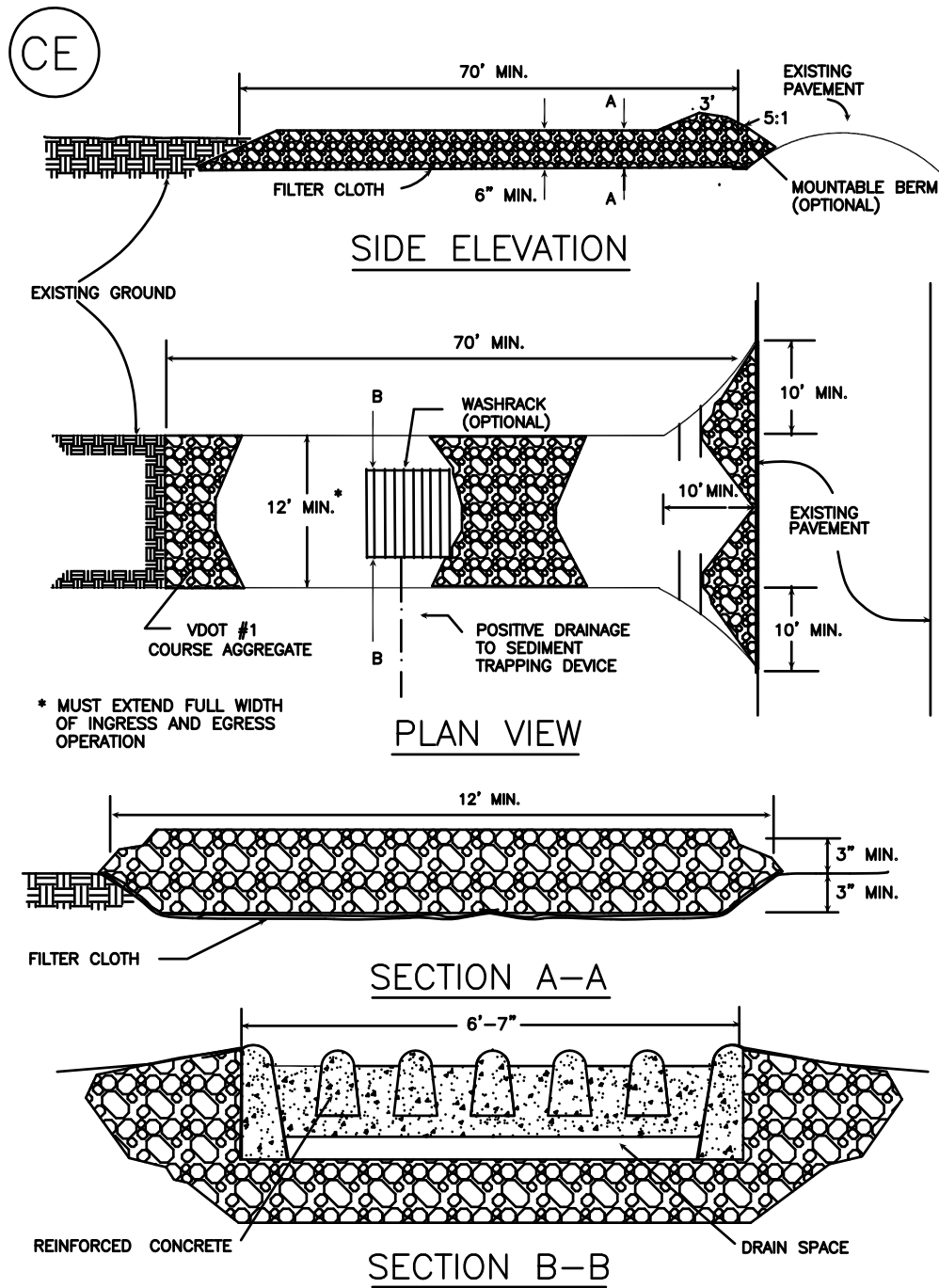


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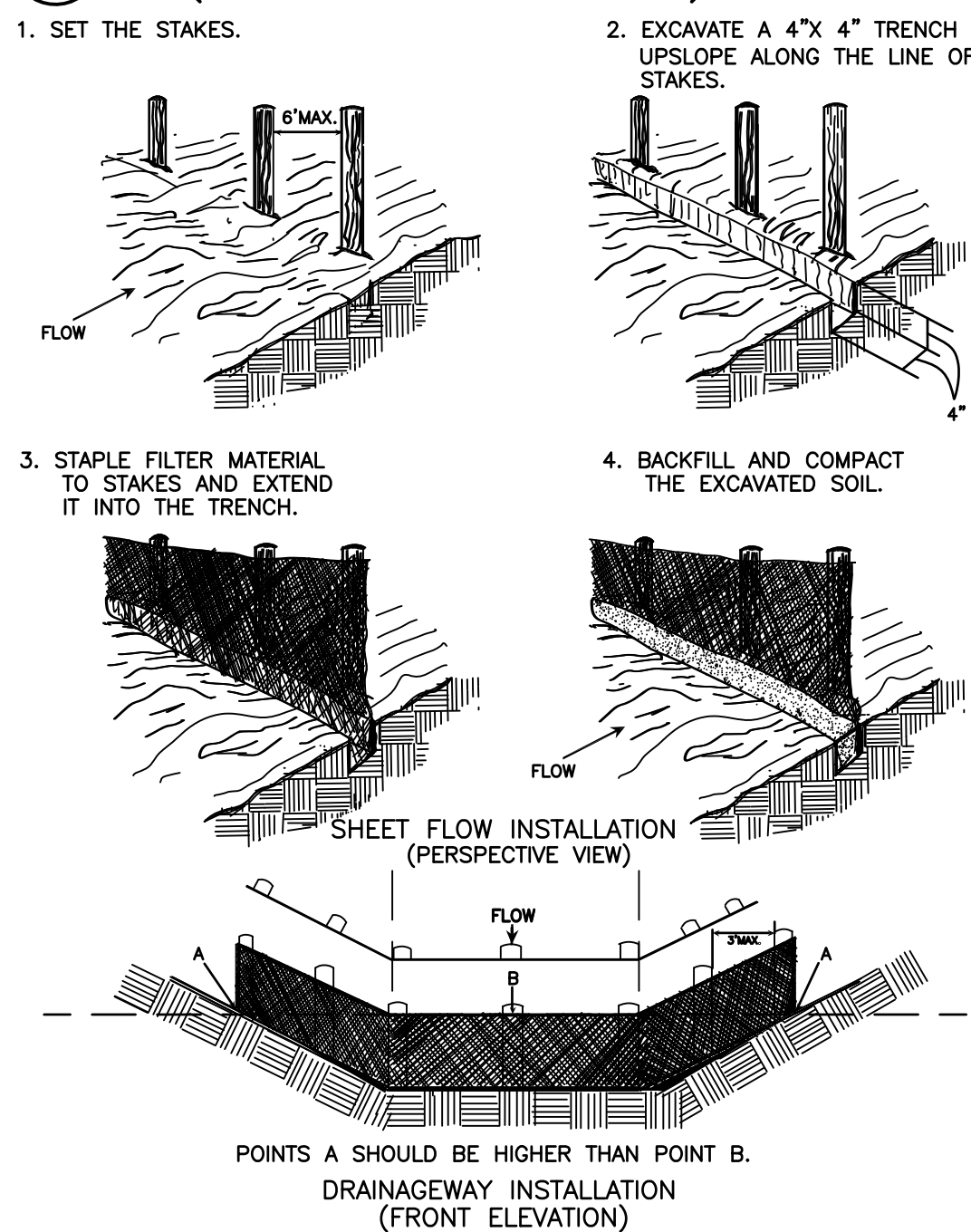
STONE CONSTRUCTION ENTRANCE



SOURCE: ADAPTED FROM 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

Plate 3.02-1

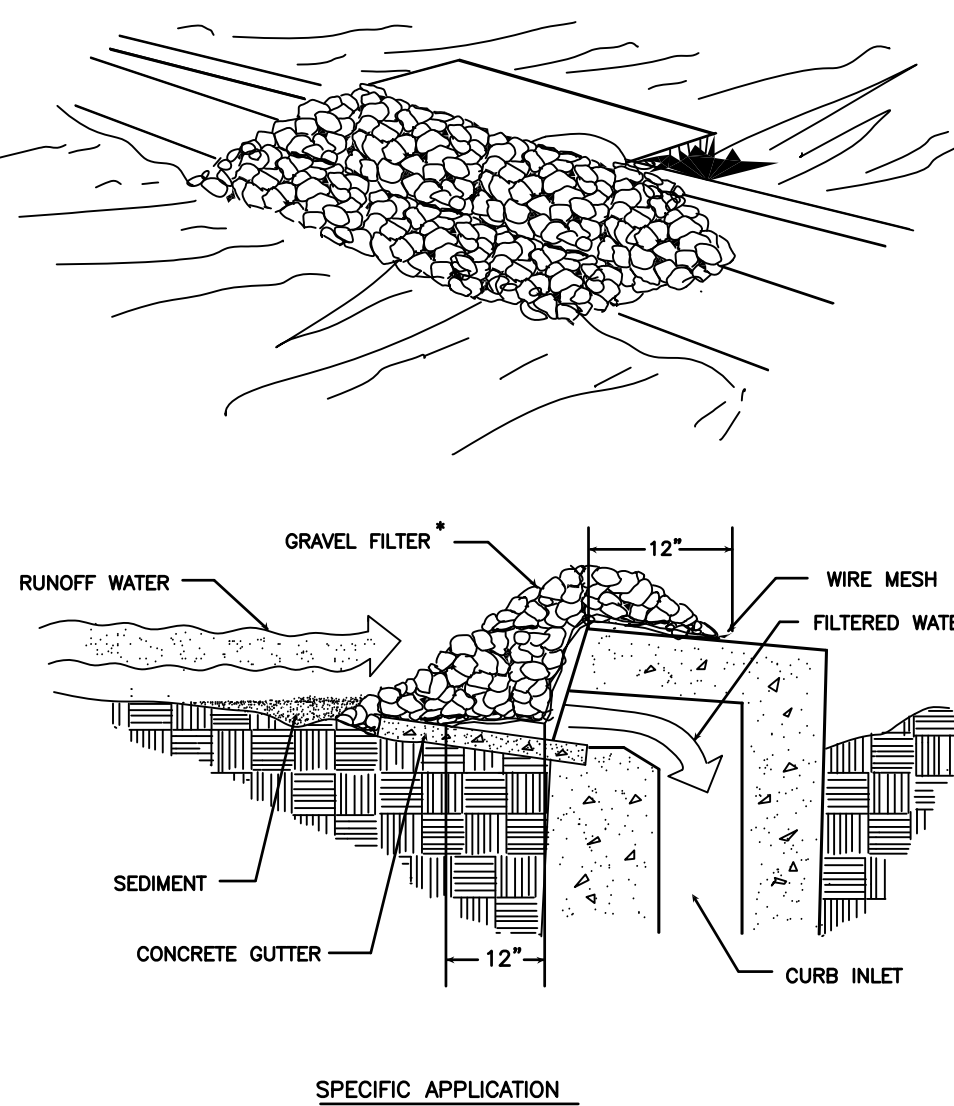
(SF) CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Va. DSWC

Plate 3.02-2

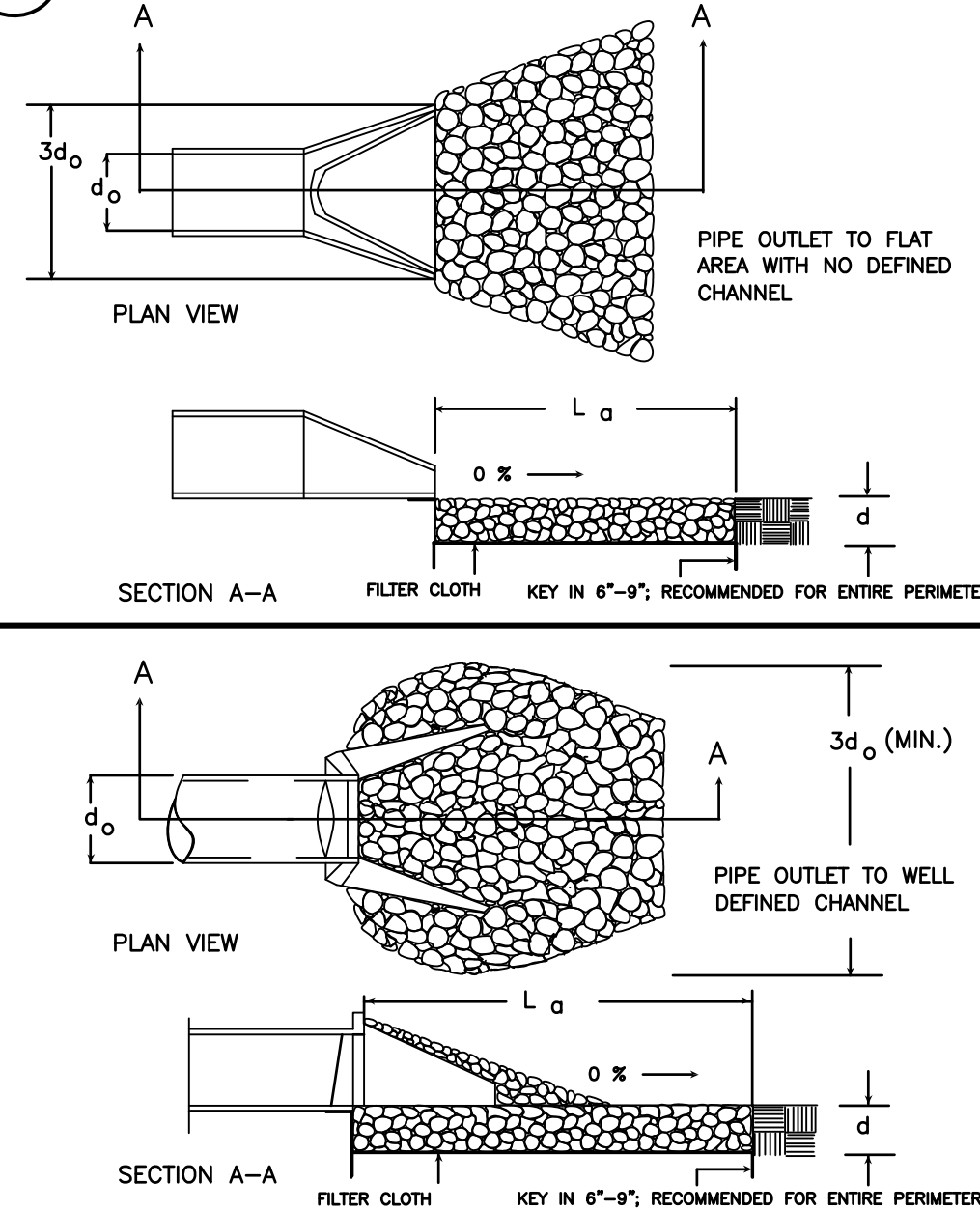
(P) GRAVEL CURB INLET SEDIMENT FILTER



SOURCE: VA. DSWC

Plate 3.07-6

(OP) PIPE OUTLET CONDITIONS



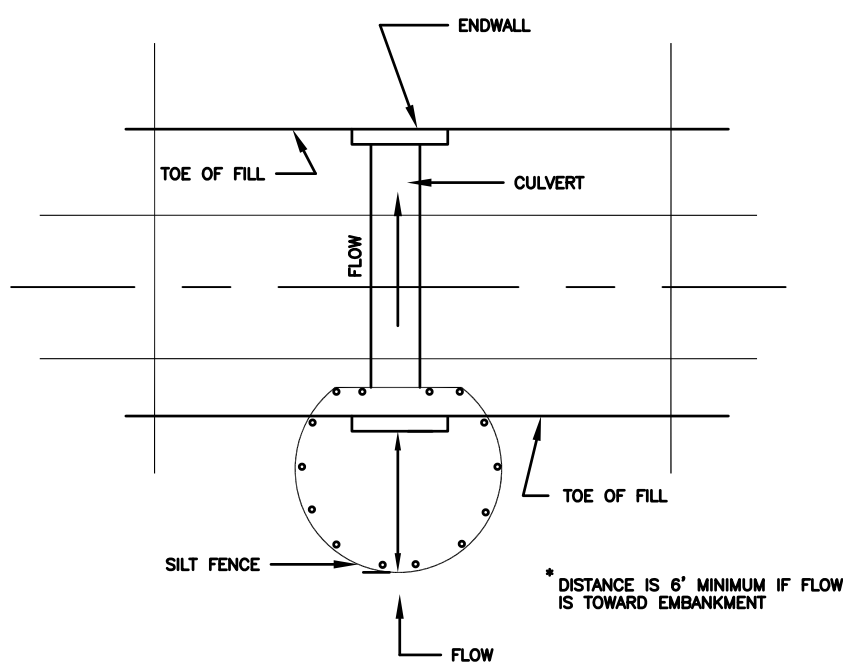
SOURCE: VA. DSWC

Plate 3.18-1

(PS) PERMANENT SEEDING MIXTURE

TYPE A	TYPE B (SLOPES 3:1 OR STEEPER)
15 OCTOBER TO 1 FEBRUARY K-31 FESCUE @ 5 LB / 1000 SF BORZY WINTER RYE @ 1/2 LB / 1000 SF	15 MARCH TO 1 MAY CROWN VETCH @ 1/2 LB / 1000 SF PERENNIAL RYE GRASS @ 1/2 LB / 1000 SF RED TOP @ 1/8 LB / 1000 SF
1 FEBRUARY TO 1 JUNE K-31 FESCUE @ 5 LB / 1000 SF ANNUAL RYE @ 1/2 LB / 1000 SF	15 AUGUST TO 1 OCTOBER CROWN VETCH @ 1/2 LB / 1000 SF PERENNIAL RYE GRASS @ 1/2 LB / 1000 SF RED TOP @ 1/8 LB / 1000 SF
1 JUNE TO 1 SEPTEMBER K-31 FESCUE @ 5 LB / 1000 SF GERMAN MILLET @ 1/2 LB / 1000 SF	
1 SEPTEMBER TO 15 OCTOBER K-31 FESCUE @ 5 LB / 1000 SF ANNUAL RYE @ 1/2 LB / 1000 SF	
LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE	
FERTILIZER: 5-20-10 @ 25 LB / 1000 SF 38-0-0 @ 7 LB / 1000 SF	
MULCH: IF REQUIRED, SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.	
SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.	
SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEDER ON A FIRM, FRABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.	

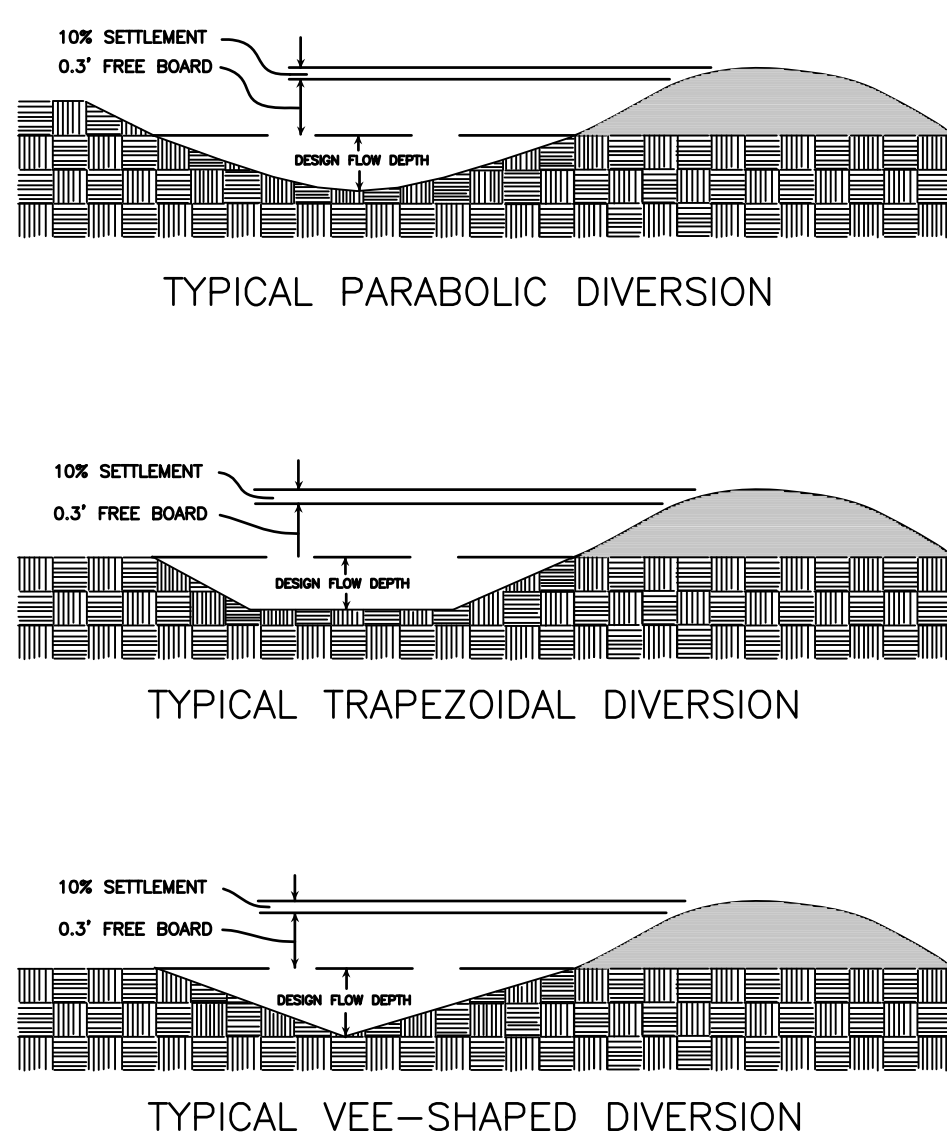
(CIP) SILT FENCE CULVERT INLET PROTECTION



SOURCE: ADAPTED FROM VDOT Standard Sheets and Va. DSWC

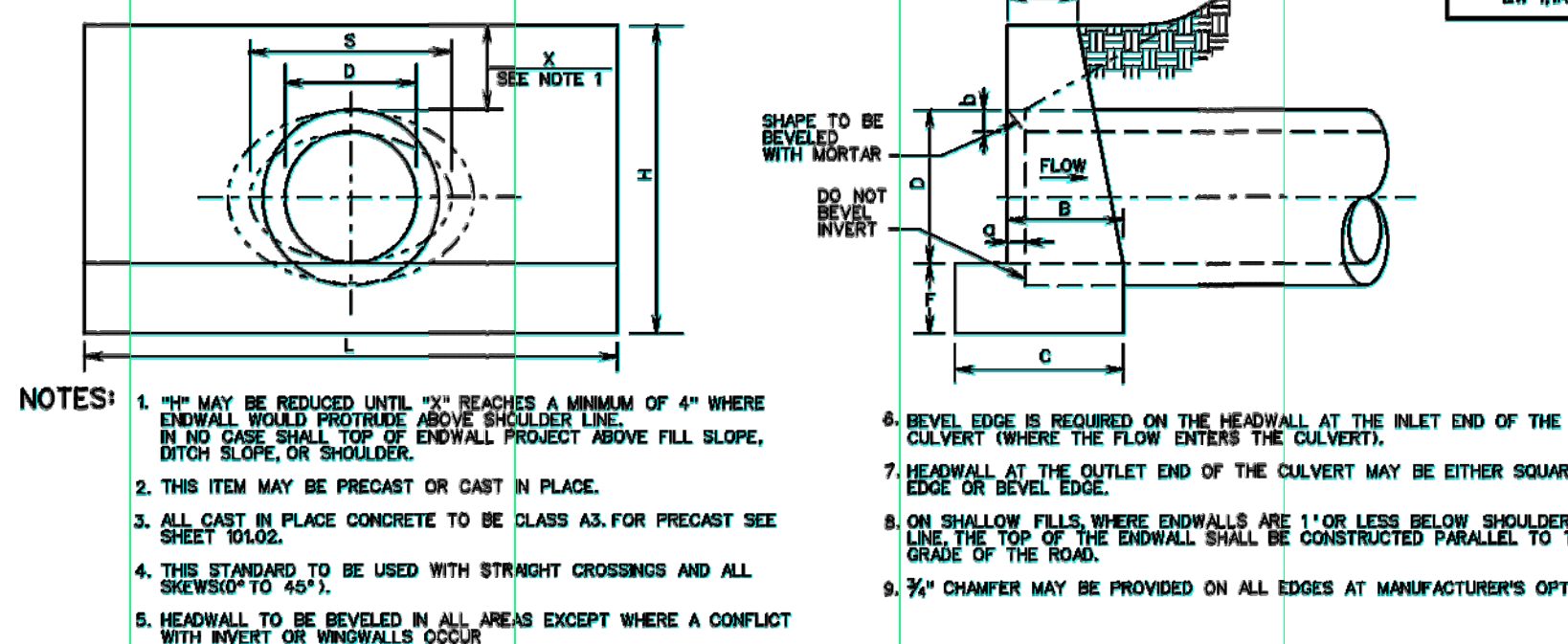
Plate 3.08-1

(DV) (DD) DIVERSIONS



SOURCE: VA. DSWC

Plate 3.12-1

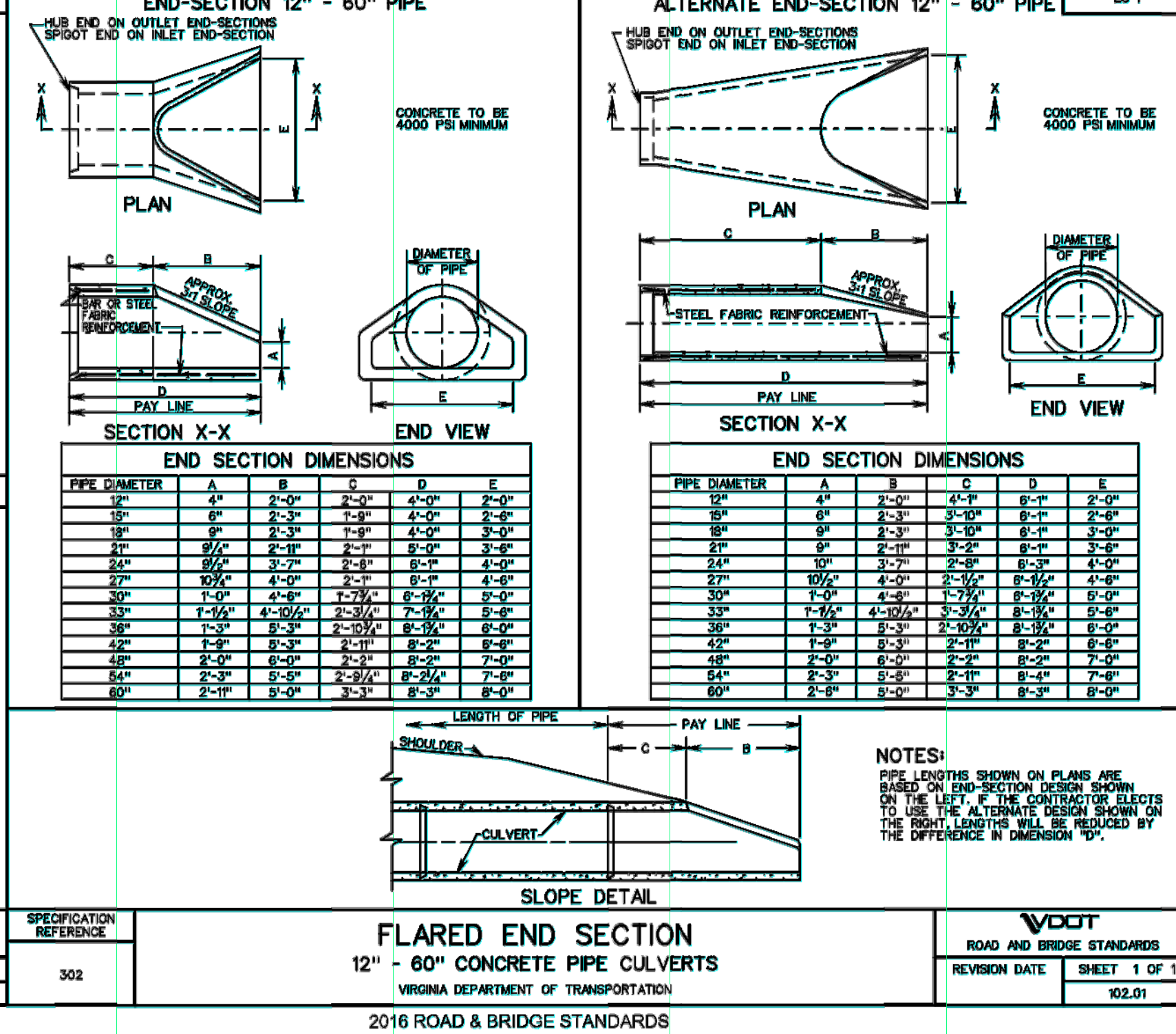


ENDWALL FOR CIRCULAR PIPE									
DIAMETER OF PIPE CULVERT									
12"	18"	24"	30"	36"	42"	48"	54"	60"	72"
A	0'-6"	0'-8"	0'-9"	0'-10"	0'-11"	0'-12"	0'-13"	0'-14"	0'-16"
B	0'-10"	0'-11"	0'-12"	0'-13"	0'-14"	0'-15"	0'-16"	0'-17"	0'-19"
C	1'-4"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	1'-12"	1'-13"	1'-15"
D	1'-0"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"
E	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"
F	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"
H	2'-3"	2'-11"	3'-2"	3'-3"	4'-3"	4'-6"	4'-7"	4'-8"	4'-11"
L	4'-0"	5'-0"	5'-0"	5'-0"	10'-0"	12'-0"	12'-0"	12'-0"	12'-0"
Q	0'-11 1/2"	0'-9 1/2"	0'-2"	0'-2 1/2"	0'-3 1/2"	0'-3 1/2"	0'-3 1/2"	0'-3 1/2"	0'-3 1/2"
b	0'-1"	0'-1 1/2"	0'-1 1/2"	0'-2"	0'-2 1/2"	0'-2 1/2"	0'-2 1/2"	0'-2 1/2"	0'-2 1/2"
CUBIC YARDS OF CONCRETE									
CONC. PIPE	0.241	0.492	0.897	1.379	2.067	2.847			
C.M. PIPE	0.257	0.521	0.739	1.289	2.196	3.145			

ENDWALL FOR ELLIPTICAL PIPE									
SIZE OF ELLIPTICAL PIPE CULVERT (SPIN x RISE)									
23"x14"	30"x20"	34"x22"	36"x24"	42"x27"	48"x30"	48"x32"	53"x34"		
A	0'-8"	0'-9"	0'-10"	0'-11"	0'-12"	0'-13"	0'-14"	0'-15"	0'-16"
B	1'-2"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	1'-12"	1'-13"
C	1'-8"	1'-11"	1'-12"	2'-4"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"
D	1'-2"	1'-7"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-10"	2'-12"
F	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"
H	2'-10"	3'-3"	3'-7"	3'-8"	4'-0"	4'-2"	4'-5"	4'-7"	4'-11"
L	8'-5"	7'-2"	8'-6"	9'-2"	10'-2"	10'-11"	12'-1"	12'-11"	12'-11"
S	1'-11"	2'-6"	2'-10"	3'-2"	3'-8"	3'-9"	4'-1"	4'-5"	4'-5"
Q	0'-2 1/2"	0'-3 1/2"	0'-3 1/2"	0'-4"	0'-4 1/2"	0'-4 1/2"	0'-5"	0'-5 1/2"	0'-5 1/2"
b	0'-2"	0'-2 1/2"	0'-2 1/2"	0'-3"	0'-3 1/2"	0'-3 1/2"	0'-4"	0'-4 1/2"	0'-4 1/2"
CUBIC YARDS OF CONCRETE									
CONC. PIPE	0.802	0.855	1.236	1.500	1.811	2.101	2.512	2.801	

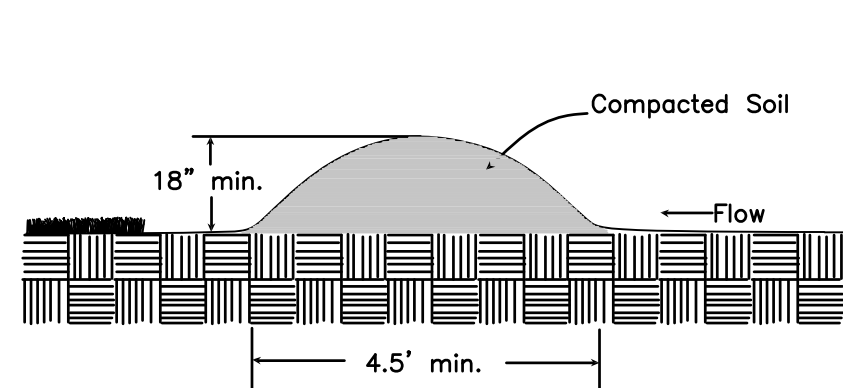
STANDARD ENDWALL FOR PIPE CULVERTS	
12" - 36" CIRCULAR AND 23" x 14" - 53" x 34" ELLIPTICAL PIPES	
VIRGINIA DEPARTMENT OF TRANSPORTATION	
2016 ROAD & BRIDGE STANDARDS	

VDOT ROAD AND BRIDGE STANDARDS	
REVISION DATE	SHEET 1 OF 1
10/01	



VDOT ROAD AND BRIDGE STANDARDS	
REVISION DATE	SHEET 1 OF 1
10/01	

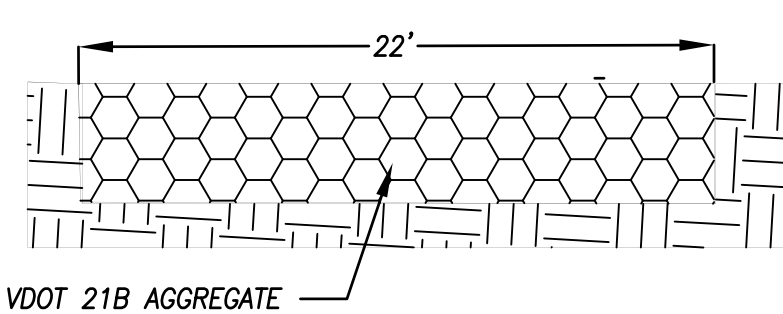
(DD) TEMPORARY DIVERSION DIKE



SOURCE: VA. DSWC

Plate 3.09-1

(CRS) CONSTRUCTION ROAD STABILIZATION



1. GRADE ROADS TO PLAN SUBGRADE.
2. ROADBEDS SHALL BE AT LEAST 22 FEET WIDE.
3. THE ROADBED OR PARKING SURFACE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL, PRIOR TO LAYING STONE.
4. PRIOR TO APPLYING PERMANENT ASPHALT TOP COURSE, REMOVE DEBRIS, REDRESS, AND APPLY PRIMECOAT.

(TS) TEMPORARY SEEDING MIXTURE

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS
QUICK REFERENCE FOR ALL REGIONS

PLANTING DATES	SPECIES	RATE (LBS./ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50-100
FEB. 16 - APR. 30	ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM)	60-100
MAY 1 - AUG. 31	GERMAN MILLET (SETARIA ITALICA)	50



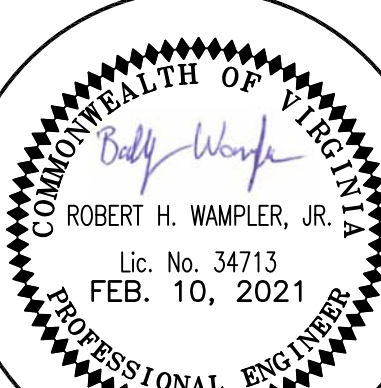
ENGINEERING CONCEPTS, INC.

94 GREENFIELD STREET
DALEVILLE, VIRGINIA 24083
540.473.1253

Date	
Description	
No.	

PRESERVE AT ASHLEY BOTETOURT COUNTY

FRONT LOTS DEVELOPMENT EROSION CONTROL DETAILS



0 0 0	
GRAPHIC SCALE	
PROJECT:	20004

C21