

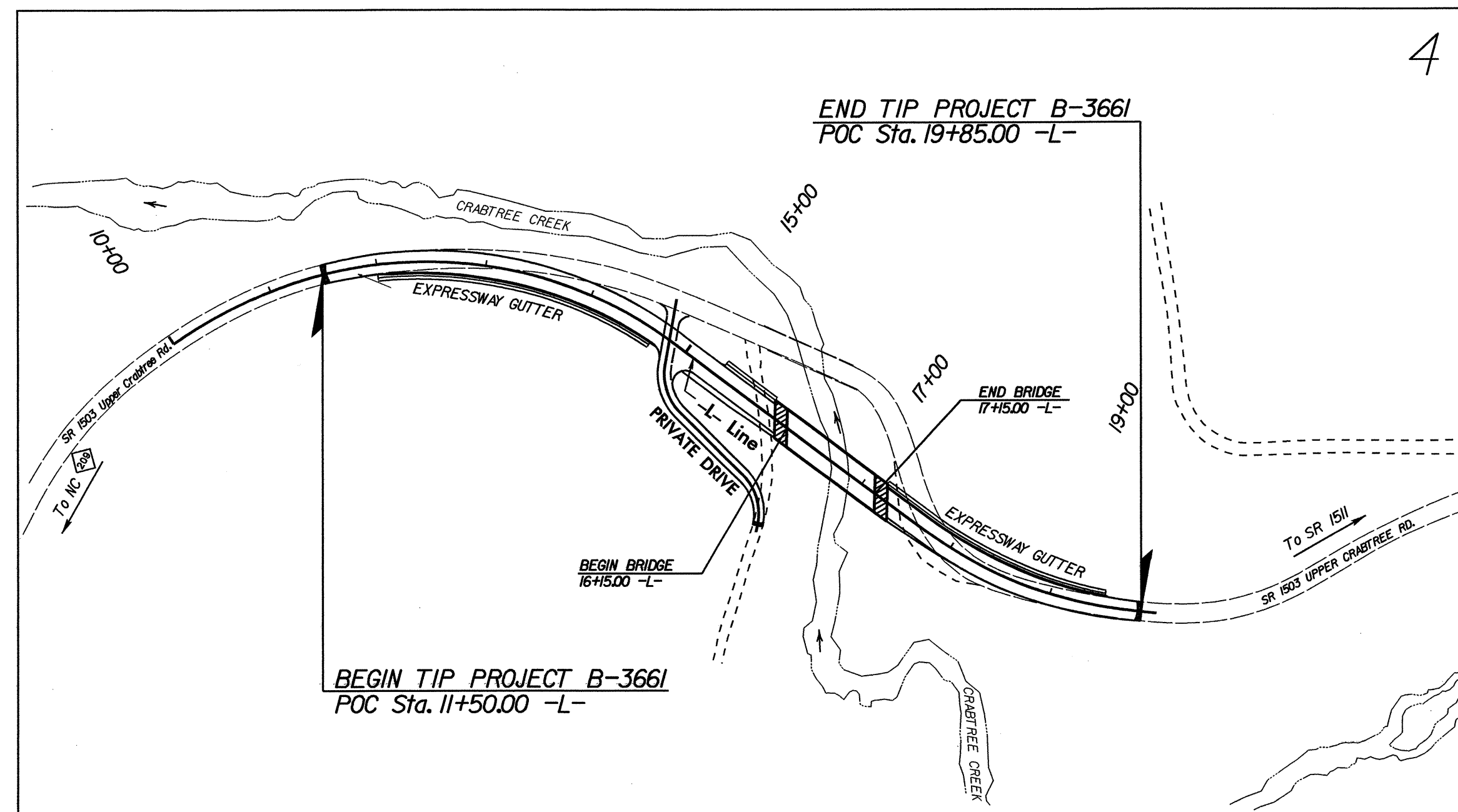
TIP PROJECT: B-3661



STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
HAYWOOD COUNTY

**LOCATION: REPLACEMENT OF BRIDGE No. 36
 ON SR 1503 (UPPER CRABTREE RD.) OVER CRABTREE CREEK**

**TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES,
 TRAFFIC CONTROL & PAVEMENT MARKING PLAN**



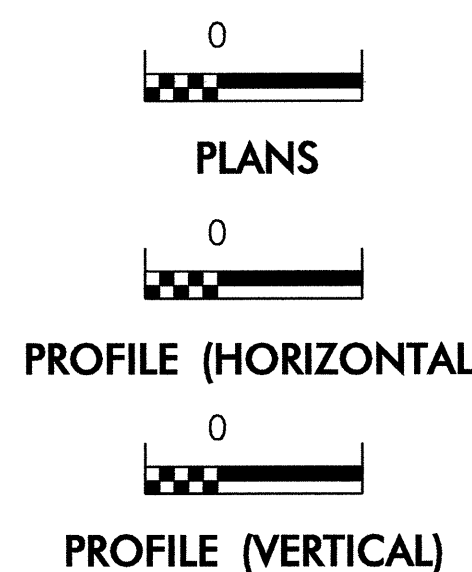
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3661	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
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	
	Wattle	
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	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

GRAPHIC SCALE



**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

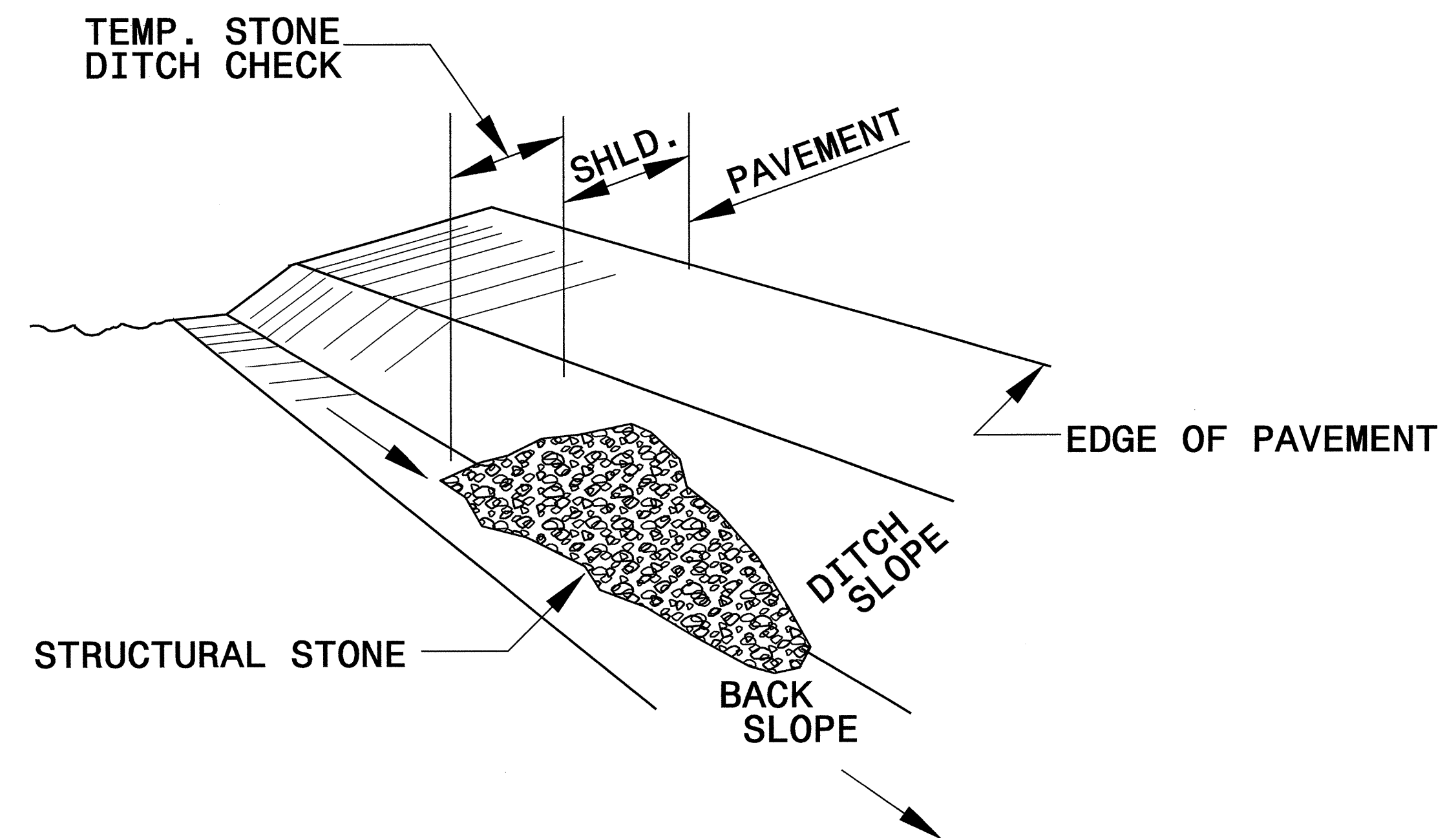
Roadway Standard Drawings
 The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered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

1605.01 Temporary Silt Fence	1632.03 Rock Inlet Sediment Trap Type C
1606.01 Special Sediment Control Fence	1633.01 Temporary Rock Silt Check Type A
1607.01 Gravel Construction Entrance	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	

31-JAN-2008 07:29 p:\projects\2008\0729\roadside\environmental\design\b3661.eci.tsh.dgn

PROJECT REFERENCE NO. <i>B-3661</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

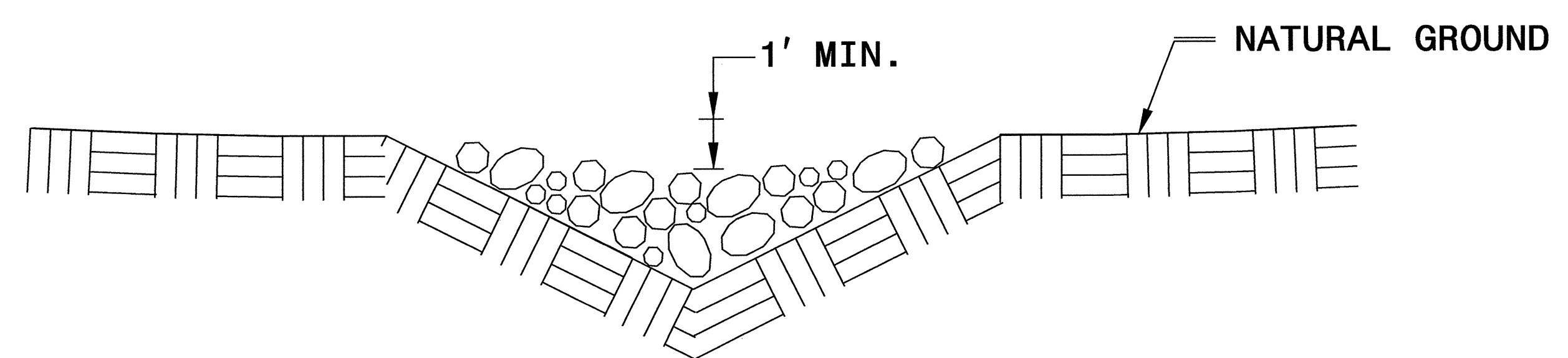


ISOMETRIC VIEW

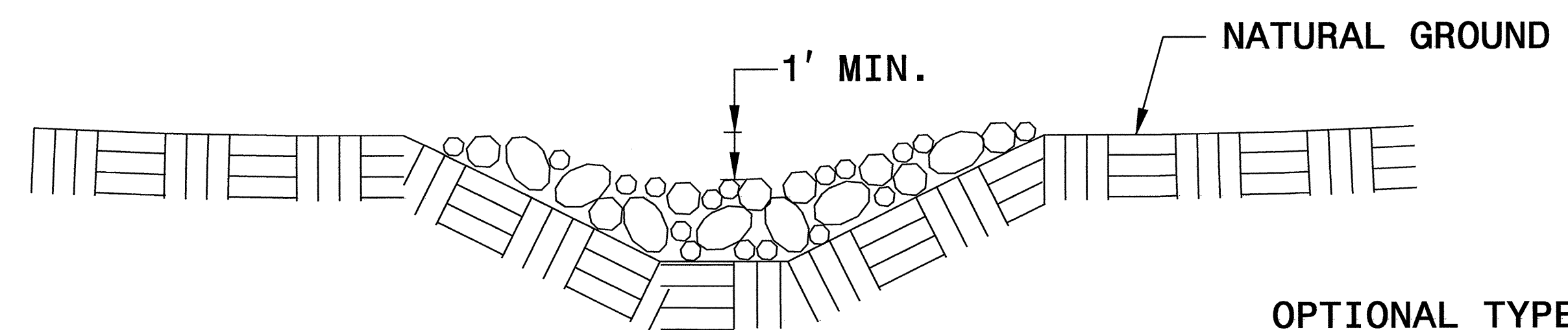
NOTES:

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

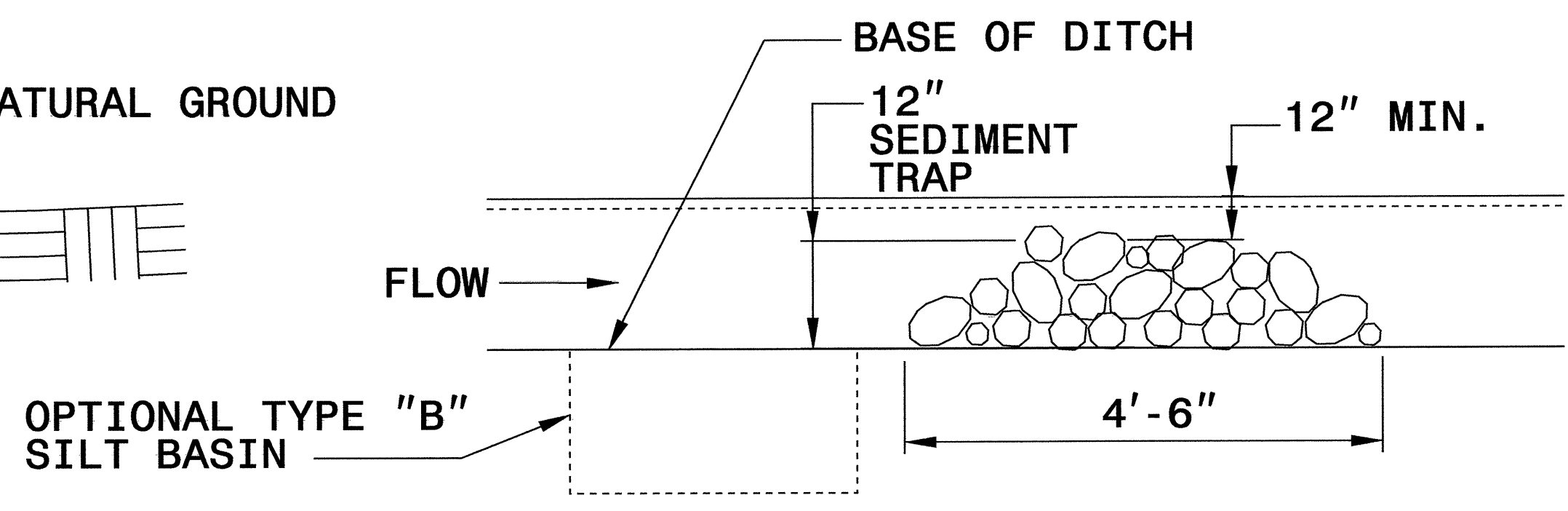
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



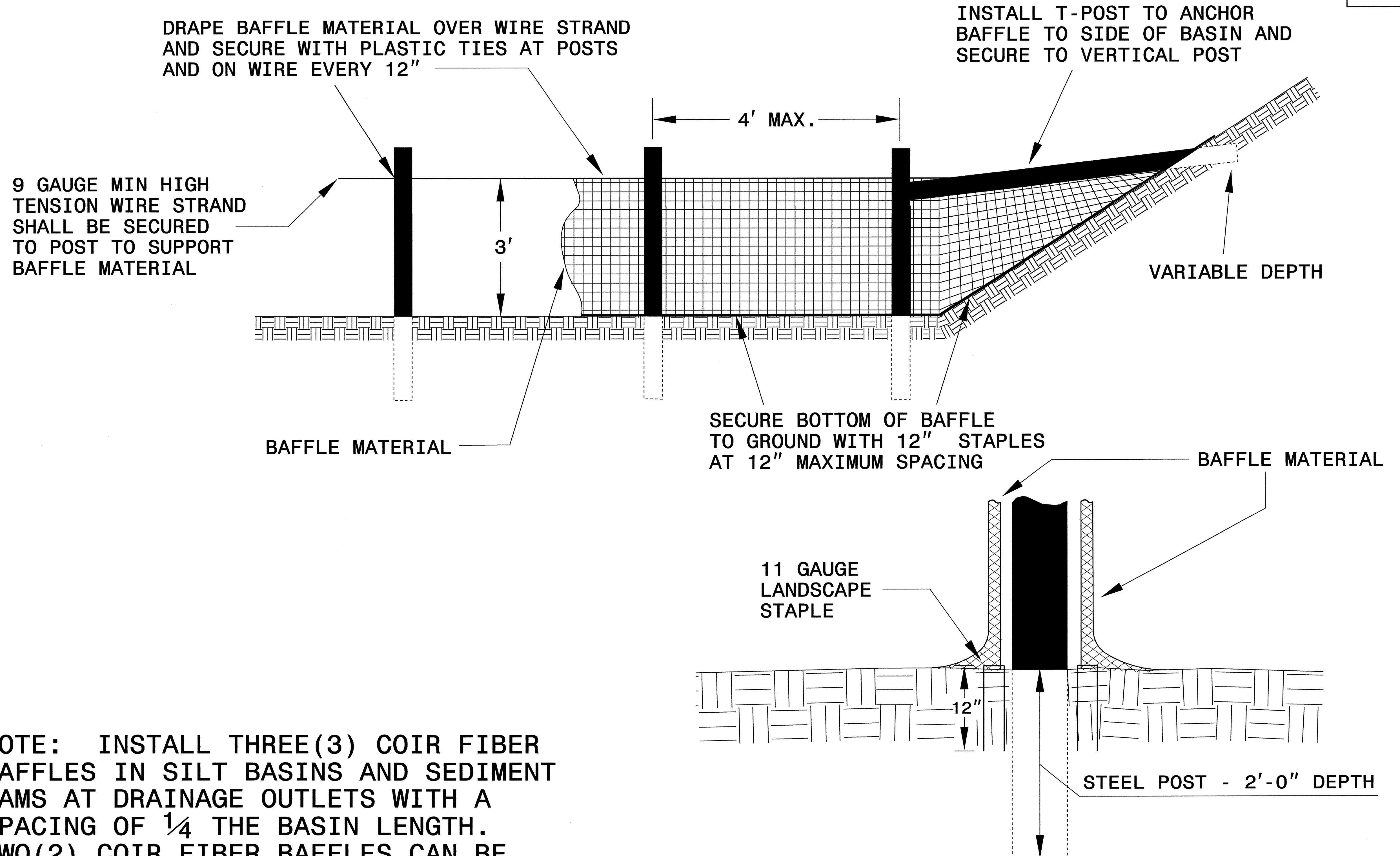
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

PROJECT REFERENCE NO. B-3661	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL

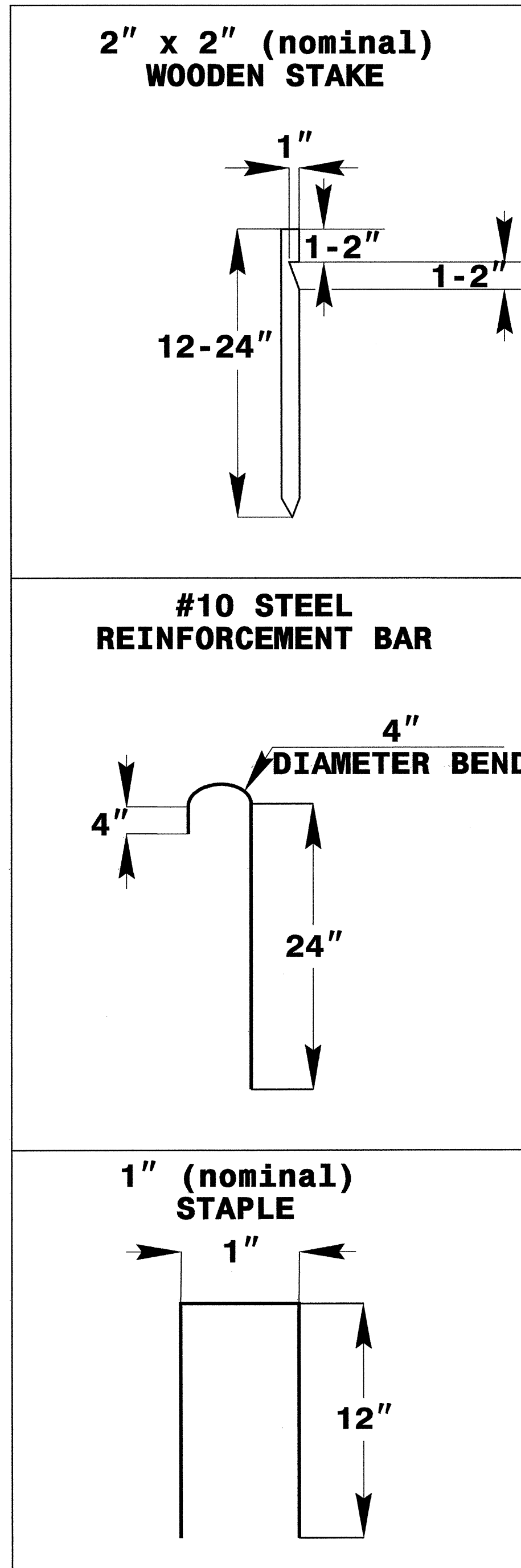
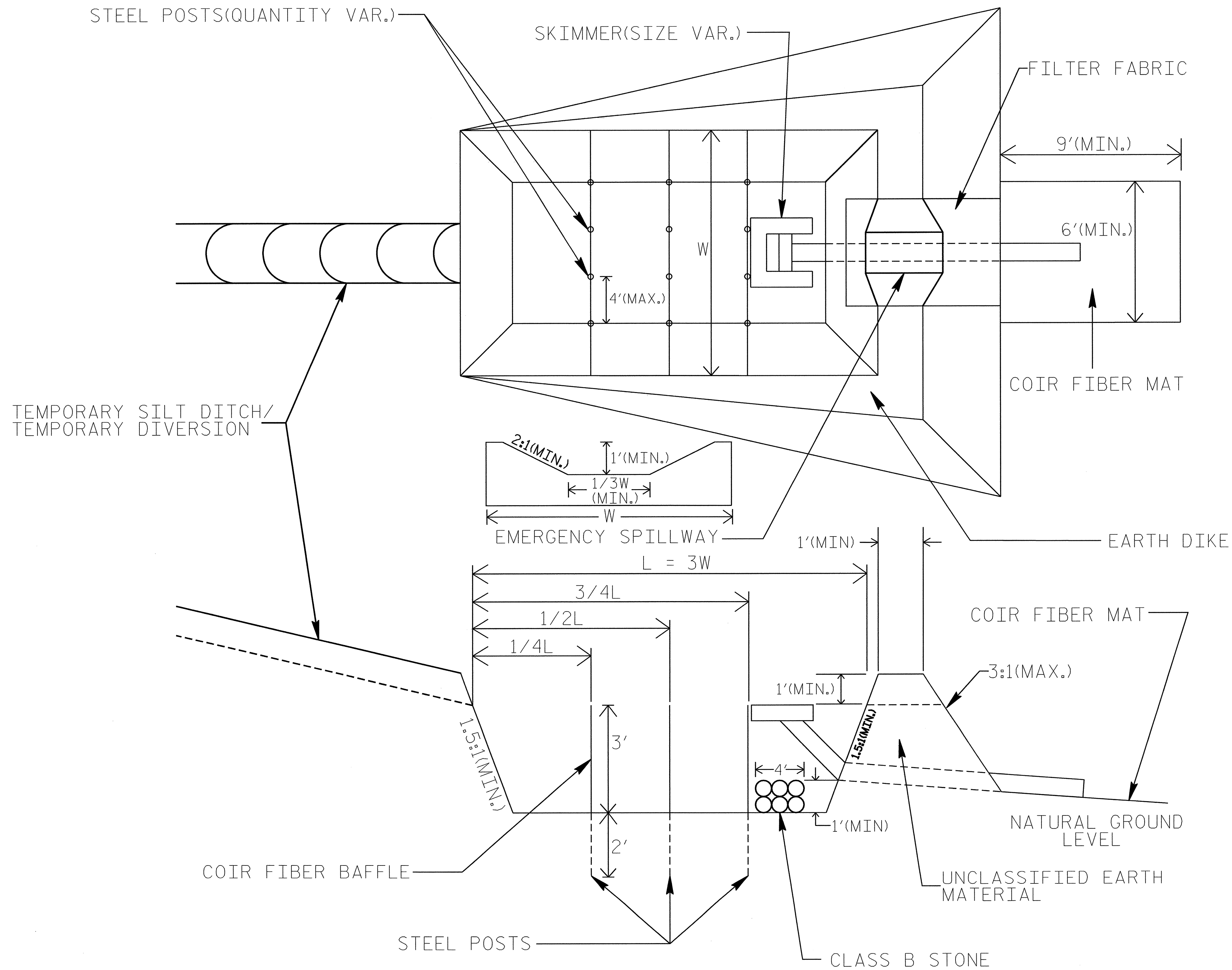


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

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

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. B-3661	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



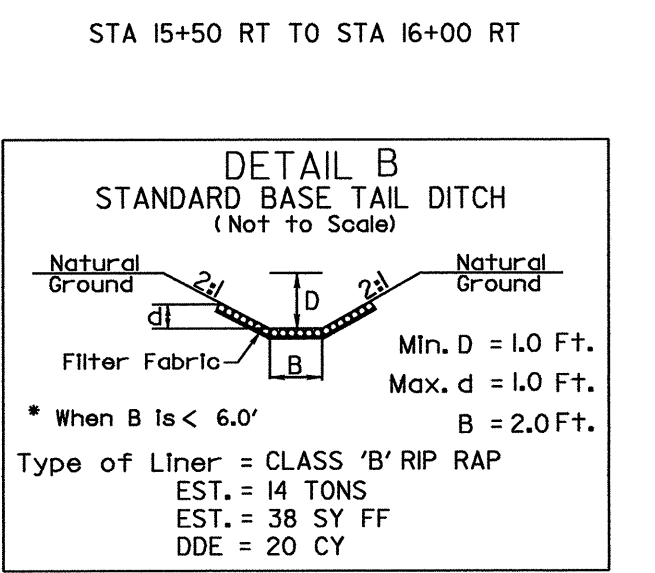
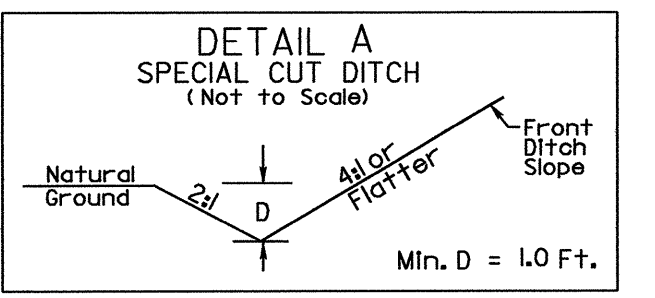
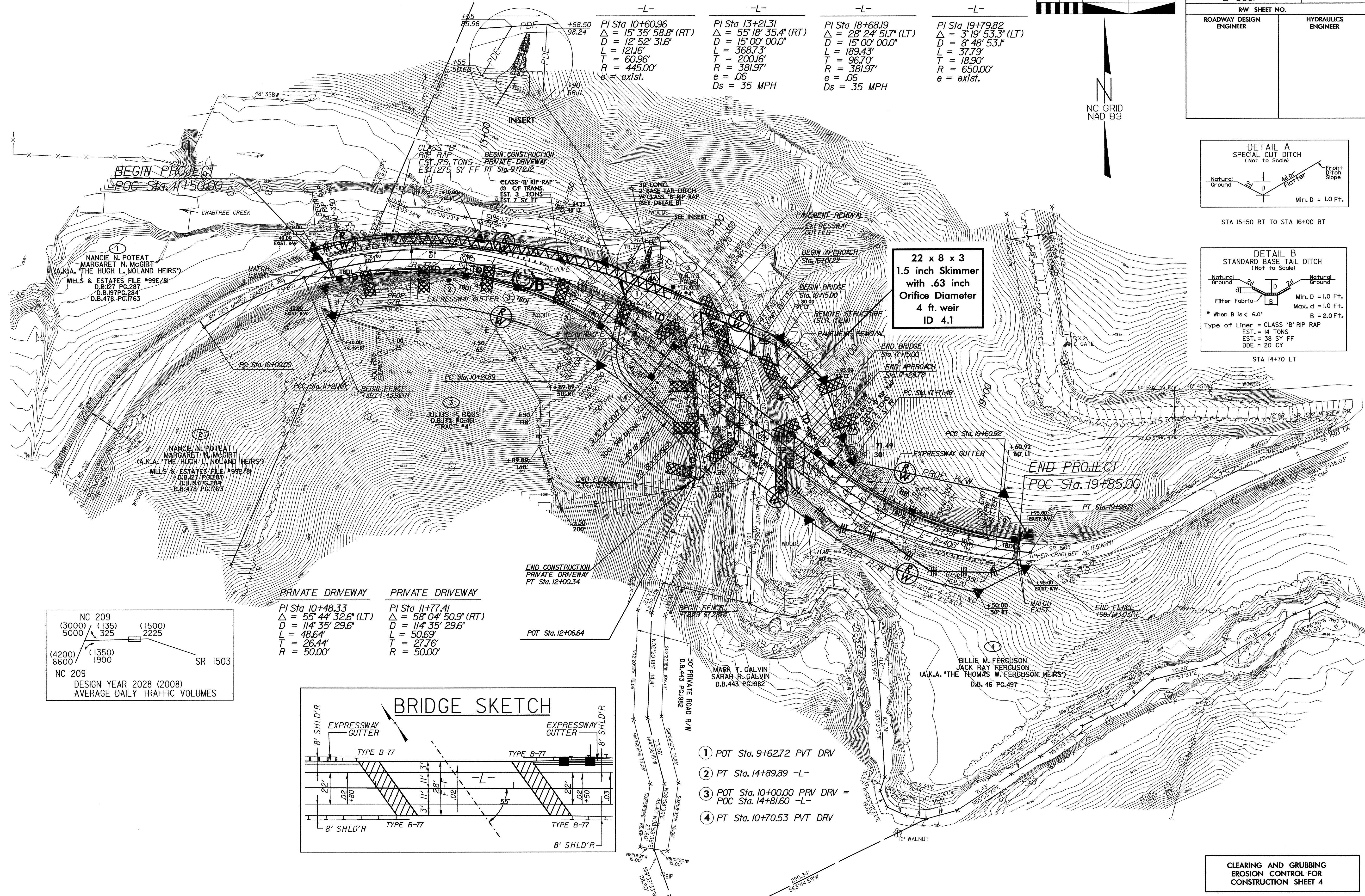
COIR FIBER MAT ANCHOR OPTIONS

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

PROJECT REFERENCE NO. B-3661	SHEET NO. EC-4/CONST. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PI Sta 10+60.96 $\Delta = 15^\circ 35' 58.8''$ (RT) $D = 12^\circ 52' 31.6''$ $L = 121.6'$ $T = 60.96'$ $R = 445.00'$ $e = \text{exlst.}$	PI Sta 13+21.31 $\Delta = 55^\circ 18' 35.4''$ (RT) $D = 15^\circ 00' 00.0''$ $L = 368.73'$ $T = 200.16'$ $R = 381.97'$ $e = .06$ $D_s = 35 \text{ MPH}$	PI Sta 18+68.19 $\Delta = 28^\circ 24' 51.7''$ (LT) $D = 15^\circ 00' 00.0''$ $L = 189.43'$ $T = 96.70'$ $R = 381.97'$ $e = .06$ $D_s = 35 \text{ MPH}$	PI Sta 19+79.82 $\Delta = 3^\circ 19' 53.3''$ (LT) $D = 8^\circ 48' 53.1''$ $L = 37.79'$ $T = 18.90'$ $R = 650.00'$ $e = \text{exlst.}$
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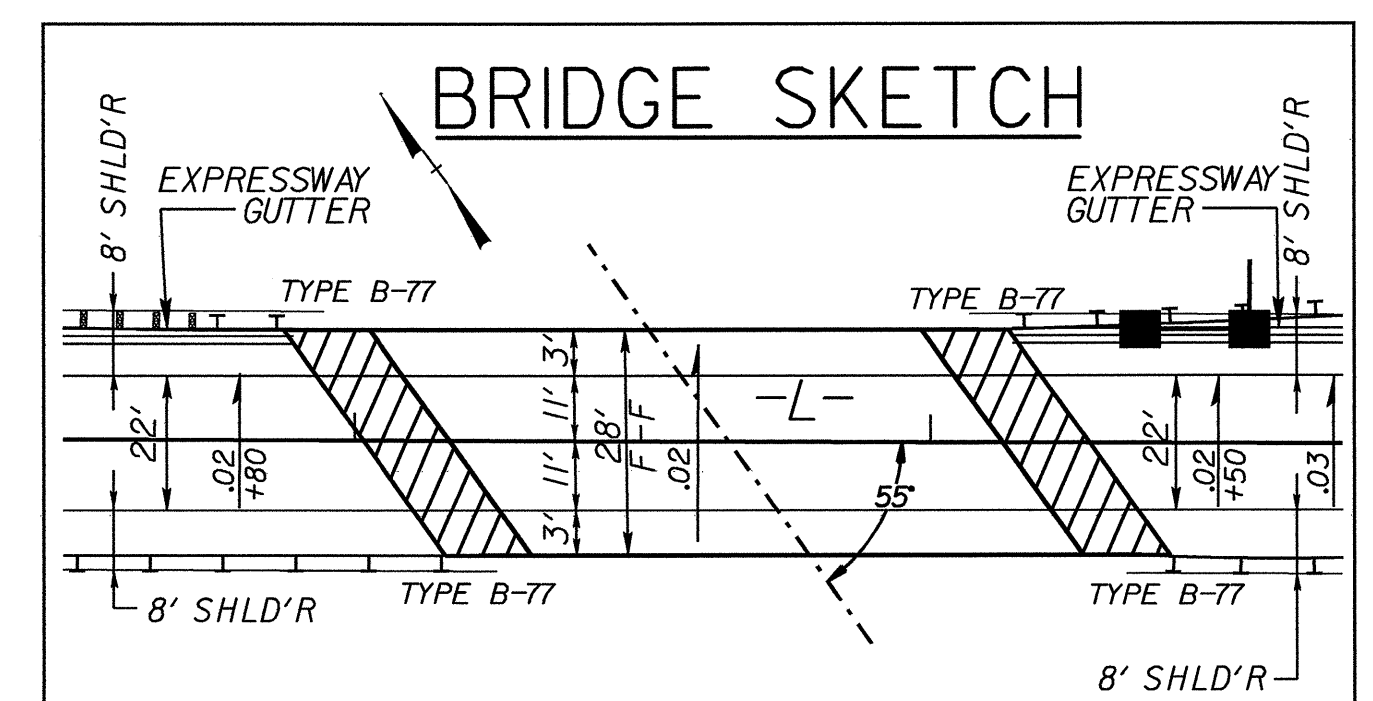


**22 x 8 x 3
1.5 inch Skimmer
with .63 inch
Orifice Diameter
4 ft. weir
ID 4.1**

NC 209 (3000) 5000	(135) 325	(1500) 2225
(4200) 6600	(1350) 1900	

SR 1503
NC 209
DESIGN YEAR 2028 (2008)
AVERAGE DAILY TRAFFIC VOLUMES

PRIVATE DRIVEWAY PI Sta 10+48.33 $\Delta = 55^\circ 44' 32.6''$ (LT) $D = 114^\circ 35' 29.6''$ $L = 48.64'$ $T = 26.44'$ $R = 50.00'$	PRIVATE DRIVEWAY PI Sta 11+77.41 $\Delta = 58^\circ 04' 50.9''$ (RT) $D = 114^\circ 35' 29.6''$ $L = 50.69'$ $T = 27.76'$ $R = 50.00'$
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- 1 POT Sta. 9+62.72 PVT DRV
- 2 PT Sta. 14+89.89 -L-
- 3 POT Sta. 10+00.00 PRV DRV = POC Sta. 14+81.60 -L-
- 4 PT Sta. 10+70.53 PVT DRV

**CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4**

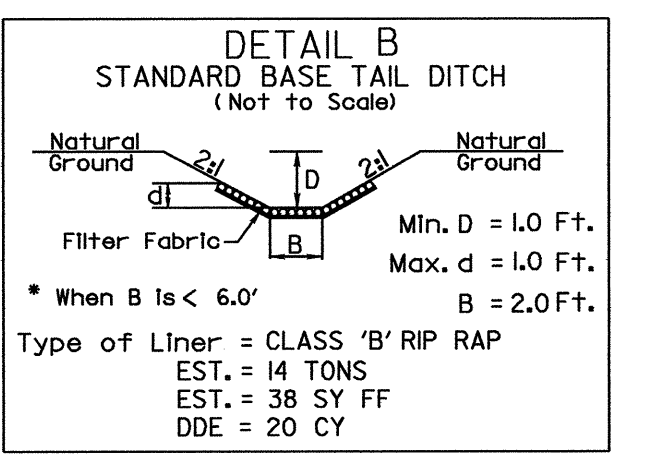
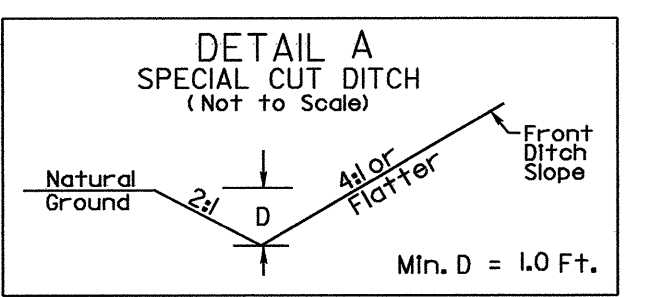
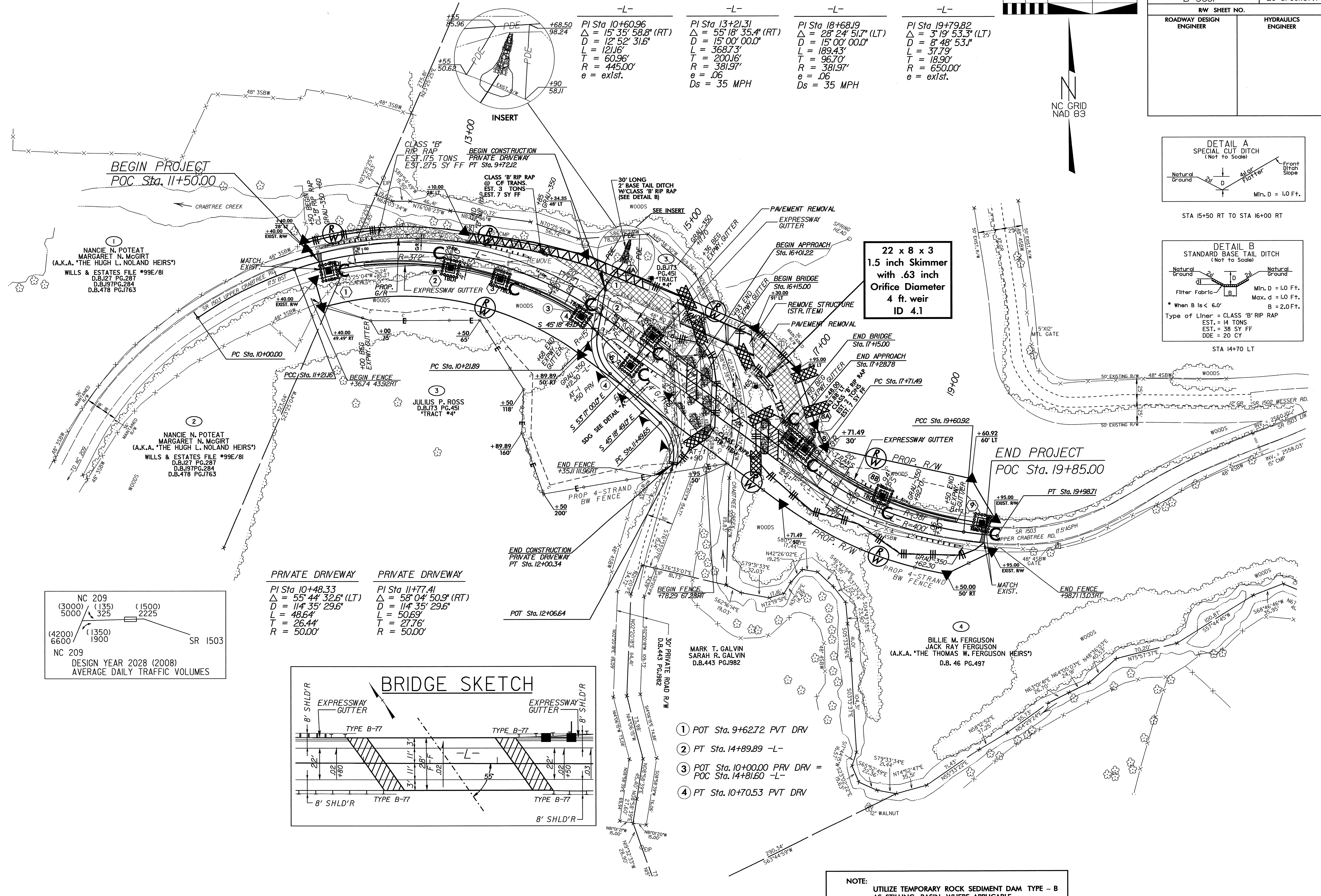
NOTE:
UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B AS STILLING BASIN WHERE APPLICABLE.

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

PROJECT REFERENCE NO.	SHEET NO.
B-3661	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-L-	-L-	-L-	-L-
PI Sta 10+60.96 Δ = 15° 35' 58.8" (RT) D = 12° 52' 31.6" L = 121.6' T = 60.96' R = 445.00' e = ex1st.	PI Sta 13+21.31 Δ = 55° 18' 35.4" (RT) D = 15° 00' 00.0" L = 368.73' T = 200.16' R = 381.97' e = .06 Ds = 35 MPH	PI Sta 18+68.19 Δ = 28° 24' 51.7" (LT) D = 15° 00' 00.0" L = 189.43' T = 96.70' R = 381.97' e = .06 Ds = 35 MPH	PI Sta 19+79.82 Δ = 3° 19' 53.3" (LT) D = 8° 48' 53.1" L = 37.79' T = 18.90' R = 650.00' e = ex1st.

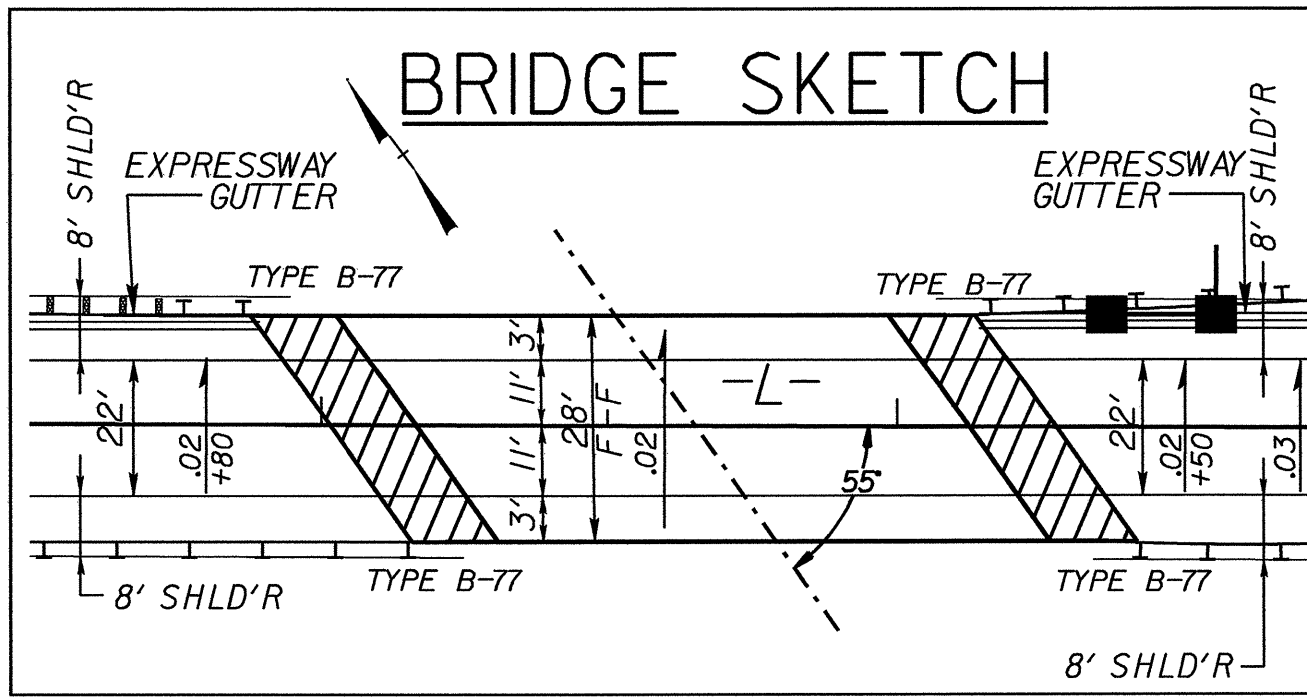


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SR 1503
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PRIVATE DRIVEWAY	PRIVATE DRIVEWAY
PI Sta 10+48.33 Δ = 55° 44' 32.6" (LT) D = 114° 35' 29.6" L = 48.64' T = 26.44' R = 50.00'	PI Sta 11+77.41 Δ = 58° 04' 50.9" (RT) D = 114° 35' 29.6" L = 50.69' T = 27.76' R = 50.00'



- ① POT Sta. 9+62.72 PVT DRV
- ② PT Sta. 14+89.89 -L-
- ③ POT Sta. 10+00.00 PRV DRV =
POC Sta. 14+81.60 -L-
- ④ PT Sta. 10+70.53 PVT DRV

NOTE:
UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
AS STILLING BASIN WHERE APPLICABLE.