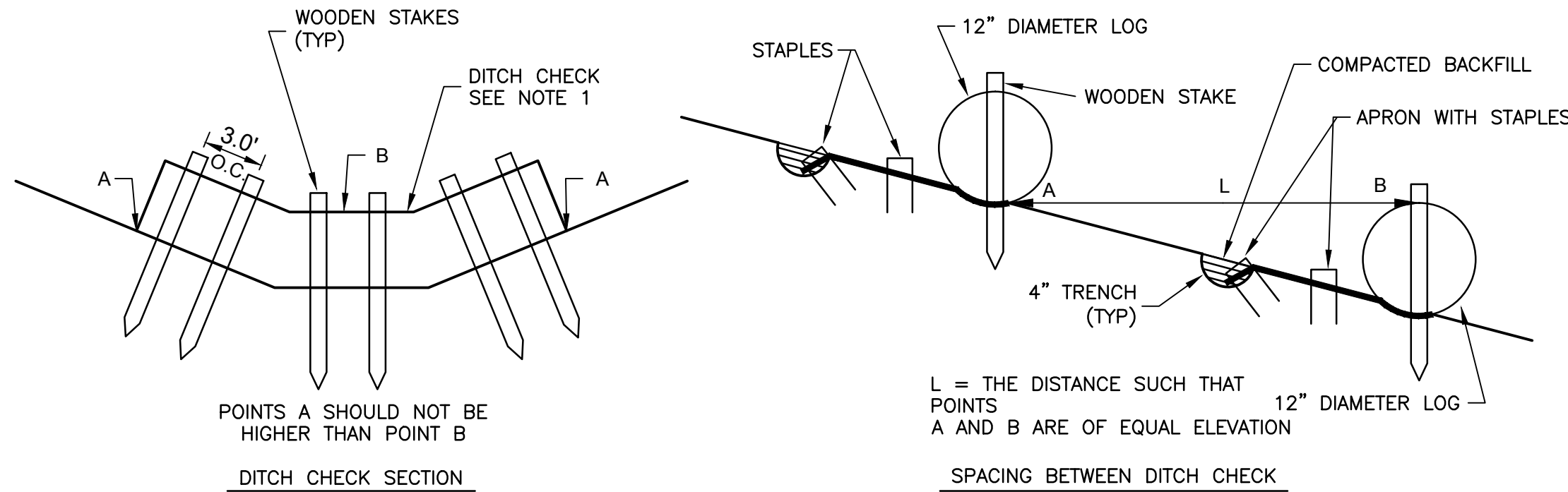


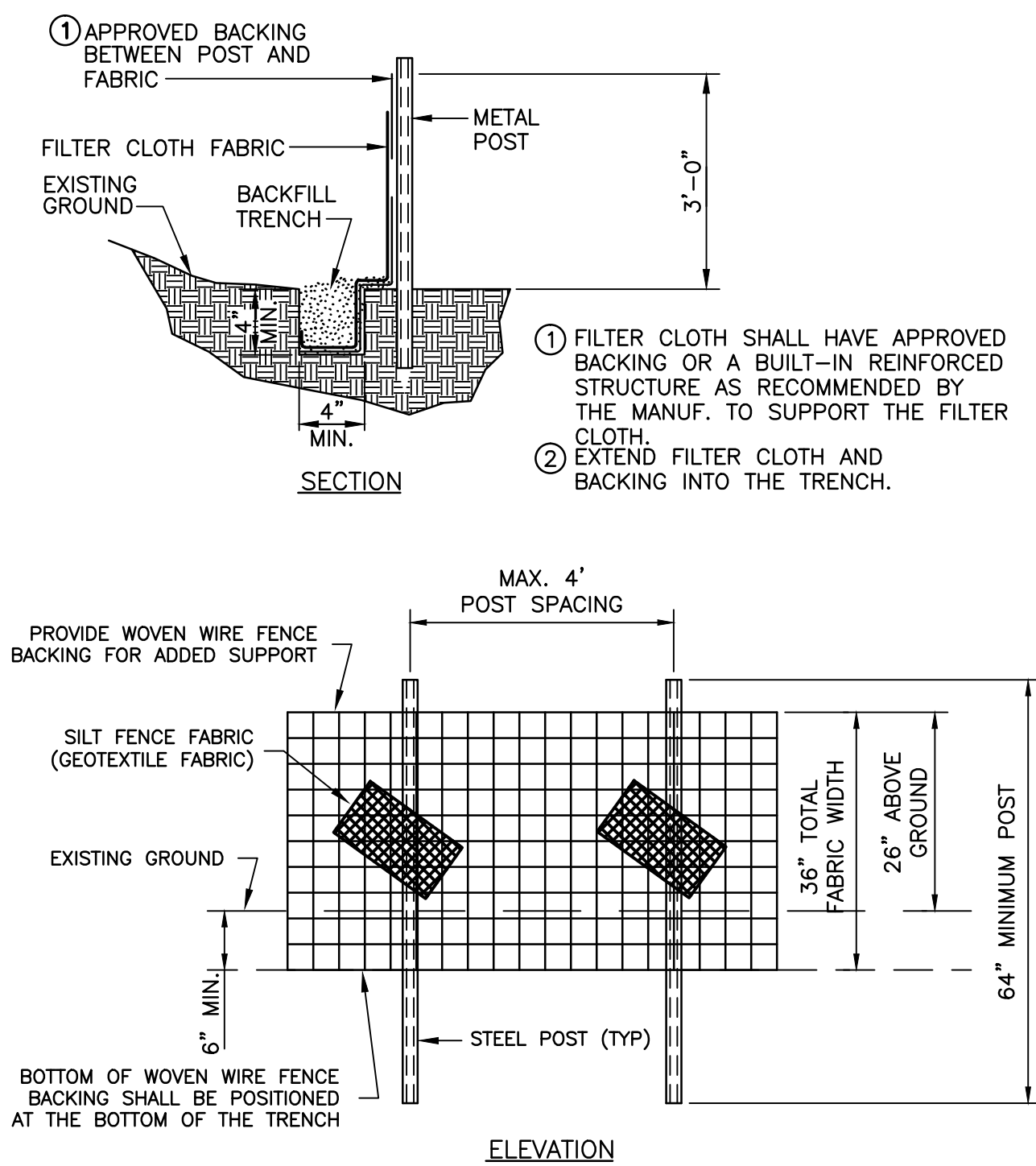
1. COIR LOGS, GEORIDE OR SEDIMENT STOP FILTRATION SYSTEM MAY BE USED.
2. INSPECTION OF EROSION CONTROL DEVICES AND STRUCTURES SHALL BE CONDUCTED TWICE EACH WEEK AND AFTER RAIN EVENTS IN EXCESS OF HALF INCH PER DAY. REPAIR OR REPLACEMENT OF DITCH CHECK SHALL BE MADE PROMPTLY AS NEEDED.
3. REMOVE SEDIMENT WHEN SEDIMENT DEPTH AT THE DITCH CHECK IS APPROXIMATELY EQUAL TO ONE-HALF OF COIR LOGS HEIGHT.
4. CHECK DAMS SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION AND ONLY WHEN DIRECTED BY THE ENGINEER.



SCALE: NTS

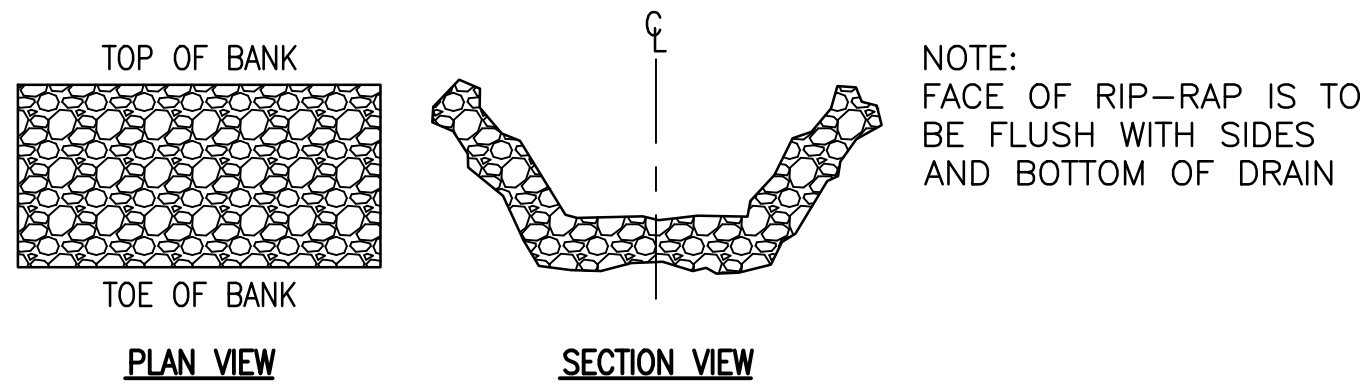
TYPE FENCE	A	B	C
TENSILE STRENGTH (LBS. MIN.) (1) (ASTM D-4632)	WARP — 120 FILL — 100	WARP — 120 FILL — 100	WARP — 260 FILL — 180
ELONGATION (% MAX.) (ASTM D-4632)	40	40	40
AOS (APPARENT OPENING SIZE) (MAX. SIEVE SIZE) (ASTM D-4751)	#30	#30	#30
FLOW RATE (GAL./MIN./SQ. FT.) (GDT-87)	25	25	70
ULTRAVIOLET STABILITY (2) (ASTM D-4632 AFTER 300 HOURS WEATHERING IN ACCORDANCE WITH ASTM D-4355)	80	80	80
BURSTING STRENGTH (PSI MIN.) (ASTM D-3786 DIAPHRAGM BURSTING STRENGTH TESTER)	175	175	175
MINIMUM FABRIC WIDTH (INCHES)	36	22	36
(1) MINIMUM ROLL AVERAGE OF FIVE SPECIMENS. (2) PERCENT OF REQUIRED INITIAL MINIMUM TENSILE STRENGTH.			

SCALE: NTS



SILT FENCE DETAIL

1. All work shall be done in accordance with the Storm Water Pollution Prevention Plan (SWPPP).
2. No work may proceed until a Notice of Coverage (NOC) has been issued by the State of Tennessee Department of Environment and Conservation.
3. SWPPP must be available at the site for review at all times.
4. At a minimum, the Contractor shall install silt fence on the downhill side of the proposed water line construction area.
5. Contractor shall provide ditch checks as required.
6. Contractor shall furnish and install temporary erosion control blanket/matting on all slopes greater than 2.5:1
7. All areas to remain bare more than 15 days must be temporarily stabilized in accordance with the current Best Management Practices (BMP's).
8. Erosion controls shall be checked and repaired if necessary at least twice each calendar week in accordance with the SWPPP.
9. All erosion control measures utilized within State of Tennessee shall meet or exceed the TDOT requirements.



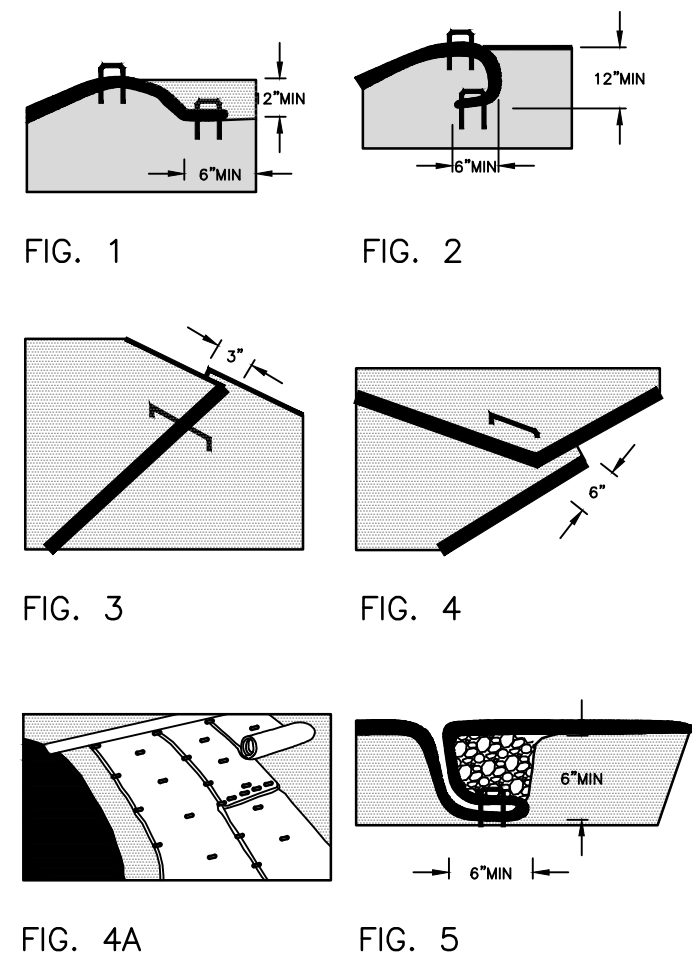
RIP-RAP STABILIZATION WHERE NOTED WILL CONSIST OF HAND-PLACED NATIVE LIMESTONE, HAVING A MAXIMUM LENGTH/WIDTH DIMENSION OF 12" IN EITHER DIRECTION AND A MAXIMUM THICKNESS OF 6". TREATMENT WILL BE PLACED IN TWO INTERLOCKING (NESTING) LAYERS. RIP-RAP SHALL BE PLACED FOR THE FULL WIDTH OF AREA DISTURBED BY PIPE LAYING OPERATIONS. LIMIT OF WIDTH FOR PAYMENT OF RIP-RAP SHALL BE AS FOLLOWS:

PIPE DIAMETER	RIP-RAP WIDTH
8"	5'
10"	5.5'
12"	6'
15-16"	8'
18"	8.5'
21"	9'
24"	10'

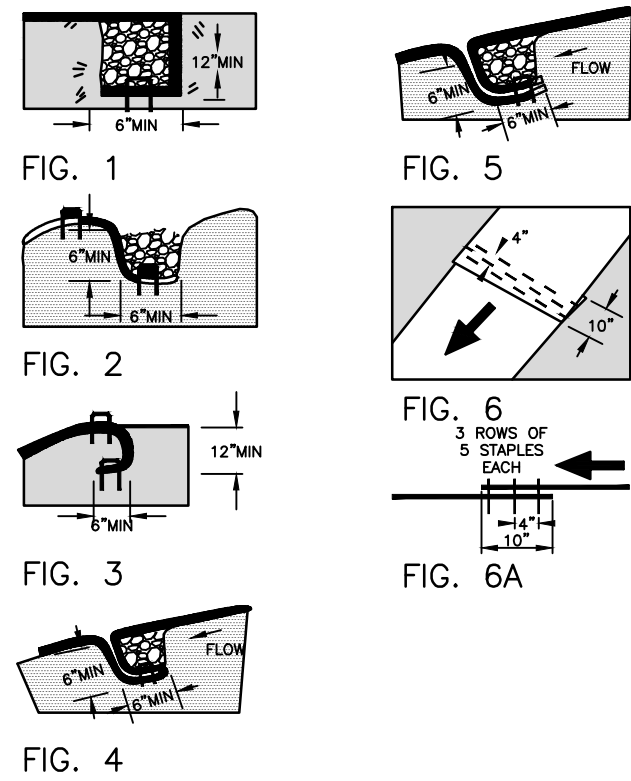
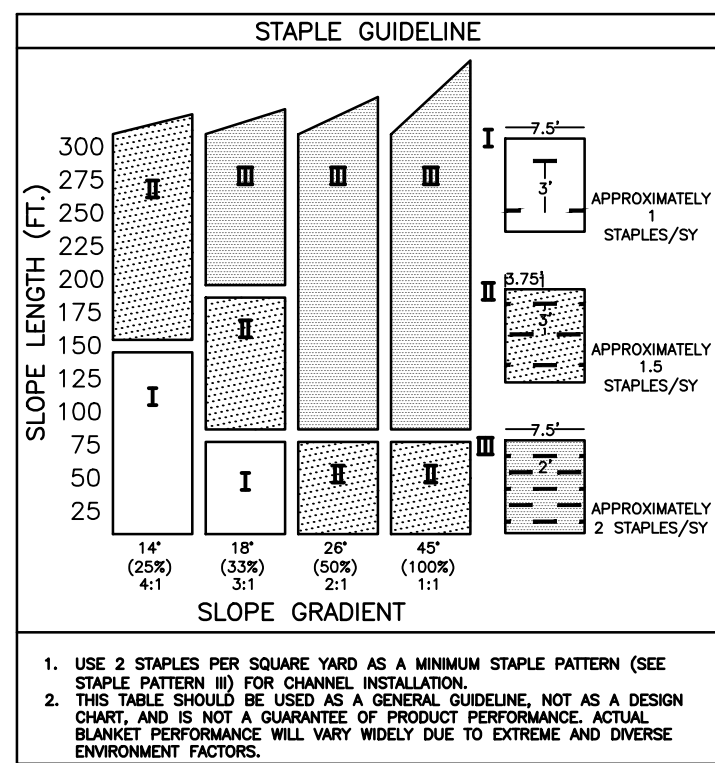
SCALE: NTS

SITE PREPARATION (CHANNEL AND SLOPE) – GRADE THE SURFACE INSTALLATION AREAS SO THAT THE GROUND IS SMOOTH AND COMPACT. WHEN SEEDING PRIOR TO INSTALLATION, PREPARE FOR SEEDING BY LOOSENING THE TOP 2" TO 3" OF SOIL. ALL GULLIES, RILLS, AND ANY OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION. SPREAD SEED BEFORE OR AFTER MAT INSTALLATION AS DIRECTED. (IMPORTANT: REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW FOR INTIMATE CONTACT BETWEEN THE SOIL SURFACE AND THE MAT.)

1. ANCHOR BLANKETS 2' TO 3' OVER THE TOP OF SLOPE AS IN FIG. 1 OR FIG. 2. PIN THE MAT AT 1' INTERVALS ALONG THE ANCHOR TRENCH BOTTOM.
2. WALKING BACKWARD DOWN THE SLOPE, ALLOW THE BLANKET TO UNROLL SLOWLY; IDEALLY, THE BLANKET ROLL WILL REST AGAINST YOUR BACK AS YOU WALK. PLACE BLANKETS LOOSELY BUT WITHOUT SLACK. THE BLANKET MUST BE IN INTIMATE CONTACT WITH THE SOIL TO PERFORM PROPERLY.
3. STAPLE BLANKET ACCORDING TO RECOMMENDED STAPLE PATTERN FOR SPECIFIC PRODUCT AND SLOPE. (SEE STAPLE PATTERN GUIDE)
4. OVERLAP BLANKET EDGES (SIDE-TO-SIDE) APPROXIMATELY 3" AND STAPLE ACCORDING TO FIG. 3. NOTE: INSTALL BLANKET SO EDGE OVERLAPS ARE SHINGLED AWAY FROM THE TRENCH.
5. OVERLAP BLANKET ENDS 6" (15cm), WITH UPPER BLANKET OVER LOWER BLANKET, AND STAPLE AT 1' INTERVALS (SEE FIG. 4 AND FIG. 4A) ACROSS WIDTH OF THE BLANKET.
6. CUT EXCESS BLANKET WITH SCISSORS AND ANCHOR AT END OF SLOPE.
7. IF INSTALLATION PLAN SPECIFIES "CHECK SLOT(S)", SEE FIG. 5.




1. EXCAVATE TERMINAL TRENCHES (MINIMUM 12" DEEP AND 6" WIDE) ACROSS THE CHANNEL BOTTOM AT THE UPPER AND LOWER END OF THE LINED CHANNEL SECTIONS. SEE FIG. 1.
2. EXCAVATE LONGITUDINAL TRENCHES (MINIMUM 6" DEEP BY 6" WIDE) ALONG THE CHANNEL EDGES (ABOVE THE WATER LINE) IN WHICH TO BURY THE OUTSIDE BLANKET EDGES. SEE FIG. 2 OR FIG. 3.
3. PLACE THE FIRST BLANKET AT THE DOWNSTREAM (D/S) END OF THE CHANNEL. PLACE THE END OF THE BLANKET IN THE TERMINAL TRENCH AND PIN IT AT 1' INTERVALS ACROSS THE BLANKET WIDTH IN THE BOTTOM OF THE TRENCH.
4. ONCE PINNED AND BACKFILLED, THE BLANKET IS DEPLOYED BY WRAPPING OVER THE TOP OF THE TRENCH AND UNROLLING UPSTREAM (U/S). IF THE CHANNEL IS WIDER THAN THE PROVIDED ROLLS, PLACE THE ENDS OF THE ADJACENT ROLLS IN THE TERMINAL TRENCH, OVERLAPPING THE ADJACENT ROLLS 3" TO 6". PIN AT 1' INTERVALS, BACKFILL, AND COMPACT.
5. UNROLL THE BLANKET PROCEEDING U/S AND INSTALL CHECK SLOT (MINIMUM 6" DEEP BY 6" WIDE) ACROSS THE WIDTH OF THE CHANNEL 30' INTERVALS. SEE FIG. 4.
6. TO JOIN ROLL ENDS WITHIN THE CHANNEL BOTTOM, EXCAVATE A CHECK SLOT (MINIMUM 6" DEEP BY 6" WIDE) AND PLACE THE END OF THE D/S BLANKET IN THE BOTTOM OF THE CHECK SLOT. PLACE THE END OF THE U/S BLANKET OVER THE D/S BLANKET AND STAPLE AT 1' INTERVALS ACROSS THE WIDTH OF THE BLANKET IN THE BOTTOM OF THE CHECK SLOT. ONCE PINNED AND BACKFILLED, THE U/S BLANKET IS DEPLOYED BY WRAPPING OVER THE TOP OF THE TRENCH AND UNROLLING UPSTREAM (U/S). SEE FIG. 5.
7. FOR SIDE CHANNEL SLOPES, INTERMITTENT CHECK SLOTS SHOULD BE INSTALLED ACROSS THE WIDTH OF THE CHANNEL AT 30' INTERVALS AND AT THE BEGINNING AND END OF THE CHANNEL. THE TOP EDGE OF THE FURTHEST SIDE BLANKET SHOULD BE PLACED IN AN ANCHOR TRENCH RUNNING LONGITUDINAL TO THE CHANNEL. SEE FIG. 2 OR FIG. 3.
8. ENDS OF ROLLS ON THE SIDE SLOPES SHOULD BE LAPPED 10" AND SHINGLED TO THE WATER FLOW. PIN USING 3 ROWS OF STAPLES, WITH THE ROWS SPACED AT 4" AND STAGGERED, AND STAPLES AT 1' INTERVALS ACROSS THE ROLL WIDTH. SEE FIG. 6 AND FIG. 6A.



THIS RECORD DOCUMENT HAS BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR GRW ENGINEERS, INC. HAS ATTEMPTED TO VERIFY THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION BUT SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.

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ENGINEER/ARCHITECT: JAMES W. HILBORN

CONSTRUCTION COMPANY: WARD CONSTRUCTION

DATE: MAY 5, 2014

This document, originally issued, sealed, and signed by James W. Hilborn, Kentucky Professional Engineer, No. 16514, on March 14, 2011, shall not be used in lieu of a certified document.

GRW PROJECT NO. 3827-02

ENGINEERS - ARCHITECTS - PLANNERS

STANDARD EROSION CONTROL DETAILS

WATER LINE EXTENSION
CITY OF LOBELVILLE AND PERRY COUNTY TENNESSEE

[illegible]

DATE:	JULY 2010
SCALE:	AS NOTED
SHEET NO.	

C-12