

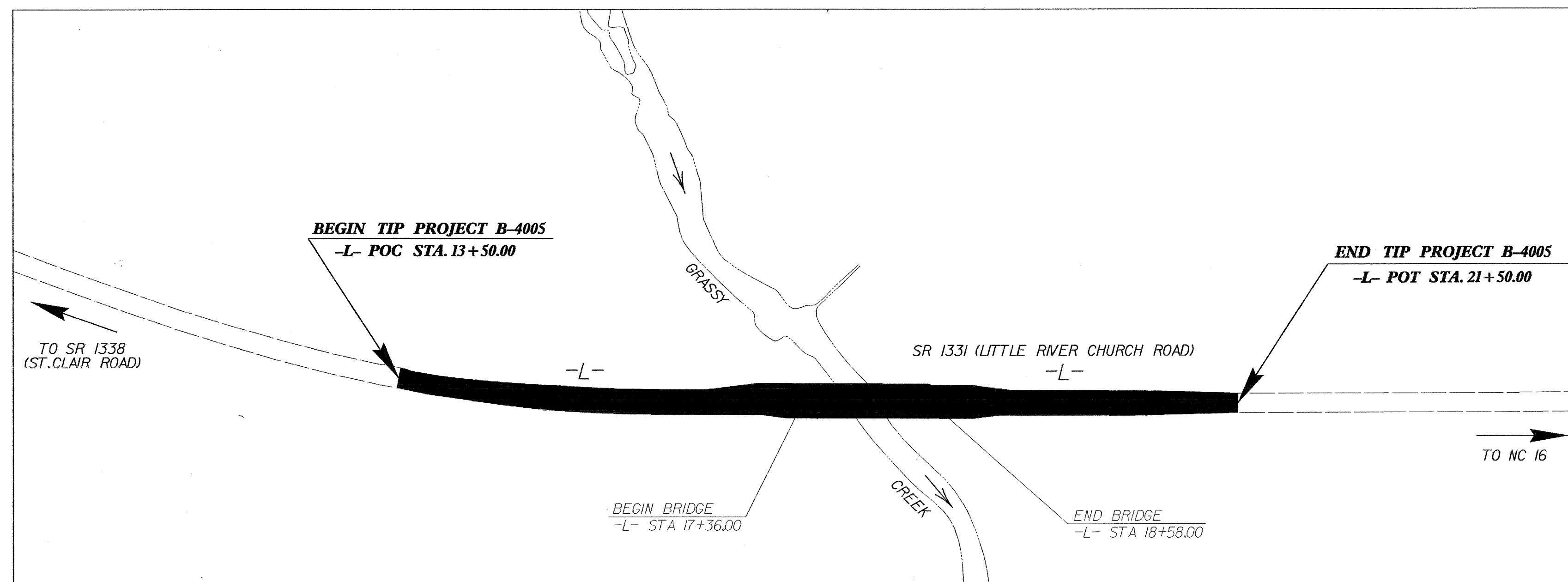
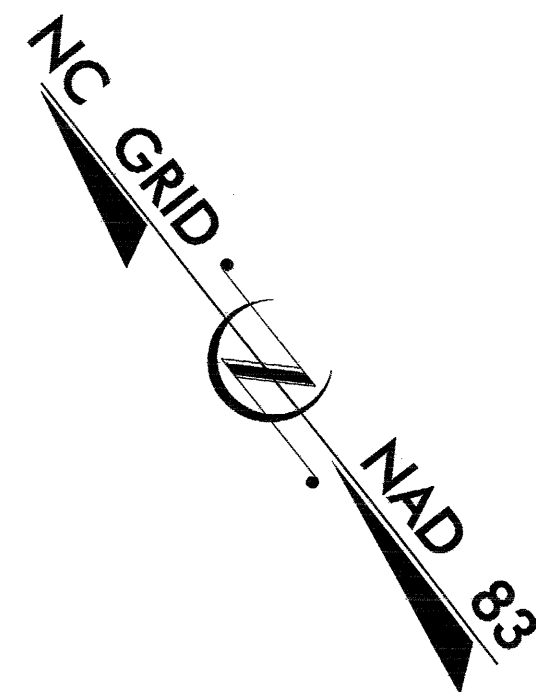
**TIP PROJECT: B-4005**

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

**ALEXANDER COUNTY**

**LOCATION: BRIDGE NO. 70 AND APPROACHES OVER GRASSY CREEK  
 ON SR 1331 (LITTLE RIVER CHURCH ROAD)**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING,  
 STRUCTURE, AND GUARDRAIL.**



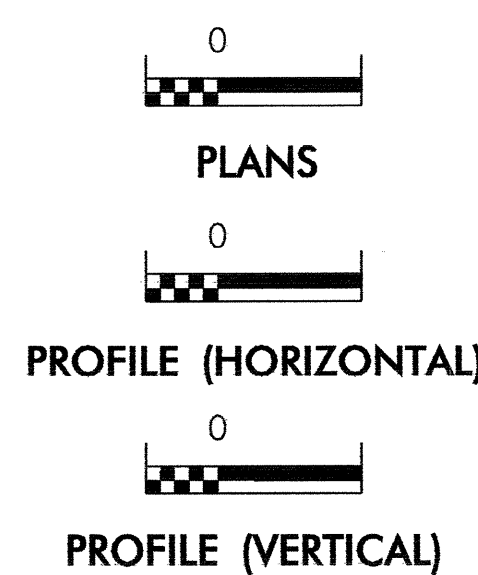
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4005	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**EROSION AND SEDIMENT CONTROL MEASURES**

Sid. #	Description	Symbol
	Streambank Reforestation.....	
1630.05	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.....	
1632.02	Type B.....	
1632.03	Type C.....	
	Skimmer Basin.....	
	Tiered Skimmer 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**

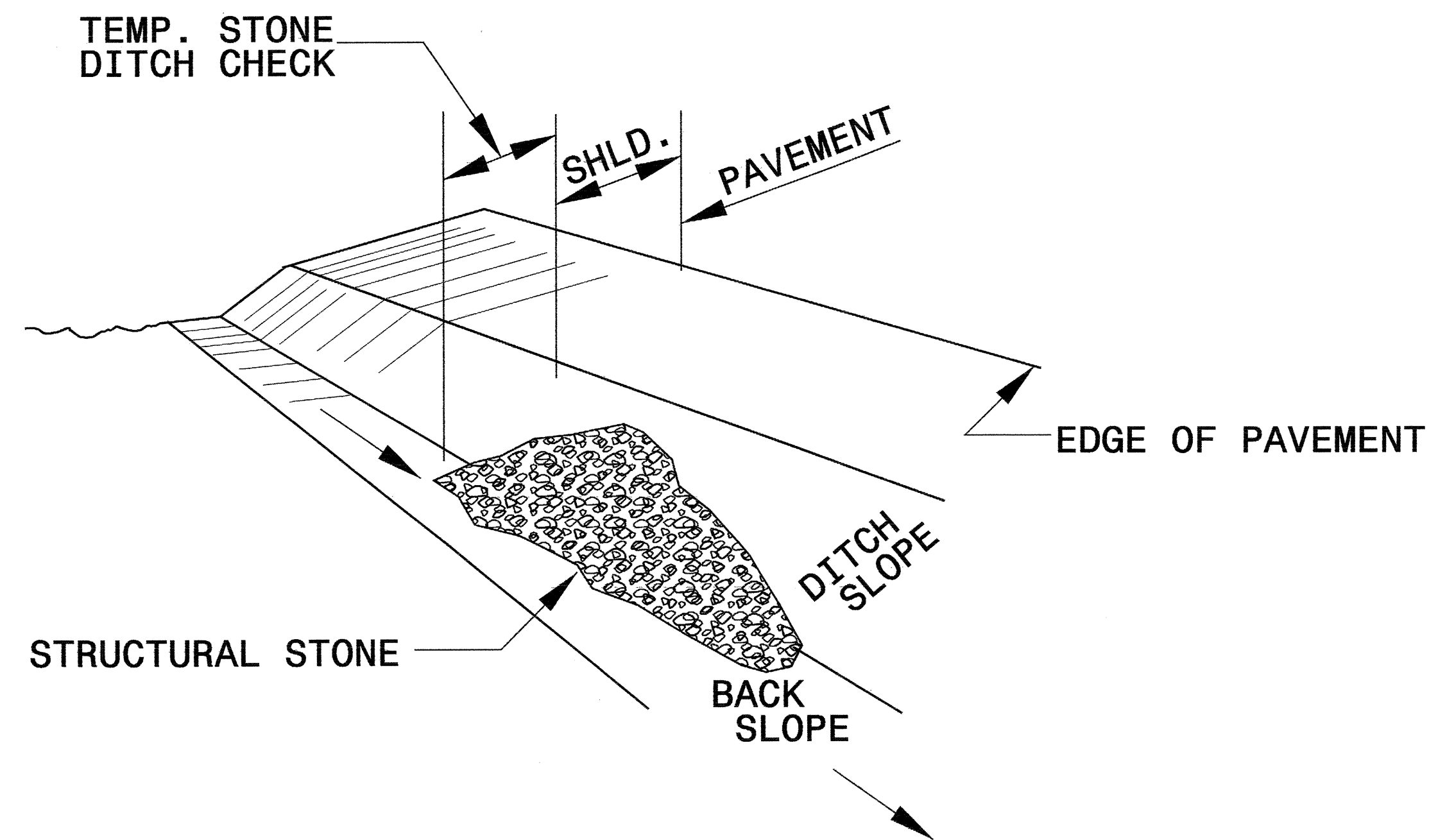
**Roadway Standard Drawings**

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
- 1607.01 Gravel Construction Entrance
- 1622.01 Temporary Berms and Slope Drains
- 1630.03 Temporary Silt Ditch
- 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. B-4005	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

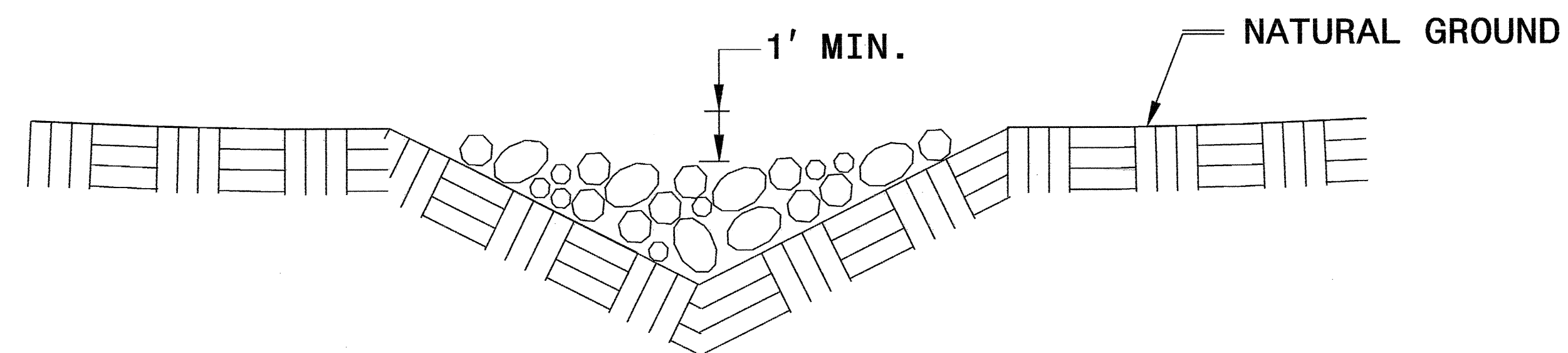


**ISOMETRIC VIEW**

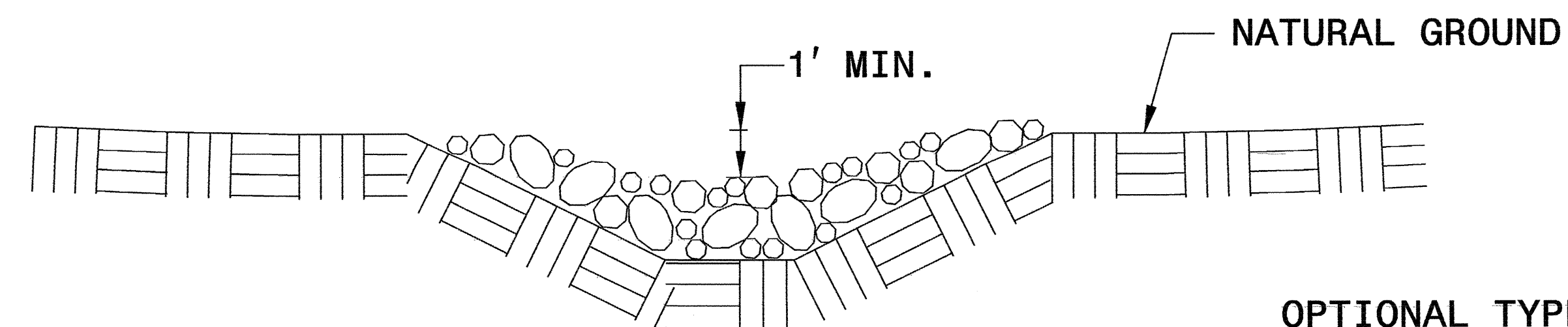
**NOTES:**

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

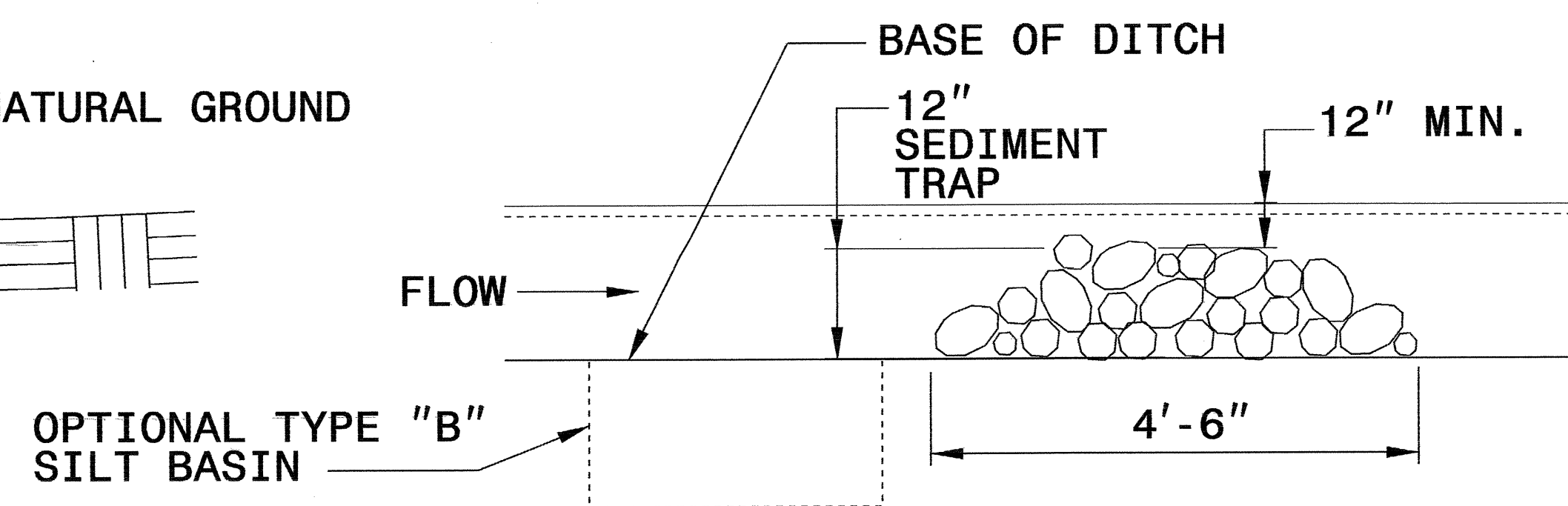
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION  
VEE DITCH**



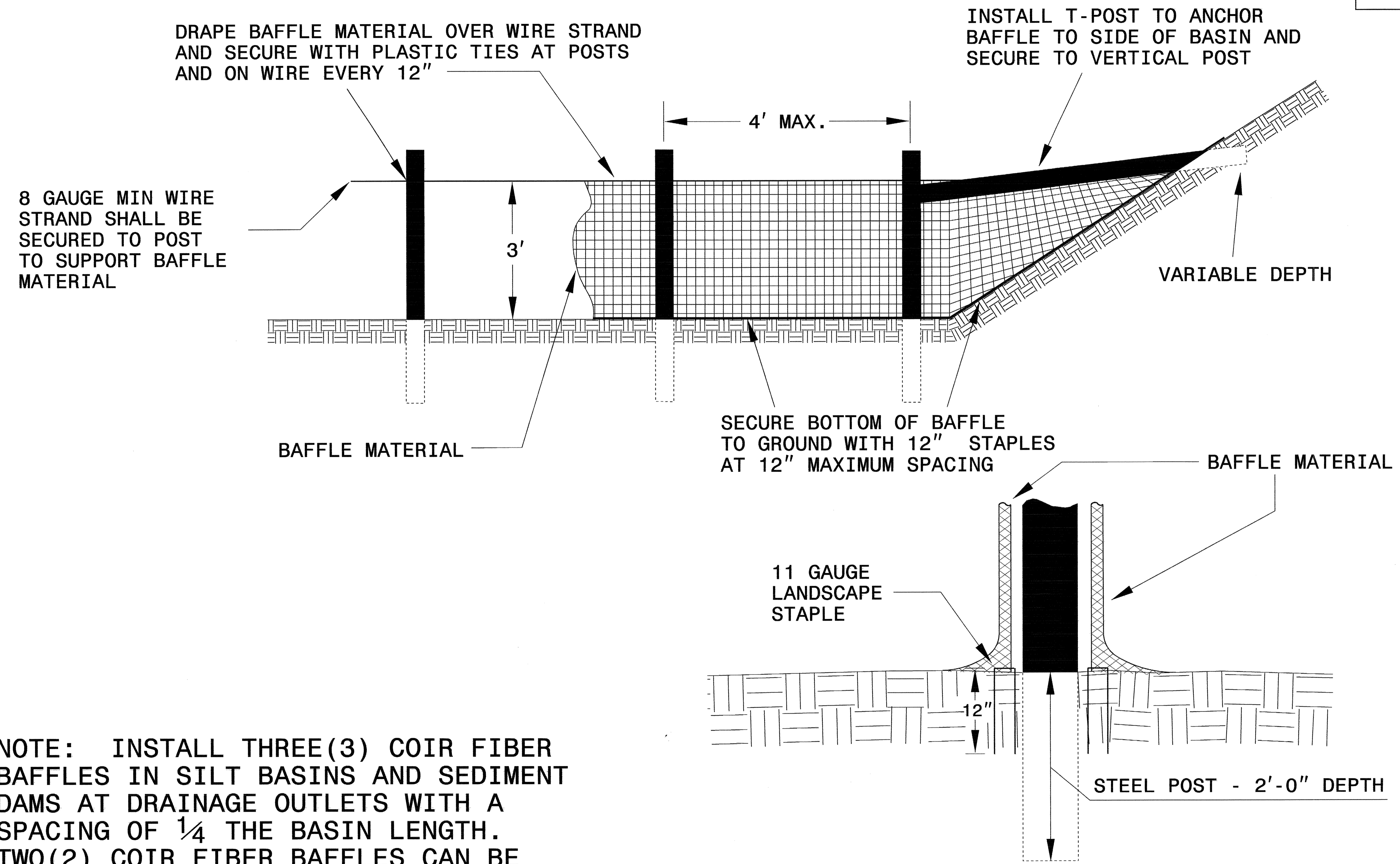
**CROSS SECTION  
TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

PROJECT REFERENCE NO. B-4005	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL



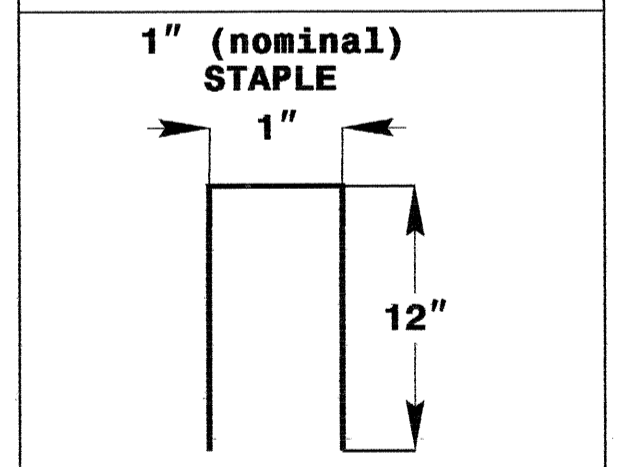
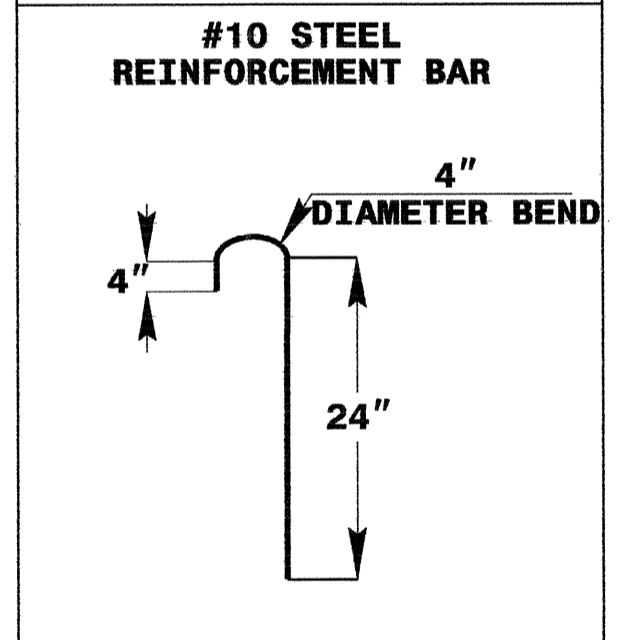
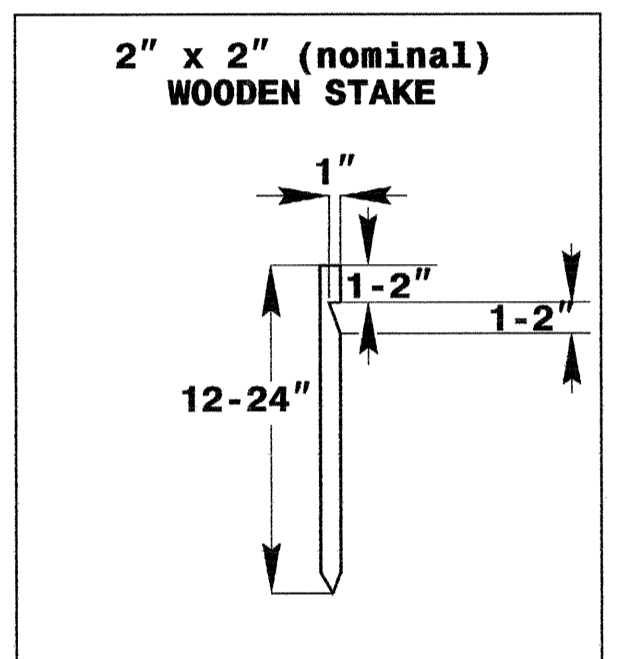
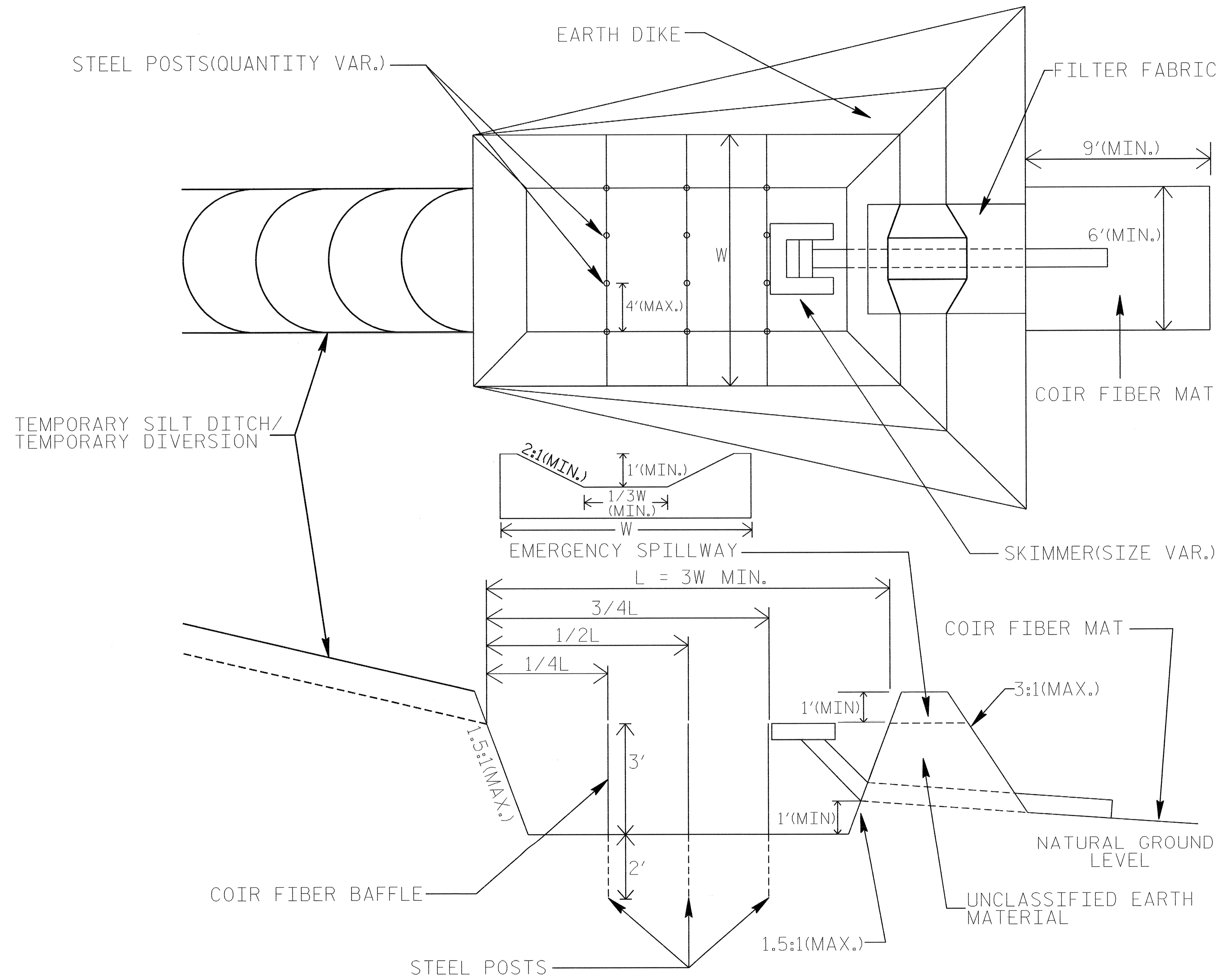
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

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



# SKIMMER BASIN WITH BAFFLES DETAIL

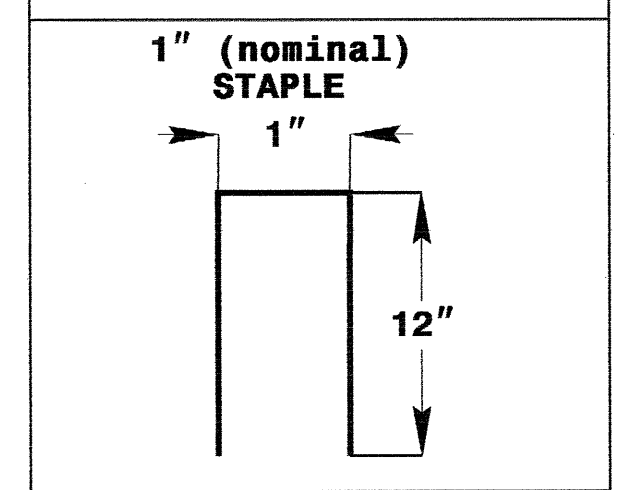
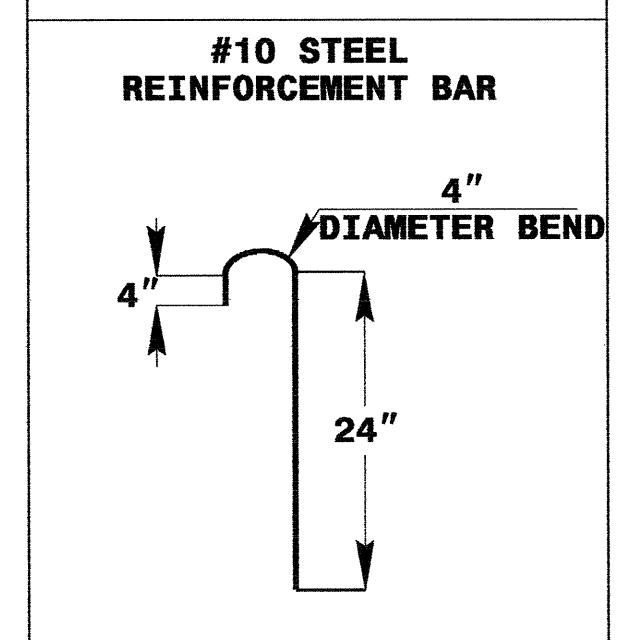
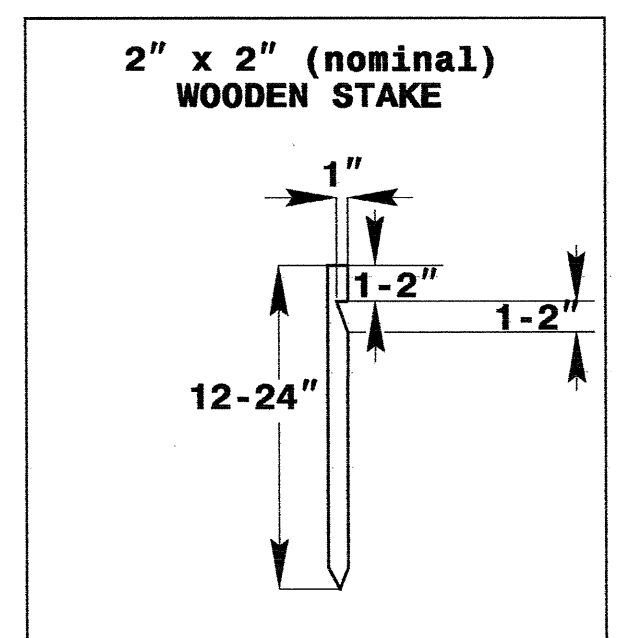
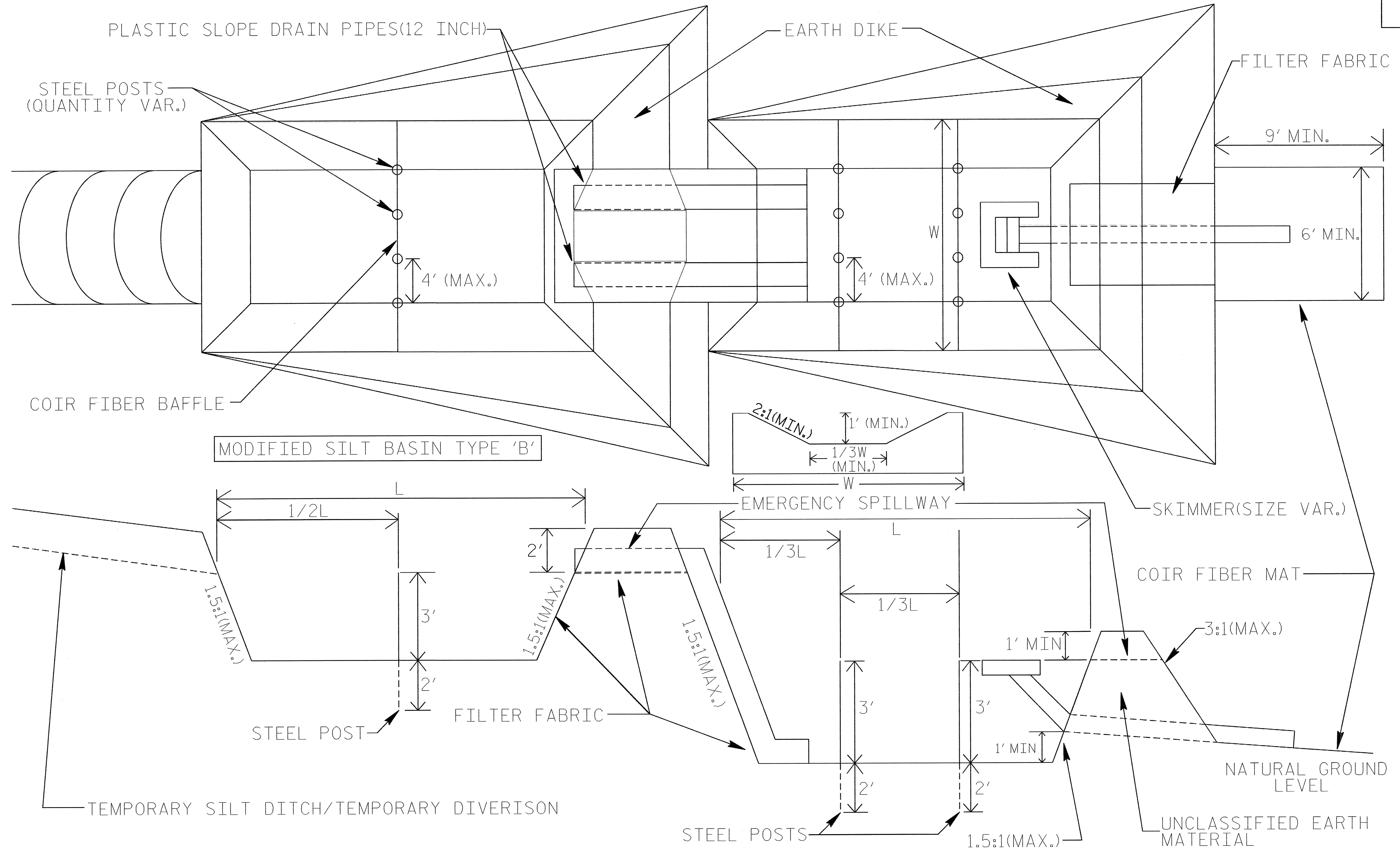
PROJECT REFERENCE NO. B-4005	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**COIR FIBER MAT ANCHOR OPTIONS**

# TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. B-4005	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**COIR FIBER MAT ANCHOR OPTIONS**

**NOTE**  
ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.





7/2/99

NOTE: UTILIZE SKIMMER BASIN AND TIERED 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

Modified Silt Basin  
Type 'B'  
20 x 12 x 3  
(See Tiered Skimmer Basin Detail)  
ID 4.1

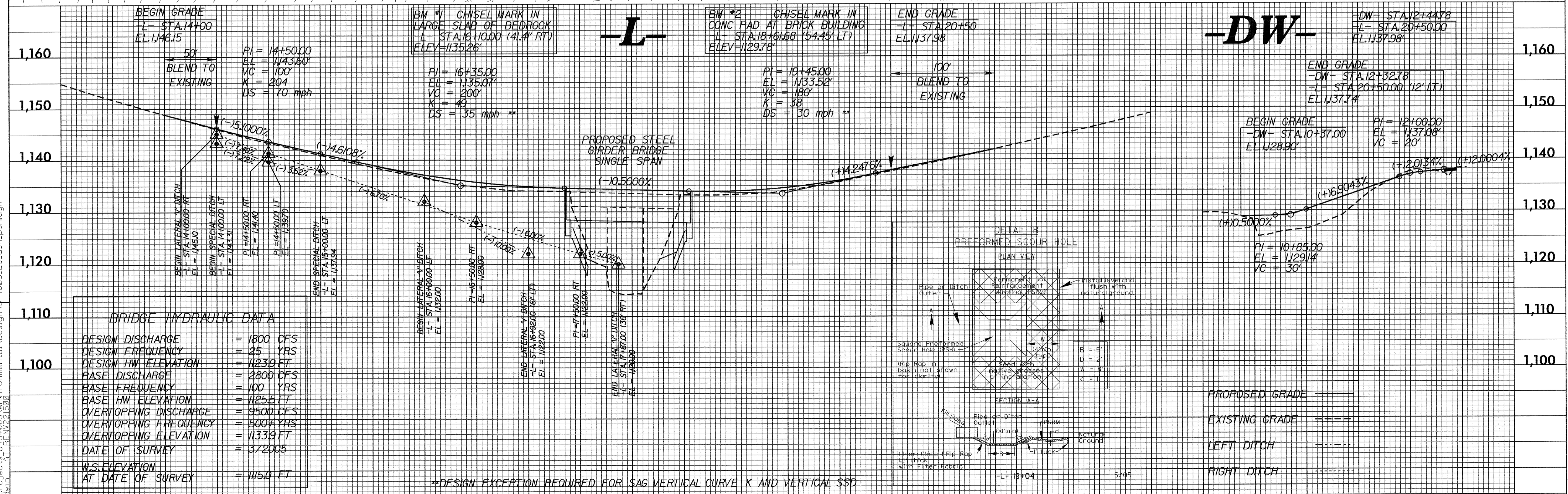
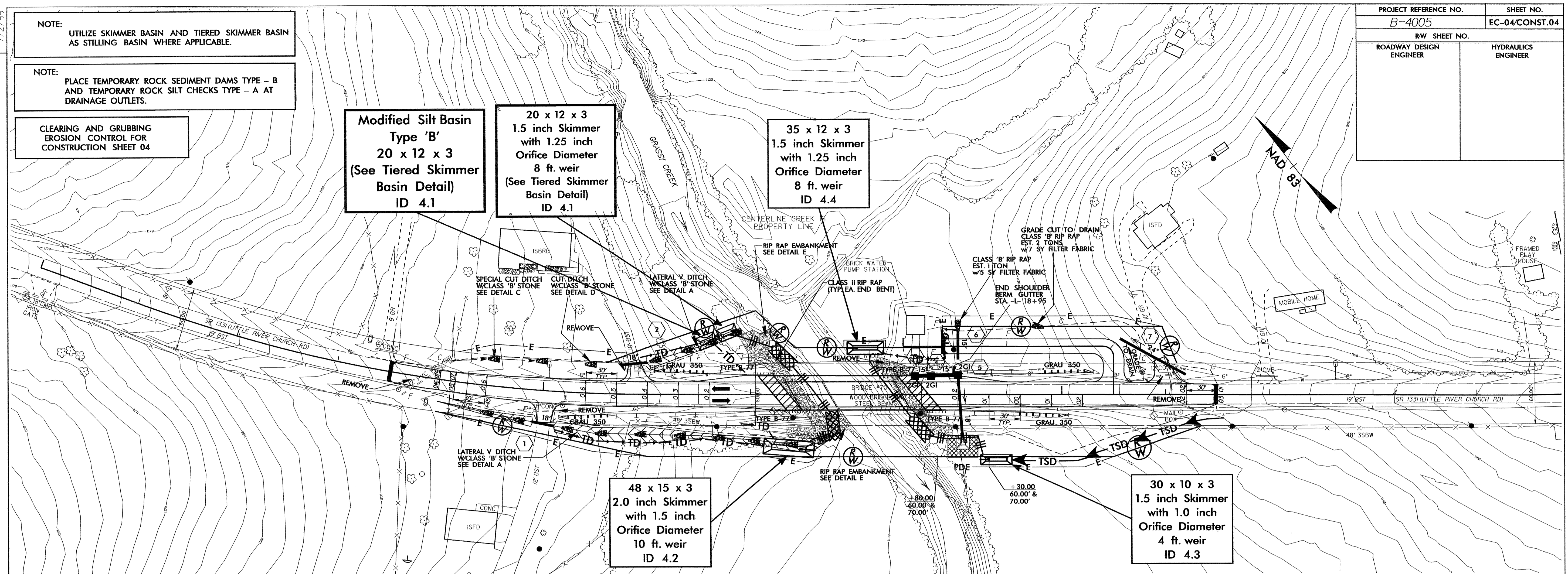
20 x 12 x 3  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
8 ft. weir  
(See Tiered Skimmer Basin Detail)  
ID 4.1

35 x 12 x 3  
1.5 inch Skimmer  
with 1.25 inch  
Orifice Diameter  
8 ft. weir  
ID 4.4

48 x 15 x 3  
2.0 inch Skimmer  
with 1.5 inch  
Orifice Diameter  
10 ft. weir  
ID 4.2

30 x 10 x 3  
1.5 inch Skimmer  
with 1.0 inch  
Orifice Diameter  
4 ft. weir  
ID 4.3

PROJECT REFERENCE NO. B-4005	SHEET NO. EC-04/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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REVISIONS

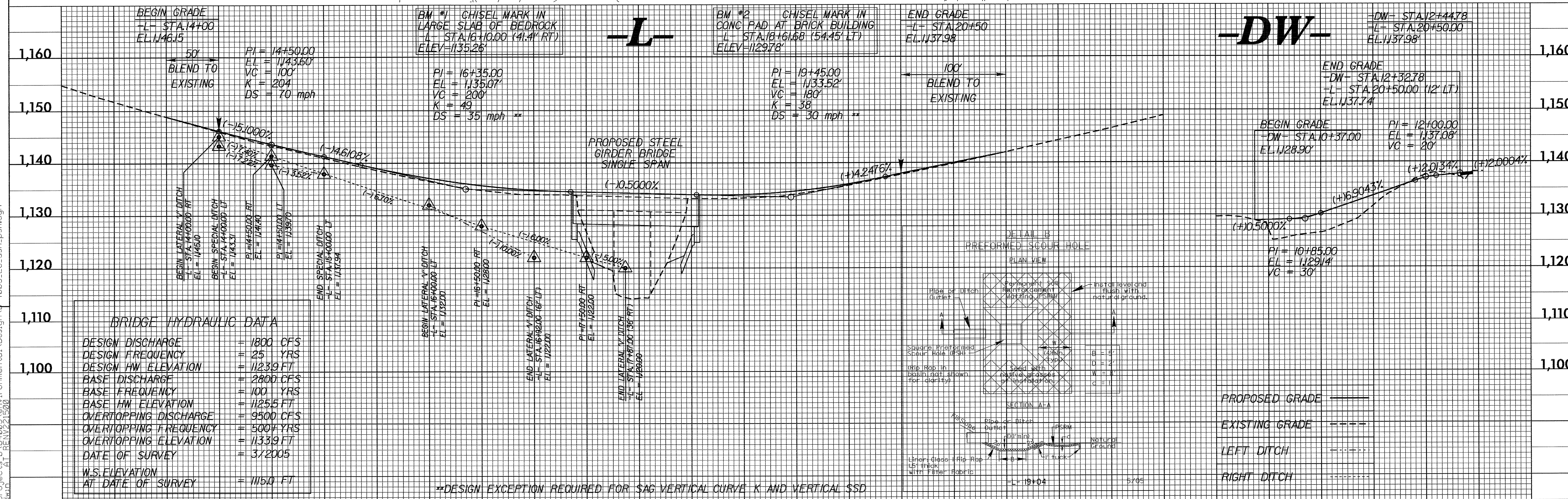
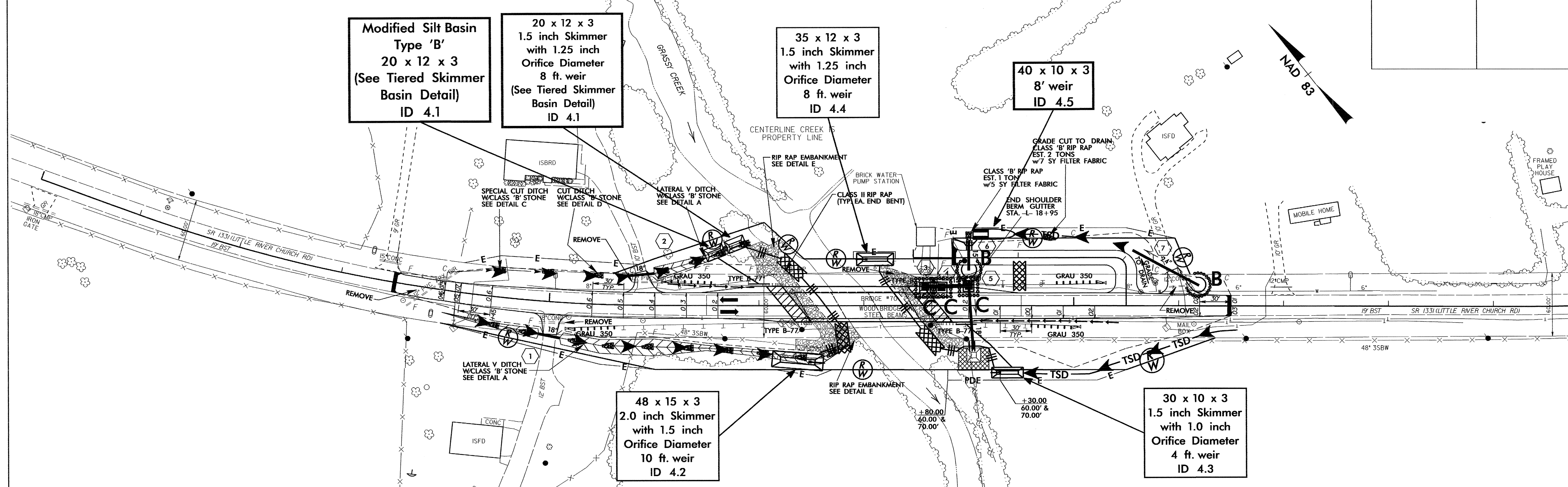
\*\*DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVE K AND VERTICAL SSD



7/2/09

NOTE: UTILIZE SKIMMER BASIN AND TIERED SKIMMER BASIN AS STILLING BASIN WHERE APPLICABLE.

PROJECT REFERENCE NO.		SHEET NO.	
B-4005		EC-05/CONST.04	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



\*\*DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVE K AND VERTICAL SSD

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REVISIONS