OF HOWARD COUNTY PLUS MDSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE(5) WORKING DAYS PRIOR TO THE START OF WORK. 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIORI TO ANY EXCAVATION WORK BEING DONE.

4. EXISTING TOPOGRAPHIC CONTOURS BASED ON BOUNDARY & TOPOGRAPHY SURVEY PERFORMED BY DCI ENGINEERS ON 02/23/2022

5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE

IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT. 6. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENT OF ZONING SECTION 134.

7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 42EC.42ED & 42EF WERE USED FOR THIS PROJECT.

42EC- N-545416.990 E-1360140.442 42ED- N-546494.219 E-1358095.141

42EF- N-545623.351 E-1359044.500

8. WATER WILL BE PUBLIC AND A CONNECTION IS PROVIDED TO THE EXISTING PUBLIC MAIN IN CARTERSVILLE ROAD. 9. SEWER WILL BE PUBLIC AND A CONNECTION IS PROVIDED TO THE EXISTING PUBLIC MAIN IN CARTERSVILLE ROAD. 10. EXISTING UTILITIES ARE BASED ON FIELD RUN SURVEY INFORMATION AND HOWARD COUNTY APPROVED CONSTRUCTION DRAWINGS.

11. STORMWATER MANAGEMENT WILL BE PROVIDED ON-SITE BY THE FOLLOWING MEANS:

-WATER QUALITY WILL BE PROVIDED BY A MICRO BIO-RETENTION(M-6), & 8 DRYWELL (M-5) & A PERMEABLE PAVEMENT(A-2). RECHARGE VOLUME IS PROVIDED USING STONE RESERVOIR IN DRYWELLS. CHANNEL PROTECTION VOLUME IS NOT REQUIRED. THE 10-YEAR AND 100-YEAR STORM ATTENUATION IS NOT REQUIRED PER HOWARD COUNTY DUE TO NO DOWNSTREAM EROSION. THE MICRO BIO-RETENTION, DRY WELL & PERMEABLE PAVERS WILL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. 12. NO CEMETERIES OR GRAVE SITES ARE LOCATED ON THE PROPERTY

13. THIS PLAN IS SUBJECT TO THE AMENDED, FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/02/03. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATION

14. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOW, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

15. THE SUBJECT PROPERTY IS ZONED R-12 PER THE OCTOBER 6,2013 COMPREHENSIVE ZONING PLAN. 16. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

WIDTH-12' (16' SERVING MORE THAN ONE RESIDENCE) SURFACE-6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-11/2" MIN)

GEOMETRY- MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS

STRUCTURE (CULVERT/BRIDGES)—CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)

DRAINAGE ELEMENTS -SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE MAINTENANCE -SUFFICIENT TO INSURE ALL WEATHER USE

17. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.

18. ROAD DEDICATION -REFERENCE THE DEDICATION AREA WITH THE FOLLOWING NOTE:

I. LAND DEDICATED TO HOWARD COUNTY, MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.12 ACRES).

ii. LAND DEDICATED TO STATE OF MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.00 ACRES)

19. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE. 20. THERE ARE TWO EXISTING DWELLING/STRUCTURE(S) LOCATED ON LOT TO BE DEMOLISHED. NO NEW BUILDINGS,

EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING(S) ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING 21. LANDSCAPING FOR LOT(S) 1 & 2 WILL BE PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE ARCHITECT

INCLUDED WITH THE FINAL PLAN SET; IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. 22. FOREST CONSERVATION IS NOT REQUIRED SINCE IN ACCORDANCE WITH SECTION 16.1202(b)(1)(vii) OF THE HOWARD

OUNTY SINCE THIS IS A MINOR SUBDIVISIONS THAT CREATE ONE ADDITIONAL LOT AND HAVE NO FURTHER SUBDIVISION POTENTIAL, BASED ON THE EXISTING ZONING.

23. AN IN-PERSON PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON 04/25/2022 AT SAVAGE VOLUNTEER FIRE STATION, 8521 CORRIDOR ROAD, SAVAGE, MARYLAND 20763.

24. THERE IS NO WETLAND PRESENT ON THE SITE. 25. A CONTRIBUTION WILL BE MADE BY THE DEVELOPER TO THE CAPITAL PROJECT 14207 FOR THE ROAD IMPROVEMENTS, IF APPROVED BY DPW.

26. PER SECTION 109.0.E OF THE ZONING REGULATIONS, AT LEAST 10% OF THE DWELLINGS IN A R-12 DEVELOPMENT SHALL BE MODERATE INCOME HOUSING UNIT(MHU).2*10%=0.2 UNITS. A FEE IN LIEU WILL BE PAID. 27.STORMWATER MANAGEMENT PRACTICES ARE REQUIRED IN ACCORDANCE WITH THE DESIGN MANUALS. PRIOR TO THE SIGNATURE NUMBER OF SINGLE DETACHED LOTS FOR THIS PLAN = 2

APPROVAL OF THE FINAL PLAT, THE DEVELOPER WILL BE REQUIRED TO EXECUTE THE DECLARATION OF COVENANT FOR THE CONSTRUCTION & MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES.

VERIZON

COMCAST-FIBER/UTILIQUEST

THE FOLLOWING COMPANIES WERE NOTIFIED BY MISS UTILITY (1-800-282-8555) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED

UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

UTILITY COMPANY PHONE NUMBER BGE ELECTRIC-USIC BGE GAS-USIC COLONIAL PIPELINE HWD CO GOVT HOWARD COUNTY WATER/SEWER COMCAST/UTILIQUEST

ENVIRONMENTAL CONCEPT DESIGN NARRATIVE

(800) 778-9140 IN ACCORDANCE WITH THE SECTION 16.121(A)(2) OF THE HOWARD

(410) 536-0070 | A FEE IN LIEU WILL BE PAID. (410) 536-0070 (410) 393-3553

THE PROPOSED SINGLE-FAMILY HOME DEVELOPMENT IS A 0.781 AC SITE SITUATED AT 7320 OAKLAND

MILLS ROAD, COLUMBIA, MD 21046. THE SITE IS TO BE DIVIDED INTO 2 LOTS WITH NEW SINGLE-FAMILY

MANAGEMENT SYSTEMS OUTFALLING TO THE SAME WESTERN PROPERTY LINE. THE TOTAL PROPOSED

IMPERVIOUS AREA IS REDUCED TO THE MAXIMUM EXTENT PRACTICABLE THROUGH THE USE OF MINIMUM

WIDTH OF DRIVEWAYS.ENVIRONMENTAL SITE DESIGN PRACTICES, SUCH AS MICRO BIO(M-6) &

DRYWELLS(M-5) & PERMEABLE PAVEMENT (A2) HAVE BEEN IMPLÉMENTED TO REDUCE SITÈ RUNOFF

POLLUTION, STORM WATER RUNOFF, AND GROUNDWATER RECHARGE VOLUME, FROSION AND SEDIMENT

CONTROL PRACTICES WILL BE INSTALLED DURING CONSTRUCTION TO REDUCE SEDIMENT RUNOFF ONTO

DOWNSTREAM PROPERTIES THERE ARE NO WETLANDS, WETLAND BUFFERS OR STREAM BUFFERS. THERE ARE

(410) 536-0070 (0.78ACX8%=0.06 AC)

(678) 762-2403 COUNTY SUBMISSION AND LAND DEVELOPMENT REGULATIONS THE OPEN (410) 313-4982 | SPACE REQUIREMENTS FOR THIS R-12 PROJECT IS 8% OF GROSS AREA.

OPEN SPACE TABULATION

CONTROL POINTS NORTHING EASTING HOMES AND ALL EXISTING STRUCTURES SHALL BE REMOVED. A USE IN COMMON DRIVEWAY LOCATED ACCESS EASEMENT CONNECTED TO CARTERSVILLE ROAD WILL SERVE BOTH LOTS. BOTH THE LOTS WILL I 547475.0240 1360214.2740 387.57 SERVED BY PUBLIC SANITARY AND WATER MAINS LOCATED IN CARTERSVILLE ROAD. THE SHC AND WE DCI-2 547410.7410 1360240.2520 388.21 FOR LOT-1 WILL HAVE TO CROSS LOT-2 TO ACCESS THE SEWER MAIN IN CARTERSVILLE ROAD USING OUTILITY EASEMENT.THE NATURAL FLOW PATTERN OF THE EXISTING SITE IS TOWARDS THE WESTER DCI-3 547406.5260 1360155.1360 382.52 PROPERTY LINE. THE PROPOSED FLOW PATTERNS WILL BE MAINTAINED BY THE PROPOSED STORMWATE

REQUIRED PARKING

PROVIDED PARKING

2 SPACES PER UNIT = 4

0.5 SPACES PER UNIT = 1

TOTAL REQUIRED SPACES = 5

SINGLE

DETACHED

SIGNATURE

(PER SECTION 133.D.2. OF THE ZONING REGULATIONS)

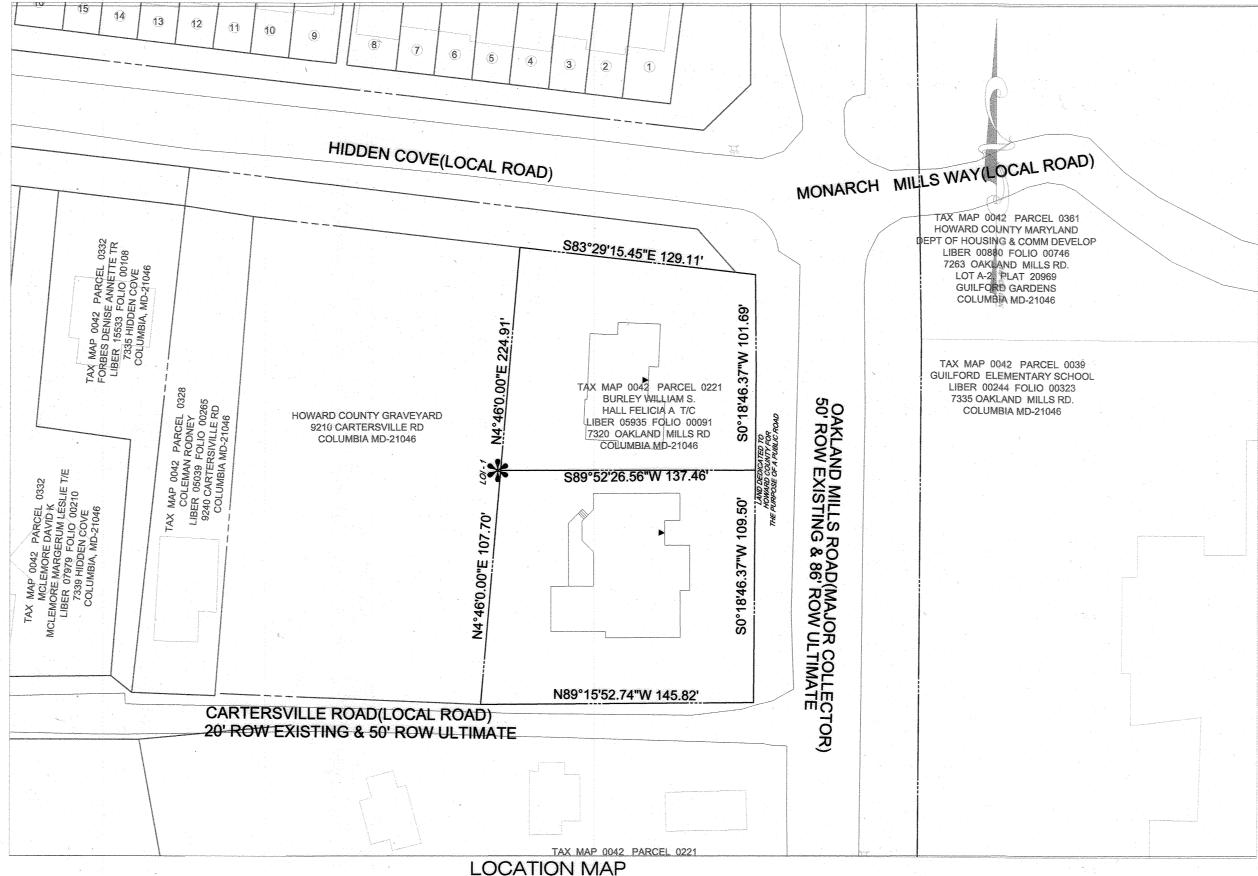
FAMILY 1 & 2 12,000 SF

MINIMUM LOT SIZE CHART

LOT/PARCEL	GROSS AREA	MIN. LOT SIZE
1	13657 SF	12,000 SF
2.	16283 SF	12,000 SF

7320 OAKLAND MILLS ROAD SUBDIVISION ENVIRONMENTAL CONCEPT PLAN

7320 OAKLAND MILLS RD COLUMBIA MD, 21046 HOWARD COUNTY, MARYLAND



SCALE: 1"=50

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA (GROSS) 0.78 AC. AREA OF PLAN SUBMISSION: LOT 1 & 2 0.66 AC. LAND DEDICATED TO COUNTY 0.12 AC. PRESENT ZONING DESIGNATION R - 12TOTAL NO. OF UNITS ALLOWED 2.4 (0.66/0.275) TOTAL NO. OF UNITS PROPOSED 2 BUILDABLE LOTS AREA OF OPEN SPACE REQUIRED 0.06 (8%) AREA OF OPEN SPACE PROVIDED 0.0, FEE IN LIEU MIN. LOT SIZE REQUIRED 12,000 SF MIN. LOT SIZE PROVIDED 13,657 SF AREA OF WETLAND AND BUFFER 0.00 AC. AREA OF 100-YR FLOODPLAIN 0.00 AC AREA OF FOREST 0.28 AC. AREA OF STEEP SLOPES (15% TO 25%) 0.00 AC. AREA OF STEEP (25% OR GREATER) 0.00 AC. HIGHLY ERODIBLE SOILS (K>0.25) 0.00 AC. NET TRACT AREA 0.66 A.C. LIMIT OF DISTURBANCE AREA 0.56 AC. PROPOSED USE SINGLE FAMILY IMPERVIOUS COVER 0.27 A.C. PROPOSED WATER SYSTEM PUBLIC PROPOSED SEWER SYSTEM PUBLIC.

		THE HOLOGIC SOIL GITOU		
	MAP UNIT SYMBOL	MAP UNIT NAME	RATING	RATING
:	UsB	URBAN LAND- SASSAFRAS- BELTSVILLE COMPLEX, 0%-5% SLOPES	D	0.32
	UsD	URBAN LAND- SASSAFRAS- BELTSVILLE COMPLEX, 5% TO 15% SLOPES		0.37

HYDROLOGIC SOIL GROUP

LEGEND

MODERATE INCOME HOUSING UNIT(MIHU)

APPLICATION EXEMPTION TRACKING

TOTAL NUMBER OF MIHU'S REQUIRED NUMBER OF MIHU'S PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS) NUMBER OF APPO ALLOCATIONS REQUIRED (REMAINING LOTS/UNITS) MIHU FEE-IN-LIEU

TOTAL NUMBER OF LOTS/UNITS PROPOSED

(INDICATE LOTS/UNIT NUMBERS)

BUILDING RESTRICTION LINE PROPOSED ASPHALT PAVING

PROPOSED CONCRETE SIDEWALK

EXISTING WATER MAIN W/FIRE HYDRANT PROPOSED WATER MAIN W/ FIRE HYDRANT

PROPOSED BUSH/SHRUBS

- 405 ---- PROPOSED CONTOURS SPOT ELEVATION + 408.44

PROPOSED SAN. SEWER

OHE FX. OVERHEAD LINE STABILIZED CONSTRUCTION ENTRANCE

CHART BY LOT LOT/PARCEL ADDRESS ESD PRACTICE NUMBER LOT-1 7320 OAKLAND MILLS ROAD. 4 DRYWELLS (M-5) COLUMBIA , MD 21046 4 DRYWELLS (M-5) LOT-2 1 PERMEABLE

STORMWATER MANAGEMENT PRACTICE

1 MICRO BIO(M-6) & PAVEMENTS(A-2)

7320 OAKLAND MILLS F

COLUMBIA , MD, 21046

OWNER /DEVELOPER/PETITIONER

BULL DEVELOPMENT LLC 2816 HILLSDALE ROAD BALTIMORE, MD, 21207 ATTN: WINFIELD WILLIS WTWILLIS@MSN.COM PHONE: 410-499-4292

42EF

I FGEND: ADC MAR PAGE 20, GRID F7

DCI-100 TRAVERSE CONTROL

EXISTING TELEPHONE/COMM. MANHOLE

-405 ---- EXISTING GIS CONTOUR

DIRECTION OF THE FLOW - LIMIT OF DISTURBANCE

- SILT FENCE EASEMENT > PERMEABLE PAVERS

THIS PROJECT IS SUBJECTED TO FOLLOWING ALTERNATIVE COMPLIANCE BASED ON FOLLOWING HOWARD COUNTY MUNICODE SECTIONS: 1.SECTION 16.120.c.2.I:WAIVER FOR NOT PROVIDING THE 20 FEET PIPESTEM DUE TO SITE CONSTRAINTS 2.SECTION 16.127.c.4.i: A SHARED USE IN COMMON DRIVEWAY WAS NOT POSSIBLE

DUE TO BUILDING LAYOUTS AND FRONTAGE TO OAKLAND MILLS. 3.SECTION 16.127.c.4.ii: WAIVER IS BEING REQUESTED FOR NOT BEING ABLE TO PROVIDE FRONT YARD SETBACKS AS PER THE CODE.

SHEET INDEX

. TITLE SHEET EXISTING SITE PLAN & DEMOLITION PLAN . ENVIRONMENTAL CONCEPT PLAN

4. PRE CONSTRUCTION DRAINAGE AREA MAP 5. POST CONSTRUCTION DRAINAGE AREA MAP & BMP DRAINAGE AREA MAP

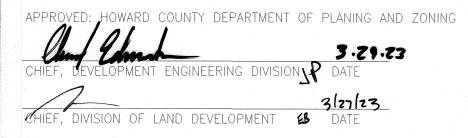
6. STORMWATER DETAILS & PRACTICE TABLE 7. E&S GENERAL NOTES AND DETAIL 8. EXISTING SEDIMENT & CONTROL PLAN

9. PROPOSED SEDIMENT & CONTROL PLAN

TITLE SHEET

7320 Oakland Mills Road Subdivision

7320 OAKLAND MILLS RD COLUMBIA MD, 21046 HOWARD COUNTY, MARYLAND



14,790 SF OF WOODS THAT WILL BE CLEARED

ENGINEERS CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SINGLE FAMILY ATTACHED

PARKING ANALYSIS

(PER SECTION 133.0 OF THE ZONING REGULATIONS FOR VISITOR PARKING)

LOT INFORMATION

LOT TYPE LOTS | MINIMUM LOT MINIMUM LOT WIDTH

MB M6-1

AT FRONT BRL

60'

SWM TABLE

IDTH(FT) LENGTH(FT) OWNER | MAINTENANCE

6 40 | PRIVATE | PRIVATE

AREA 1016 SF | PRIVATE | PRIVATE

11/21/22 DATE

4 SPACES/UNIT (2 GARAGE AND 2 DRIVEWAY SPACES) = 8 SPACES

DEVELOPER'S CERTIFICATE RIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONS

PERMIT INFOMATION CHART ubdivision No: Section/Area Parcel No. 0221 Zoning | Tax Map No. Elect. District | Census Tract 0042 6067.03 Sewer Code 5201800

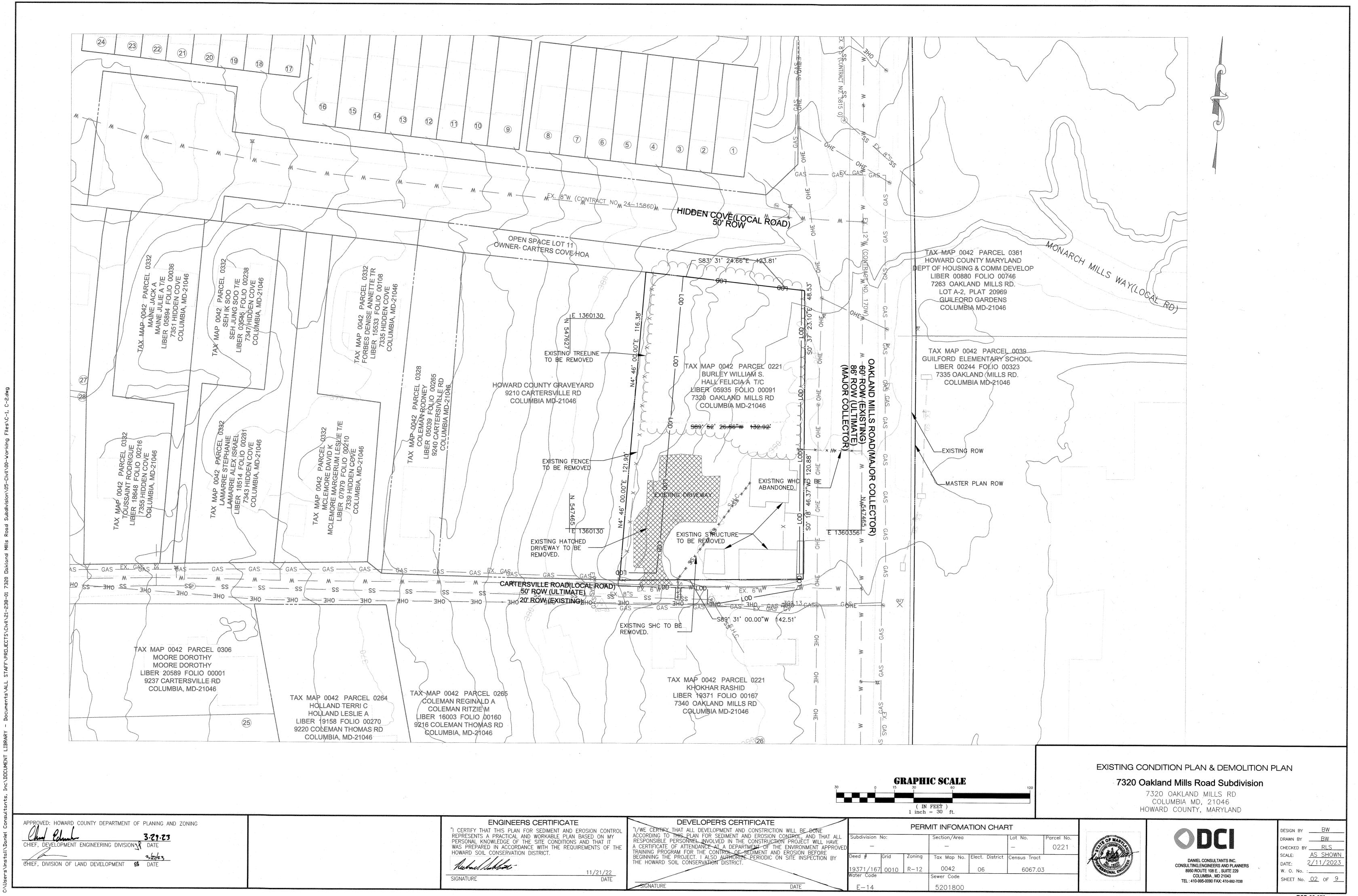
-HOUSES MAY NOT BE BUILT USING THIS PLAN



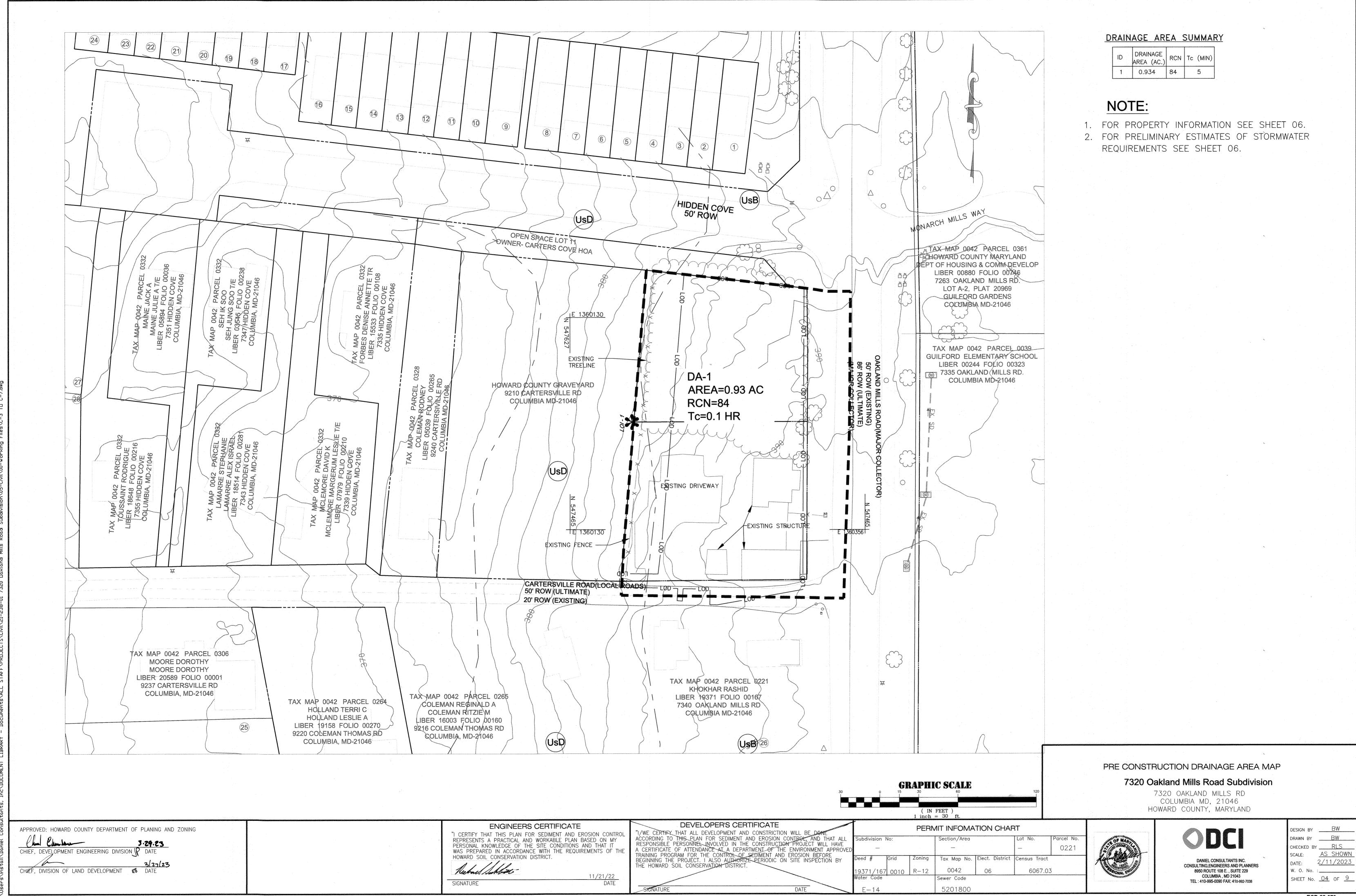
CONSULTING ENGINEERS AND PLANNERS 8950 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043 TEL: 410-995-0090 FAX: 410-992-7038

DESIGN BY BW DRAWN BY ____BW CHECKED BY RLS CALE: AS SHOWN DATE: 2/11/2023 W. O. No. :____ SHEET No. <u>01</u> of <u>9</u>

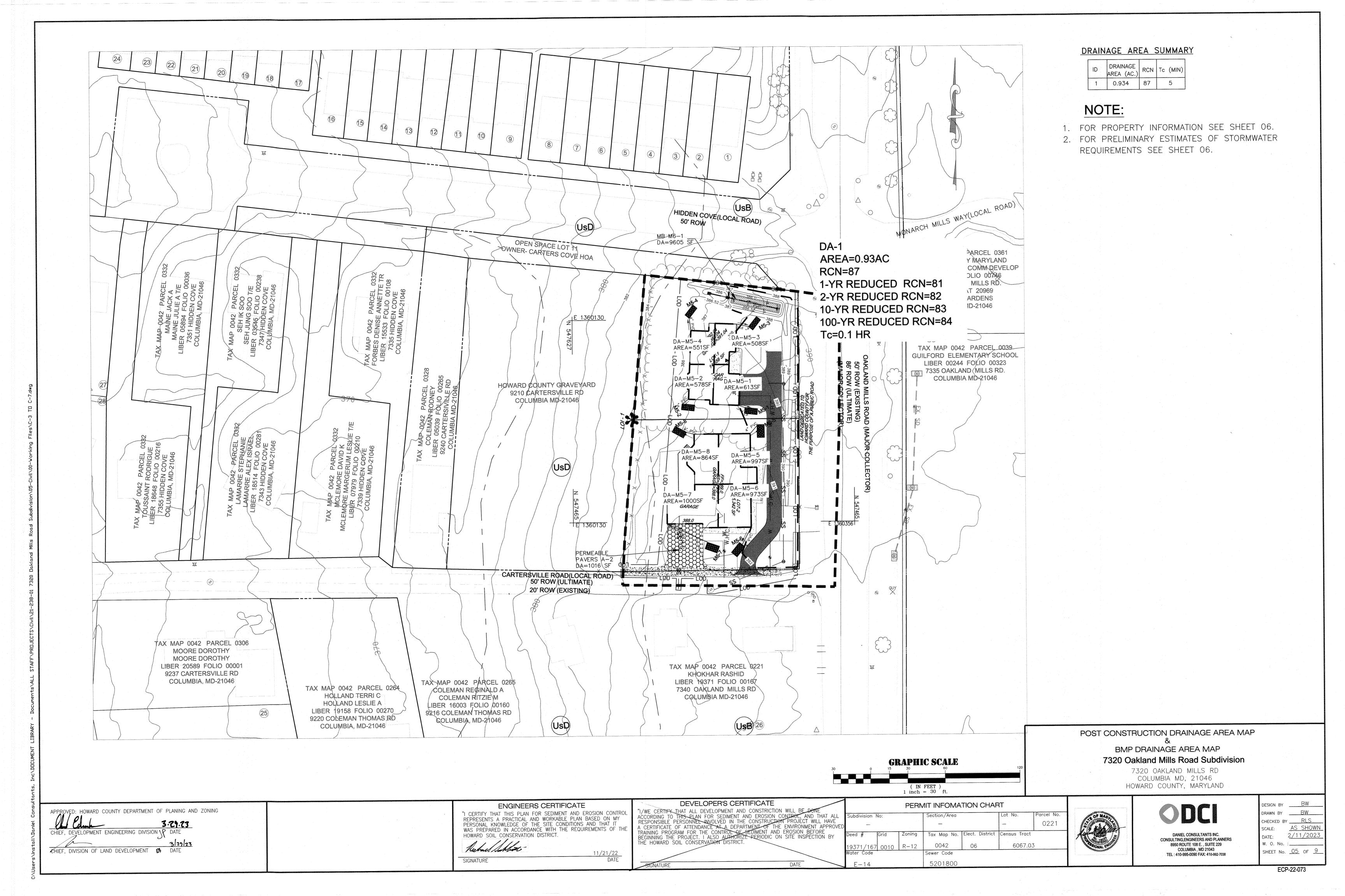
ECP-22-073







ECP-22-073

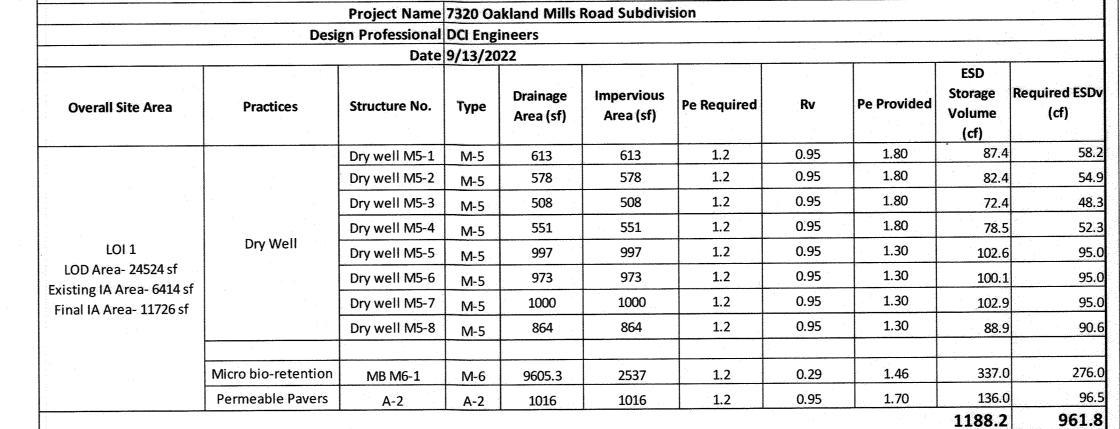


ESDv REQUIRED= (Pe reg*A*Rv)/12 ESDv Provided= Volume of stone*0.4 Pe Provided= ESDv provided*12/(A*RV)

BMP ID	Drainage Area (SF)	Impervious Area (SF)	% IA	Target Pe (IN)	Rv	WQv Required (CF)	HSG	S	Target Rev (cf)	Total Rev Provided (c
Drywell M5-1	613	613	100%	1.2	0.950	48.5	D	0.07	3.4	87.4
Drywell M5-2	578	578	100%	1.2	0.950	45.8	D	0.07	3.2	82.4
Drywell M5-3	508	508	100%	1.2	0.950	40.2	D	0.07	2.8	72.4
Drywell M5-4	551	551	100%	1.2	0.950	43.6	D	0.07	3.1	78.5
Drywell M5-5	997	997	100%	1.2	0.950	78.9	D	0.07	5.5	102.6
Drywell M5-6	973	973	100%	1.2	0.950	77.0	D	0.07	5.4	100.1
Drywell M5-7	1000	1000	100%	1.2	0.950	79.2	D	0.07	5.5	102.9
Drywell M5-8	864	864	100%	1.2	0.950	68.4	D	0.07	4.8	88.9
		.t								715.2

WQv required= (A*Rv)/1	2

NO:	PROPERTY DESCRIPTION	NO:	PROPERTY DESCRIPTION
	CHALLENGER RASHIDA/WESTON SAUNDRA		KENDZ JENNIFER LYNN/CUNNINGHAM FRANCINE H
	SUBDIVISION: 1203 LOT: 1	13	SUBDIVISION: 1203 LOT: 13
1	PLAT NO: 7203	15	PLAT NO: 7203
	ZONING:R-12		ZONING:R-12
	REYES EFRAIN ADALBERTO/REYES DIANA RIVAS T/E		AKAKPO MONTCHO PATRICE/FLORES NANCIE
2	SUBDIVISION: 1203 LOT: 2		ALEXANDRA GARCIA
a. 2	PLAT NO: 7203	14	SUBDIVISION: 1203 LOT: 14
	ZONING:R-12		PLAT NO: 7203
			ZONING:R-12
	TURCIOS MAURICE/ORANTES GRACIELA MARIA		JOHNSON REX C
	LUNA ETAL	15	SUBDIVISION: 1203 LOT: 15
3	SUBDIVISION: 1203 LOT: 3	15	PLAT NO: 7203
	PLAT NO: 7203 ZONING:R-12		ZONING:R-12
			LIALI LAMBENCE E CARRAL MATHERINE ANGELIA L'E
	MORALES MEL		HALL LAWRENCE E/CABRAL KATHERINE AMELIA J/T
4	SUBDIVISION: 1203 LOT: 4	16	SUBDIVISION: 1203 LOT: 16
	PLAT NO: 7203	;	PLAT NO: 7203
	ZONING:R-12		ZONING:R-12
	EMILIEN BETSEY LEILANI		MARIAN ANTHONY A
5	SUBDIVISION: 1203 LOT: 5	17	SUBDIVISION: 1203 LOT: 17
J	PLAT NO: 7203		PLAT NO: 7203
· · · · · · · · · · · · · · · · · · ·	ZONING:R-12		ZONING:R-12
6	NEIRA MARIA/NEIRA JOHN T/E		JEFFERSON BRIAN N
	SUBDIVISION: 1203 LOT: 6	18	SUBDIVISION: 1203 LOT: 18
	PLAT NO: 7203		PLAT NO: 7203 ZONING:R-12
	ZONING:R-12 IDREES MUHAMMAD		MURRILLO GUSTAVO
	SUBDIVISION: 1203 LOT: 7		SUBDIVISION: 1203 LOT: 19
7	PLAT NO: 7203	19	PLAT NO: 7203
	ZONING:R-12		ZONING:R-12
	SHARMA SHAILEY		WHISENTON ANDRE CHRISTOPHER
	SUBDIVISION: 1203 LOT: 8		SUBDIVISION: 1203 LOT: 20
8	PLAT NO: 7203	20	PLAT NO: 7203
	ZONING:R-12		ZONING:R-12
	THOMAS VAUGHN D/THOMAS YVETTE LT/E		KELLY CANDACE
	SUBDIVISION: 1203 LOT: 9	21	SUBDIVISION: 1203 LOT: 21
9	PLAT NO: 7203	21	PLAT NO: 7203
	ZONING:R-12		ZONING:R-12
	SHAKYA MANITA/SHRESTHA SUMAN		IFTIKHAR ADIL/IFTIKHAR AKIFA A
10	SUBDIVISION: 1203 LOT: 10	22	SUBDIVISION: 1203 LOT: 22
10	PLAT NO: 7203		PLAT NO: 7203
	ZONING:R-12	<u> </u>	ZONING:R-12
	CHOURASIA VAIBHAV		MAYNARD KARIM
11	SUBDIVISION: 1203 LOT: 11	23	SUBDIVISION: 1203 LOT: 23
. 44	PLAT NO: 7203		PLAT NO: 7203
	ZONING:R-12	ļ	ZONING:R-12
	FETTING JACOB	-	MCDONOUGH JULIE LYN
12	SUBDIVISION: 1203 LOT: 12	24	SUBDIVISION: 1203 LOT: 24
	PLAT NO: 7203		PLAT NO: 7203
	ZONING:R-12	1	ZONING:R-12



STORMWATER MANAGEMENT PRACTICES

ESDv Required= (Pe req*A*Rv)/12 Pe Provided= ESDv Provided*12/(A*Rv)

Dry Well ESD Volume from table Named Dry well Computations Micro Bio retention ESDv= Surface Volume/0.75

(From MDE process and computations memo, as detailed in SWM report) Permeable Pavers ESDv= 0.134 ESDv/sf

26% (<40%, NEW DEVELOPMENT) EXISTING PERCENT IMPERVIOUS 47.8% PROPOSED PERCENT IMPERVIOUS 0.45 1.2 $(1.2\times0.45\times0.56\times43560)/12=1178.0$ 0.07 $(0.07 \times 0.45 \times 0.56 \times 43560)/12 = 68.7$

0.56

0.15

0.27

SITE IMPERVIOUS AREA MEASUREMENTS & ESDV REQUIREMENTS

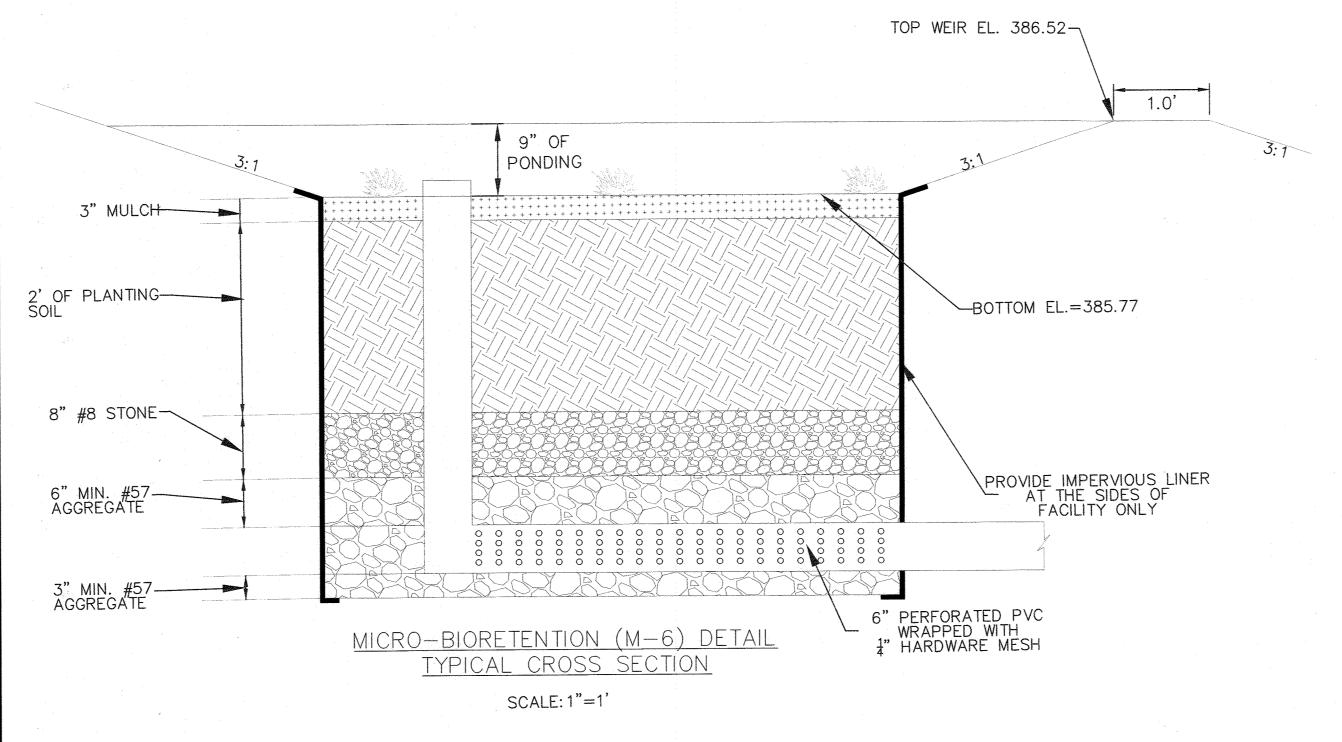
SITE AREA (LOD) (AC.)

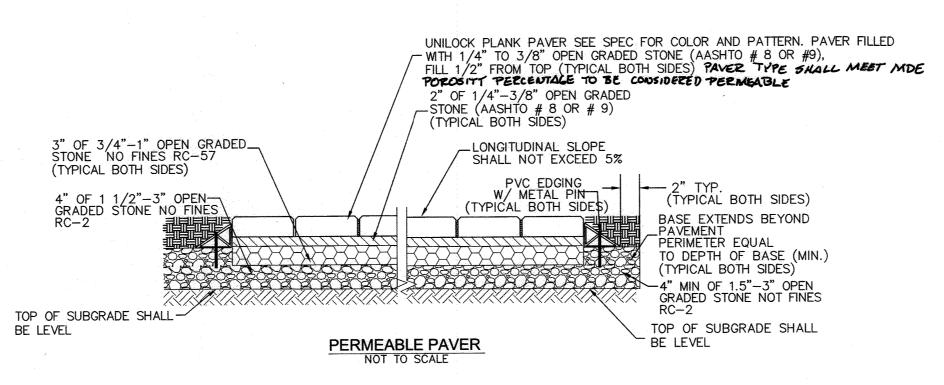
ESDv (CF)

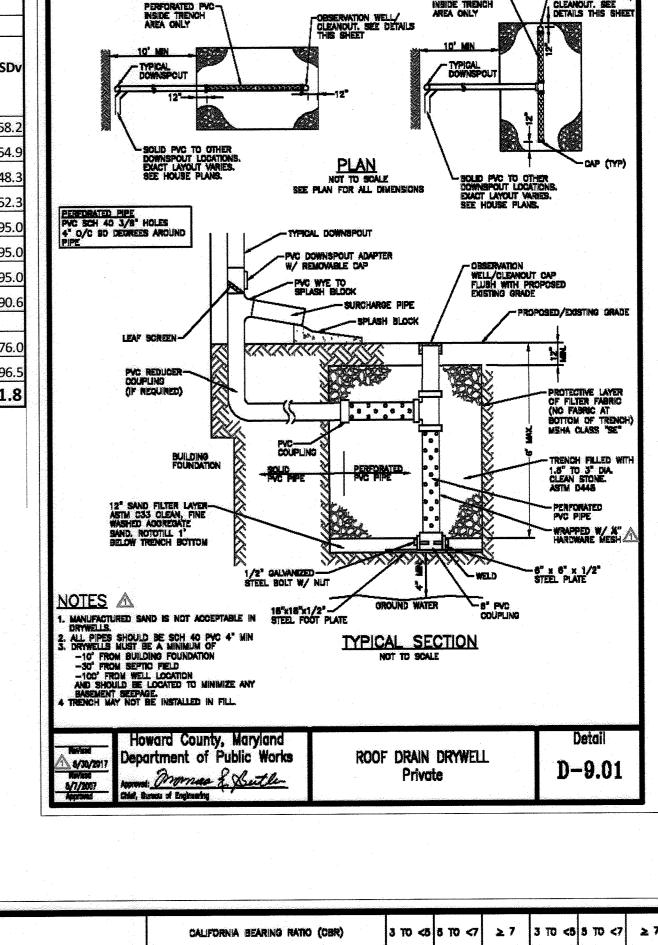
Rev (CF)

EXISTING IMP. AREA W/IN LOD (AC)

PROPOSED IMP. AREA W/IN LOD (AC)







LAYOUT OPTION 1

LAYOUT OPTION 2

SECTION	ROAD AND STREET	CALIFORNIA BEARING RATIO (CBR)	3 10 <5	5 TO <7	≥7	3 TO <5	5 70 <7	≥ 7
NUMBER	CLASSIFICATION	PAVEMENT MATERIAL (INCHES)	MIN. SUP	ERPAVE AS			AVE ABPHI	
	PARKIND BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PO 64-22S, LEVEL 1 (ESAL) SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	1.5 NA	1.5 NA	1,5 NA	1.5 NA	1.5 NA	1.5 NA
P-1	THAN 2 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX BASE	2.0	2.0	2.0	3.8	3.0	2.5
-		19.0 MM, PO 54-22S, LEVEL 1 (ESAL) GRADED AGGREGATE BASE (GAB)	8,5	7.0	5.0	4.0	4.0	4.0
	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS:	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM, PG 84-22S, LEVEL 1 (ESAL) SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	1,5	1.5 1.5	1,5 1,5	1,5	1.5	1.5
P-2	ACESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	9.5 MM, PG 64-22S, LEVEL 1 (ESAL) SUPERPAVE ASPHALT MIX BASE 19.0 MM, PG 84-22S, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	2.0	2.0
		GRADED AGGREDATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0
	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM, PG 64-225, LEVEL 1 (ESAL)	1,5	1,5	1,5	1,5	1,5	1.5
P-3	THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET	SUPERPAVE ASPHALT WIX INTERMEDIATE SURFACE 9.5 MM, PG 84-22S, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1,0	1.0
, ,	CUL-DE-SACS: NON-RESIDENTIAL	SUPERPAVE ASPHALT MIX BASE 19.0 MM, PC 84-225, LEVEL 1 (ESAL)	3.0	3.0 6.0	3.0 3.0	4.5 6.0	3.0 8.0	2.0 8.0
	MINOR COLLECTORS: RESIDENTIAL	GRADED AGGREGATE BASE (GAB)	10.0	0.0	U.U	010	310	410
	MINOR COLLECTORS: NON-RESIDENTIAL MAJOR COLLECTORS	SUPERPAVE ASPHALT MIX FINAL SURFACE 12.5 MM, PO 84-225, LEVEL 2 (LOW ESAL) SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	2.0	2.0	2.0 2.0	2.0 2.0	2.0 2.0	2.0 2.0
P-4		12.5 MM, PG 84-225, LEVEL 2 (LOW ESAL) SUPERPAVE ASPHALT MIX BASE 19.0 MM, PG 84-225, LEVEL 2 (LOW ESAL)	4.0	4.0	3.0	8.0	5.0	3.0
		GRADED AGGREGATE BASE (GAB)	13.0	7.0	4.0	6,0	8.0	8,0
2. SUPERPAV (2.0" MIN. J. GRADED A 4. THE INTER REQUIRED 5. IN LIEU C COUNTY R	UCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING ASPHALT MIX LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED. TO 4.0° MAX.), 12.8 MM SURFACE (1.8° MIN. TO 3.0° MAX.), AND SUBJECT OF MAX. OF M	D LIFT THICKNESS: 19.0 MM BASE 8 MM SURFACE (1.0" MIN. TO 2.0" MAX.) DMPACTED THICKNESS LAYERS. OF PLACEMENT OF BASE COURSE, AND IS N. AL/INDUSTRIAL ENTRANCE APRONS WITHIN THE CNESS OF THE INTERMEDIATE PAVEMENT LAYER		SUPERPA SUPERPA	WE ASPHALI WE ASPHALI WE ASPHALI AGGREGATE	T MIX INTI	ERMEDIATE SE	
O. THE CORE	Howard County, Maryland Department of Public Works	PAVING SECTIONS	e de la la la la la compania de la compania del compania del compania de la compania del compania del compania de la compania de la compania del compania del compania del la compania del	gete este este de este de en este este en este este en este este			Deto	il

SWM DETAILS AND TABLES

7320 Oakland Mills Road Subdivision

7320 OAKLAND MILLS RD COLUMBIA MD, 21046 HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 3.29.23 CHIEF. DIVISION OF LAND DEVELOPMENT 3 DATE

ENGINEERS CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. 11/21/22 DATE SIGNATURE

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRICTION WILL BE DON ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. SIGNATURE

PERMIT INFOMATION CHART 0221 Tax Map No. | Elect. District | Census Tract 0042 6067.03 9371/167 0010 R-12 Sewer Code 5201800



DANIEL CONSULTANTS INC. CONSULTING, ENGINEERS AND PLANNERS 8950 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043 TEL: 410-995-0090 FAX: 410-992-7038

CHECKED BY RLS AS SHOWN SCALE: DATE: W. O. No. :____ SHEET No. 06 OF 9

DESIGN BY BW

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ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION: SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING: SEEDING AND MULCHING: TEMPORARY STABILIZATION: AND PERMANENT STABILIZATION.

EFFECTS ON WATER QUALITY AND QUANTITY STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS. PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH.

VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE. SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ESTABLISHMENT. ADEQUATE VEGETATIVE ESTABLISHMENT INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE

PLANTING SEASON. 1. ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUNDCOVER. 2. IF AN AREA HAS LESS THAN 40 PERCENT GROUNDCOVER, RE STABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER, SEEDBED

PREPARATION. AND SEEDING. 3. IF AN AREA HAS RETWEEN 40 AND 94 PERCENT GROUNDCOVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY SPECIFIED 4. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

ESTABLISHMENT OF VEGETATIVE COVER ON CUT AND FILL SLOPES

TO PROVIDE TIMELY VEGETATIVE COVER ON CUT AND FILL SLOPES AS WORK PROGRESSES.

CONDITIONS WHERE PRACTICE APPLIES ANY CUT OR FILL SLOPE GREATER THAN 15 FEET IN HEIGHT. THIS PRACTICE ALSO APPLIES TO STOCKPILES

A. INCREMENTAL STABILIZATION - CUT SLOPES CUT SLOPES AS THE WORK PROGRESSES.

1. EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL 2. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1):

A. CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF AROUND B. PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE.

PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS NECESSARY. . PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED ARFAS AS NECESSARY

NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION

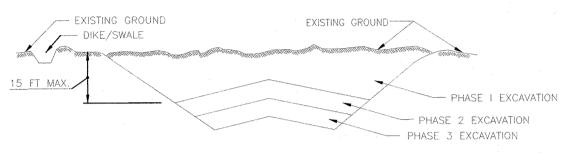


FIGURE B.1: INCREMENTAL STABILIZATION - CUT

B. INCREMENTAL STABILIZATION -- FILL SLOPES 1. CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT, PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES

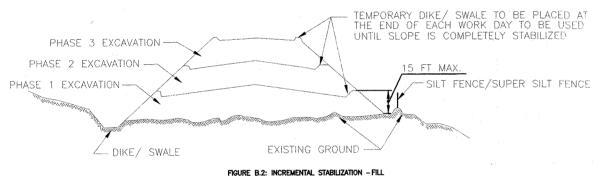
PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE

2. STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING OPERATION CEASES AS PRESCRIBED IN THE PLANS. 3, AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANN 4. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):

CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL CONSTRUCT SILT FENCE ON LOW SIDE AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSME MANNI PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.

PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE, OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSAR

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCI ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.



B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES

WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

A. SOIL PREPARATION 1. 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 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.

2. 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.

B APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. C. 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. D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.

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 B. TOPSOILING

1. 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, 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS, TYPICALLY, THE DEFINITION

DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY 3. 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 FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.

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.

SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS. 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE.

5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA: A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED 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, STICKS, ROOTS,

TRASH, OR OTHER MATERIALS LARGER THAN 11/2 INCHES IN DIAMETER. B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IV C. 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. 6. TOPSOIL APPLICATION A. FROSION 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 DEPRESSIONS OR WATER POCKETS.

A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS 1. 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. 2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE FOLIPMENT, MANUFE 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 3. 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 #100 MESH SIEVE AND 98 TO 100 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 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 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED

AREA NOT UNDER ACTIVE GRADING.

A. SEEDING 1. SPECIFICATIONS

A. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW, ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING

R MILICH ALONE MAY BE APPLIED RETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS. C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE 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 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE D. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS

2. APPLICATION A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR

SITE-SPECIFIC SEEDING SUMMARIES II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.

DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER, APPLY HALF THE SEEDING RATE IN EACH DIRECTION

HYDROSEFDING: APPLY SEED LINIFORMLY WITH HYDROSEFDER (SLURRY INCLUDES SEED AND FERTILIZER). IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED 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. III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL

1. MULCH MATERIALS (IN ORDER OF PREFERENCE) STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE

PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED. WCFM, INCLUDING DYF, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS III. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER

UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND DEFINITION COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE CONDITIONS WHERE PRACTICE APPLIES

APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

OF 4.0 TO 8.5. ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

WHEN STRAW MULCH IS USED. SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED, WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE. C. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD: A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS RUT IS LIMITED TO FLATTER SLOPES WHERE FOLLOWENT CAN OPERATE SAFELY IF LISED ON SLOPING LAND. THIS PRACTICE SHOULD FOLLOW THE CONTOUR.

WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DR WEIGHT OF 750 POUNDS PER ACRE. MIX THE B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. II. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE DEFINITION USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

PURPOSE

IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO

ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG. B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS. PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON

CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), 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 PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION

TEMPORARY SEEDING SUMMARY

		DINESS ZON D MIXTURE	CEDTUIZED DATE	LIME DATE			
NO.	SPECIES	SPECIES APPLICATION SE		SEEDING DEPTHS	FERTILIZER RATE (10-20-20)	LIME RATE	
1	ANUAL RYEGRASS	40	2/15 - 4/30 8/15 - 11/30	0.5	436 LB/ AC (10 LB/1000 SF)	2 TONS/AC (90 LB/1000 SF)	
6	FOXTAIL MILLET	30	5/1 - 8/14	0.5			
7	PEAR MILLET	20	5/1 - 8/14	0.5			

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS CONDITIONS WHERE PRACTICE APPLIES EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

1. GENERAL US SFLECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANEN SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS

WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.

2. TURFGRASS MIXTURES A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL

SIGNATURE

MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEE

CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN LICENSTRUCTION OF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. MIXTURE PER 1000 SQUARE FEET, CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE

> III. 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 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED, IV. 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 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT SEEDING RATE: 1% TO 3 POLINDS PER 1000 SOLIARE FEET.

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" 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

IDEAL TIMES OF SEEDING FOR THRE GRASS MIXTURES WESTERN MD. MARCH 15 TO JUNE 1 ALIGHST 1 TO OCTOBER 1 (HARDINESS ZONES 5B 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B) D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 11/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY

PERMANENT SEEDING SUMMARY

	HARDINESS ZONE (FROM FIGURE B.3): 7a SEED MIXTURE (FROM TABLE B.3): 8, 9, 11					FE	LILLE DATE			
E	NO.	SPECIES	APPLICATION RATE(LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K ₂ 0	LIME RATE	-
	8	TALL FESCUE	100	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30	74-72 114	45 LBS PER ACRE	(2.0 LB/	90 LB/ AC (2.0 LB/	2 TONS/AC (90 LB/	-
	9	HARD FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	40 40 20	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30	/ / /	(1.0 LB/ 1000 SF)	1000 SF)	1000 SF)	1000 SF)	-
	11	CREEPING RED FESCUE CHEWING FESCUE KENTUCKY FESCUE	30 30 20	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30		-	,			- 0

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER). 1. GENERAL SPECIFICATIONS

DRY OR HOT SEASONS, OR ON ADVERSE SITES.

CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR. B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF % INCH, PLUS OR MINUS % INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR HICKNESS MUST EXCLUDE TOP GROWTH AND THATCH, BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED ERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.

SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SLIPVIVAL SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED 12. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE. BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION. 2. SOD INSTALLATION A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING

THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P206 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE. B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS 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.

WHEDDIED DOSSIBLE LAY SOO WITH THE LONG FRICES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS, ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOL TO PREVENT SUPPAGE ON SLOPES ENSURE SOLID CONTACT EXISTS RETWEEN SOL ROOTS AND THE HINDERLYING SOIL SURFACE. D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET, COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS. SOD MAINTENANCE

IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/2 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT

B-4-7 STANDARDS AND SPECIFICATIONS FOR HEAVY USE AREA PROTECTION

THE STABILIZATION OF AREAS FREQUENTLY AND INTENSIVELY USED BY SURFACING WITH SUITABLE MATERIALS (E.G., MULCH AND AGGREGATE). TO PROVIDE A STABLE, NON-ERODING SURFACE FOR AREAS FREQUENTLY USED AND TO IMPROVE THE WATER QUALITY FROM THE RUNOFF OF THESE AREAS. THIS PRACTICE APPLIES TO INTENSIVELY USED AREAS (E.G., EQUIPMENT AND MATERIAL STORAGE, STAGING AREAS, HEAVILY USED TRAVEL LANES) CRITERIA

1. A MINIMUM 4-INCH BASE COURSE OF CRUSHED STONE OR OTHER SUITABLE MATERIALS INCLUDING WOOD CHIPS OVER NON-WOVEN GEOTEXTILE SHOULD BE PROVIDED AS SPECIFIED IN SECTION H-1 MATERIALS. SELECT THE STABILIZING MATERIAL BASED ON THE INTENDED USE, DESIRED MAINTENANCE FREQUENCY, AND RUNOFF CONTROL THE TRANSPORT OF SEDIMENTS, NUTRIENTS, OILS, CHEMICALS, PARTICULATE MATTER ASSOCIATED WITH VEHICULAR TRAFFIC AND EQUIPMENT, AND MATERIAL STORAGE NEEDS TO BE CONSIDERED IN THE SELECTION OF MATERIAL. ADDITIONAL CONTROL MEASURES MAY BE NECESSARY TO CONTROL

SOME OF THESE POTENTIAL POLLUTANTS. 4. SURFACE EROSION CAN BE A PROBLEM ON LARGE HEAVY USE AREAS. IN THESE SITUATIONS, MEASURES TO REDUCE THE FLOW LENGTH OF RUNOFF OR EROSIVE VELOCITIES NEED TO BE CONSIDERED. THE HEAVY USE AREAS MUST BE MAINTAINED IN A CONDITION THAT MINIMIZES EROSION. THIS MAY REQUIRE ADDING SUITABLE MATERIAL, AS SPECIFIED ON

THE APPROVED PLANS, TO MAINTAIN A CLEAN SURFACE

CONDITIONS WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE.

1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL 2. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE, PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.

WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

STANDARD STABILIZATION NOTE
FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN: A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES SWALES DITCHES

PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1): AND B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

DAILY STABILIZATION

THIS NOTE SHOULD BE USED FOR MINIMAL AREAS WITHIN THE LIMITS OF DISTURBANCE THAT DO NOT DRAIN TO A SEDIMENT CONTROL MEASURE AND/OR WHERE THE INSTALLATION OF CONTROLS IS NOT FEASIBLE (ROAD WIDENING, SIDEWALK INSTALLATION, ETC.). THE CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH DAY, STABILIZATION SHALL BE AS FOLLOW: 1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE

2 FOR AREAS TO BE VEGETATIVE STABILIZED: A. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNEL OR SWALES.

B. PERMANENT SOD AND MULCH FOR ALL OTHER AREAS. ANY AREAS WHICH CANNOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWN SLOPE SIDE.

STABILIZED CONSTRUCTION ENTRANCE NOTE

1. MAINTENANCE-THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR OF CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED SPILLED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE IMMEDIATELY REMOVED BY VACUUMING SCRAPING AND/OR SWEEPING. WASHING THE ROADWAY TO REMOVE SEDIMENT TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE. 2. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOURS NOTICE TO CID MUST BI GIVEN AT THE FOLLOWING STAGES:

A.PRIOR TO THE START OF EARTH DISTURBANCE DISTURBANCE OR GRADING.

B.UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH C PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT

D PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN. 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISOINS THERETO

S. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPOPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROL, DIKES, SWALS, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE 4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC

B-4-4) AND MULCHING (SEC. B-4-3), TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATE FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6). 5. ALL SEDIMENT CONTROL STRUCUTRES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNITL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID. 6. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTRIBUTED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF

, additional sediment control must be provided, if deemed necessary by the cid. The site and LL controls shall be inspected by the CONTRACTOR WEEKLY: AND THE NEXT DAY AFTER EACH RAIN EVENT, A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:

- INSPECTION DATE - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) - NAME AND TITLE OF INSPECTOR

- WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION - BRIEF DESCRIPTION OF PROJECTS STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES - EVIDENCE OF SEDIMENT DISCHARGES - IDENTIFICATION OF PLAN DEFICIENCIES

- IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS

- OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES. MDE). 8. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHIICHEVER IS SHORTER. 9. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES. O.DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LOD. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT

PPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A 11. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.

(MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT T TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT HAS BEEN STABILIZED AND

13.ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION. 14.STREAM CHANNELS MUST NOT BE DISTRIBUTED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE): -USE I AND IP MARCH 1 - JUNE 15

-USE IV MARCH 1 - MAY 31 15.A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE

SITE AREA =0.78 AC OR 33979 SOFT DISTURBED AREA=0.56 AC OR 24524 SQ.FT TOTAL FILL=200 C NOTE: ALL CUT/FILL AS SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY AS REQUIRED BY THE MUNICIPAL SEDIMENT CONTROL AUTHORITIES INVOLVED THE CONTRACTORS SHALL VERIFY ALL SUCH CALCULATIONS TO THEIR OWN SATISFACTION FOR BID CONTRACTOR PURPOSES.

-USE III AND IIIP OCTOBER 1 - APRIL 30

- MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED

COLUMBIA, MD 21046 HOWARD COUNTY RICHARD L SOBBOTT DANIEL CONSULTANTS INC. 8950 ROUTE 108 E. SUITE 229 COLUMBIA, MD 21045

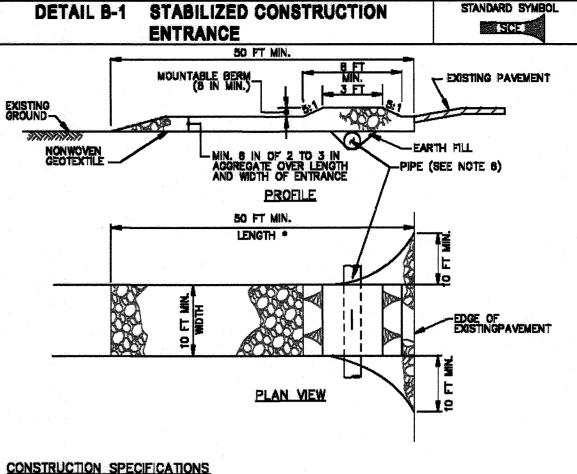
CONTACT: RICHARD SOBBOTT

7320 OAKLAND MILLS ROAD

SITE ADDRESS

MAINTENANCE NOTE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE PROJECT, REPAIR AND MAINTAIN EXISTING SEDIMENT CONTROL DEVICES LINTIL ALL AREAS WITHIN LIMITS OF CONSTRUCTION ARE STABILIZED, ALL SEDIMENT CONTROL MEASURES REFERRED TO THESE PLANS SHALL BE IN ACCORDANCE WITH THE PUBLICATION ENTITLED "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

BULL DEVELOPMENT LLC 2816 HILLSDALF ROAD BALTIMORE, MD 21207 ATTN: WINFIELD WILLIS EMAIL ID: WTWILLIS@MSN.COM PHONE NO: 410-499-4292



 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 NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT

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

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.

REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

B.2

DETAIL E-1 SILT FENCE ----SF------CENTER TO CENTER __36 IN MIN. FENCE POST LENGTH DRIVEN WIN. 16 IN INTO GROUND 18 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILE **ELEVATION** CROSS SECTION JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW) MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE
NATURAL REPOURCES CONSERVATION SERVICE

E&S GENERAL NOTES AND DETAILS

7320 Oakland Mills Road Subdivision 7320 OAKLAND MILLS RD

COLUMBIA MD, 21046 HOWARD COUNTY, MARYLAND

DANIEL CONSULTANTS INC. CONSULTING ENGINEERS AND PLANNERS 8950 ROUTE 108 E. . SUITE 229 COLUMBIA MD 21043 TEL: 410-995-0090 FAX: 410-992-703

2/11/2023 DATE: W. O. No. SHEET No. <u>07</u> OF <u>9</u>

___BW

AS SHOWN

ECP-22-073

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING 3.29.23 DEVELOPMENT ENGINEERING DIVISION O DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 🐯 DATE

ENGINEERS CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF TH HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRICTION WILL BE DON'S ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL SIGNATURE

RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Section/Area 0221 Tax Map No. | Elect. District ICensus Tract 0042 6067.03 R-12 9371/167 0010 Sewer Code 5201800

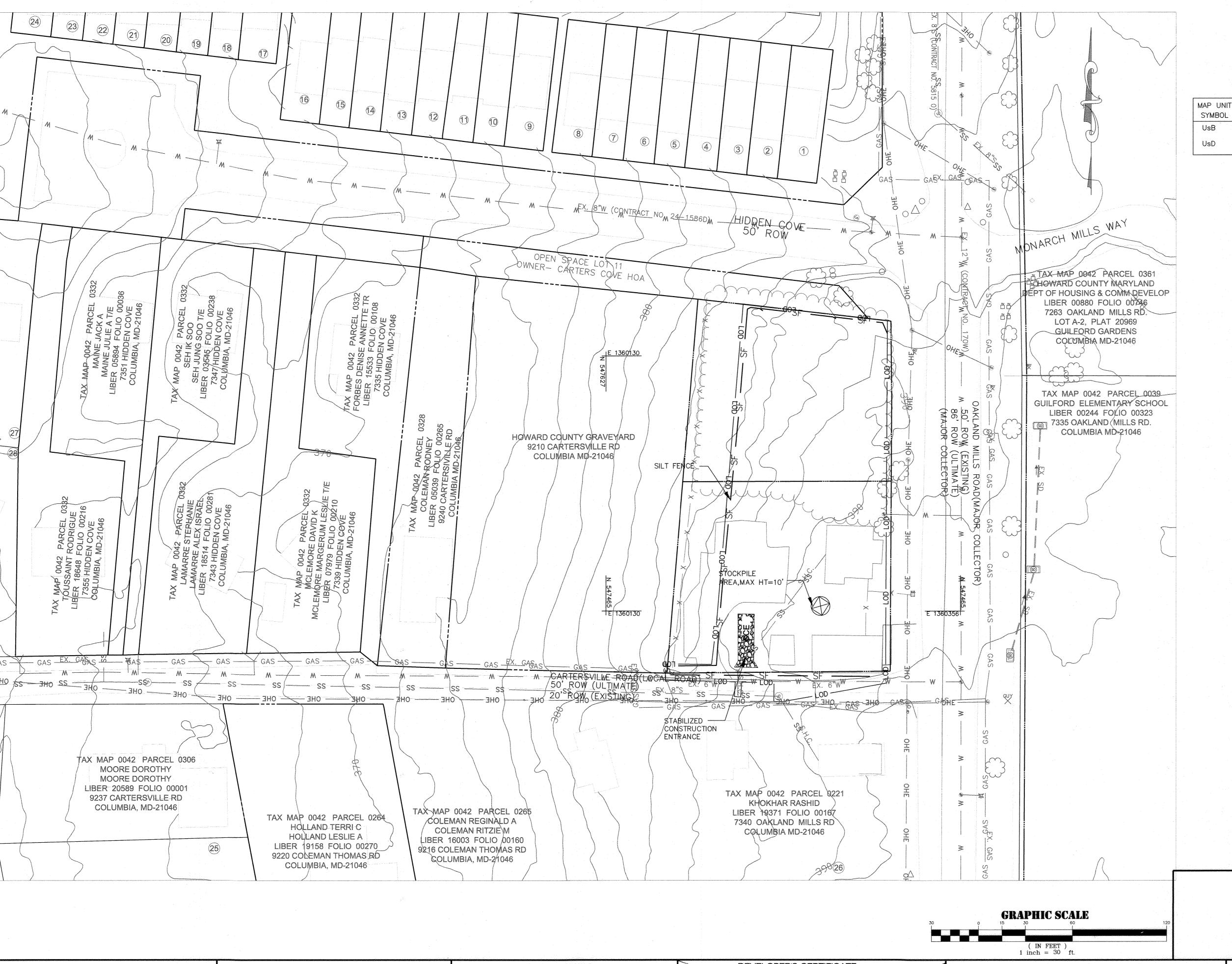
PERMIT INFOMATION CHART

DESIGN BY BW

DRAWN BY

SCALE:

CHECKED BY



NOTE:

1. FOR PROPERTY INFORMATION SEE SHEET 06.

HYDROLOGIC SOIL GROUP

MAP UNIT SYMBOL	MAP UNIT NAME	RATING	RATING
UsB	URBAN LAND- SASSAFRAS- BELTSVILLE COMPLEX, 0%-5% SLOPES	D	0.32
UsD	URBAN LAND- SASSAFRAS- BELTSVILLE COMPLEX, 5% TO 15% SLOPES	D	0.37

EXISTING SEDIMENT AND CONTROL PLAN

7320 Oakland Mills Road Subdivision

7320 OAKLAND MILLS RD COLUMBIA MD, 21046 HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANING AND ZONING 3.29.23 DEVELOPMENT ENGINEERING DIVISION DATE CHIEF, DIVISION OF LAND DEVELOPMENT (8 DATE

ENGINEERS CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. Reback Sakbot

SIGNATURE

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRICTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE RERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE

	PERMIT INFOMATION CHART								
L	Subdivision No	D:		Section/Area		Lot No.	Parcel No.		
VED	_					_	0221		
	Deed # G	rid	Zoning	Tax Map No.	Elect. District	Census Tract			
	19371/167	0010	R-12	0042	06	6067.03	,		
	Water Code			Sewer Code					
	E-14			5201800					

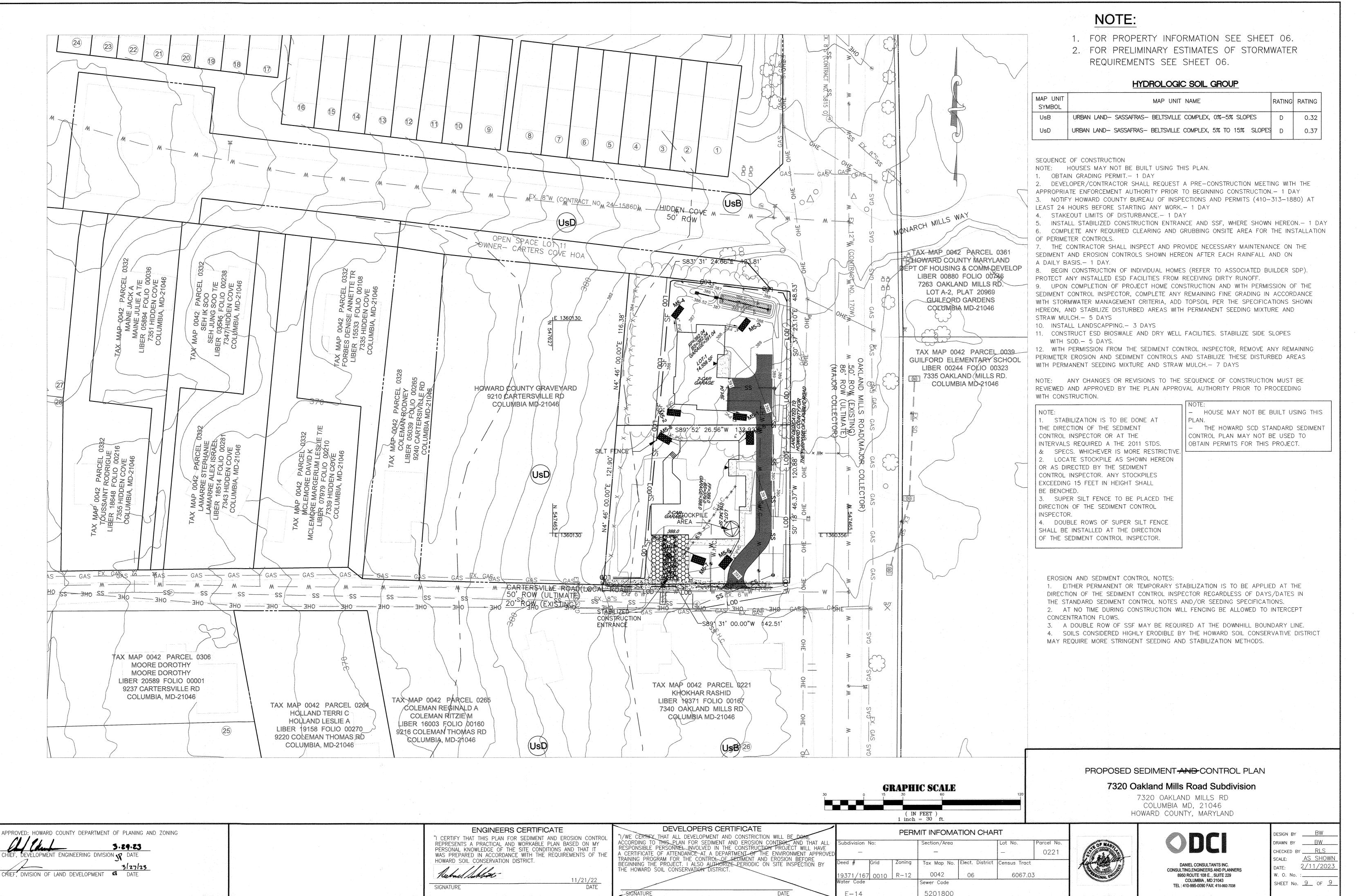


DANIEL CONSULTANTS INC. CONSULTING, ENGINEERS AND PLANNERS 8950 ROUTE 108 E., SUITE 229 COLUMBIA, MD 21043

TEL: 410-995-0090 FAX: 410-992-7038

DESIGN BY BW DRAWN BY BW CHECKED BY RLS AS SHOWN SCALE: 2/11/2023 DATE: W. O. No. :____ SHEET No. 8 OF 9

ECP-22-073



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Secretary of the second of the