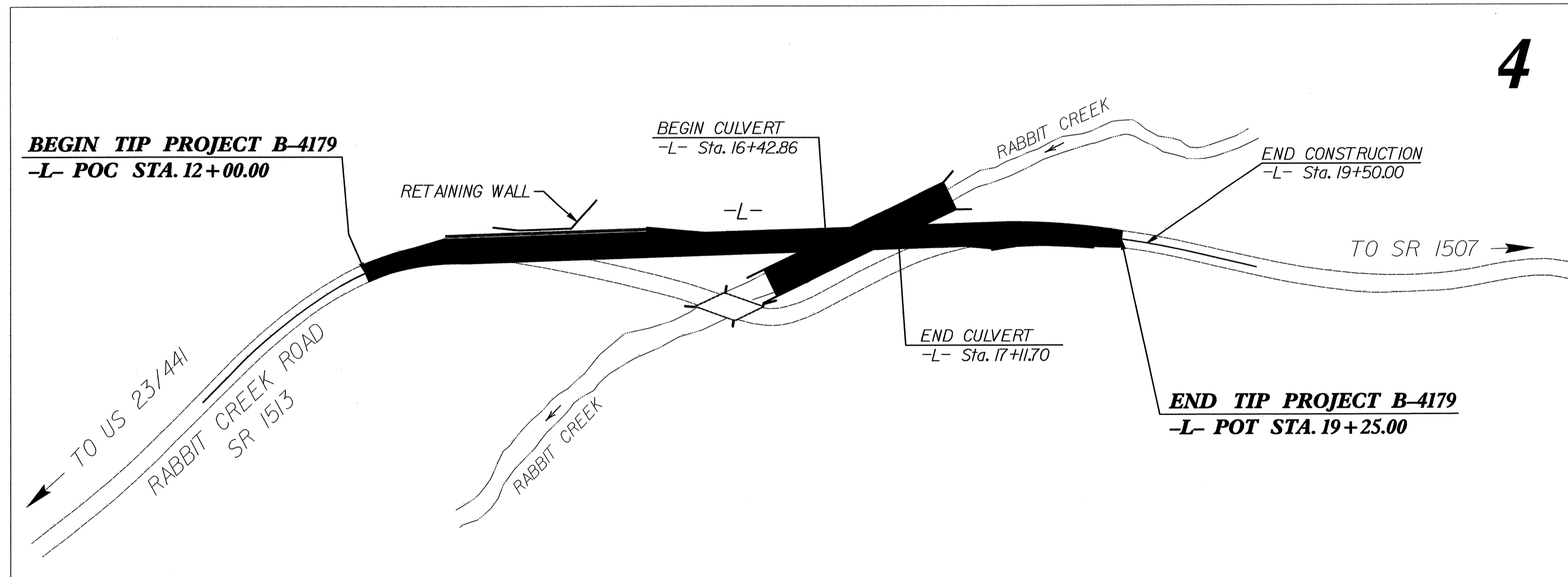


**TIP PROJECT: B-4179**

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

**LOCATION: BRIDGE #65 OVER RABBIT CREEK ON SR 1513 (RABBIT CREEK ROAD) AND APPROACHES**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING GUARDRAIL, AND CULVERT**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4179	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	
	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	
1630.06	Special 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.**

**THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.**

**ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT**  
 Refer To E. C. Special Provisions for Special Considerations.

**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**

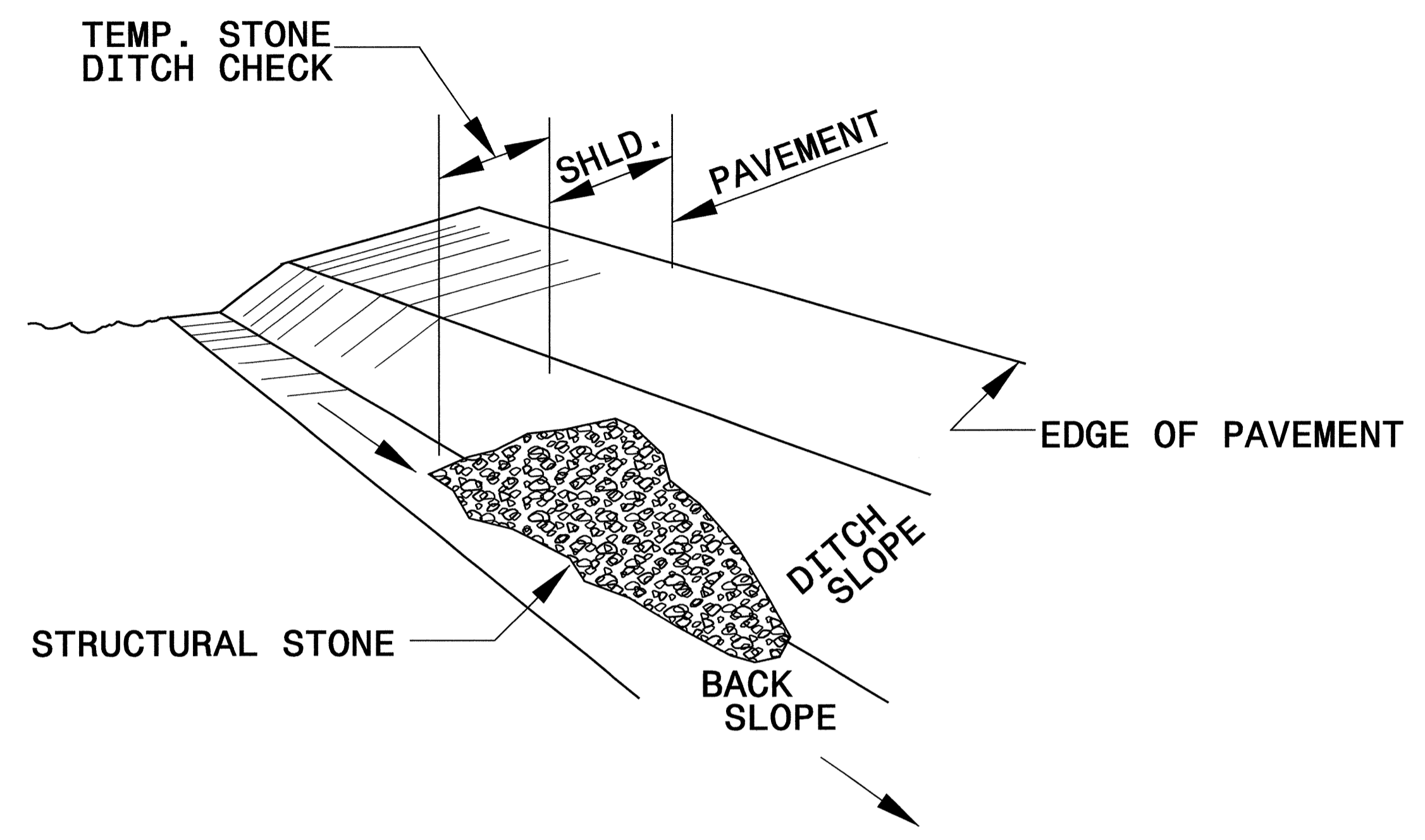
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1630.06 Special Stilling Basin
1607.01 Gravel Construction Entrance	1632.02 Rock Inlet Sediment Trap Type B
1622.01 Temporary Berms and Slope Drains	1632.03 Rock Inlet Sediment Trap Type C
1630.05 Temporary Diversion	1633.01 Temporary Rock Silt Check Type A
	1635.02 Rock Pipe Inlet Sediment Trap Type B

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PROJECT REFERENCE NO. <i>B-4179</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

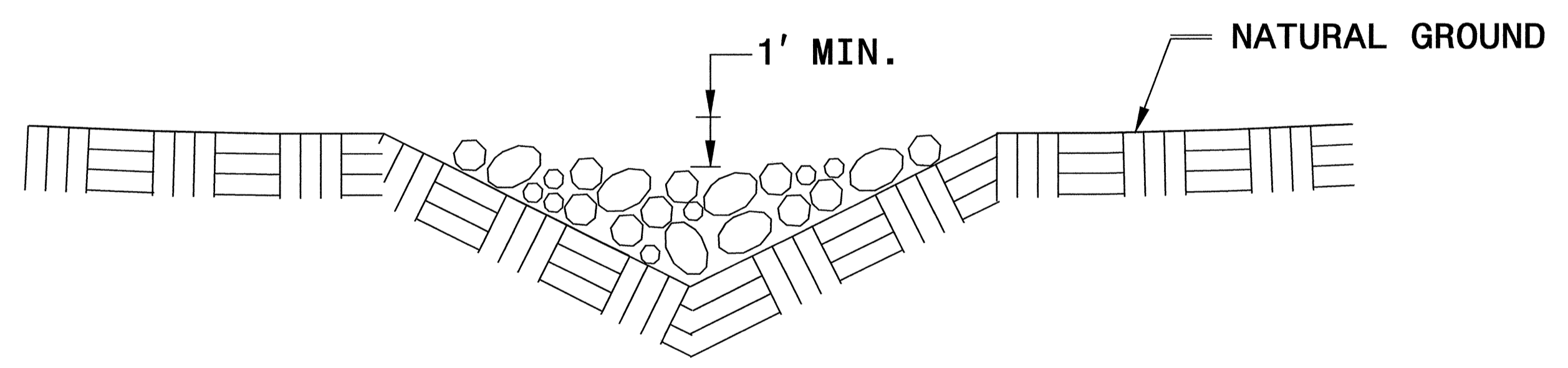


**ISOMETRIC VIEW**

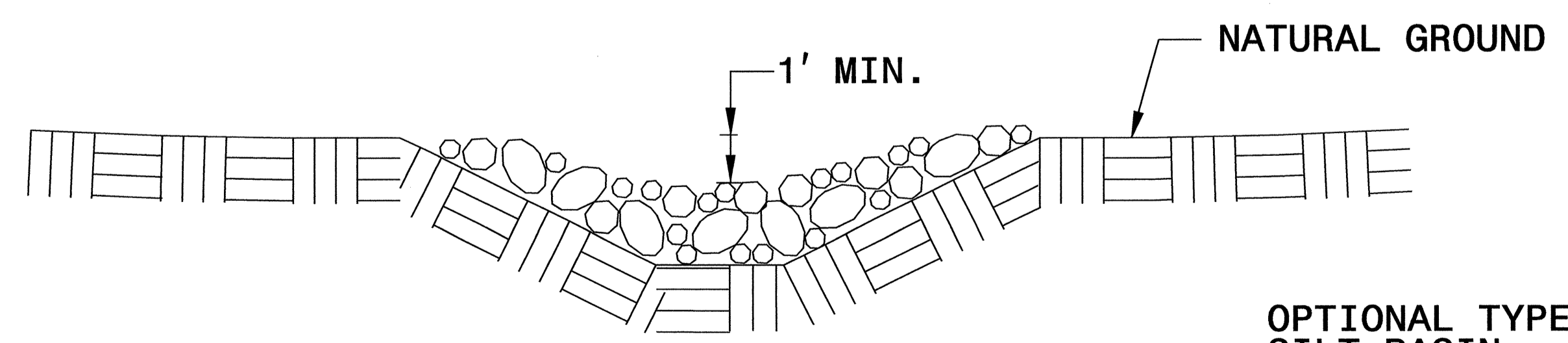
**NOTES:**

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

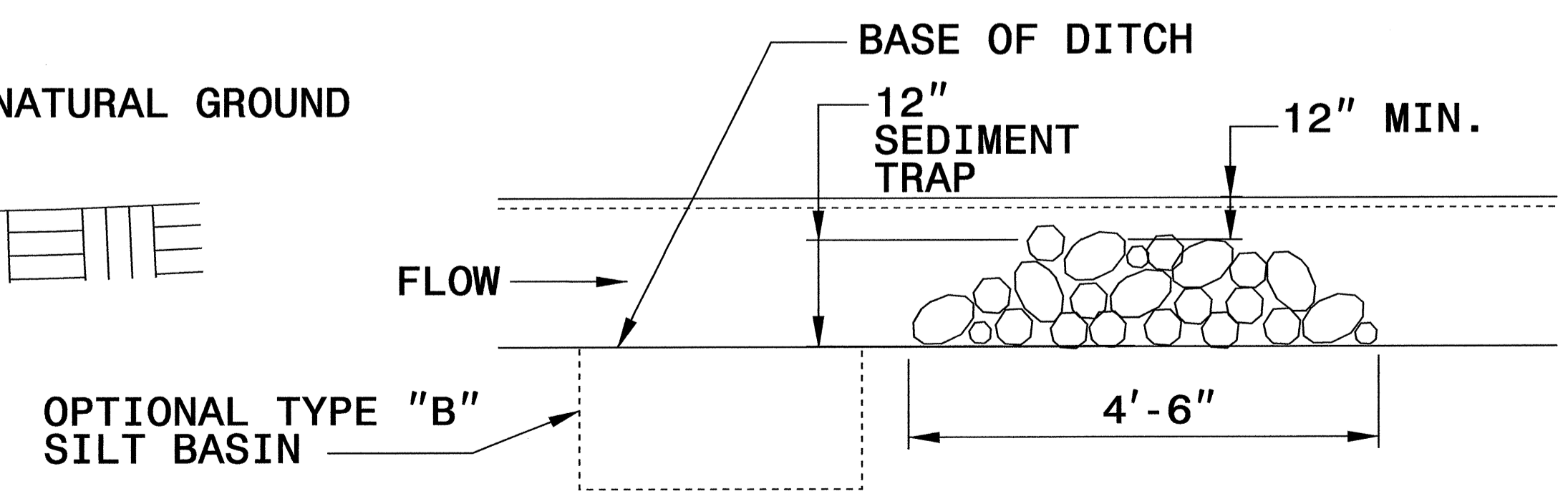
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION VEE DITCH**



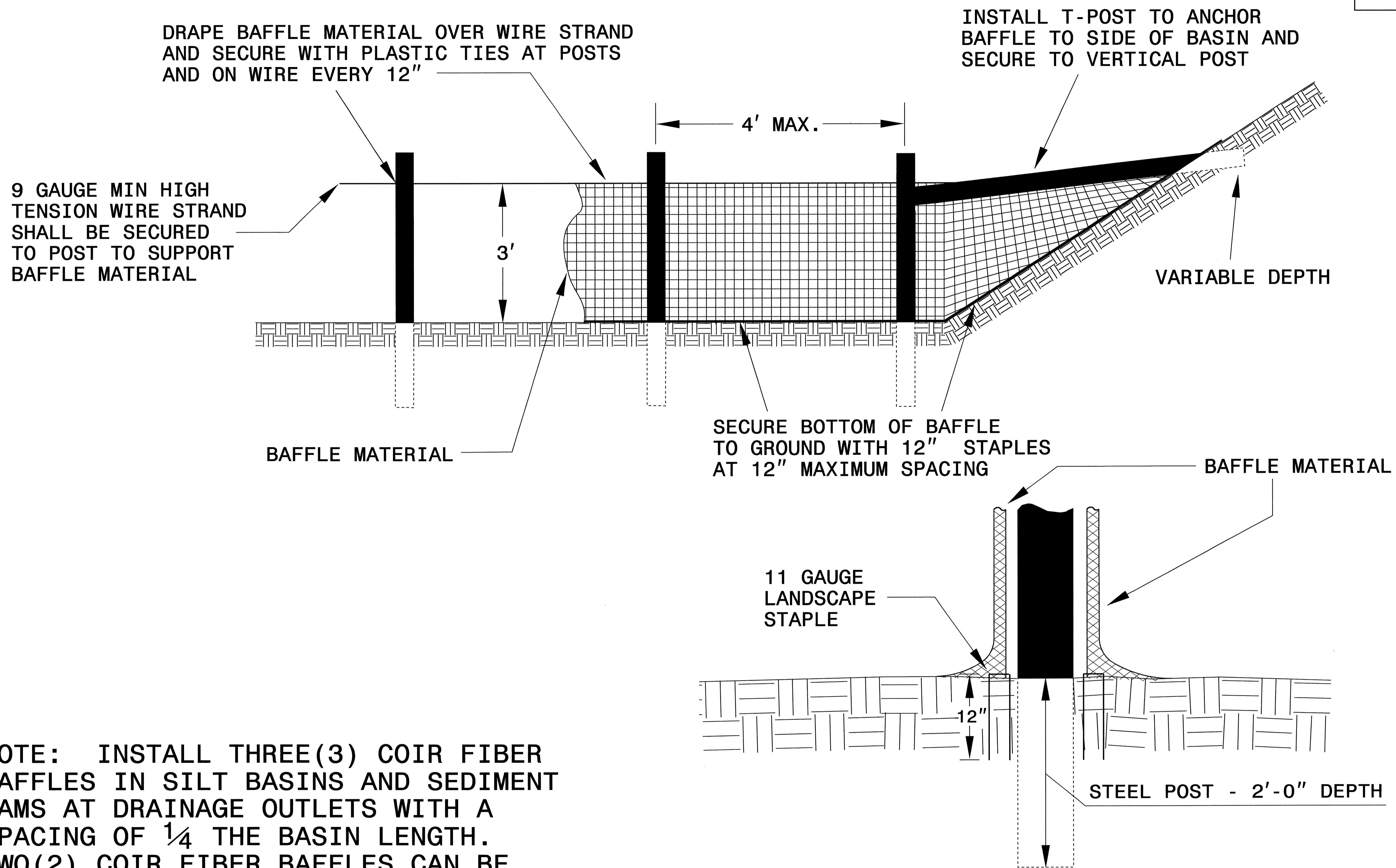
**CROSS SECTION TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

PROJECT REFERENCE NO. B-4179	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL

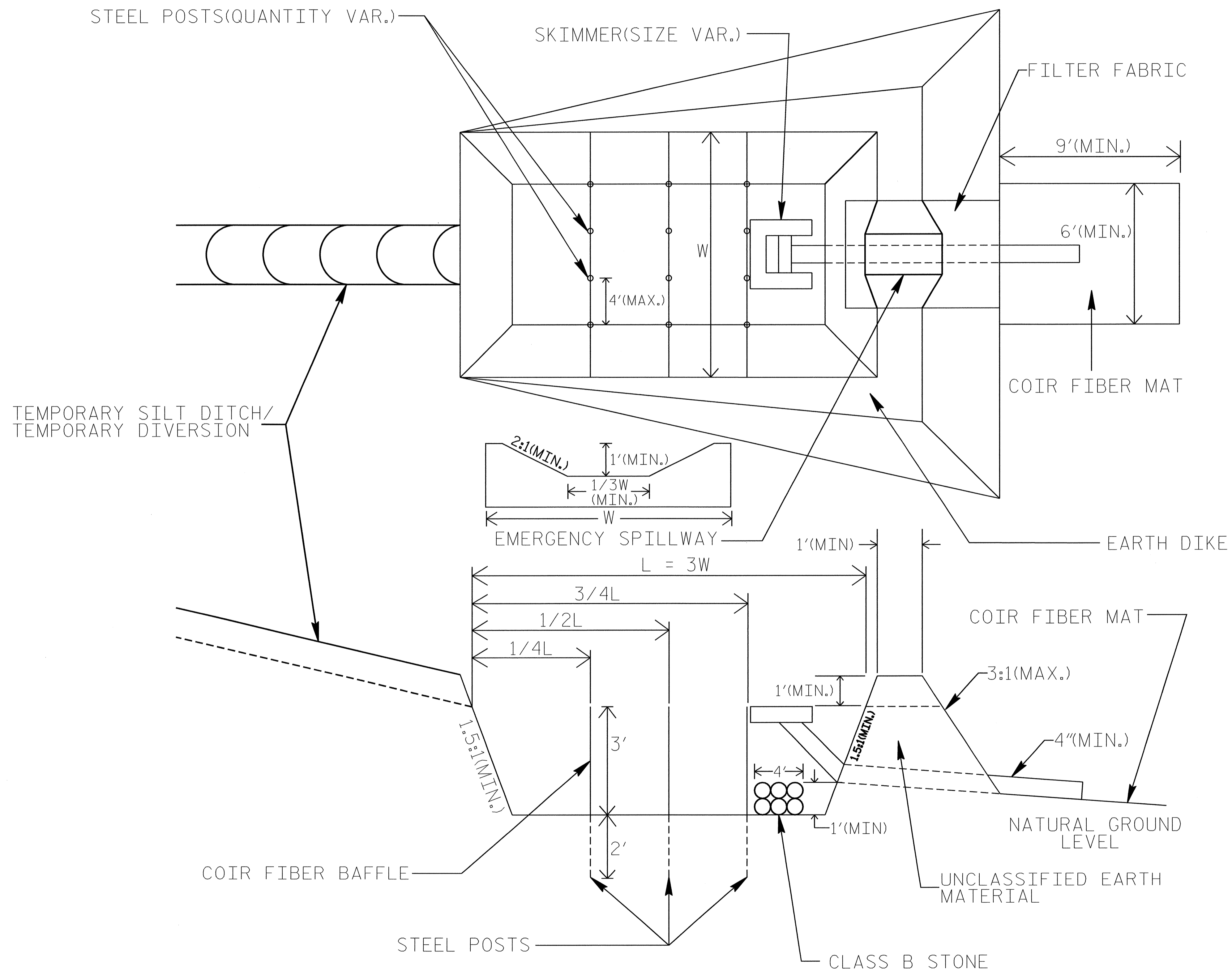


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

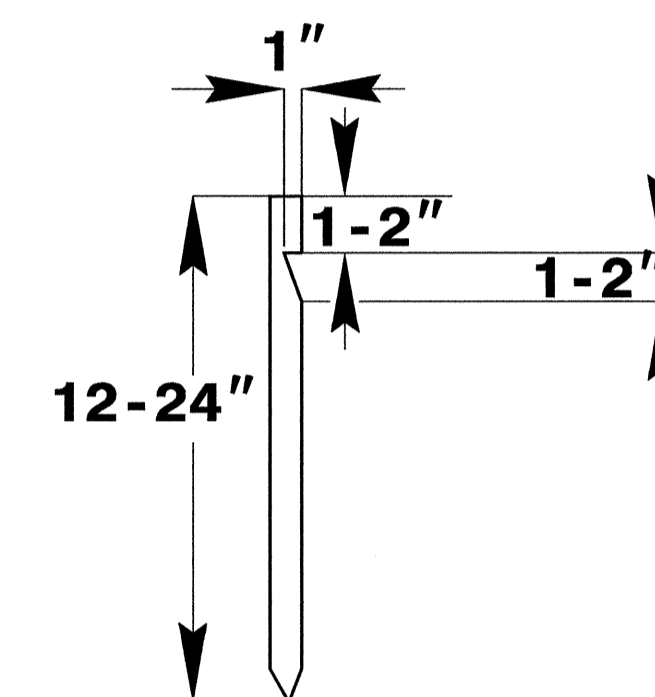
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

# SKIMMER BASIN WITH BAFFLES DETAIL

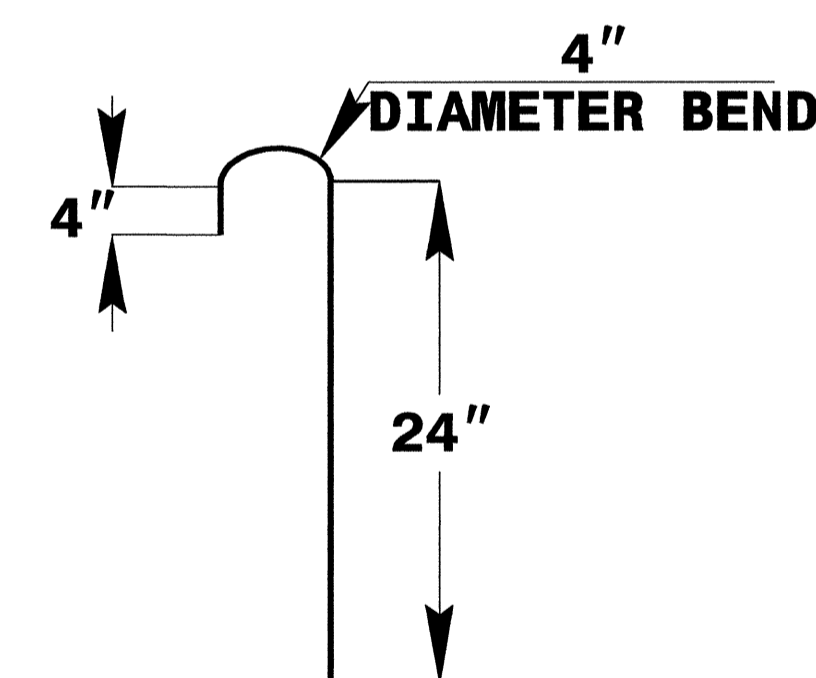
PROJECT REFERENCE NO. B-4179	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



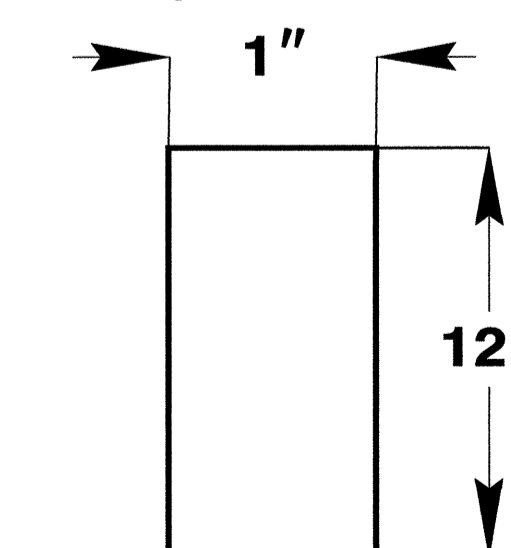
**2" x 2" (nominal)  
WOODEN STAKE**



**#10 STEEL  
REINFORCEMENT BAR**



**1" (nominal)  
STAPLE**



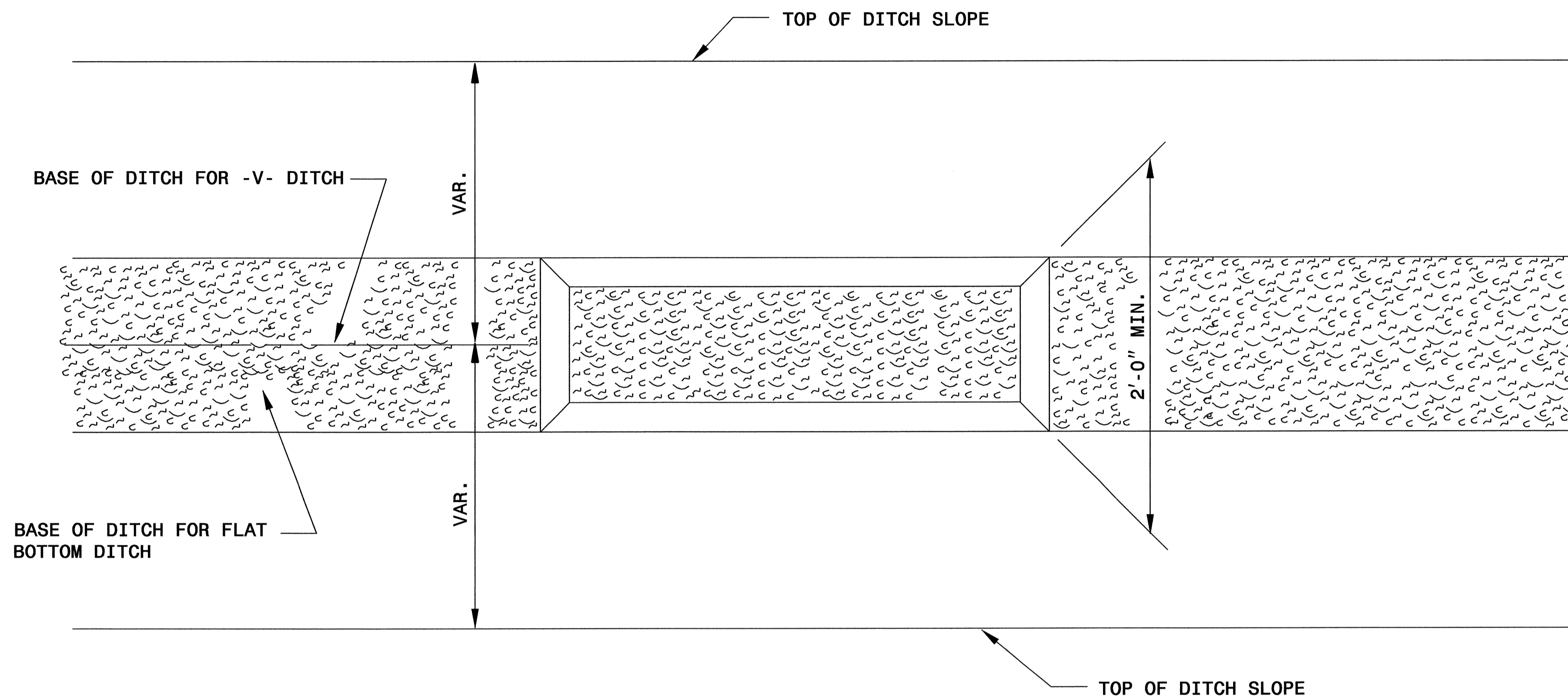
**COIR FIBER MAT  
ANCHOR OPTIONS**

**NOTES:**

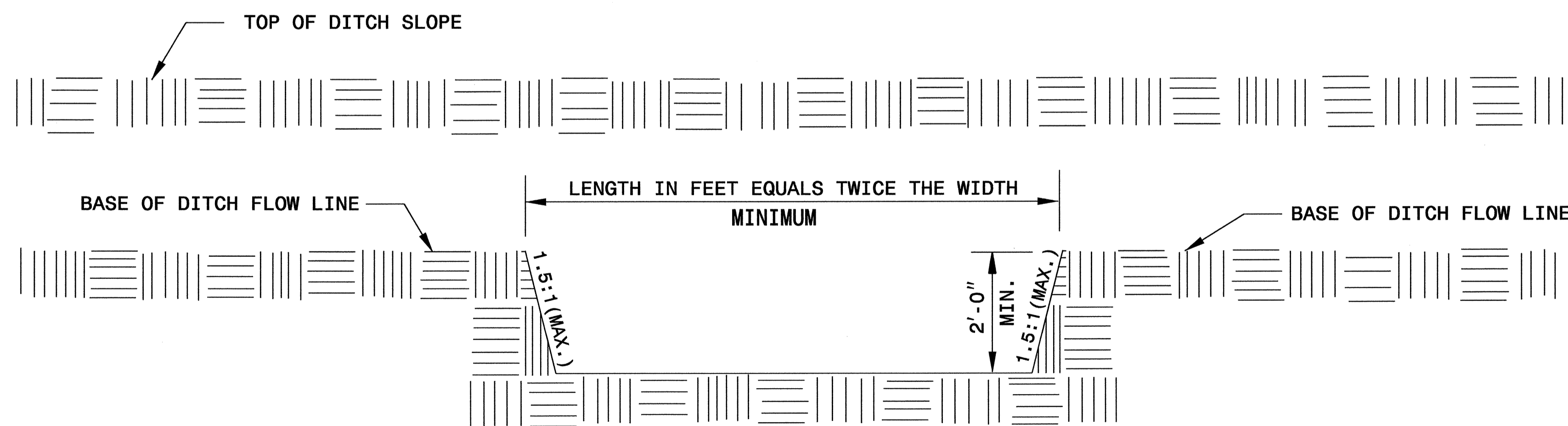
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.

PROJECT REFERENCE NO.	SHEET NO.
B-4179	EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SILT BASIN 'B' DETAIL



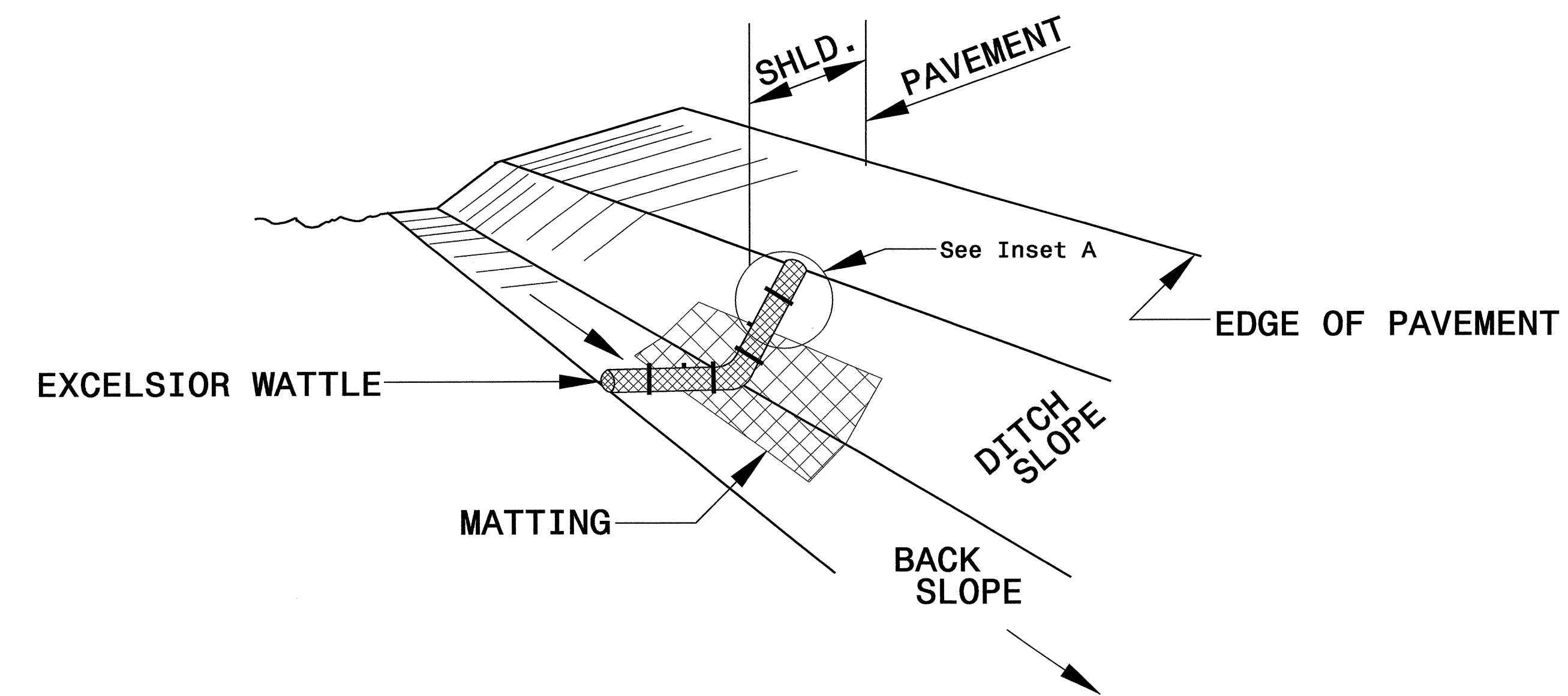
PLAN



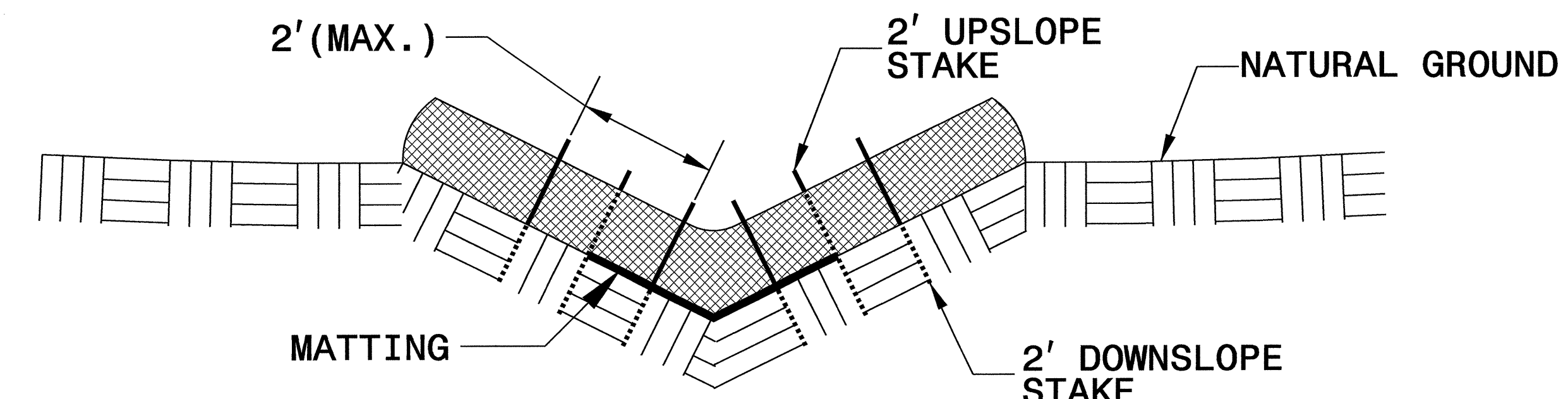
ELEVATION

PROJECT REFERENCE NO. B-4179	SHEET NO. EC-2D
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

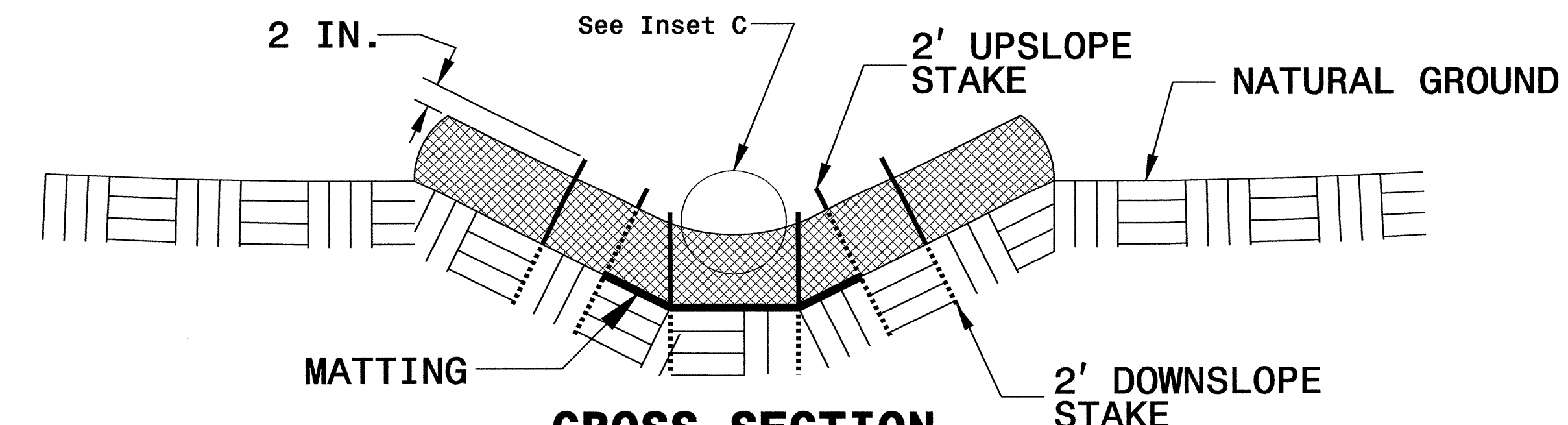
# WATTLE WITH POLYACRYLAMIDE DETAIL



**ISOMETRIC VIEW**

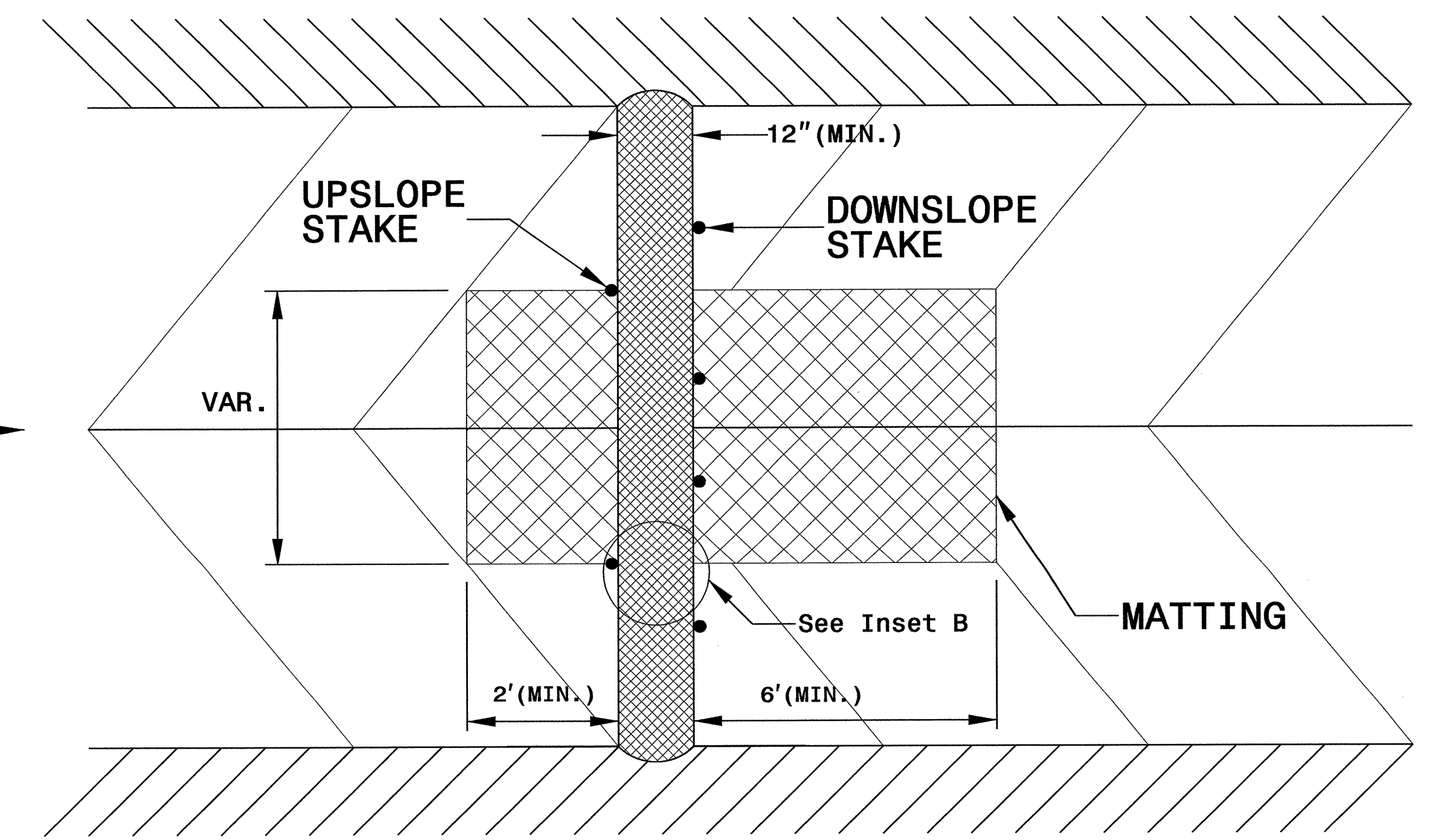
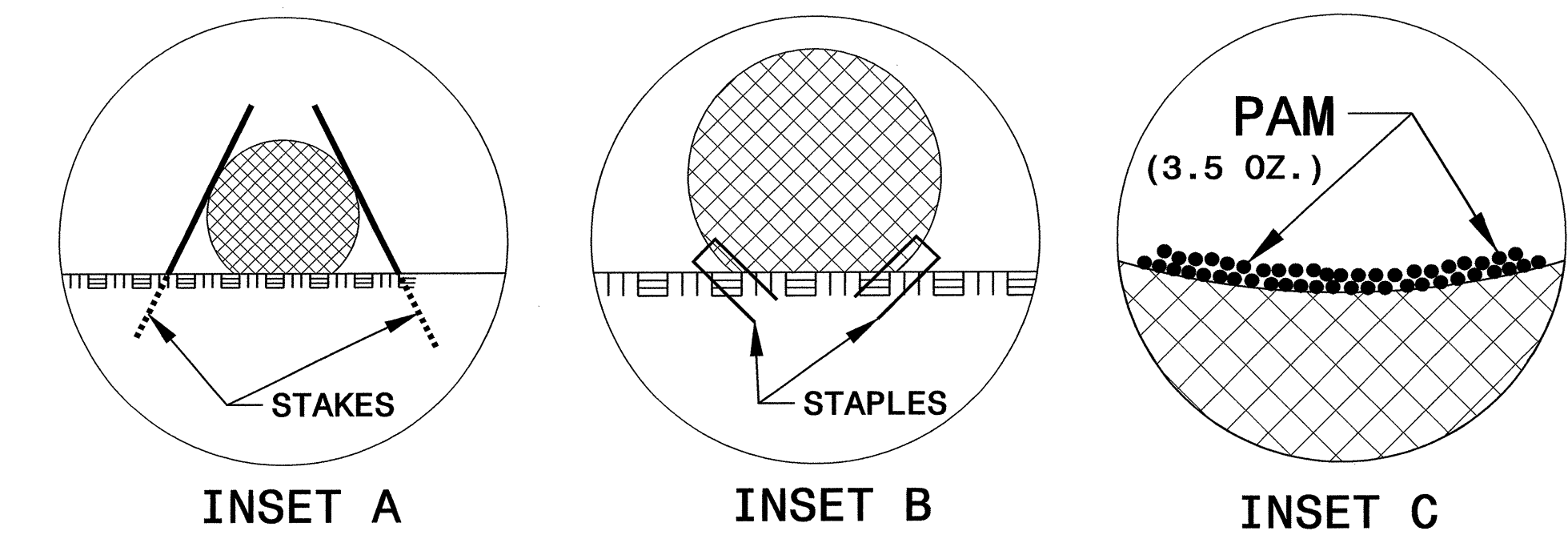


**CROSS SECTION VEE DITCH**



**CROSS SECTION TRAPEZOIDAL DITCH**

- NOTES:
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
  - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. CROSS SECTION.
  - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
  - PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
  - INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
  - INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.
  - INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.25 IN.

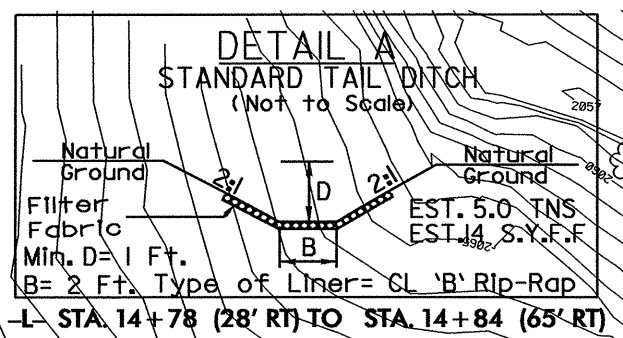


**TOP VIEW**



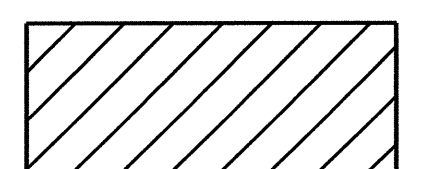
CLEARING AND GRUBBING  
EROSION CONTROL FOR  
CONSTRUCTION SHEET 4

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



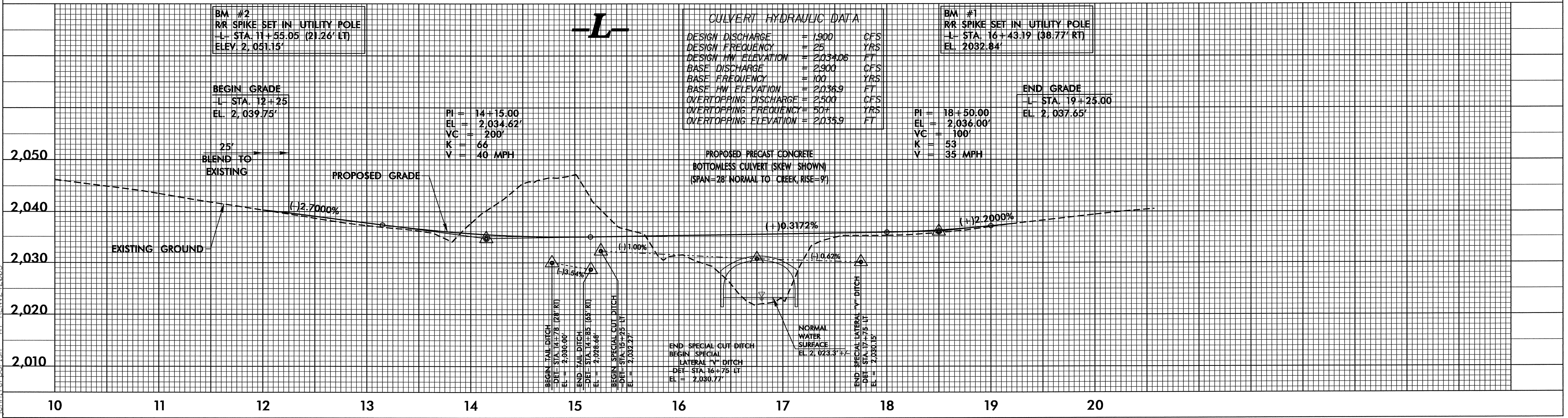
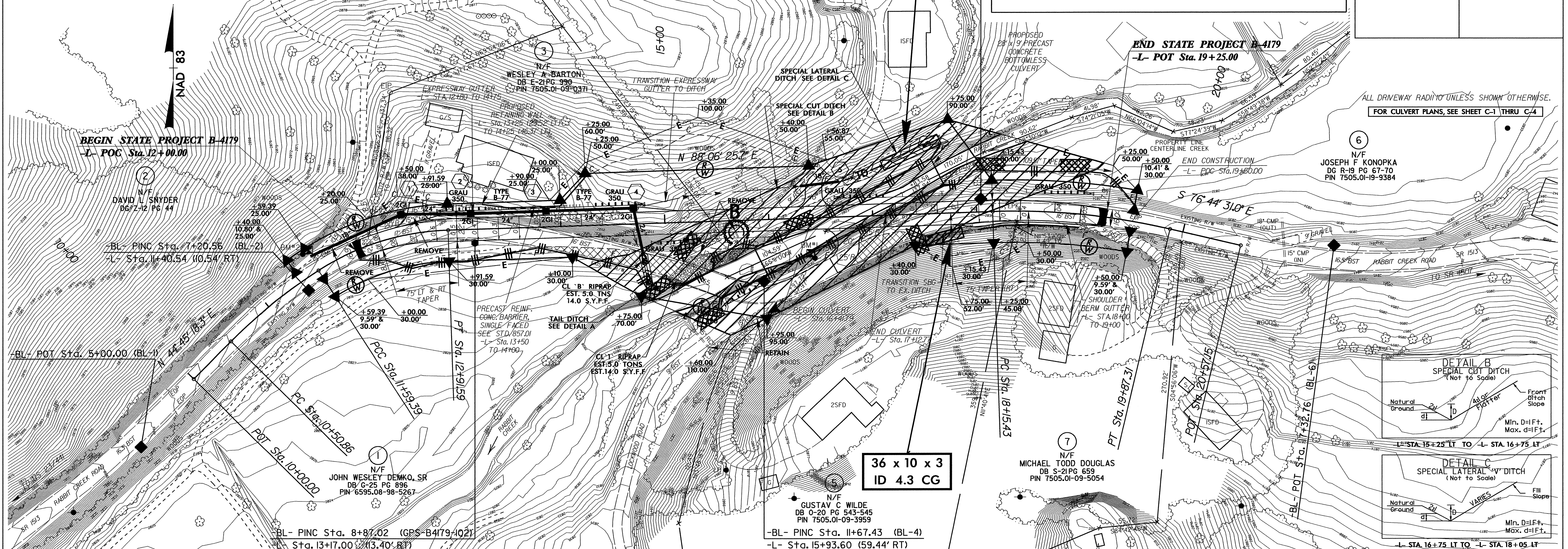
60 x 10 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
6 ft. weir  
ID 4.1 F

-BL- PINC Sta. 13+90.08 (BL-5)  
-L- Sta. 18+04.36 (12.34' LT)



ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO. B-4179	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



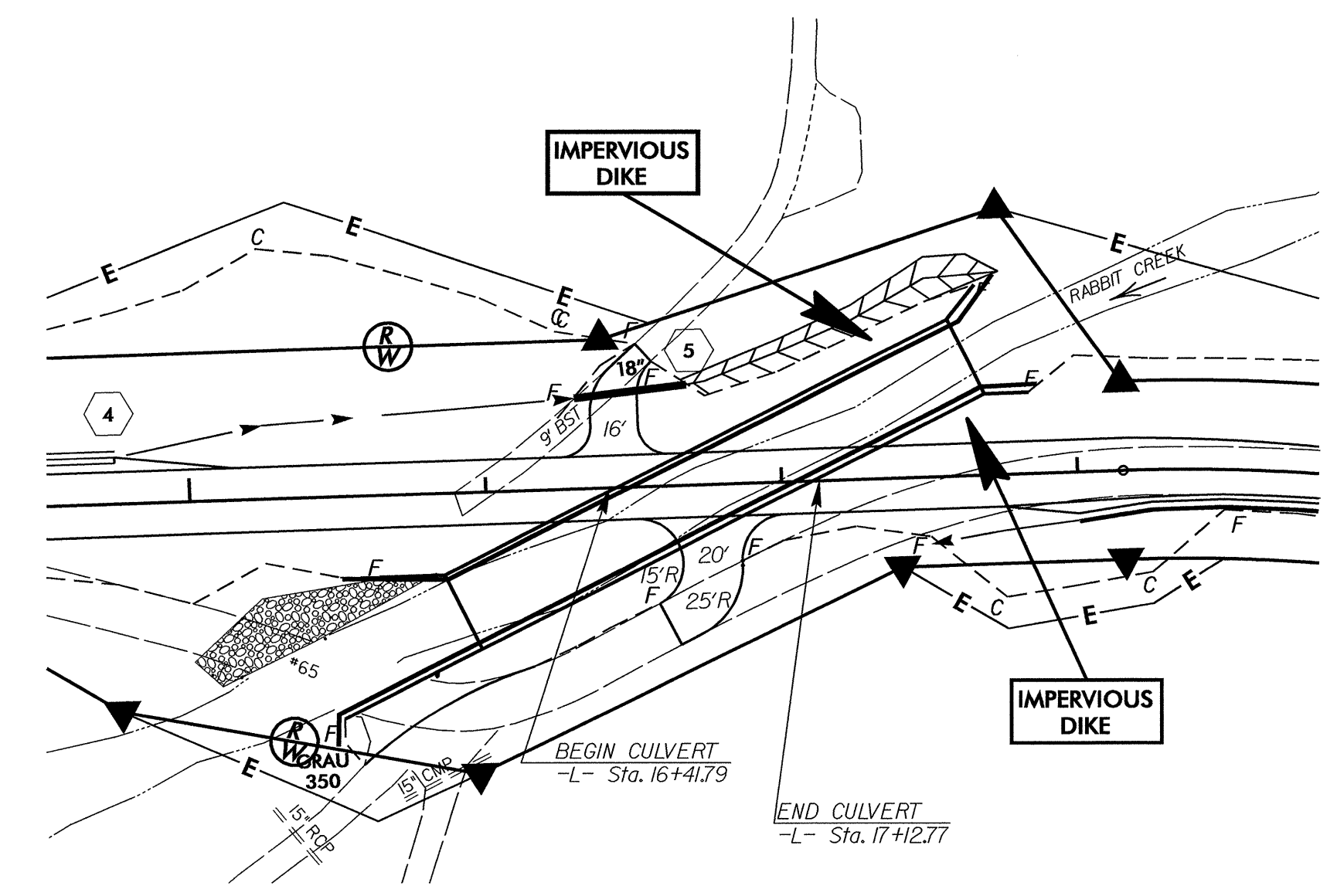
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 Jannifer@psdsh



PROJECT REFERENCE NO.	SHEET NO.
B-4179	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

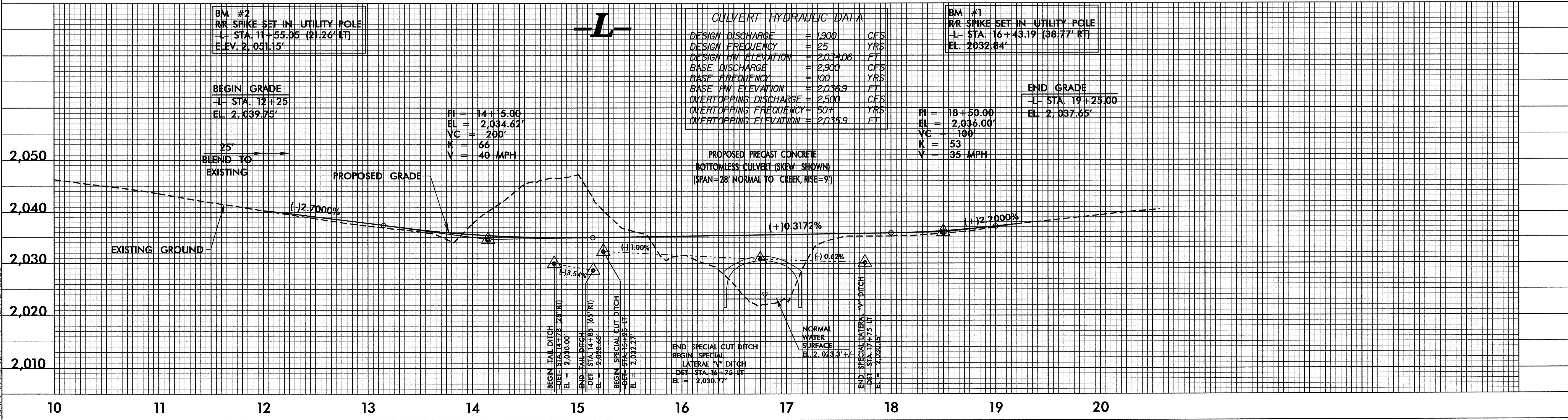
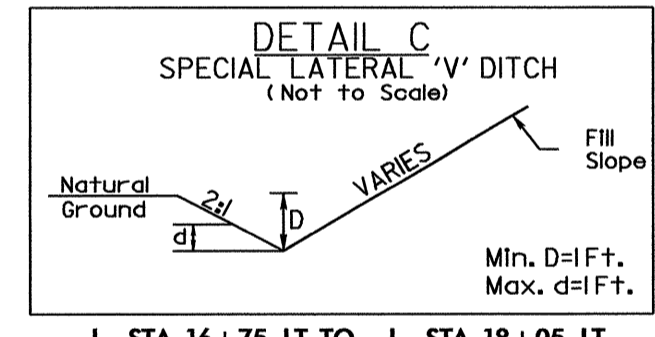
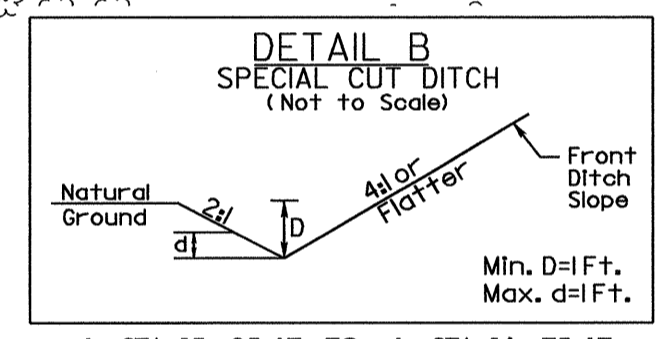
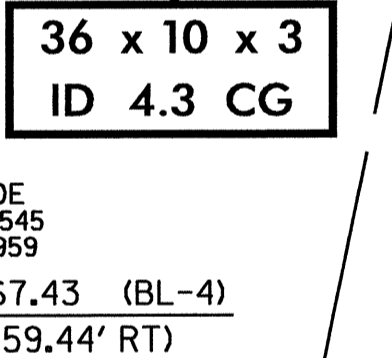
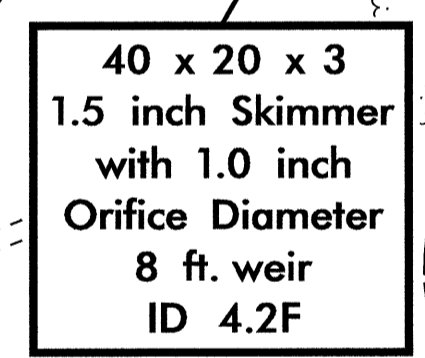
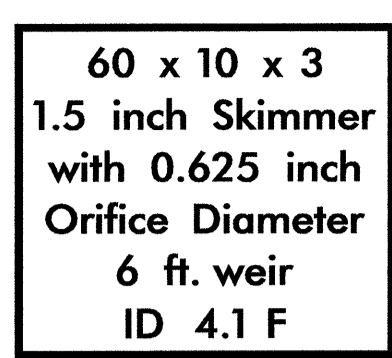
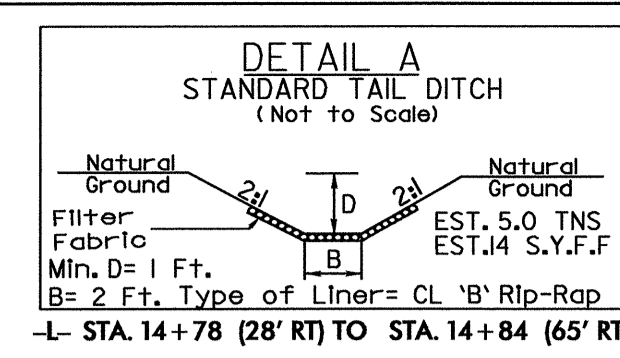
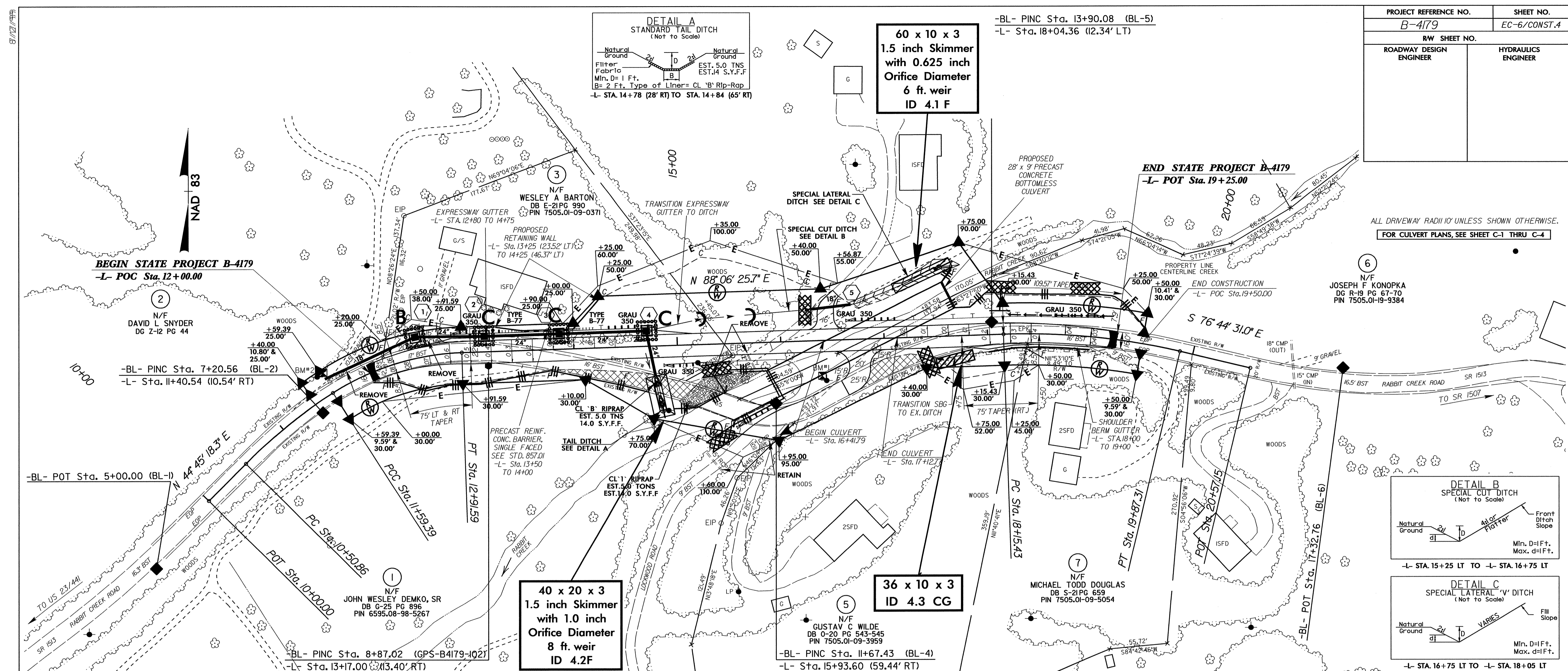
# CULVERT CONSTRUCTION SEQUENCE STA. 16+77 -L-

1. UTILIZE SPECIAL STILLING BASINS AS NEEDED DURING CULVERT CONSTRUCTION.
2. CONSTRUCT IMPERVIOUS DIKES.
3. CONSTRUCT BOTTOMLESS CULVERT.
4. REMOVE IMPERVIOUS DIKES.
5. CONSTRUCT OUTLET CHANNEL IMPROVEMENTS.
6. REMOVE SPECIAL STILLING BASINS AND COMPLETE ROADWAY.



PROJECT REFERENCE NO.	SHEET NO.
B-4179	EC-6/CONST-4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ALL DRIVEWAY RADII 10' UNLESS SHOWN OTHERWISE.  
FOR CULVERT PLANS, SEE SHEET C-1 THRU C-4



CULVERT HYDRAULIC DATA	
DESIGN DISCHARGE	= 1,900 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 2034.06 FT
BASE DISCHARGE	= 2,900 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 2036.9 FT
OVERTOPPING DISCHARGE	= 2,500 CFS
OVERTOPPING FREQUENCY	= 50 YRS
OVERTOPPING ELEVATION	= 2035.9 FT

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