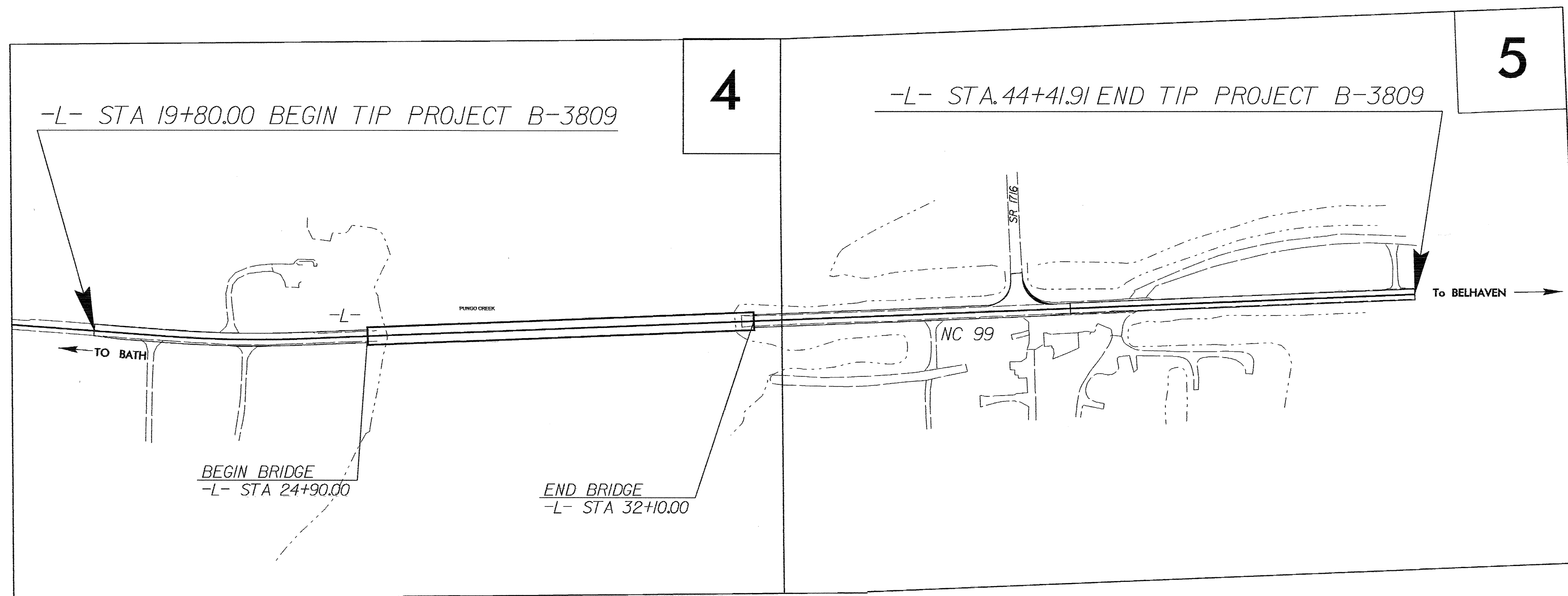
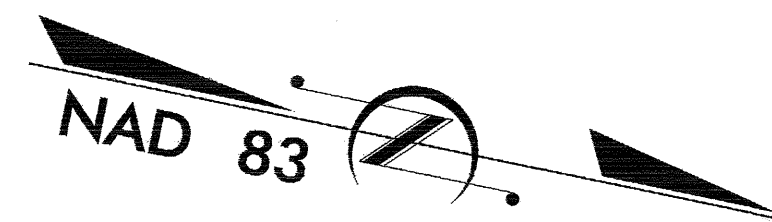


TIP PROJECT: B-3809

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

LOCATION: BRIDGE 64 OVER PUNGO CREEK ON NC 99

TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES, AND
 GUARDRAIL



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3809	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
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	▲
	Silt Basin Type B	■
1633.01	Temporary Rock Silt Check Type-A	■
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	■
	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	■
1650.06	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.

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 [Scale Bar] 100
 PLANS

0 [Scale Bar] 100
 PROFILE (HORIZONTAL)

0 [Scale Bar] 100
 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

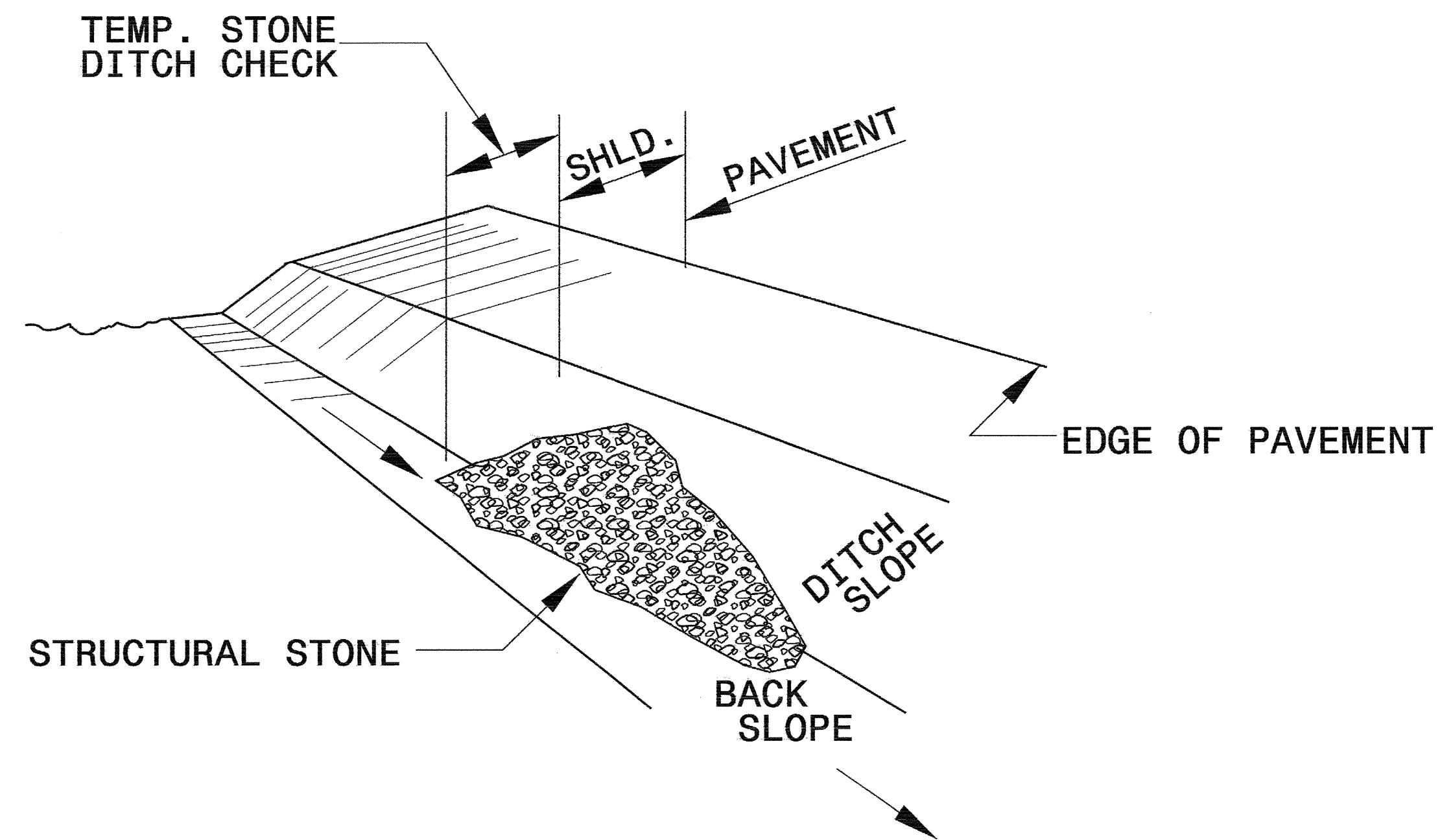
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence
 1606.01 Special Sediment Control Fence
 1607.01 Gravel Construction Entrance
 1622.01 Temporary Berms and Slope Drains
 1630.05 Temporary Diversion
 1632.03 Rock Inlet Sediment Trap Type C

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PROJECT REFERENCE NO. <i>B-3809</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

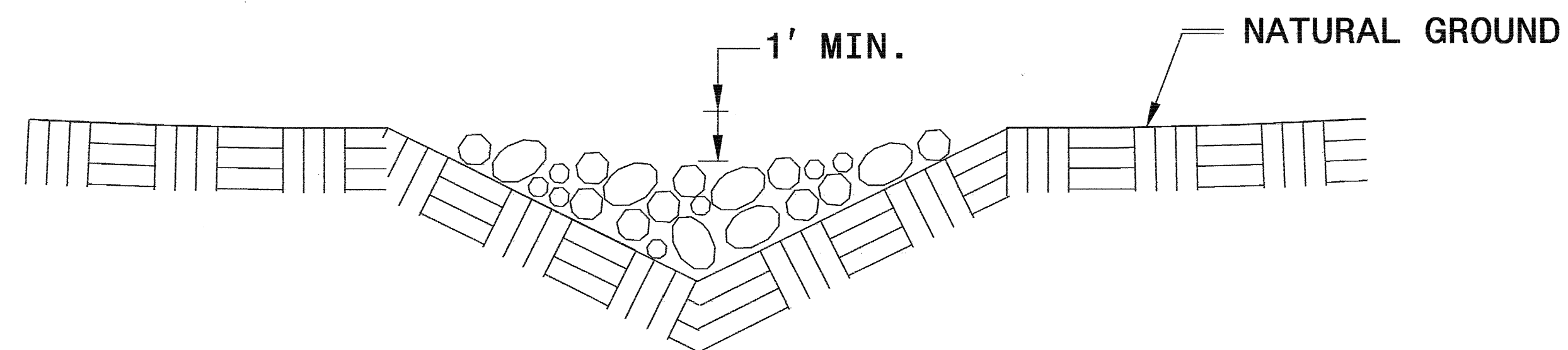


ISOMETRIC VIEW

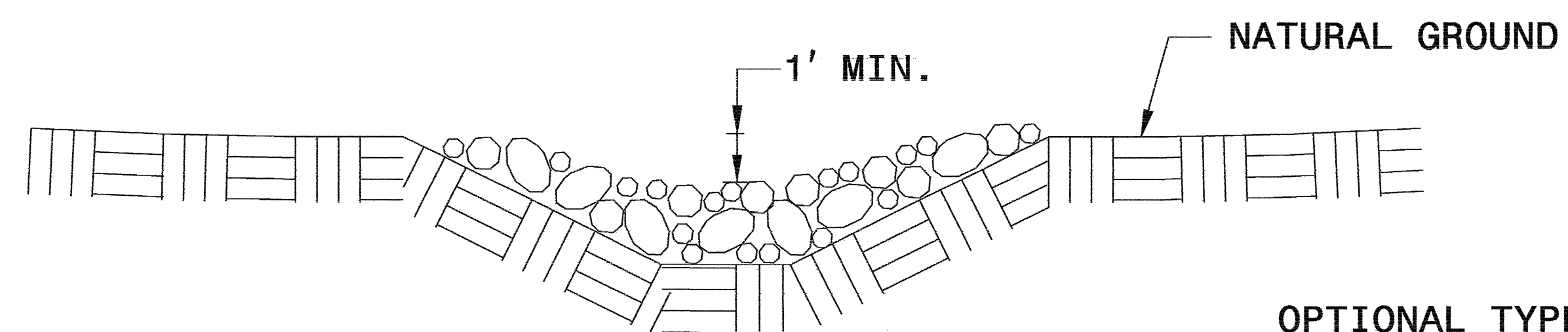
NOTES:

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

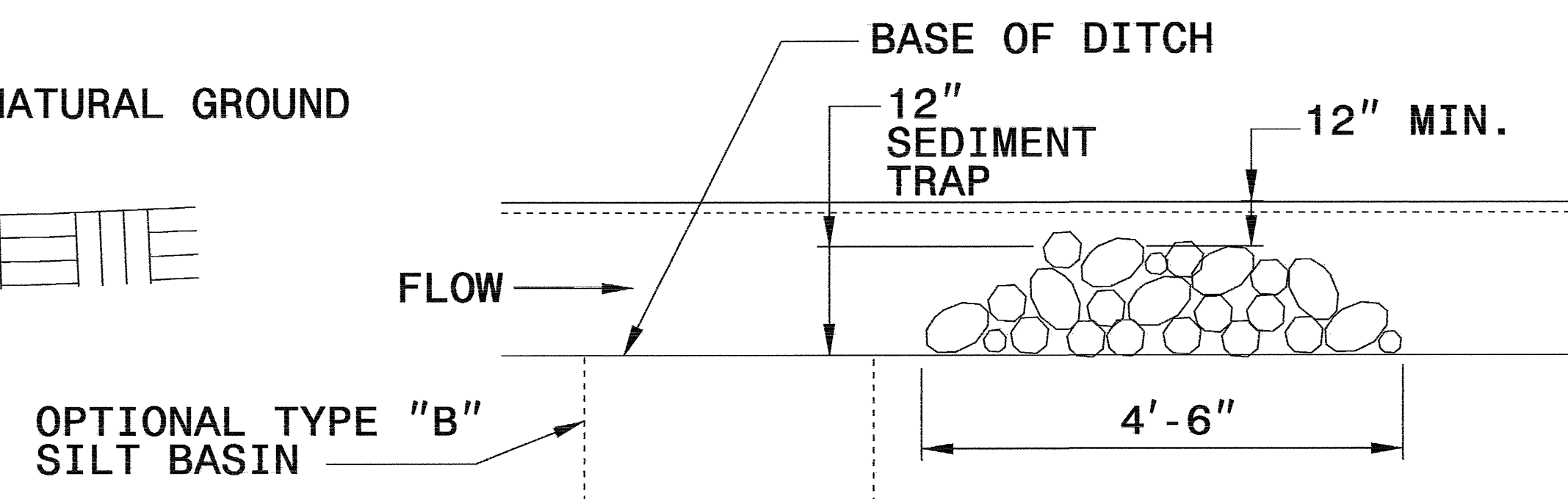
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



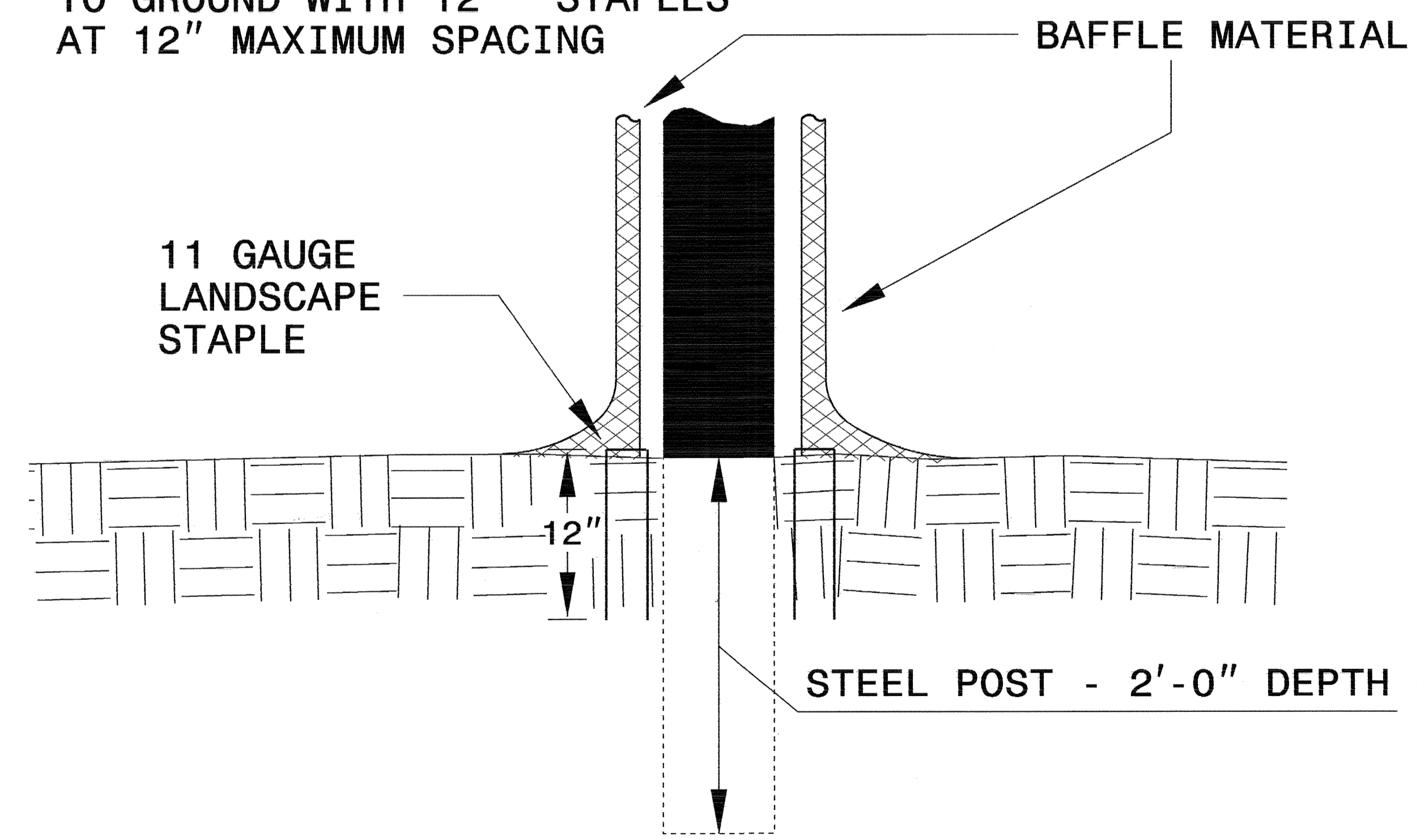
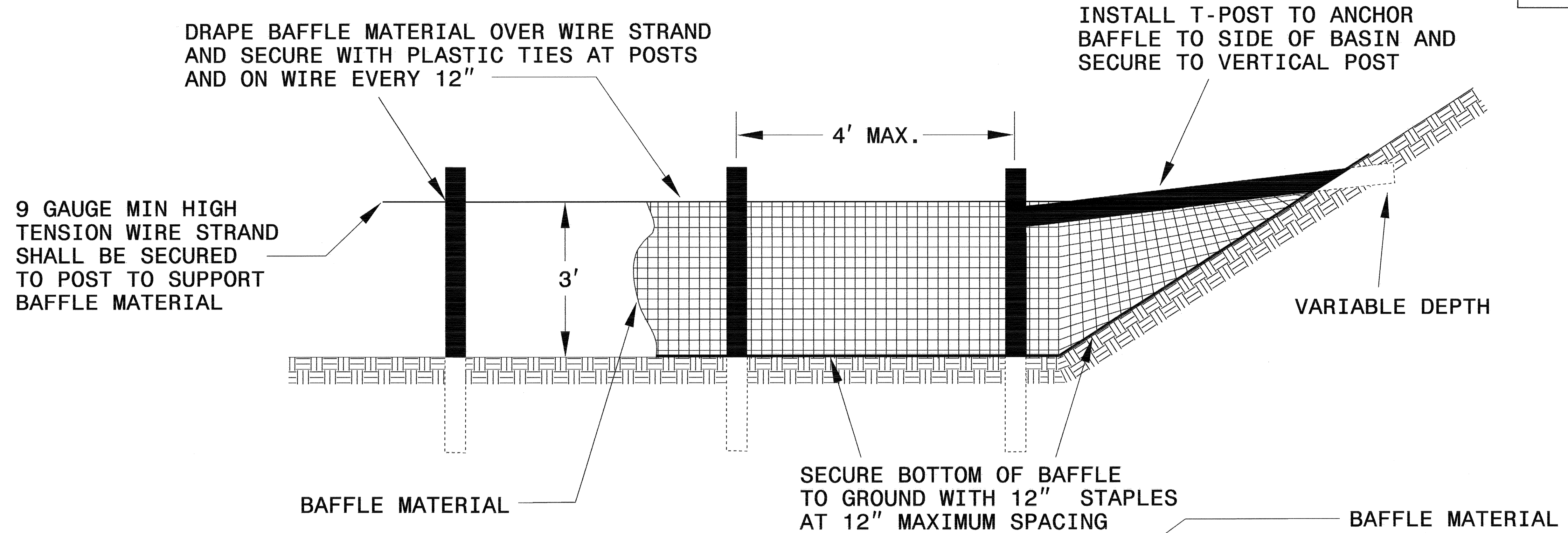
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

PROJECT REFERENCE NO. B-3809	SHEET NO. EC-2A
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

COIR FIBER BAFFLE DETAIL



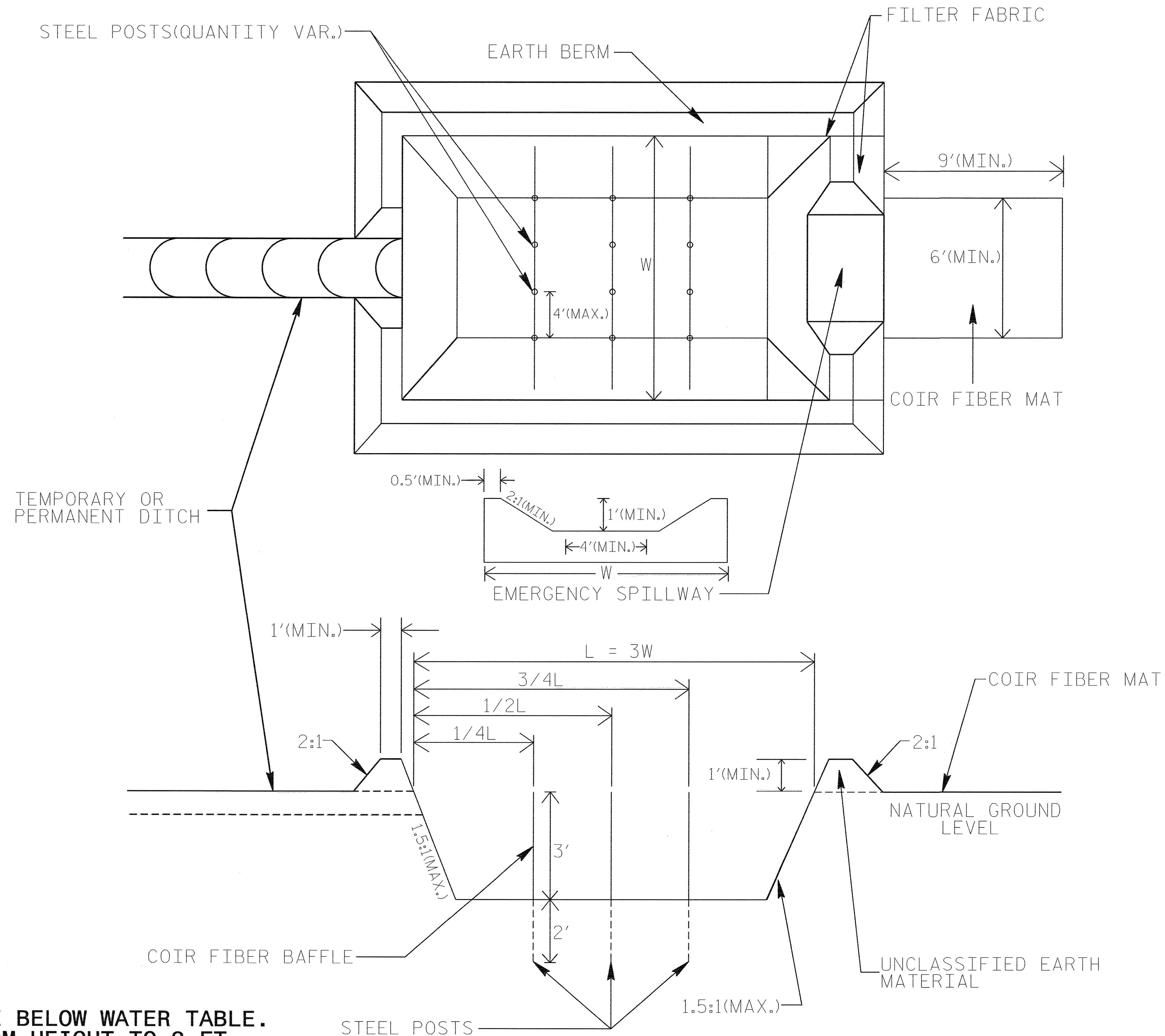
NOTES:

1. 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.
2. 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.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.

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

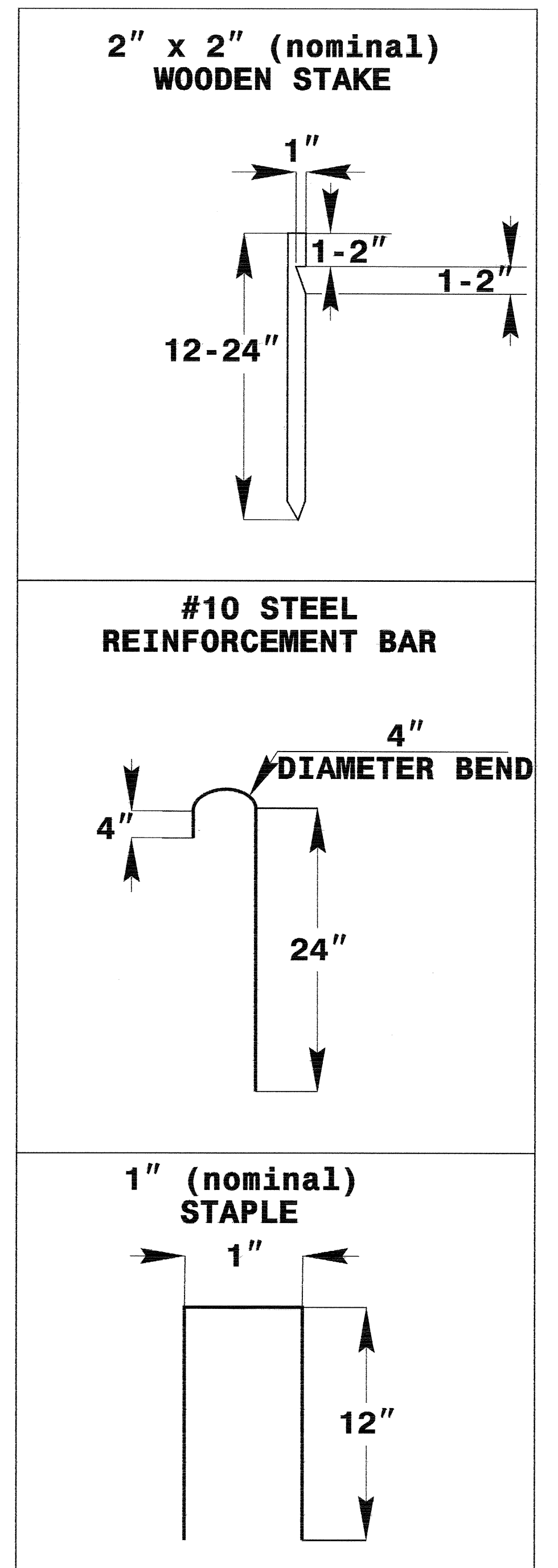
INFILTRATION BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. <i>B-3809</i>	SHEET NO. <i>EC-2B</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES:

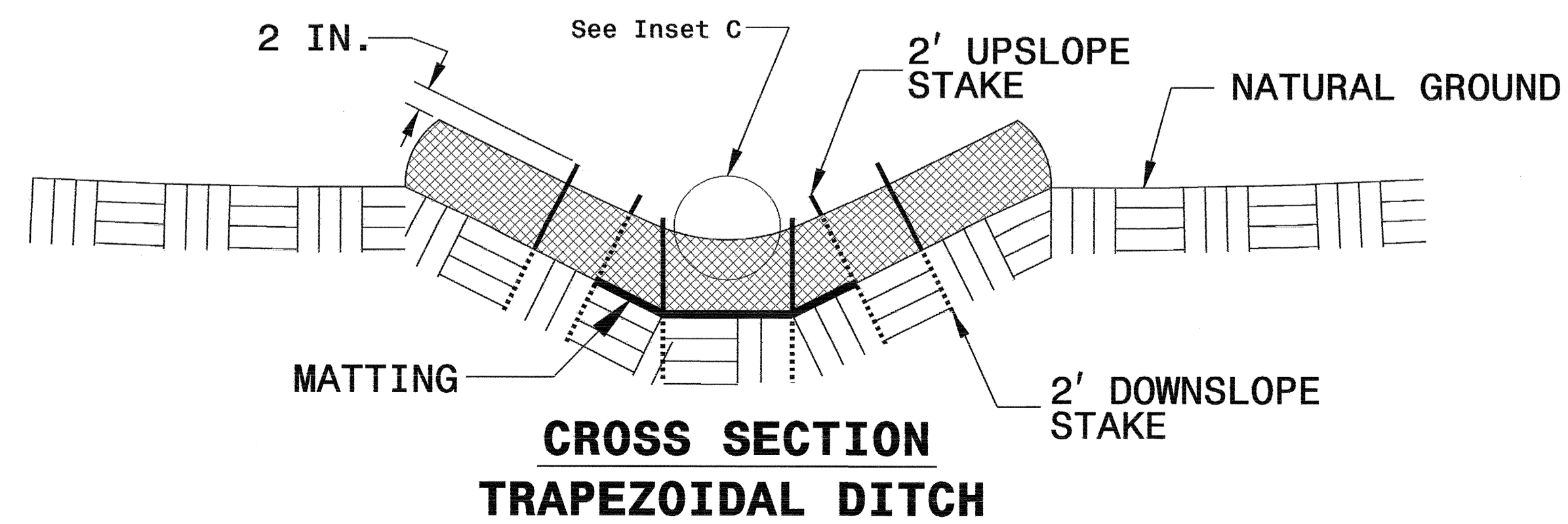
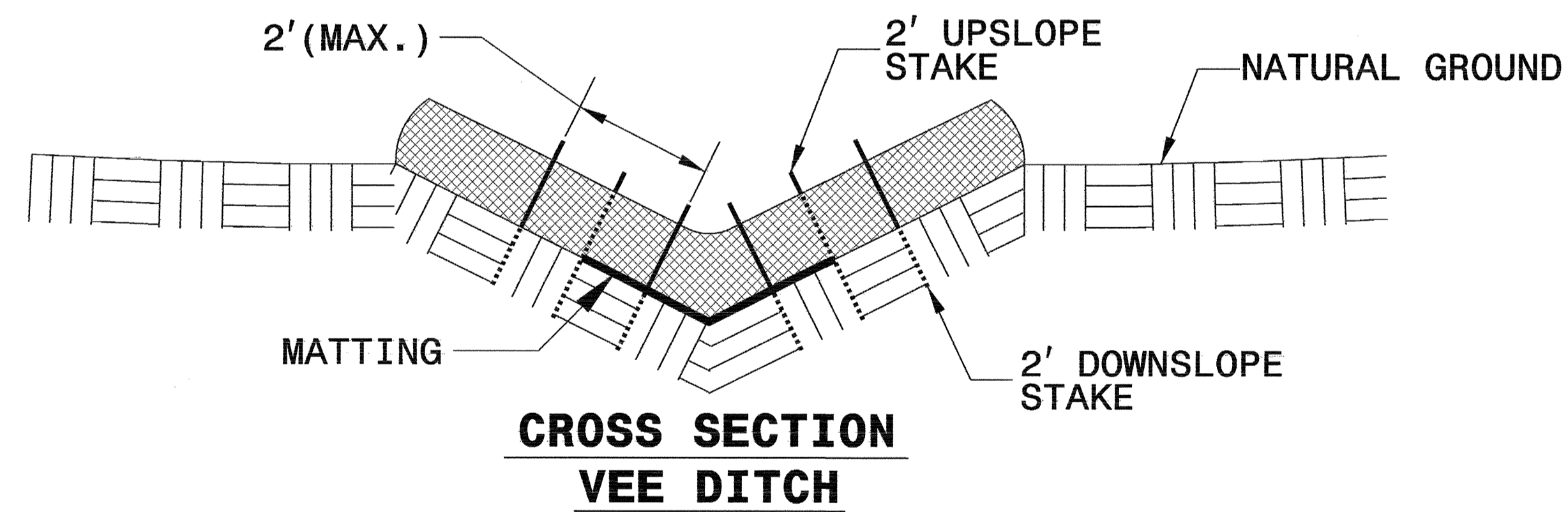
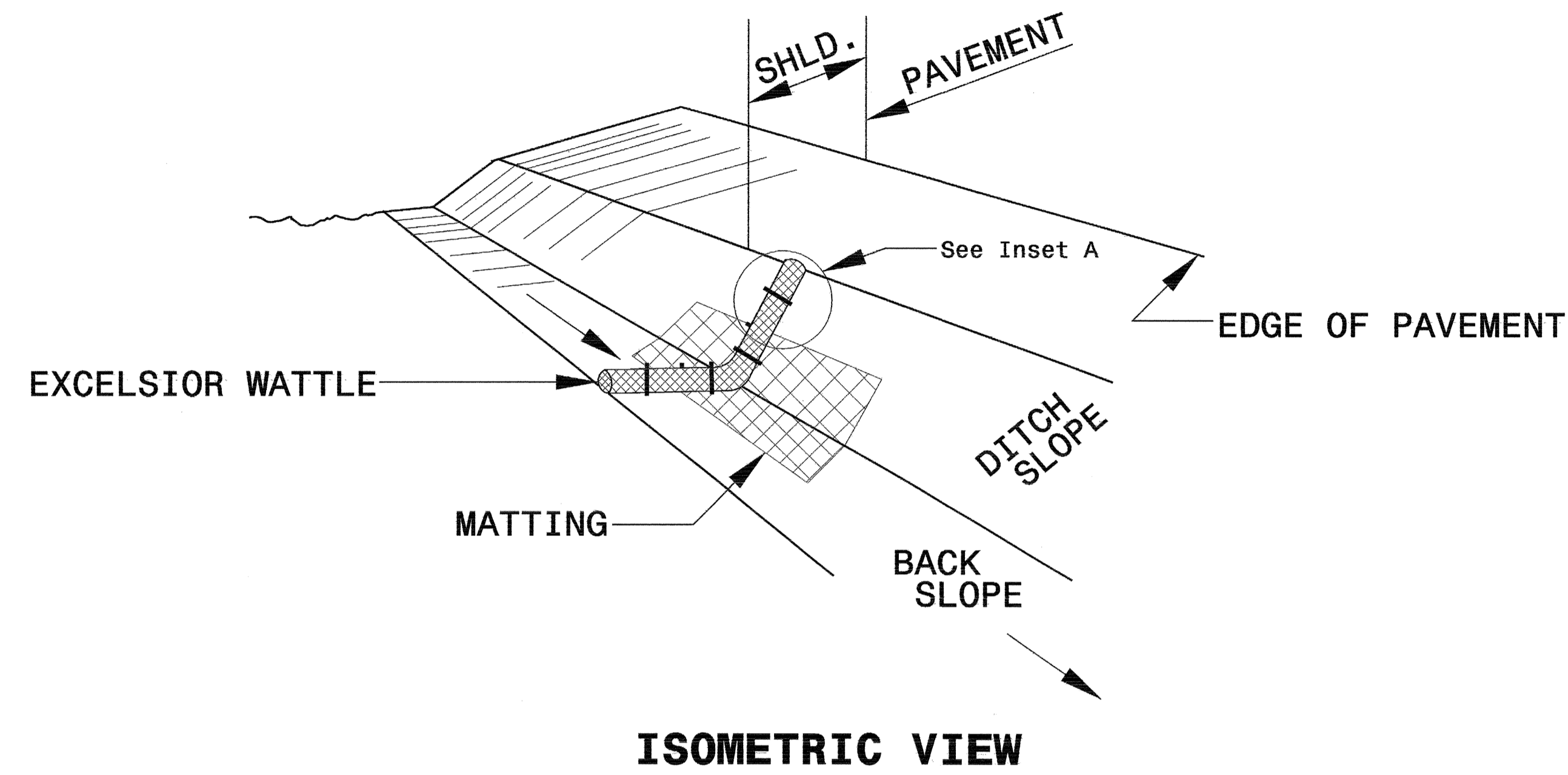
1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.



COIR FIBER MAT ANCHOR OPTIONS

PROJECT REFERENCE NO. B-3809	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

WATTLE WITH POLYACRYLAMIDE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

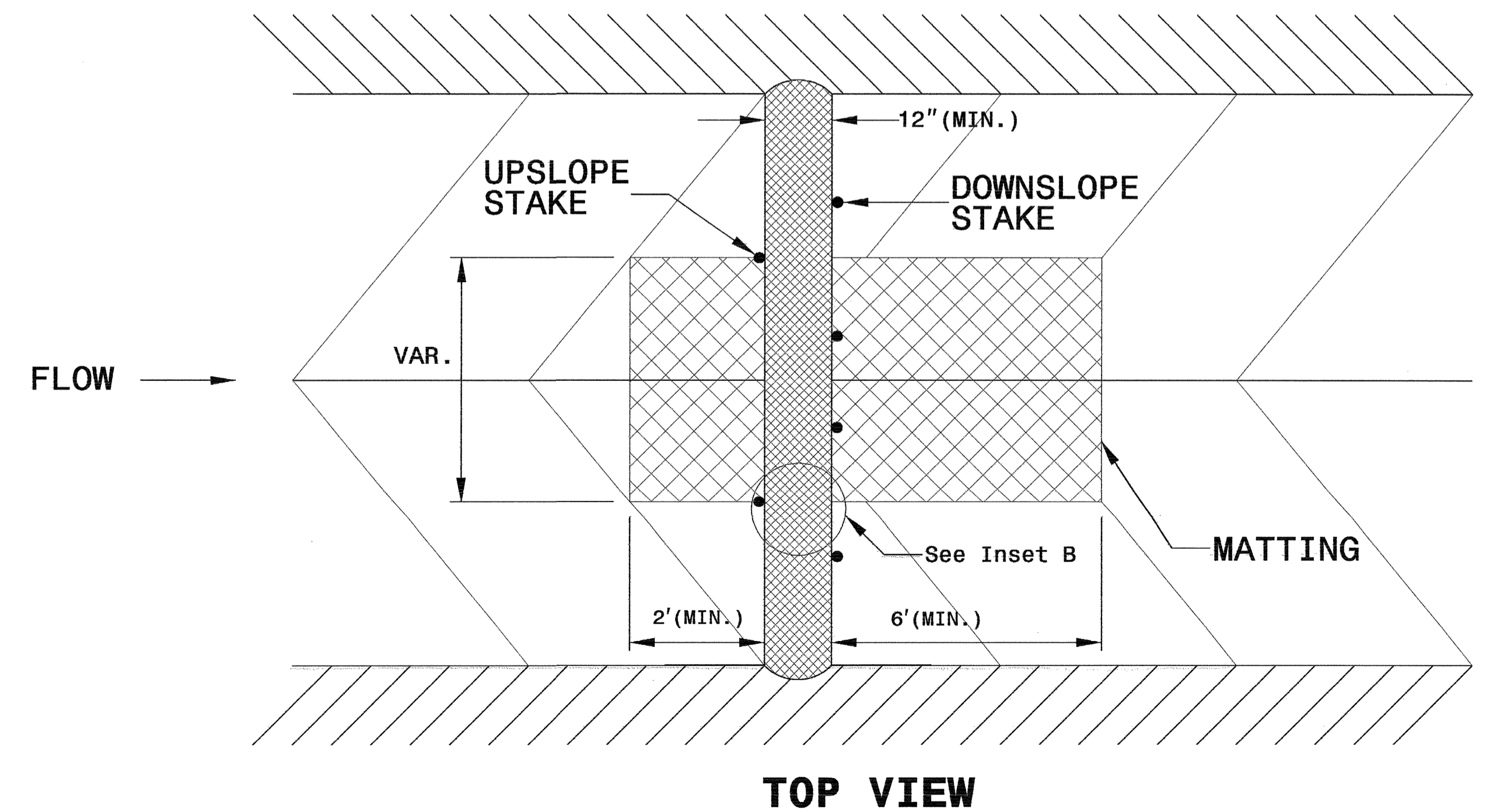
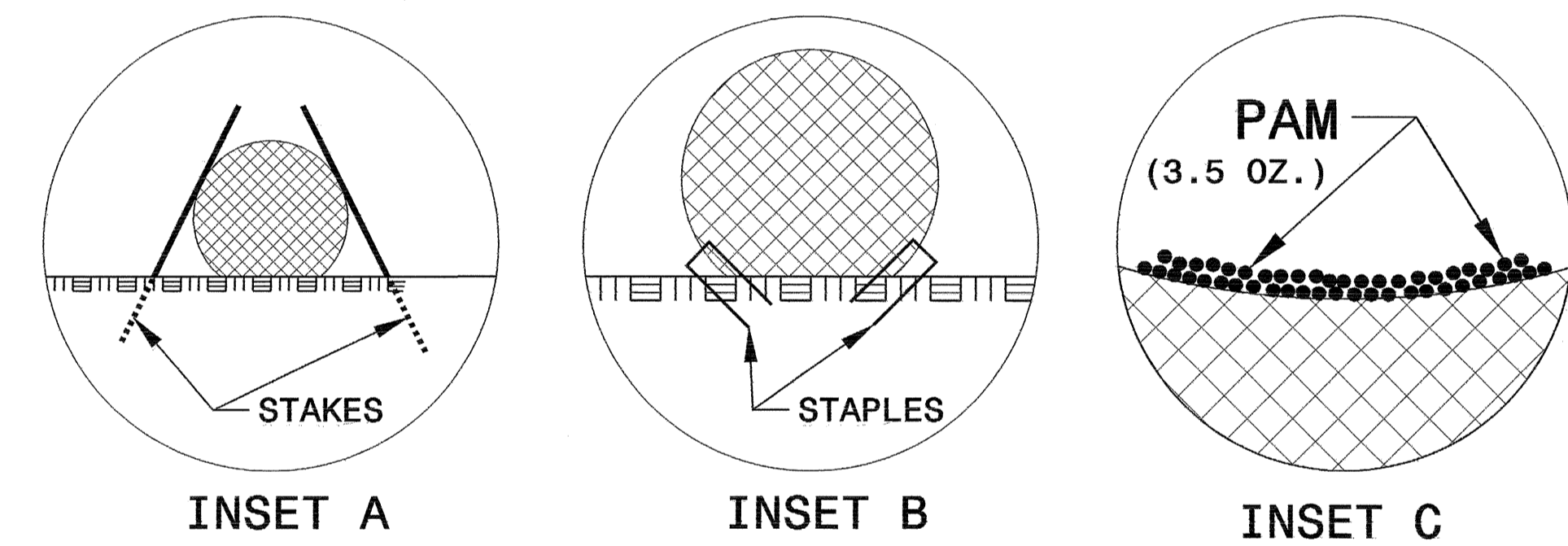
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.

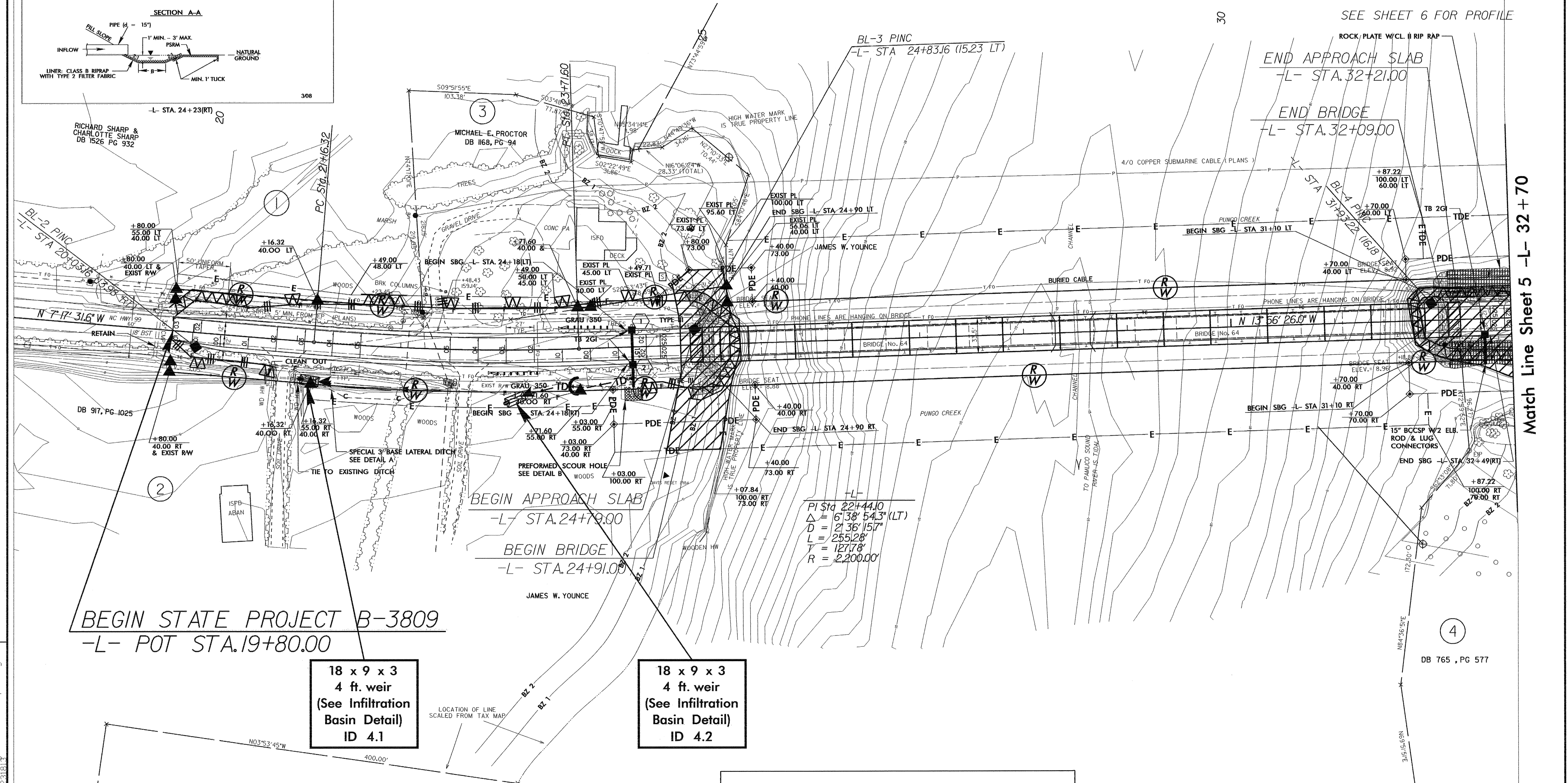
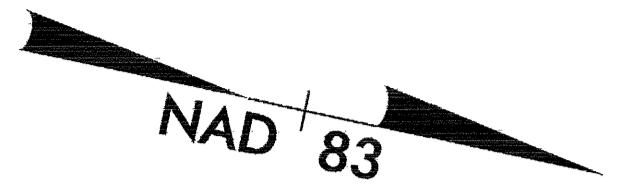
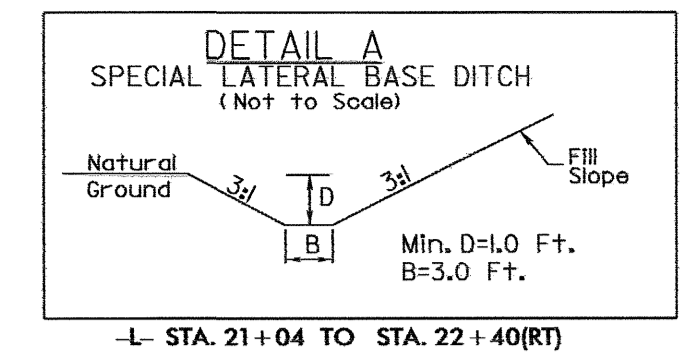
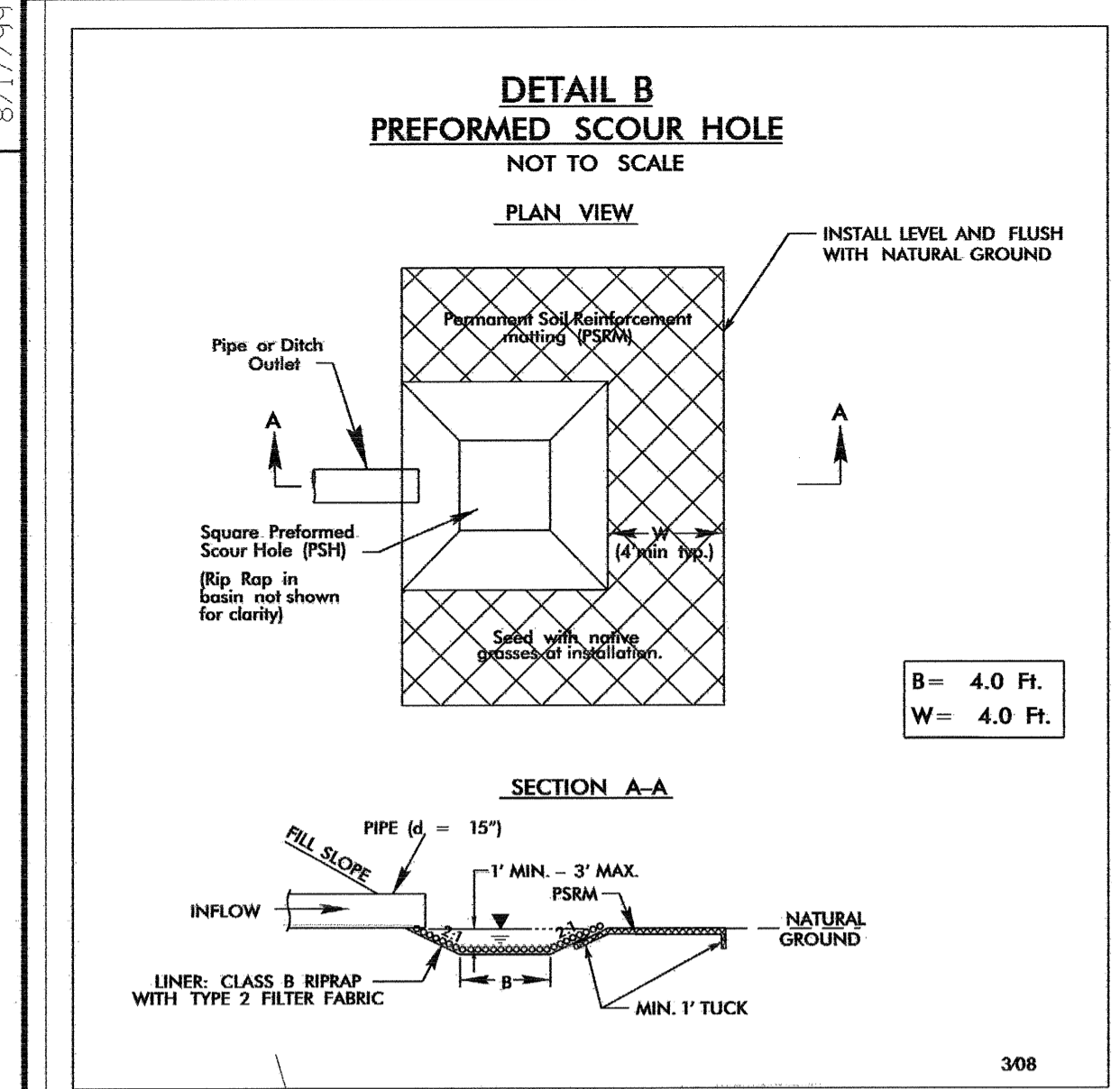
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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 0.50 IN.



PROJECT REFERENCE NO.	SHEET NO.
B-3809	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



BEGIN STATE PROJECT B-3809
-L- POT STA. 19+80.00

18 x 9 x 3
4 ft. weir
(See Infiltration
Basin Detail)
ID 4.1

18 x 9 x 3
4 ft. weir
(See Infiltration
Basin Detail)
ID 4.2

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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

Match Line Sheet 5 -L- 32 + 70

REVISIONS

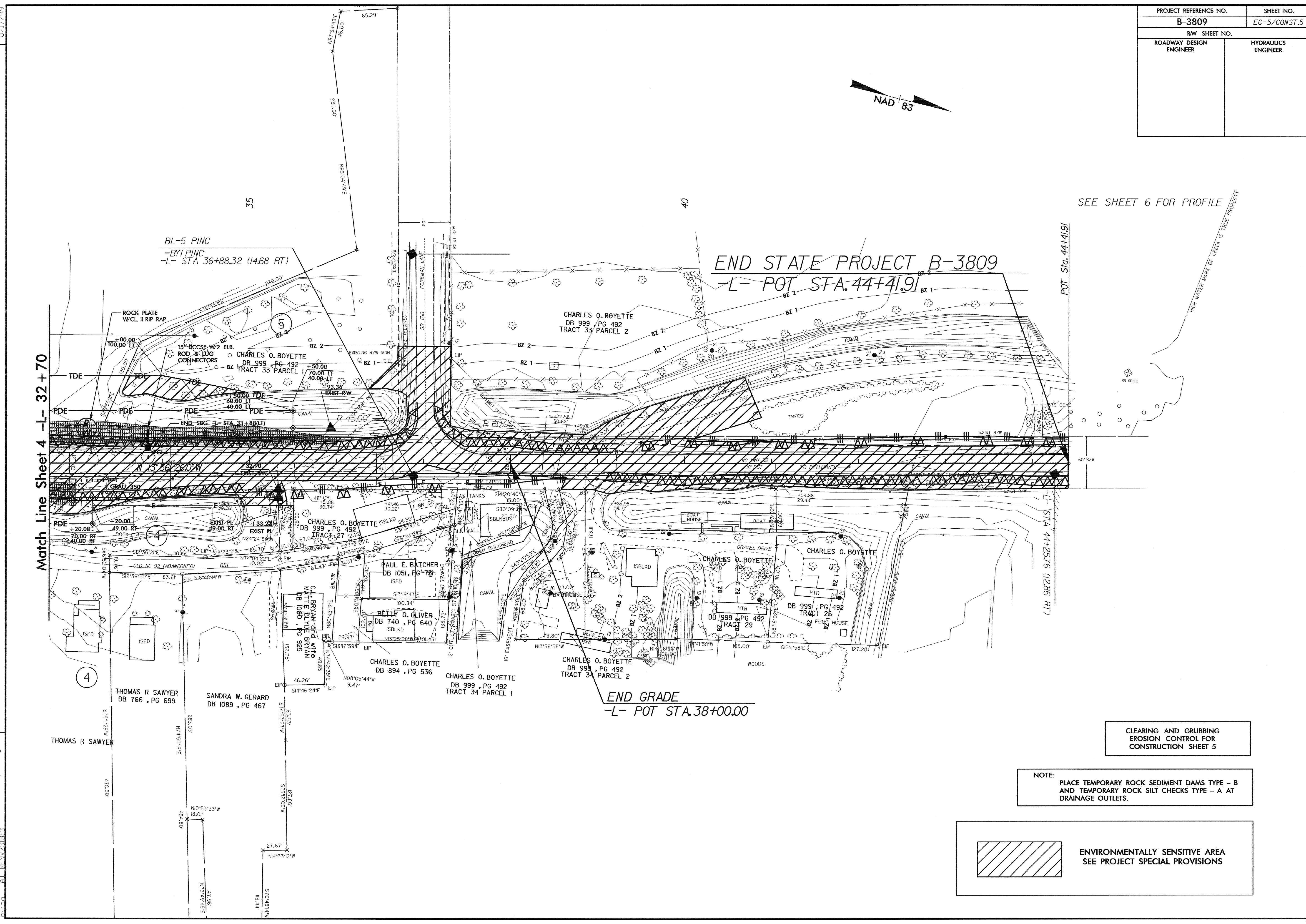
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PROJECT REFERENCE NO.	SHEET NO.
B-3809	EC-5/CONST.5
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 6 FOR PROFILE



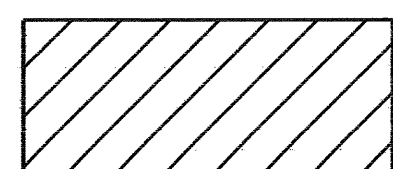
Match Line Sheet 4 -L- 32+70

END STATE PROJECT B-3809
-L- POT STA. 44+41.91

END GRADE
-L- POT STA. 38+00.00

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

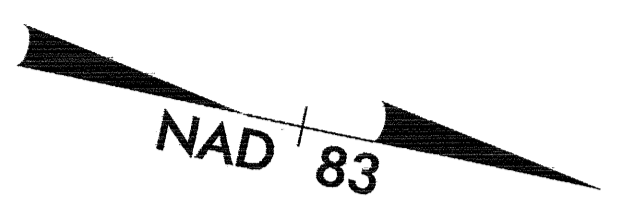
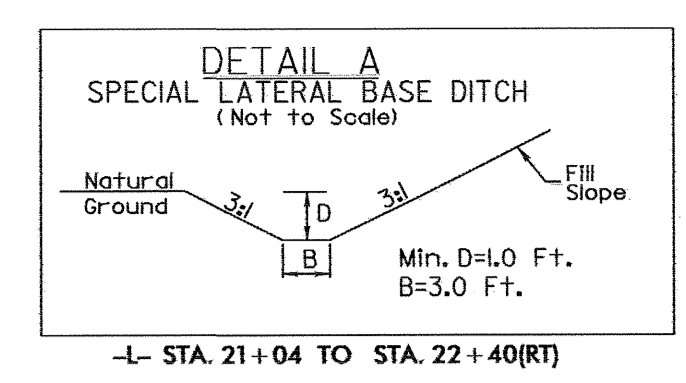
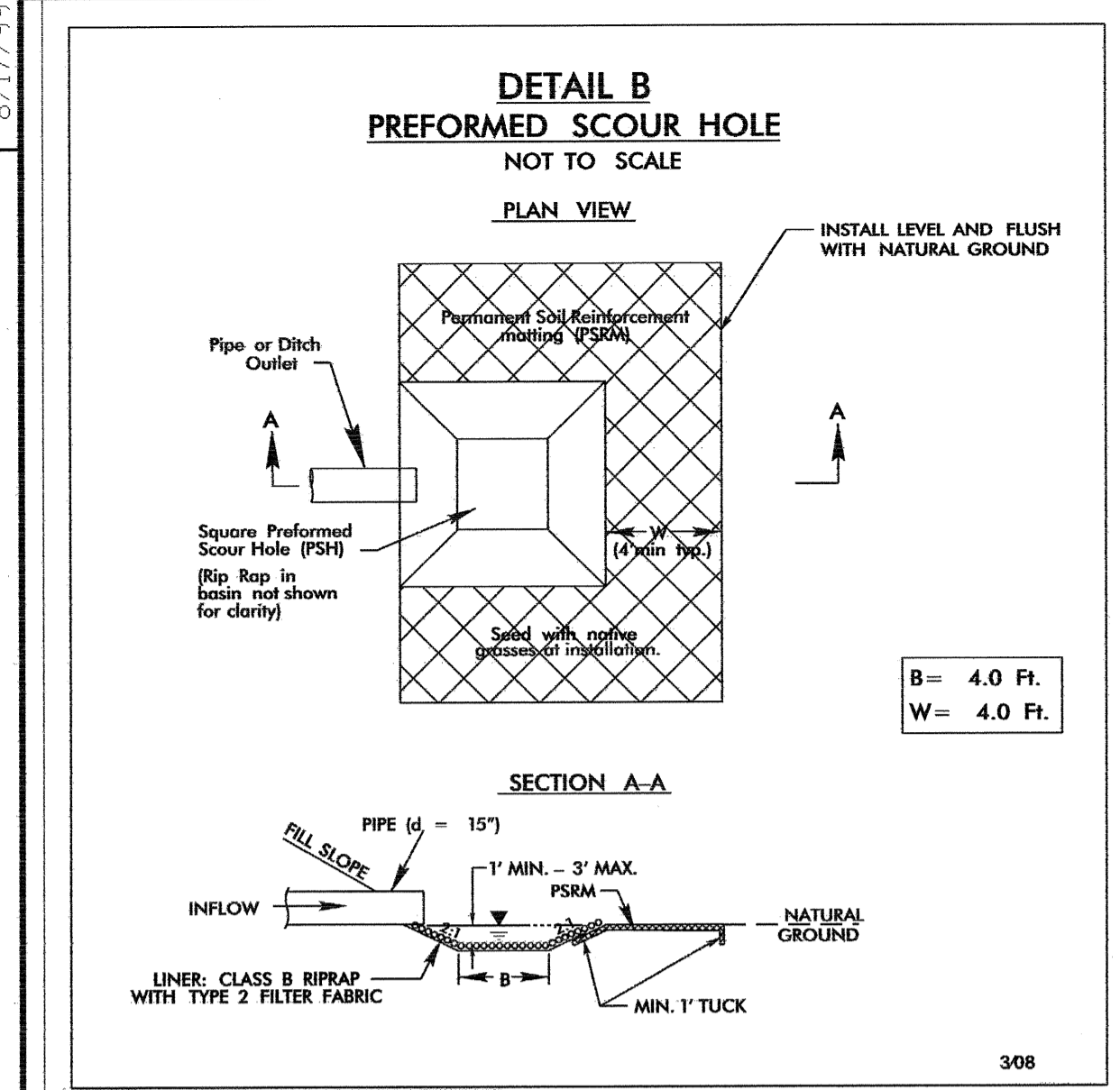
 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

REVISIONS

8/17/99

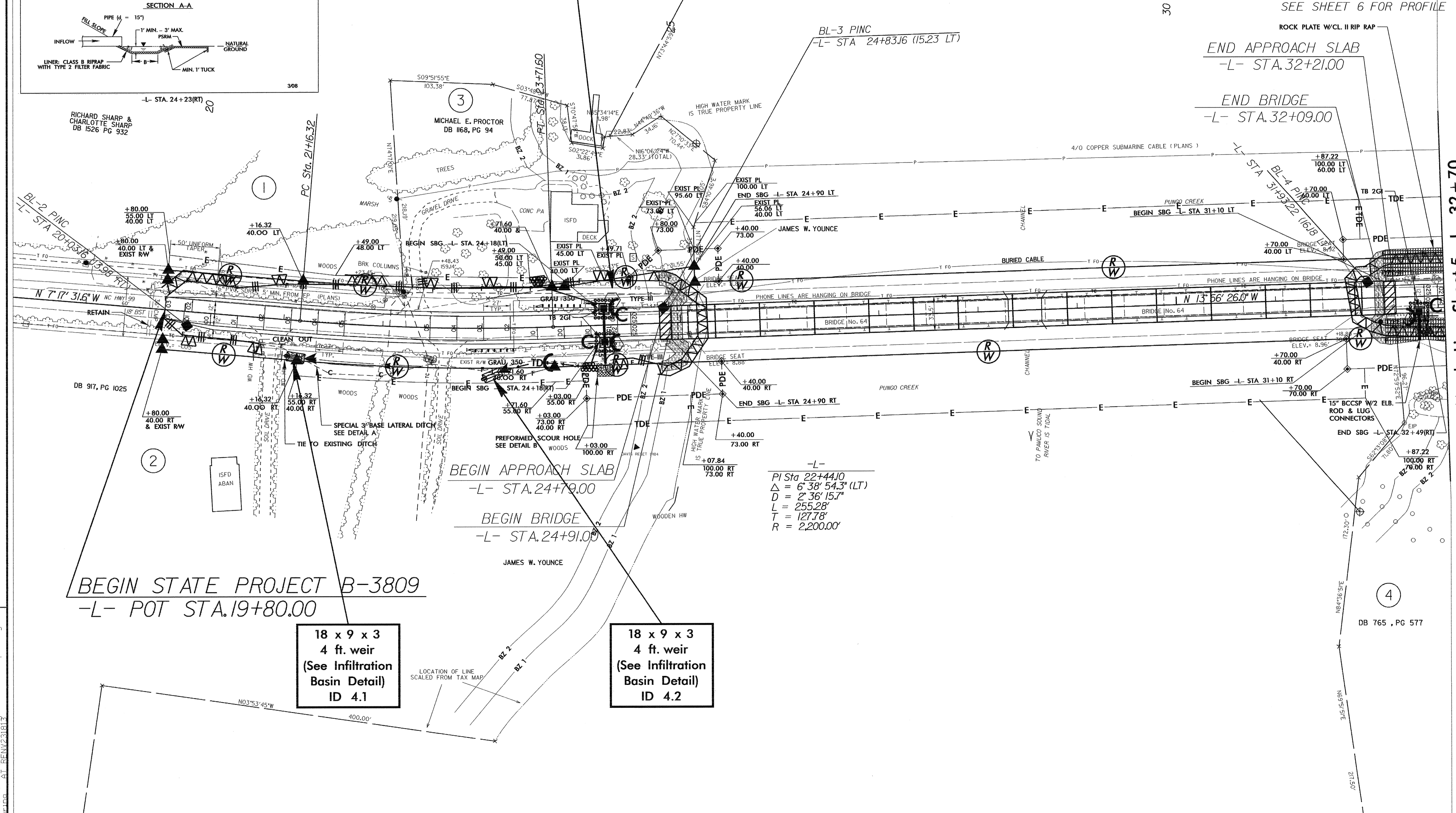
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PROJECT REFERENCE NO.		SHEET NO.	
B-3809		EC-6/CONST.4	
R/W SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER			



Place Matting for Erosion Control on Slope as Work Allows.

SEE SHEET 6 FOR PROFILE
 ROCK PLATE W/CL II RIP RAP
 END APPROACH SLAB
 -L- STA. 32+21.00
 END BRIDGE
 -L- STA. 32+09.00



BEGIN STATE PROJECT B-3809
 -L- POT STA. 19+80.00

18 x 9 x 3
 4 ft. weir
 (See Infiltration Basin Detail)
 ID 4.1

18 x 9 x 3
 4 ft. weir
 (See Infiltration Basin Detail)
 ID 4.2

-L-
 PI Sta 22+44.10
 $\Delta = 6' 38'' 54.3''$ (LT)
 $D = 2' 36'' 15.7''$
 $L = 255.28'$
 $T = 127.78'$
 $R = 2,200.00'$

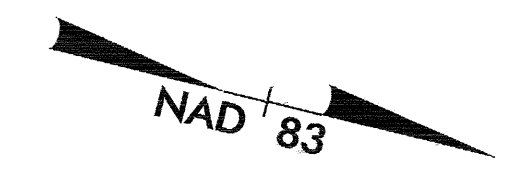
Match Line Sheet 5 -L- 32 + 70

REVISIONS

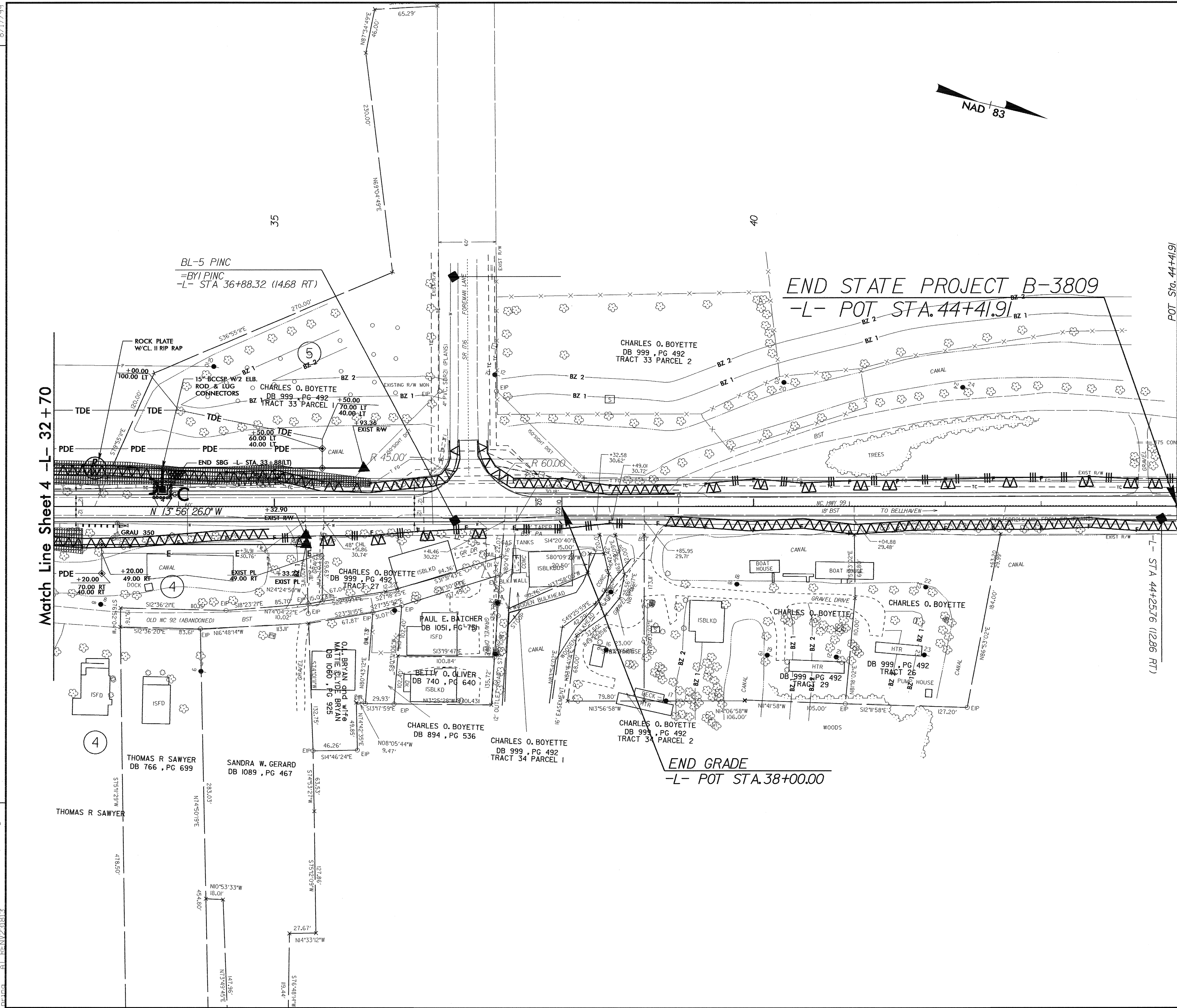
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PROJECT REFERENCE NO.	SHEET NO.
B-3809	EC-7/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SEE SHEET 6 FOR PROFILE



Match Line Sheet 4 -L- 32+70

END STATE PROJECT B-3809
-L- POT STA. 44+41.91

END GRADE
-L- POT STA. 38+00.00

POT Sta. 44+41.91
-L- STA 44+25.76 (1286 FT)

REVISIONS

8/17/99

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