

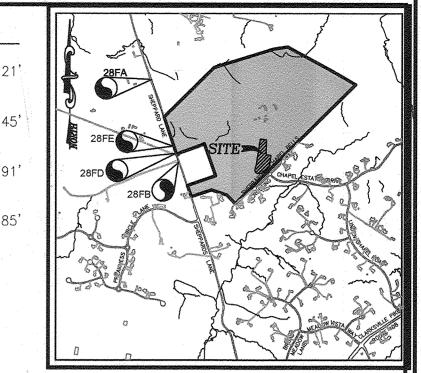
SUPPLEMENTAL PLAN **CUNNINGHAM PROPERTY** 4979 SHEPPARD LANE

BENCHMARKS

HOWARD COUNTY BENCHMARK 28FA N 572,456.68 E 1,328,957.64 ELEV.: 348.21 HOWARD COUNTY MONUMENT HOWARD COUNTY BENCHMARK 28FB N 570,710.84 E 1,329,524.63 ELEV.: 385.45'

HOWARD COUNTY MONUMENT HOWARD COUNTY BENCHMARK 28FD N 570,895.88 E 1,329,461.33 ELEV.: 381.91 HOWARD COUNTY MONUMENT

HOWARD COUNTY BENCHMARK 28FE N 571,047.81 E 1,329,404.44 ELEV.: 380.85 HOWARD COUNTY MONUMENT



VICINITY MAP SCALE: 1"=2000 ADC MAP COORDINATES: 25-D5

SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 7
LAYOUT AND LANDSCAPE PLAN	2 OF 7
SITE PROFILES AND DETAILS	3 OF 7
INITIAL STAGE - GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN	4 OF 7
FINAL STAGE - GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN	5 OF 7
GRADING, SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	6 OF 7
ESDV DRAINAGE AREA MAP AND STORMWATER MANAGEMENT DETAILS	7 OF 7

SWM F	PRACTICE CHART - FU	JTURE PR	IVATE LOTS	
Parising a constraint of the c	ESD PRACTICE	S BY LOT		······································
LOT #	ESD PRACTICE		ADDRESS	
#4	RAIN GARDENS (M-7)	:	11912 CARITAS WAY	
#5	RAIN GARDEN (M-7)		11908 CARITAS WAY	
#6	RAIN GARDEN (M-7)	3	11904 CARITAS WAY	

LEGEND PROPOSED CONTOUR EXISTING CURB AND GUTTER PROPOSED CURB AND GUTTER EXISTING EXISTING PRIVATE WELL WELL BOX EXISTING TREE PROPERTY LINE

N 571550

N 569700

PURPOSE NOTE:

(HO-10-003-E)

Telephone (410) 832-2480 Fax (410) 832-2488

THE PURPOSE OF THIS SUPPLEMENTAL PLAN IS FOR THE

EXCHANGE OF ALPP ENCUMBERED LAND PER SECTION 15.513

OF THE CODE. CUNNINGHAM PROPERTY LOTS 4-6 WILL BE

MD DNR Qualified Professional

USACOE Wetland Delineator

Certification # WDCP93MD0610044B2

OWNER/DEVELOPER:

11140 HOMEWOOD ROAD

ELLICOTT CITY, MD 21042

PHONE: 443-677-4612

GRATIA PLENA, LLC.

EXCHANGED FOR THE ENCUMBERING AND MERGING OF

SHEPPARD HILLS LOTS 1-3 INTO ALPP PARCEL 25

MANOR III

Eco-Science

NOTE *WITHIN LIMITS OF DEVELOPMENT AREA FOR THIS PROJECT ONLY

Professionals, Inc.

Consulting Ecologists

P.O. Box 5006 Glen Arm, Maryland 21057

WATERSHED NUMBER: 2131106

WATERSHED NAME: MIDDLE PATUXENT RIVER SUB-BASIN NUMBER: 02-13-11

100 YEAR PLOODPLAIN

EX. 50' BGE EASEMENT L. 296 / F. 1 mmm PROPOSED TREELINE FINAL DEVELOPMENT AREA/ STAGE 1 LIMIT OF DISTURBANCE PROPOSED HOUSE SEWAGE DISPOPSAL AREA PROPOSED PRIVATE WELL

PROPOSED 100 YEAR DFIRM FLOODPLAIN

LIMIT OF EXISTING WETLANDS

INDIVIDUAL LOT IMPROVEMENTS INCLUDING HOUSES, PRIVATE DRIVEWAYS LEAD WALKS AND PRIVATE, ON-LOT SEWERAGE AND SWM FACILITIES MAY NOT BE CONSTRUCTED UNDER THIS SUPPLEMENTAL PLAN, A SEPARATE GRADING PLAN AND BUILDING PERMIT MUST BE OBTAINED BEFORE ON LOT CONSTRUCTION MAY BEGIN.

5	REVISE THE PLAN TO CHANGE THE HOUSE TYPE, GRADING AND SWM ON LOT S	8-30-23
4	REVISE THE PLAN TO CHANGE THE HOUSE TYPE AND GRAPING ON LOT 6	3-23-23
3	REVISE THE PLANTO CHANGE THE HOUSE TYPE AND GRADING ON LOT 4	12-19-22
2_	REVISE THE PLAN TO CHANGE THE HOUSE TYPE, GRADING AND SWM ON LOT G	11-1-22
1	REVISE THE PLAN TO CHANGE THE HOUSE TYPE AND GRADING ON LOT 4	15
NO.	REVISION	DATE

SUPPLEMENTAL PLAN

COVER SHEET

CUNNINGHAM PROPERTY ALPP EXCHANGE LOTS 4-6 AND CONSOLIDATION OF SHEPPARD HILL, LOTS 1-3 AND T.M. 29 P. 25

L.15767/F.426 **ELECTION DISTRICT 5** TAX MAP: 29 GRID:13 PARCEL:25

ZONED: RC-DEO-RURAL CONSERVATION HOWARD COUNTY, MARYLAND

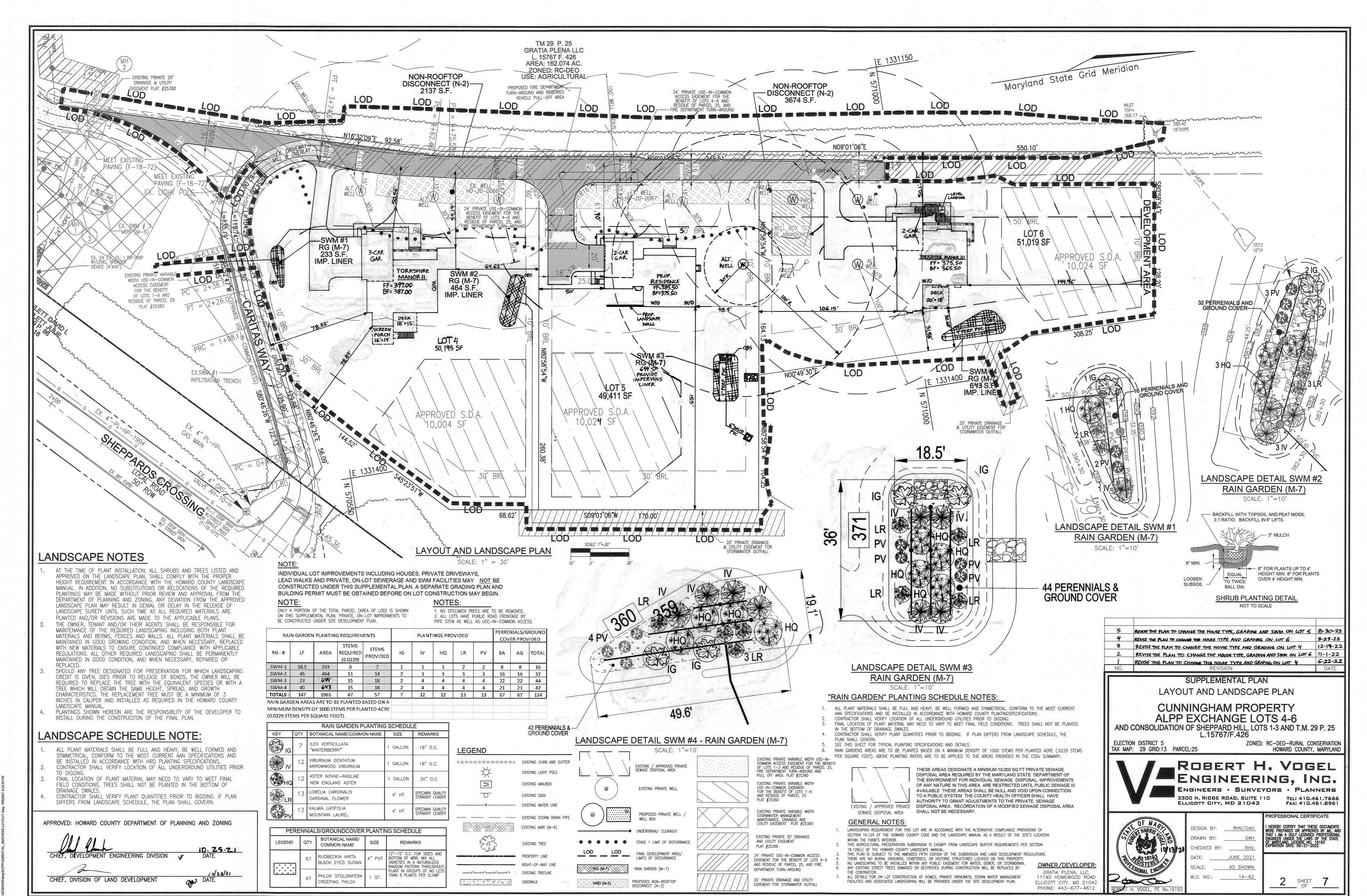


NGINEERING, INC. ENGINEERS · SURVEYORS · PLANNERS 3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666 ELLICOTT CITY, MD 21043

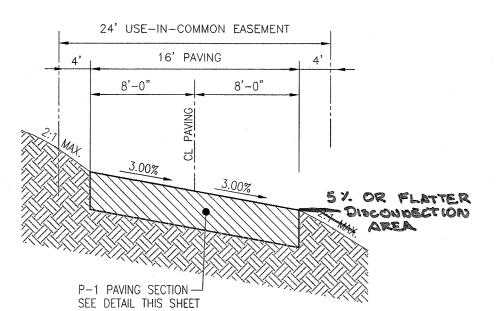


DESIGN BY: DRAWN BY: RHV JUNE 2021 SCALE: AS SHOWN 14-62 W.O. NO.:

SHEET

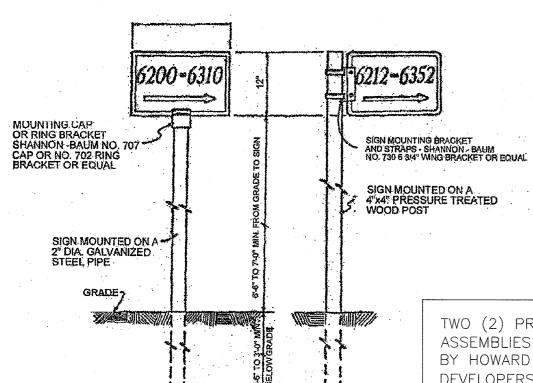


F-19-040



TYPICAL SECTION FOR **USE-IN-COMMON DRIVEWAY** STATION 3+88.19 - 8+18.20

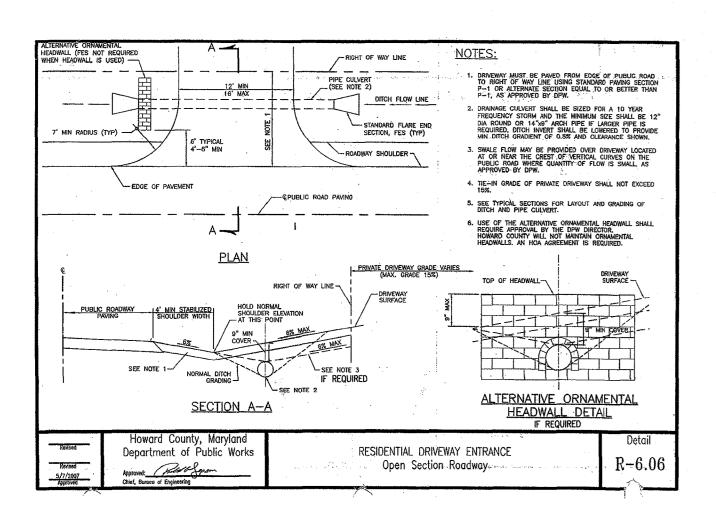
* Road DRAIDS TO DISCONNECTION AREA

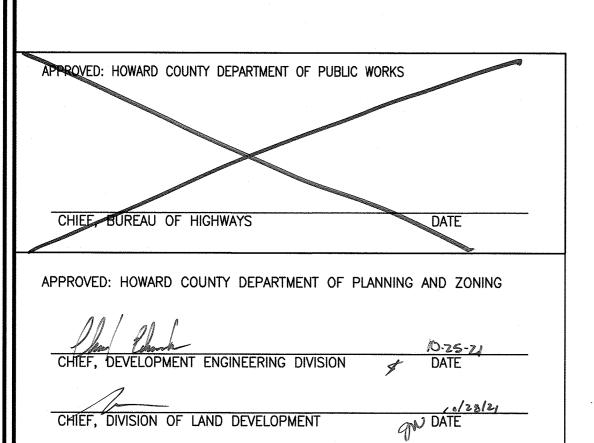


TWO (2) PRIVATE RANGE OF ADDRESS SIGN ASSEMBLIES SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.

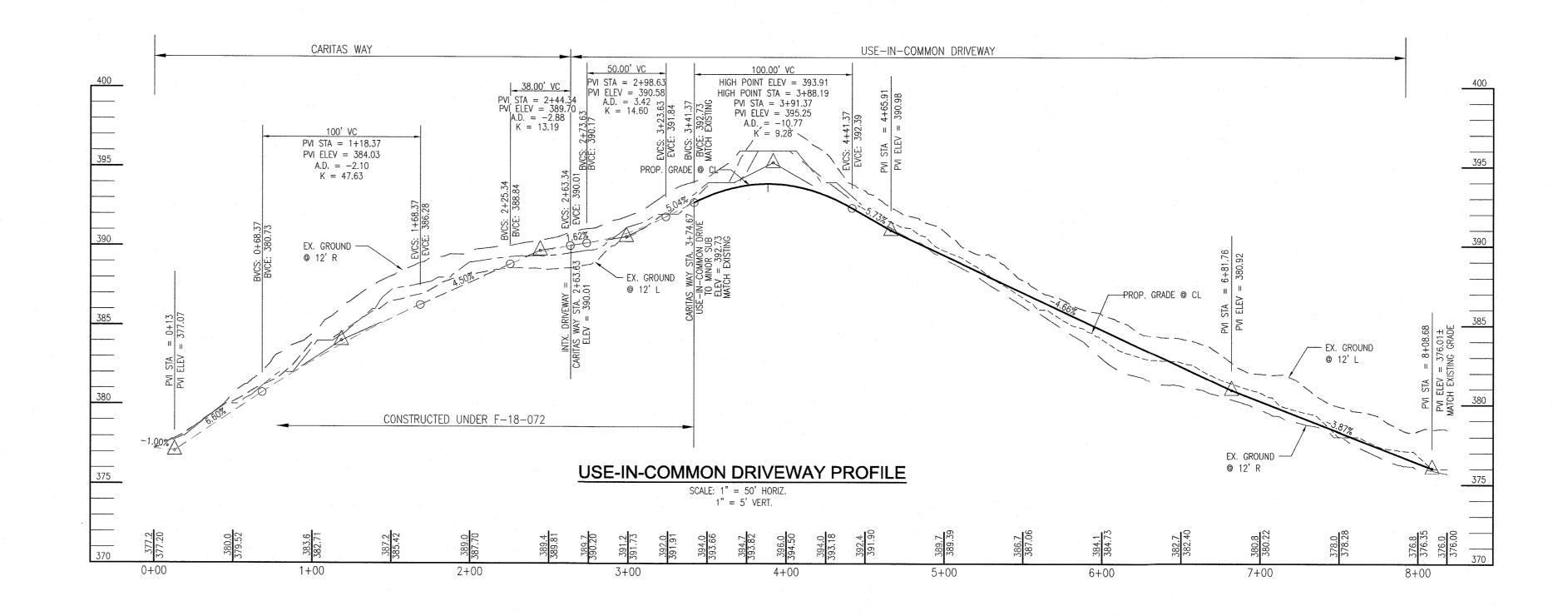
SIGN DESIGN AND INSTALLATION DETAIL NO SCORE

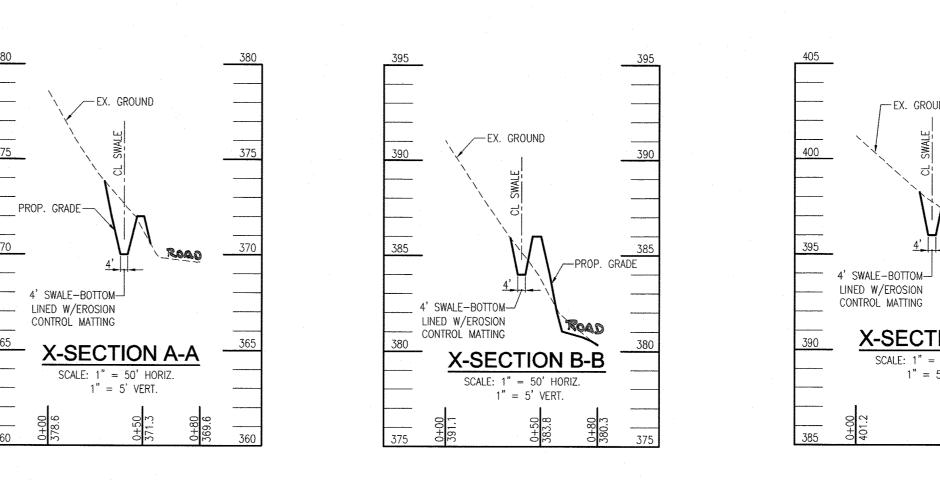
SIGN OPTION NUMBER 1 AND NUMBER 2





			7			, , , , , , , , , , , , , , , , , , , ,	,	
SECTION	ROAD AND STREET	CALIFORNIA BEARING RATIO (CBR)	3 TO <5	5 10 <7	≥7	3 TO <5	5 10 <7	≥ 7
NUMBER	CLASSIFICATION	PAVEMENT MATERIAL (INCHES)	MIN HMA WITH GAB		HMA WITH CONSTANT GAB			
	Parking Bays: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES:	HMA SUPENPAVE FINAL SURFACE 9.5 MM PG 64-22, LEVEL 1 (ESAL)	1.5	1,5	1.5	1.5	1.5	1.5
P-1	RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE INTERMEDIATE SURFACE (NA)	NA.	NA	NA.	NA.	NA	NA.
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	3.0	2.5
		GRADED AGGREGATE BASE (GAB)	8.5	7,0	5.0	4.0	4.0	4.0
	PARKING DRIVE ASSLES: RESIDENT AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS 1 CH.	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	15	-1.0	1.5	1.5	1.5
P-2	LOCAL ROADS: ACESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SUPERAGE	1.0	1.0	1.0	1.0	1.0	1.0
r-z	CUL-DE-SACS: RESIDENTIAL	HMA SUI DRAWE PASE 19.0 MM, PG 84-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	8.0	4,0	-10	4.0	4.0	4.0
	PARKING DRIVE AISLES: RESIDENTIAL WITH NO MORE	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5		1,5	1.5	1,5
P-3	THAN 10 HEAVY TRUCKS PER- LOCAL ROADS: ACCESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SUBERAL	1.0	1.0	1.0	1.0	1.0	.1.0
, 0	CUL-DE-SACS: NON-RESIDENTIAL	19.0 MM, PG 64-22, LEVEL 1 (ESAL)	3.0	3.0	3.0	4.5	3.0	2.0
	MINOR COLLECTIONS	GRADED AGGREGATE BASE (GAB)	10.0	0.0	- 30	8.0	6.0	6.0
	MINOR COLLECTORS:	HMA SUPERPAVE FINAL SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0		2.0	2.0	2.0
P-4	MAJOR COLLECTORS	HMA SUPERPAYE INTERMEDIATE SURFACE 12.5 MM, PG 84-32 MML Z (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0
P-4		19.0 MM, PG 84-22, LEVEL 2 (CON-1944)	4.0	4.0	3.0	6.0	5.0	3.0
		GRADED AGGREGATE BASE (GAB)	13.0	7.0	40	6.0	6.0	6.0
2) HMA SUPER 12.5 MM SURF 3) GRADED AG 4) THE INTERPRIOR TO SUE 5) IN LIEU OF COUNTY RIGHT ADDED TO THE	CKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLIDING, RPAVE LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICK FACE (1.5" MIN TO 3.0" MAX), AND 9.5 MM SURFACE (1.0" MIN TO 2.0 GOREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX COMMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF STRATTIAL COMPLETION INSPECTION AND BOND REDUCTION. PLACING THE INTERNEDIATE SURFACE COURSE LAYER FOR COMMERCIAL INFORMATION OF THE OFFICE OFFICE COMPACTION OF THE OFFICE COMPACTION OF THE OFFICE COMMERCIAL INFORMATION OF THE OFFICE AUXILIARY LANGS ARE NOT REQUIRED, THE THICKNESS FOR THE BASE ASPHALT LAYER. RECURION DRAWINGS SHALL SHOW THE PAYING SECTION, ROAD CLASSIFICE.	IXNESS: 19.0 MM BASE (2.0" MIN TO 4.0" MAX), "MAX)" MAX) PACTED THICKNESS LAYERS. PLACEMENT OF BASE COURSE, AND IS REQUIRED INDUSTRIAL ENTRANCE APRONS WITHIN THE OF THE INTERMEDIATE PAVEMENT LAYER CAN BE			HMA SUPE	erpave fin erpave int erpave ba	ermediate Se	SURFAC
	Howard County, Maryland	THE SAN TRANS LOS ENGLISHED IN	<u> </u>			Т	Det	il
Revised	Department of Public Works	PAVING SECTIONS				İ		
Revised 5/7/2007	Approved Miles of grown	P-1 to P-4					R-2	.01
Approved	Chief, Bureau of Engineering		-					٠,

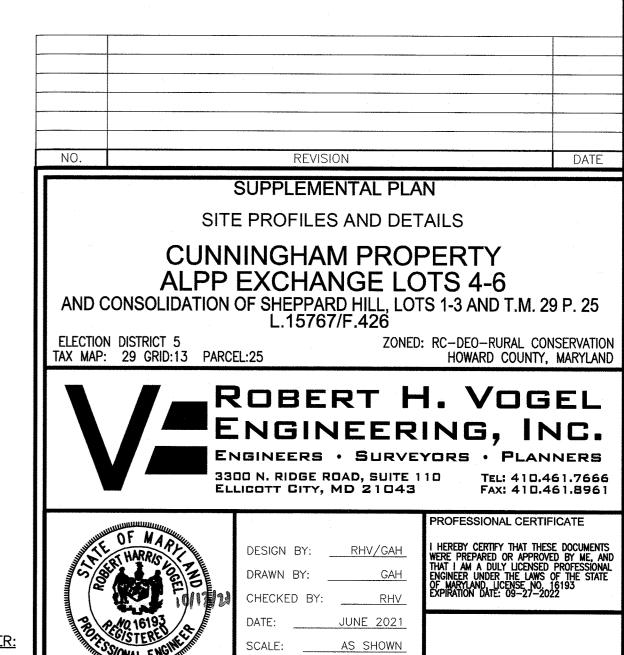




DIVERSION SWALE CROSS SECTIONS

NOTE:

INDIVIDUAL LOT IMPROVEMENTS INCLUDING HOUSES, PRIVATE DRIVEWAYS, LEAD WALKS AND PRIVATE, ON-LOT SEWERAGE AND SWM FACILITIES MAY NOT BE CONSTRUCTED UNDER THIS SUPPLEMENTAL PLAN. A SEPARATE GRADING PLAN AND BUILDING PERMIT MUST BE OBTAINED BEFORE ON LOT CONSTRUCTION MAY BEGIN.



OWNER/DEVELOPER:
GRATIA PLENA, LLC.
11140 HOMEWOOD ROAD ELLICOTT CITY, MD 21042 PHONE: 443-677-4612

--PROP. GRADE

CASS

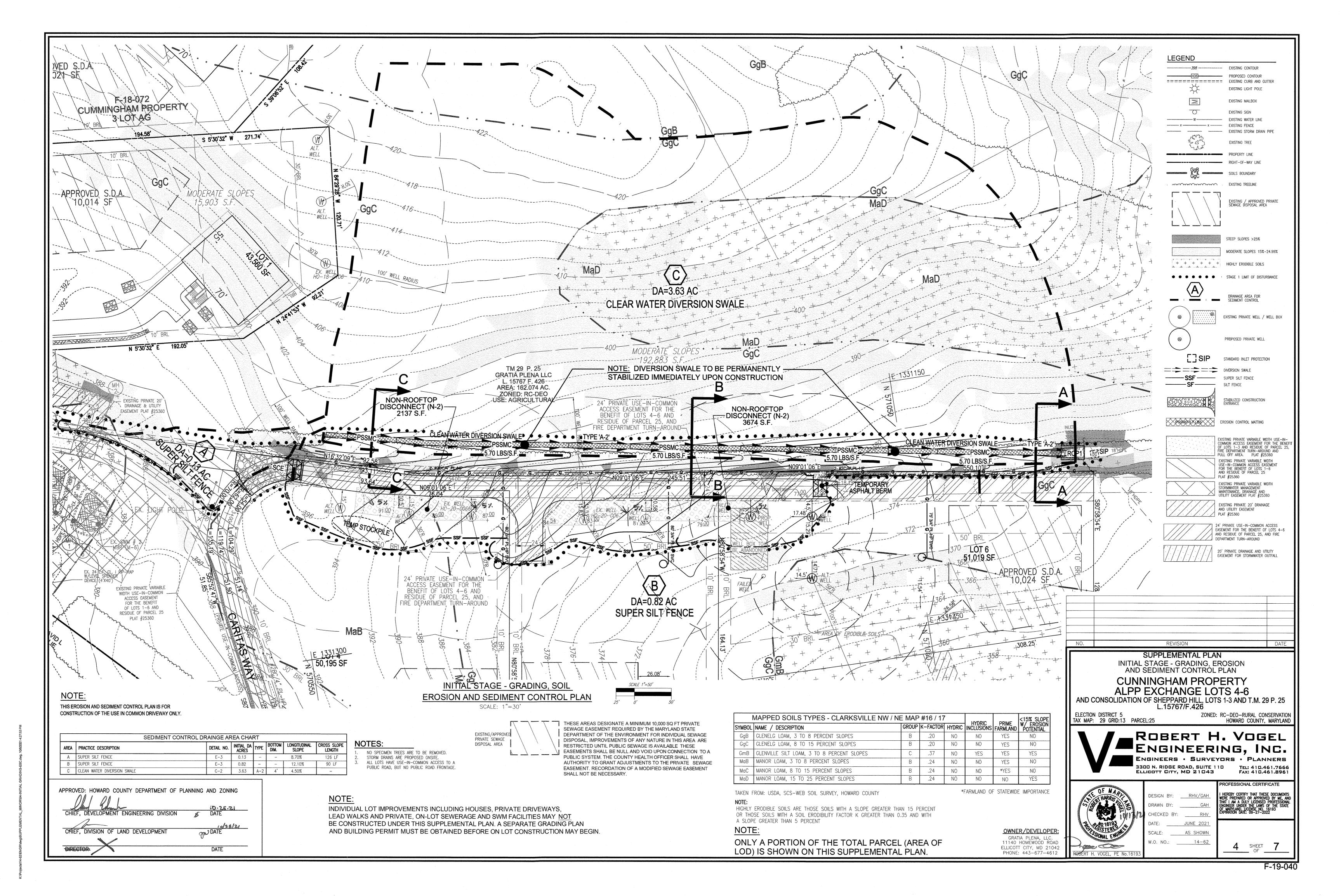
X-SECTION C-C

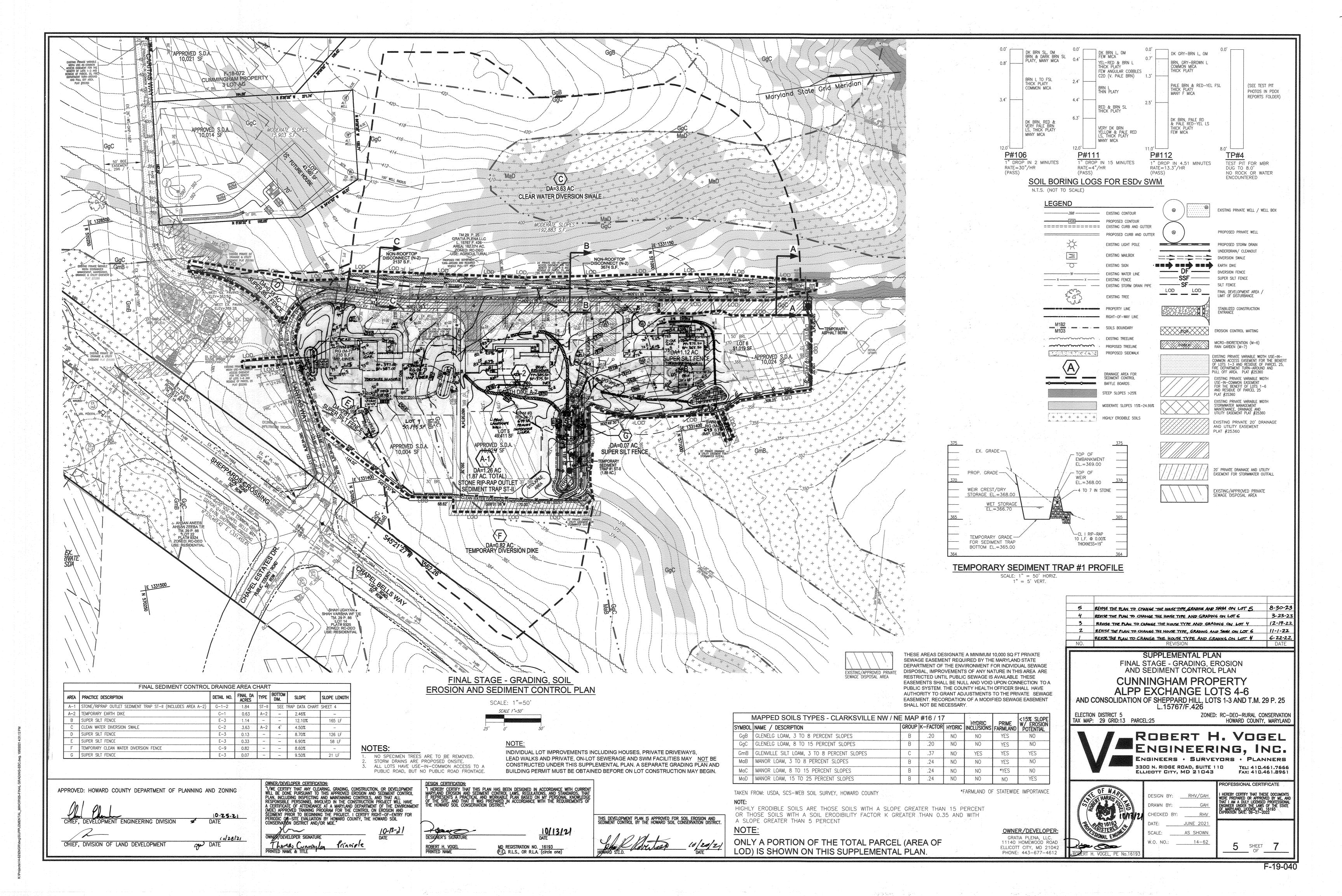
SCALE: 1" = 50' HORIZ.

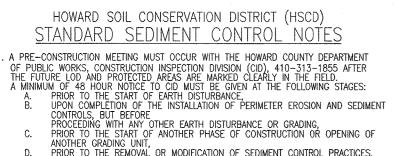
1" = 5' VERT.

____AS SHOWN W.O. NO.: 14-62

3 SHEET 7







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

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO

, FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, 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 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 CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).

5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID.

TOTAL AREA OF SITE

AREA DISTURBED (LIMIT OF DISTURBANCE)

AREA TO BE ROOFED OR PAVED

AREA TO BE VEGETATIVELY STABILIZED

TOTAL CUT

TOTAL CUT

TOTAL FILL

162.07 ACRES

1.22 ACRES

0.24 ACRES

0.98 ACRES

8.38 CU. YDS

TOTAL FILL

582 CUL YDS OFFSITE WASTE/BORROW AREA LOCATION

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL 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 AST RECORDED PRECIPITATION)

* BRIEF DESCRIPTION OF PROJECT'S 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 RECARDING THE SEQUENCE OF CONSTRUCTION AND

STABILIZATION REQUIREMENTS
PHOTOGRAPHS * MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
* OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE).

TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTH: OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER. 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

DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.

14. 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. 15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
* USE | AND IP MARCH 1 - JUNE 15 * USE III AND IIIP OCTOBER 1 - APRIL 30 * USE IV MARCH 1 - MAY 31

16. 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

* ESTIMATE ONLY; CONTRACTOR SHALL VERIFY QUANTITIES TO HIS OWN SATISFACTION.

** TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, WITH AN APPROVED AND ACTIVE GRADING PERMIT

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION <u>DEFINITION</u>
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 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 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.a.1.B AND

TEMPORARY SEEDING SUMMARY

	HARDINESS Z SEED MIXTUR	FERTILIZER RATE	LIME RATE			
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	
1	COOL SEASON ANNUAL RYEGRASS OR EQUAL	40 LB / AC	MAR 1 TO MAY 15 AUG 1 TO OCT 15	1/2 IN.	436 LB/AC (10 LB PER 1000 SF)	2 TONS/AC (90 LB PER 1000 SF)
2	WARM SEASON FOXTAIL MILLET OR EQUAL	30 LB / AC	MAY 16 TO JUL 31	1/2 IN.		

PERMANENT SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b FERTILIZER RATE SEED MIXTURE (FROM TABLE B.3): 9 (10-20-20)						LIME RATE		
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ 0 ₅	K ₂ 0	
1	COOL SEASON TALL FESCUE & KENTUCKY BLUEGRASS OR EQUAL	T.F. 60 LB / AC K.B. 40 LB / AC	MAR 1 TO MAY 15 AUG 15 TO OCT 15	1/4-1/2 IN.	(1 LB PER	(2 LB PER	90 LB/AC (2 LB PER 1000 SF)	

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

 $\begin{array}{c} \underline{\text{DEFINITION}} \\ \overline{\text{TO}} \ \ \overline{\text{STABILIZE}} \ \ \overline{\text{DISTURBED}} \ \ \overline{\text{SOILS}} \ \ \overline{\text{WITH}} \ \ \overline{\text{PERMANENT}} \ \ \overline{\text{VEGETATION}}. \end{array}$ <u>PURPOSE</u> 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.

GENERAL USE

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR

THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

B. 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.

C. 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)

3-1/2 POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME

5 SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT

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 TE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND EDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED

THE PLAN.

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT CERTIFIED PERENNIAL RYEGRASS CULTIVARS/
CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000
SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH
EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. 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 RIFNDED. 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: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET. NOTES:
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 AND ASSURES A PURE GENETIC

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

- WESTEM MD: MARCH 15 TO JUNE 1, AUGUST ITO OCTOBER 1 (HARDINESS ZONES: SB, 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 1½ INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. 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 DRY OR HOT SEASONS, OR ON ADVERSE SITES.

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER) 1. GENERAL SPECIFICATIONS
A. 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 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCL TOP GROWTH AND THATCH. BROKEN PADS AND TOM OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.

C. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.

D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT CESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. O NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR DIL SCIENTIST PRIOR TO ITS INSTALLATION.

SOD INSTALLATION
A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
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.
C. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. UNDERLYING SUIL 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

SOD MAINLENANCE
A. 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.
B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN
ADEQUATE MOISTURE CONTENT. C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A SS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

> B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

<u>DEFINITION</u>
A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE CONDITIONS WHERE PRACTICE APPLIES

PURPOSE

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL

THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. 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 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 MIJIST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT

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.

MAINTENANCE 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.

OBTAIN GRADING PERMIT. (1 DAY)
DEVELOPER / CONTRACTOR SHALL REQUEST A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO BEGINNING CONSTRUCTION. (1 DA NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK, (1 DAY STAKEOUT LIMITS OF DISTURBANCE. (3 DAYS) INSTALL STABILIZED CONSTRUCTION ENTRANCE, AS SHOWN HEREON. (1 DAY)

INSTALL STABILIZED CONSTRUCTION ENTRANCE, AS SHOWN HEREON. (1 DAY)
CLEAR AND GRUB ONSITE AREA FOR THE INSTALLATION OF PERIMETER CONTROLS. (1 DAY)
INSTALL PERIMETER CONTROLS INCLUDING SUPER SILT FENCE, CLEAN WATER DIVERSION
SWALE, STANDARD INLET PROTECTION, ROCK OUTLET PROTECTION, TEMPORARY ASPHALT BERM
AND STABILIZED CONSTRUCTION ENTRANCE AS SHOWN HEREON OR AS DIRECTED BY SEDIMENT CONTROL INSPECTOR. (1 WEEK) UPON COMPLETION OF ABOVE, AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, CLEAR & GRUB REMAINDER OF SITE. (3 DAYS)
THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE
SEDIMENT AND EROSION CONTROLS SHOWN HEREON AFTER EACH RAINFALL AND ON A

DAILY BASIS. (1 DAY)
WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, ROUGH GRADE SITE, BRING (5% GRADE OR <) ON THE DOWNHILL SIDE OF THE USE-IN-COMMON DRIVE. (3 WEEKS) COMPLETE THE INSTALLATION OF THE PRIVATE WELLS TO SERVICE THE LOTS. (3 DAYS) INSTALL STONE SUBBASE AND BASE COURSE PAVING FOR USE-IN-COMMON DRIVEWAY AND FIRE TURN-AROUND. (3 DAYS)

ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

R-4-2 STANDARDS AND SPECIFICATIONS B-4-3 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS FOR SEEDING AND MULCHING

<u>DEFINITION</u>
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

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

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 RATE.

B. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY ITS THE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY

HE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN

INCCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST

C. INOCULANTS: THE INUCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFCALLY 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 STERIL ANTS.

OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

APPLICATION

APPLICATION

A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS

I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY

SEEDING TABLE 8.1, PERMANENT SEEDING TABLE 8.3, OR SITE—SPECIFIC SEEDING

SUMMARIES.

SUMMARIES.

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

DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.

CILITIPACKING SEEDERS ARE DESCRIPTION.

I. 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

II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

AND FERTILIZER).

I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF

SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20

HYDROSEEDING.
III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT

I. MULCH MATERIALS (IN ORDER OF PREFERENCE)
 A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYE, 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.

B. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.

1. 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 SPERFAD STUREY.

SPREAD SLURRY.

II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.

III. WCFM, INCLUDING DYE, 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 COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.

V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

90 PERCENT MINIMOM.

2. APPLICATION

A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

B. 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

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

A. 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 FROSION HAZARD.

EROSION HAZARD:

1. 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, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.

11. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

FIBER PER 100 GALLONS OF WATER.

III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

SEDIMENT TRAP ST-II

ISOMETRIC VIEW

CREST ELEVATION

19 IN MIN. THICKNESS OF
CLASS 1 RIPRAP
CUTLET ELEVATION

NUMBER OF THE MIN. WIDTH

2 12 IN MIN. THICKNESS
DRY
STORAGE

EXISTING

NUMBER OF THE MIN. WIDTH

A FT MIN. WIDTH

2 12 IN MIN. THICKNESS
DRY
STORAGE
STORAGE

EXISTING

NONWOVEN GEOTEXTILE

4 TO 7 IN STONE -

SECTION B-B

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

SECTION A-A

EMBED NONWOVEN A
GEDTEXTILE MIN.
6 IN INTO GROUND

-4 TO 7 IN STONE

TOP OF EMBANKMEN

ST-II

MAXIMUM DRAINAGE AREA = 10 ACRES

DETAIL G-1-2 STONE/RIPRAP OUTLET

FIBER PER 100 GALLONS OF WATER.

DISCHARGE TO STABLE AREA OR RECEIVING CHANNEL

APRON 10 FT MIN.

NONWOVEN GEOTEXTILE

INTERRUPTION.

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

(POTASSIUM), 200 POUNDS PER ACRE.

HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED

LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY

JE 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

<u>definition</u> The process of preparing the soils to sustain adequate vegetative stabilization.

 $\begin{array}{l} \underline{\text{PURPOSE}} \\ \hline \text{TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH} \end{array}$ CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

<u>CRITERIA</u> A. SOIL PREPARATION

 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 THE SLOPE.

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: 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 MATERIA

(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 AMEDICANS OR TOPSOIL IS REQUIRED IF ON—SITE SOILS DO NOT MEET THE ADOLE CONDITIONS. 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 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 CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

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 CONCEM 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—

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 FLIRNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUITIPIENTS. 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.

AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING JATIENIA: 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 BY AN AGRONOMIST OF SOIL SCIENTIST AND APPROVAL 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 1½ INCHES IN DIAMETER.

B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA SRASS, OUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS IS SPECIFIED. AS SPECIFIED.

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.

EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPAC 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 SOIL PREPARATION AND TILLAGE, AND INFREDUCINITIES IN THE SURFACE RESULTING PROVIDED TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

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 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.

2. 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. 3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE UBSTITUTED EXCEPT WHEN HYDROSFEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND D SUCH FINENÈSS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #100 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,

PREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS

SEQUENCE OF CONSTRUCTION

PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL

USE-IN-COMMON DRIVEWAY TO SUBGRADE. COMPLETE GRADING OF PERMANENT SWALE/BERM ON UPHILL SIDE OF USE-IN-COMMON DRIVE. GRADE THE FACE OF SLOPE AS SHOWN

PERIMETER DEVICES, SUPER SILT FENCE, ETC SHALL BE INSPECTED AND REPAIRED AS REQUIRED ON A DAILY BASIS.
INDIVIDUAL LOT IMPROVEMENTS INCLUDING HOUSES, PRIVATE DRIVEWAYS, LEAD WALKS AND PRIVATE, ON—LOT SEWERAGE AND SWM FACILITIES MAY NOT BE CONSTRUCTED UNDER THIS SUPPLEMENTAL PLAN. A SEPARATE GRADING PLAN AND BUILDING PERMIT MUST BE OBTAINED BEFORE ON LOT CONSTRUCTION MAY BEGIN.

AS CONSTRUCTION NEARS COMPLETION, COMPLETE ANY REMAINING FINE GRADING AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON, AND PERMANENTLY STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 WEEK)
AFTER PERMISSION HAS BEEN GIVEN BY SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING PERIMETER E/S CONTROLS AND STABILIZE THESE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. NOTE: PERIMETER DIVERSION SWALE AND BERM ARE TO REMAIN AS PERMANENT FEATURES. DO NOT REMOVE. (1 WEEK)

ROBERT H. VOGEL PRINTED NAME

2:1 SLOPE OR FLATTER FLOW GRADE TO GRADE TO GRADE TO 2:1 SLOPE OR FLATTER-GRADE TO PROVIDE REQUIRED FLOW WEITH AND FLOW DEPTH CROSS SECTION DIKE TYPE CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE a - DIKE HEIGHT 18 IN MIN. 30 IN MIN. *** b - DIKE WIDTH 24 IN MIN. 36 IN MIN. c - FLOW WIDTH 4 FT MIN. 6 FT MIN. d - FLOW DEPTH 12 IN MIN. 24 IN M PLAN VIEW FLOW CHANNEL STABILIZATION A-1 SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)

DETAIL C-1 EARTH DIKE

A-2/8-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOO. A-3/B-3

4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A
MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION NOTES REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE. . EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.

. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE. . PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN. . STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.

. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUBULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION 8-4 VEGETATIVE STABLIZATION. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS O REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED BY AN

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE
UTURAL RESOURCES CONSERVATION SERVICE

2011

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION DETAIL E-9-1 STANDARD INLET PROTECTION TYPE A MAXIMUM DRAINAGE AREA = 1/4 ACRE
TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE -16 IN MIN. -NOTCH ELEVATION WOVEN SUT FILM - 18 IN INTO GROUND -TYPE A ISOMETRIC VIEW

SECTION FOR TYPE A AND B MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD SYMBOL

ST-II

STANDARD SYMBOL DETAIL C-9 DIVERSION FENCE |------| MAXIMUM DRAINAGE AREA = 2 ACRE 10 FT MAX. CHAIN LINK FENCE
COVERED WITH
IMPERMEABLE SHEETING ELEVATION JUN RESISTANT IMPERMEABLE SHEETING ON BOTH SIDES OF FENCE EXTEND IMPERMEABLE SHEETING—
OR PROVIDE SOIL STABILIZATION MATTING
4 FT MIN. ALONG FLOW SURFACE FLOW -

SECTION CONSTRUCTION SPECIFICATIONS 1. USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2% INCH MAXIMUM OPENING). . Use 2% inch diameter galvanized steel posts of 0.085 inch wall thickness and six foo length spaced no further than 10 feet apart. The posts do not need to be set in

3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES. SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE. b. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND, SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.

. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DIMMORRAPS KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMILATED SEDMENT AND DERRIS. MAINTAIN POSTITUE PRANNAGE. REPLACE IMPERMEABLE SHETING IF TORN. IF UNDERNIRMS OCCURS, REINSTALL FENCE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE 2011

ENTRANCE Sea MOUNTABLE BERM (6 IN MIN.) -EARTH FILL NONWOVEN GEOTEXTILE ---MIN. 6 IN OF 2 TO 3 IN AGGREGATE OVER LENGTH AND WIDTH OF ENTRANCE -PIPE (SEE NOTE 6) PROFILE PLAN VIEW

I. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN, VEHICLES MUST TRAVEL OVER THE ENTRE 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 ENSTRING ROAD TO PROVIDE A TURNING RADIUS. 2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTAIN EREM WITH 5-1 SLOPES AND A MINIMUM OF 12 NOTHES OF STONE OVER THE PIPE, PROVIDE PIPE AS SPECIFED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAI TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

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 (WITHOUREBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACULUNING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SCRIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT IRAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION

DETAIL C-5 TEMPORARY ASPHALT BERM PLAN VIEW PAVED SURFACE CROSS SECTION

CONSTRUCTION SPECIFICATIONS CONSTRUCT BERM ON AN UNINTERRUPTED, CONTINUOUS GRADE. INSTALL BERM TO CONFORM TO CROSS SECTION DIMENSIONS OF A UNIFORM HEIGHT OF 8 INCHES MINIMUM AND APPROXIMATE WIDTH OF 3½ FEET.

. COMPACT ASPHALT BERM. . REPAIR DAMAGED ASPHALT, REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. . UPON REMOVAL OF ASPHALT BERM, RETURN TO ORIGINAL CONDITIONS OR AS SPECIFIED ON APPROVED

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE
ATURAL RESOURCES CONSERVATION SERVICE

WARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION DETAIL D-4-1-A ROCK OUTLET PROTECTION I EMBED GEOTEXTILE
LINING A MIN. OF 4 IN
NONWOVEN SECTION A-A CHANNEL CROSS SECTION WILL TRANSITION FROM A-A TO B-B 4 N PLAN VIEW H DEPTH DICTATED
BY CHANNEL
SECTION AT END NONWOVEN
OF APRON GEOTEXTILE OR
STONE FILTER
SECTION B-B EXTEND RIPRAP TO A MIN. HEIGHT OF H OS A IN SLOPE TO DRAIN SOMEWING OR LE IN 3 FT MIN. RIPRAP

CLASS THICKNESS (T)

1 19 IN NONWOVEN OR STONE FILTER L12 IN MIN. CONSTRUCTION SPECIFICATIONS RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS

STABILIZATION MATTING CHANNEL APPLICATION

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL. PLAN.

OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.

ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

CENTER TO CENTER 36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND

ELEVATION

WOVEN SLIT FILM FENCE POST 18 IN MIN.

GEOTEXTILE ABOVE GROUND

CROSS SECTION

STEP 2

FINAL CONFIGURATION

ROP1

16 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILE

8 IN MIN. DEPTH

-UNDISTURBED GROUND

DETAIL E-1 SILT FENCE

STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOHNTS, AND ROLL ENDS.

ONSTRUCTION NOTES

EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.

 Where no endwall is used, construct the upstream end of the apron so that the width is two times the duameter of the outlet pipe, and extend the stone under the outlet by a minimum of 18 inches. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS, PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULA: SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS INMEDIATELY.

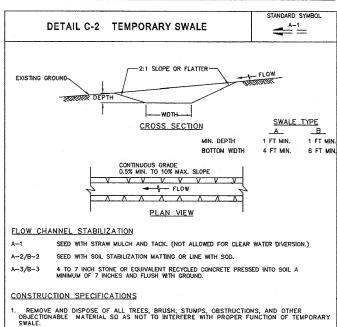
DETAIL E-3 SUPER SILT FENCE -----SSF-----I 10 FT MAX -34 IN MIN. GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE . USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS. HOVEN SLIT FILM GEOTEXTILE-2. USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNFFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-FLOXED TO VEGETATION AND SEE GENRINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, INCTING MUST BE EXTRACED PLASTIC WITH A MAXIMUM MEET OFFENIOR OF 22 INCHES AND SUFFICIENTLY BONDED OF SENIO NOT 2 INCHEST ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL. FLOW SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "I" SHAPED STEEL WIRE HAMING A MINIBULU GALIGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 170 17 BIOLINES MOR AND BE A MINIBULU OF 8 NOVEMBER STAPLES MUST HAVE A MINIBULUS HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULUS HAVE AND MINIBULU 4 BIOCH HEAD, WOOD STAPLES MUST HAVE AND MINIBULUS HAVE

CONSTRUCTION NOTES NSTALL 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 INTO THE GROUND. FASTEN 9 GAUGE OR HEAVER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPOF THE SEEDED SURFACE. AVOID STRETCHEN THE MATTING. . Where ends of the geotextile come together, the ends shall be overlapped by 8 inches, folded, and stapled to prevent sediment by pass. Key in the top of slope end of mat 6 inches (minimum) by diagna a trench, placing the matting roll end in the trench, stapling the mat in place, replacing the excavated material, and tamping to secure the mat end in the key. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DECREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE. . PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIR LINK FENCING AND GEOTEXTILE.

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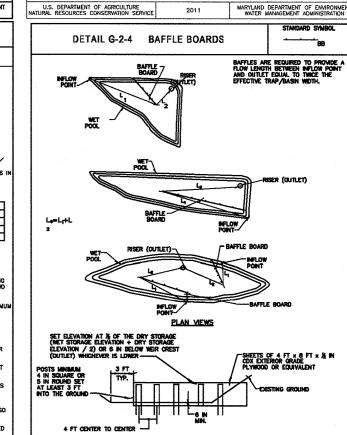
MARYLAND DEPARTMENT OF ENVIRONMEN
WATER MANAGEMENT ADMINISTRATION DETAIL C-2 TEMPORARY SWALE

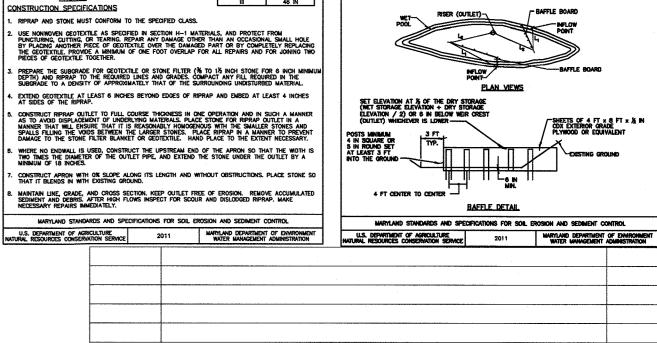


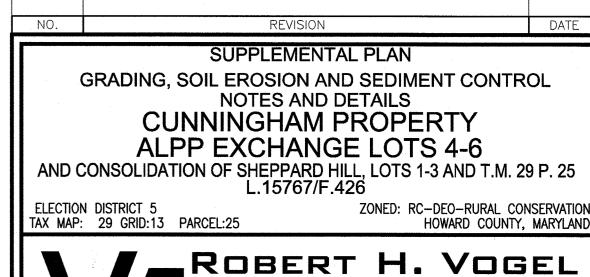
EXCAVATE OR SHAPE TEMPORARY SWALE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED. S. STABILIZE TEMPORARY SWALE WITHIN THREE DAYS OF INSTALLATION, STABILIZE SWALES USED FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.

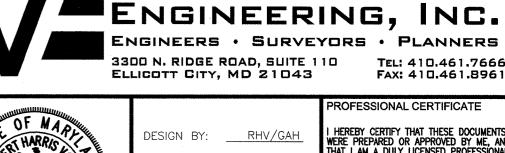
CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE. . PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP TEMPORARY SWALE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATI

UPON REMOVAL OF TEMPORARY SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL









DRAWN BY: CHECKED BY: SCALE: W.O. NO.: 2000 ROBERT H. VOGEL, PF No.1619

RHV/GAH GAH RHV JUNE 2021 AS SHOWN 14-62

FAX: 410.461.8961 PROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2022 SHEET 7

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, 'DEVELOPMENT ENGINEERING DIVISION DIVISION OF LAND DEVELOPMEN

BUILDING PERMIT MUST BE OBTAINED BEFORE ON LOT CONSTRUCTION MAY BEGIN OWNER/DEVELOPER CERTIFICATION: "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL WILL BE DUNE PURSUANT TO THIS APPROVED ENOSION AND SEDIMENT CONTROL
PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL
RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE
A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT
(MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND
SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT—OF—ENTRY FOR
PERIODIC ON—SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL
CONSERVATION DISTRICT AND/OR MDE." OWNER/DEVELOPER SIGNATURE PRINTED NAME & TITLE

INDIVIDUAL LOT IMPROVEMENTS INCLUDING HOUSES, PRIVATE DRIVEWAYS,

LEAD WALKS AND PRIVATE, ON-LOT SEWERAGE AND SWM FACILITIES MAY NOT BE

CONSTRUCTED UNDER THIS SUPPLEMENTAL PLAN. A SEPARATE GRADING PLAN AND

DESIGN CERTIFICATION: "I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRE MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THIT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLED OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." 10/13/21

MD REGISTRATION NO. 16193

(P.E), R.L.S., OR R.L.A. (circle one)

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

13. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL STANDARD SYMBOL DETAIL G-1-2 STONE/RIPRAP OUTLET ST-II SEDIMENT TRAP ST-II STONE / RIPRAP OUTLET SEDIMENT TRAP ST-IL TRAP NO. DRAINAGE AREA - INITIAL DRAINAGE AREA - INTERIN DRAINAGE AREA - FINAI ACRES TOTAL STORAGE REQUIRE TOTAL STORAGE PROVIDE WET STORAGE REQUIRED WET STORAGE PROVIDED 3,858 DRY STORAGE REQUIRED DRY STORAGE PROVIDED EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION) 366.70 FT TRAP BOTTOM DIMENSIONS WEIR LENGTH WEIR CREST (DRY STORAGE) ELEVATION CLEANOUT ELEVATION TOP OF EMBANKMENT ELEVATION OUTLET PROTECTION - LENGTH OUTLET PROTECTION - DEPTH

DETAIL G-1-2 STONE/RIPRAP OUTLET

ONSTRUCTION SPECIFICATIONS

5. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.

SEDIMENT TRAP ST-II

CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.

USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.

CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST. COMPACT THE EMBANKMEN' BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.

6. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.

. USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR, USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.

CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.

O. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.

REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B —4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODLY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.

WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL

8. PLACE 1 FOOT OF CLEAN 3/4 TO 11/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.

CLEAR, CRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.

