

**TIP PROJECT: B-4149**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

**HENDERSON COUNTY**

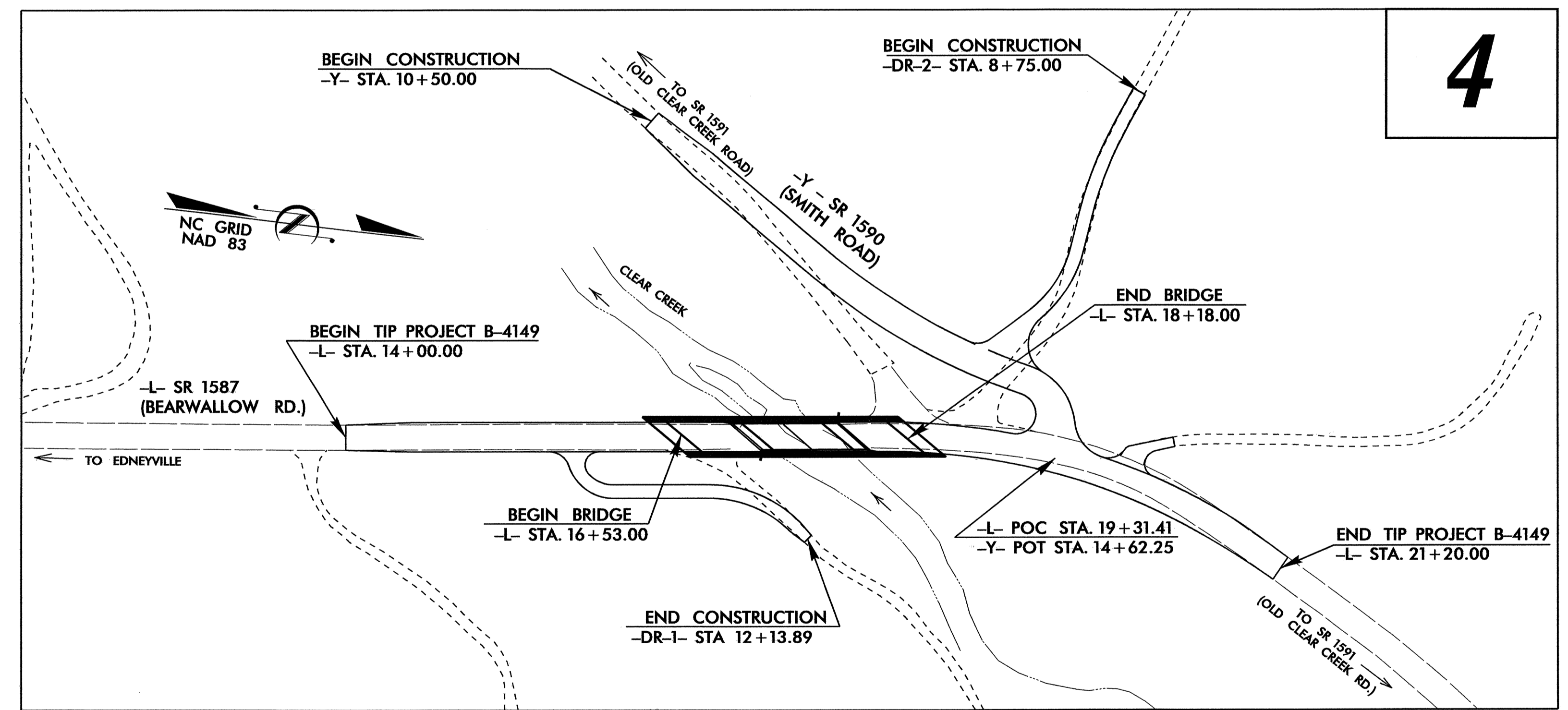
**LOCATION: BRIDGE No. 34 OVER CLEAR CREEK ON  
SR 1587 (BEARWALLOW ROAD)**

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4149	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSB
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	△△△△△
1622.01	Temporary Berms and Slope Drains	TBD
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	▭



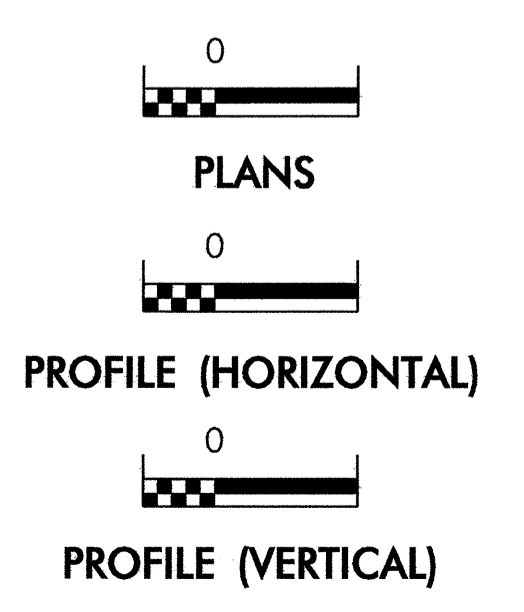
**4**

**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**



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**

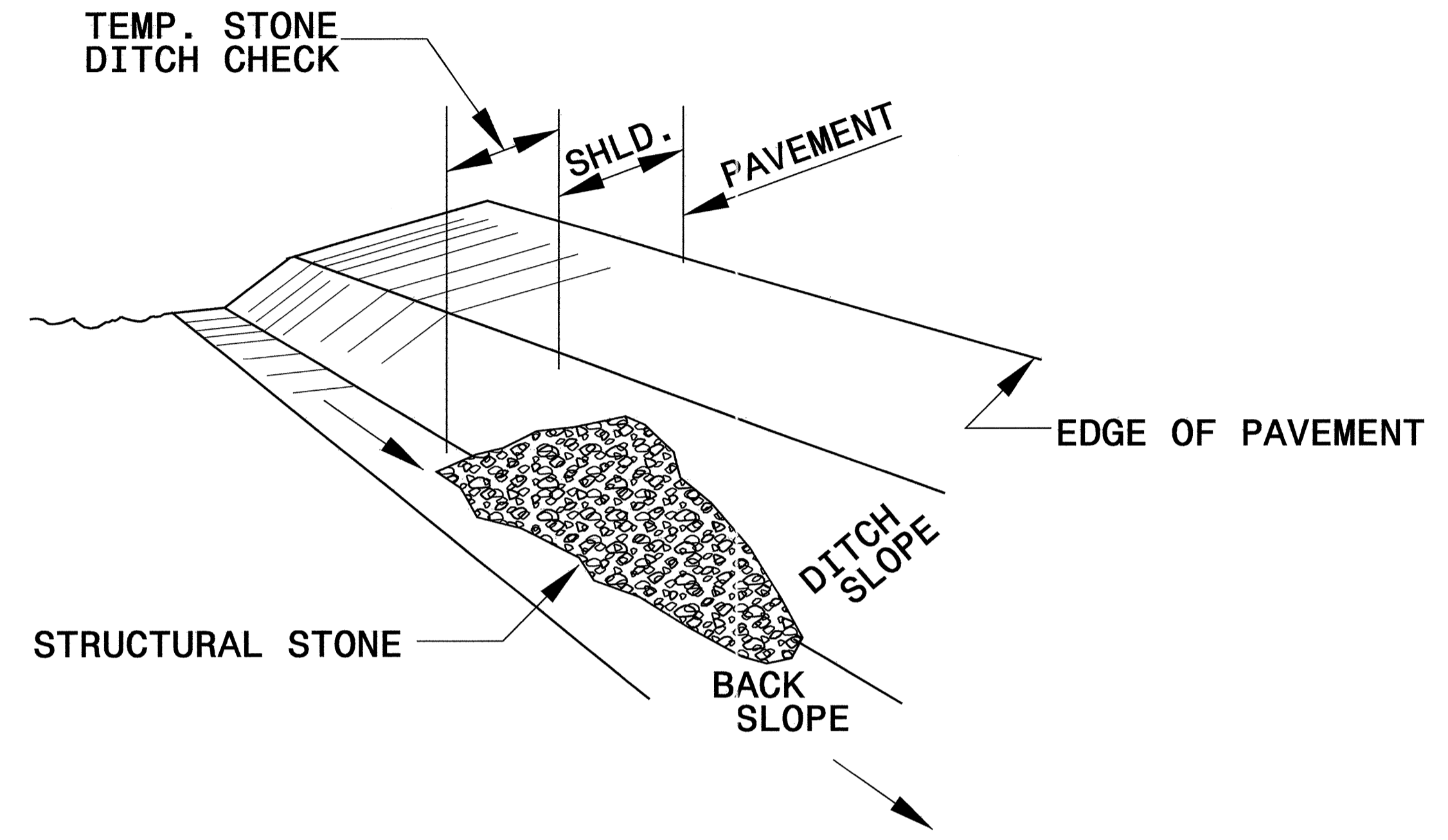
Roadway Standard Drawings  
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered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

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

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no: 001 - 01 25-SEP-2008

PROJECT REFERENCE NO. B-4149	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

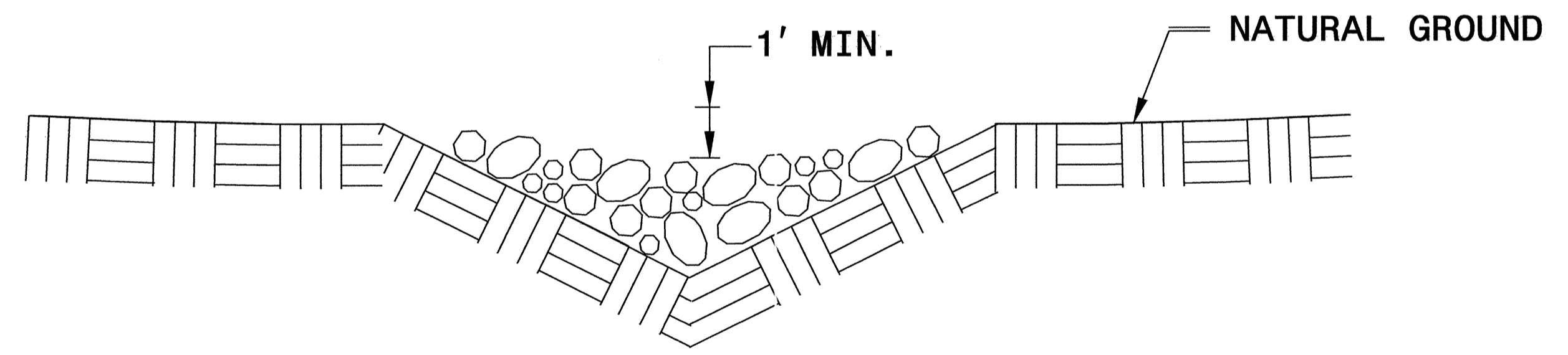


**ISOMETRIC VIEW**

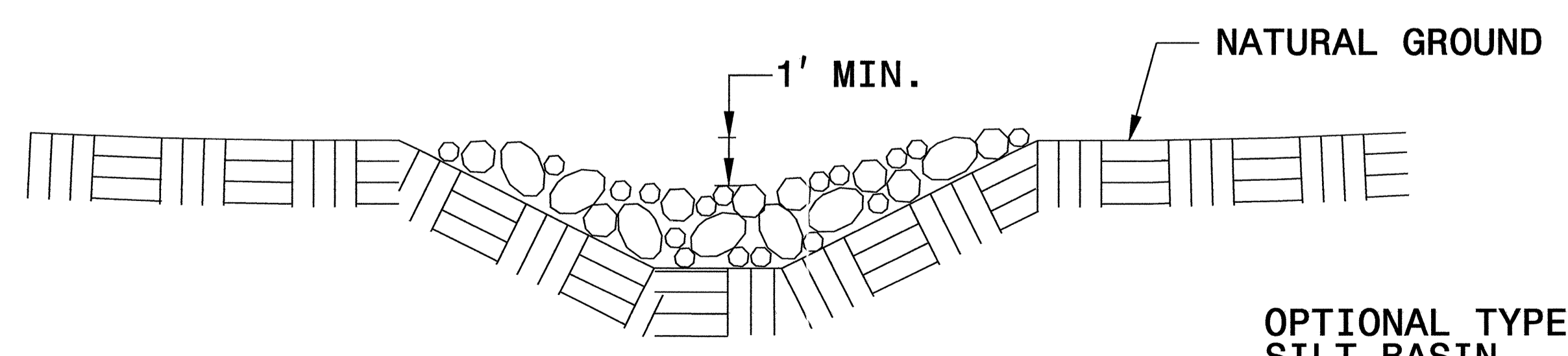
**NOTES:**

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

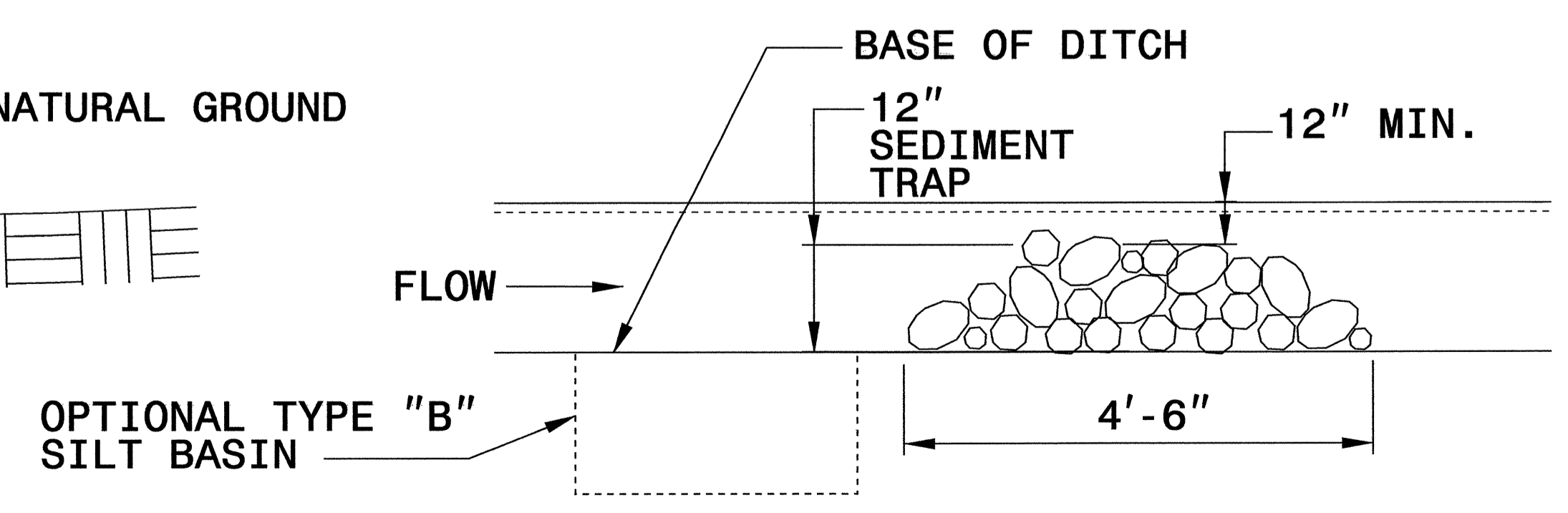
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION VEE DITCH**



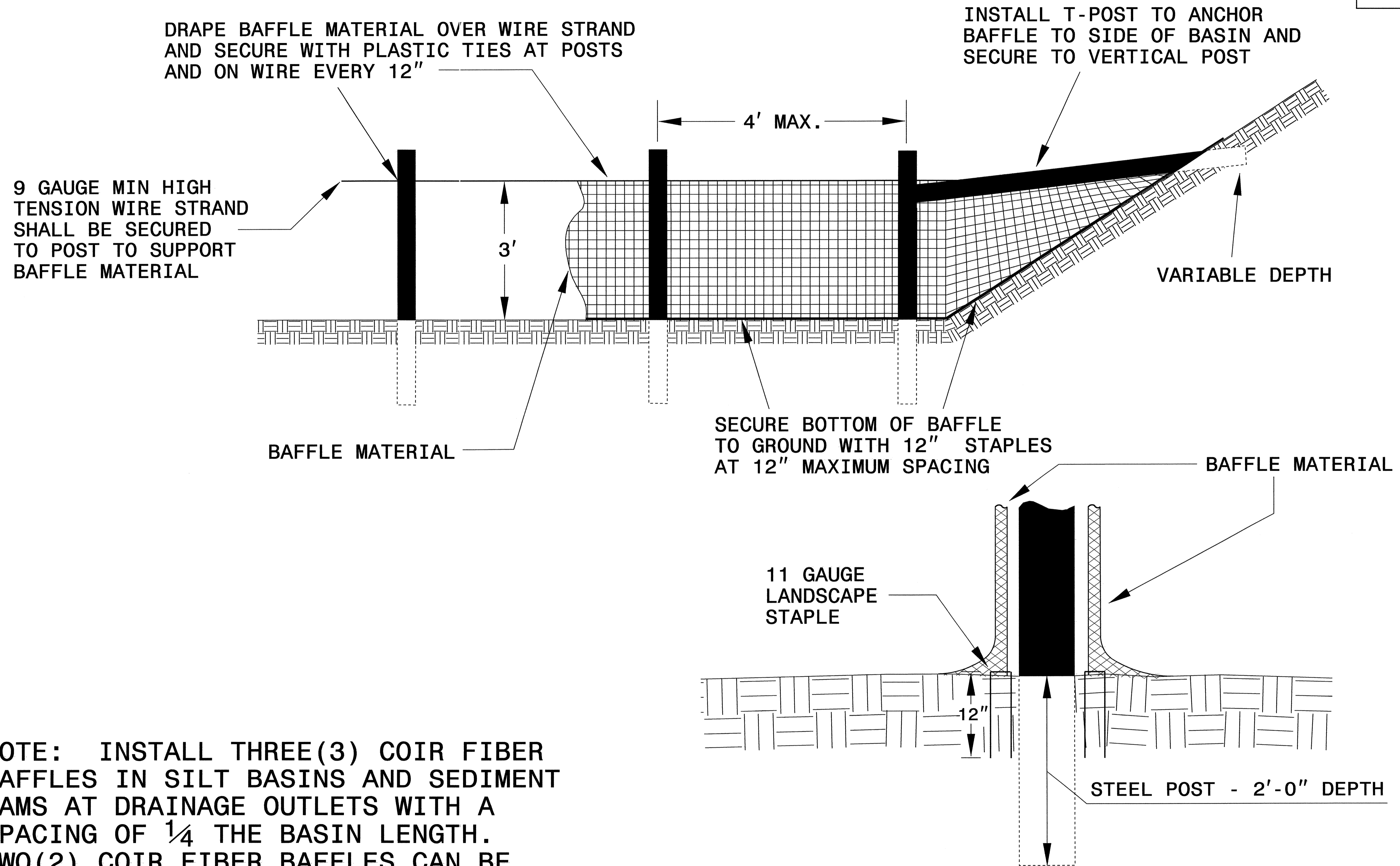
**CROSS SECTION TRAPEZOIDAL DITCH**



**ELEVATION VIEW**

PROJECT REFERENCE NO. B-4149	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER BAFFLE DETAIL

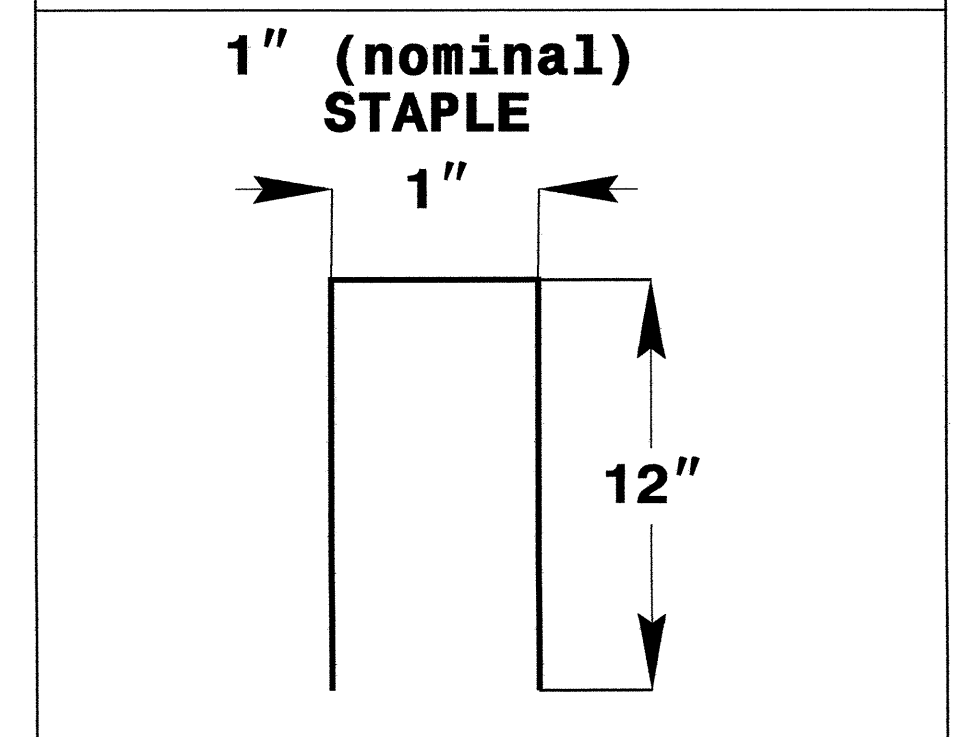
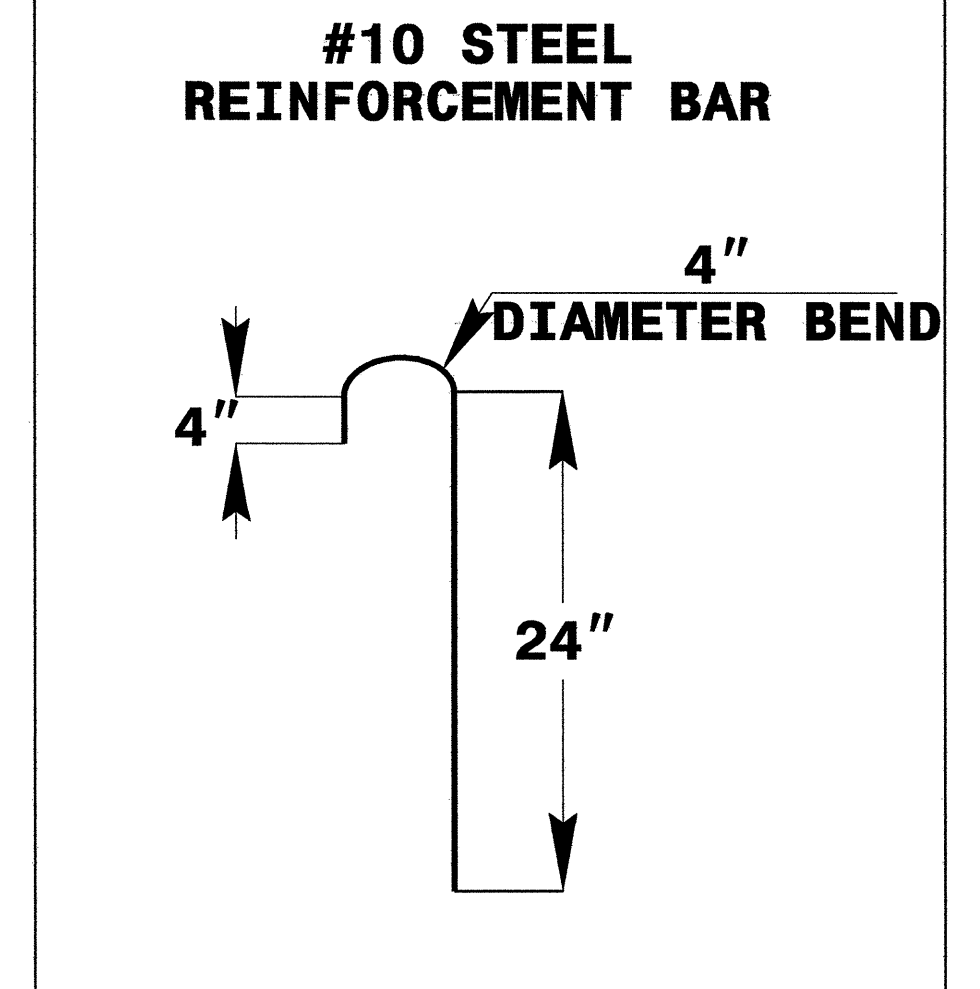
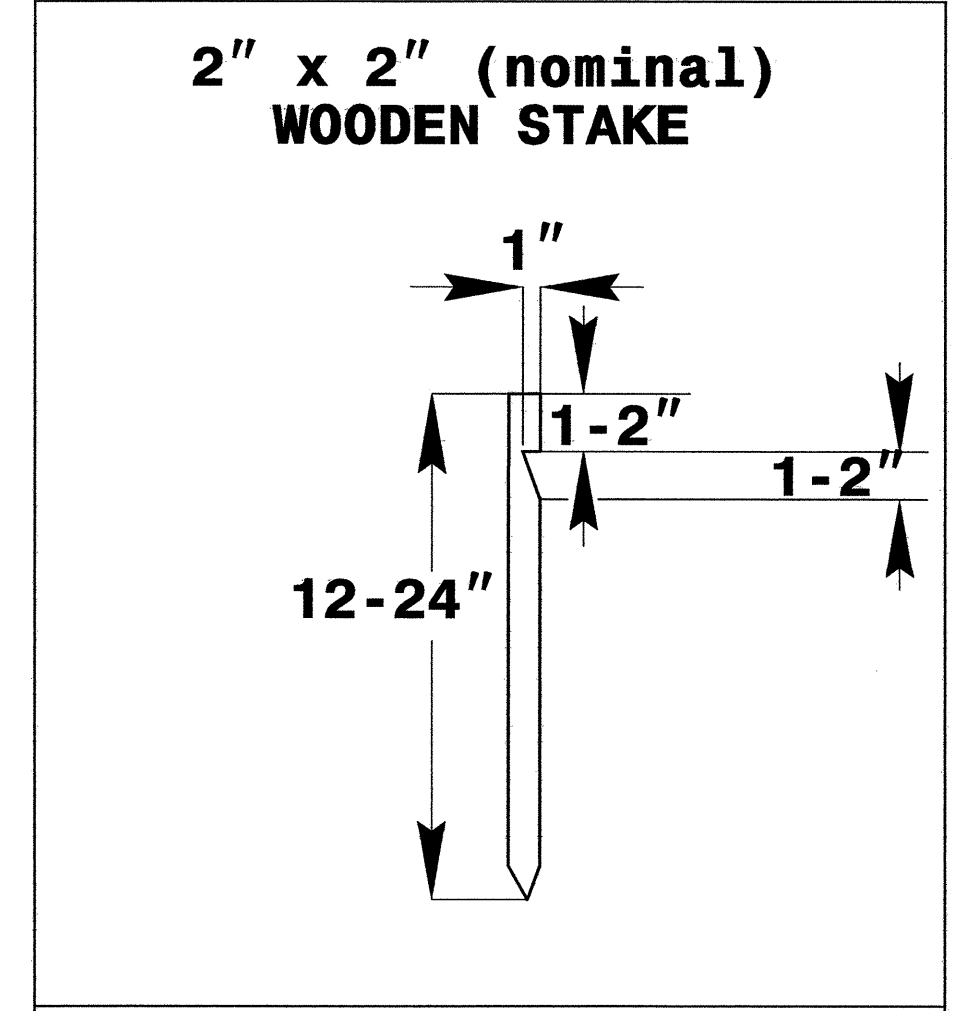
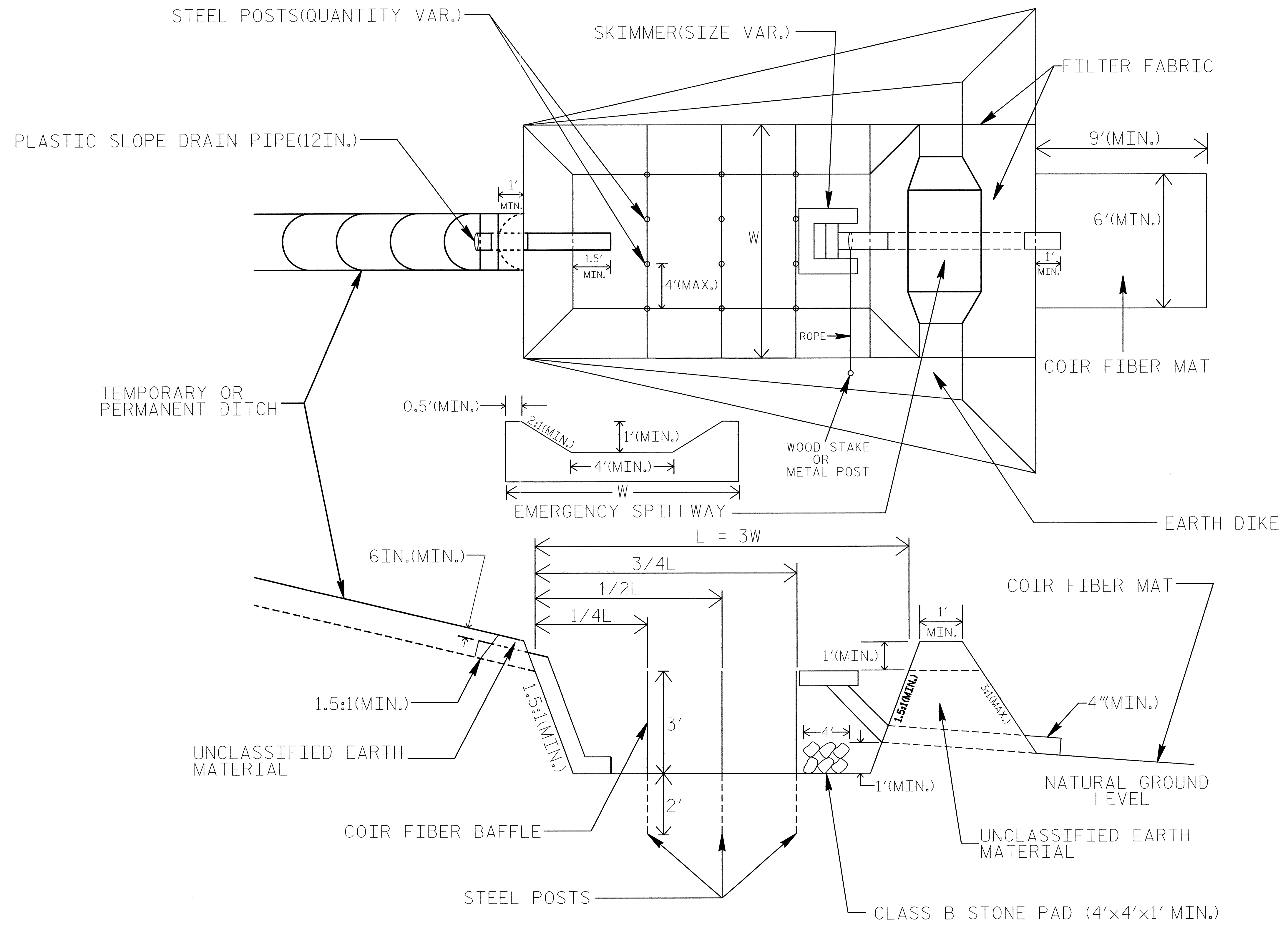


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF  $\frac{1}{4}$  THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF  $\frac{1}{3}$  THE BASIN LENGTH.

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-4149	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**COIR FIBER MAT ANCHOR OPTIONS**

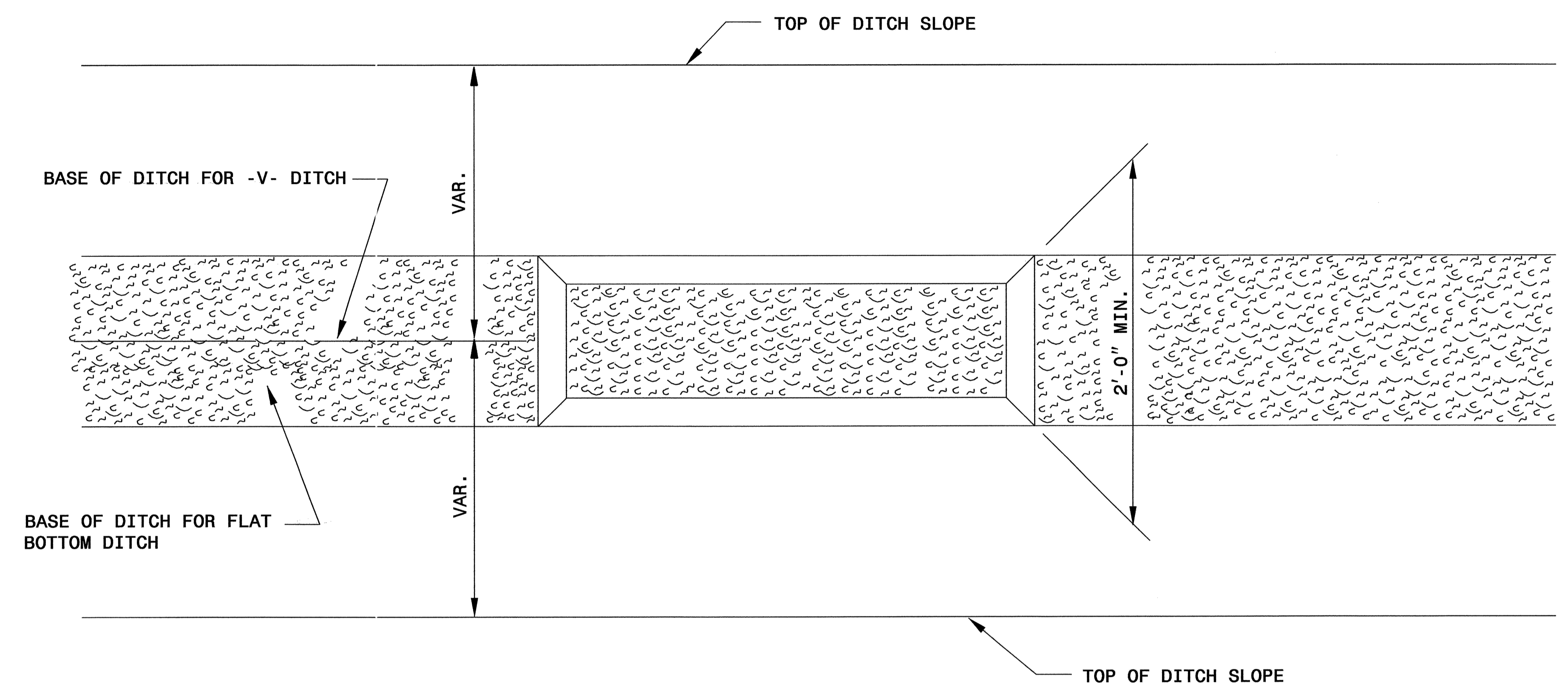
**NOTES**

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.

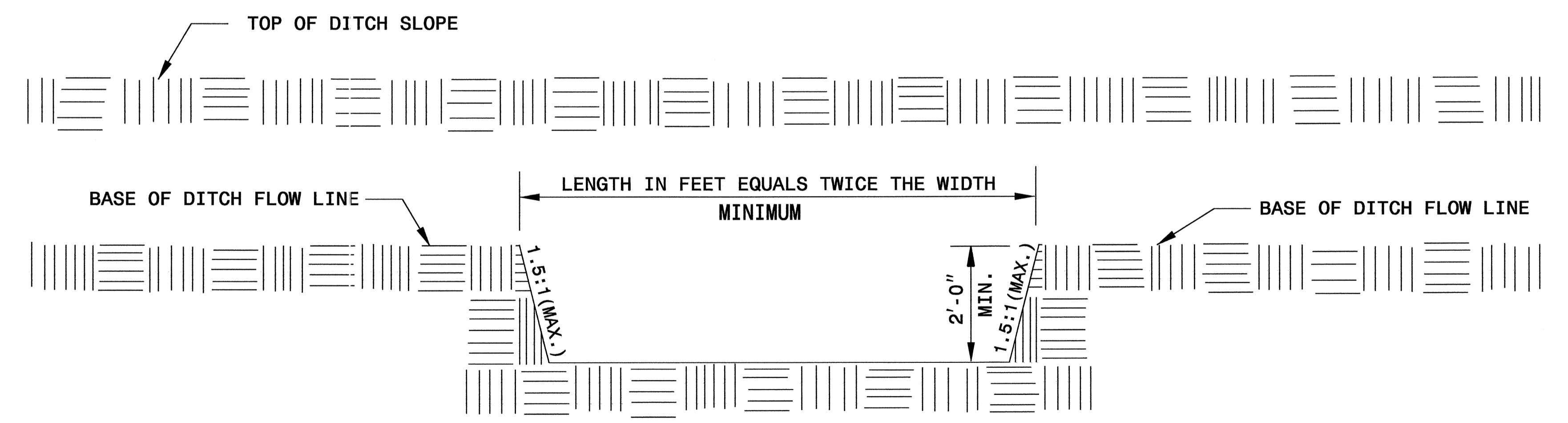
NOT TO SCALE

PROJECT REFERENCE NO. <i>B-4149</i>	SHEET NO. <i>EC-2C</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SILT BASIN 'B' DETAIL



PLAN



ELEVATION



PROJECT REFERENCE NO. B-4149	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

20 x 10 x 3  
1.5 inch Skimmer  
with 0.25 inch  
Orifice Diameter  
4 ft. weir  
ID 4.1B

36 x 18 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
10 ft. weir  
ID 4.8B

27 x 12 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
4 ft. weir  
ID 4.7B

34 x 16 x 3  
ID 4.6C

30 x 14 x 3  
ID 4.5C

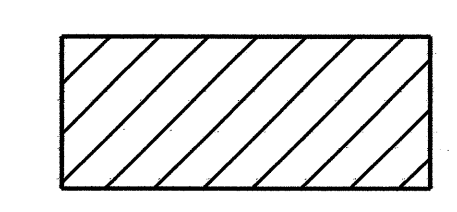
34 x 16 x 3  
ID 4.4C

25 x 9 x 3  
ID 4.3C

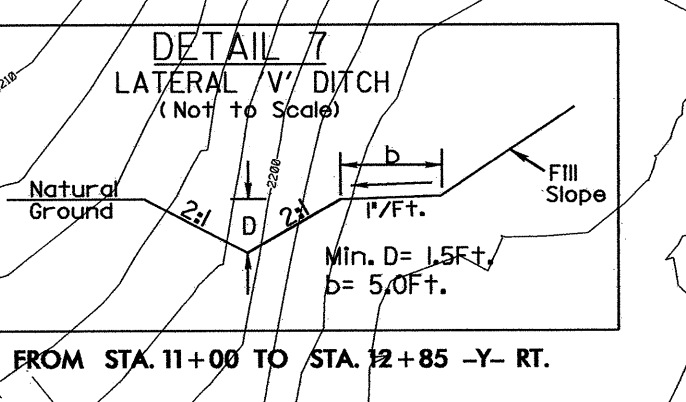
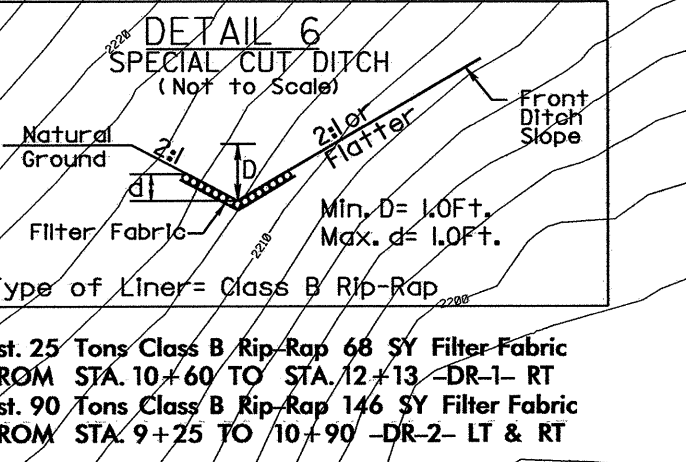
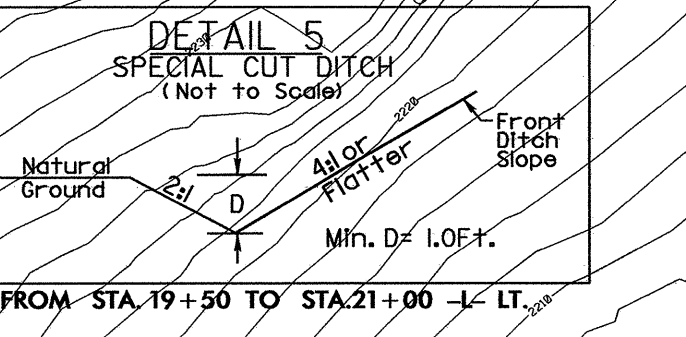
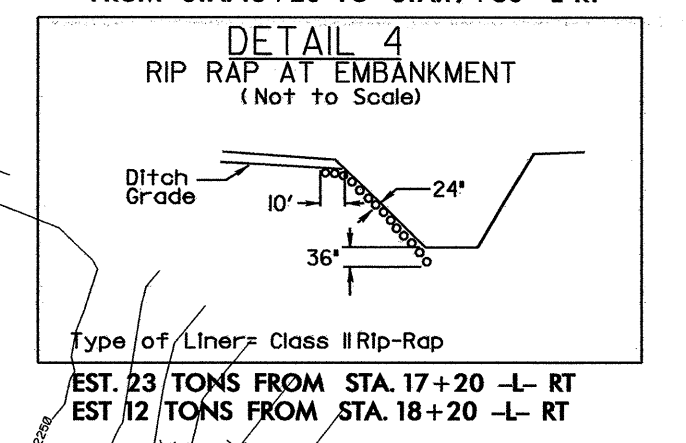
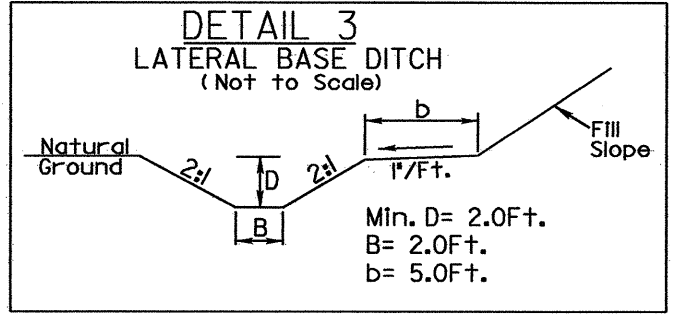
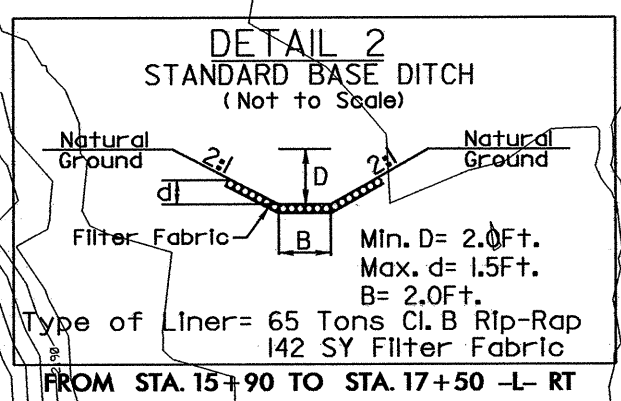
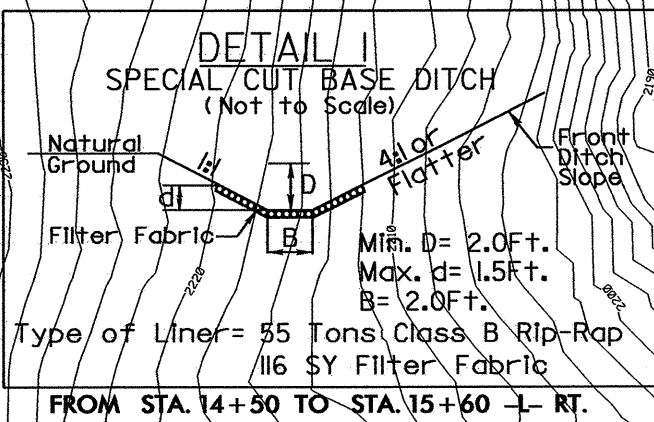
50 x 10 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.9B

43 x 15 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
7 ft. weir  
ID 4.2C

NOTE:  
UTILIZE SPECIAL STILLING BASIN  
WHERE APPLICABLE.



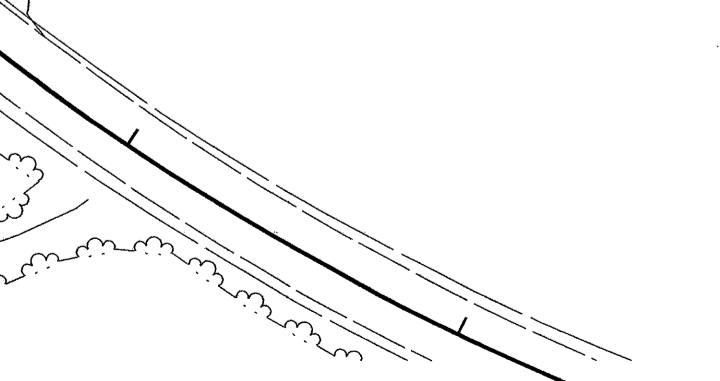
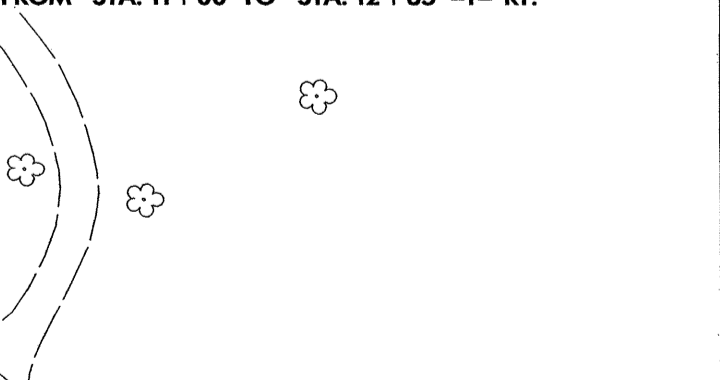
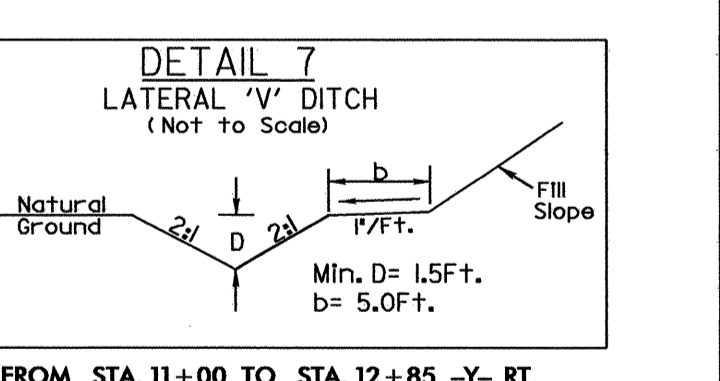
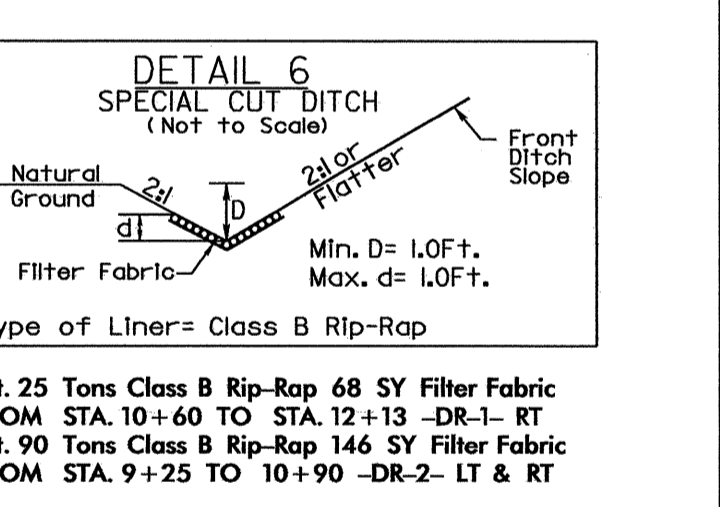
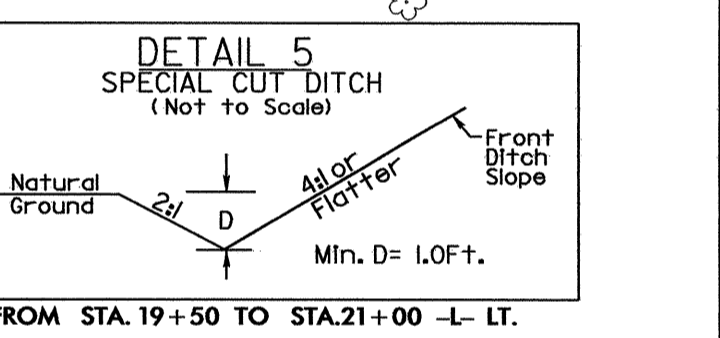
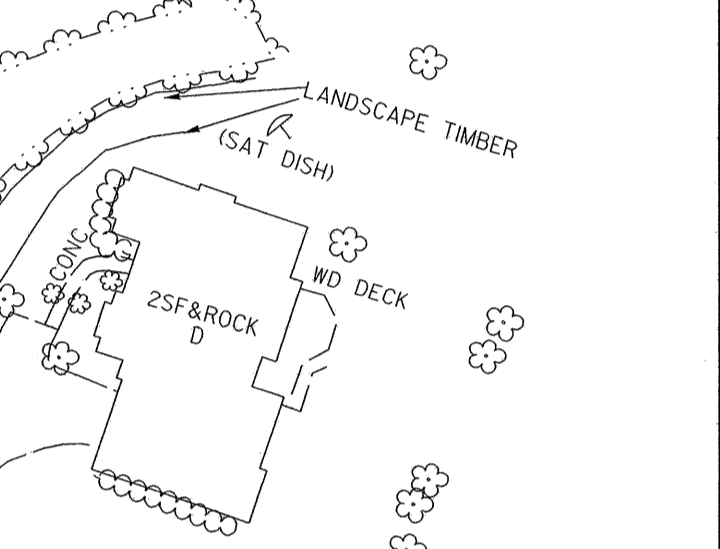
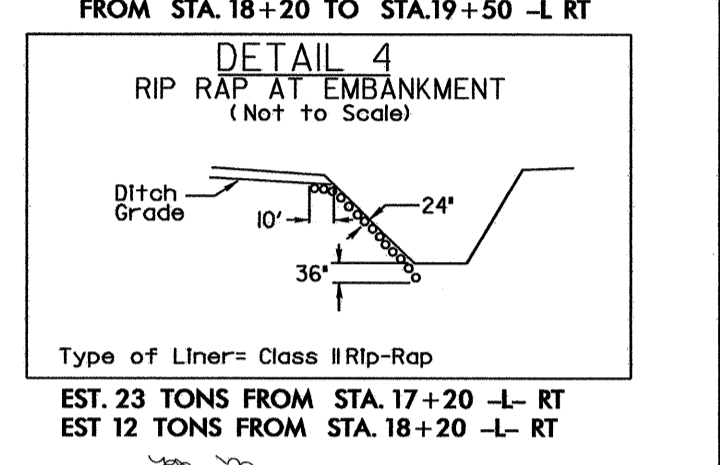
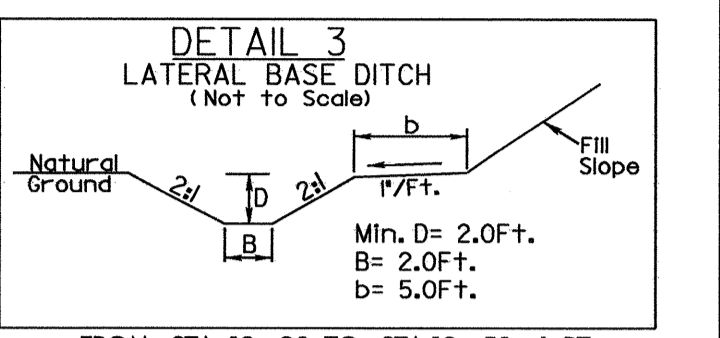
ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS



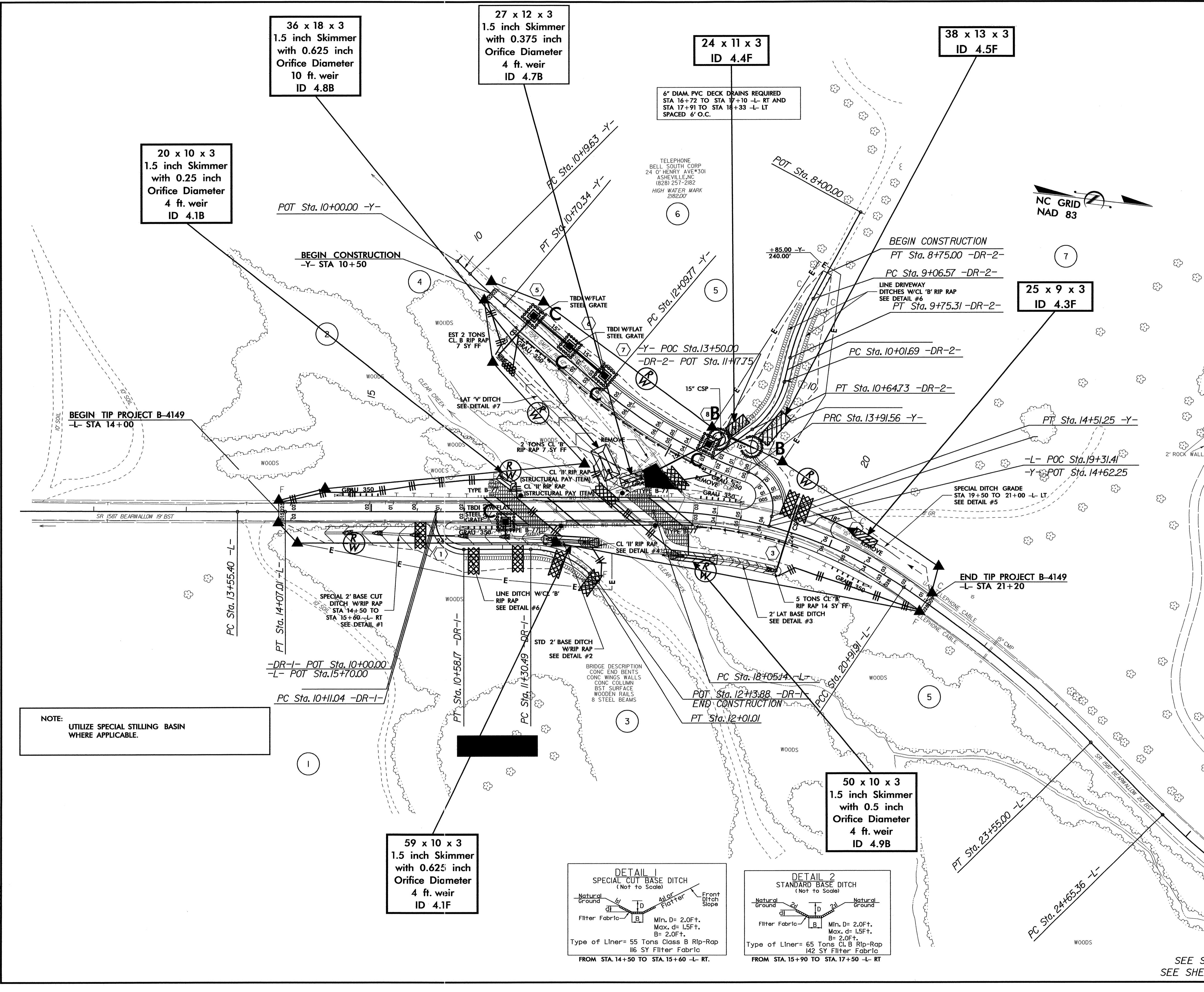
SEE SHEET 5 FOR -L- & -Y- PROFILES  
SEE SHEET 6 FOR -DR-1- & -DR-2- PROFILES

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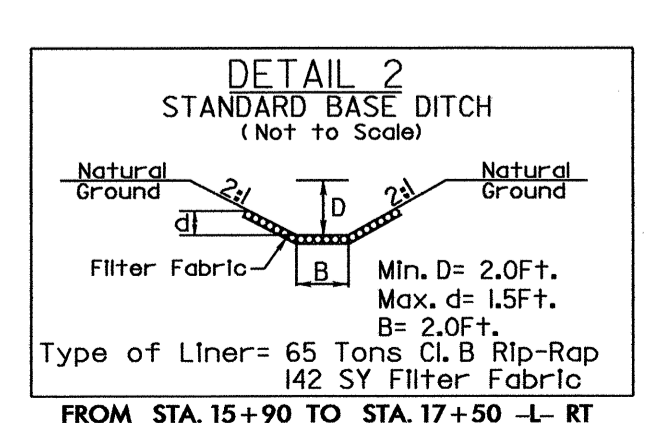
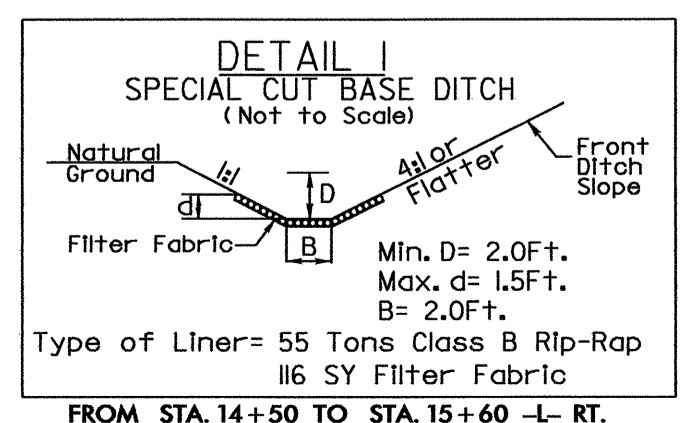
PROJECT REFERENCE NO.	SHEET NO.
B-4149	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 5 FOR -L- & -Y- PROFILES  
SEE SHEET 6 FOR -DR-1- & -DR-2- PROFILES



NOTE:  
UTILIZE SPECIAL STILLING BASIN  
WHERE APPLICABLE.



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

50 x 10 x 3  
1.5 inch Skimmer  
with 0.5 inch  
Orifice Diameter  
4 ft. weir  
ID 4.9B

20 x 10 x 3  
1.5 inch Skimmer  
with 0.25 inch  
Orifice Diameter  
4 ft. weir  
ID 4.1B

36 x 18 x 3  
1.5 inch Skimmer  
with 0.625 inch  
Orifice Diameter  
10 ft. weir  
ID 4.8B

27 x 12 x 3  
1.5 inch Skimmer  
with 0.375 inch  
Orifice Diameter  
4 ft. weir  
ID 4.7B

24 x 11 x 3  
ID 4.4F

38 x 13 x 3  
ID 4.5F

25 x 9 x 3  
ID 4.3F

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