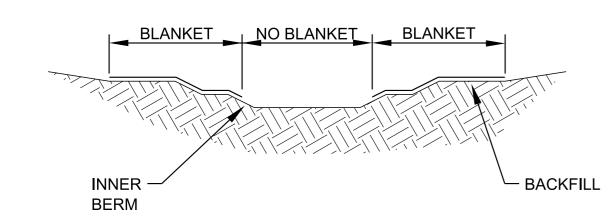
BANKFULL BLANKET BACKFILL 2"x4"x18" WOODEN STAKE 2"x4"x18" **SECTION B-B** WOODEN STAKE

2"x4"x18" WOODEN STAKE

STAKES MAY BE MADE BY SAWING A 2"x4" DIAGONALLY IN HALF.

WOOD STAKE

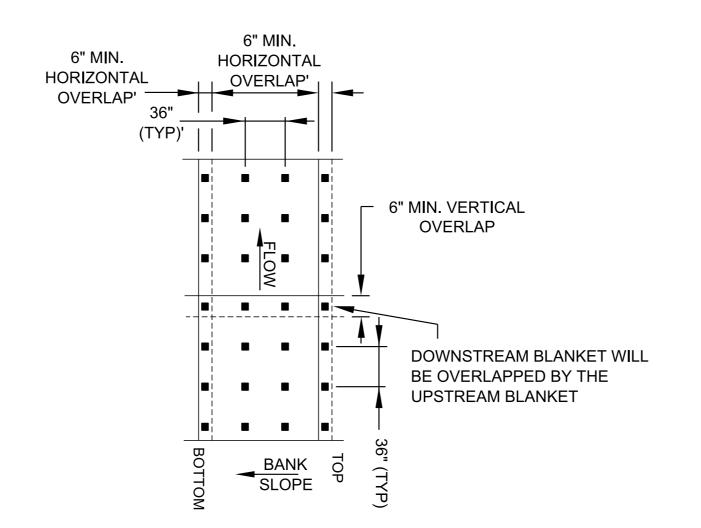
COIR EROSION CONTROL BLANKET **PLAN**



SECTION A-A

STREAM MITIGATION PLAN LEGEND:

COIR FIBER EROSION CONTROL BLANKET



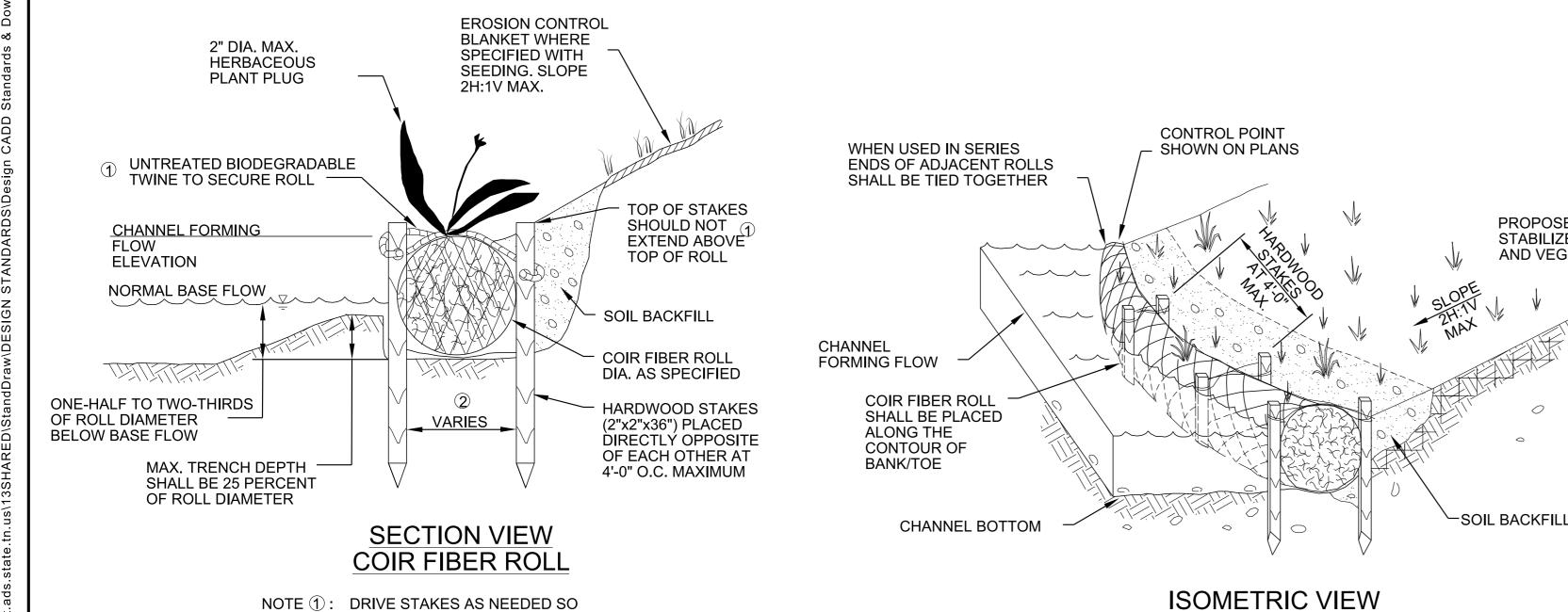
MATTING STAKING VIEW

COIR FIBER ROLI

PROPOSED

STABILIZED SLOPE

AND VEGETATION



COIR FIBER EROSION CONTROL BLANKET NOTES

- COIR FIBER EROSION CONTROL BLANKETS PROVIDE TEMPORARY BANK STABILIZATION FOLLOWING BANK GRADING. UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED.
- COIR FIBER EROSION CONTROL BLANKETS SHALL BE 700 GRAMS PER SQUARE METER.
- BEFORE INSTALLING COIR BLANKETS, RAKE OR TILL THE UPPER THREE TO FOUR INCHES OF THE SOIL ON THE STREAM BANKS, SEED WITH TEMPORARY AND PERMANENT SEED MIXES, RAKE SOIL LEVEL, AND LIGHTLY MULCH WITH CLEAN STRAW.
- COIR BLANKETS SHALL BE INSTALLED ON THE OUTSIDE OF BANKS OF MEANDERS AND ON BOTH BANKS ALONG RIFFLES, FROM THE INNER BERM OF THE CHANNEL TO TWO FEET (MIN.) BEYOND BANKFULL. BLANKET MAY BE ELIMINATED FROM THE INNER BERM AT THE DISCRETION OF THE ENGINEER.
- PLACE COIR BLANKETS PARALLEL TO THE CHANNEL. WHERE MULTIPLE PANELS OF BLANKETS ARE USED, PANELS SHALL BE OVERLAPPED A MINIMUM OF SIX INCHES, IN A DOWNSTREAM AND DOWNSLOPE DIRECTION
- PULL BLANKETS TIGHT, BUT MAINTAIN CONTACT WITH THE SOIL. USE 2-INCH X 4-INCH X 18-INCH WOODEN STAKES ON THREE-FOOT CENTERS TO SECURE COIR BLANKETS.
- ALL MATERIALS ARE TO BE APPROVED BY ENGINEER OR ENGINEER'S ON-SITE CONSTRUCTION OBSERVER.
- COIR FIBER EROSION CONTROL BLANKETS SHALL BE PAID FOR UNDER THE FOLLOWING

805-12.08 700 GRAM COIR FIBER EROSION BLANKETS PER SY

SEED AND MULCH SHALL BE PAID FOR ACCORDING TO THEIR RESPECTIVE ITEM NUMBERS. PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR TO INSTALL THE COIR FIBER EROSION CONTROL BLANKETS.

COIR FIBER ROLL NOTES

- COIR FIBER ROLLS ARE A FLEXIBLE BANK STABILIZATION MEASURE CONSISTING OF INTERWOVEN COCONUT HUSK FIBERS THAT CAN BE FITTED TO THE CURVATURE OF A STREAM BANK PROVIDING IMMEDIATE TOE PROTECTION AND BANK STABILIZATION. COIR FIBER ROLLS ARE USED TO ENHANCE THE ESTABLISHMENT AND GROWTH OF NATIVE VEGETATION ALONG THE STREAM BANK BY TRAPPING SEDIMENT BEHIND THE ROLL PROVIDING A SUBSTRATE FOR PLANT GROWTH, EFFECTIVE LIFE 2 TO 3 YEARS.
- COIR FIBER ROLLS ARE AN ACCEPTABLE MITIGATION PRACTICE FOR USE IN STREAMS AND ALONG THE SHORELINE OF PONDS AND WETLANDS.
- COIR FIBER ROLLS MAY BE USED IN COMBINATION WITH LONGITUDINAL STONE TOES. ROOT WADS, LIVE SILTATION, OR OTHER BANK STABILIZATION MEASURES.
- COIR FIBER ROLLS SHOULD NOT BE USED WHEN CHANNEL FLOW VELOCITY EXCEEDS 10 FEET PER SECOND, WHERE CHANNEL SHEAR STRESSES ARE MODERATE TO HIGH ALONG THE BANK, IN BEDROCK CHANNELS, IN CHANNELS WHERE SCOUR IS PRESENT OR EXPECTED. OR IN STREAMS WHERE SIGNIFICANT DEBRIS LOAD IS EXPECTED.
- COIR FIBER ROLLS SHOULD BE CONSTRUCTED AT THE TOE OF A STREAM BANK TO A HEIGHT EQUAL TO THE CHANNEL FORMING FLOW ELEVATION.
- COIR FIBER ROLLS SHALL BE SEATED IN A SHALLOW HAND-CUT TRENCH SLIGHTLY BELOW THE CHANNEL BOTTOM ELEVATION. COIR FIBER ROLL SHALL BE IN CONTACT WITH THE WATER. SUBMERGED FROM ONE-HALF TO TWO-THIRDS OF THE ROLL DIAMETER.
- ENDS OF COIR FIBER ROLLS SHALL BE TURNED IN AND BURIED WITHIN THE BANK TO PREVENT WATER FROM INTRUDING BEHIND THE ROLL.
- VEGETATION (SPECIES) USED FOR HERBACIOUS PLUGS TO BE INSTALLED IN THE TOP OF COIR FIBER ROLLS SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION. LIVE DORMANT STAKES MAY BE USED FOR PLUGS.
- COIR FIBER ROLLS SHALL BE KEPT DRY PRIOR TO INSTALLATION.

ACCORDING TO THEIR RESPECTIVE ITEM NUMBERS.

COIR FIBER ROLLS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-03.31 STREAM MITIGATION - COCONUT FIBER ROLLS PER LINEAR FOOT

EROSION CONTROL BLANKETS AND HERBACEOUS PLANT PLUGS SHALL BE PAID FOR

PAYMENT FOR COIR FIBER ROLLS SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR THE INSTALLATION OF THE COIR FIBER ROLL.

MATERIAL SHOWN ARE ONLY A GRAPHICAL REPRESENTATION AND DO NOT DEPICT THE ACTUAL DEPTH OR QUANTITY OF MATERIALS TO APPROPRIATELY CONSTRUCT OR STABILIZE THE CHANNEL

> MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

> > **STATE OF TENNESSEE** DEPARTMENT OF **TRANSPORTATION**

COIR FIBER EROSION CONTROL BLANKET AND COIR FIBER ROLLS

D-NSD-33

STREAM MITIGATION PLAN LEGEND: ———— COCONUT FIBER ROLLS

TWINE IS SECURED AGAINST TOP OF

DIAMETER 8, 12, 16, 18, 20-INCH (TYP.)

NOTE (2): SPACING VARIES BASED ON ROLL

FULL OR PARTIAL SUN

REQUIRED FOR USE

NOT TO SCALE