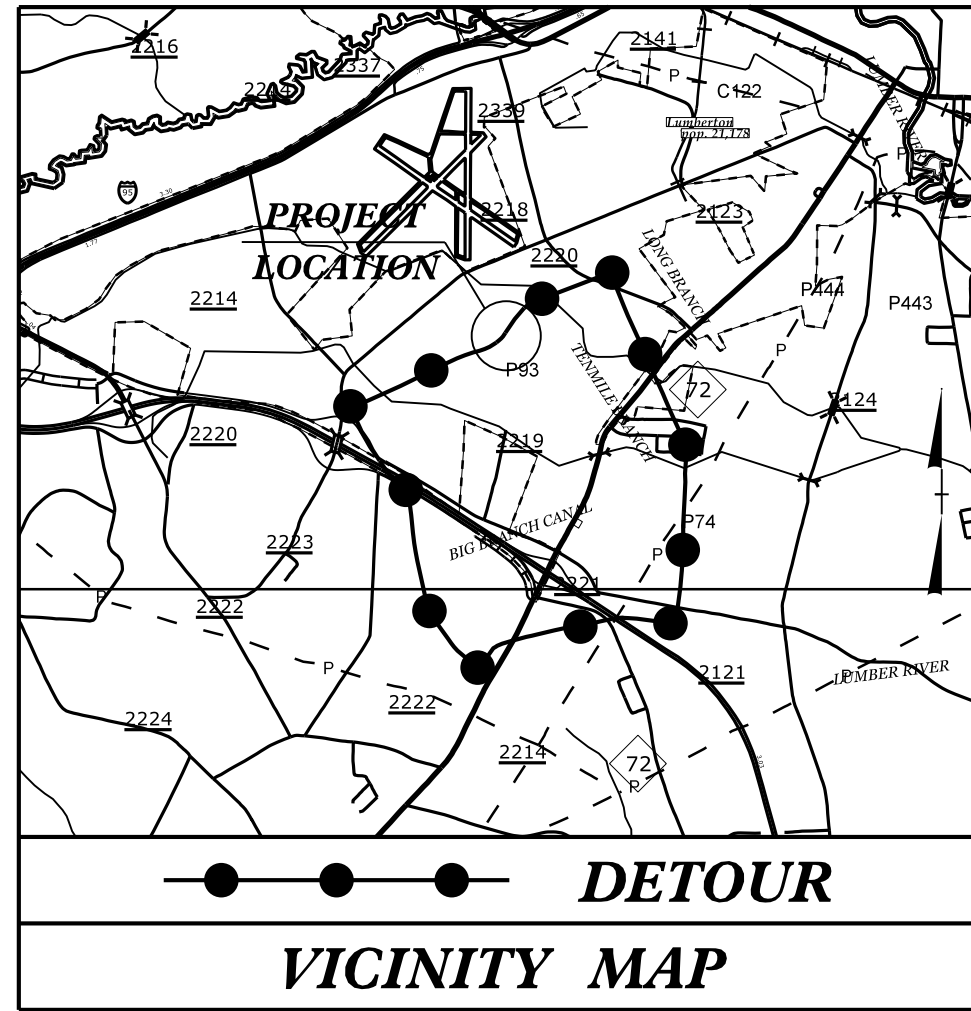


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numbers appear on each page, on the dates appearing  
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**TIP PROJECT: B-5334**



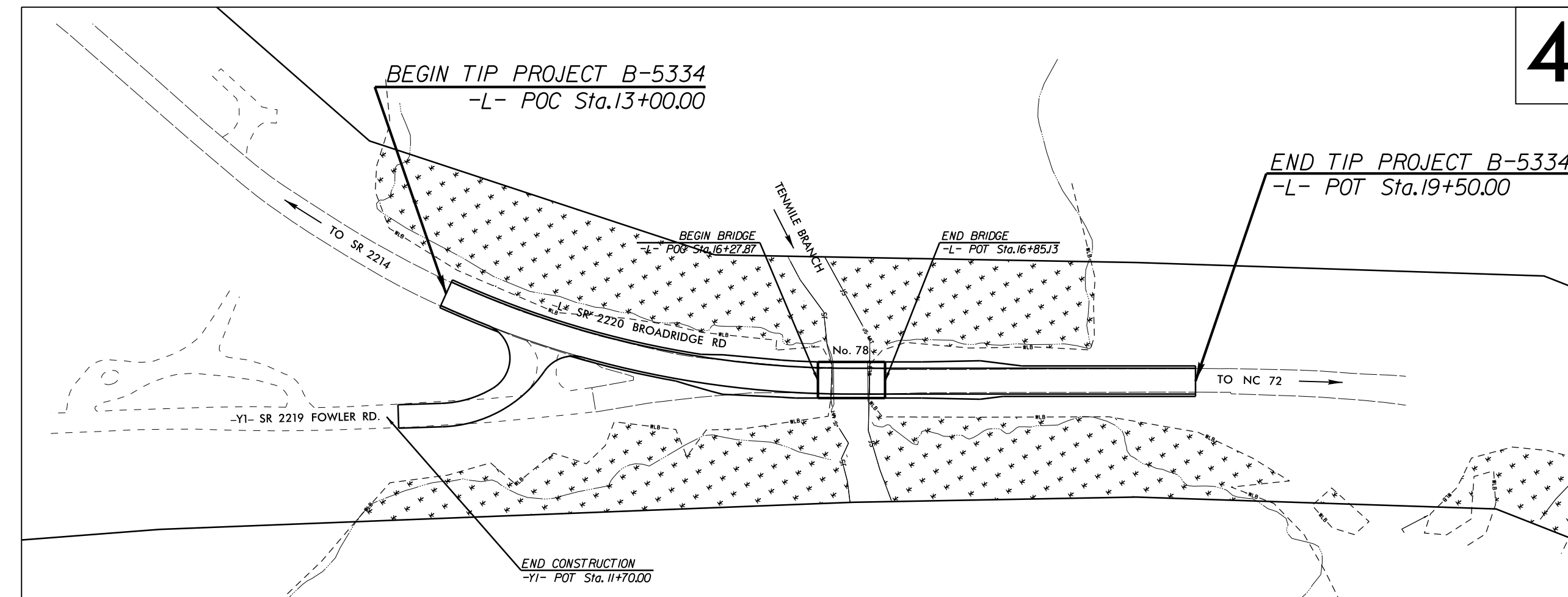
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**ROBESON COUNTY**

**LOCATION: REPLACE BRIDGE 78 OVER TENMILE BRANCH  
ON SR 2220 (NORTH BROADRIDGE ROAD)**

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



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5334	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**EROSION AND SEDIMENT CONTROL MEASURES**

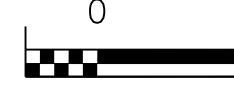
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	△△△△△△△△
1622.01	Temporary Berms and Slope Drains	—
1630.02	Silt Basin Type B	▨
1633.01	Temporary Rock Silt Check Type-A	▩
	Temporary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

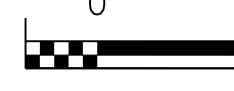
**GRAPHIC SCALE**



PLANS



PROFILE (HORIZONTAL)



PROFILE (VERTICAL)

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 1, 2016  
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**

Designed by:  
**Natalie Chan, P.E.** **3444**  
NAME LEVEL III CERTIFICATION NO.

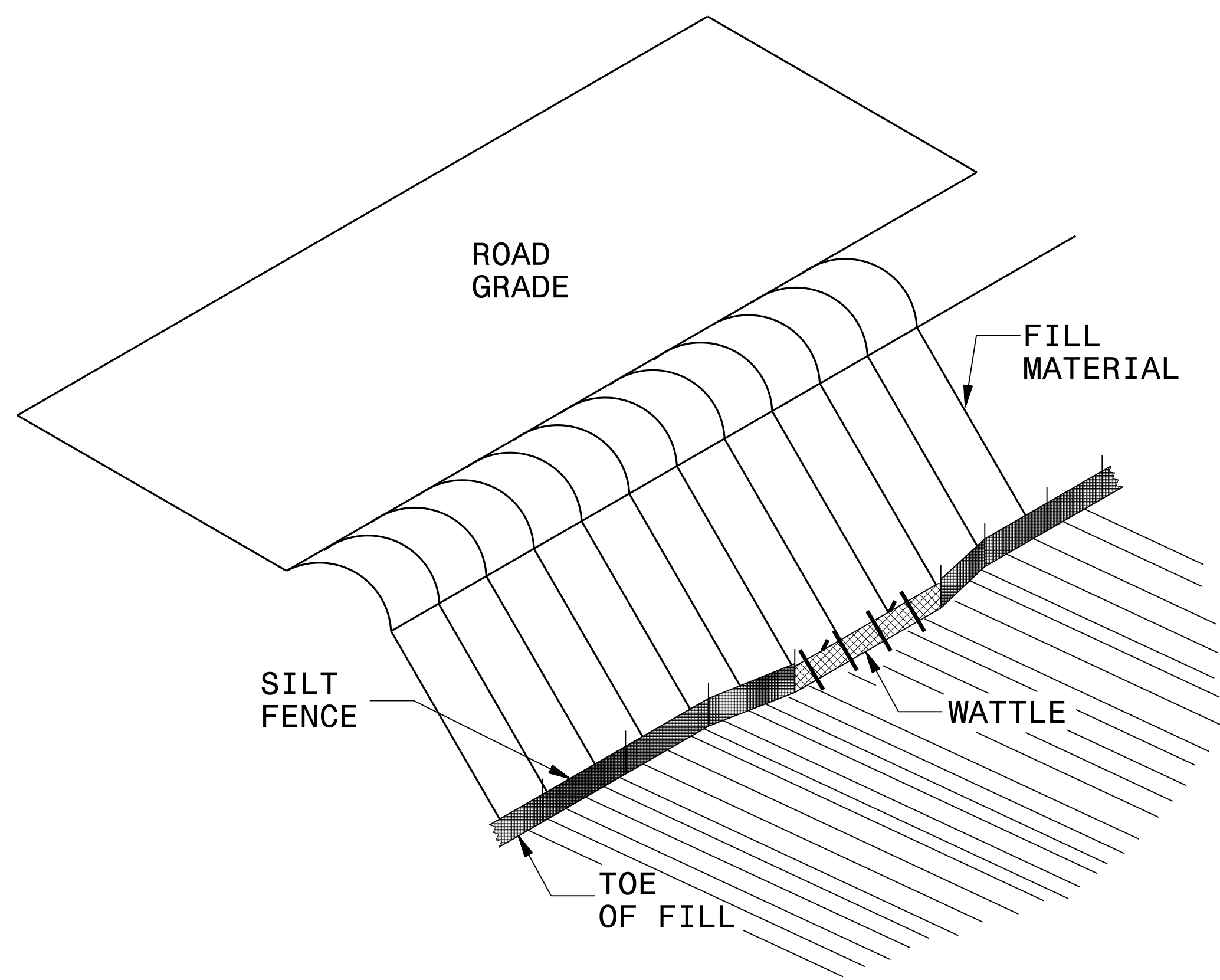
Roadway Standard Drawings

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.

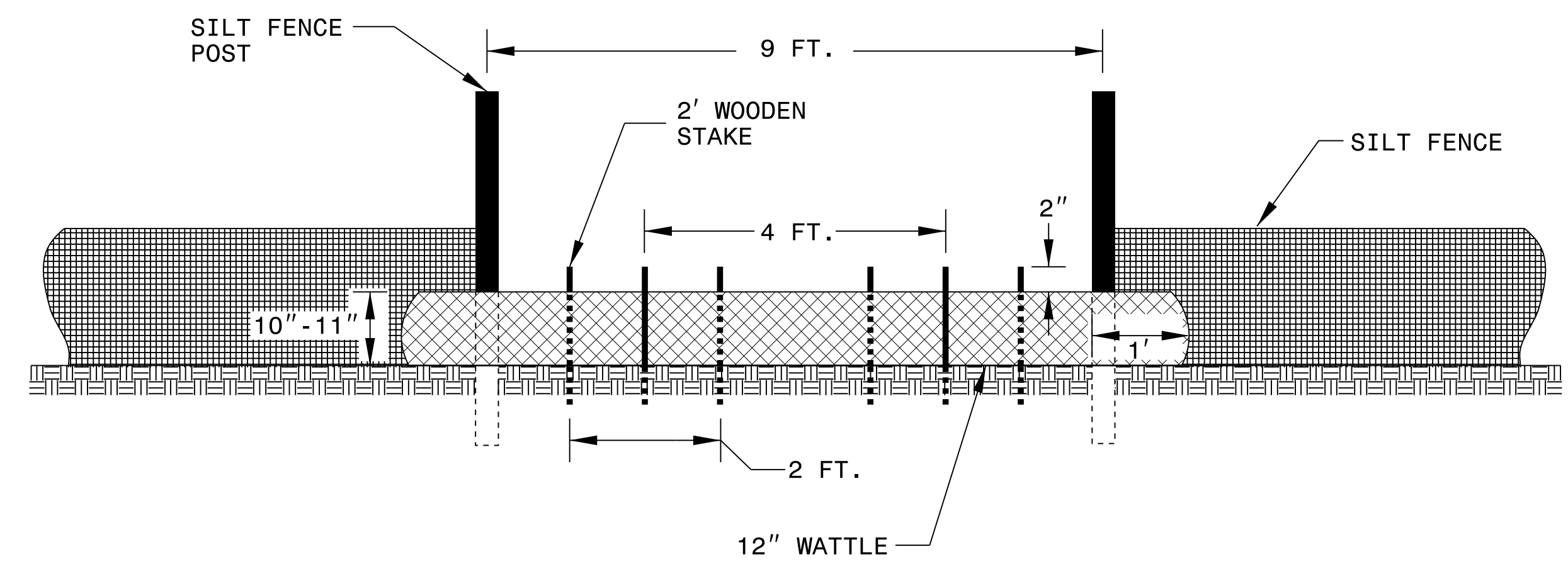
1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1633.03 Temporary Rock Silt Check Type C
1630.02 Silt Basin Type A	1634.01 Temporary Rock Sediment Dam Type A
1630.03 Temporary Silt Ditch	1634.02 Temporary Rock Sediment Dam Type B
1630.04 Stilling Basin	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.05 Temporary Diversion	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.06 Special Stilling Basin	1640.01 Coir Fiber Jaffle
1631.01 Matting Installation	1645.01 Temporary Stream Crossing

# SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO. B-5334	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**ISOMETRIC VIEW**

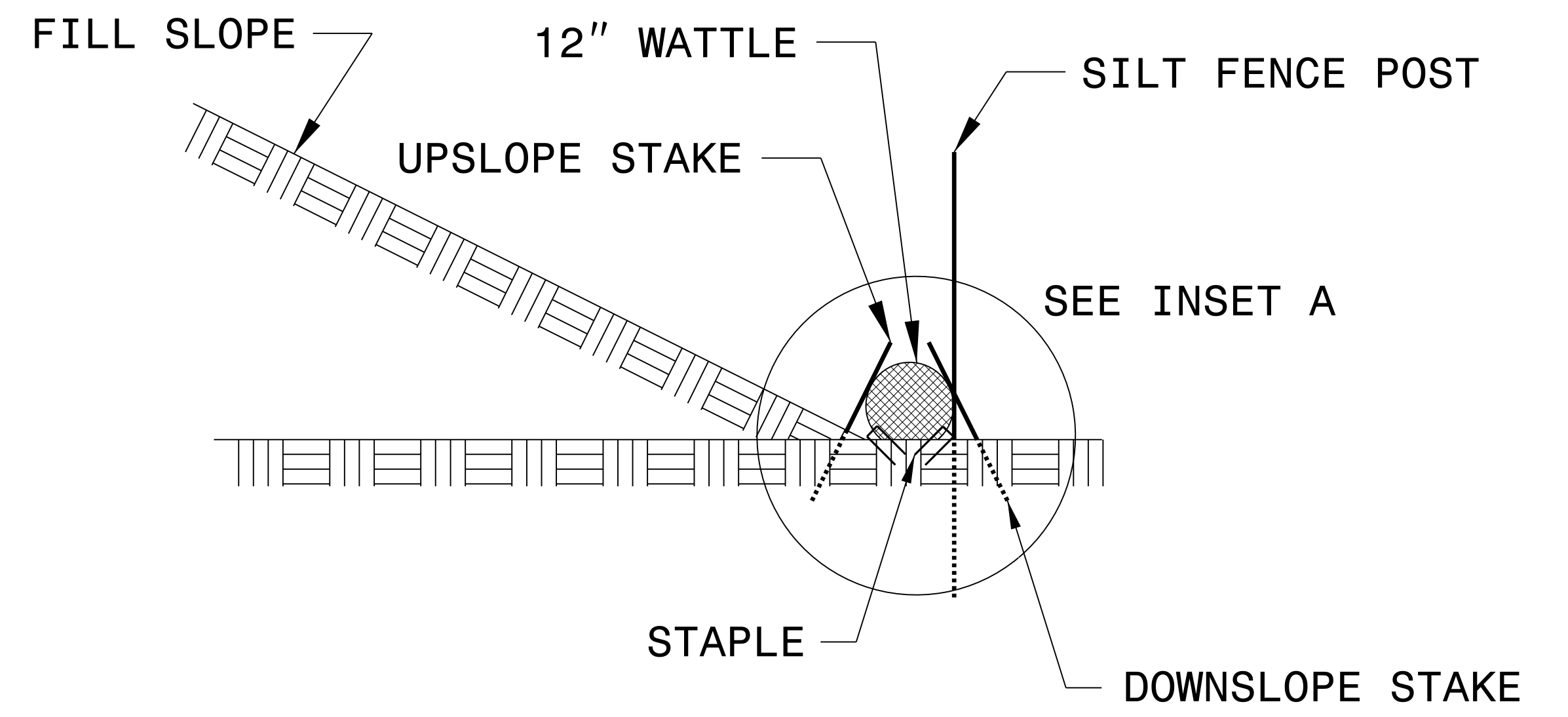
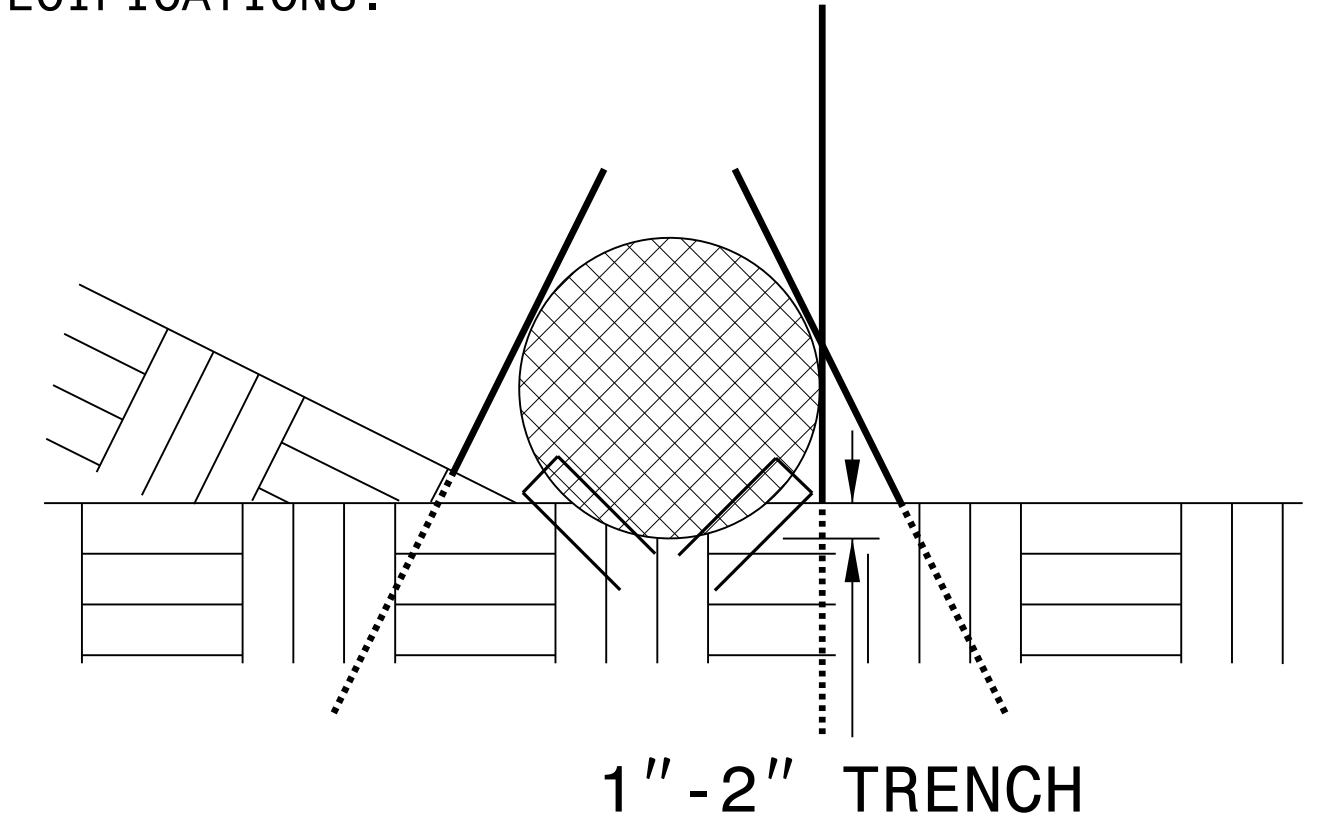


**VIEW FROM SLOPE**

**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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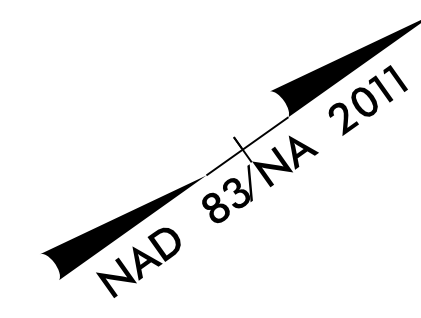
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PROJECT REFERENCE NO. <i>B-5334</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# ***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-5334	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



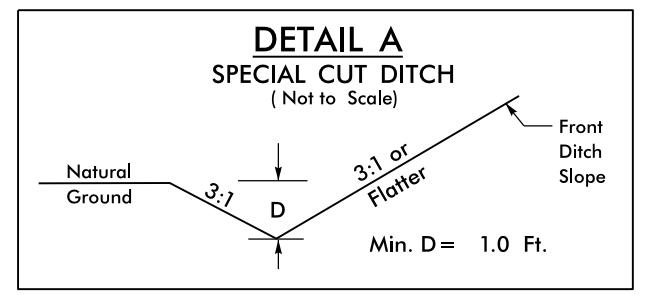
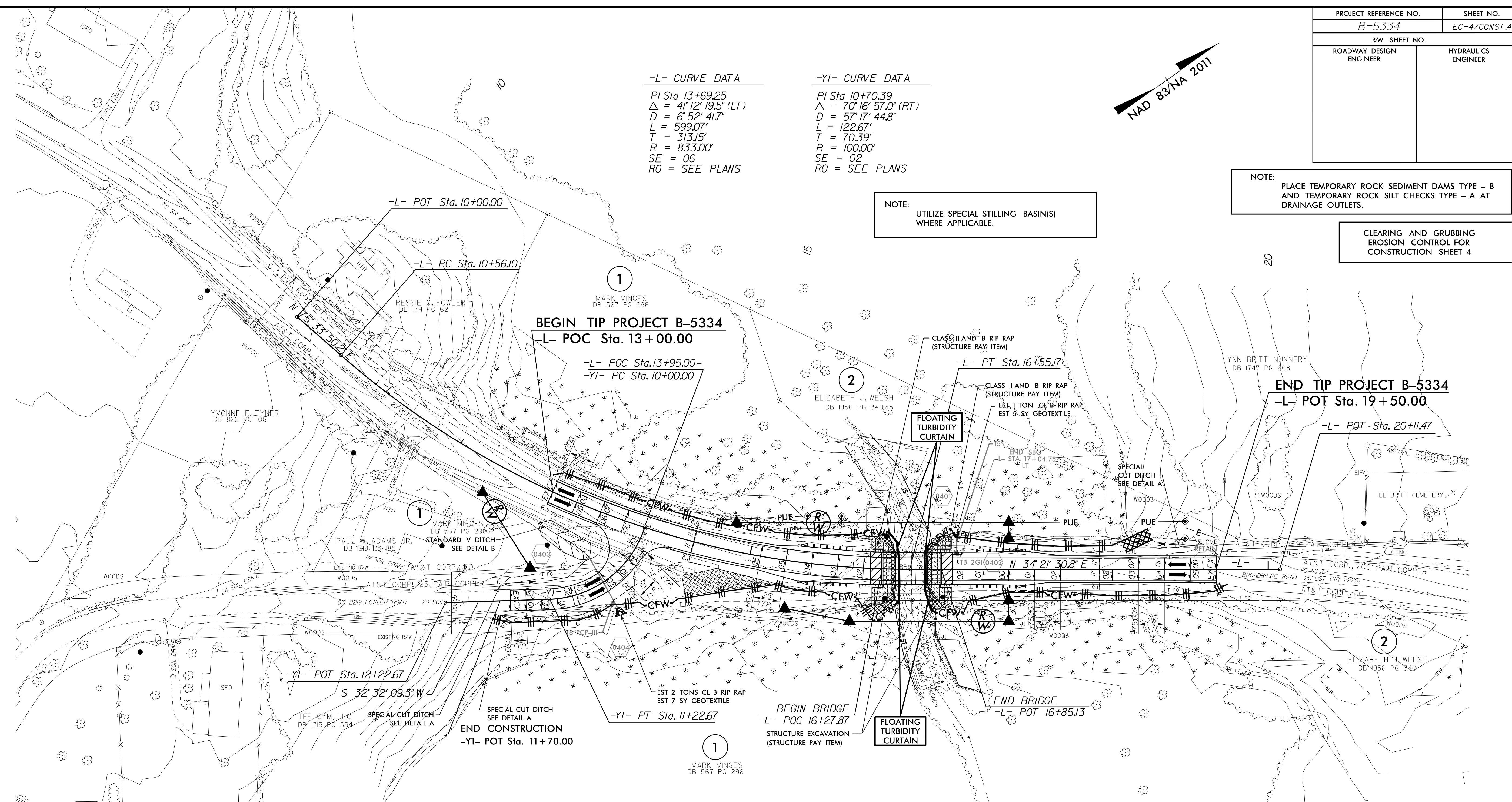
**-L- CURVE DATA**  
 PI Sta 13+69.25  
 $\Delta = 41^{\circ}12'19.5"$  (LT)  
 $D = 6^{\circ}52'41.7"$   
 $L = 599.07'$   
 $T = 313.15'$   
 $R = 833.00'$   
 $SE = 06$   
 $RO = \text{SEE PLANS}$

**-YI- CURVE DATA**  
 PI Sta 10+70.39  
 $\Delta = 70^{\circ}16'57.0"$  (RT)  
 $D = 57^{\circ}17'44.8"$   
 $L = 122.67'$   
 $T = 70.39'$   
 $R = 100.00'$   
 $SE = 02$   
 $RO = \text{SEE PLANS}$

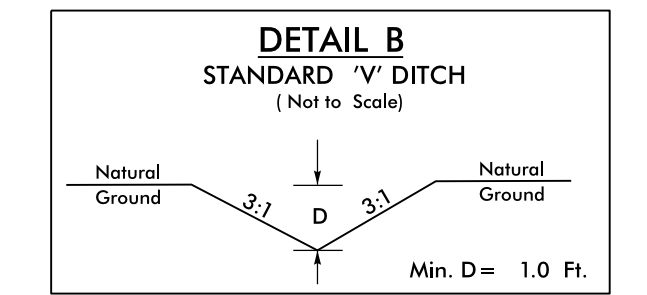
NOTE:  
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B  
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT  
 DRAINAGE OUTLETS.

CLEARING AND GRUBBING  
 EROSION CONTROL FOR  
 CONSTRUCTION SHEET 4

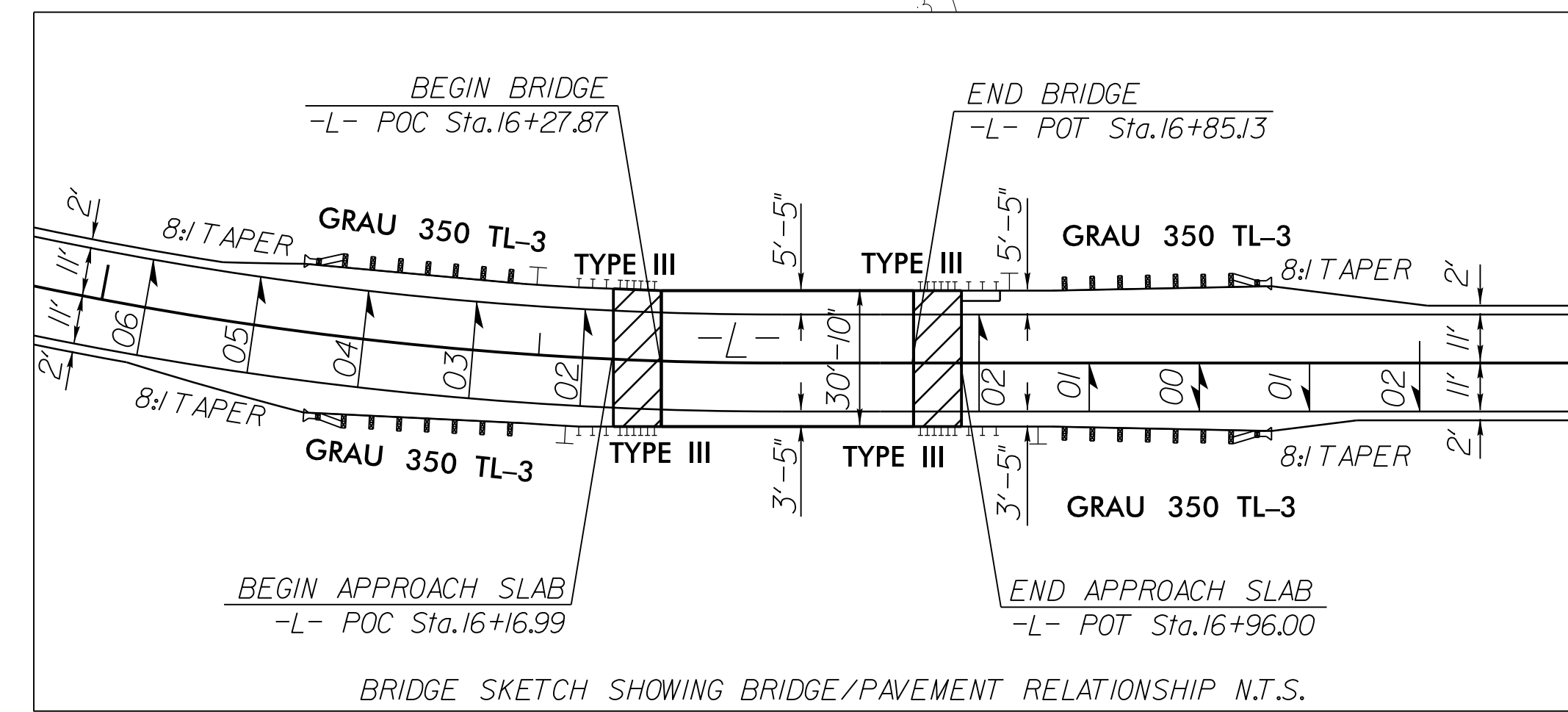
NOTE:  
 UTILIZE SPECIAL STILLING BASIN(S)  
 WHERE APPLICABLE.



FROM STA. -L- 18+70 TO STA. 19+30 LT  
 FROM STA. -YI- 10+65 TO STA. 11+70 RT  
 FROM STA. -YI- 10+85 TO STA. 11+70 LT



FROM STA. -L- 13+00 TO STA. 13+55 RT  
 EST. 20 CY DDE

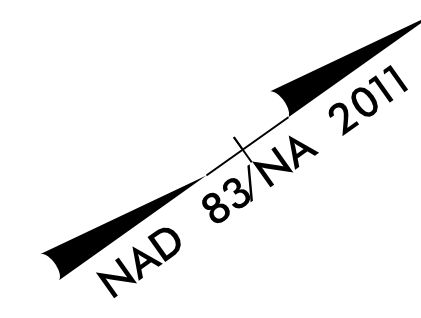


FOR -L- PROFILE, SEE SHEET NO. 5  
 FOR -YI- PROFILE, SEE SHEET NO. 5  
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-?

8/17/99

23-AUG-2017 13:19  
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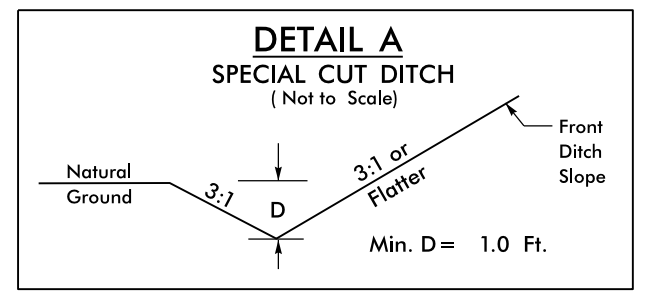
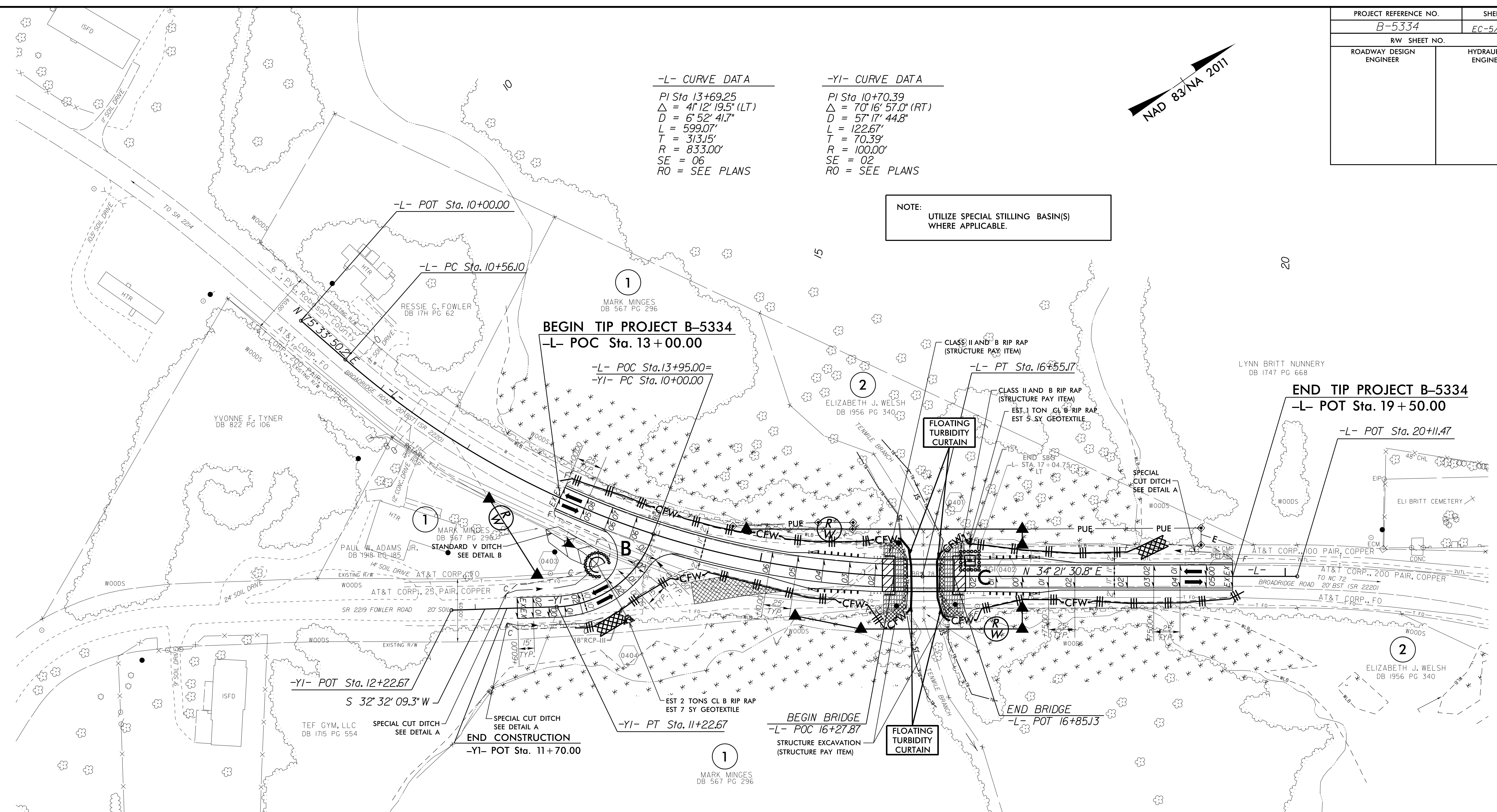
PROJECT REFERENCE NO.	SHEET NO.
B-5334	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



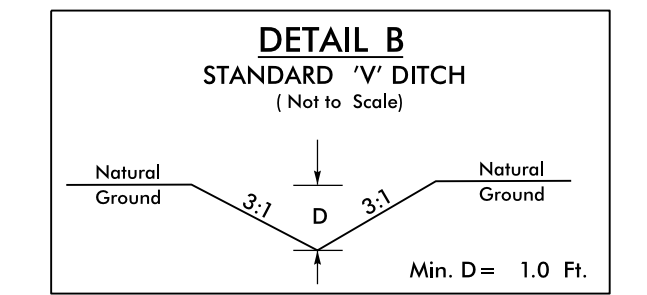
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 $\Delta = 41^\circ 12' 19.5''$  (LT)  
 $D = 6^\circ 52' 41.7''$   
 $L = 599.07'$   
 $T = 313.15'$   
 $R = 833.00'$   
 $SE = 06$   
 $RO = \text{SEE PLANS}$

**-YI- CURVE DATA**  
 PI Sta 10+70.39  
 $\Delta = 70^\circ 16' 57.0''$  (RT)  
 $D = 57^\circ 17' 44.8''$   
 $L = 122.67'$   
 $T = 70.39'$   
 $R = 100.00'$   
 $SE = 02$   
 $RO = \text{SEE PLANS}$

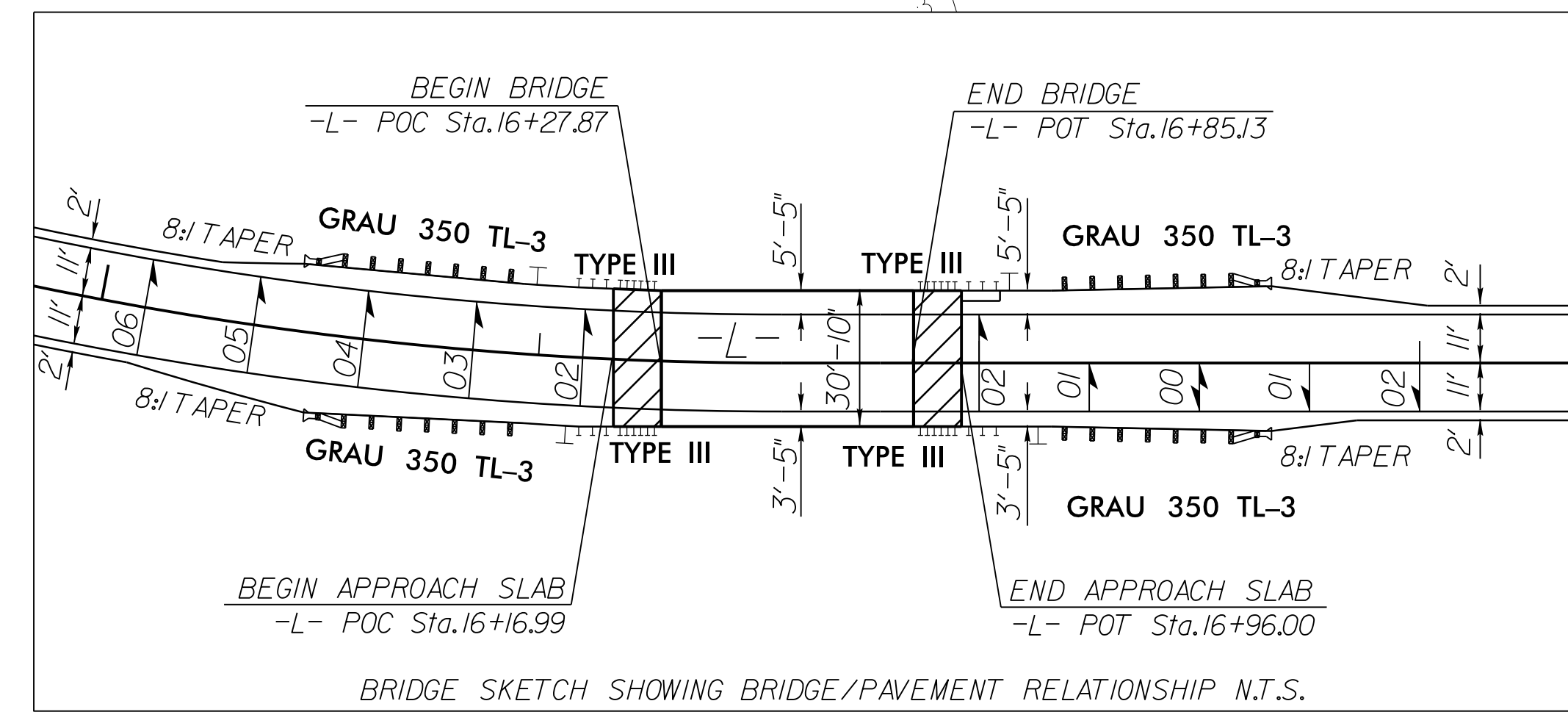
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 FROM STA. -YI- 10+65 TO STA. 11+70 RT  
 FROM STA. -YI- 10+85 TO STA. 11+70 LT



FROM STA. -L- 13+00 TO STA. 13+55 RT  
 EST. 20 CY DDE



FOR -L- PROFILE, SEE SHEET NO. 5  
 FOR -YI- PROFILE, SEE SHEET NO. 5  
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-2

8/17/99

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