRUB AND ROUGH GRADE SITE ONLY AS SHOWN WITHIN THE LIMITS OF DISTURBANCE. HAUL ALL DEBRIS TO AN

INSTALL PRIVATE SEPTIC, WHC, OR OTHER UTILITIES AT THIS TIME IF THE ACCESS WILL BE BLOCKED BY BUILDING

6. CONSTRUCT PROPOSED FOUNDATION AND ASSOCIATED IMPROVEMENTS. CONSTRUCTION OF THE FIRST FLOOR WALLS OF ANY BUILDING OR STRUCTURE MAY NOT PROCEED UNTIL THE FOUNDATION HAS BEEN BACKFILLED AND ALL DISTURBED AREAS WITHIN THE LIMITS OF DISTURBANCE HAVE BEEN PERMANENTLY OR TEMPORARILY STABILIZED. A CERTIFICATE IS TO BE PROVIDED BY THE ENGINEER TO THE INSPECTOR VERIFYING THE GRADES AND DRAINAGE PATTERNS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN OBTAINED.

7. ONCE THE SITE IS STABILIZED, WITH THE GRADING INSPECTORS APPROVAL, FRAMING MAY COMMENCE ABOVE THE GROUND FLOOR. DURING BUILDING CONSTRUCTION BEYOND THE GROUND FLOOR, ALL DISTURBED AREAS MUST BE STABILIZED AT THE END OF EACH BUSINESS DAY. ALL AREAS ARE TO BE VEGETATIVELY STABILIZED PER THE ANNE ARUNDEL SOIL

8. ONCE UPSTREAM AREAS ARE 95% STABILIZED, INSTALL SWM SYSTEMS AND DEVICES AND/OR PLANTINGS. (SEDIMENT IS TO 9. FINE GRADE AND STABILIZE ALL DISTURBED AND AFFECTED AREAS. INSTALL DRIVEWAY TO FINAL SURFACE AND STABILIZE

ACCESS WITH CR-6 GRAVEL OR PAVEMENT FROM ACCESS ROAD OR RIGHT-OF-WAY TO THE STRUCTURE._____(2 DAYS) 10. WITH GRADING INSPECTOR'S APPROVAL, REMOVE REMAINING SEDIMENT CONTROLS._

AND STABILIZATION OF THE PERIMETER EROSION CONTROL MEASURES ONLY.

THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROLS ALSO BE PERFORMED BY A DESIGN

CONSTRUCTION. ANY SEDIMENT CONTROLS DAMAGED MUST BE REPLACED BY THE END OF THE WORKDAY.____(2 WEEKS)

CONSERVATION DISTRICT'S DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT.

BE PREVENTED FROM ENTERING SWM SYSTEMS DURING CONSTRUCTION: INFLOW PIPES TO BE CONNECTED AFTER CONTRIBUTING DRAINAGE AREAS ARE ALSO STABILIZED.) THE ENGINEER MUST CERTIFY SWM INSTALLATION. $_$

LICENSE#13354

410-266-1160

EMAIL: TERRAIN@COMCAST.NET

ROY C. LITTLE, PE (ENGINEER)

G.P. NO. G02019636

COVER SHEET

GRADING, EROSION AND SEDIMENT CONTROL PLAN **SELBY GROVE**

> PB. 31, PG. 98, PLAT NO. 1673 224 N. DRUM AVENUE PASADENA, MD 21122

TAX MAP 23, GRID 5, PARCEL 147 TAX ACCT#03-722-90046471 ZONING:R2 SECOND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DATE: JUNE, 2024 SCALE: AS SHOWN CHECKED BY: R.C.L

SHEET: 1 OF 7

EMAIL:FANCORAL11@AOL.COM

SHEET INDEX

COVER SHEET

3 RESOURCE MAP

4 20 SCALE PLAN

DESCRIPTION

2 EX/DEV. DRAINAGE AREA MAPS

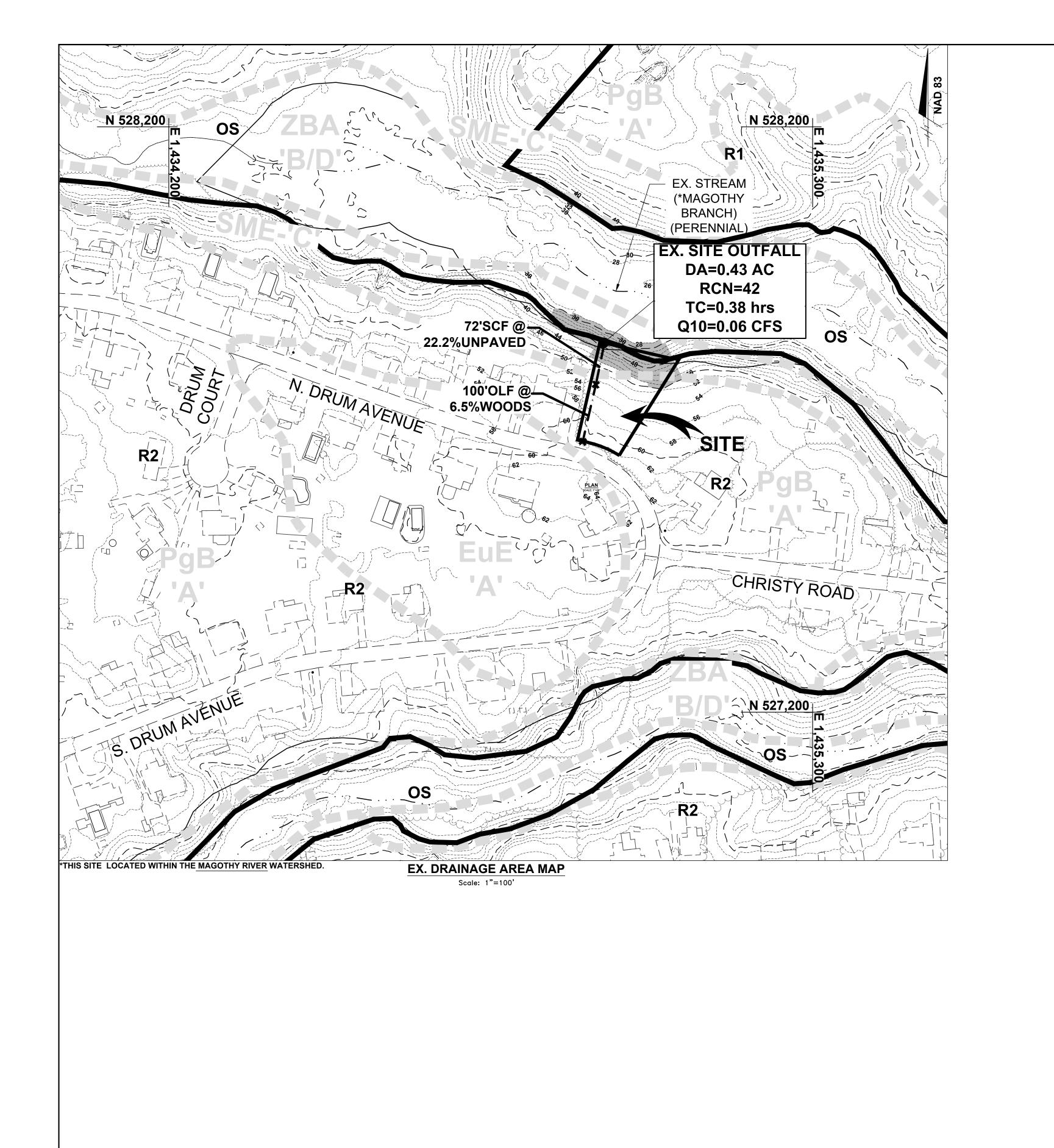
5 NOTES AND DETAILS SHEET

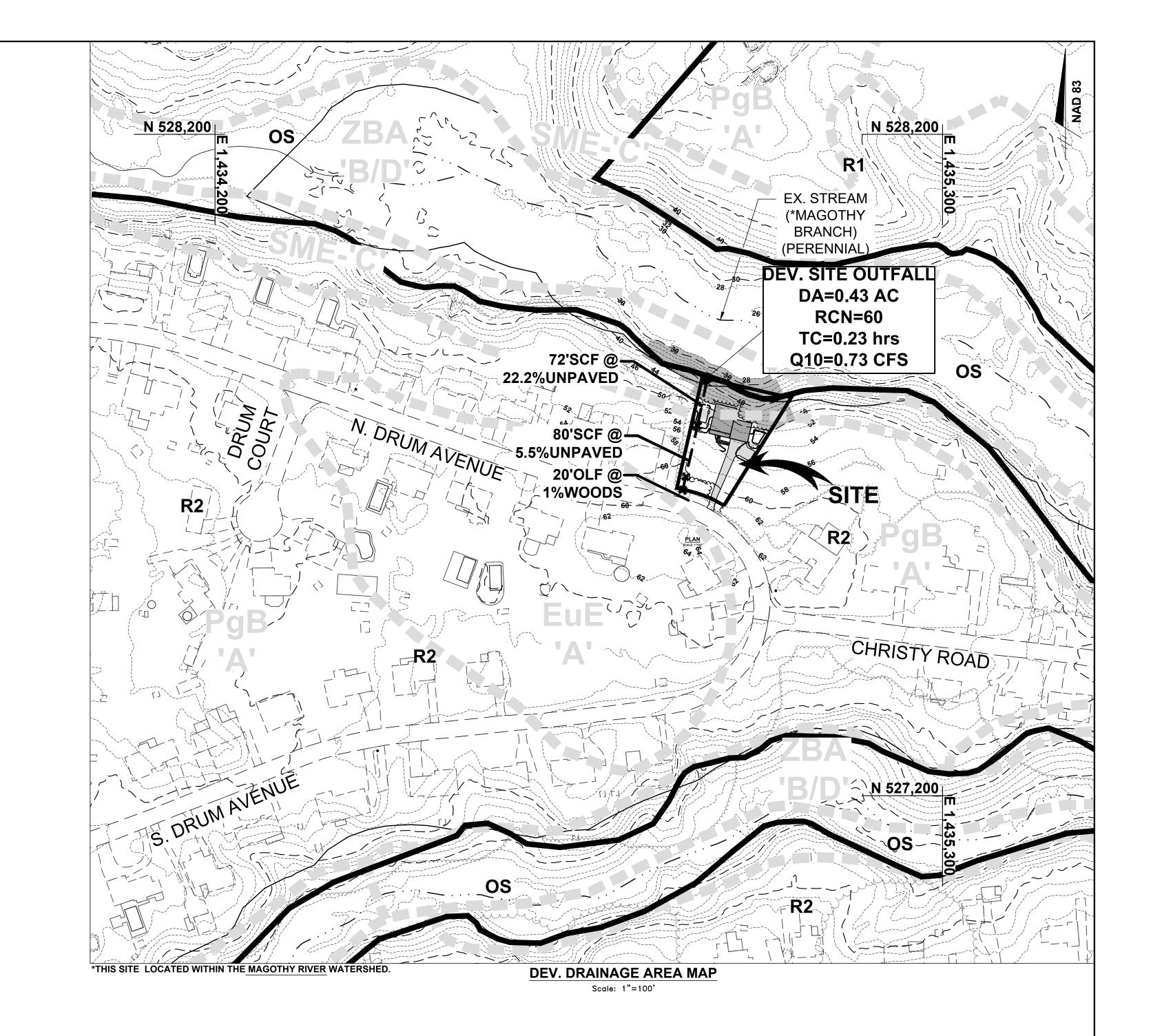
7 MODIFICATION SHEET

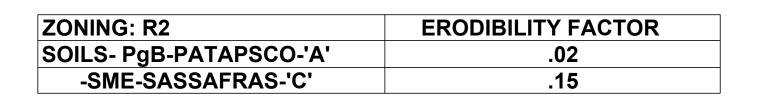
6 SWM NOTES AND DETAILS SHEET

NO.

OWNER







DA. KEY OF CONCENTRATION STUDY POINT CRITICAL AREA LIMIT SOILS LINE/TYPE

G.P. NO. G02019636

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE #. 13354, EXPIRATION DATE: 2/28/25. (CORPORATE LICENSE #48856, EXPIRATION DATE: 2/28/2026)

PB. 31, PG. 98, PLAT NO. 1673 224 N. DRUM AVENUE PASADENA, MD 21122 TAX MAP 23, GRID 5, PARCEL 147 TAX ACCT#03-722-90046471 ZONING:R2 SECOND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: D.J.B. DATE: JUNE, 2024

SCALE: AS SHOWN

SHEET: 2 OF 7

EX/DEV. DRAINAGE AREA MAPS

GRADING, EROSION AND

SEDIMENT CONTROL PLAN

SELBY GROVE LOT 23 SECTION 2 PLAT 2

CHECKED BY: R.C.L

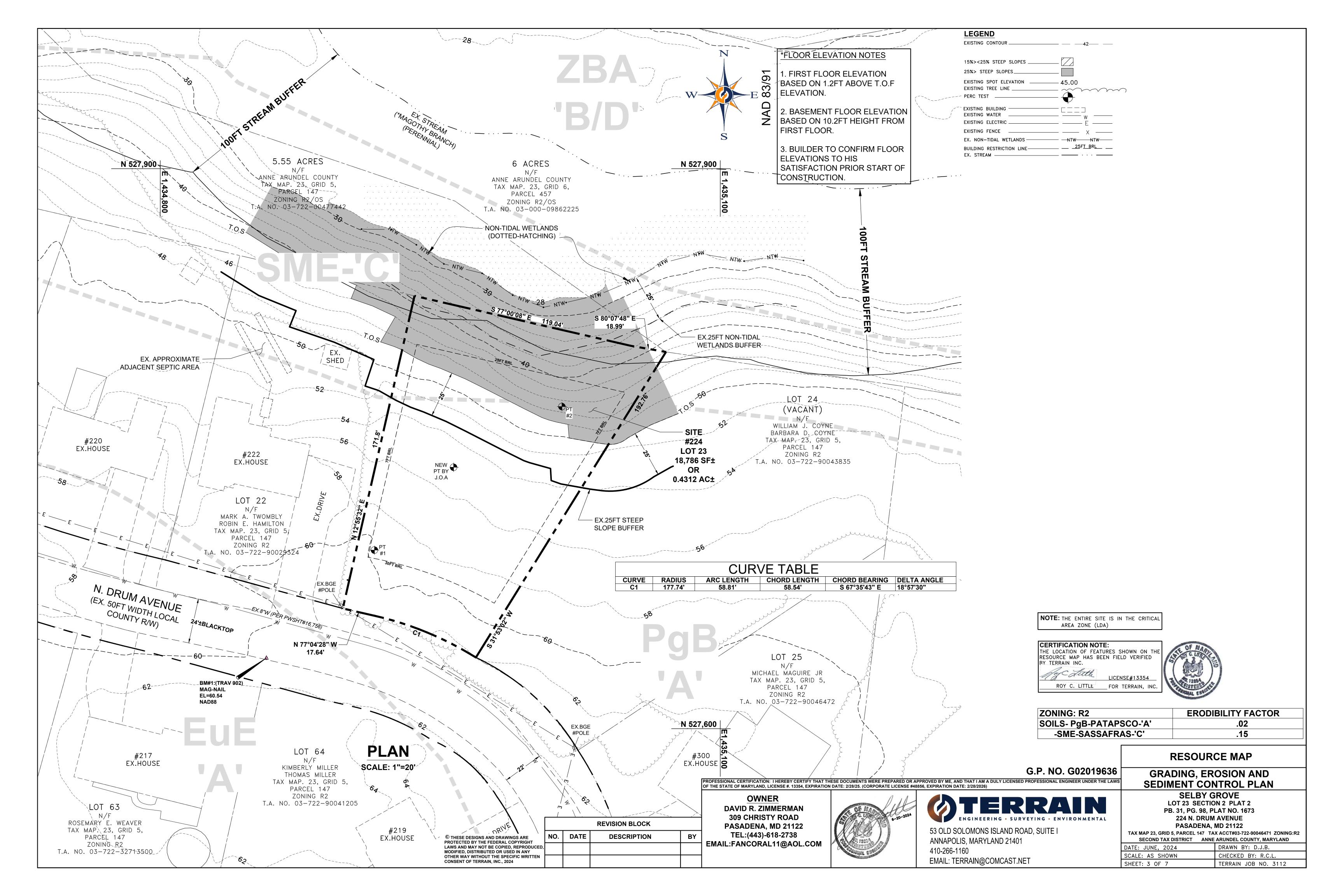
TERRAIN JOB NO. 3112

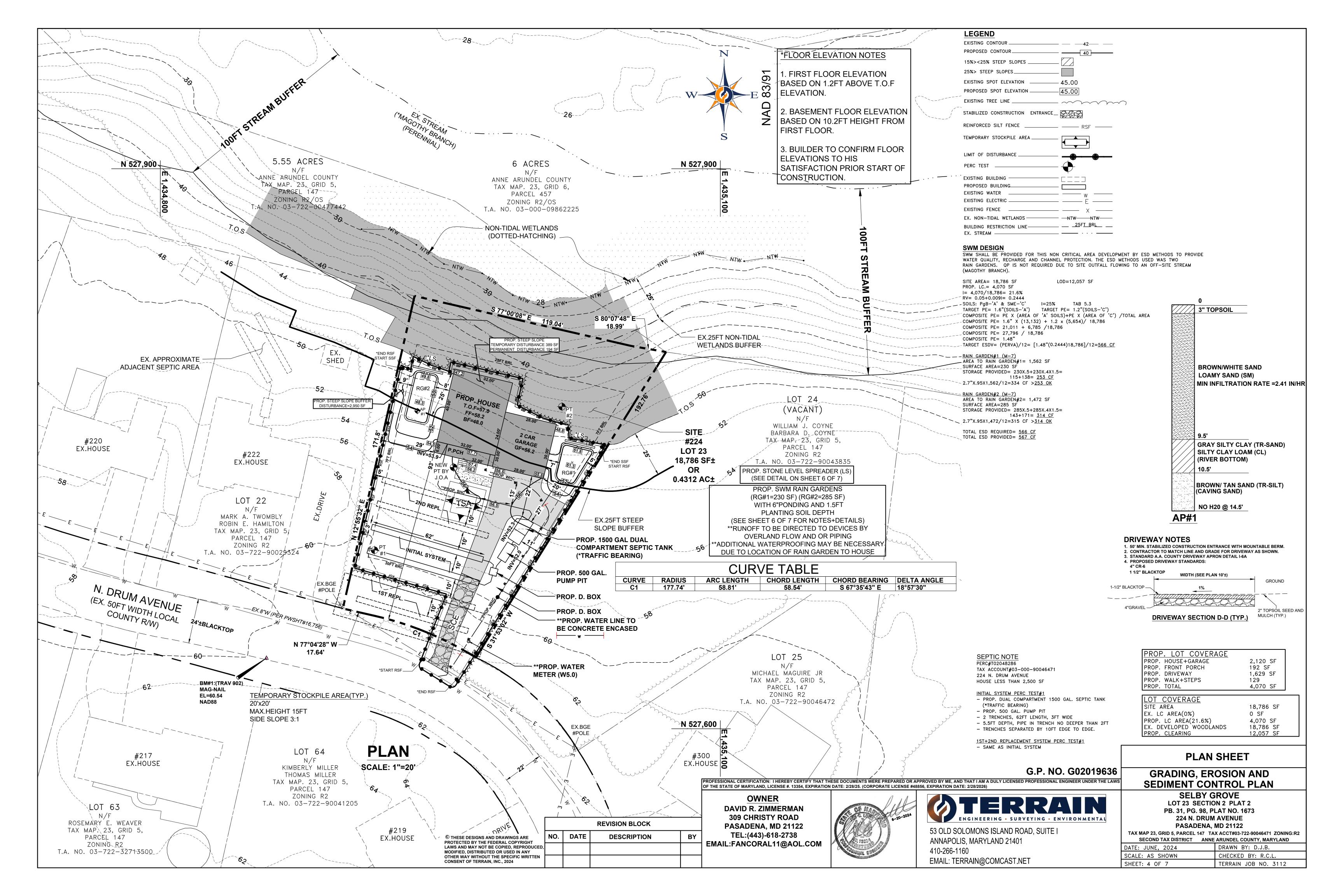
53 OLD SOLOMONS ISLAND ROAD, SUITE I ANNAPOLIS, MARYLAND 21401 410-266-1160 EMAIL: TERRAIN@COMCAST.NET

OWNER DAVID R. ZIMMERMAN **309 CHRISTY ROAD** PASADENA, MD 21122 TEL:(443)-618-2738 EMAIL:FANCORAL11@AOL.COM

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CONSENT OF TERRAIN, INC., 2024





THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

DEFINITION

SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED

SOIL PREPARATION

I. TEMPORARY STABILIZATION

A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES 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 MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF

- B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
- C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- PERMANENT STABILIZATION
- A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
- I. SOIL PH BETWEEN 6.0 AND 7.0.
- II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
- III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
- IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT. v.SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
- GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.

B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE

- D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL
- E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP I TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING

- TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS 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.
- TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
- TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
- A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR
- C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS
- SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN. 5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:

STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN I Y2 INCHES IN DIAMETER.

- TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL,
- B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS. JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL. TOPSOIL APPLICATION
- EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
- B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF
- TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING

AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

- I. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
- FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
- LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #!00 MESH SIEVE AND 98 TO I 00 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
- 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- 5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER I ,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF

2018 VEGETATI VE ESTABLI SHMENT NOTES

FOLLOWING INITIAL SOIL DISTURBANCES OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

1. PERMANENT SEEDING:

A. SOIL TESTS: LIME AND FERTILIZER WILL BE APPLIED PER SOIL TESTS RESULTS FOR SITES GREATER THAN 5 ACRES. SOIL TESTS WILL BE DONE AT COMPLETION OF INITIAL ROUGH GRADING OR AS RECOMMENDED BY THE SEDIMENT CONTROL INSPECTOR. RATES AND ANALYSES WILL BE PROVIDED TO THE GRADING INSPECTOR AS WELL AS THE CONTRACTOR.

OCCURRENCE OF ACID SULFATE SOILS (GRAYISH BLACK COLOR) WILL REQUIRE COVERING WITH A MINIMUM OF 12 INCHES OF CLEAN SOIL WITH 6 INCHES MINIMUM CAPPING OF TOP SOIL. NO STOCKPILING OF MATERIAL IS ALLOWED. IF NEEDED, SOIL TESTS SHOULD BE DONE BEFORE AND AFTER A 6-WEEK INCUBATION PERIOD TO ALLOW OXIDATION OF SULFATES.

THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:

- A. SOIL PH SHALL BE BETWEEN 6.0 AND 7.0.
- SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM)
- 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)

WITH THE STANDARD AND SPECIFICATION FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS FROM

- 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
- 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR AMENDMENTS MADE AS RECOMMENDED BY A CERTIFIED AGRONOMIST.
- B. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3-5 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-10-10 FERTILIZER PER 1,000 SQUARE FEET. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3-5 INCHES ON SLOPES FLATTER THAN 3:1.
- C. SEEDING: APPLY 5-6 POUNDS PER 1,000 SQUARE FEET OF TALL FESCUE BETWEEN FEBRUARY 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDER, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE WHERE NECESSARY TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. IF OTHER SEED MIXES ARE TO BE USED, SELECT FROM TABLE B3 AND B5 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- D. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. IF A MULCH-ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.
- E. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:
- i. USE A MULCH-ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
- ii.WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
- iii. LIQUID BINDERS MAY BE USED. APPLY AT HIGHER RATES AT THE EDGES WHERE WIND CATCHES MULCH. SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURERS.
- iv. LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

2. TEMPORARY SEEDING:

LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET. FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SQUARE FEET. SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST

15 THROUGH OCTOBER 31). MILLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15). MULCH: SAME AS 1 D AND E ABOVE.

NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL IS TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL COMPACTION REQUIREMENTS ARE IN ACCORDANCE TO ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AS WELL AS THE AA COUNTY DESIGN MANUAL AND STANDARD DETAILS. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER MD-378 CONSTRUCTION SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

4. PERMANENT SOD:

INSTALLATION OF SOD SHOULD FOLLOW PERMANENT SEEDING DATES. SEEDBED PREPARATION FOR SOD SHALL BE AS NOTED IN SECTION (B) ABOVE. PERMANENT SOD IS TO BE TALL FESCUE, STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD.

WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING

ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE INSTALLED ON FROZEN GROUND. SOD SHALL NOT BE TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE

5. MINING OPERATIONS:

PERFORMED TO ENSURE ESTABLISHMENT OF SOD.

MINIMUM RATE OF 0.5 POUNDS PER 1,000 SQUARE FEET.

SEDIMENT CONTROL PLANS FOR MINING OPERATIONS MUST INCLUDE THE FOLLOWING SEEDING DATES AND MIXTURES FOR SEEDING DATES OF FEBRUARY 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 31, USE SEED MIXTURE OF TALL FESCUE AT THE RATE OF 2 POUNDS PER 1,000 SQUARE FEET AND SERICEA LESPEDEZA AT THE

- 6. TOPSOIL SHALL BE APPLIED AS PER THE STANDARD AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS FROM THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT
- 7. USE OF THESE VEGETATIVE ESTABLISHMENT SPECIFICATIONS DOES NOT PRECLUDE THE PERMITTEE OR CONTRACTOR FROM MEETING ALL OF THE REQUIREMENTS SET FORTH IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

TEMPORARY SEEDING SPECIFICATIONS

IF TEMPORARY SEEDING IS TO BE UTILIZED, THE FOLLOWING APPLIES

TEMPORARY SEEDING:

- LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET.
- FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SQUARE FEET. - SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST 15 THROUGH NOVEMBER 1). MILLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15). MULCH: AS STATED BELOW.
- MULCHING: TO PREVENT EROSION OF FRESHLY GRADED SITES.
- DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING
- · MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE (90 POUNDS PER 1,000 SQUARE FEET (2 BALES)). IF A MULCH-ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.

SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:

- USE A MULCH—ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING
- MULCH; HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY. · WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY
- WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. - LIQUID BINDERS MAY BE USED. APPLY AT HIGHER RATES AT THE EDGES WHERE WIND CATCHES
- MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 2011 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES

DETAIL E-3 SUPER SILT FENCE

CHAIN LINK FENCING -

WOVEN SLIT FILM GEOTEXTILE -

FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

CHAIN LINK FENCING AND GEOTEXTILE.

U.S. DEPARTMENT OF AGRICULTURE

SOIL TEST/SITE EVALUATION

GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS

ELEVATION

CROSS SECTION

INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOO

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

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 $\frac{3}{4}$ 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

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES,

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE A

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THA

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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

Conbined rate

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS

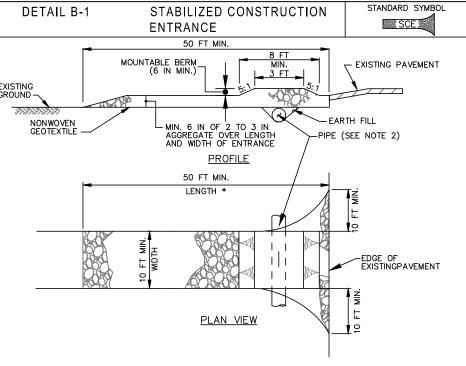
SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND

11811811811811

H-SSF---

RECOMMENDED BY THE MANUFACTURERS. — LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO

THE GROUND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

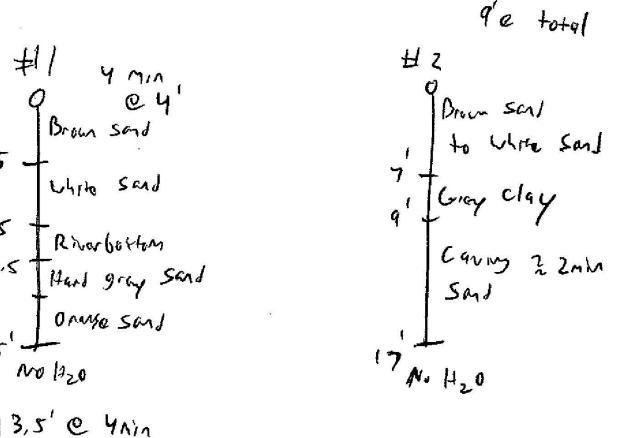


- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN, WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS N TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE

(WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL



964616,45) = 186

| WATER CONDITIONER? □ YES □ NO LOCATION OF BACKWASH DISCHARGE

OWNER DAVID R. ZIMMERMAN

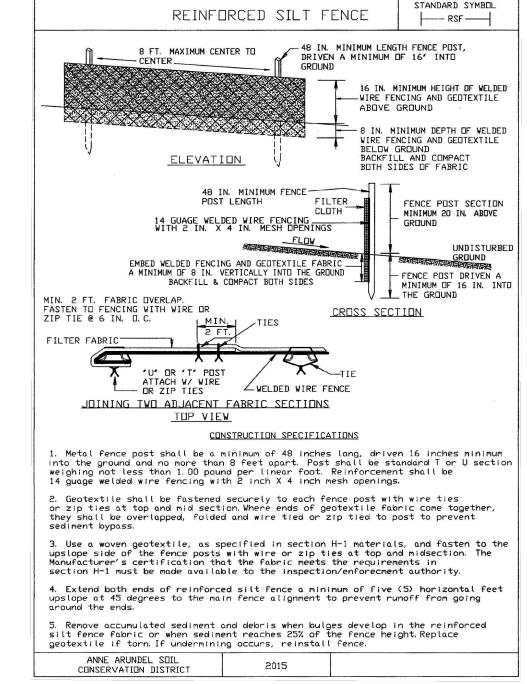
309 CHRISTY ROAD PASADENA. MD 21122 TEL:(443)-618-2738

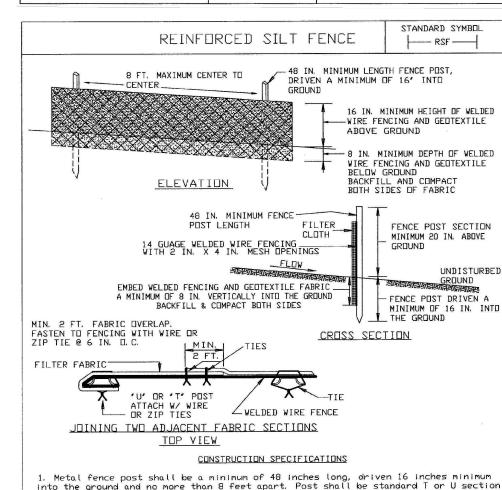




G.P. NO. G02019636

53 OLD SOLOMONS ISLAND ROAD, SUITE I ANNAPOLIS, MARYLAND 21401 410-266-1160 EMAIL: TERRAIN@COMCAST.NET





1. Metal fence post shall be a minimum of 48 inches long, driven 16 inches minimum into the ground and no more than 8 feet apart. Post shall be standard T or U section weighing not less than 1.00 pound per linear foot. Reinforcement shall be 14 guage welded wire fencing with 2 inch X 4 inch mesh openings. 2. Geotextile shall be fastened securely to each fence post with wire ties or zip ties at top and mid section. Where ends of geotextile fabric come together, they shall be overlapped, folded and wire tied or zip tied to post to prevent

3. Use a woven geotextile, as specified in section H-1 materials, and fasten to the upslope side of the fence posts with wire or zip ties at top and midsection. The Manufacturer's certification that the fabric meets the requirements in section H-1 must be made available to the inspection/enforecment authority. 4. Extend both ends of reinforced silt fence a minimum of five (5) horizontal feet upslope at 45 degrees to the main fence alignment to prevent runoff from going

5. Remove accumulated sediment and debris when bulges develop in the reinforced silt fence fabric or when sediment reaches 25% of the fence height. Replace geotextile if torm. If undermining occurs, reinstall fence.

NOTES AND DETAILS SHEET

GRADING, EROSION AND SEDIMENT CONTROL PLAN

SELBY GROVE LOT 23 SECTION 2 PLAT 2 PB. 31, PG. 98, PLAT NO. 1673 224 N. DRUM AVENUE PASADENA, MD 21122

SHEET: 5 OF 7

TAX MAP 23, GRID 5, PARCEL 147 TAX ACCT#03-722-90046471 ZONING:R2 SECOND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: D.J.B. DATE: JUNE, 2024 SCALE: AS SHOWN CHECKED BY: R.C.L

TERRAIN JOB NO. 3112

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REVISION BLOCK

RAINGARDEN NOTES AND DETAILS

Base Course - The base course shall be AASHTO No. 3 or 4 course aggregate with an assumed open pore space of 30% (n = 0.30).

Reinforced Turf

Reinforced Grass Pavement (RGP) - Whether used with grass or gravel, the RGP thickness shall be at least 13/4" thick with a load capacity capable of supporting the traffic and vehicle types that will be carried.

B.4.C Specifications for Micro-Bioretention. Rain Gardens, Landscape Infiltration & Infiltration Berms

Material Specifications

The allowable materials to be used in these practices are detailed in Table B.4.1.

Filtering Media or Planting Soil

The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the microbioretention practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.01.05.

The planting soil shall be tested and shall meet the following criteria:

- Soil Component Loamy Sand or Sandy Loam (USDA Soil Textural Classification) Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35% to 40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
- Clay Content Media shall have a clay content of less than 5%. pH Range - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

Compaction

It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoes to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment.

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a

Plant Material

Recommended plant material for micro-bioretention practices can be found in Appendix A, Section A.2.3.

Plant Installation

Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Pine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootstock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

Underdrains

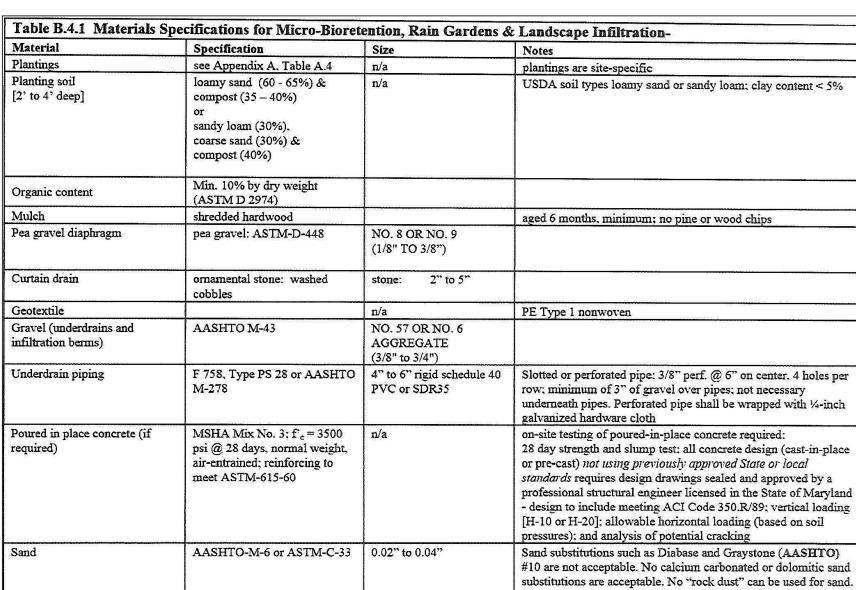
Underdrains should meet the following criteria:

- Pipe- Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTMF 758, Type PS 28, or AASHTO-M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).
- Perforations If perforated pipe is used, perforations should be 36" diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a 1/4" (No. 4 or 4x4) galvanized hardware cloth.
- Gravel The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.
- The main collector pipe shall be at a minimum 0.5% slope.
- A rigid, non-perforated observation well must be provided (one per every 1,0000 square feet) to provide a clean-out port and monitor performance of the filter.
- A 4" layer of pea gravel (1/8" to 3/8" stone) shall be located between the filter media and underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24".

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).

Miscellaneous

These practices may not be constructed until all contributing drainage area has been stabilized

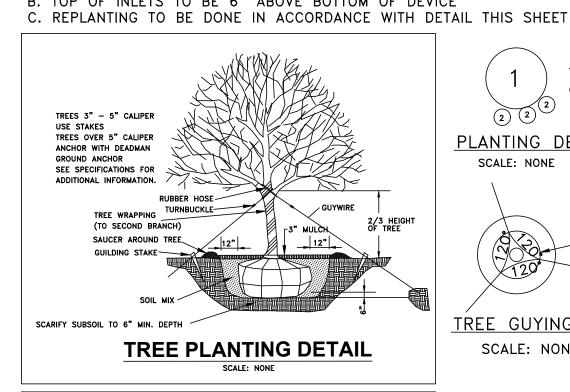


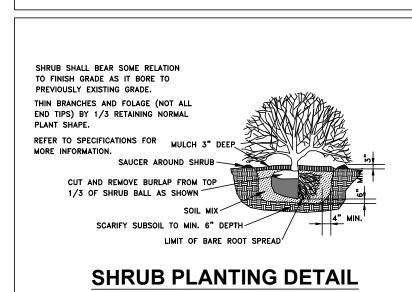
GENERAL NOTES

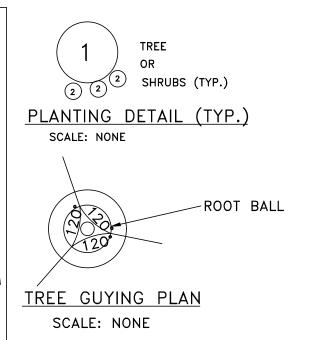
- 1. SHRUBS TO BE PLANTED IN MULCH BEDS.
- 2. IN ALL LOCATIONS WHERE TREE PLANTINGS ARE PROPOSED AND GRAVEL AND/ OR PAVING EXISTS, ADDTIONAL EXCAVATION BELOW BALL (12" MIN.) WILL BE REQUIRED.
- 3. ALL PLANTING TO BE MULCHED WITH 3" OF SHREDDED MULCH.
- 4. ALL PLANT MATERIAL SHALL MEET ANNE ARUNDEL COUNTY STANDARDS.
- 5. ALL PLANT MATERIAL MUST CONFORM TO SIZE REQUIREMENTS AS SHOWN
- 6. ALL TREES AND SHRUBS MUST BE PLANTED IN A HOLE TWO TIMES THE
- WIDTH OF THE ROOT BALL AND 1 1/2 TIMES AS DEEP. 7. ALL TWIN E AND WIRE BASKETS MUST BE REMOVED FROM BALLED AND
- BURLAPPED PLANT MATERIAL. 8. DO NOT PLANT OR ALLOW ROOT BALL TO SETTLE DEEPER THAN IT
- ORIGINALLY GREW.
- 9. THE TOP 1/3 OF ALL BURLAP MUST BE PULLED BACK INTO HOLE AT TIME OF PLANTING.
- 10. AN EARTH SAUCER 2" HIGH MUST BE BUILT AROUND ALL TREES. 11. ALL TREES ARE TO BE MULCHED TO A THICKNESS OF A MINIMUM OF 3".
- 12. ALL TREES ARE TO BE STAKED AS PER PLANTING DIAGRAM I.E. THREE WIRES SET 120° APART.
- 13. ALL WIRES ARE TO RUN THROUGH TWO-PLY RUBBER HOSE TO PROTECT
- 14. ALL STAKES ARE TO BE DRIVEN 3' INTO THE GROUND NEVER INTO THE ROOT BALL.
- 15. ALL STAKING MATERIALS ARE TO BE REMOVED ONE YEAR AFTER

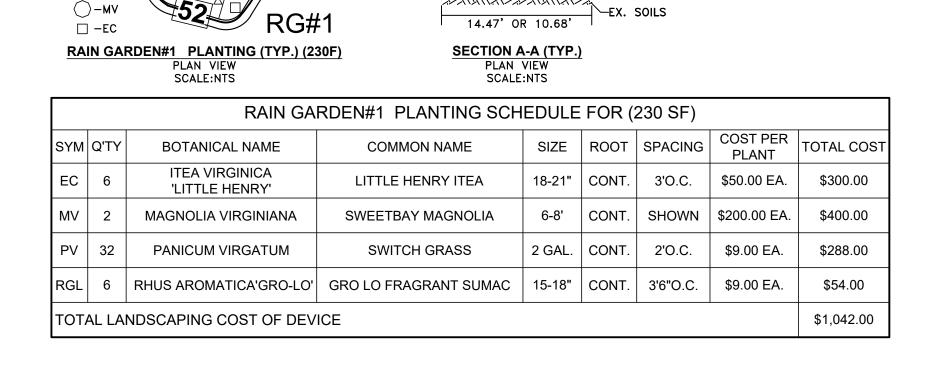
RAINGARDEN NOTES:

- A. 3" MULCH (SHREDDED HARDWOOD) NOTE: AGED SIX MONTHS MINIMUM AREA TO BE EXCAVATED TO 1FT BELOW BOTTOM OF RAIN GARDEN WITH PLANTING SOIL (SAND: 30% TO 60%; SILT: 30% TO 55%; CLAY: 0% TO 25%) NOTE: USDA SOIL TYPES LOAMY SAND, SANDY LOAM OR LOAM.
- B. TOP OF INLETS TO BE 6" ABOVE BOTTOM OF DEVICE









OWNER

DAVID R. ZIMMERMAN

309 CHRISTY ROAD

PASADENA, MD 21122

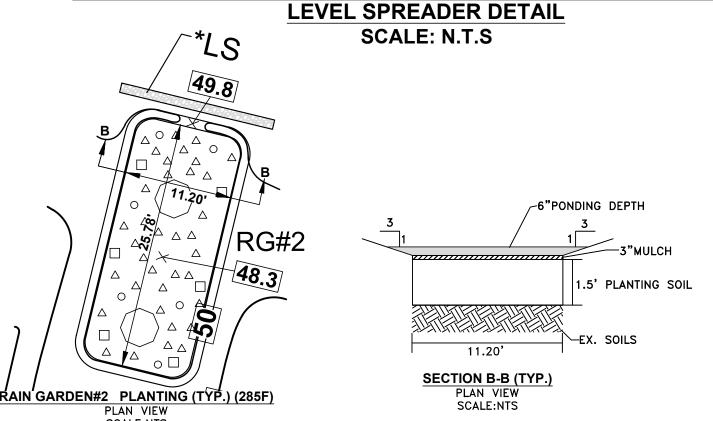
TEL:(443)-618-2738

SWM DIAGRAM

SCALE: 1"=20'

-6"PONDING DEPTH

1.5' PLANTING SOIL



WETLANDS BUFFE

PROP. STONE LEVEL SPREADER (LS

PROP. SWM RAIN GARDENS

(RG#1=230 SF) (RG#2=285 SF)

WITH 6"PONDING AND 1.5FT

PLANTING SOIL DEPTH

(SEE THIS SHEET FOR NOTES+DETAILS)

**RUNOFF TO BE DIRECTED TO DEVICES BY

OVERLAND FLOW AND OR PIPING

**ADDITIONAL WATERPROOFING MAY BE NECESSARY

DUE TO LOCATION OF RAIN GARDEN TO HOUSE

6" SURGE STONE

#57 STONE

EX. GROUND

(SEE DETAIL ON SHEET 6 OF 7)

		5411.04				205.05		
RAIN GARDEN#2 PLANTING SCHEDULE FOR (285 SF)								
SYM	Q'TY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	COST PER PLANT	TOTAL COST
EC	6	ITEA VIRGINICA 'LITTLE HENRY'	LITTLE HENRY ITEA	18-21"	CONT.	3'O.C.	\$50.00 EA.	\$300.00
MV	2	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	6-8'	CONT.	SHOWN	\$200.00 EA.	\$400.00
PV	32	PANICUM VIRGATUM	SWITCH GRASS	2 GAL.	CONT.	2'O.C.	\$9.00 EA.	\$288.00
RGL	6	RHUS AROMATICA'GRO-LO'	GRO LO FRAGRANT SUMAC	15-18"	CONT.	3'6"O.C.	\$9.00 EA.	\$54.00
TOTAL LANDSCAPING COST OF DEVICE								\$1,042.00

G.P. NO. G02019636

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE #, 13354, EXPIRATION DATE: 2/28/25, (CORPORATE LICENSE #48856, EXPIRATION DATE: 2/28/2026)

EMAIL: TERRAIN@COMCAST.NET

EX.25FT STEEP

SLOPE BUFFER

EX. GROUND

53 OLD SOLOMONS ISLAND ROAD, SUITE I ANNAPOLIS, MARYLAND 21401 410-266-1160

SWM NOTES AND DETAILS SHEET GRADING, EROSION AND

SEDIMENT CONTROL PLAN **SELBY GROVE LOT 23 SECTION 2 PLAT 2** PB. 31, PG. 98, PLAT NO. 1673 224 N. DRUM AVENUE

PASADENA, MD 21122 TAX MAP 23, GRID 5, PARCEL 147 TAX ACCT#03-722-90046471 ZONING:R2 SECOND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND

DRAWN BY: D.J.B. DATE: JUNE, 2024 SCALE: AS SHOWN CHECKED BY: R.C.L SHEET:6 OF 7 TERRAIN JOB NO. 3112

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REVISION BLOCK DATE **DESCRIPTION** EMAIL:FANCORAL11@AOL.COM

O -RGL

N 77°04'28" \

MODIFICATION NOTE

THIS DEVELOPMENT IS SUBJECT TO THE APPROVED MODIFICATIONS MODIFICATION #17390 (STEEP SLOPE + BUFFER DISTURBANCE)



2664 Riva Road, P.O. Box 6675 Annapolis, MD 21401

Jenny B. Dempsey Planning and Zoning Officer

April 3, 2024

Roy Little Terrain

53 Old Solomons Island Road, Suite I Annapolis, MD, 21401

Re: Modification #17390 (Steep Slopes) Selby Grove, Lot 23, Section 2 Grading permit # G02019636

Dear Mr. Little:

This letter is in response to your Modification request dated December 21, 2023 regarding Article 17-6-404 – Steep Slopes.

Development/Property Description

The site is zone R2 and is located outside of the Critical Area. The site is partially encumbered by steep slopes and their associated buffers, nontidal wetlands and their associated buffers, and a 100' stream buffer. The site will be served by public water and a private sewage system.

Requested modification

The requested modification is to allow disturbance to the steep slope and its associated 25' buffer.

Discussion

As specified in Article 17-2-108(a) of the County Code, modification requests may be approved if the request satisfies each of the five criteria stated therein. This Office has evaluated the application for compliance with the five criteria listed in Article 17-2-108(a)(1-5) and offers the following:

Modification # 17390 Grading permit # G02019636 April 3, 2024

> 1. Practical difficulties or unnecessary hardship will result from strict application of this article or, for a modification relating to forest conservation, unwarranted hardship will result due to special features of the site or other circumstances.

The applicant argues that strict application of this Article would prohibit development of the site as the majority of the site is "encumbered by slopes, buffers and septic constraints."

2. The purposes of this article, including minimization and mitigation of environmental impacts through the use of clustering or other available design alternatives to preserve the character of the impacted area, will be served by an alternative proposal.

The applicant states "the house has been designed to minimize slope and buffer disturbance. The house design pulls the garage forward to align with the front porch which eliminates slope disturbance." The applicant further argues "the house depth of 40' is not excessive and is critical for interior functions. The original house design considered a 50' depth but was redesigned to reduce the depth by 10'."

. The modification is not detrimental to the public health, safety, or welfare, is not injurious to other properties, or, if the modification relates to forest conservation, does not adversely affect water quality.

The applicant argues the modification is not detrimental to the public health, safety, or welfare, and is not injurious to other properties. The applicant argues the construction is providing a new house on a vacant lot within the "neighborhood characteristics and County standards".

4. The modification does not have the effect of nullifying the intent and purpose of this article, the General Development Plan, or Article 18 of this Code.

The applicant states granting this modification request does not have the effect of nullifying the intent and purpose of the County Code and is consistent with the intent of the General Development Plan "due to infill development".

- 5. The applicant has submitted written verification to the Office of Planning and Zoning that: (i) the requested modification was disclosed and discussed at a community meeting required under this article: or
- (ii) all owners of property located within 300 feet of the affected property were mailed a notice explaining the reason for the modification, along with a copy of the request for modification.

Written verification was received on December 21, 2023 to the Department of Inspections & Permits staff that the requested modification was disclosed and discussed at a community meeting held on November 14, 2023.

Modification # 17390 Grading permit # G02019636 April 3, 2024

Summary/Decision

The above Modification has been evaluated by staff for compliance with the five criteria listed in Article 17-2-108 as being the basis for modification approvals. Inspections & Permits and the Development Division staff have determined that the requests satisfy those criteria and are in keeping with the intent and purpose of Article 17, the General Development Plan and Article 18, and I agree with staff findings. Therefore, the above Modification is hereby approved with the following condition:

1. On-site reforestation equal to the disturbance of steep slope and its associated buffer is required.

The date of the decision, the Modification number and a brief note regarding the decision must be placed on the public plans. Should you have any questions regarding this decision, please contact Jennifer Sullivan at ipsull20@aacounty.org or by phone at 410-222-7499.

Planning and Zoning Officer

Lori Allen, OPZ Allison Valliant, OPZ Judy Motta, I&P Raghavenderrao Badami, I&P Subhash Dhir, I&P Mary Wilkinson, OPZ Rick Fisher, OPZ Jennifer Sullivan, I&P Cindy Riggs, I&P FY24/Modifications

G.P. NO. G02019636 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS

SCALE: AS SHOWN

SHEET:7 OF 7

GRADING, EROSION AND SEDIMENT CONTROL PLAN **SELBY GROVE**

> LOT 23 SECTION 2 PLAT 2 PB. 31, PG. 98, PLAT NO. 1673 224 N. DRUM AVENUE PASADENA, MD 21122

TAX MAP 23, GRID 5, PARCEL 147 TAX ACCT#03-722-90046471 ZONING:R2 SECOND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: D.J.B. DATE: JUNE, 2024

CHECKED BY: R.C.L

TERRAIN JOB NO. 3112

MODIFICATION SHEET

53 OLD SOLOMONS ISLAND ROAD, SUITE I ANNAPOLIS, MARYLAND 21401 410-266-1160 EMAIL: TERRAIN@COMCAST.NET

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CONSENT OF TERRAIN, INC., 2024

REVISION BLOCK DATE **DESCRIPTION** EMAIL:FANCORAL11@AOL.COM

OF THE STATE OF MARYLAND, LICENSE #. 13354, EXPIRATION DATE: 2/28/25. (CORPORATE LICENSE #48856, EXPIRATION DATE: 2/28/2026)

OWNER

DAVID R. ZIMMERMAN

309 CHRISTY ROAD

PASADENA, MD 21122

TEL:(443)-618-2738

OFFICE OF PLANNING AND ZONING

CONFIRMATION OF PRE-FILE MEETING

DATE OF MEETING July 2024

P&Z STAFF Rob Konowal, Lori Allen, Engineering

APPLICANT/REPRESENTATIV	E_Terrain_	EMAIL_	terrain@comcast.net		=
SITE LOCATION 224 Drum A	ve N (2024-0069	9-P)	LOT SIZE 18,786 sf	_ ZONING	R2
CA DESIGNATION n/a	_BMA or BU	JFFER	APPLICATION TYPE_Use of substandard	unimproved le	ot

18-4-202(c) provides that a dwelling may be constructed on a substandard lot that was contiguous to and under the same ownership as one or more unimproved lots on January 1, 1987 if (1) the lot is served by public water and sewer or (2) the lot is merged with the contiguous unimproved lot or lots to create a lot that complies with or comes as close as possible to complying with the minimum area requirements of the zoning district in which the lot is located.

The subject lot is not served by public sewer facilities and was not merged with the lot to the west, which was contiguous to, unimproved, and under the same ownership on January 1, 1987. Therefore, a variance is required.

COMMENTS

Zoning

Variance requested is correct. Site Plan is complete.

Engineering

- 1. Stormwater management will be addressed through two rain gardens.
- 2. A non-tidal stream that is likely a county floodplain is located on this property. Please delineate the drainage area to this system and compute the Q10. If the Q10 is 100 cfs or more, the system is considered a county floodplain based on the County's Manual. If the system is a floodplain, use the simple method in the AACO design manual and compute and delineate the 100-year HGL as the flood boundary.
- 3. All stormwater conveyance systems shall be designed so that no building or habitable structure, either proposed or existing, is flooded or has water impounded against it during the 100-year storm event.
- 4. Per 6.1.4 (G) of the County Stormwater Practices and Procedures manual, SWM facilities shall not be located in areas that are off-limits to development, e.g., natural resource areas and their steep slopes and buffers.

- 5. Please ensure that the rain gardens area is setback/offset from property lines so that if it needs maintenance/reconstruction, easements do not need to be obtained from neighboring properties or impact rights-of-way.
- 6. Ensure the proposed improvement including runoff, seepage, and slope saturation does not adversely impact the integrity of the slope and potential impact of slope failure.
- 7. Based on the plan provided, it appears that the property will be served by a private septic and a public water.
- 8. The above is provided as a courtesy review as information for review and consideration comments at the pre-file.

Cultural Resources

This property is located in a historically active area alongside a tributary of Lake Waterford and has high archaeological potential. In order to complete review of the property under Article 17-6-502, as related to effects on archaeological resources, a site visit by the Cultural Resources Section for any permit applications. Please contact Anastasia Poulos at pzpoul44@aacounty.org to forward plans and to arrange a site visit once the permit application is ready for submission.

INFORMATION FOR THE APPLICANT

Section 18-16-201 (b) Pre-filing meeting required. Before filing an application for a variance, special exception, or to change a zoning district, to change or remove a critical area classification, or for a variance in the critical area or bog protection area, an applicant shall meet with the Office of Planning and Zoning to review a pre-file concept plan or an administrative site plan. For single lot properties, the owner shall prepare a simple site plan as a basis for determining what can be done under the provisions of this Code to avoid the need for a variance.

*** A preliminary plan checklist is required for development impacting environmentally sensitive areas and for all new single-family dwellings. A stormwater management plan that satisfies the requirements of the County Procedures Manual is required for development impacting environmentally sensitive areas OR disturbing 5,000 square feet or more. State mandates require a developer of land provide SWM to control new development runoff from the start of the development process.

Section 18-16-301 (c) Burden of Proof. The applicant has the burden of proof, including the burden of going forward with the production of evidence and the burden of persuasion, on all questions of fact. The burden of persuasion is by a preponderance of the evidence.

A variance to the requirements of the County's Critical Area Program may only be granted if the Administrative Hearing Officer makes affirmative findings that the applicant has addressed all the requirements outlined in Article 18-16-305. Comments made on this form are intended to provide guidance and are not intended to represent support or approval of the variance request.