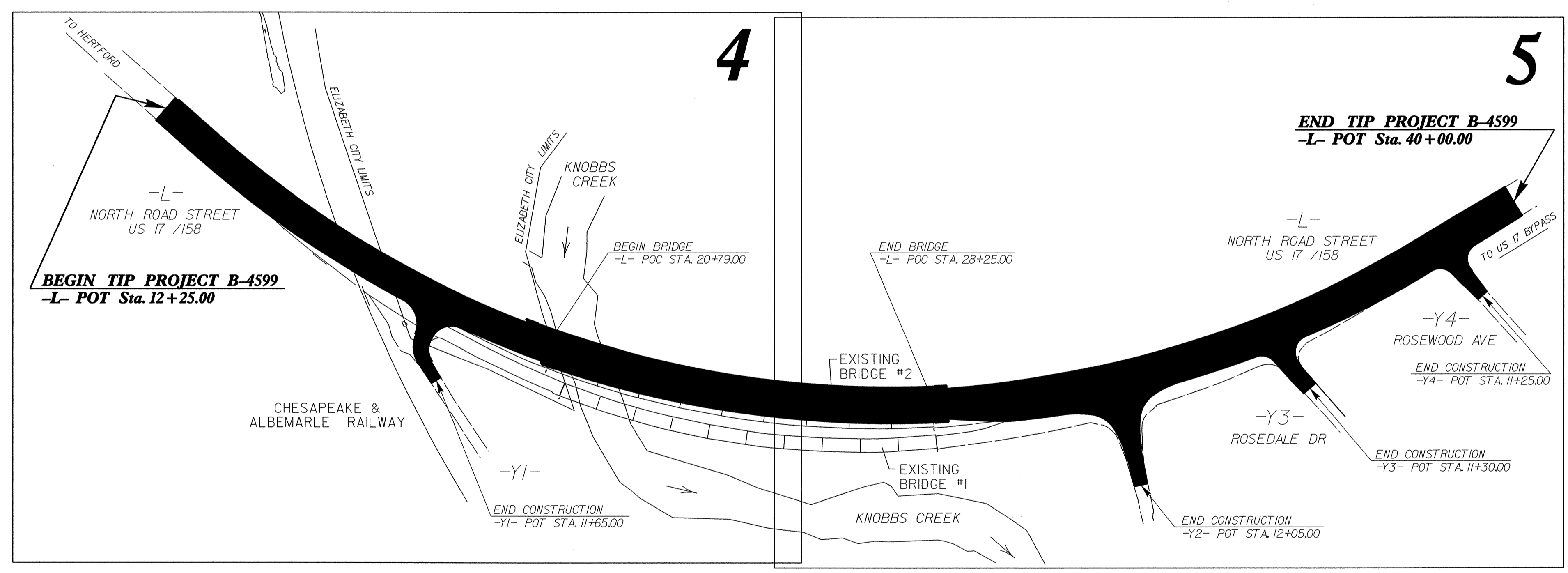


**TIP PROJECT: B-4599**

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



**LOCATION: BRIDGES NOS. 1 & 2 OVER KNOBBS CREEK ON US 17 / US 158.**  
**TYPE OF WORK: GRADING, DRAINAGE, PAVING, CURB & GUTTER, SIGNAL & STRUCTURE.**

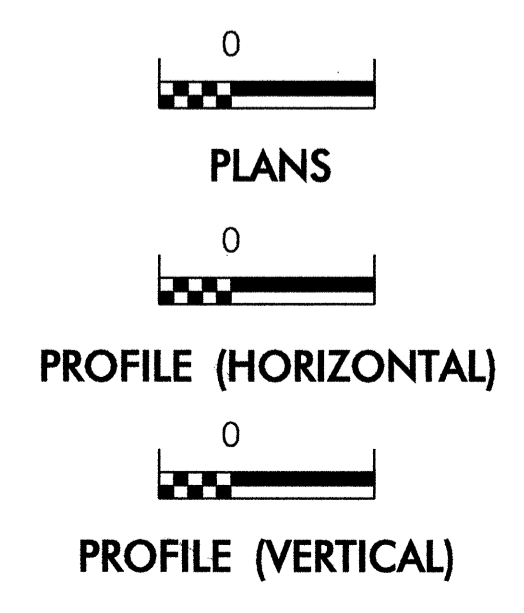


**EROSION AND SEDIMENT CONTROL MEASURES**

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	III III III
1622.01	Temporary Berms and Slope Drains	TSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle / Coir Fiber Wattle	WF
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	WF-PAM
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDA
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRA
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB

**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

**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.**

Prepared In the Office of:  
**ROADSIDE ENVIRONMENTAL UNIT**  
 1 South Wilmington St.  
 Raleigh, NC 27611  
**2012 STANDARD SPECIFICATIONS**

Roadway Standard Drawings

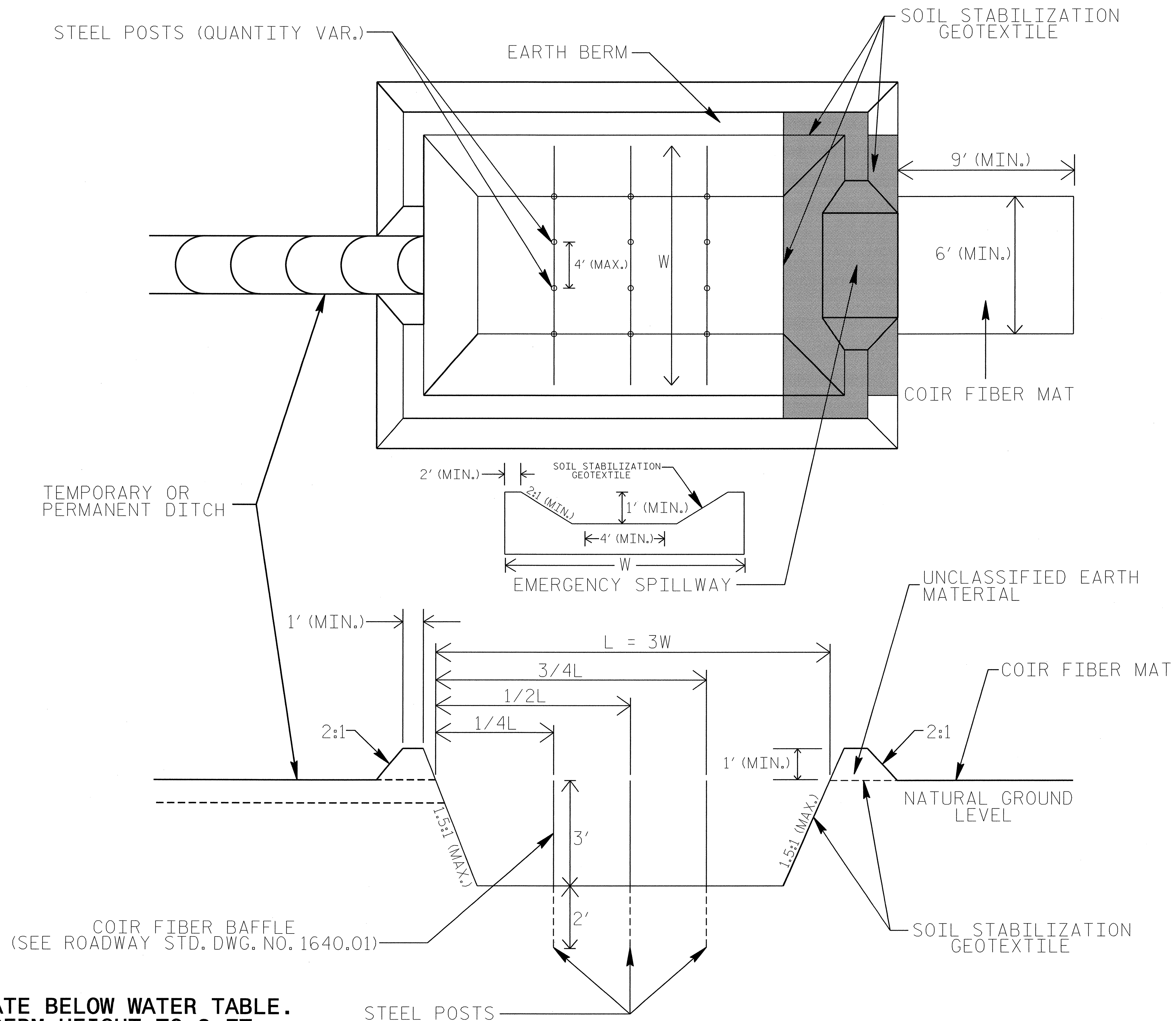
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

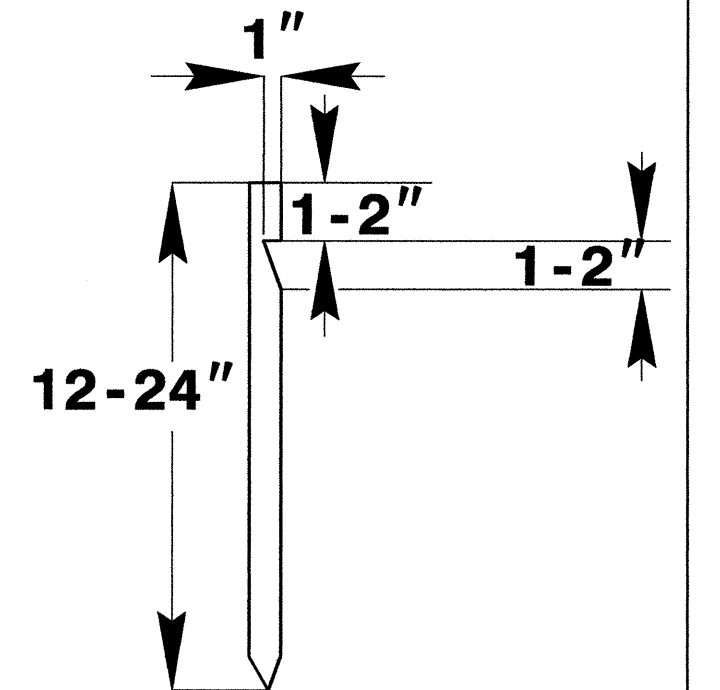
10-FEB-2012 ORG: mehancock; title: PASQUOTANK COUNTY TIP PROJECT B-4599; EC - tsh.dgn

# INFILTRATION BASIN WITH BAFFLES DETAIL

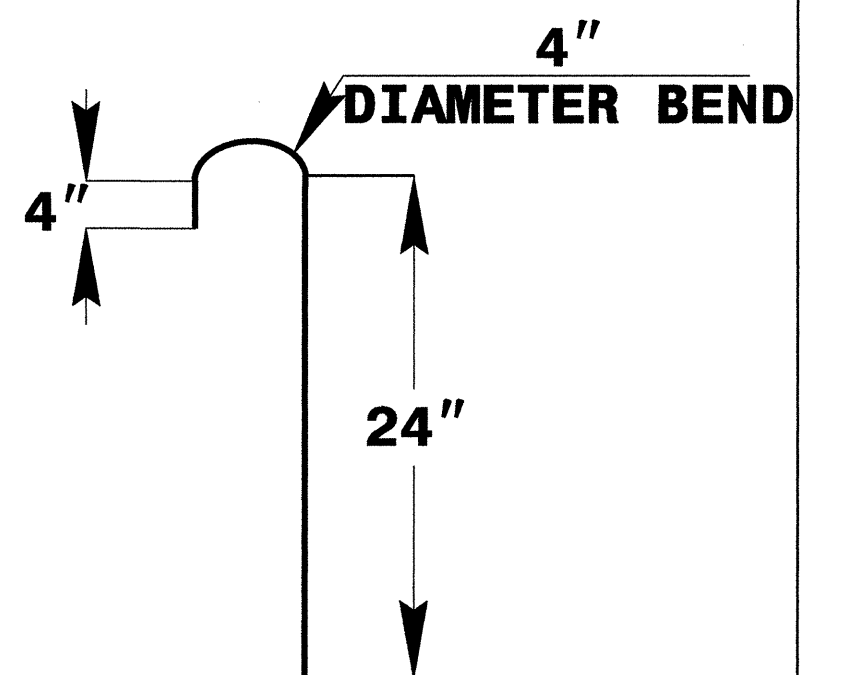
PROJECT REFERENCE NO. B-4599	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



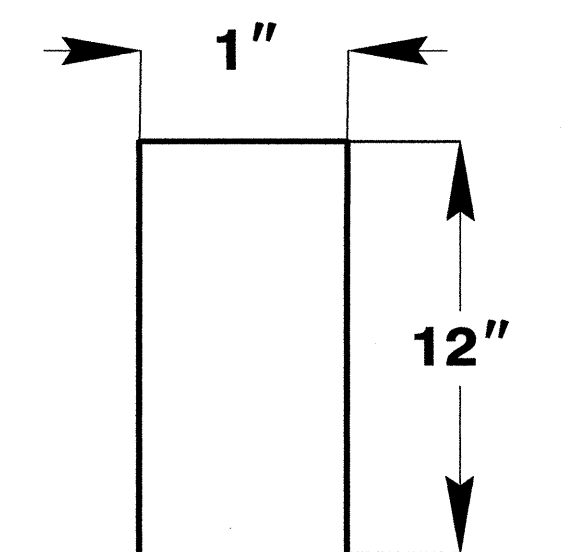
**2" x 2" (nominal)  
WOODEN STAKE**



**#10 STEEL  
REINFORCEMENT BAR**



**1" (nominal)  
STAPLE**



**COIR FIBER MAT  
ANCHOR OPTIONS**

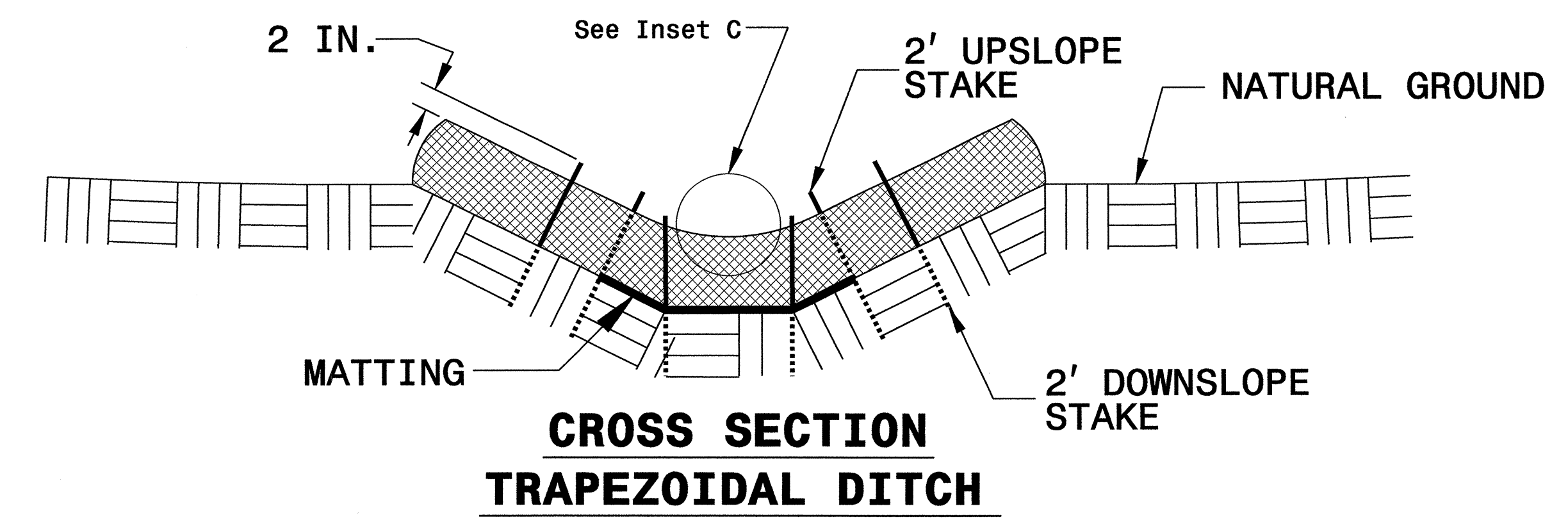
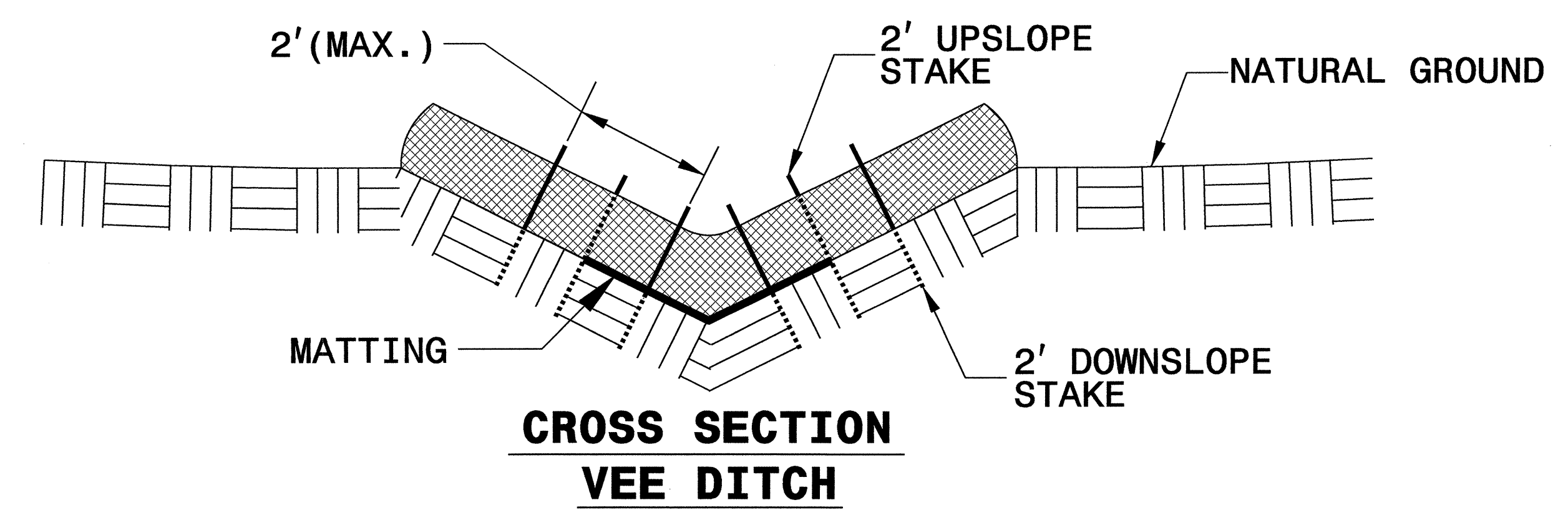
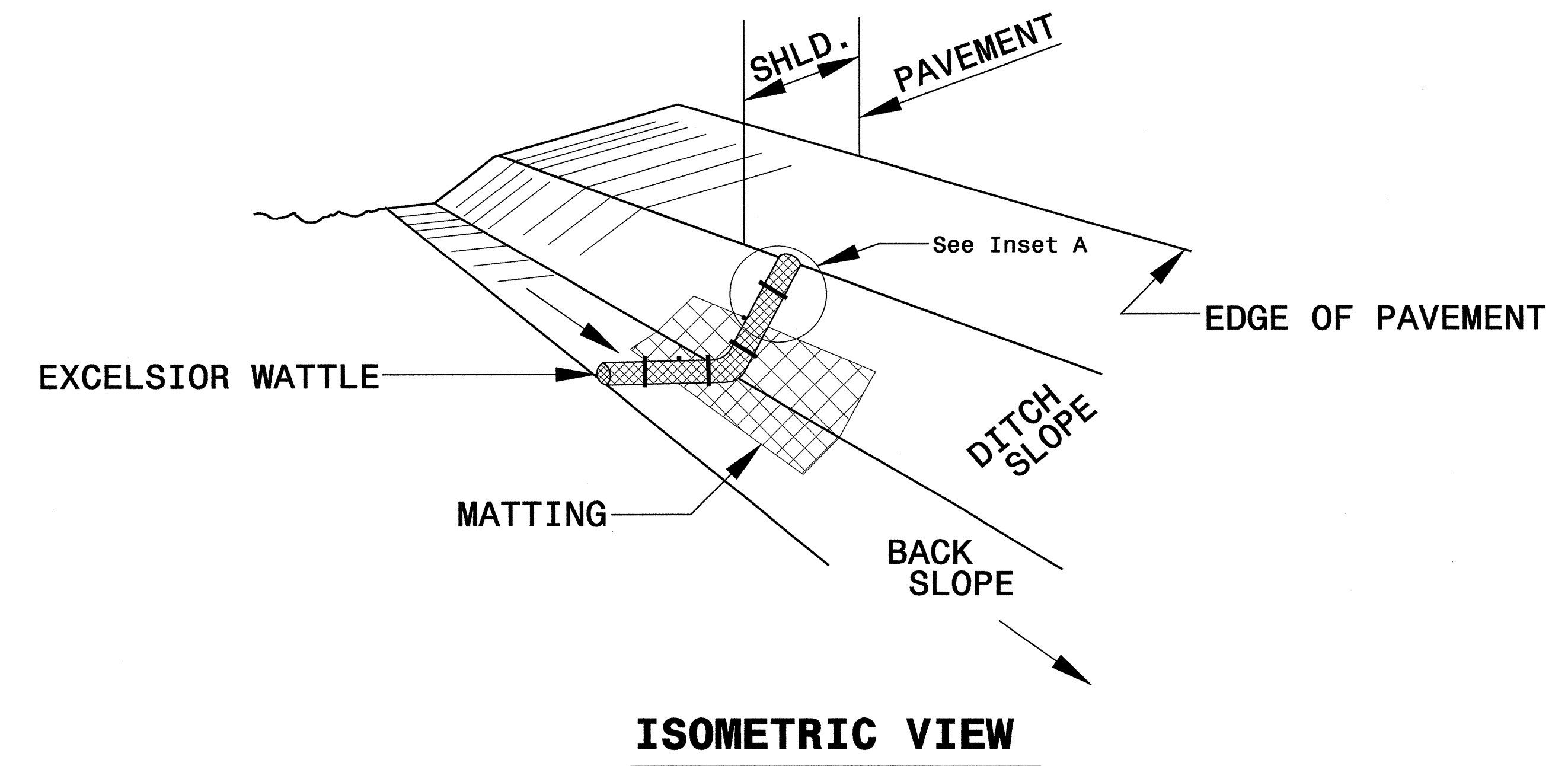
## NOTES

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., 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.

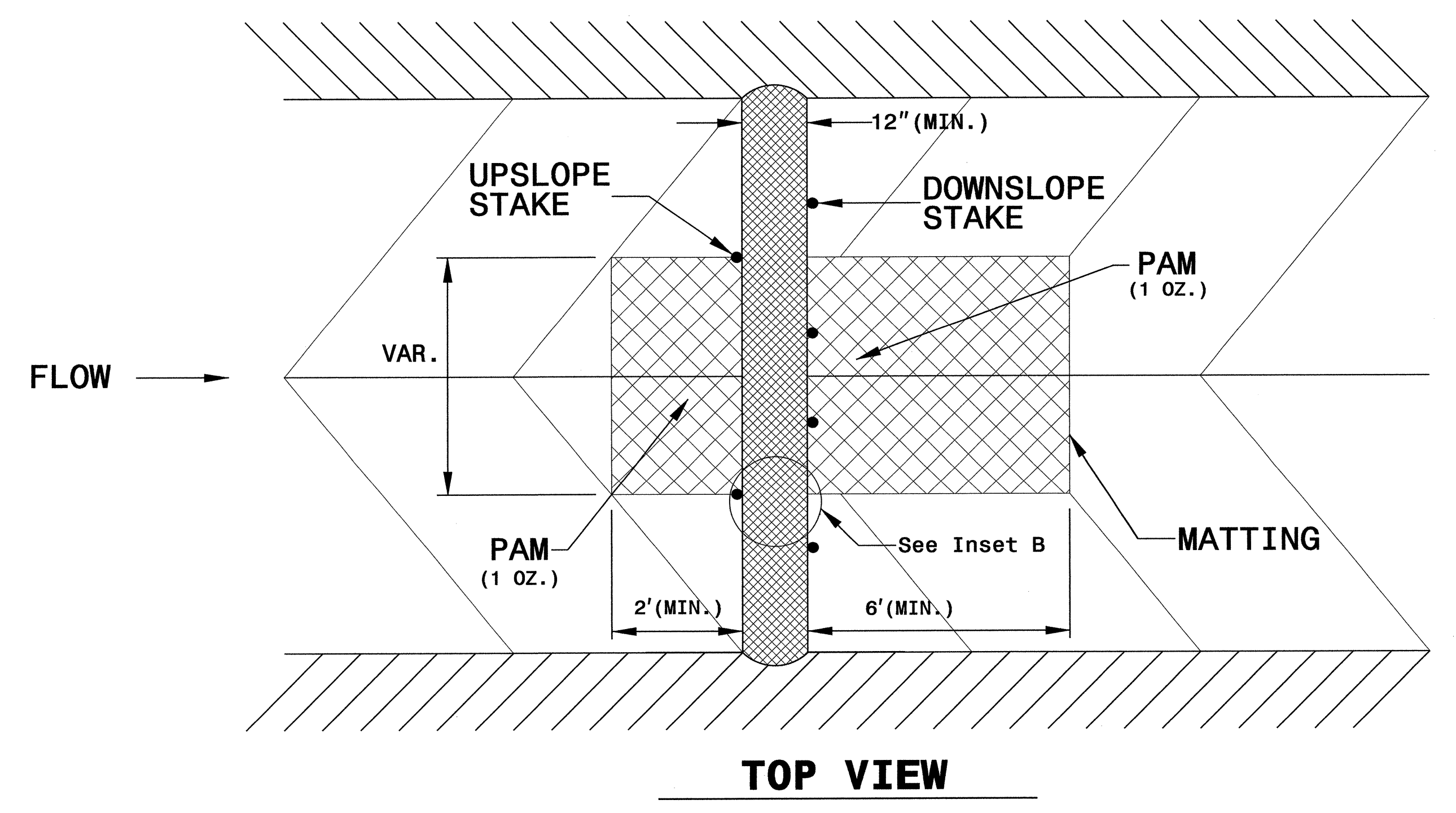
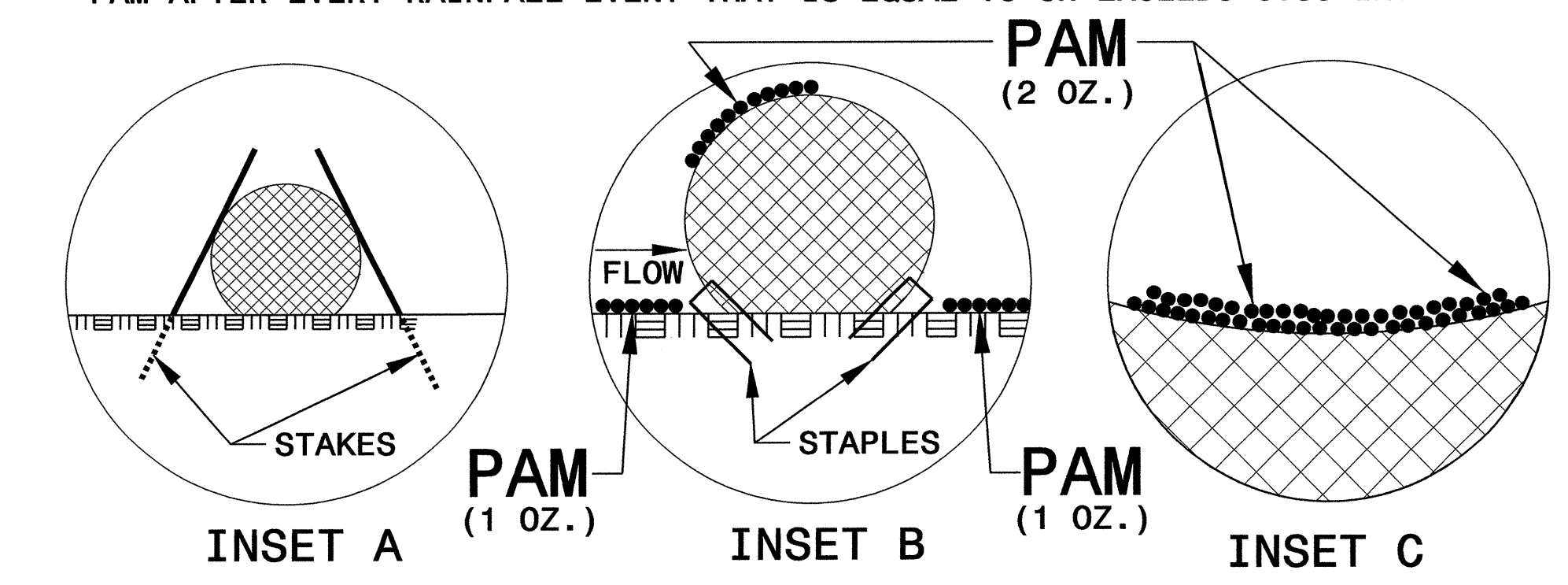
NOT TO SCALE

PROJECT REFERENCE NO. B-4599	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# WATTLE WITH POLYACRYLAMIDE (PAM) 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 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.





DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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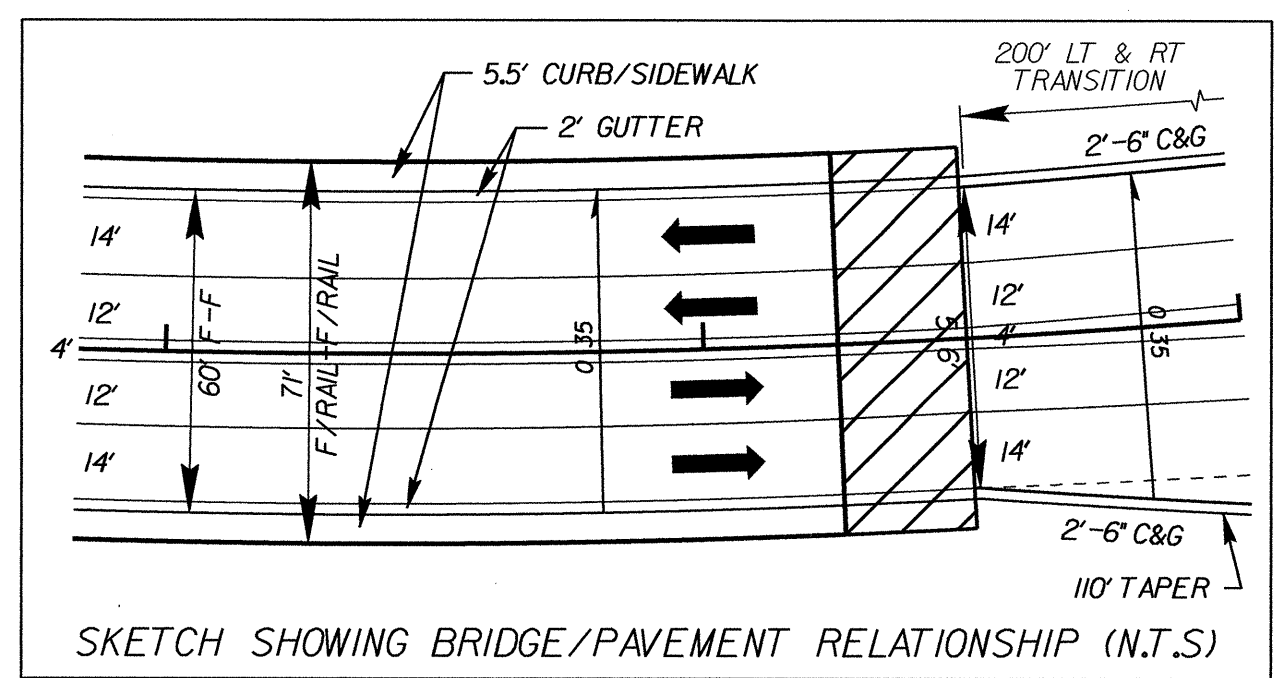
PROJECT REFERENCE NO. <i>B-4599</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# ***SOIL STABILIZATION TIMEFRAMES***

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.



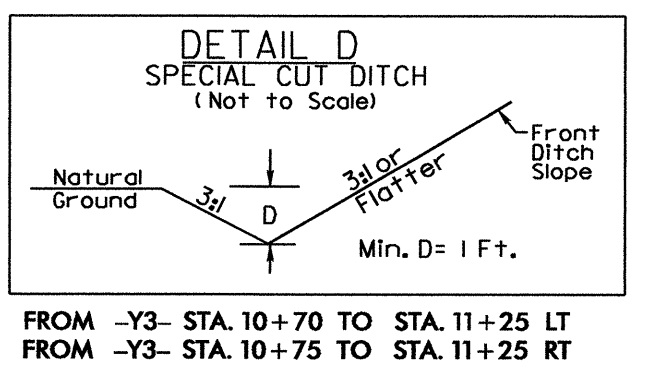
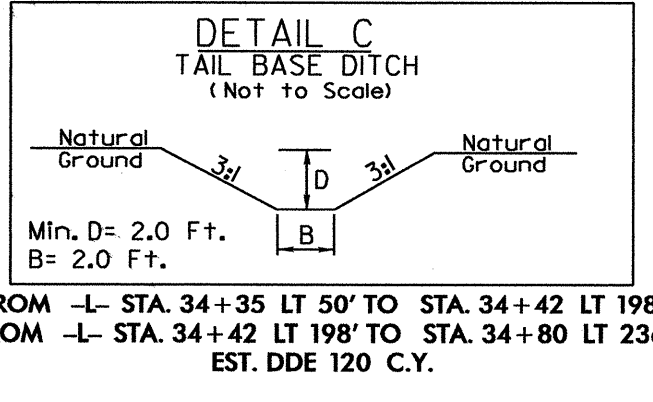
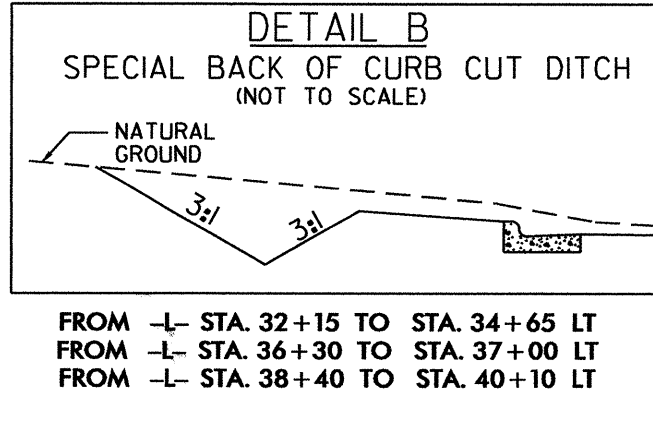
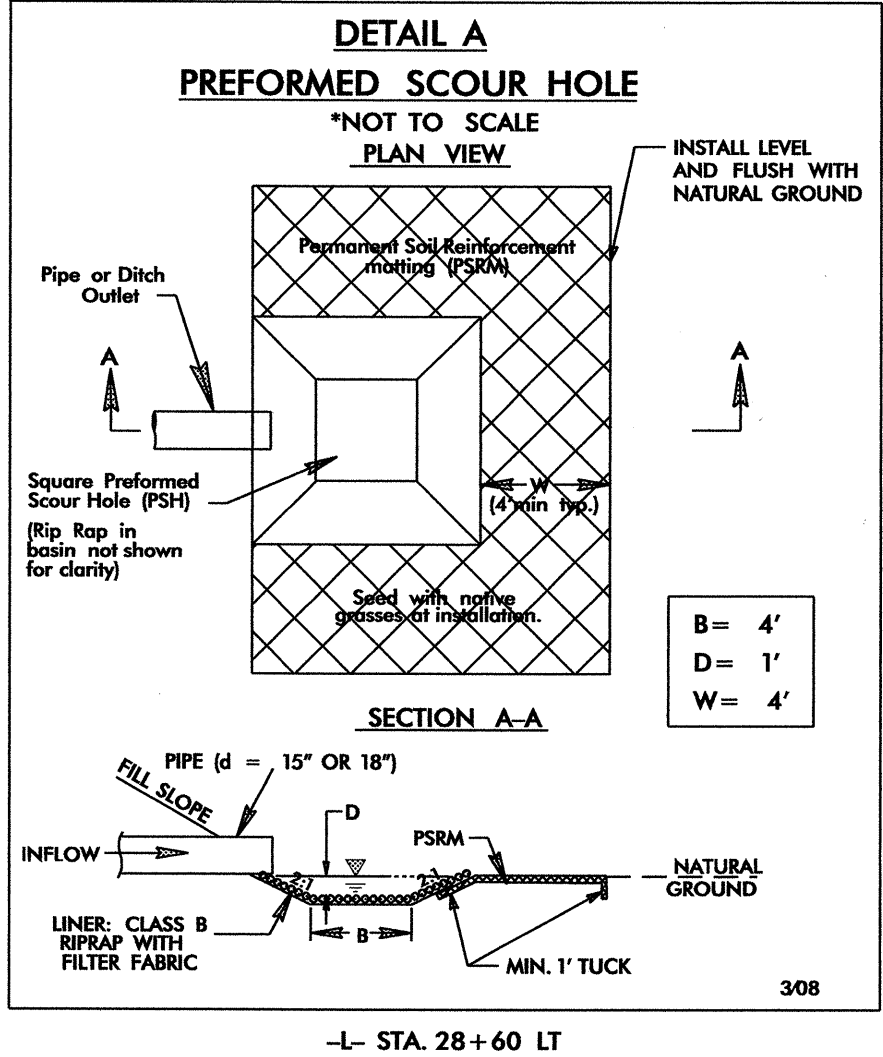
PROJECT REFERENCE NO.	SHEET NO.
B-4599	EC-05/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



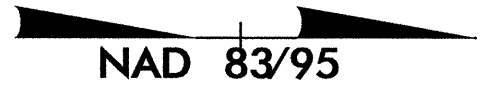
NOTE:  
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

THIS PUE TO BE TRANSFERRED TO DOMINION POWER AS REPLACEMENT TRANSMISSION LINE EASEMENT.



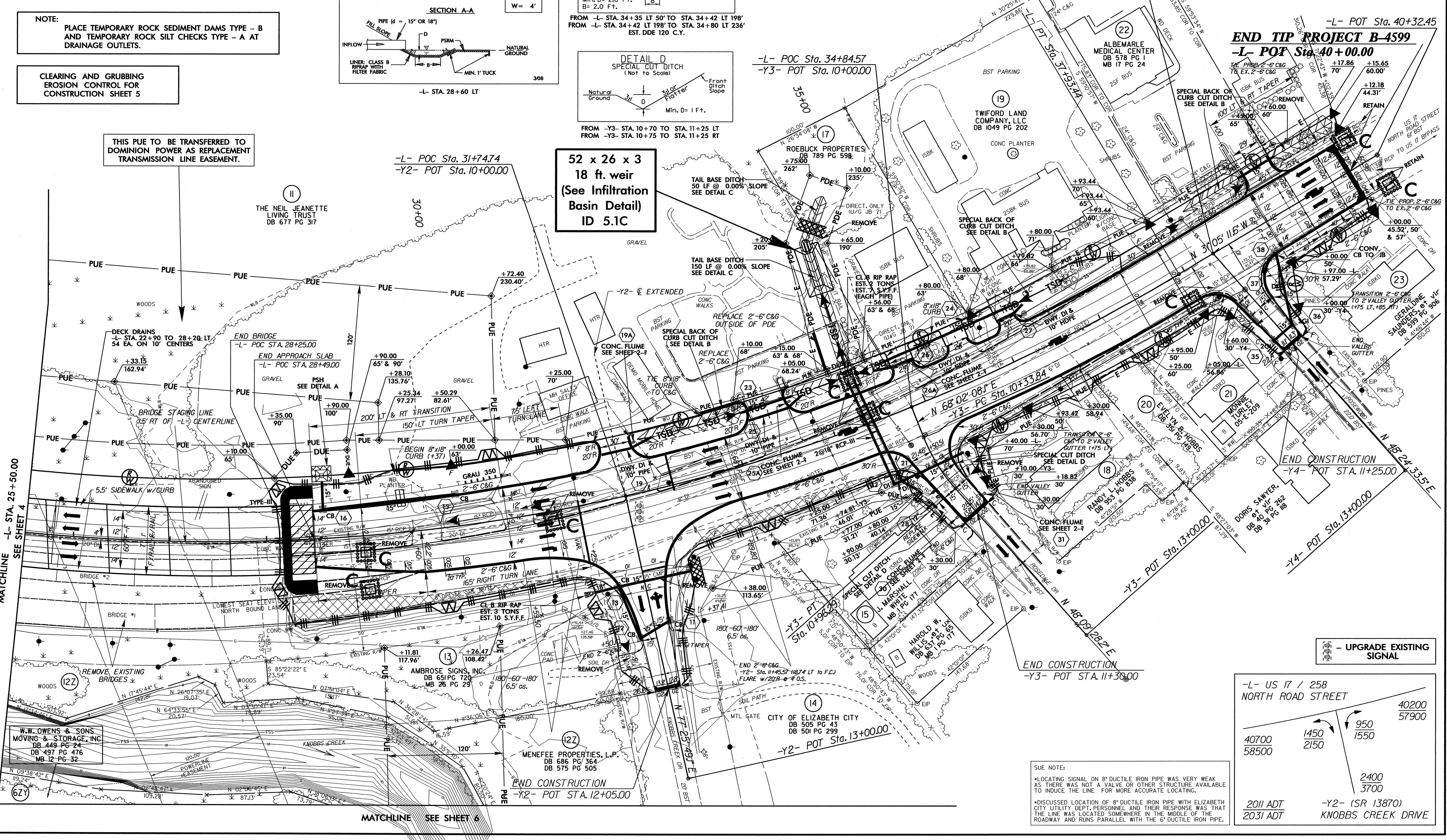
SEE SHEETS 7 & 8 FOR -L- PROFILE  
SEE SHEET 8 FOR -Y2-, -Y3-, & -Y4- PROFILES



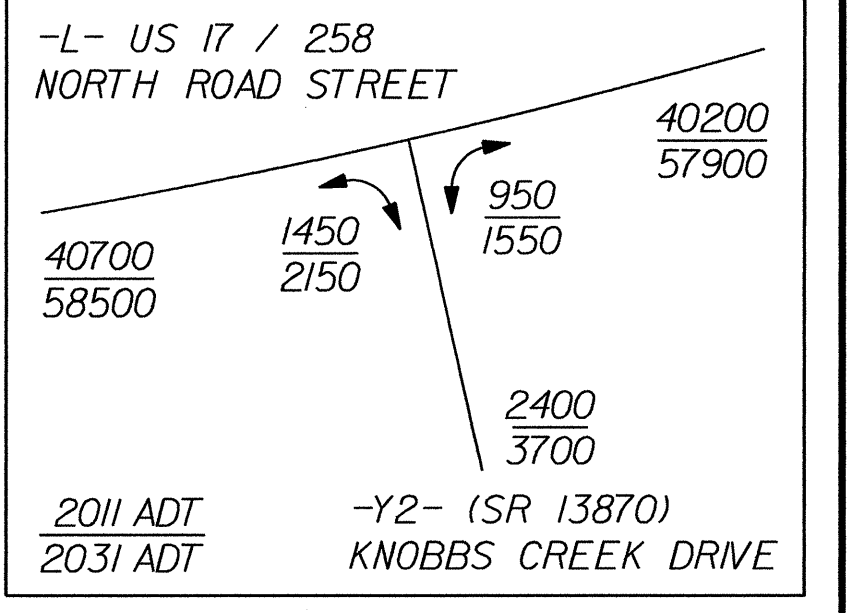
-L-  
PI Sta 27+60.68  
 $\Delta = 72' 33" (49' LT)$   
 $D = 2' 57" (2.2")$   
 $L = 2,456.64'$   
 $T = 1,423.88'$   
 $R = 1,940.00'$   
 $RO = 157.5' (PT)$   
 $V = 50 \text{ mph}$

-Y3-  
PI Sta 10+65.38  
 $\Delta = 19' 52" 39.9' (LT)$   
 $D = 3' 49" 51.6'$   
 $L = 62.45'$   
 $T = 31.54'$   
 $R = 180.00'$

8/17/99  
REVISIONS  
10-FEB-2012 10:24 R:\Environment\B-4599\_EC-dsn-psht5.dgn  
11-NOV-2011 10:24 R:\Environment\B-4599\_EC-dsn-psht5.dgn



SUE NOTE:  
•LOCATING SIGNAL ON 8" DUCTILE IRON PIPE WAS VERY WEAK AS THERE WAS NOT A VALVE OR OTHER STRUCTURE AVAILABLE TO INDUCE THE LINE FOR MORE ACCURATE LOCATING.  
•DISCUSSED LOCATION OF 8" DUCTILE IRON PIPE WITH ELIZABETH CITY UTILITY DEPT. PERSONNEL AND THEIR RESPONSE WAS THAT THE LINE WAS LOCATED SOMEWHERE IN THE MIDDLE OF THE ROADWAY AND RUNS PARALLEL WITH THE 6" DUCTILE IRON PIPE.

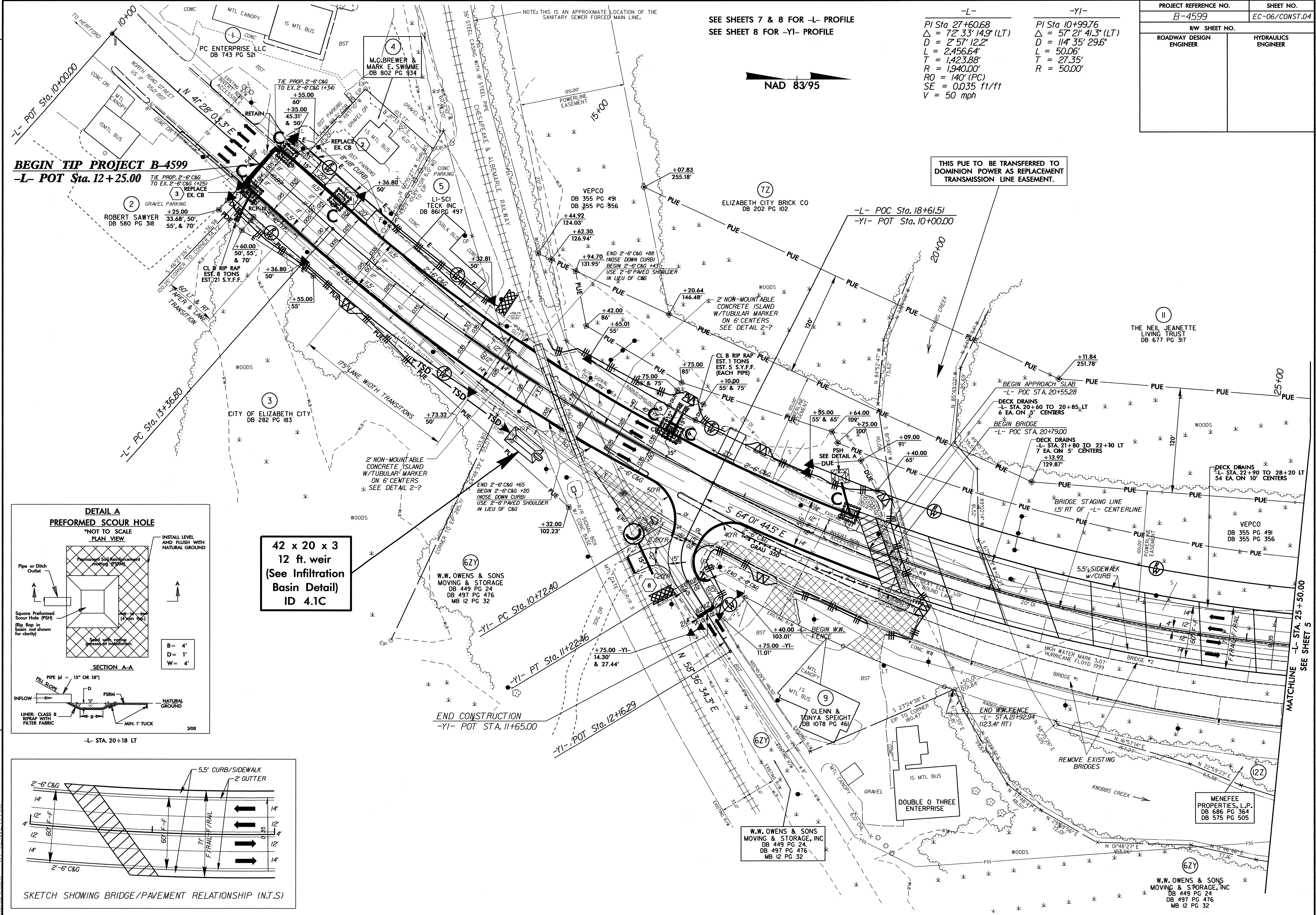
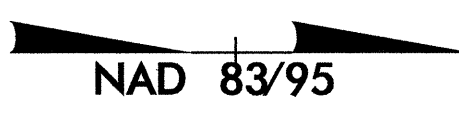


PROJECT REFERENCE NO.	SHEET NO.
B-4599	EC-06/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-  
 PI Sta 27+60.68  
 $\Delta = 72' 33" 14.9" (LT)$   
 $D = 2' 57" 12.2"$   
 $L = 2,456.64'$   
 $T = 1,423.88'$   
 $R = 1,940.00'$   
 $RO = 140' (PC)$   
 $SE = 0.035 \text{ ft/ft}$   
 $V = 50 \text{ mph}$

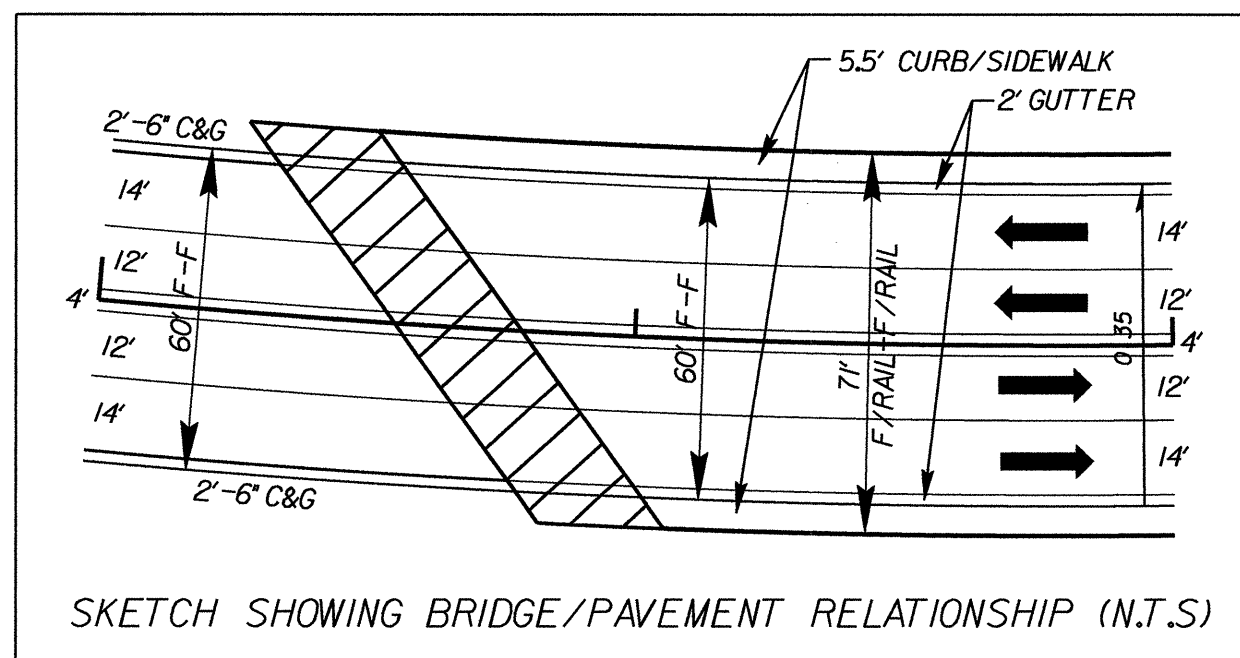
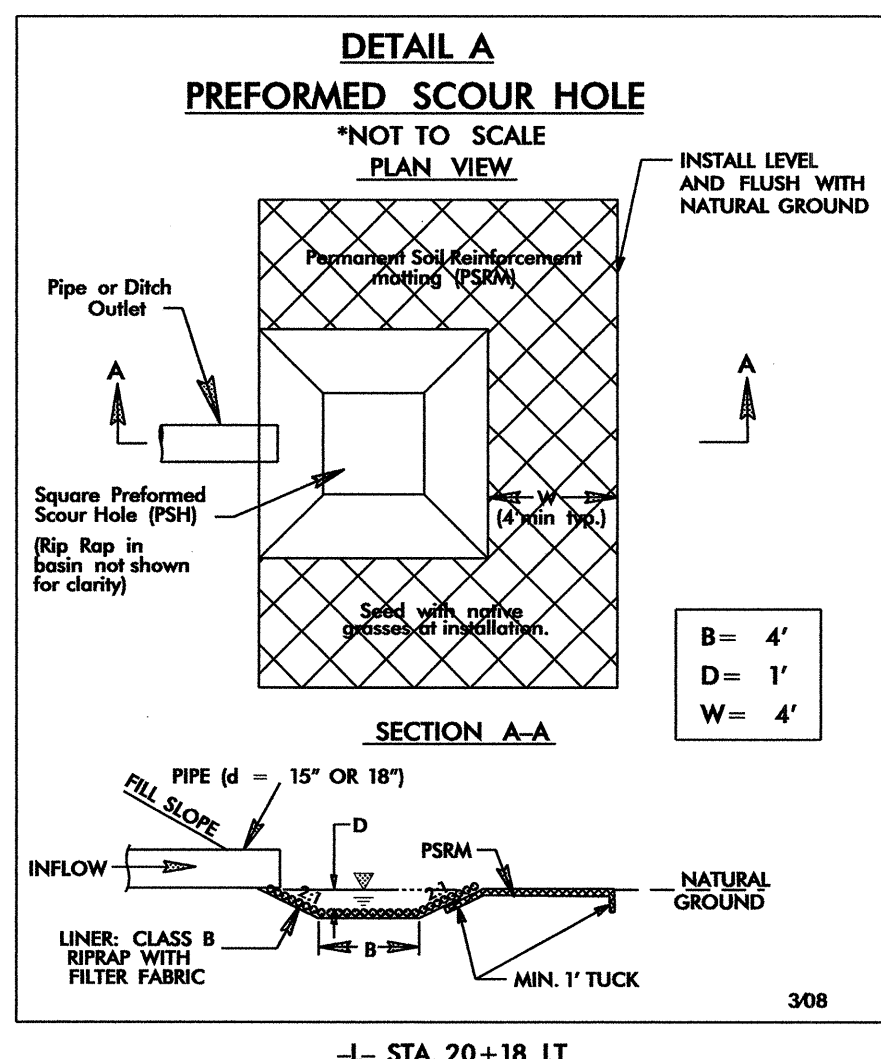
-YI-  
 PI Sta 10+99.76  
 $\Delta = 57' 21" 41.3" (LT)$   
 $D = 114' 35" 29.6"$   
 $L = 50.06'$   
 $T = 27.35'$   
 $R = 50.00'$

SEE SHEETS 7 & 8 FOR -L- PROFILE  
 SEE SHEET 8 FOR -YI- PROFILE



THIS PUE TO BE TRANSFERRED TO DOMINION POWER AS REPLACEMENT TRANSMISSION LINE EASEMENT.

42 x 20 x 3  
 12 ft. weir  
 (See Infiltration Basin Detail)  
 ID 4.1C



REVISIONS

8/17/99  
 10-FEB-2012 10:19  
 R:\Environmental\Design\B-4599\_EC.dsn-psn4.dwg  
 mchancek

MATCHLINE -L- STA. 25+50.00  
 SEE SHEET 5

W.W. OWENS & SONS  
 MOVING & STORAGE, INC  
 DB 449 PG 24  
 DB 497 PG 476  
 MB 12 PG 32



