TIP PROJECT: B-4675

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4675	EC-1	

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

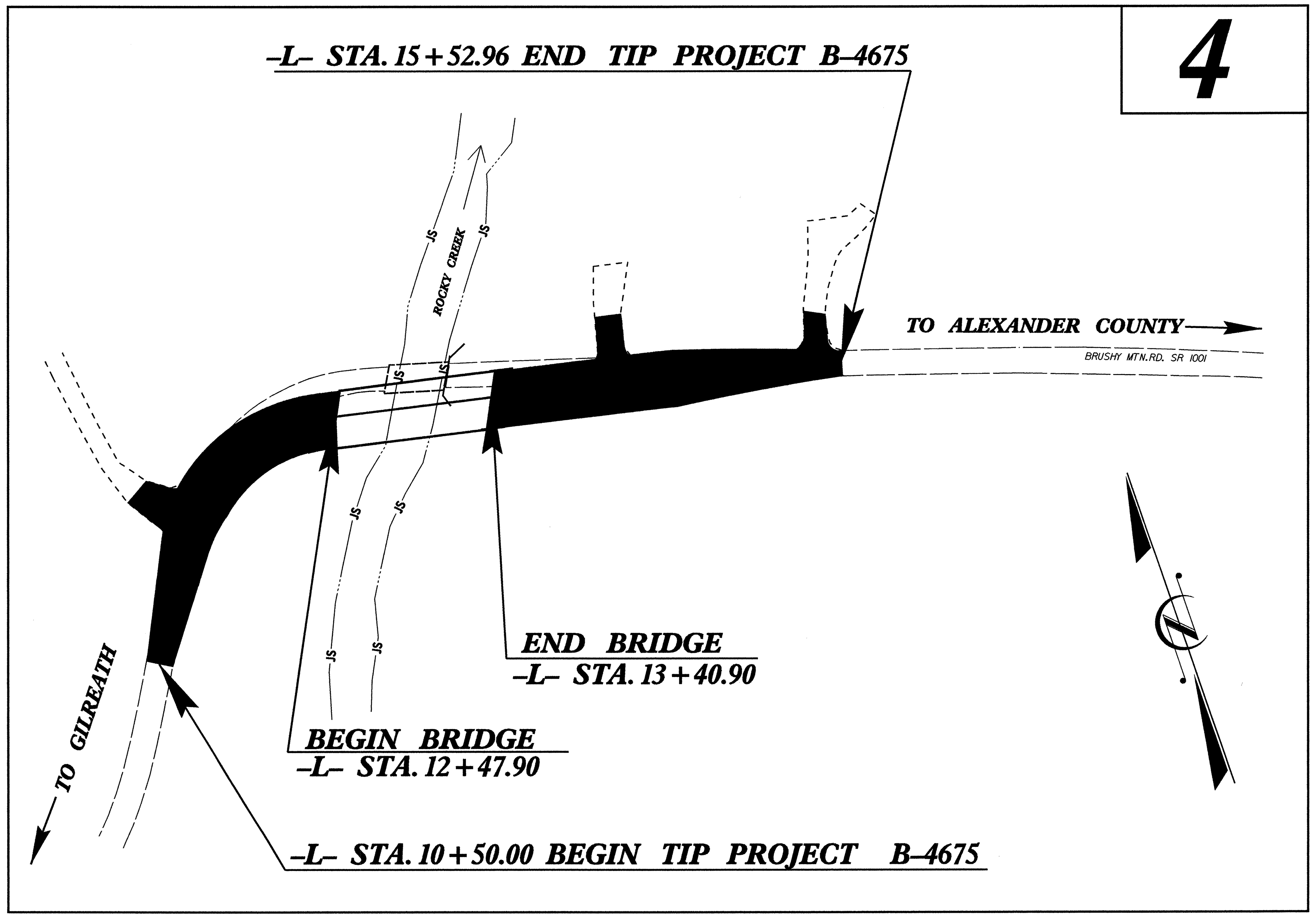
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

WILKES COUNTY

LOCATION: BRIDGE NO. 34 OVER ROCKY CREEK AND APPROACHES ON SR 1001 (BRUSHY MOUNTAIN RD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
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.

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

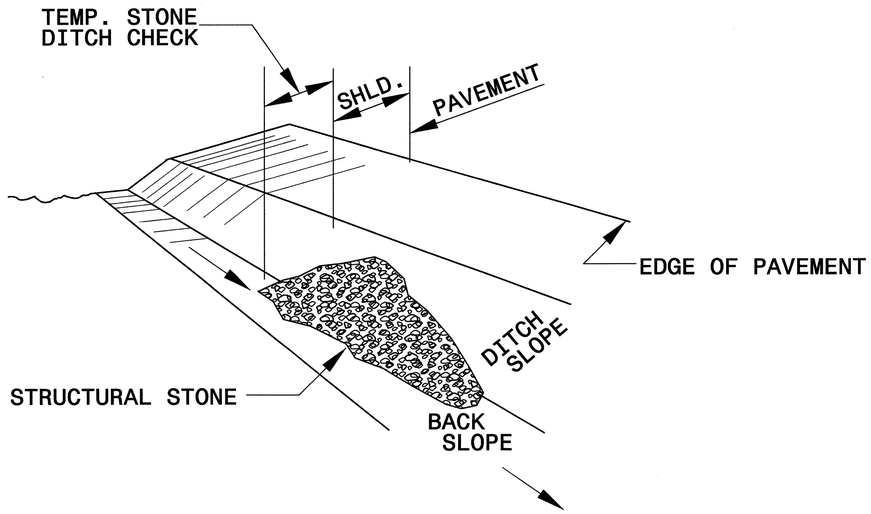
Roadway Standard Drawings

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
1606.01 Special Sediment Control Fence
1607.01 Gravel Construction Entrance
1630.05 Temporary Diversion
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-4675	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

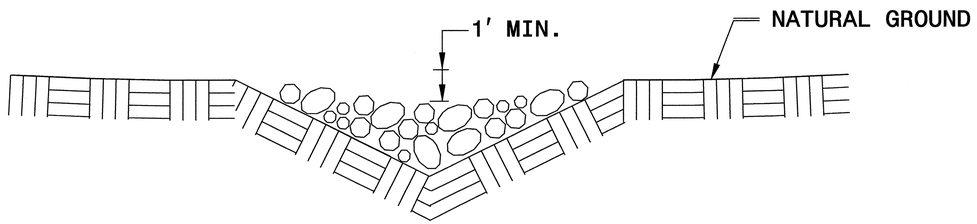


ISOMETRIC VIEW

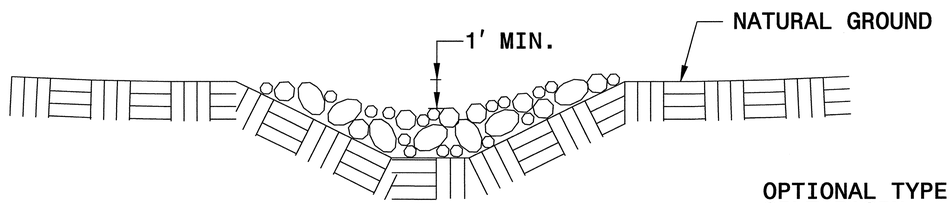
NOTES:

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

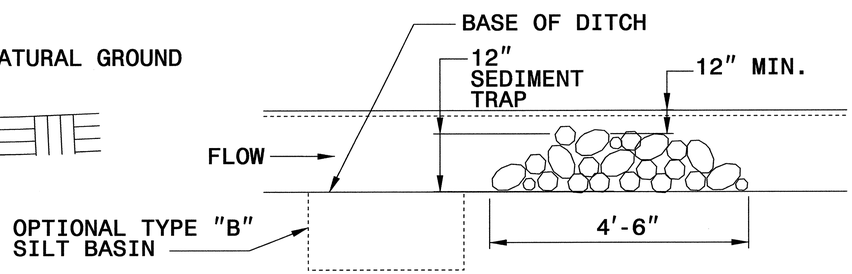
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



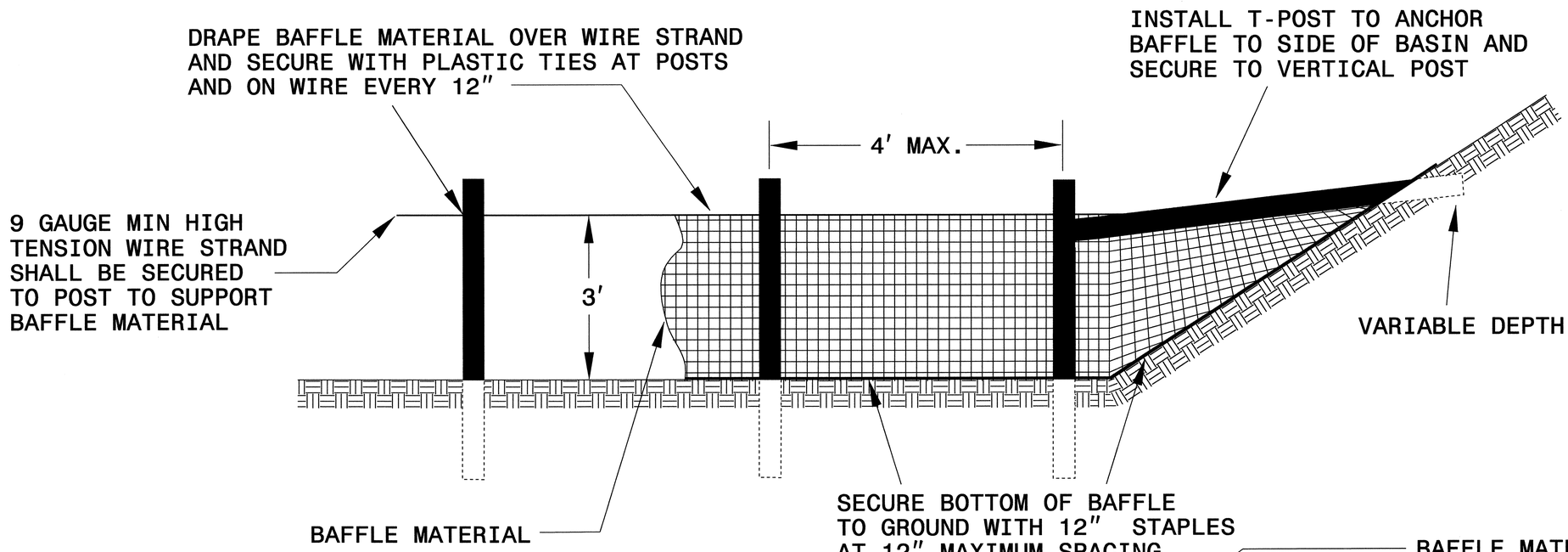
CROSS SECTION TRAPEZOIDAL DITCH

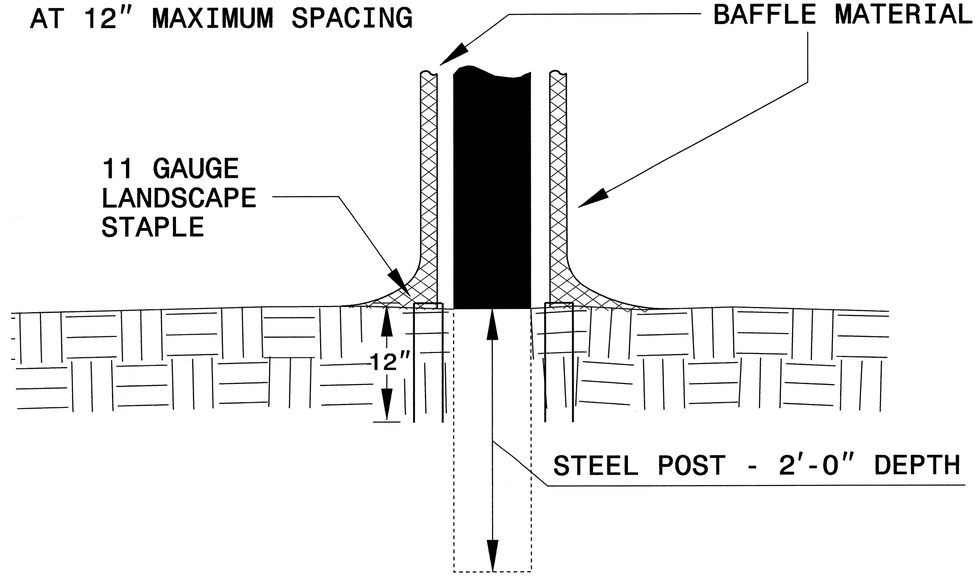


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-4675	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



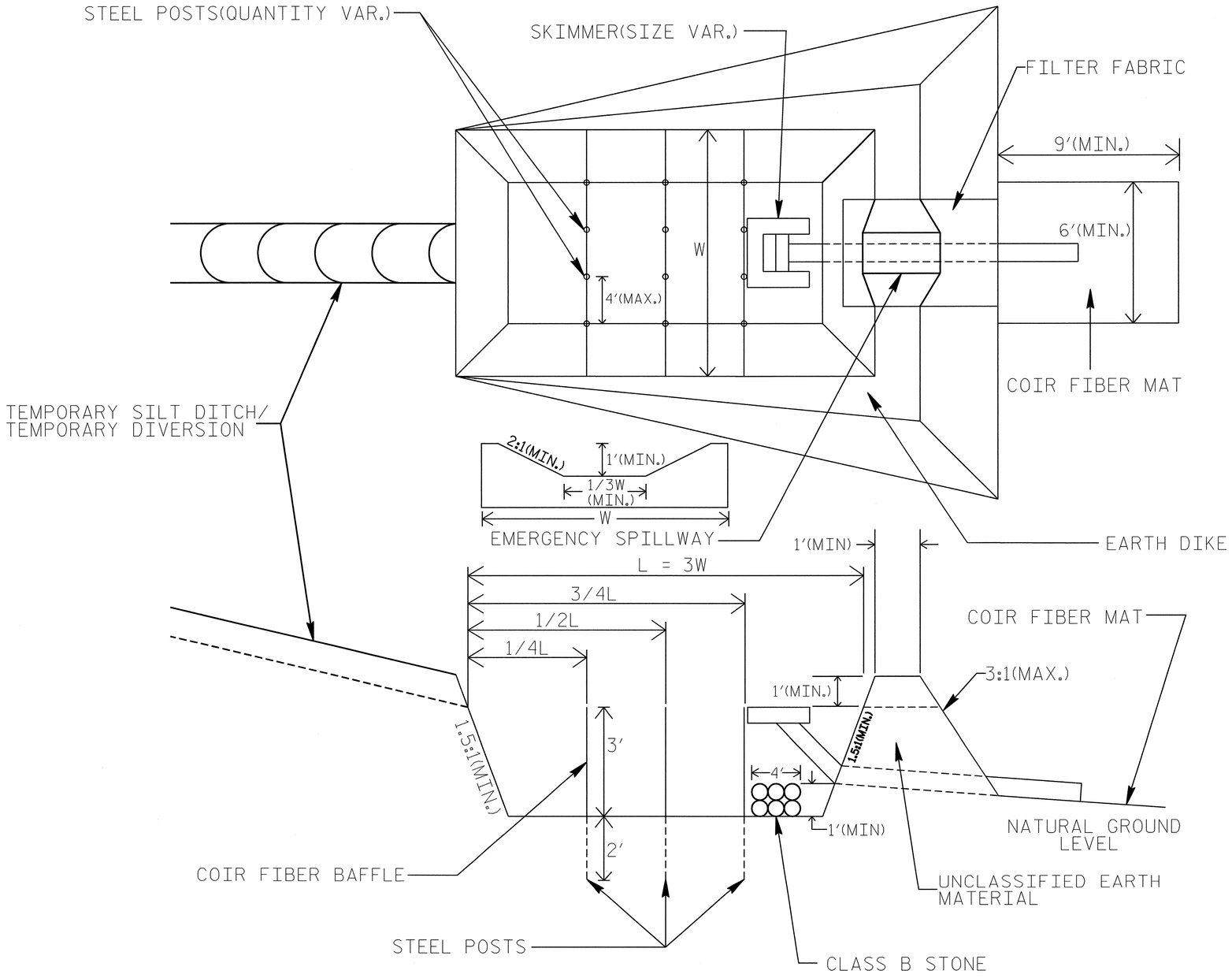


BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

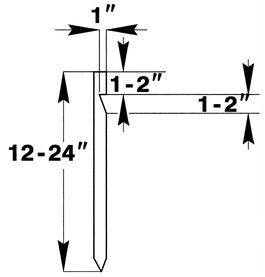
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

PROJECT REFERENCE NO.	SHEET NO.
B-4675	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

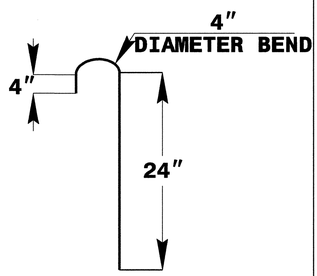
SKIMMER BASIN WITH BAFFLES DETAIL



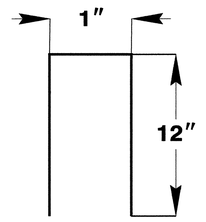
2" x 2" (nominal)
WOODEN STAKE



#10 STEEL
REINFORCEMENT BAR



1" (nominal)
STAPLE



COIR FIBER MAT ANCHOR OPTIONS

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

PROJECT REFERENCE NO.	SHEET NO.
B-4675	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	L	11+00	12+50	LT	140
				SUBTOTAL	140
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					285
				TOTAL	425
				SAY	430

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

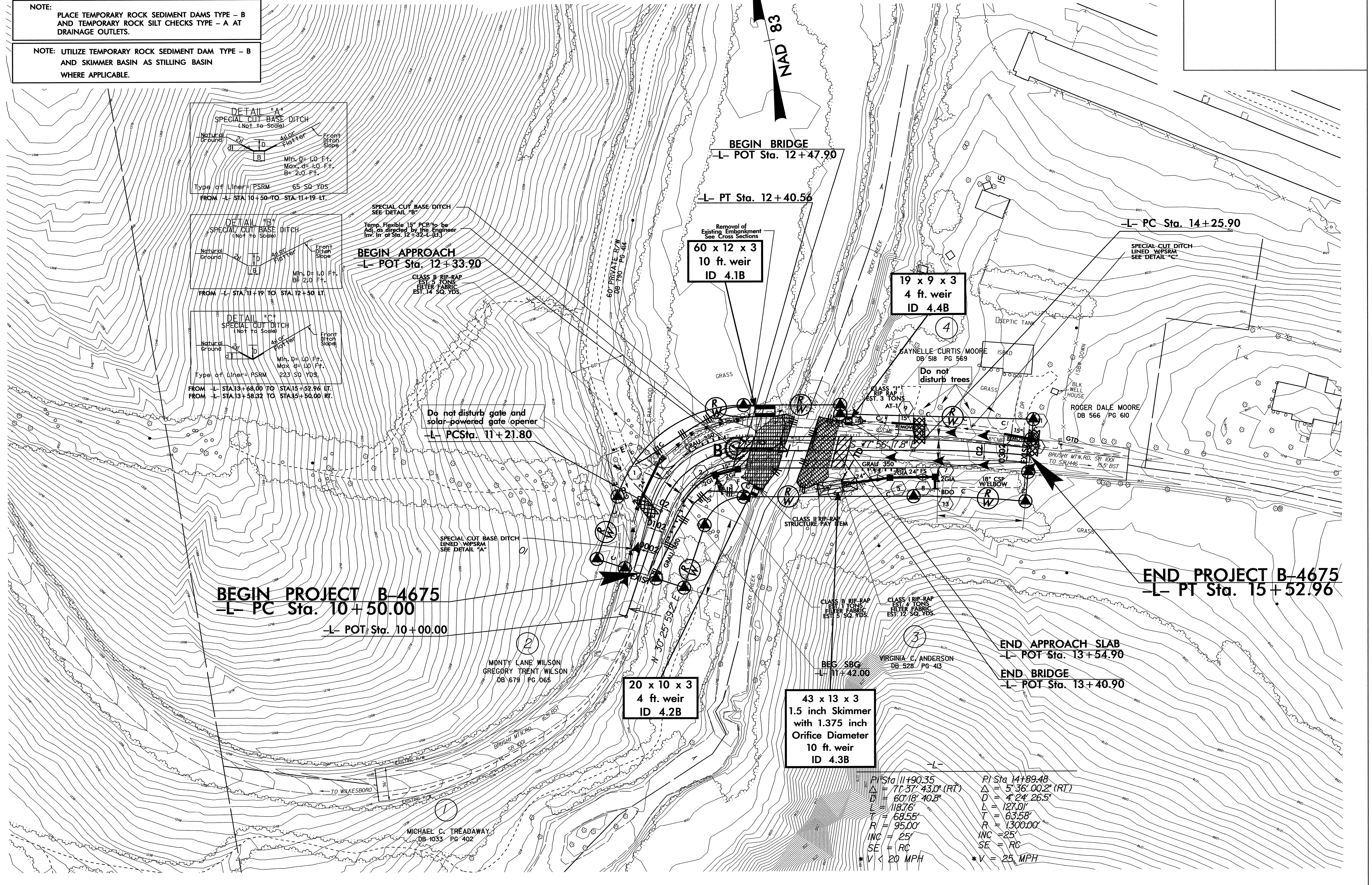
PROJECT REFERENCE NO.	SHEET NO.
B-4675	EC-4/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

NOTE: UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE – B AND SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

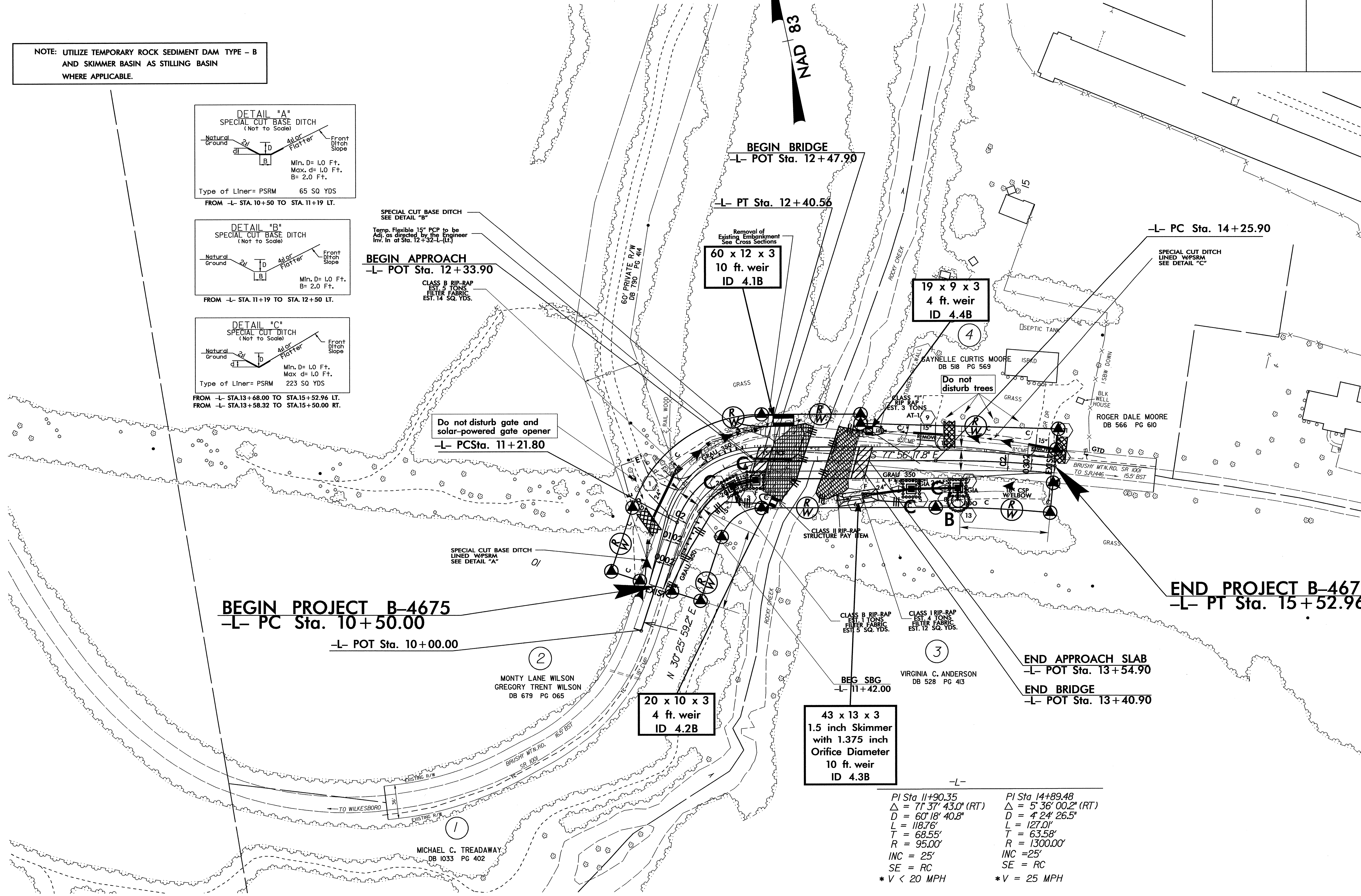


NAD 83
DETAIL "A"
SPECIAL CUT BASE DITCH
(Not to Scale)
Natural Ground
Front Ditch Slope
4:1 or Flatter
Min. D= 1.0 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
Type of Liner= PSRM 65 SQ YDS
FROM -L- STA. 10+50 TO STA. 11+19 LT.
DETAIL "B"
SPECIAL CUT BASE DITCH
(Not to Scale)
Min. D= 1.0 Ft.
B= 2.0 Ft.
FROM -L- STA. 11+19 TO STA. 12+50 LT.
DETAIL "C"
SPECIAL CUT DITCH
(Not to Scale)
Min. D= 1.0 Ft.
Max d= 1.0 Ft.
Type of Liner= PSRM 223 SQ YDS.
FROM -L- STA.13+68.00 TO STA.15+52.96 LT.
FROM -L- STA.13+58.32 TO STA.15+50.00 RT.
SPECIAL CUT BASE DITCH SEE DETAIL "B"
Temp. Flexible 15" PCP to be Adj. as directed by the Engineer Inv. In at Sta. 12+32 -L- (LT)
BEGIN APPROACH
-L- POT Sta. 12+33.90
CLASS B RIP-RAP EST. 5 TONS FILTER FABRIC EST. 14 SQ. YDS.
60' PRIVATE R/W DB 790 PG 414
BEGIN BRIDGE
-L- POT Sta. 12+47.90
-L- PT Sta. 12+40.56
Removal of Existing Embankment See Cross Sections
60 x 12 x 3
10 ft. weir
ID 4.1B
19 x 9 x 3
4 ft. weir
ID 4.4B
-L- PC Sta. 14+25.90
SPECIAL CUT DITCH LINED W/PSRM SEE DETAIL "C"
SEPTIC TANK
GAYNELLE CURTIS MOORE
DB 518 PG 569
Do not disturb trees
CLASS "I" RIP RAP EST. 3 TONS
ROGER DALE MOORE
DB 566 PG 610
BLK WELL HOUSE
GRASS
ROCKY CREEK
Do not disturb gate and solar-powered gate opener
-L- PCSta. 11+21.80
BRUSHY MTN.RD. SR 1001
TO SR1446
18" CSP W/ELBOW
GTD
CLASS II RIP-RAP STRUCTURE PAY ITEM
SPECIAL CUT BASE DITCH LINED W/PSRM SEE DETAIL "A"
END PROJECT B-4675
-L- PT Sta. 15+52.96
BEGIN PROJECT B-4675
-L- PC Sta. 10+50.00
-L- POT Sta. 10+00.00
N 30°25'59.2" E
CLASS B RIP-RAP EST. 1 TONS FILTER FABRIC EST. 5 SQ. YDS.
CLASS I RIP-RAP EST. 4 TONS FILTER FABRIC EST. 12 SQ. YDS.
END APPROACH SLAB
-L- POT Sta. 13+54.90
END BRIDGE
-L- POT Sta. 13+40.90
MONTY LANE WILSON
GREGORY TRENT WILSON
DB 679 PG 065
VIRGINIA C. ANDERSON
DB 528 PG 413
BEG SBG
-L- 11+42.00
20 x 10 x 3
4 ft. weir
ID 4.2B
43 x 13 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 4.3B
TO WILKESBORO
MICHAEL C. TREADAWAY
DB 1033 PG 402
-L-
PI Sta 11+90.35
Δ = 71°37' 43.0" (RT)
D = 60°18' 40.8"
L = 118.76'
T = 68.55'
R = 95.00'
INC = 25'
SE = RC
* V < 20 MPH
PI Sta 14+89.48
Δ = 5°36' 00.2" (RT)
D = 4°24' 26.5"
L = 127.01'
T = 63.58'
R = 1300.00'
INC =25'
SE = RC
* V = 25 MPH

31-DEC-2007 13:48
c:\documents and settings\nchan\desktop\b4675\design\b4675_rdy_psh.dgn
nchan AT RENY231812

PROJECT REFERENCE NO.	SHEET NO.
B-4675	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE – B AND SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.



DETAIL "A"
SPECIAL CUT BASE DITCH
(Not to Scale)
Natural Ground
Front Ditch Slope
Min. D= 1.0 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
Type of Liner= PSRM 65 SQ YDS
FROM -L- STA. 10+50 TO STA. 11+19 LT.
DETAIL "B"
SPECIAL CUT BASE DITCH
(Not to Scale)
Min. D= 1.0 Ft.
B= 2.0 Ft.
FROM -L- STA. 11+19 TO STA. 12+50 LT.
DETAIL "C"
SPECIAL CUT DITCH
(Not to Scale)
Min. D= 1.0 Ft.
Max d= 1.0 Ft.
Type of Liner= PSRM 223 SQ YDS
FROM -L- STA.13+68.00 TO STA.15+52.96 LT.
FROM -L- STA.13+58.32 TO STA.15+50.00 RT.
NAD 83
BEGIN BRIDGE
-L- POT Sta. 12+47.90
-L- PT Sta. 12+40.56
Removal of Existing Embankment See Cross Sections
60 x 12 x 3
10 ft. weir
ID 4.1B
SPECIAL CUT BASE DITCH SEE DETAIL "B"
Temp. Flexible 15" PCP to be Adj. as directed by the Engineer Inv. In at Sta. 12+32-L-(Lt.)
BEGIN APPROACH
-L- POT Sta. 12+33.90
CLASS B RIP-RAP EST. 5 TONS FILTER FABRIC EST. 14 SQ. YDS.
60' PRIVATE R/W DB 790 PG 414
ROCKY CREEK
19 x 9 x 3
4 ft. weir
ID 4.4B
-L- PC Sta. 14+25.90
SPECIAL CUT DITCH LINED W/PSRM SEE DETAIL "C"
SEPTIC TANK
GAYNELLE CURTIS MOORE
DB 518 PG 569
Do not disturb trees
ROGER DALE MOORE
DB 566 PG 610
BLK WELL HOUSE
GRASS
Do not disturb gate and solar-powered gate opener
-L- PCSta. 11+21.80
BRUSHY MTN.RD. SR 1001 TO SR 1446 15.5' BST
CLASS II RIP-RAP STRUCTURE PAY ITEM
SPECIAL CUT BASE DITCH LINED W/PSRM SEE DETAIL "A"
BEGIN PROJECT B-4675
-L- PC Sta. 10+50.00
-L- POT Sta. 10+00.00
END PROJECT B-4675
-L- PT Sta. 15+52.96
CLASS B RIP-RAP EST. 1 TONS FILTER FABRIC EST. 5 SQ. YDS.
CLASS I RIP-RAP EST. 4 TONS FILTER FABRIC EST. 12 SQ. YDS.
MONTY LANE WILSON
GREGORY TRENT WILSON
DB 679 PG 065
VIRGINIA C. ANDERSON
DB 528 PG 413
END APPROACH SLAB
-L- POT Sta. 13+54.90
END BRIDGE
-L- POT Sta. 13+40.90
BEG SBG
-L- 11+42.00
20 x 10 x 3
4 ft. weir
ID 4.2B
43 x 13 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
10 ft. weir
ID 4.3B
N 30° 25' 59.2" E
BRUSHY MTN.RD. 16.5' BST
SR 1001
TO WILKESBORO
EXISTING R/W
MICHAEL C. TREADAWAY
DB 1033 PG 402

-L-

PI Sta 11+90.35	PI Sta 14+89.48
Δ = 71° 37' 43.0" (RT)	Δ = 5° 36' 00.2" (RT)
D = 60° 18' 40.8"	D = 4° 24' 26.5"
L = 118.76'	L = 127.01'
T = 68.55'	T = 63.58'
R = 95.00'	R = 1300.00'
INC = 25'	INC = 25'
SE = RC	SE = RC
* V < 20 MPH	* V = 25 MPH

8/17/99

31-DEC-2007 13:48
c:\documents and settings\nchan\desktop\b4675\design\b4675_rdy_psh.dgn
nchan AT RENV231812