TIP PROJECT: B-3803

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3803	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

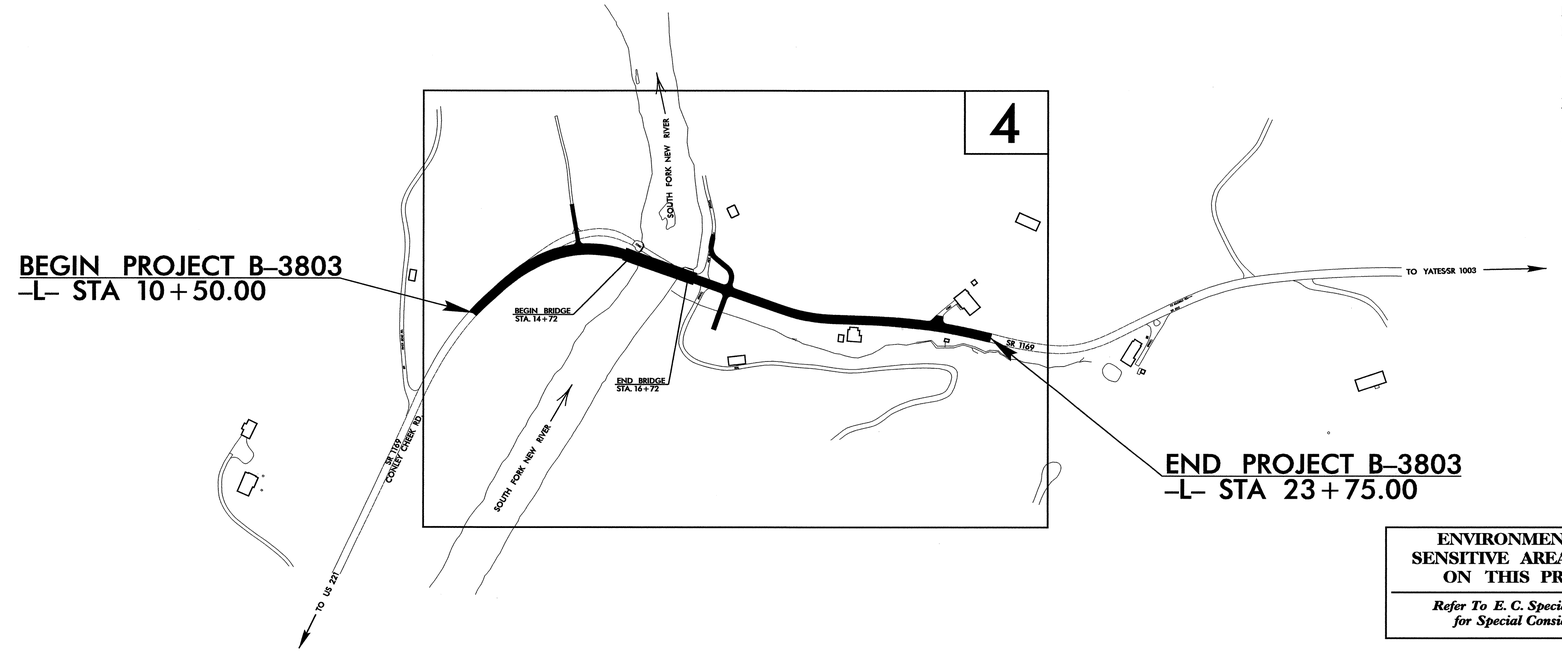
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

ASHE COUNTY

LOCATION: BRIDGE NO. 334 OVER THE SOUTH FORK NEW RIVER ON SR 1169 (CONLEY CHEEK RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE

NAD 83



BEGIN PROJECT B-3803
-L- STA 10+50.00

END PROJECT B-3803
-L- STA 23+75.00

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist From Sta. 10+50 to Sta. 23+75
Refer To E. C. Special Provisions for Special Considerations.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

GRAPHIC SCALE

0
PLANS
0
PROFILE (HORIZONTAL)
0
PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

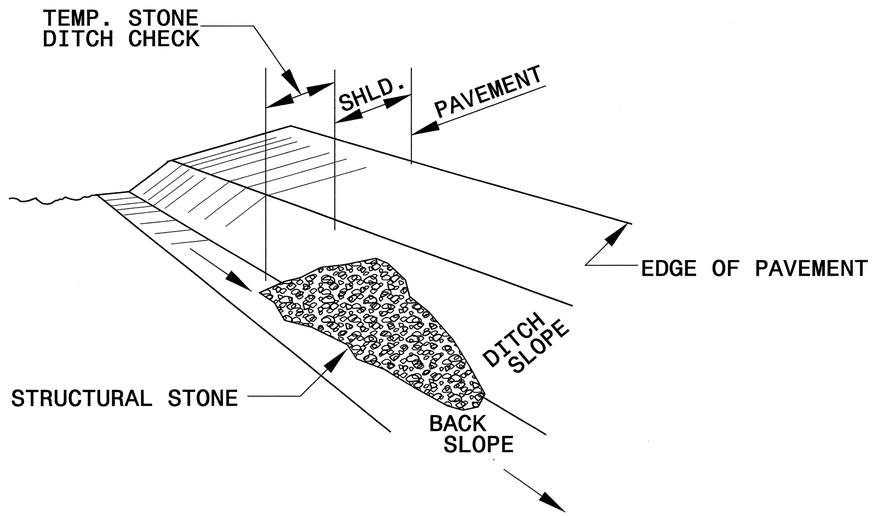
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence
1607.01 Gravel Construction Entrance
1630.03 Temporary Silt Ditch
1630.05 Temporary Diversion
1630.06 Special Stilling Basin
1632.03 Rock Inlet Sediment Trap Type C
1633.01 Temporary Rock Silt Check Type A
1634.02 Temporary Rock Sediment Dam Type B
1635.02 Rock Pipe Inlet Sediment Trap Type B

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

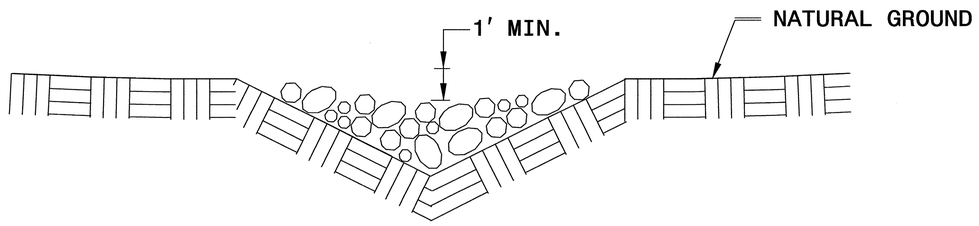


ISOMETRIC VIEW

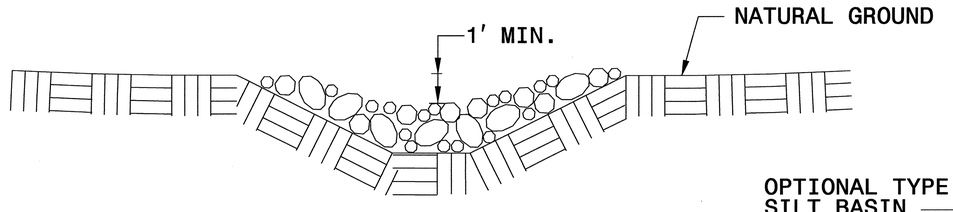
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

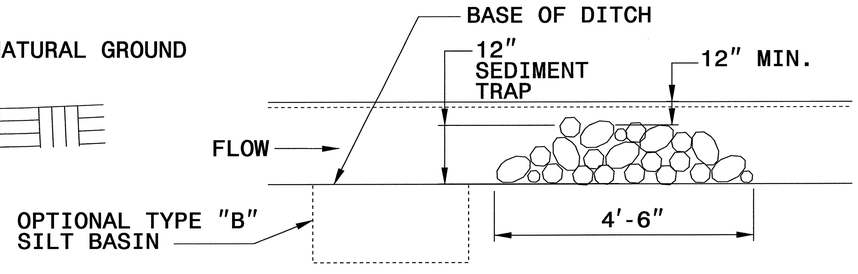
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



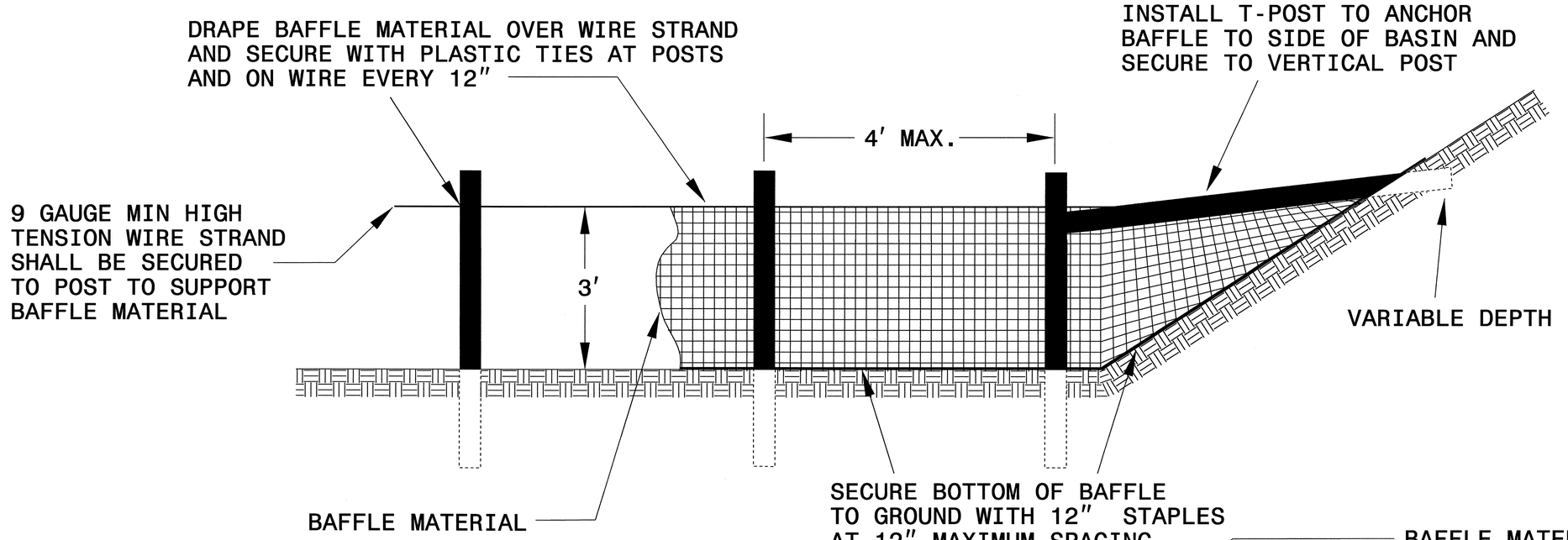
CROSS SECTION TRAPEZOIDAL DITCH

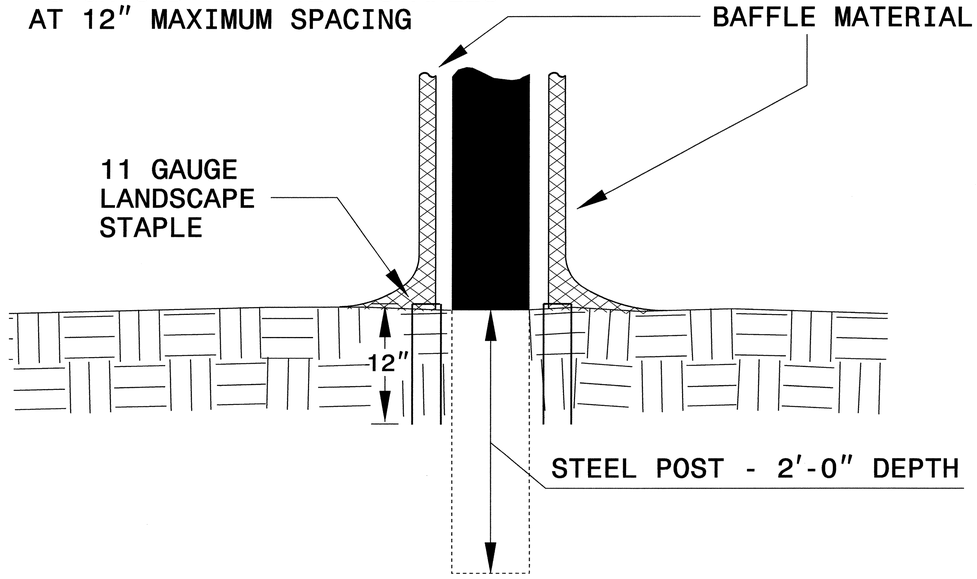


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



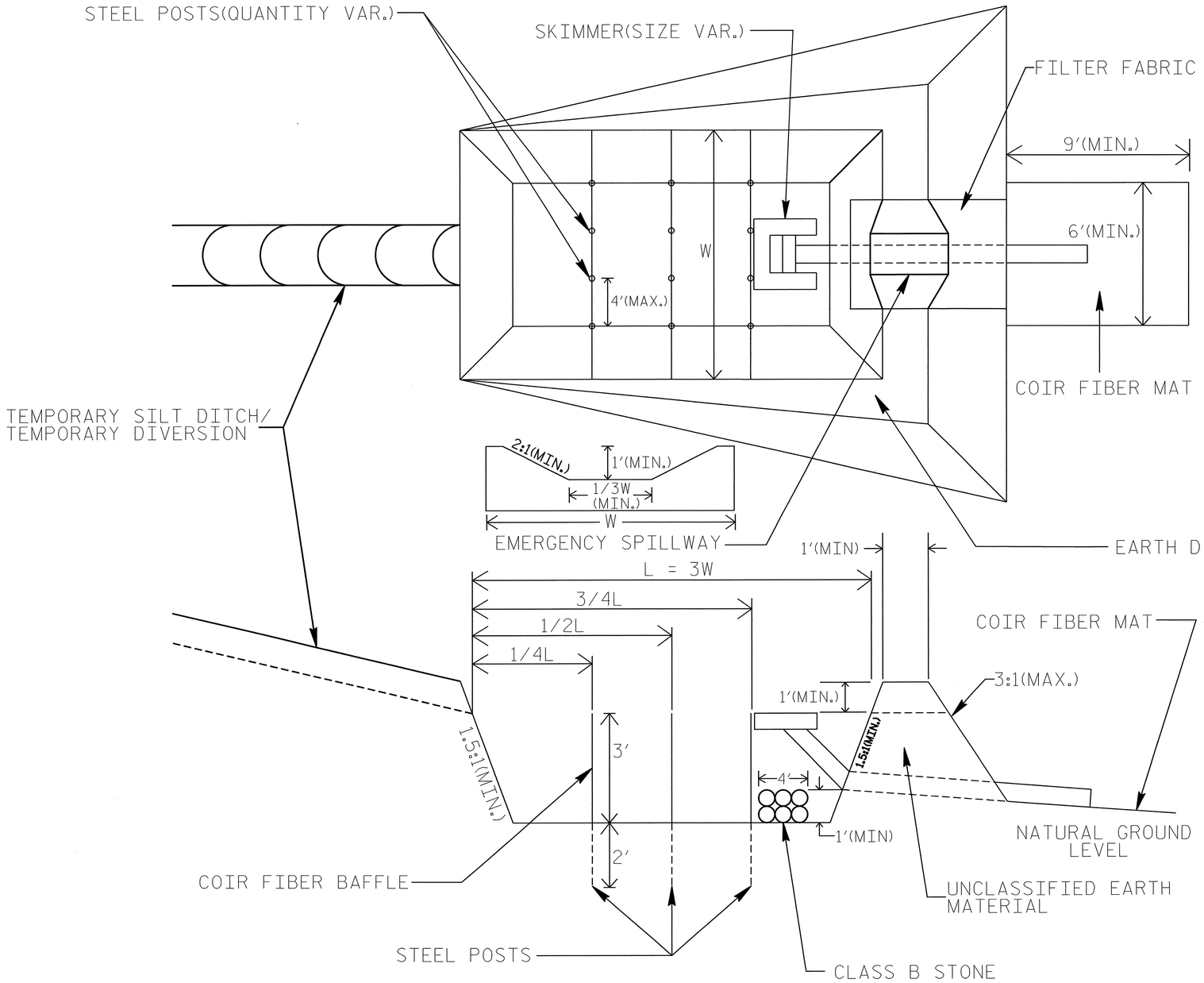


BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

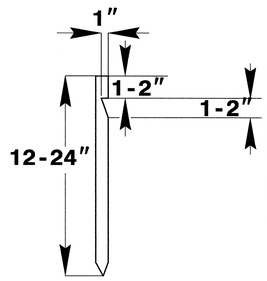
SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

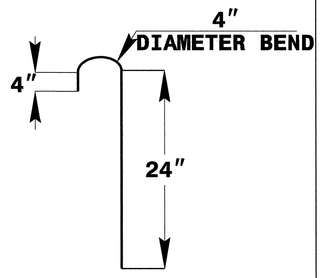


NOTES:
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.

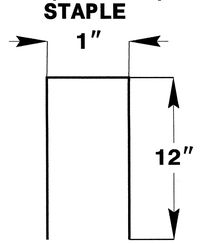
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



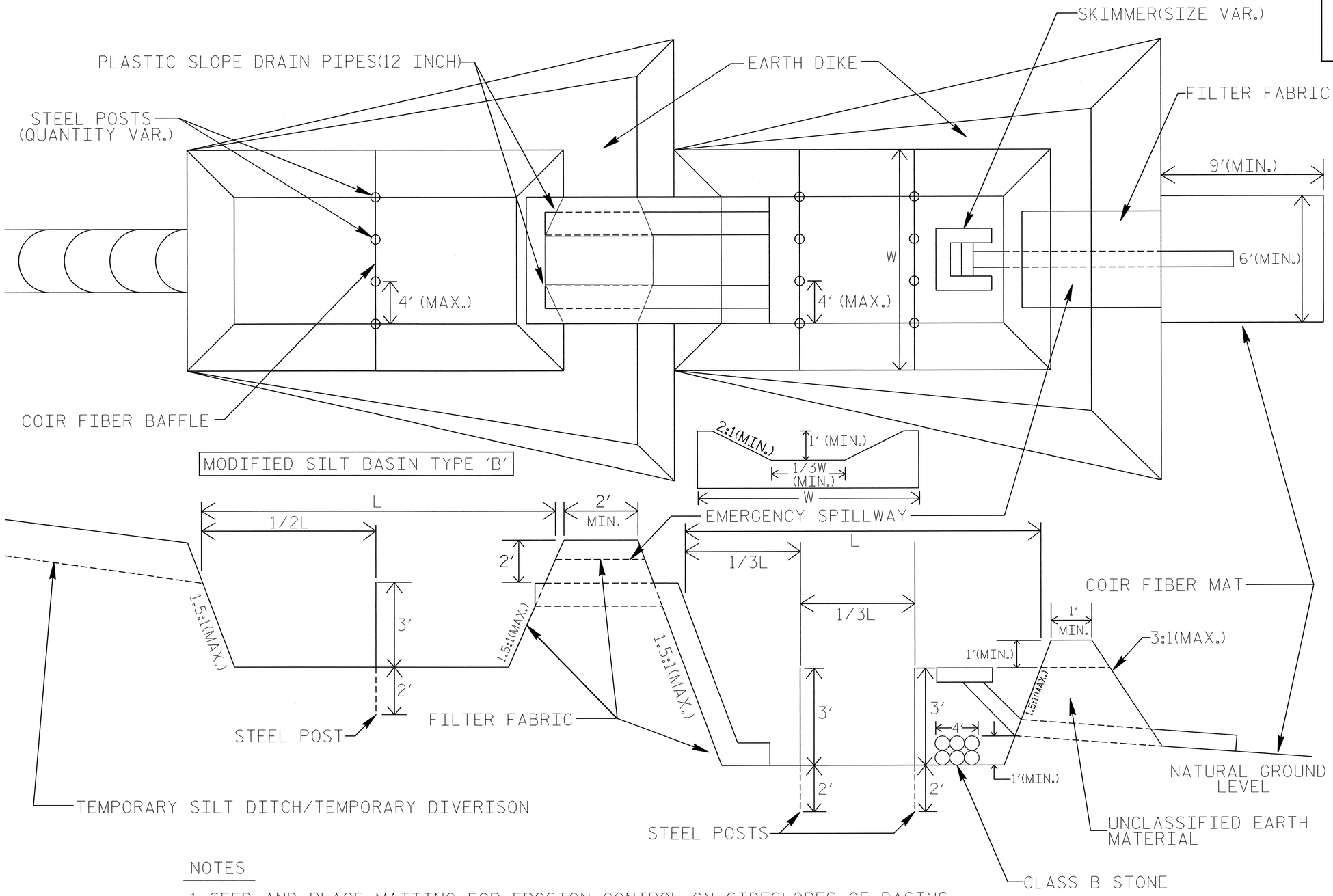
1" (nominal) STAPLE

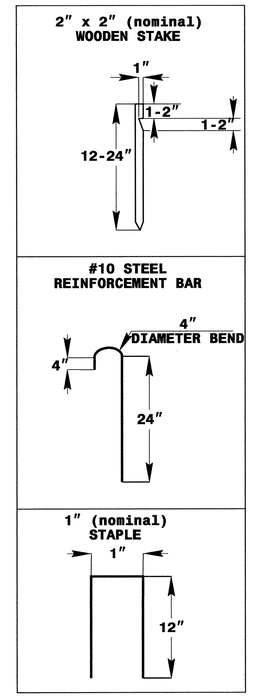


COIR FIBER MAT ANCHOR OPTIONS

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TIERED SKIMMER BASIN DETAIL





COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	D3	10+30	11+50	RT	130
4	L	12+50	14+80	LT	245
4	L	14+57	15+00	RT	60
				SUBTOTAL	435
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					910
				TOTAL	1345
				SAY	1350

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L	17+50	18+25	LT	80
4	L	22+10	23+50	LT	150
				SUBTOTAL	230
		ADDITIONAL PSRM TO BE INSTALLED			15
				TOTAL	245
				SAY	250

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE SPECIAL STILLING BASIN OR SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

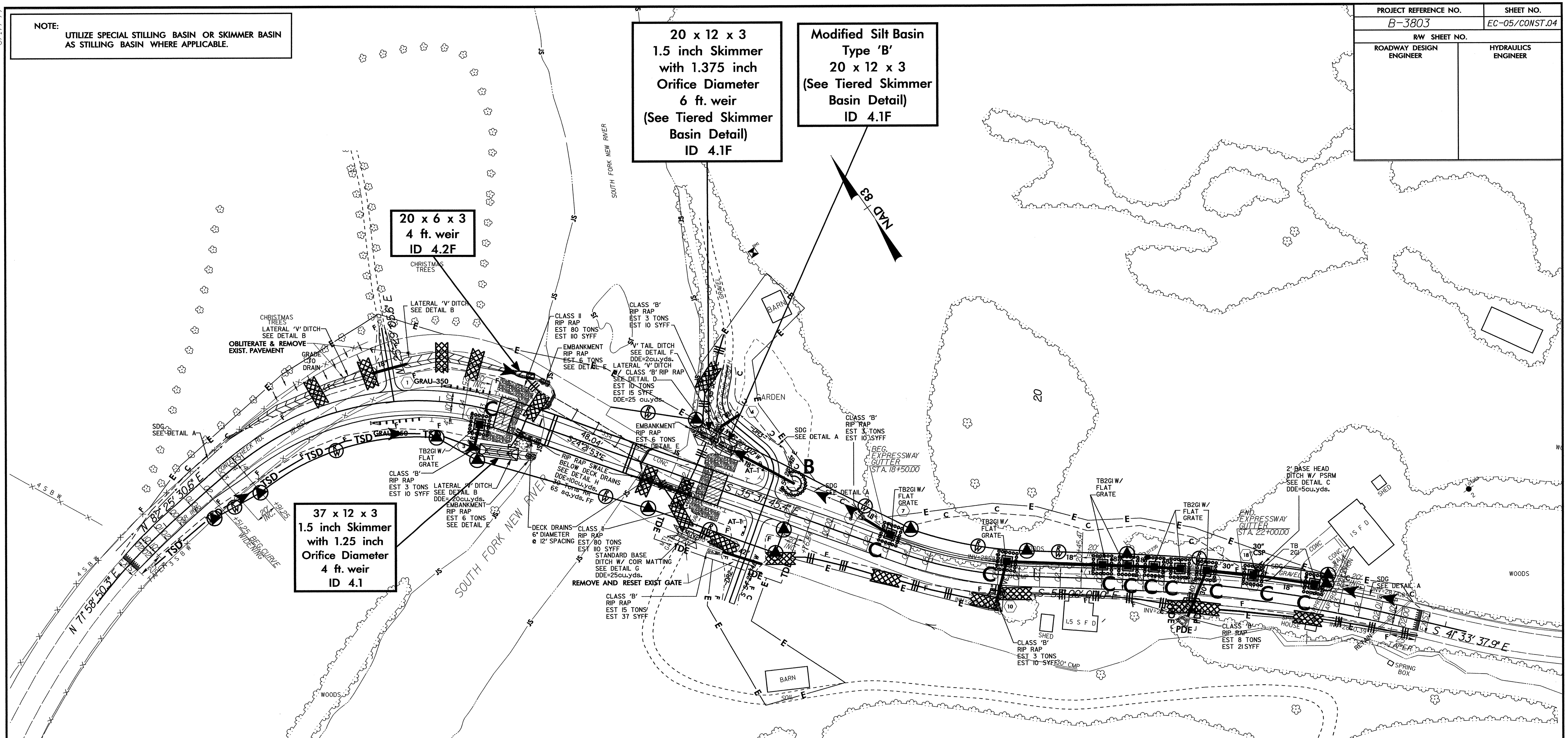
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

NAD 83
SOUTH FORK NEW RIVER
CHRISTMAS TREES
LATERAL 'V' DITCH SEE DETAIL B
OBLITERATE & REMOVE EXIST. PAVEMENT
BARN
GARDEN
WOODS
37 x 12 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
4 ft. weir
ID 4.1
CLASS 'B' RIP RAP EST 3 TONS EST 10 SYFF
EMBANKMENT RIP RAP EST 6 TONS SEE DETAIL E
DECK DRAINS 6" DIAMETER @ 12' SPACING
STANDARD BASE DITCH W/ COIR MATTING SEE DETAIL G DDE=25cu.yds.
REMOVE AND RESET EXIST GATE
CLASS 'B' RIP RAP EST 15 TONS EST 37 SYFF
TB2GI W/ FLAT GRATE
SDG SEE DETAIL A
N 71°58'50.3" E
S 41°33'37.9" E
DETAIL A
SPECIAL DITCH GRADE
(Not to Scale)
Min. D= 1.0 Ft.
FROM STA. 10+50 TO STA. 12+50 LT -L-
FROM STA. 17+50 TO STA. 18+25 LT -L-
FROM STA. 22+10 TO STA. 23+50 LT -L-
FROM STA. 10+30 TO STA. 11+50 RT -D3-
DETAIL B
LATERAL 'V' DITCH
(Not to Scale)
Min. D= 1.0 Ft.
b= 5.0 Ft.
FROM STA. 12+50 TO STA. 14+80 LT -L-
FROM STA. 14+47 TO STA. 15+00 RT -L-
DETAIL C
STANDARD BASE DITCH
(Not to Scale)
Min. D= 1.0 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
Type of Liner= PSRM
STA. 22+10 LT -L-
SLOPE = 9.20%
DETAIL H
STANDARD 'V' DITCH
Type of Liner= Class 'B' Rip-Rap
FROM STA. 14+84 TO STA. 15+05 -L-
FROM STA. 16+05 TO STA. 16+60 -L-
DETAIL D
LATERAL 'V' DITCH
(Not to Scale)
Type of Liner= 2' Rip-Rap
FROM STA. 16+50 TO STA. 16+90 LT -L-
DETAIL E
RIP RAP AT EMBANKMENT
(Not to Scale)
Est. 6 Tons
Type of Liner= Class 'B' Rip-Rap
STA. 15+00 LT -L-
STA. 15+00 RT -L-
STA. 16+50 LT -L-
DETAIL F
STANDARD 'V' DITCH
(Not to Scale)
STA. 16+60 LT -L-
SLOPE = 3.00%
DETAIL G
STANDARD BASE DITCH
(Not to Scale)
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 3 Ft.
Type of Liner= Coir Fiber Mat
FROM STA. 16+50 TO STA. 16+88 RT -L-

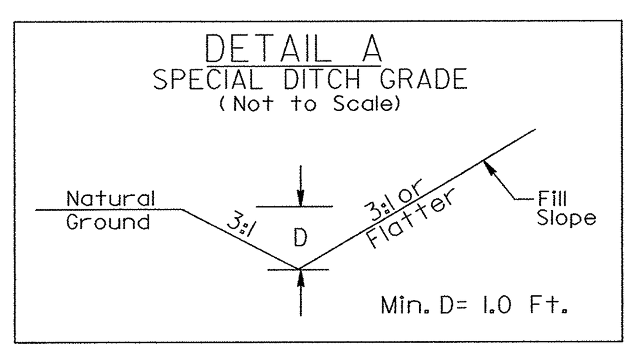
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-3803	EC-05/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

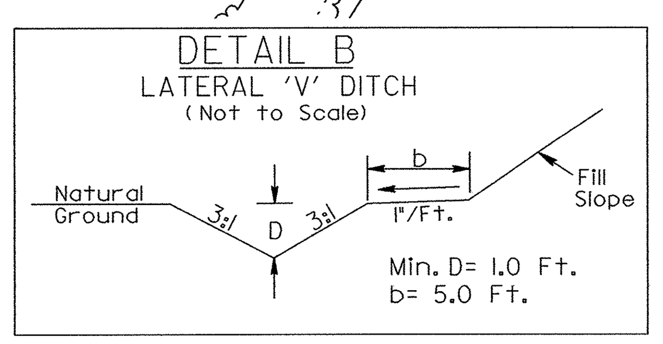
NOTE:
UTILIZE SPECIAL STILLING BASIN OR SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.



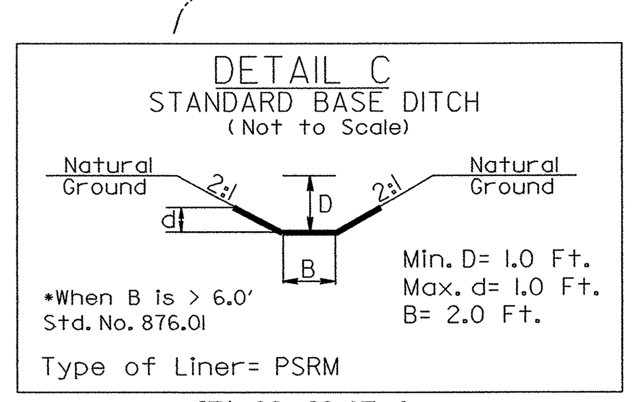
20 x 12 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
6 ft. weir
(See Tiered Skimmer Basin Detail)
ID 4.1F
Modified Silt Basin
Type 'B'
20 x 12 x 3
(See Tiered Skimmer Basin Detail)
ID 4.1F
20 x 6 x 3
4 ft. weir
ID 4.2F
37 x 12 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
4 ft. weir
ID 4.1
NAD 83
SOUTH FORK NEW RIVER
CHRISTMAS TREES
LATERAL 'V' DITCH SEE DETAIL B
OBLITERATE & REMOVE EXIST. PAVEMENT
CLASS II RIP RAP EST 80 TONS EST 110 SYFF
EMBANKMENT RIP RAP EST 6 TONS SEE DETAIL E
CLASS 'B' RIP RAP EST 3 TONS EST 10 SYFF
REMOVE AND RESET EXIST GATE
BARN
GARDEN
BEG. EXPRESSWAY GUTTER STA. 18+50.00
END EXPRESSWAY GUTTER STA. 22+00.00
2' BASE HEAD DITCH W/ PSRM SEE DETAIL C DDE=5cu.yds.
CLASS 'B' RIP RAP EST 8 TONS EST 21 SYFF
SPRING BOX
WOODS
S 41°33'37.9" E
N 71°58'50.3" E



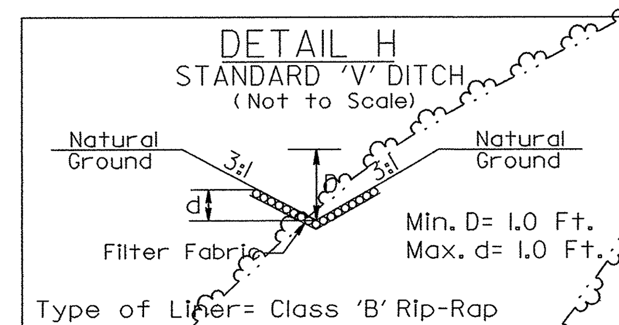
FROM STA. 10+50 TO STA. 12+50 LT -L-
FROM STA. 17+50 TO STA. 18+25 LT -L-
FROM STA. 22+10 TO STA. 23+50 LT -L-
FROM STA. 10+30 TO STA. 11+50 RT -D3-



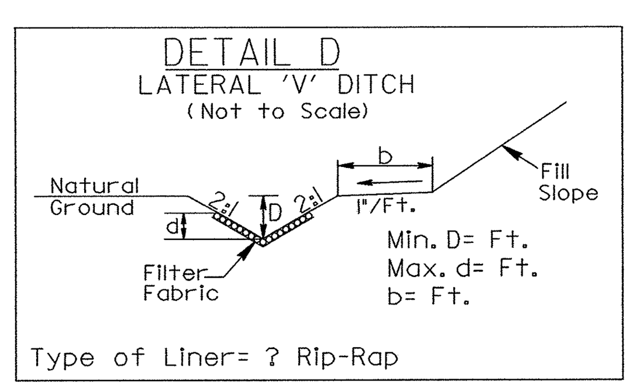
FROM STA. 12+50 TO STA. 14+80 LT -L-
FROM STA. 14+47 TO STA. 15+00 RT -L-



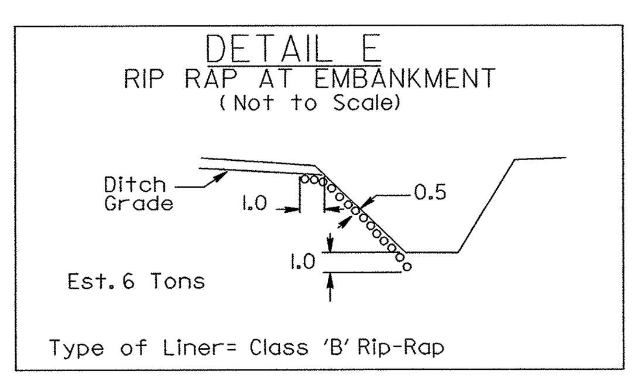
STA. 22+10 LT -L-
SLOPE = 9.20%



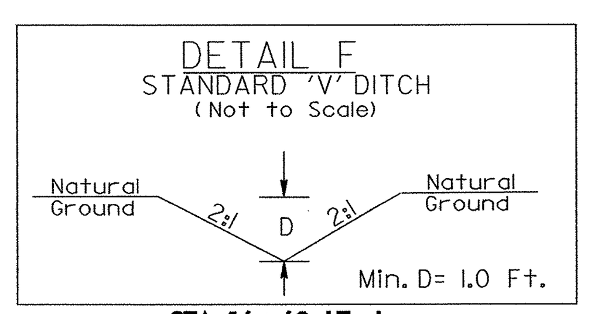
FROM STA. 14+84 TO STA. 15+05 -L-
FROM STA. 16+05 TO STA. 16+60 -L-



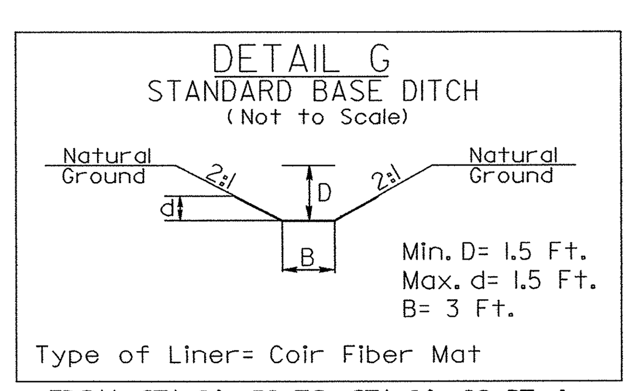
FROM STA. 16+50 TO STA. 16+90 LT -L-



STA. 15+00 LT -L-
STA. 15+00 RT -L-
STA. 16+50 LT -L-



STA. 16+60 LT -L-
SLOPE = 3.00%



FROM STA. 16+50 TO STA. 16+88 RT -L-