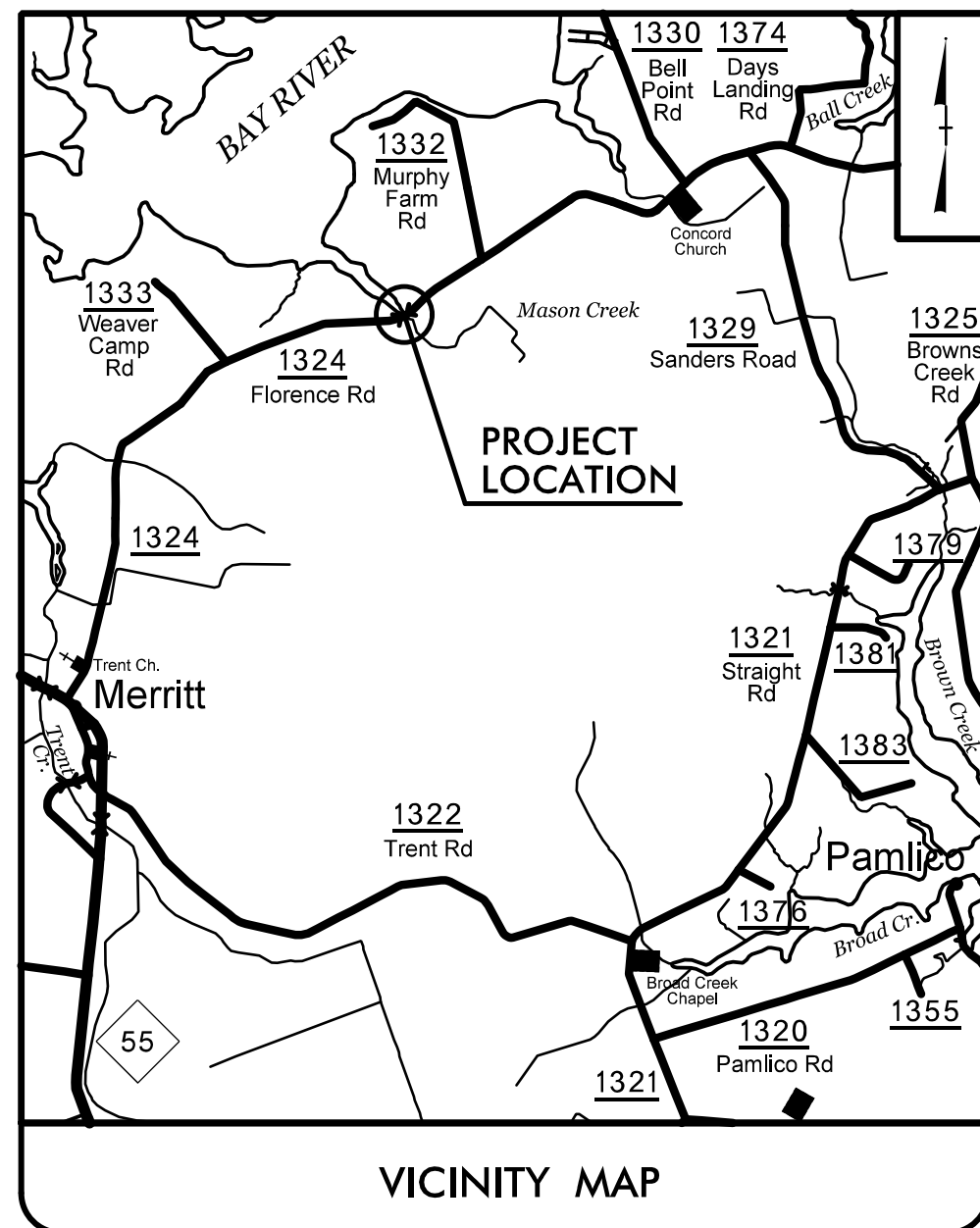


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**TIP PROJECT: B-4598**

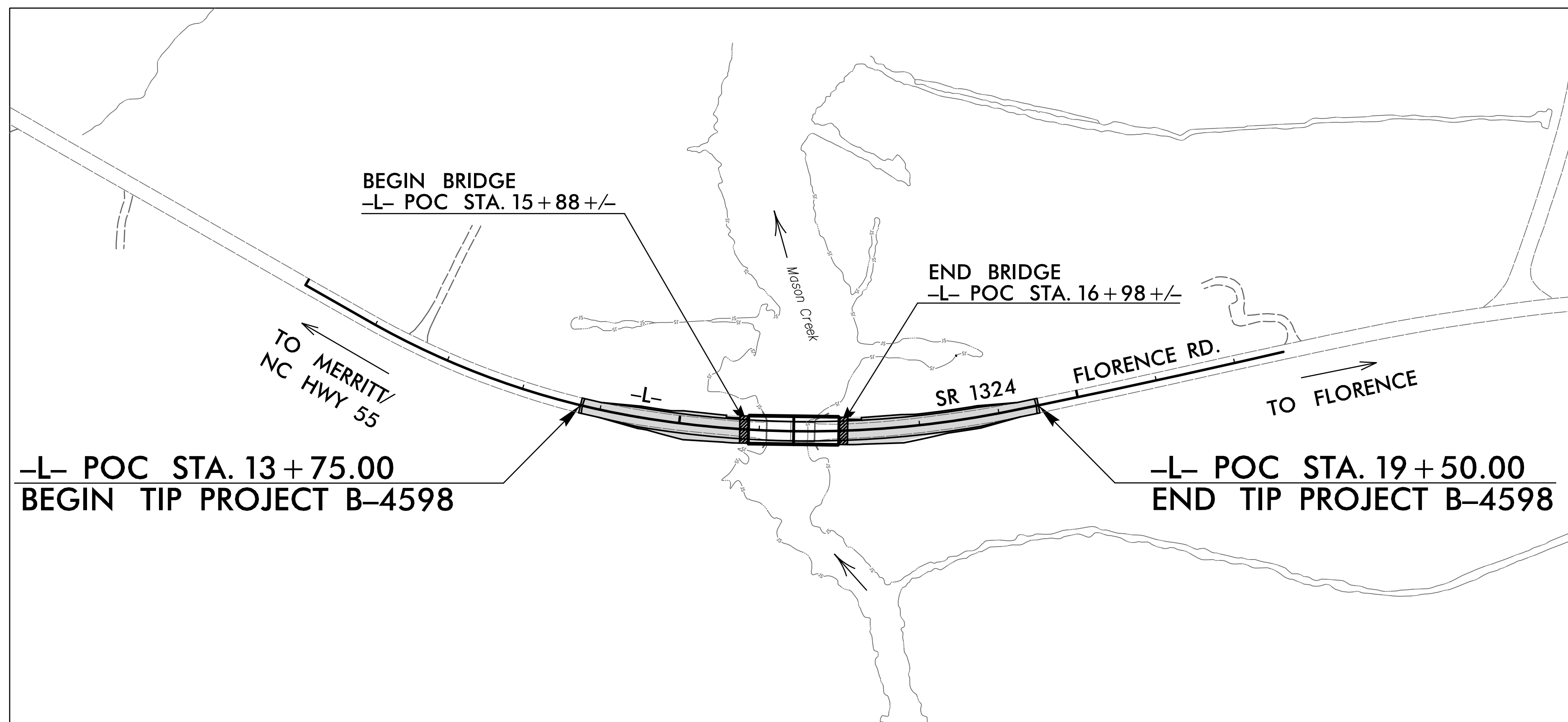
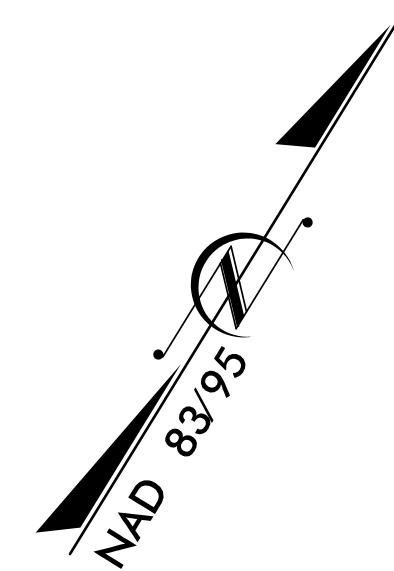


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

PAMLICO COUNTY

**LOCATION: BRIDGE NO. 16 OVER MASON CREEK  
ON SR 1324 (FLORENCE ROAD)**

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



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4598	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38426.1.2	BRZ-1324(5)	PE	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	---X---
1622.01	Temporary Berms and Slope Drains	---X---
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▨
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▨
1633.02	Temporary Rock Silt Check Type-B	▨
	Wattle / Coir Fiber Wattle	—W—
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	—W—
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	▭

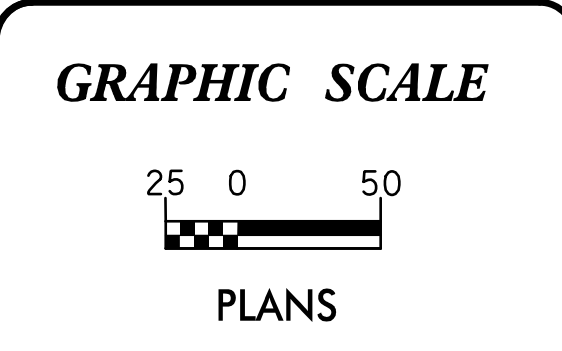
**THIS PROJECT CONTAINS  
EROSION CONTROL PLANS  
FOR CLEARING AND  
GRUBBING PHASE OF  
CONSTRUCTION.**

**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.*

**HIGH QUALITY WATER(S) EXIST  
ON THIS PROJECT**  
*High Quality Water Zone(s) Exist  
From Sta. \_\_\_\_\_ BEGIN  
to Sta. \_\_\_\_\_ END  
Refer To E. C. Special Provisions  
for Special Considerations.*

**CONTRACT:**



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

*Prepared In the Office of:*  
**TGS ENGINEERS**  
804-C N. LAFAYETTE ST.  
SHELBY, NC 28150  
**2012 STANDARD SPECIFICATIONS**  
  
*Designed by:*  
**ANDREW H. COCHRANE, PE**      **3015**  
NAME      LEVEL III CERTIFICATION NO.

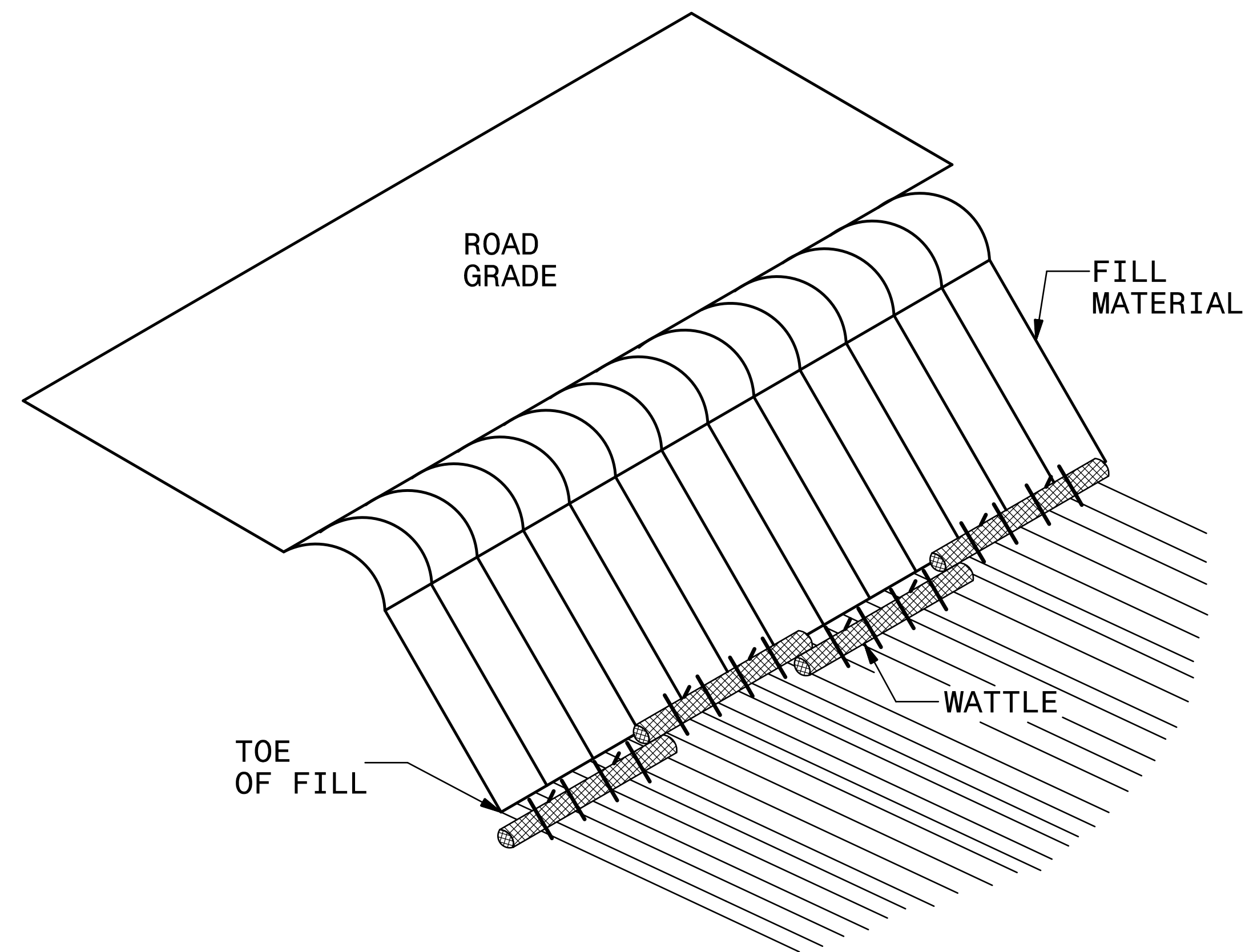
*Reviewed In the Office of:*  
**ROADSIDE ENVIRONMENTAL UNIT**  
1 South Wilmington St.  
Raleigh, NC 27611  
**2012 STANDARD SPECIFICATIONS**  
  
*Reviewed by:*  
**WES CHANDLER, EI**

High Quality Water Zone(s) Exist

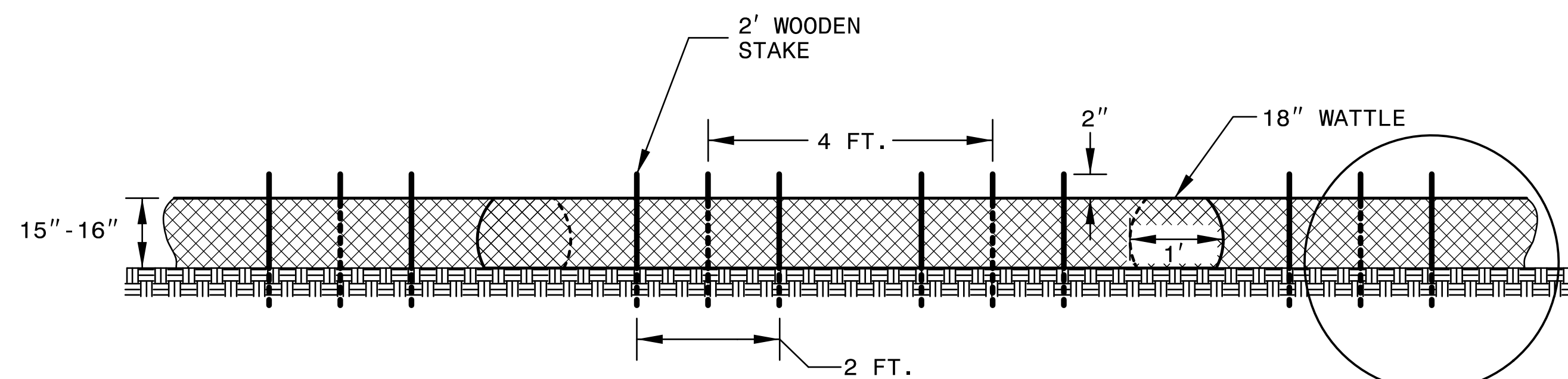
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type 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		

PROJECT REFERENCE NO. <i>B-4598</i>	SHEET NO. <i>EC-2</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# COIR FIBER WATTLE BARRIER DETAIL



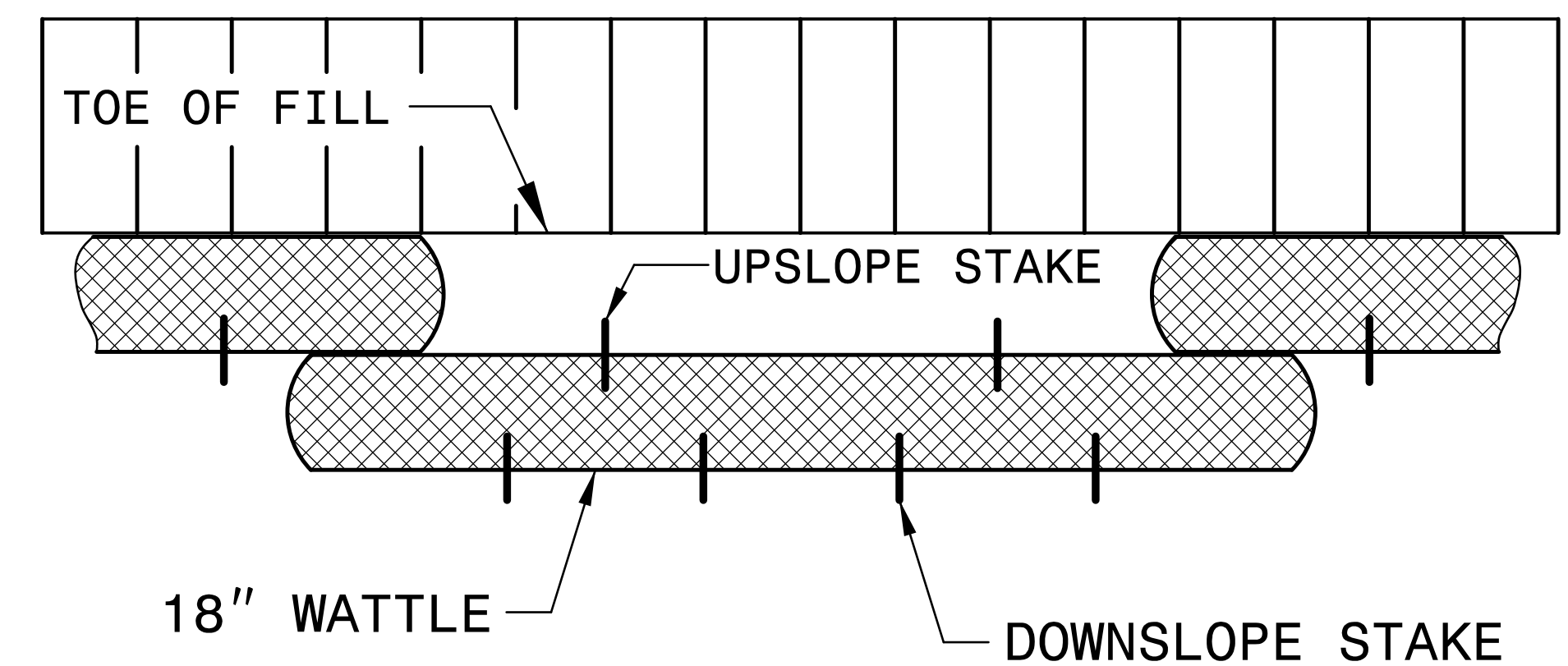
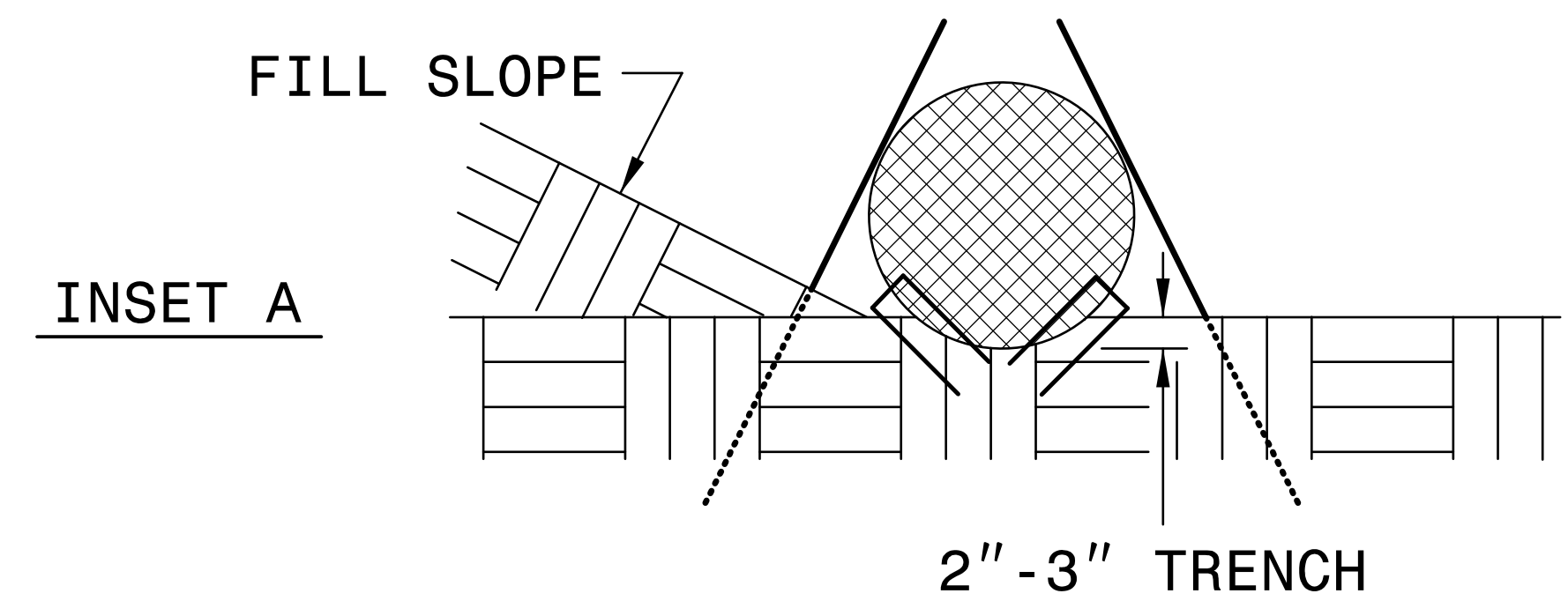
**ISOMETRIC VIEW**



**FRONT VIEW**

**NOTES:**

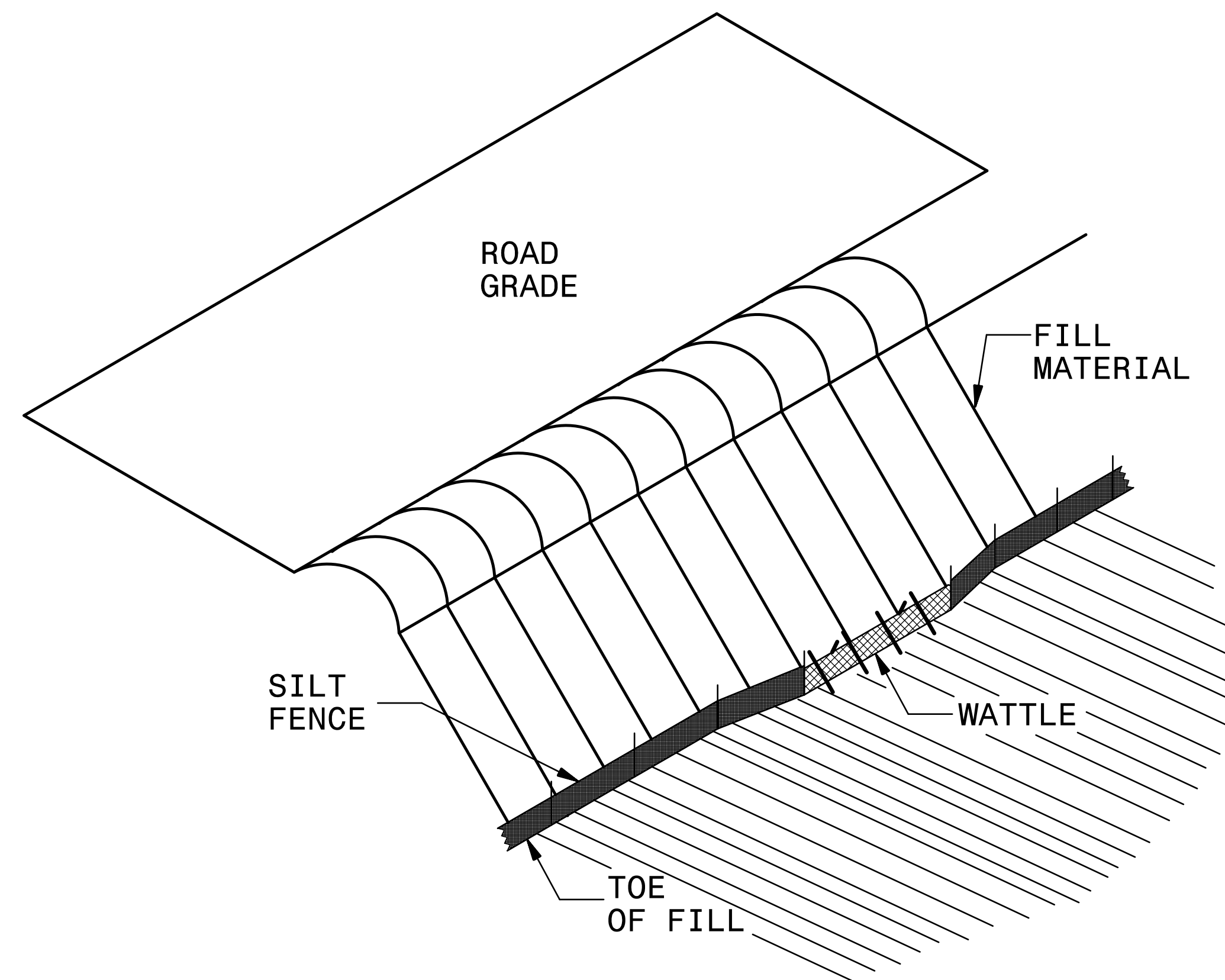
- USE MINIMUM 18 IN. NOMINAL DIAMETER COIR FIBER (COCONUT) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 2 TO 3 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLES ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- FOR BREAKS ALONG LARGE SLOPES, USE MAXIMUM SPACING OF 25 FT.



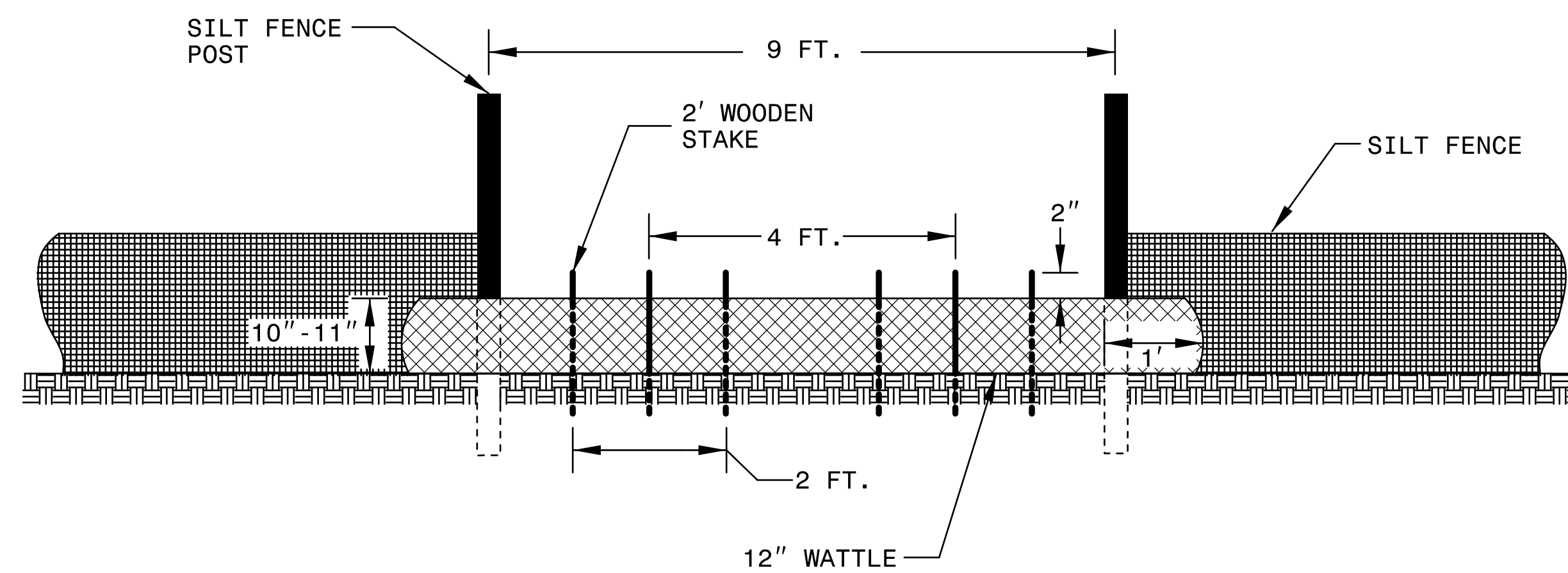
**TOP VIEW**

# SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO. <i>B-4598</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**ISOMETRIC VIEW**

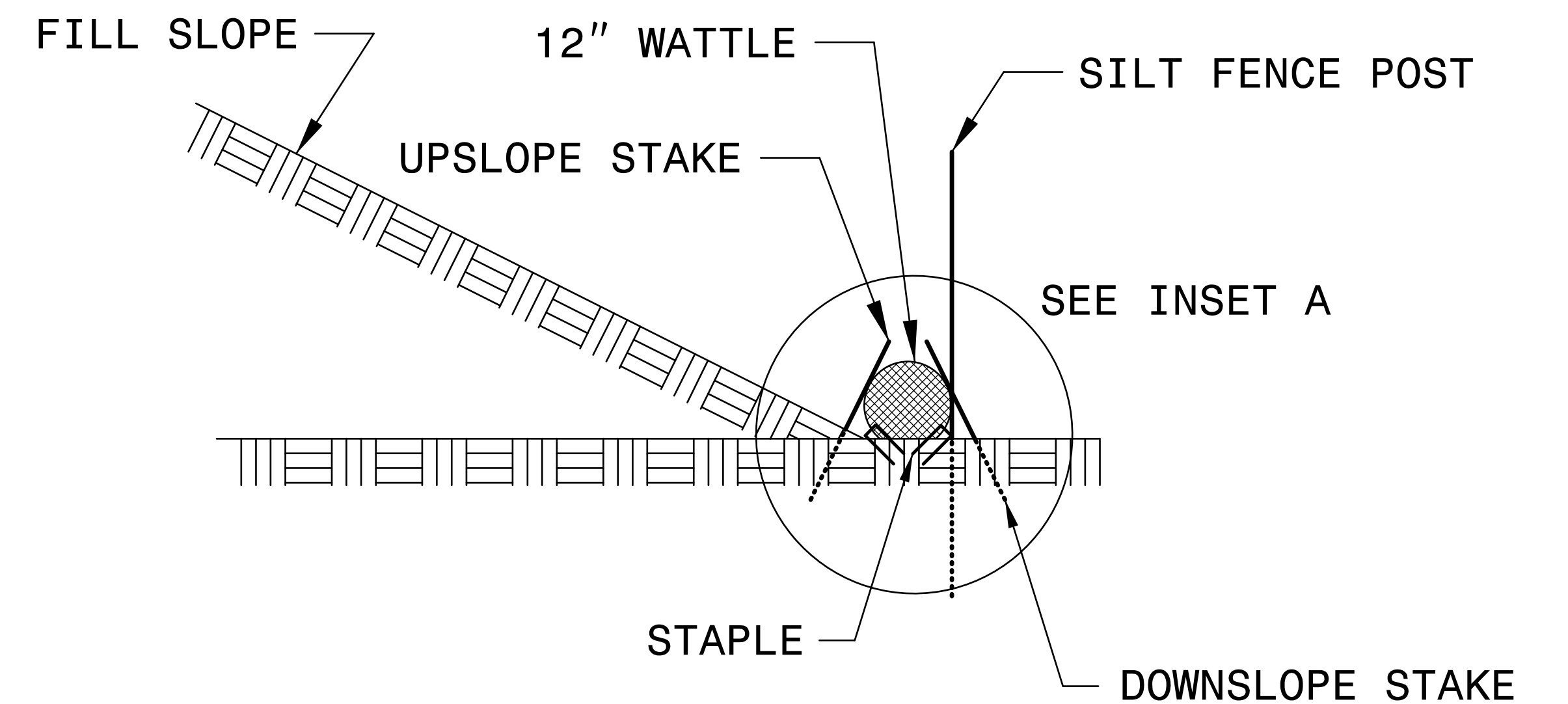
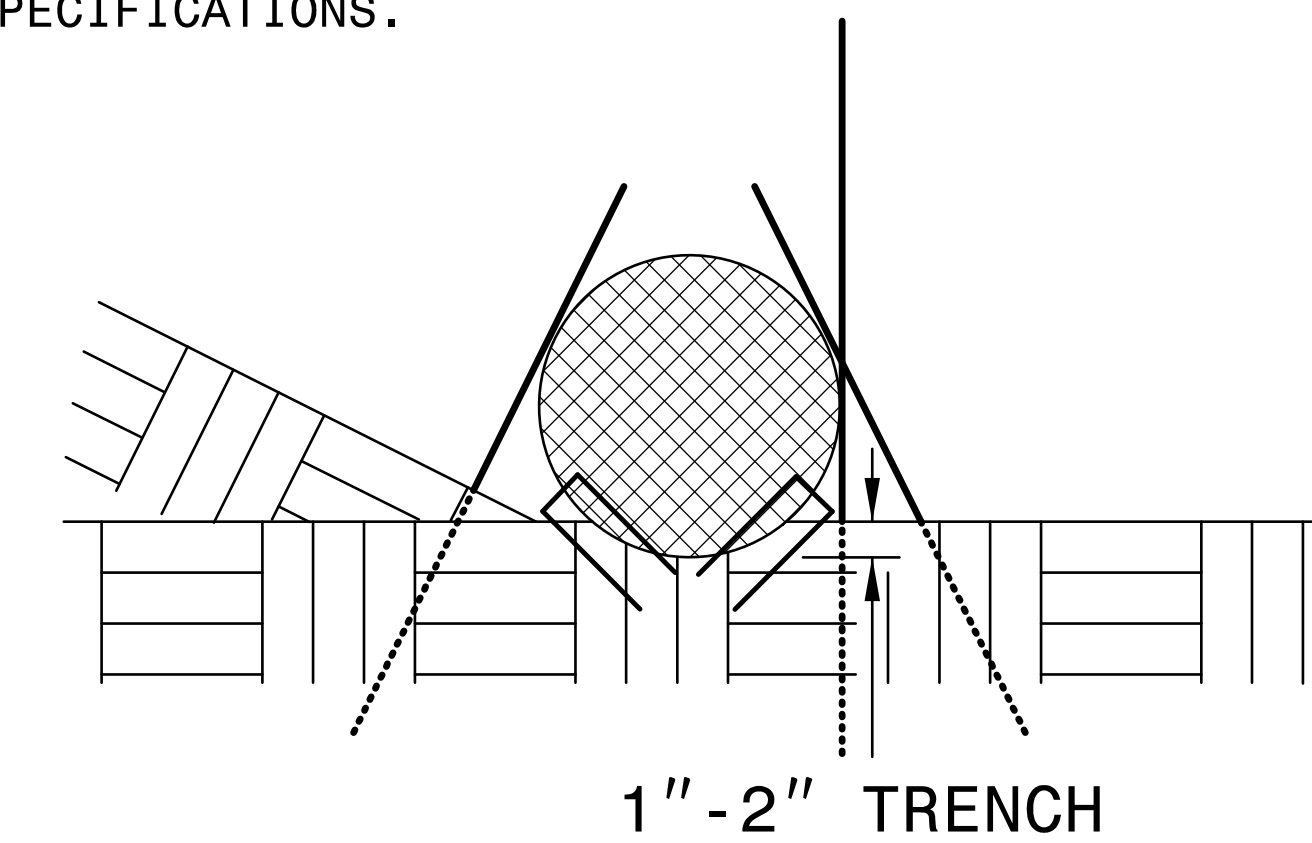


**VIEW FROM SLOPE**

**NOTES:**

- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- 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.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

**INSET A**



**SIDE VIEW**

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

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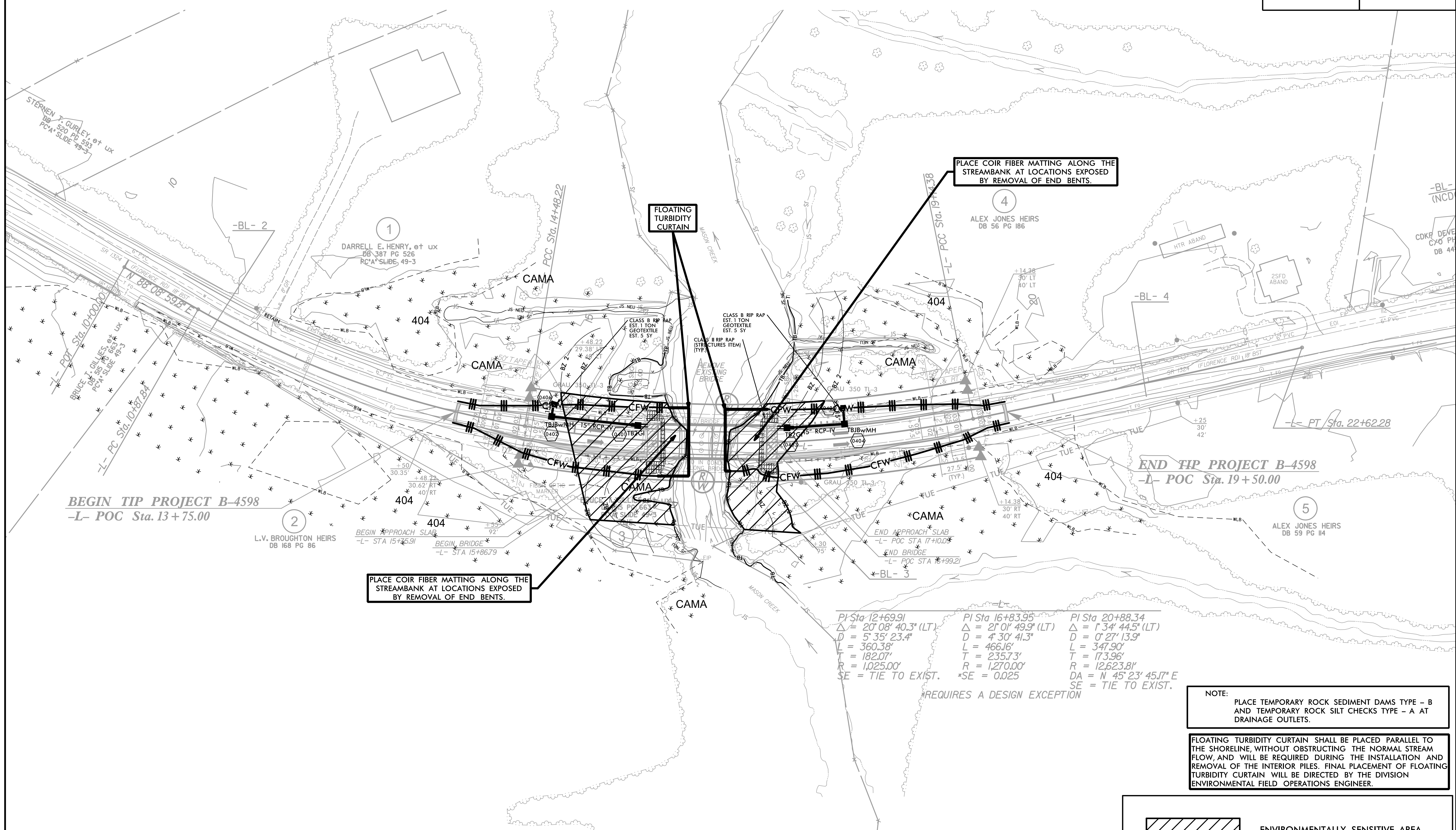
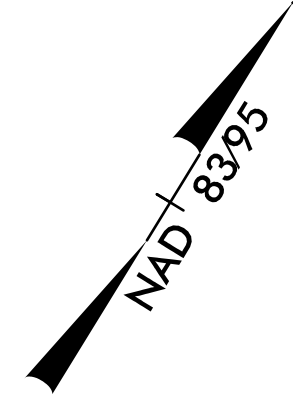
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PROJECT REFERENCE NO. <i>B-4598</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# ***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-4598	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**BEGIN TIP PROJECT B-4598**  
-L- POC Sta. 13+75.00

**END TIP PROJECT B-4598**  
-L- POC Sta. 19+50.00

PLACE COIR FIBER MATTING ALONG THE STREAMBANK AT LOCATIONS EXPOSED BY REMOVAL OF END BENTS.

PLACE COIR FIBER MATTING ALONG THE STREAMBANK AT LOCATIONS EXPOSED BY REMOVAL OF END BENTS.

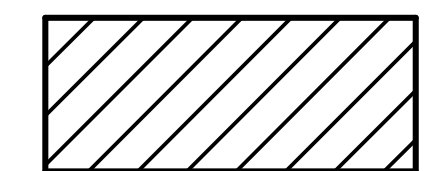
FLOATING TURBIDITY CURTAIN

PI Sta 12+69.91 $\Delta = 20' 08" 40.3" (LT)$ $D = 5' 35" 23.4"$ $L = 360.38'$ $T = 182.07'$ $R = 1,025.00'$ SE = TIE TO EXIST.	PI Sta 16+83.95 $\Delta = 21' 01" 49.9" (LT)$ $D = 4' 30" 41.3"$ $L = 466.16'$ $T = 235.73'$ $R = 1,270.00'$ *SE = 0.025	PI Sta 20+88.34 $\Delta = 1' 34" 44.5" (LT)$ $D = 0' 27" 13.9"$ $L = 347.90'$ $T = 173.96'$ $R = 12,623.81'$ $DA = N 45' 23" 45.17" E$ SE = TIE TO EXIST.
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REQUIRES A DESIGN EXCEPTION

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

FLOATING TURBIDITY CURTAIN SHALL BE PLACED PARALLEL TO THE SHORELINE, WITHOUT OBSTRUCTING THE NORMAL STREAM FLOW, AND WILL BE REQUIRED DURING THE INSTALLATION AND REMOVAL OF THE INTERIOR PILES. FINAL PLACEMENT OF FLOATING TURBIDITY CURTAIN WILL BE DIRECTED BY THE DIVISION ENVIRONMENTAL FIELD OPERATIONS ENGINEER.

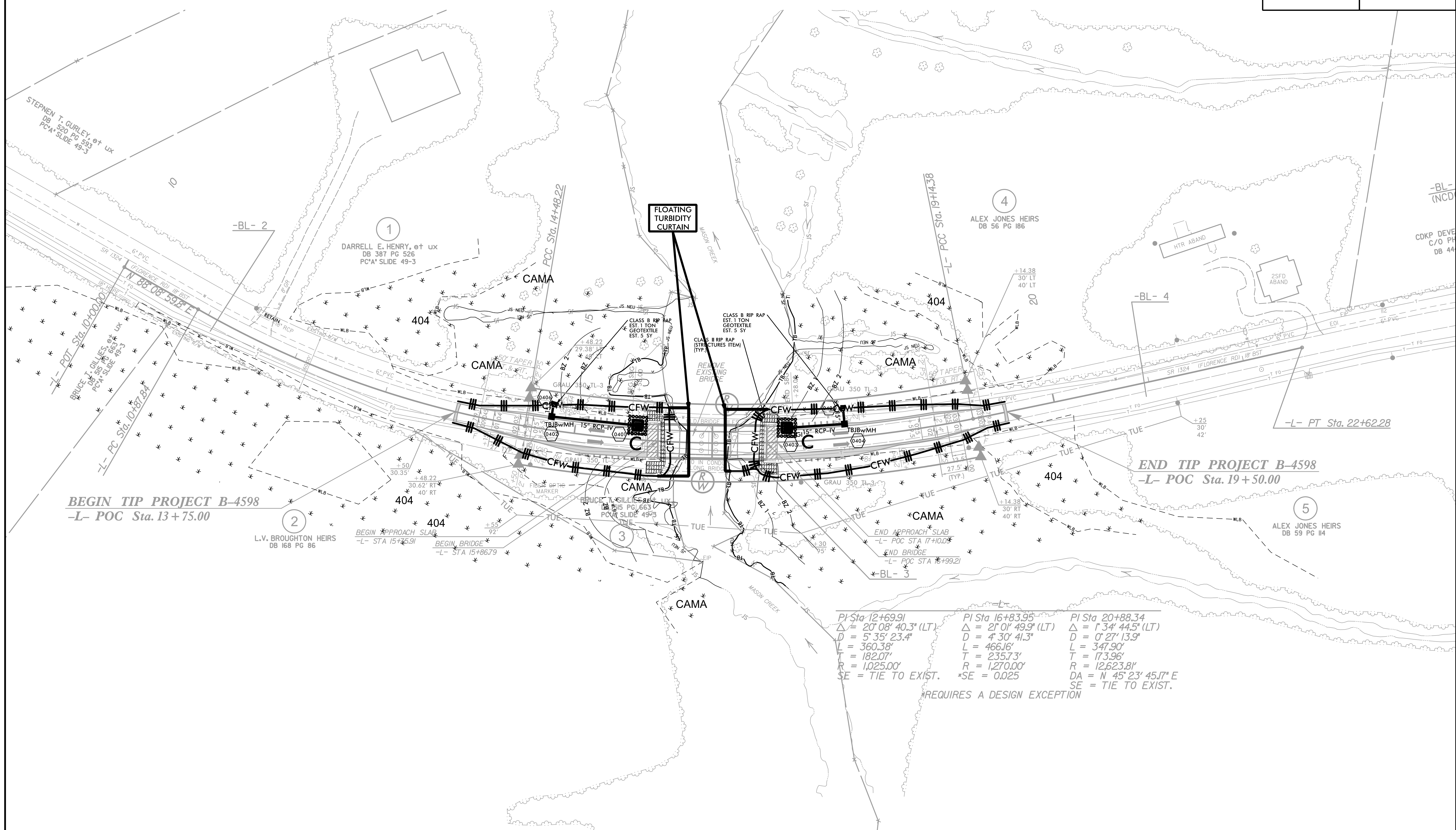
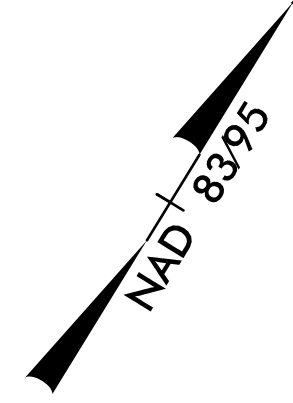


ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

NOTE: UTILIZE SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

PROJECT REFERENCE NO. <b>B-4598</b>	SHEET NO. <b>EC-5/CONST.4</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**BEGIN TIP PROJECT B-4598**  
-L- POC Sta. 13+75.00

**END TIP PROJECT B-4598**  
-L- POC Sta. 19+50.00

PI Sta 12+69.91 Δ = 20' 08" 40.3" (LT) D = 5' 35" 23.4" L = 360.38' T = 182.07' R = 1,025.00' SE = TIE TO EXIST.	PI Sta 16+83.95 Δ = 21' 01" 49.9" (LT) D = 4' 30" 41.3" L = 466.16' T = 235.73' R = 1,270.00' *SE = 0.025	PI Sta 20+88.34 Δ = 1' 34" 44.5" (LT) D = 0' 27" 13.9" L = 347.90' T = 173.96' R = 12,623.81' DA = N 45° 23' 45.17" E SE = TIE TO EXIST.
--	---	---

REQUIRES A DESIGN EXCEPTION

**NOTE:**  
UTILIZE SPECIAL STILLING BASIN(S) AS STILLING BASIN WHERE APPLICABLE.

FLOATING TURBIDITY CURTAIN WILL BE REQUIRED DURING THE CONSTRUCTION OF INTERIOR PILES. FINAL PLACEMENT OF FLOATING TURBIDITY CURTAIN WILL BE DIRECTED BY THE DIVISION ENVIRONMENTAL FIELD OPERATIONS ENGINEER.

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.