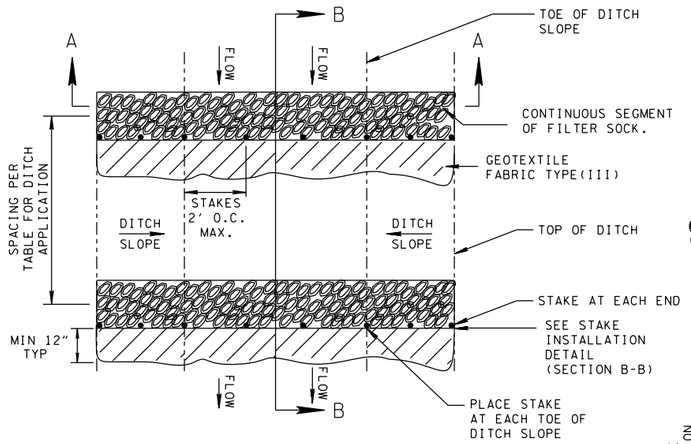
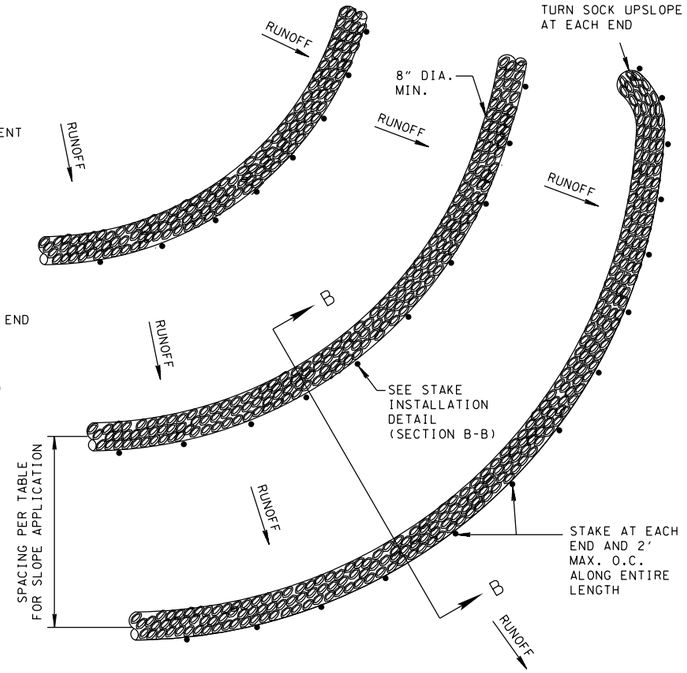
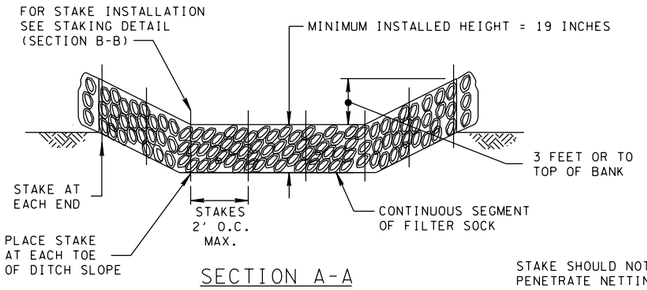


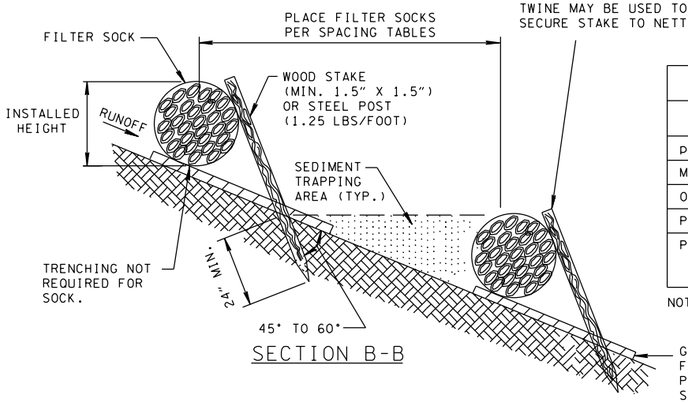
PLAN VIEW FOR DITCH APPLICATION



PLAN VIEW FOR SLOPE APPLICATION



SECTION A-A

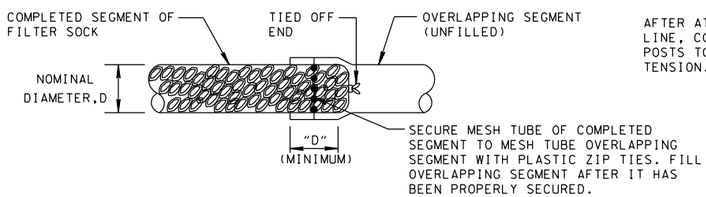


SECTION B-B

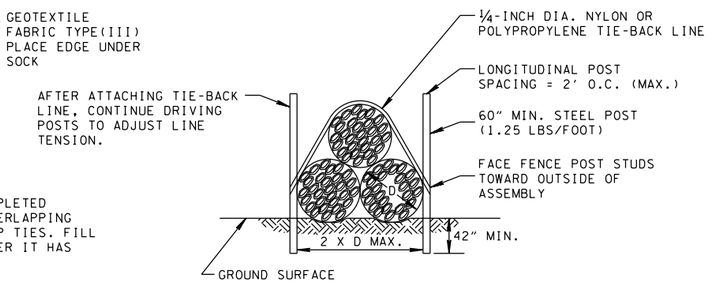
SOCK HEIGHTS INSTALLED		
NOMINAL DIAMETER, D	INSTALLED HEIGHT OF SINGLE SOCK	INSTALLED HEIGHT OF STACKED SOCKS
8"	6.5"	N/A
12"	9.5"	19"
18"	14.5"	29"
24"	19"	38"

MINIMUM SPECIFICATION FOR FILTER MEDIA		
PROPERTY	UNITS	RANGE
pH	pH	5.0 - 8.5
MOISTURE CONTENT	% WET WEIGHT BASIS	< 60
ORGANIC MATTER CONTENT	% DRY WEIGHT BASIS	25 - 100
PHYSICAL CONTAMINANTS	% DRY WEIGHT BASIS	< 1
PARTICLE SIZE	% PASSING SELECTED MESH SIZE, DRY WEIGHT BASIS	2 INCH - 99% ⅜INCH - 30% - 50% MAX. PARTICLE SIZE 2 INCHES

NOTE: MANUFACTURER SPECIFICATION MAY BE SUBSTITUTED WITH THE APPROVAL OF ENGINEER.



FILTER SOCK JOINT DETAIL (FOR SLOPE APPLICATION ONLY)



FILTER SOCK STACKING DETAIL

SEE NOTE (D)

EROSION CONTROL PLAN LEGEND: **SOCK**SOCK**SOCK**SOCK** FILTER SOCK

FILTER SOCK CHECK DAM ESTIMATED QUANTITIES						
	V-DITCH [1]			TRAPEZOIDAL DITCH [2]		
	24' FILTER SOCK (INSTALLED HEIGHT 19")	12" FILTER SOCK STACKED (INSTALLED HEIGHT 19")	18" FILTER SOCK STACKED (INSTALLED HEIGHT 29")	24' FILTER SOCK (INSTALLED HEIGHT 19")	12" FILTER SOCK STACKED (INSTALLED HEIGHT 19")	18" FILTER SOCK STACKED (INSTALLED HEIGHT 29")
LENGTH(FT)	20	60	48	24	72	60

1. ESTIMATED QUANTITIES BASED ON 4:1 SIDE SLOPES. QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.
2. ESTIMATED QUANTITIES BASED ON 4FT BOTTOM WIDTH, 4 FT DEPTH, AND 4:1 SIDE SLOPES. QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.

FILTER SOCK SPACING FOR SLOPE APPLICATION				
SLOPE	8"	12"	18"	24"
2%	70'	80'	N/A	N/A
5%	30'	60'	80'	N/A
10%	20'	30'	70'	80'
6:1	N/A	20'	40'	55'
4:1	N/A	20'	30'	30'
3:1	N/A	N/A	20'	25'
2:1	N/A	N/A	20'	20'

(P)

N/A = NOT RECOMMENDED
SPACING NOT TO EXCEED 80'

FILTER SOCK SPACING FOR DITCH APPLICATION	
DITCH SLOPE	MAXIMUM FILTER SOCK SPACING
LESS THAN 2%	80'
2%	80'
3%	50'
4%	40'
5%	30'
6%	20'
GREATER THAN 6%	20'

BASED ON AN INSTALLED HEIGHT OF 19 INCHES. SEE TABLE ON EC-STR-6 FOR OTHER HEIGHTS.

FILTER SOCK GENERAL NOTES

(A) FILTER SOCKS CAN BE PLACED IN DITCHES OR AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES. THEY CAN ALSO SERVE TO REMOVE SEDIMENT FROM RUNOFF AND RELEASE IT AS SHEET FLOW.

(B) FILTER SOCKS INSTALLED ON A SLOPE SHALL BE PLACED ALONG OR ON THE GROUND CONTOUR. WHERE POSSIBLE FILTER SOCKS APPLIED AT THE TOE OF A SLOPE SHOULD BE PLACED 10 FEET AWAY FROM THE TOE IN ORDER TO PROVIDE SEDIMENT STORAGE. THE MAXIMUM DRAINAGE AREA SHALL BE ¼ ACRE PER 100 LF OF SOCK.

(C) FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 15 ACRES. AT SITES WHICH OUTFALL TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM DRAINAGE AREA SHALL BE LIMITED TO 10 ACRES. FILTER SOCKS SHALL NOT BE USED IN STREAMS, WETLANDS, OTHER NATURAL WATER RESOURCES, OR IN DITCHES WITH CONTINUOUS FLOWS.

(D) FOR DITCH APPLICATIONS, THE MINIMUM INSTALLED HEIGHT OF A SINGLE SOCK, OR OF AN ASSEMBLY OF STACKED SOCKS, SHALL BE 19 INCHES. FILTER SOCKS MAY BE STACKED AS DETAILED ON THIS DRAWING TO ACHIEVE THE REQUIRED HEIGHT. SOCKS SHALL BE PLACED PERPENDICULAR TO THE FLOW OF WATER. FILTER SOCKS SHALL CONTINUE UP THE SIDE SLOPES TO THE TOP OF BANK OR A MAXIMUM OF 3 FEET ABOVE THE INSTALLED HEIGHT FILTER SOCKS SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED.

(E) FILTER SOCKS SHALL CONSIST OF A TUBULAR MESH SOCK WITH OPENINGS NO GREATER THAN 3/8THS OF AN INCH IN SIZE. THE MESH SOCK IS NOT REQUIRED TO BE BIODEGRADABLE. FILL MATERIAL SHALL CONSIST OF EITHER WOOD CHIPS (MULCH) OR A 50/50 COMBINATION OF WOOD CHIPS AND MANUFACTURED COMPOST MATERIAL.

(F) FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED IN DIAMETERS OF 8, 12, 18 OR 24 INCHES. DIAMETER TOLERANCE IS 2 INCHES. A FILTER SOCK WILL FLATTEN OUT TO AN OVAL WHEN IT IS PLACED; THUS, THE INSTALLED HEIGHT WILL BE LESS THAN THE NOMINAL DIAMETER.

(G) STEEL POSTS SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB/FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH GRADE WEATHER RESISTANT STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.

(H) FILTER SOCKS ARE FILLED ON THE PROJECT SITE AND MAY BE UP TO 250 FEET LONG. WHEN USED ON LONG SLOPES, FILTER SOCKS MAY BE JOINTED AS SHOWN ON THIS DRAWING.

(I) ANY PRODUCT LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE TO FILTER SOCKS IS ALSO ACCEPTABLE. FOR DITCH APPLICATIONS, SANDBAG OR GRAVEL BAG BERMS MAY ALSO BE USED AS ALTERNATE MATERIALS.

(J) FILTER SOCKS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

209-03.20 FILTER SOCK (8 INCH) PER LINEAR FOOT
209-03.21 FILTER SOCK (12 INCH) PER LINEAR FOOT
209-03.22 FILTER SOCK (18 INCH) PER LINEAR FOOT
209-03.23 FILTER SOCK (24 INCH) PER LINEAR FOOT
209-08.09 FILTER SOCK CHECK DAM PER EACH

PAYMENT SHALL INCLUDE ALL MATERIALS (INCLUDING GEOTEXTILE FABRIC IF USED) AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF FILTER SOCKS.

(K) SEDIMENT SHALL BE REMOVED FROM BEHIND THE FILTER SOCK WHEN IT HAS ACCUMULATED TO ONE-HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

(L) FILTER SOCKS SHALL BE INSPECTED AFTER EACH RUNOFF EVENT AND SHALL BE REMOVED AND REPLACED IF SIGNS OF UNDERCUTTING OR DOWNSTREAM RILLS ARE OBSERVED.

(M) FILTER SOCKS SHOULD BE REMOVED FROM SLOPES AFTER STABILIZATION IS COMPLETE. THIS MAY BE ACCOMPLISHED BY CUTTING THE SOCK OPEN AND SPREADING THE FILL MATERIAL ON THE SITE. ALL NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED. FILTER SOCKS APPLIED IN DITCHES SHALL BE COMPLETELY REMOVED.

(N) GEOTEXTILE FABRIC REQUIRED FOR SLOPE APPLICATION STEEPER THAN 6:1.

☐ REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.

☐ REV. 6-10-14: MODIFIED SPACING TABLE. ADDED GEOTEXTILE FABRIC ADDED NOTE (N).

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FILTER SOCK

4-1-08 | EC-STR-8