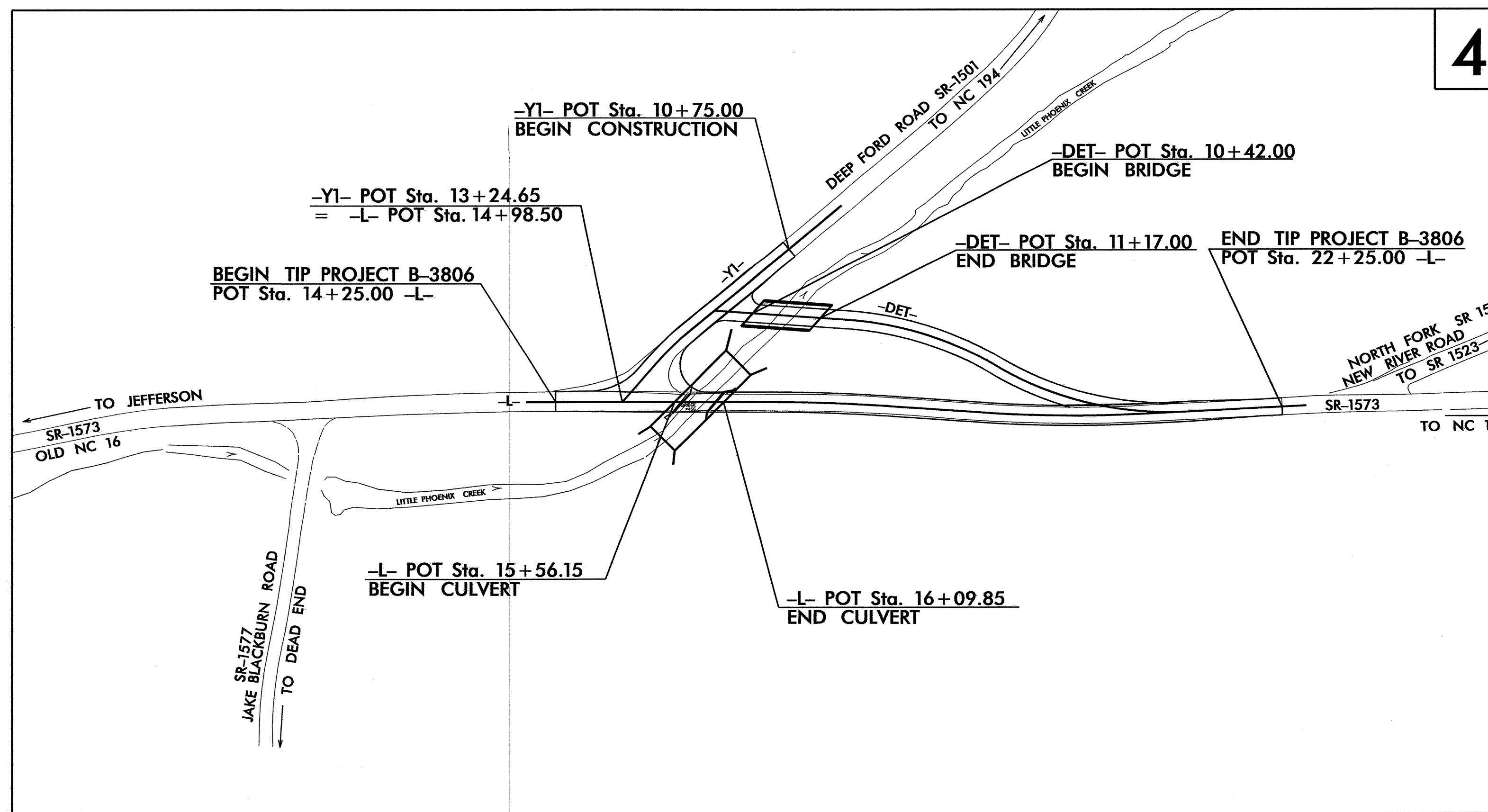
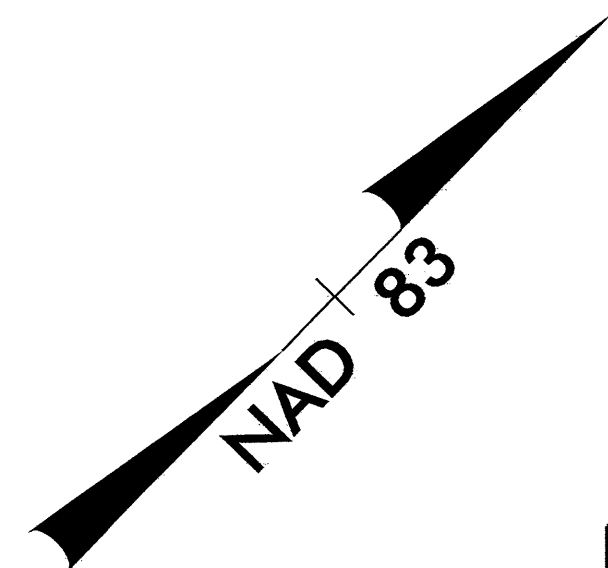


**TIP PROJECT: B-3806**

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

**LOCATION: BRIDGE NO. 456 OVER LITTLE PHOENIX CREEK ON SR 1573**  
**TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, AND PAVING**



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3806	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

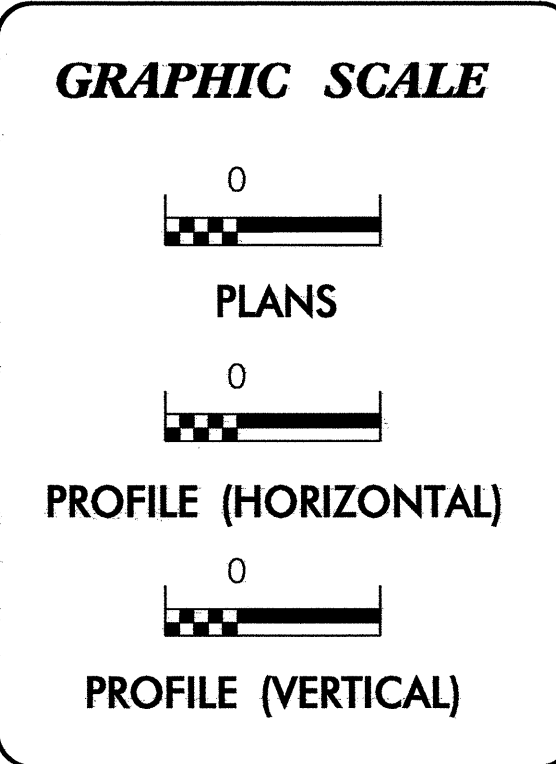
**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	△△△
1622.01	Temporary Berms and Slope Drains	— T —
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	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.**

**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.**



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**

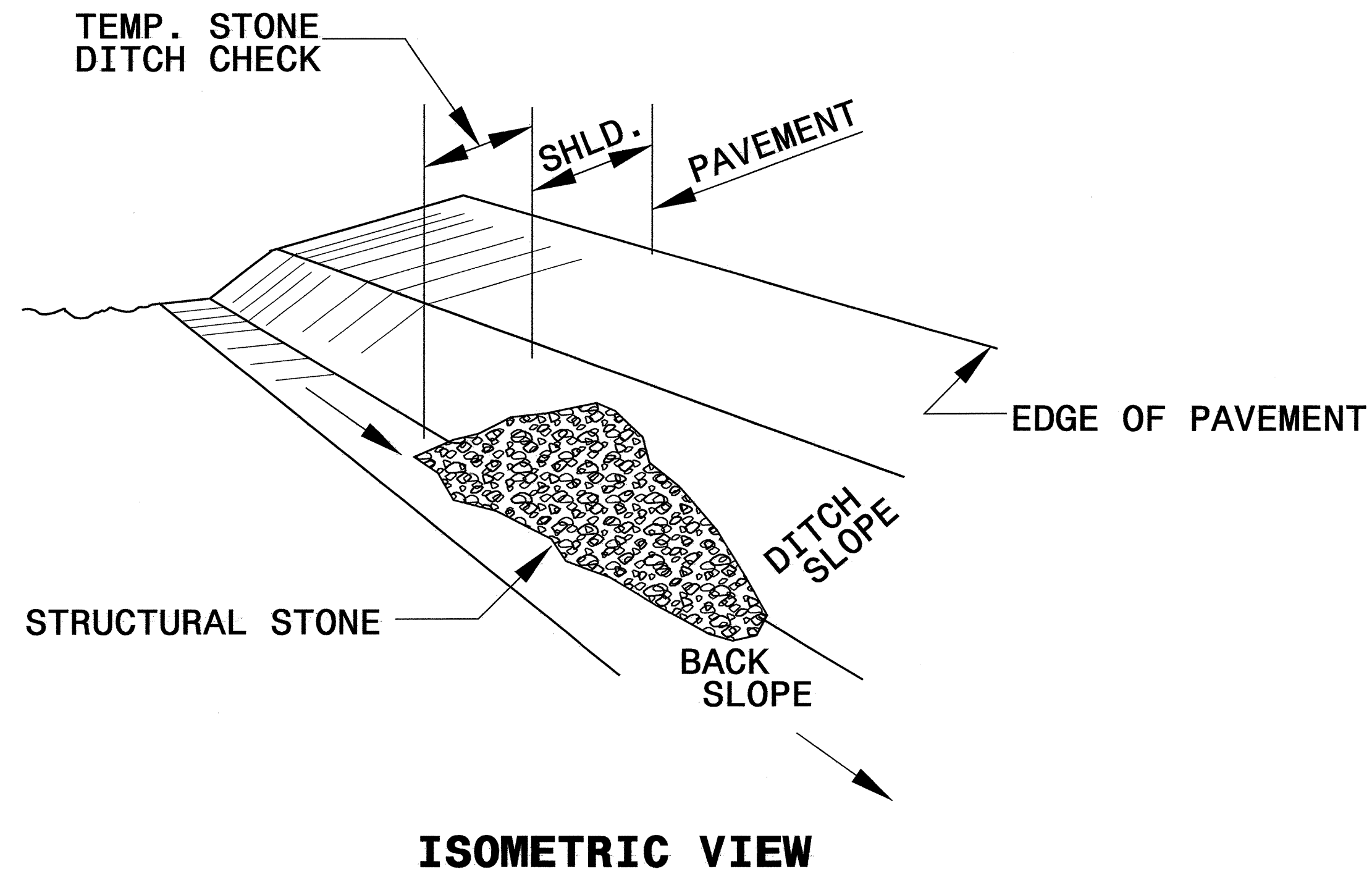
Roadway Standard Drawings

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	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1633.01 Temporary Rock Silt Check Type A
1607.01 Gravel Construction Entrance	1634.01 Temporary Rock Sediment Dam Type A
1622.01 Temporary Berms and Slope Drains	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.06 Special Stilling Basin	

PROJECT REFERENCE NO. <i>B-3806</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

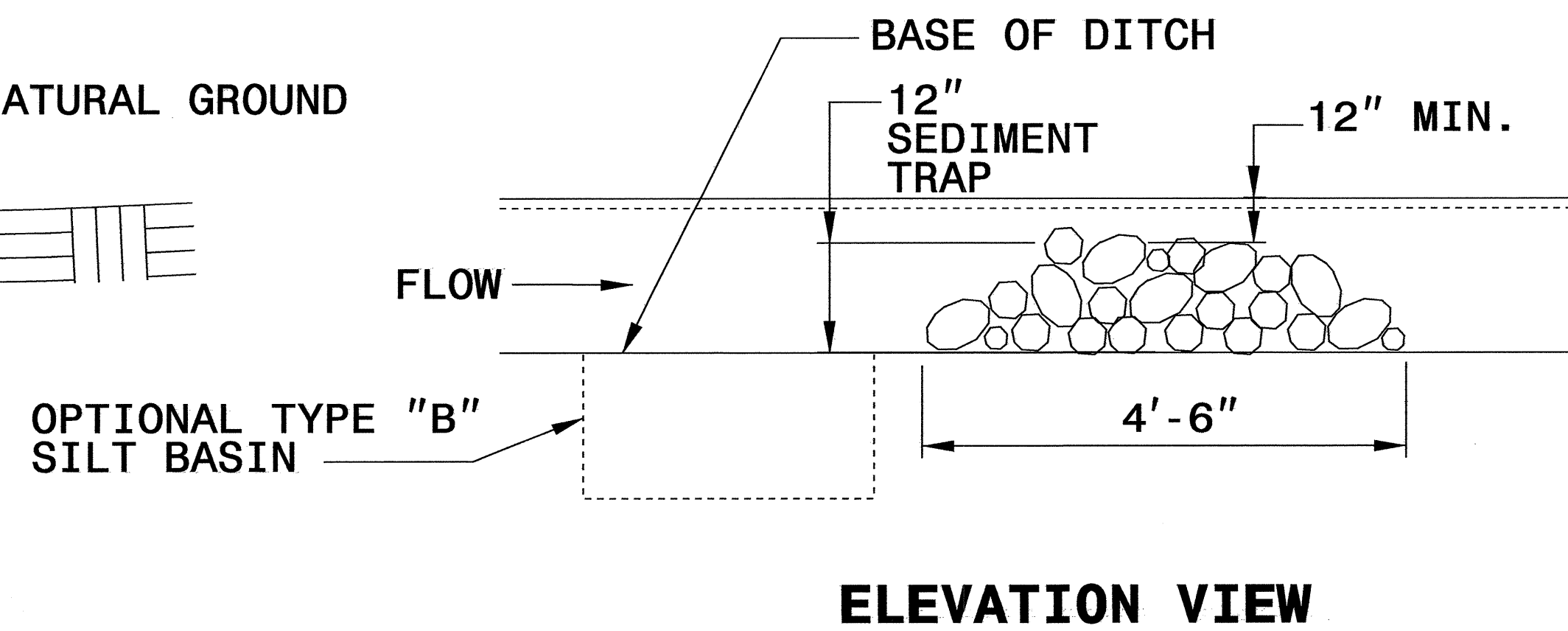
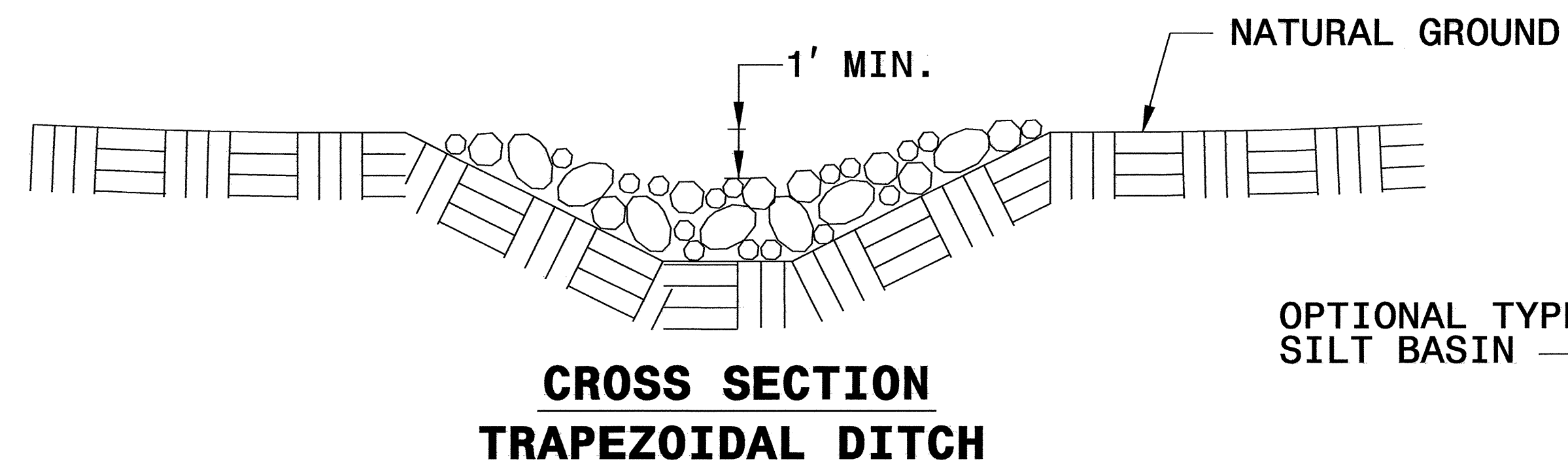
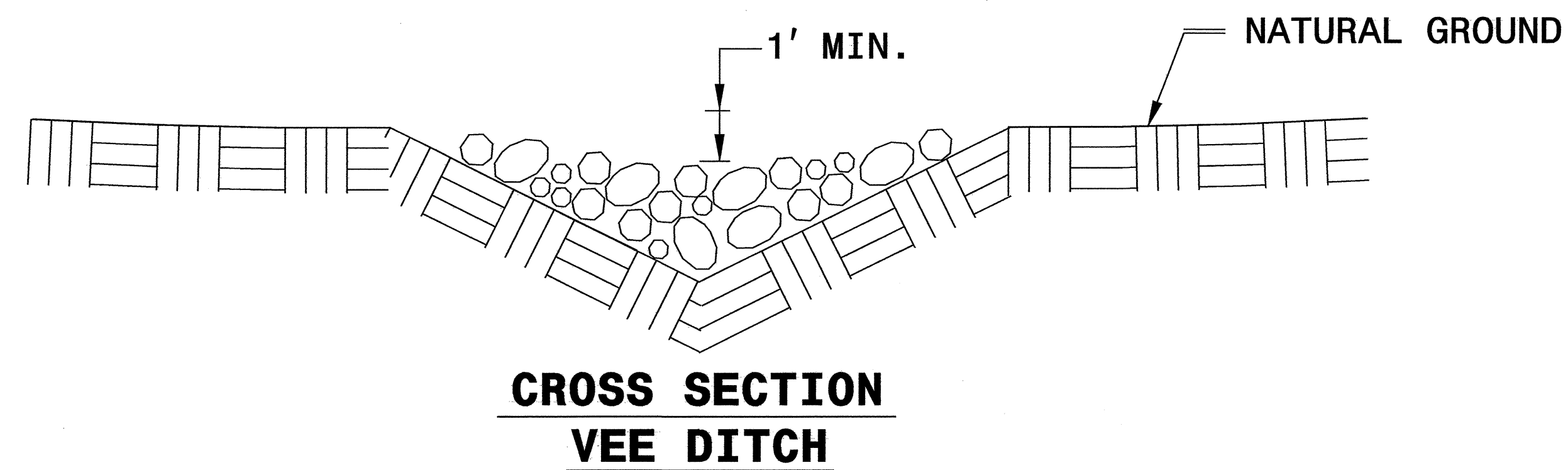
# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



**NOTES:**

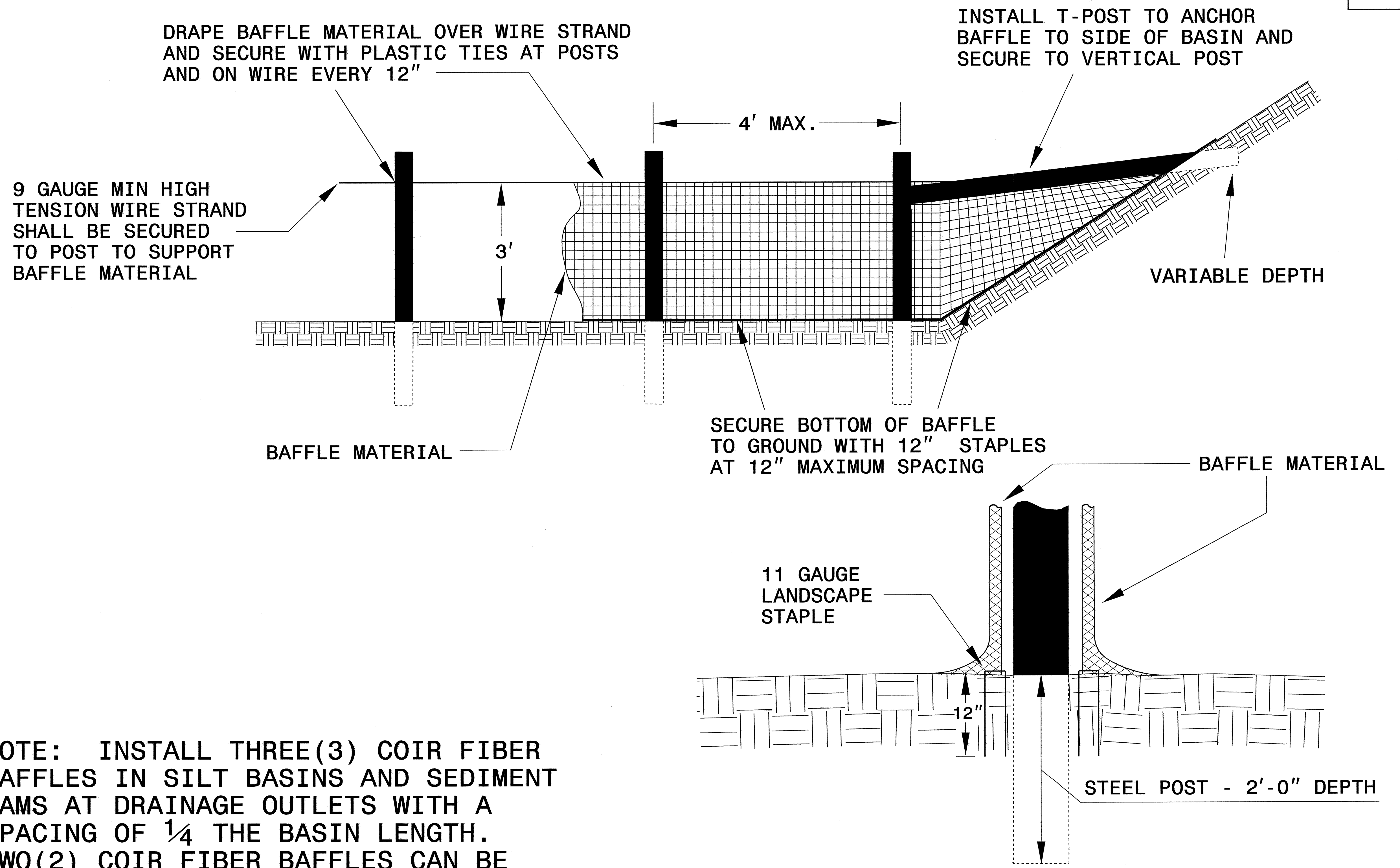
USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

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%.



PROJECT REFERENCE NO. B-3806	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL



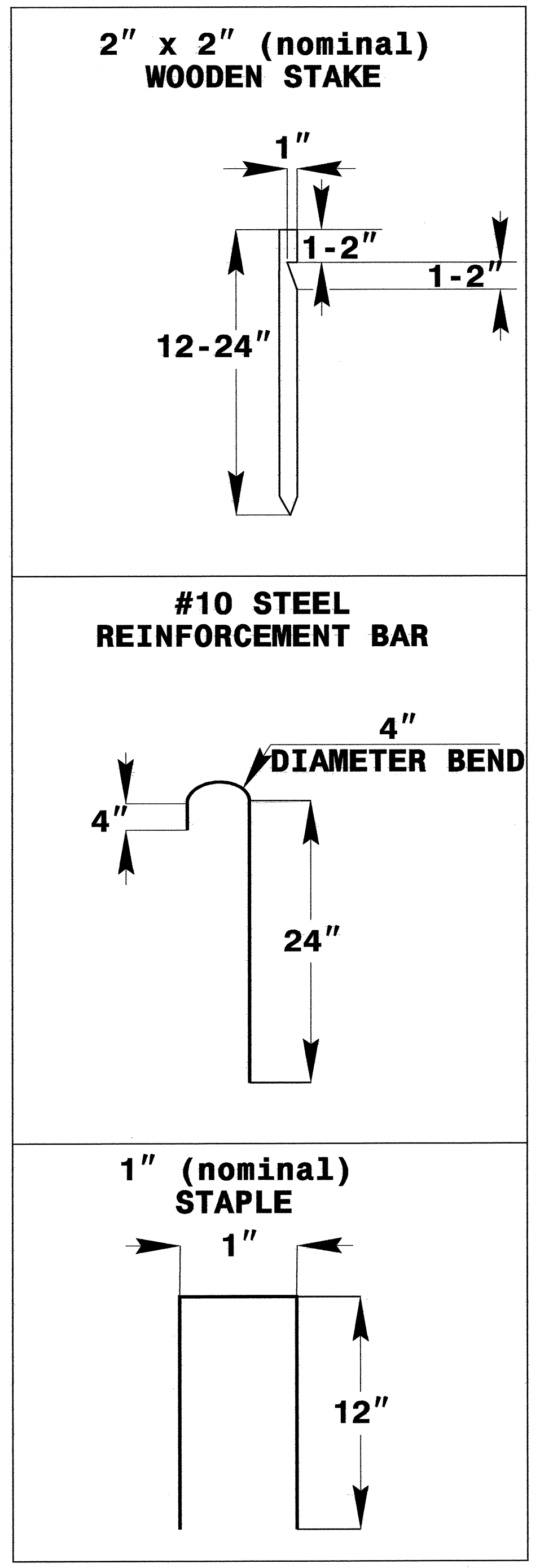
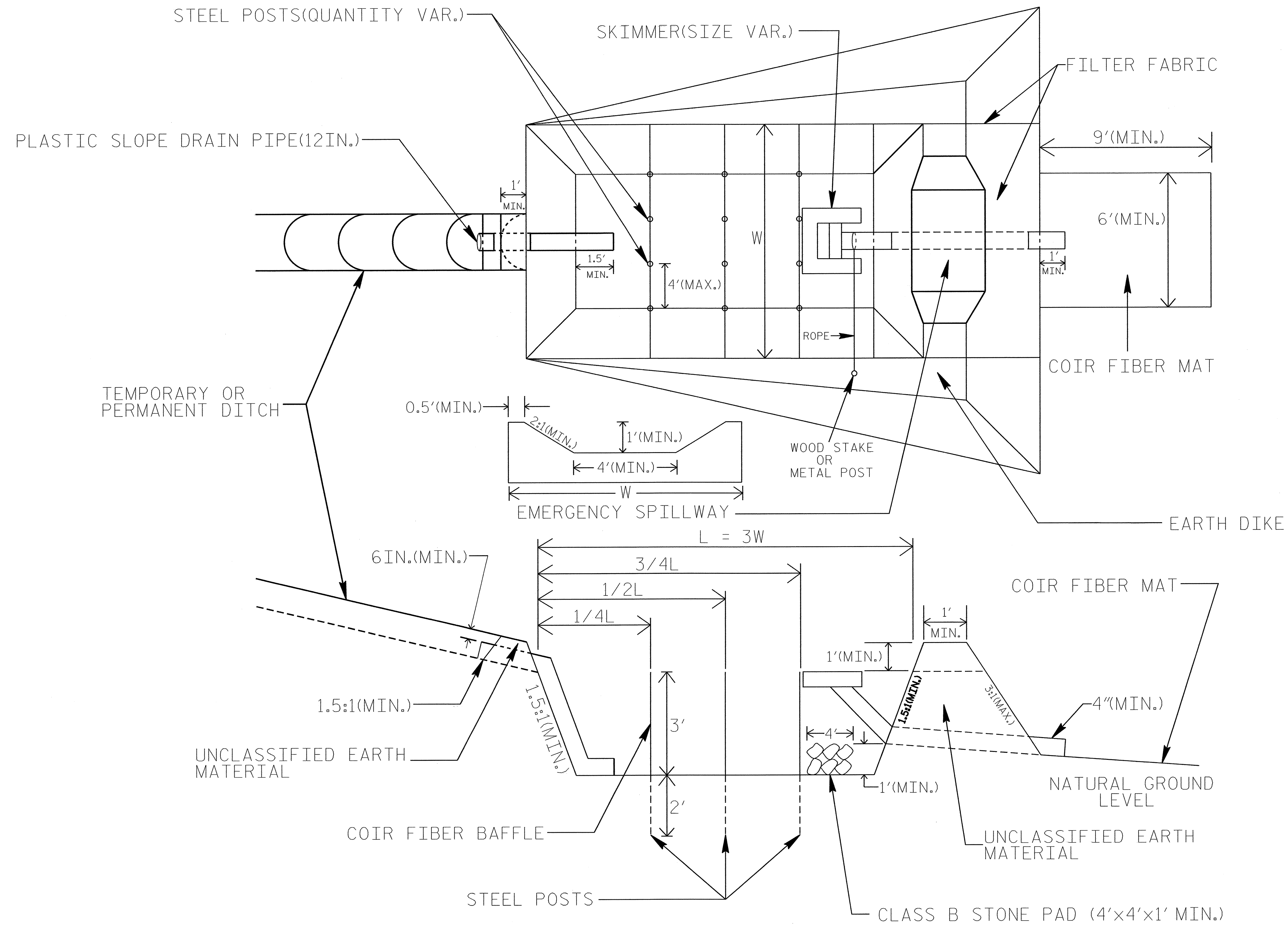
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

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-3806	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



## COIR FIBER MAT ANCHOR OPTIONS

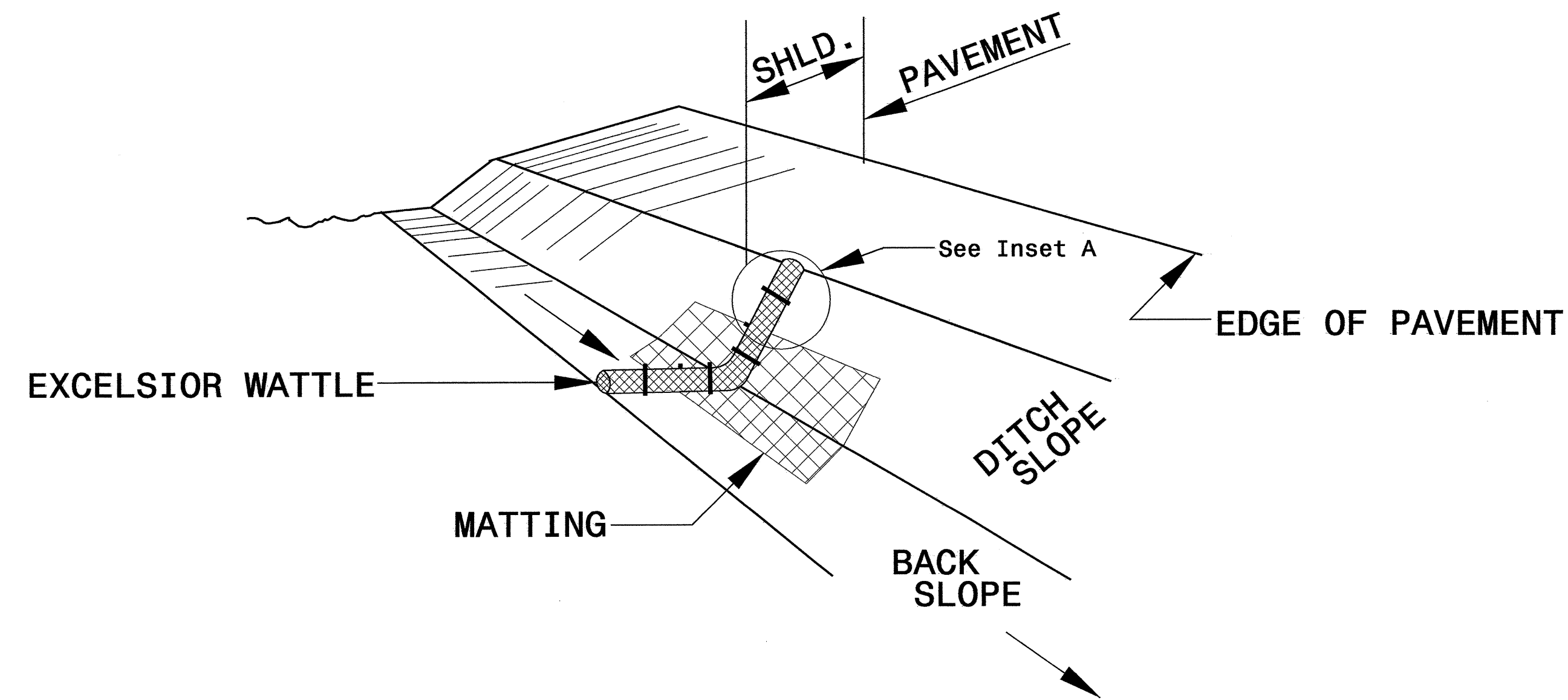
### NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING  $Q/0.8$ , WHERE Q IS FLOW RATE (CFS) INTO BASIN.

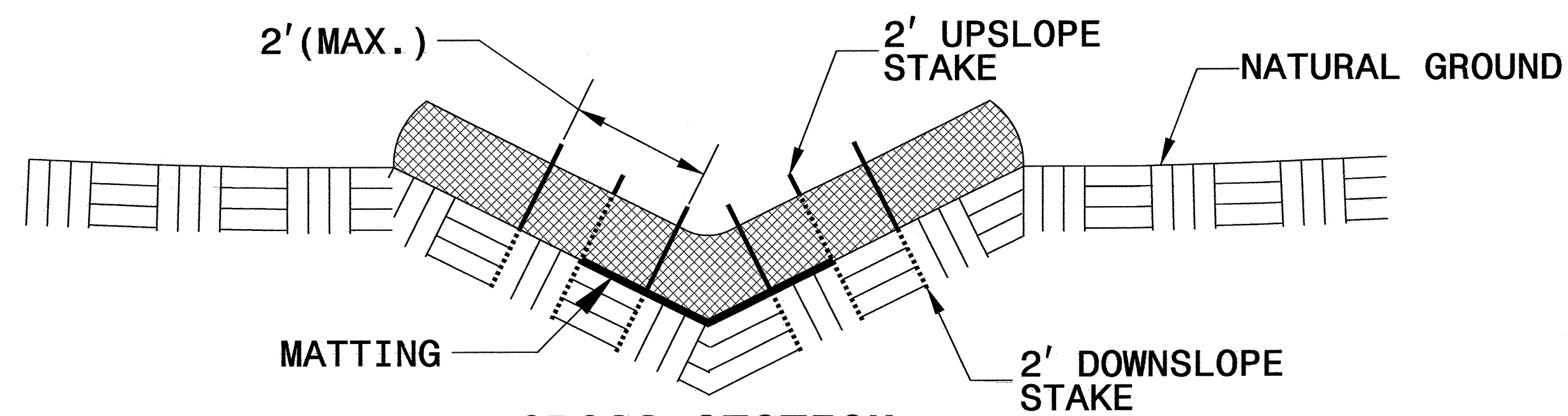
NOT TO SCALE

PROJECT REFERENCE NO. B-3806	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

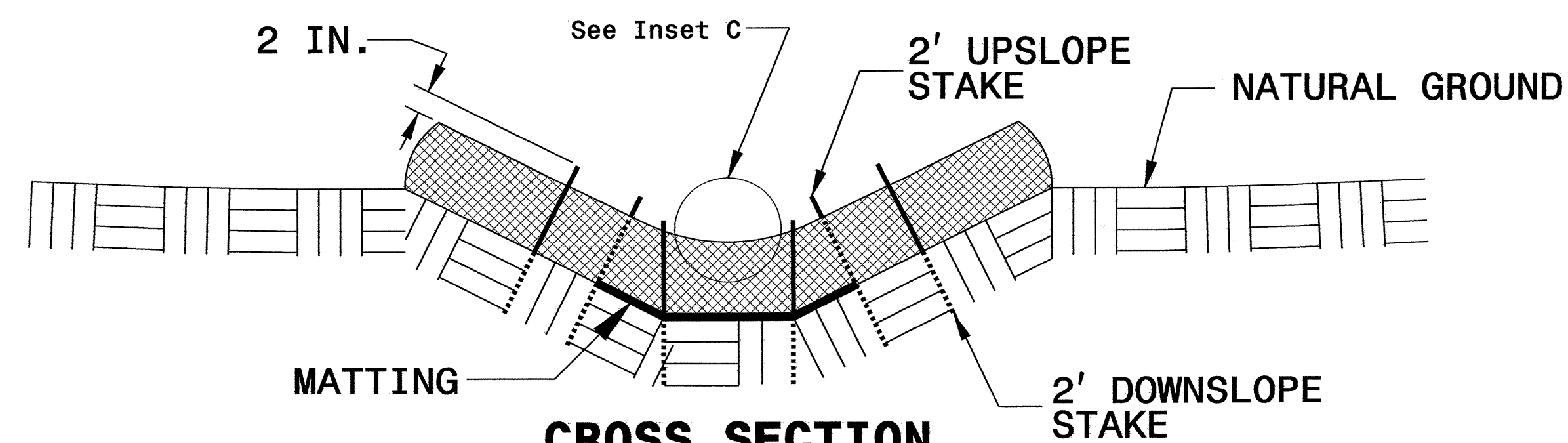
# WATTLE WITH POLYACRYLAMIDE DETAIL



**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.

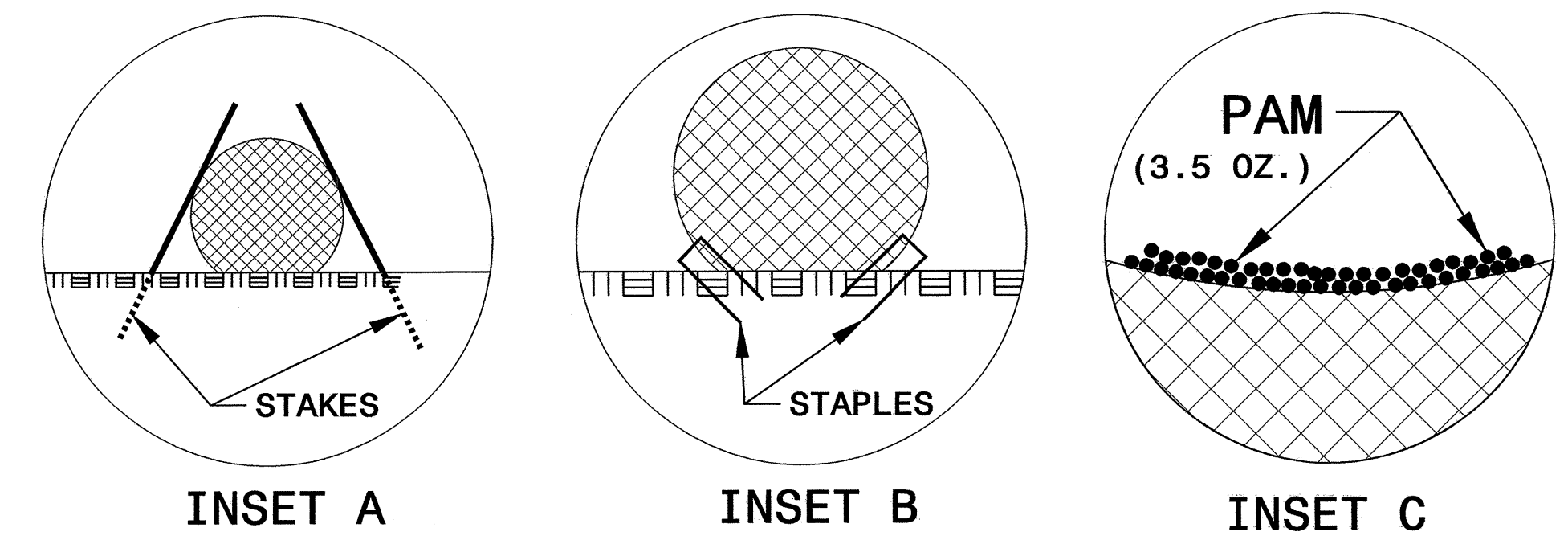
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

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.

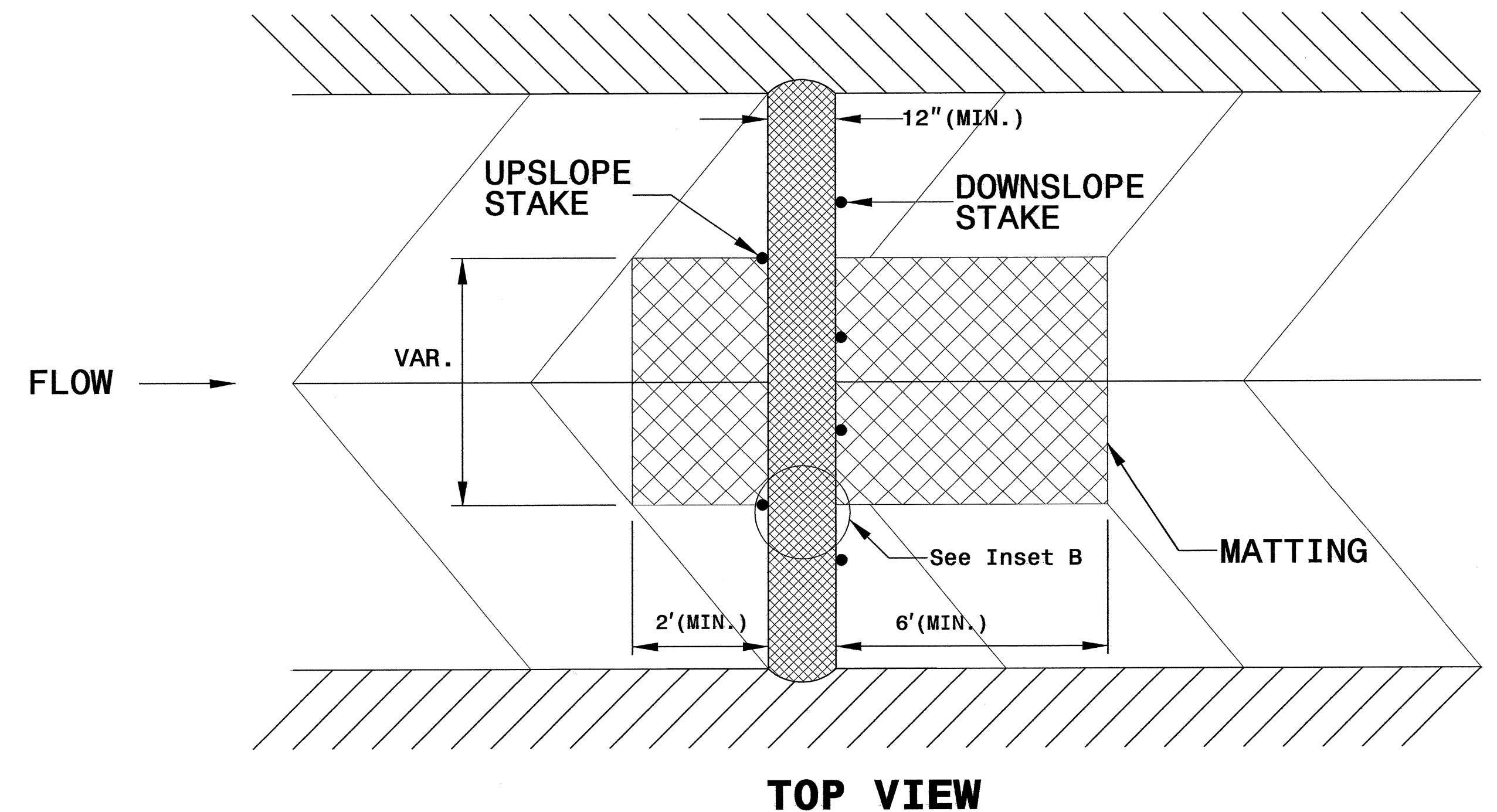
INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.25 IN.



**INSET A**

**INSET B**

**INSET C**



**TOP VIEW**



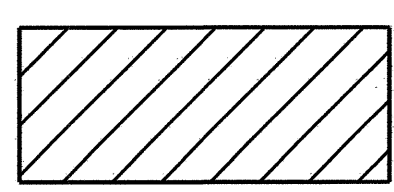


PROJECT REFERENCE NO.	SHEET NO.
B-3806	EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

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

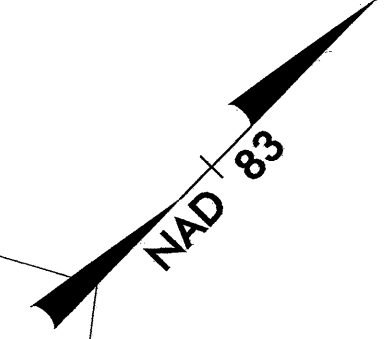
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 04



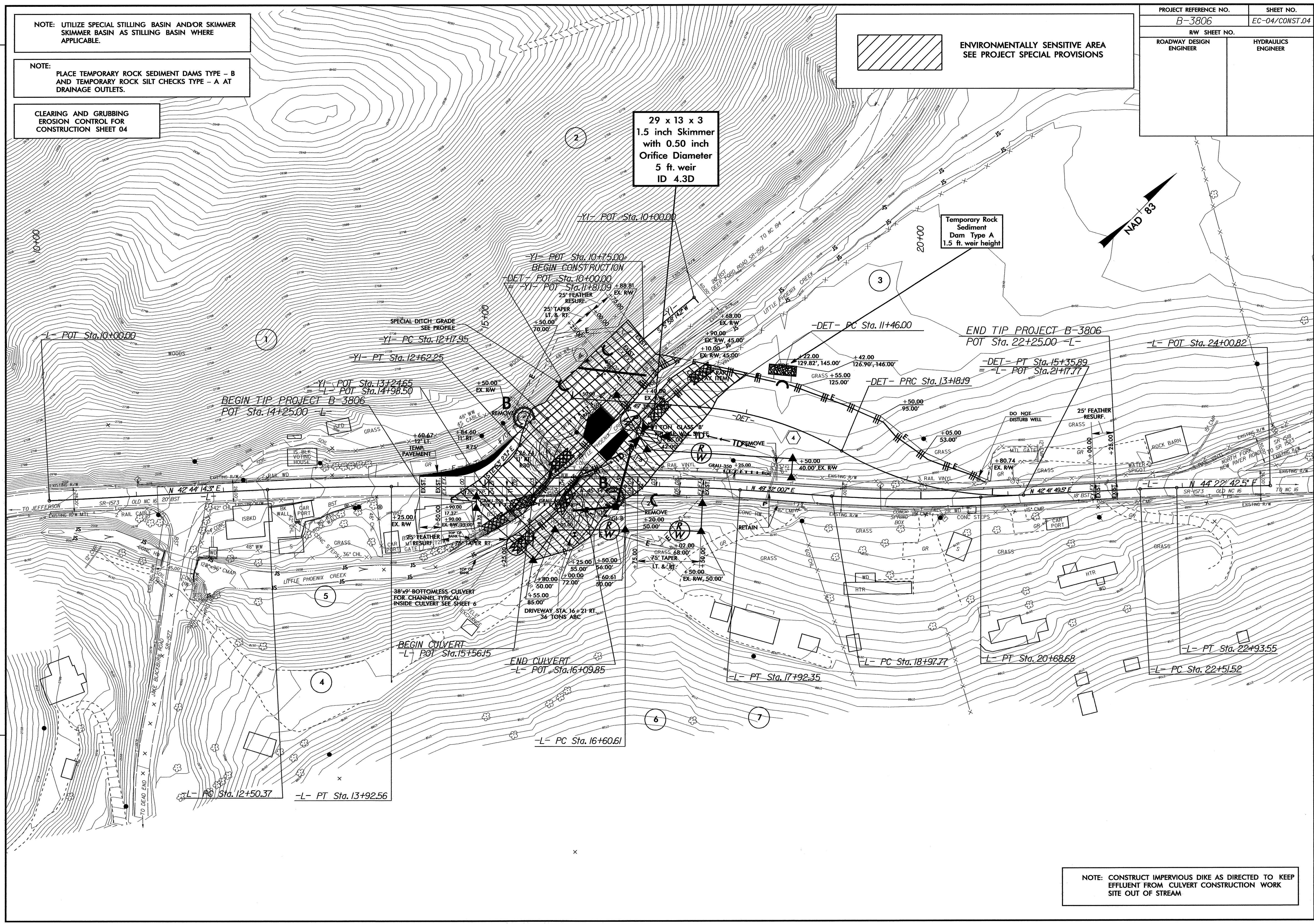
ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

29 x 13 x 3  
1.5 inch Skimmer  
with 0.50 inch  
Orifice Diameter  
5 ft. weir  
ID 4.3D

Temporary Rock  
Sediment  
Dam Type A  
1.5 ft. weir height



REVISIONS  
1. REVISED SKEW OF CROSS PIPE @ -YI- STA. 11+32.00 AND ADDED PDE AT OUTLET.



NOTE: CONSTRUCT IMPERVIOUS DIKE AS DIRECTED TO KEEP EFFLUENT FROM CULVERT CONSTRUCTION WORK SITE OUT OF STREAM



# DETOUR

PROJECT REFERENCE NO.	SHEET NO.
B-3806	EC-05/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

-DET-	
PI Sta 12+33.64 Δ = 26' 18" 29.4" (RT) D = 15' 16" 43.9" L = 172.19' T = 87.64' R = 375.00' DS = 35mph e = See Plans	PI Sta 14+30.20 Δ = 33' 15" 42.8" (LT) D = 15' 16" 43.9" L = 217.70' T = 112.01' R = 375.00' DS = 35mph e = See Plans

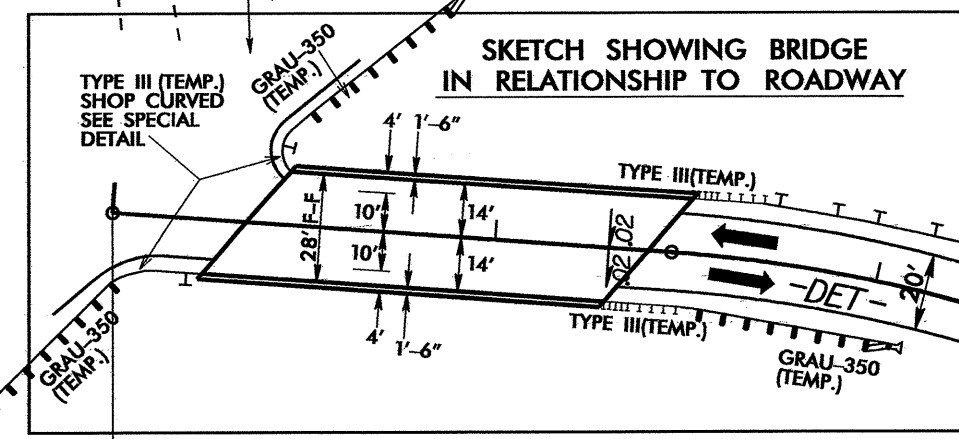
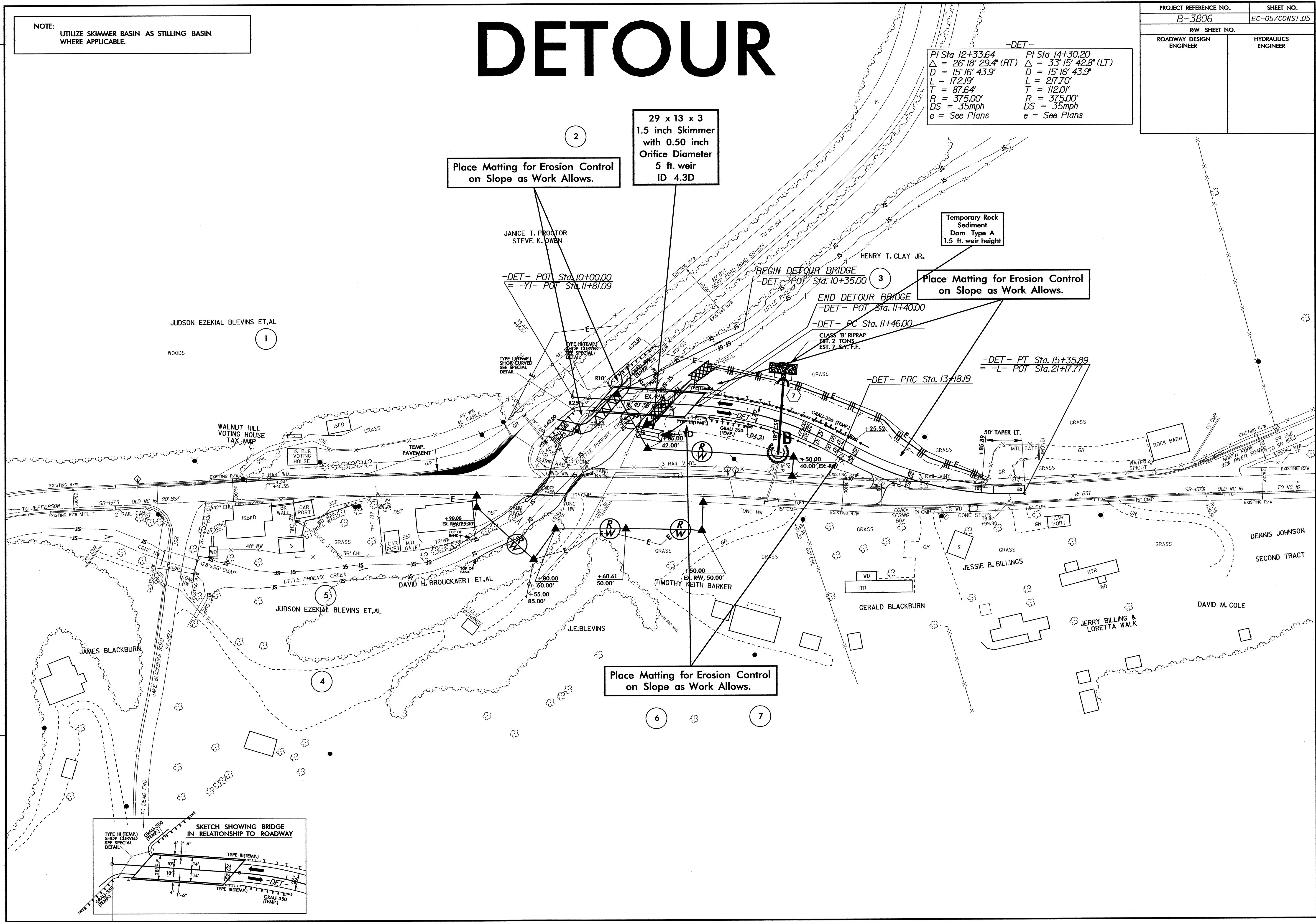
Place Matting for Erosion Control on Slope as Work Allows.

29 x 13 x 3  
1.5 inch Skimmer  
with 0.50 inch  
Orifice Diameter  
5 ft. weir  
ID 4.3D

Temporary Rock  
Sediment  
Dam Type A  
1.5 ft. weir height

Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.



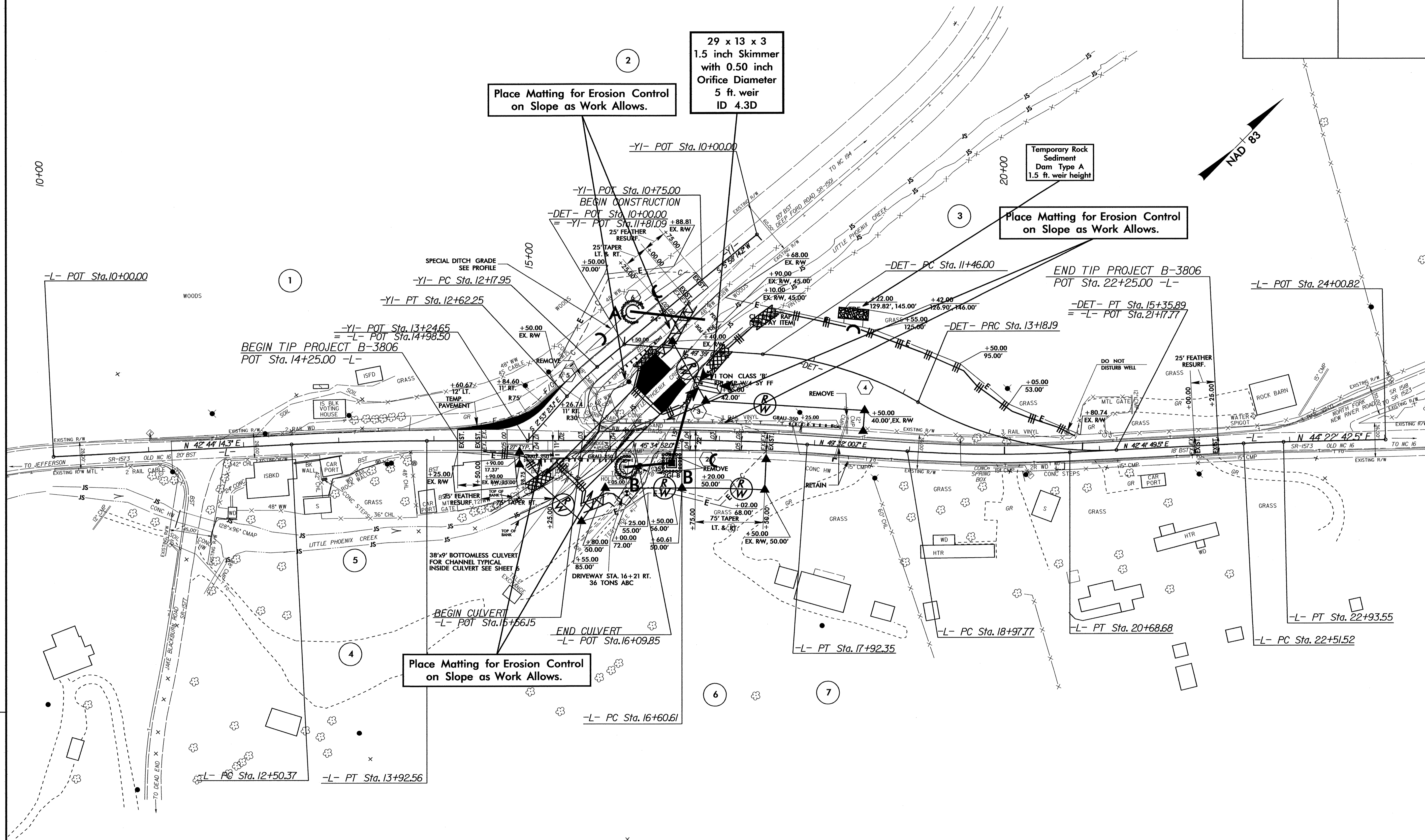
REVISIONS  
1. REVISED SKEW OF CROSS PIPE @ -YI- STA. 11+32.00 AND ADDED PDE AT OUTLET.



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

PROJECT REFERENCE NO. B-3806	SHEET NO. EC-06/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS  
1. REVISED SKEW OF CROSS PIPE @ -YI- STA. 11+32.00 AND ADDED PDE AT OUTLET.



Place Matting for Erosion Control on Slope as Work Allows.

29 x 13 x 3  
1.5 inch Skimmer  
with 0.50 inch  
Orifice Diameter  
5 ft. weir  
ID 4.3D

Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

NOTE: CONSTRUCT IMPERVIOUS DIKE AS DIRECTED TO KEEP EFFLUENT FROM CULVERT CONSTRUCTION WORK SITE OUT OF STREAM