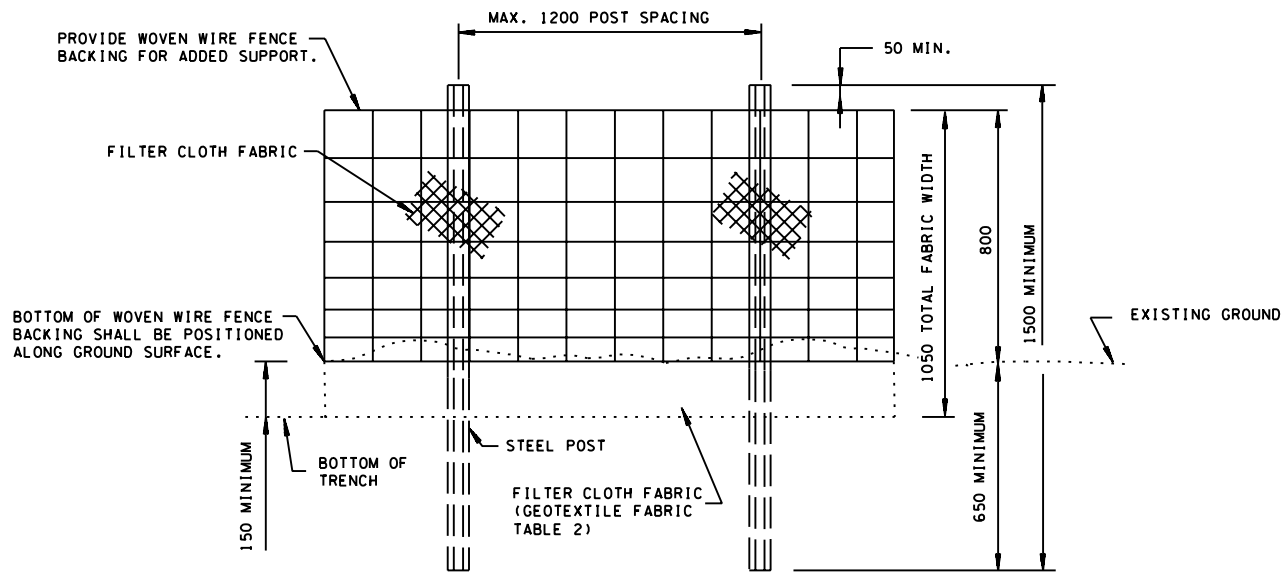
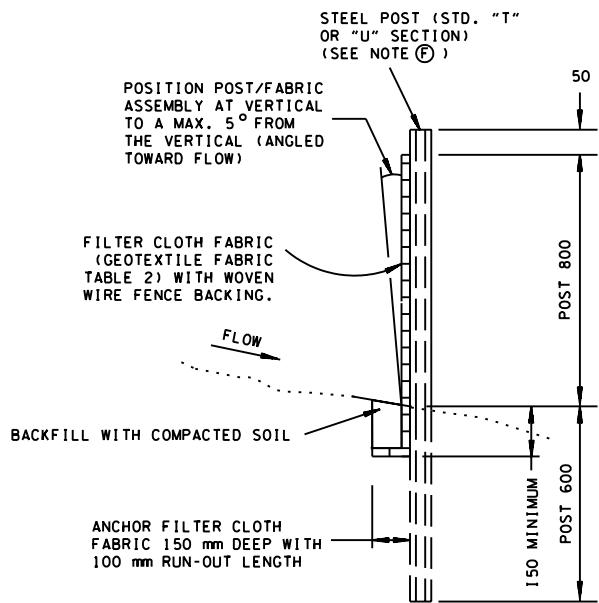


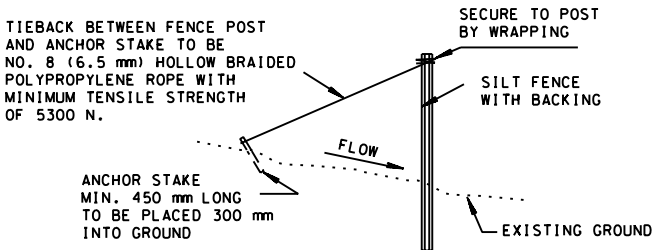
TEMPORARY SILT FENCE WITH BACKING
(ITEM NO. 209-08.02)



ELEVATION VIEW



SECTIONAL VIEW



SILT FENCE TIEBACK

WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS, COST TO BE INCLUDED IN THE ITEMS FOR TEMPORARY SILT FENCE (WITH BACKING)

TABLE 2 TEMPORARY SILT FENCE WITH BACKING FABRIC SPECIFICATIONS	
FABRIC PROPERTY AND TEST METHODS	REQUIRED PHYSICAL PROPERTIES (MARV VALUES OF TEST DATA)
FABRIC TYPE	WOVEN SLIT FILM
APPARENT OPENING SIZE (ASTM D4751)	#70 TO #100 STANDARD SIEVE
PERCENT OPEN AREA (POA)	1 % TO 10 %
WATER FLUX (ASTM D4491)	≥ 733 L/MIN/m ²
TENSILE STRENGTH (ASTM D4632)	≥ 1378 N (WARP DIRECTION) X 889 N (FILL DIRECTION)
ULTRAVIOLET STABILITY (AFTER 500 HRS PER ASTM D4355)	≥ 90%
BURST STRENGTH (ASTM D3786)	≥ 2758 kPa
PUNCTURE STRENGTH (ASTM D4833)	≥ 467 N
TRAPEZOIDAL TEAR (ASTM D4533)	≥ 444 N (WARP DIRECTION) X 266 N (FILL DIRECTION)

TEMPORARY SILT FENCE WITH BACKING GENERAL NOTES

- A ALL LABOR AND MATERIALS SHOWN ON THE ELEVATION AND SECTIONAL VIEWS USED TO CONSTRUCT SILT FENCE WITH BACKING ARE TO BE INCLUDED IN THE PRICE BID FOR ITEM 209M08.02 TEMPORARY SILT FENCE (WITH BACKING) PER METER.
- B SILT FENCES WITH BACKING ARE USED TO INTERCEPT SMALL AMOUNTS OF SEDIMENT AND REDUCE VELOCITY FROM SHEET FLOW ONLY. USE TEMPORARY SILT FENCES WITH BACKING UPGRADIENT OF AND ADJACENT TO WETLANDS, STREAMS, AND OTHER SENSITIVE WATER RESOURCES.
- C THE MAXIMUM DRAINAGE AREA SIZE FOR A CONTINUOUS BARRIER SHALL BE 0.4 ha PER 45 m OF BARRIER LENGTH. MAXIMUM SLOPE LENGTH BEHIND FENCE ON UPSLOPE SIDE SHALL BE 90 m (AS MEASURED ALONG THE GROUND SURFACE).
- D WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE JOINED ACCORDING TO THE DETAILS ON ECM-STR-3E.
- E MAINTENANCE SHALL BE PERFORMED AS NEEDED; CAPTURED SOIL MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND/OR OTHER EVIDENCE OF FILTER CLOGGING IS OBSERVED.
- F STEEL POSTS SHALL BE 2.0 kg/m ROLLED FROM HIGH CARBON STEEL AND SHALL BE GALVANIZED OR HOT-DIPPED AND PAINTED WITH ONE OR MORE COATS OF HIGH-GRADE WEATHER RESISTANT STEEL PAINT. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED TO AID IN THE ATTACHMENT OF WIRE.
- G STEEL POSTS SHALL HAVE A PROJECTION FOR FASTENING WIRE TO THEM. WOVEN WIRE FENCE BACKING TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FABRIC SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE BACKING WITH THE TIES SPACED EVERY 600 mm ALONG TOP AND MIDSECTION. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST SIX PER POST.
- H WOVEN WIRE FENCE BACKING SHALL MEET THE REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FARM, DESIGN NO. 832-6-11, CLASS 3 COATING.
- I SILT FENCES SHOULD BE PLACED ALONG OR NEAR THE GROUND CONTOUR. THE BOTTOM OF FENCE AT GROUNDLINE SHOULD BE ON A ZERO PERCENT (0%) GRADE, PLUS OR MINUS FIVE TENTHS OF ONE PERCENT (±0.5%).
- J STATIC SLICING IS THE PREFERRED METHOD OF FENCE INSTALLATION. STATIC SLICING INVOLVES THE INSERTION OF A NARROW CUTTING BLADE, PLACED AT THE SPECIFIED ANCHOR DEPTH FOR THE GIVEN FABRIC AS SHOWN ON THE APPLICABLE DETAIL, AND SIMULTANEOUSLY PULLING THE FENCE FABRIC INTO THE TRENCH AS THE TRENCH IS BEING EXCAVATED. ALTERNATE TRENCH-BASED METHODS ARE ALSO ACCEPTABLE. FOR TRENCH-BASED INSTALLATIONS, FENCING SHALL BE INSTALLED PER THE FOLLOWING STEPS AND IN THE FOLLOWING ORDER:
- EXCAVATE TRENCH A MAXIMUM OF 100 mm WIDE AND AT THE SPECIFIED DEPTH AS SHOWN ON THE APPLICABLE DETAIL. THE TRENCH SHALL BE HAND-CLEANED FOLLOWING EXCAVATION TO REMOVE BULKY DEBRIS SUCH AS ROCKS, STICKS, AND SOIL CLOUDS FROM THE TRENCH.
 - INSTALL FABRIC IN TRENCH.
 - BACKFILL TRENCH (OVER-FILL) WITH SOIL PLACED AROUND FABRIC.
 - COMPACT SOIL BACKFILL WITH MECHANICAL EQUIPMENT. DO NOT DAMAGE THE FABRIC DURING COMPACTION (DAMAGED FABRIC SHALL BE REPLACED).
 - DRIVE AND SET SUPPORT POSTS PER SPACING REQUIREMENTS GIVEN ON THE APPLICABLE FENCE DETAIL.
 - ATTACH FABRIC TO THE POSTS USING WIRE TIES. SPACING AND DENSITY OF TIES SHALL BE INSTALLED AS GIVEN ON THE APPLICABLE DETAIL.

EROSION CONTROL PLAN LEGEND: * SFB * SFB * SFB * (TEMPORARY SILT FENCE WITH BACKING)

2/22/2005
209-08.02
SFB * SFB * SFB *
SFB * SFB * SFB *



MINOR REVISION -- FHWA
APPROVAL NOT REQUIRED.

ALL UNITS ARE IN MILLIMETERS
UNLESS NOTED OTHERWISE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TEMPORARY SILT
FENCE WITH
BACKING

12-18-02 ECM-STR-3C