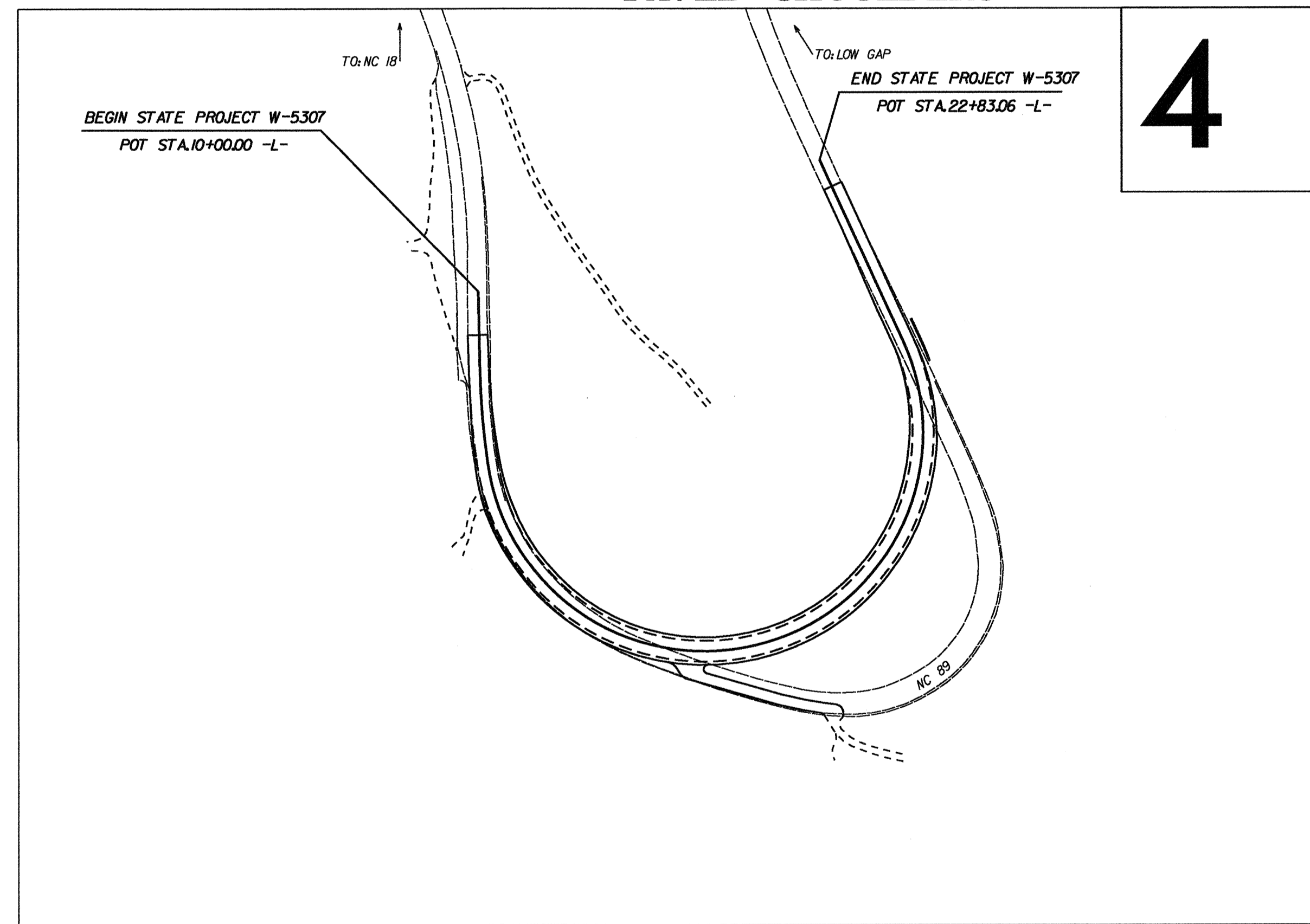


**TIP PROJECT: W-5307**

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

LOCATION: NC 89 SOUTH OF NC 18

TYPE OF WORK: CURVE REALIGNMENT, PAVEMENT WIDENING AND  
 PAVED SHOULDERS



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5307	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	---
1630.05	Temporary Diversion	--->---
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	---X---X---X---
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	U
1635.02	Rock Pipe Inlet Sediment Trap Type-B	U
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.

HIGH QUALITY WATER(S) EXIST  
 ON THIS PROJECT

*High Quality Water Zone(s) Exist*  
 From Sta. \_\_\_\_\_ Begin Project  
 to Sta. \_\_\_\_\_ End Project  
 Refer To E. C. Special Provisions  
 for Special Considerations.

**GRAPHIC SCALE**

0

PLANS

0

PROFILE (HORIZONTAL)

0

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 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

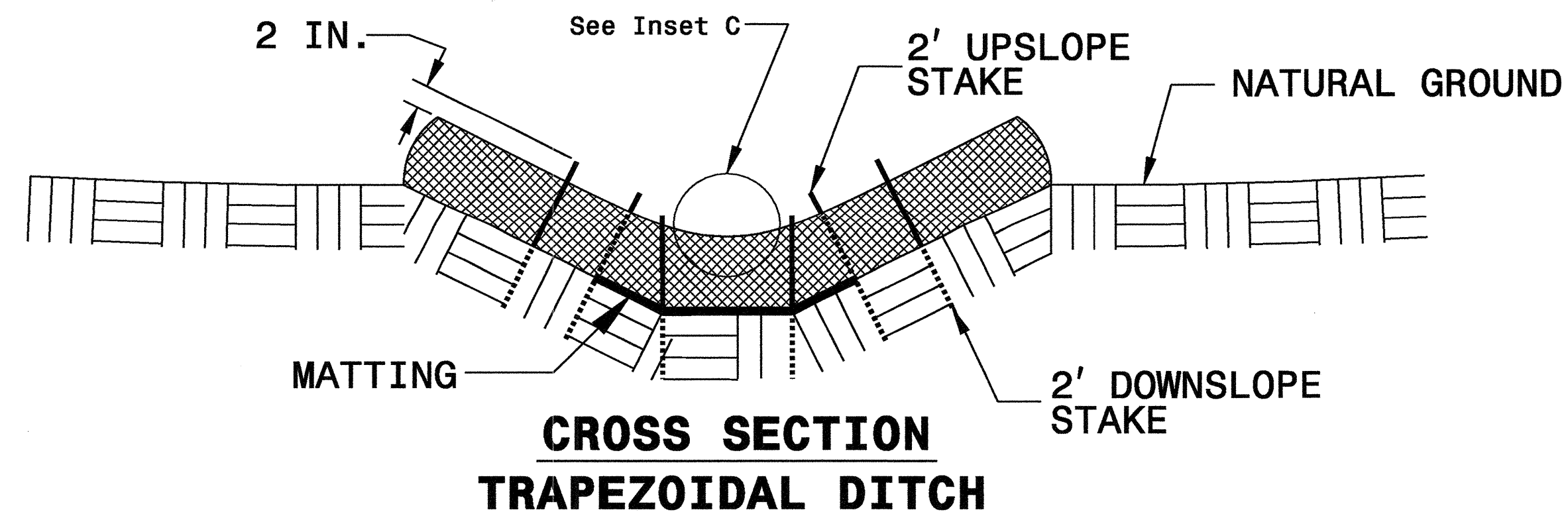
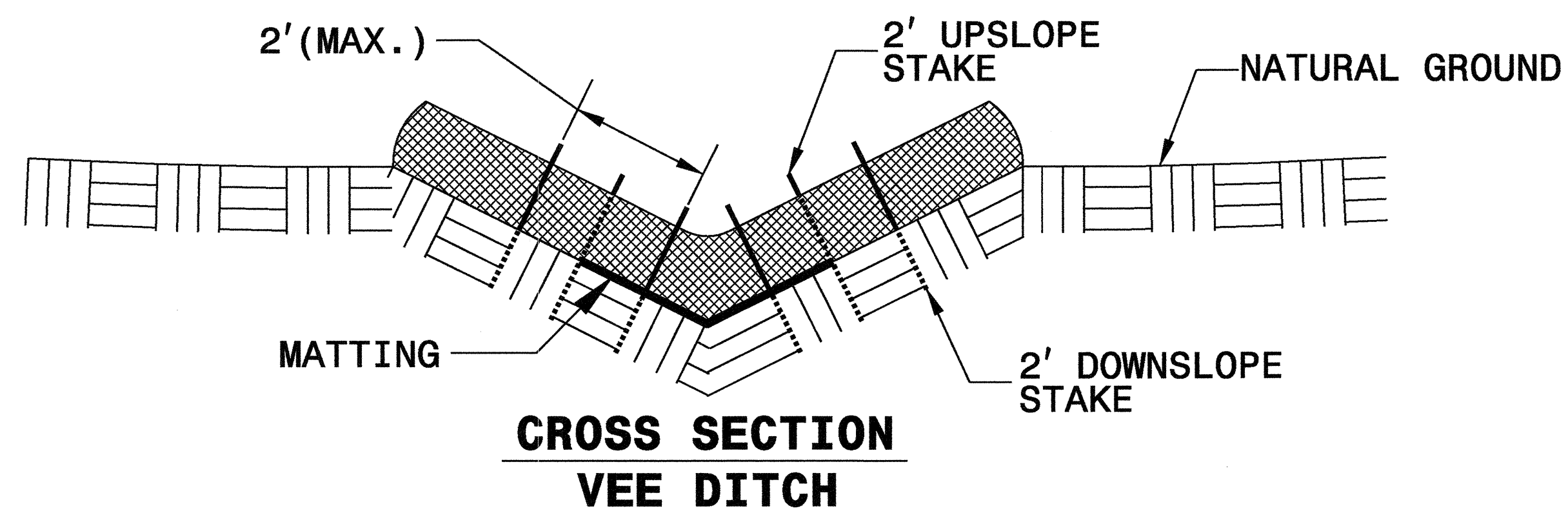
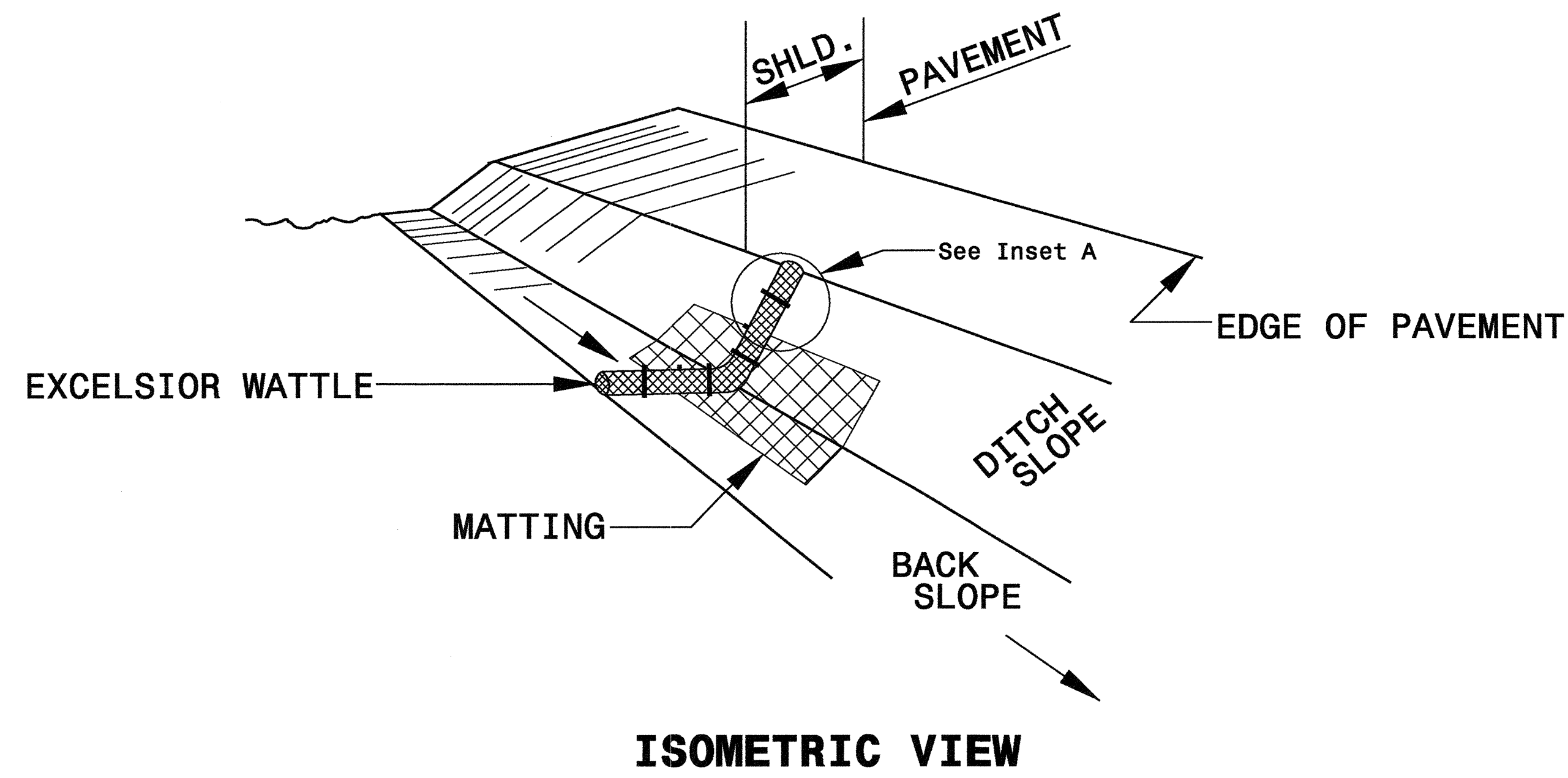
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

REVISED: APRIL 2012 (R02)  
 DRAWN BY: J. B. BROWN  
 CHECKED BY: J. B. BROWN  
 DATE: 04/27/12

PROJECT REFERENCE NO. W-5307	SHEET NO. EC-2
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.

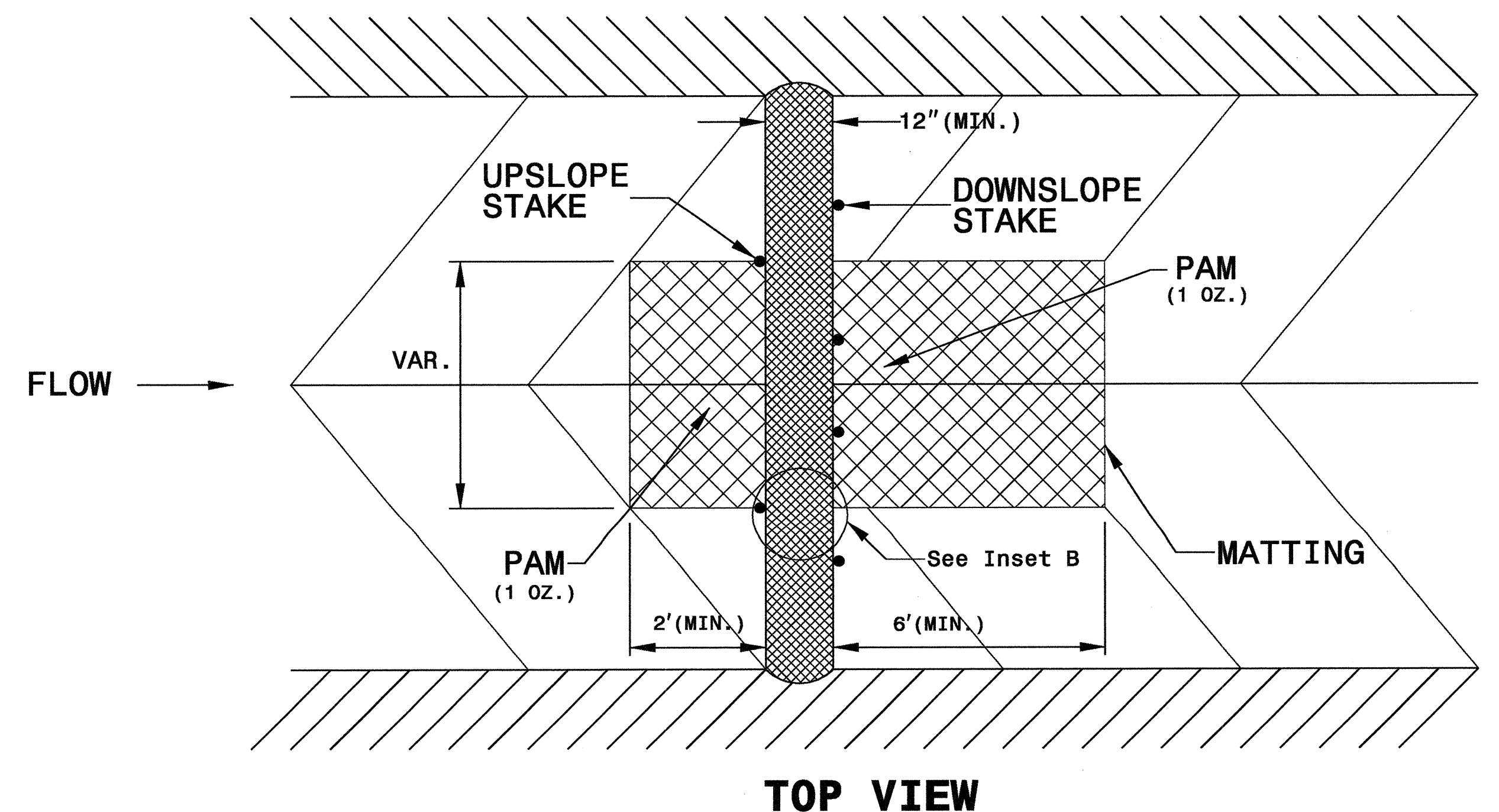
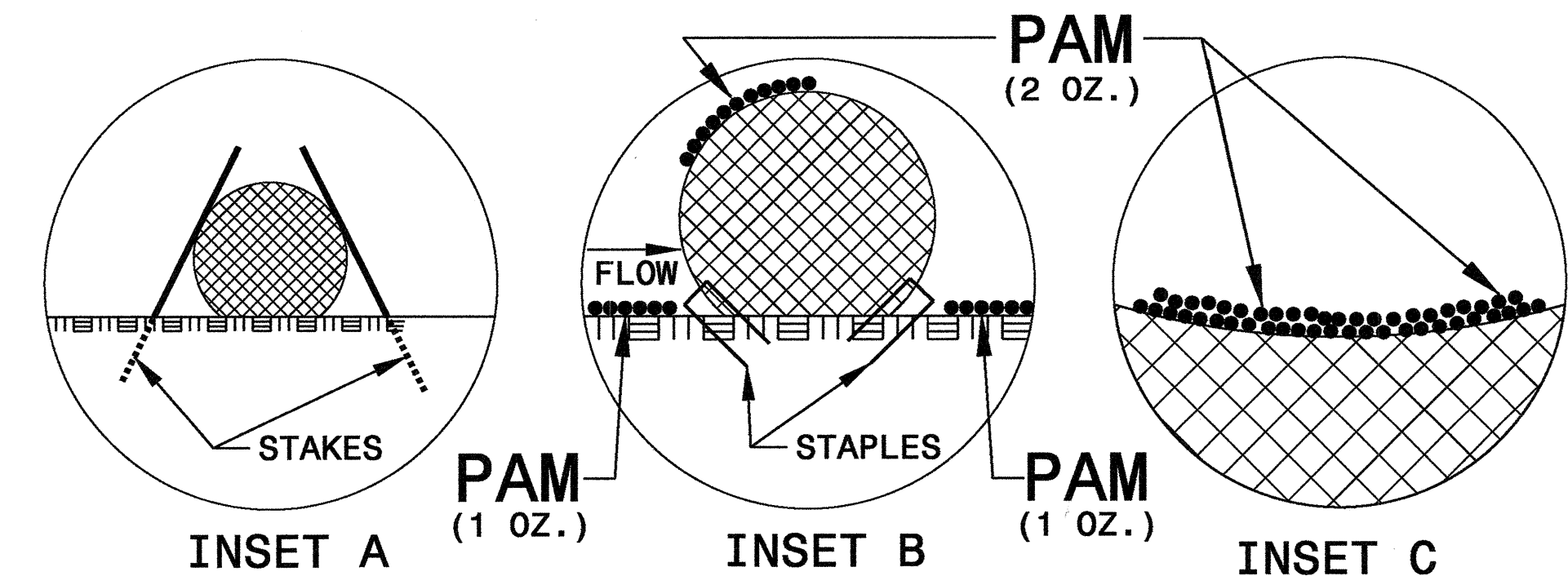
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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 MATTING 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>W-5307</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. <b>W-5307</b>	SHEET NO. <b>EC-04/CONST.04</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

**NOTE**  
For -L- Profile See Sheet 5

**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.

**BEGIN STATE PROJECT W-5307**  
POT Sta. 10+00.00 -L-

**BEGIN RESURFACING**  
POT Sta. 10+50.00 -L-

**BEGIN CONSTRUCTION**  
POC Sta. 11+00.00 -L-

**END STATE PROJECT W-5307**  
POT Sta. 22+83.06 -L-

**END RESURFACING**  
POT Sta. 22+50.00 -L-

**END CONSTRUCTION**  
POT Sta. 22+00.00 -L-

①  
NATIONAL PARK SERVICE  
OF THE  
DEPARTMENT OF THE INTERIOR  
DB 133 PG 517

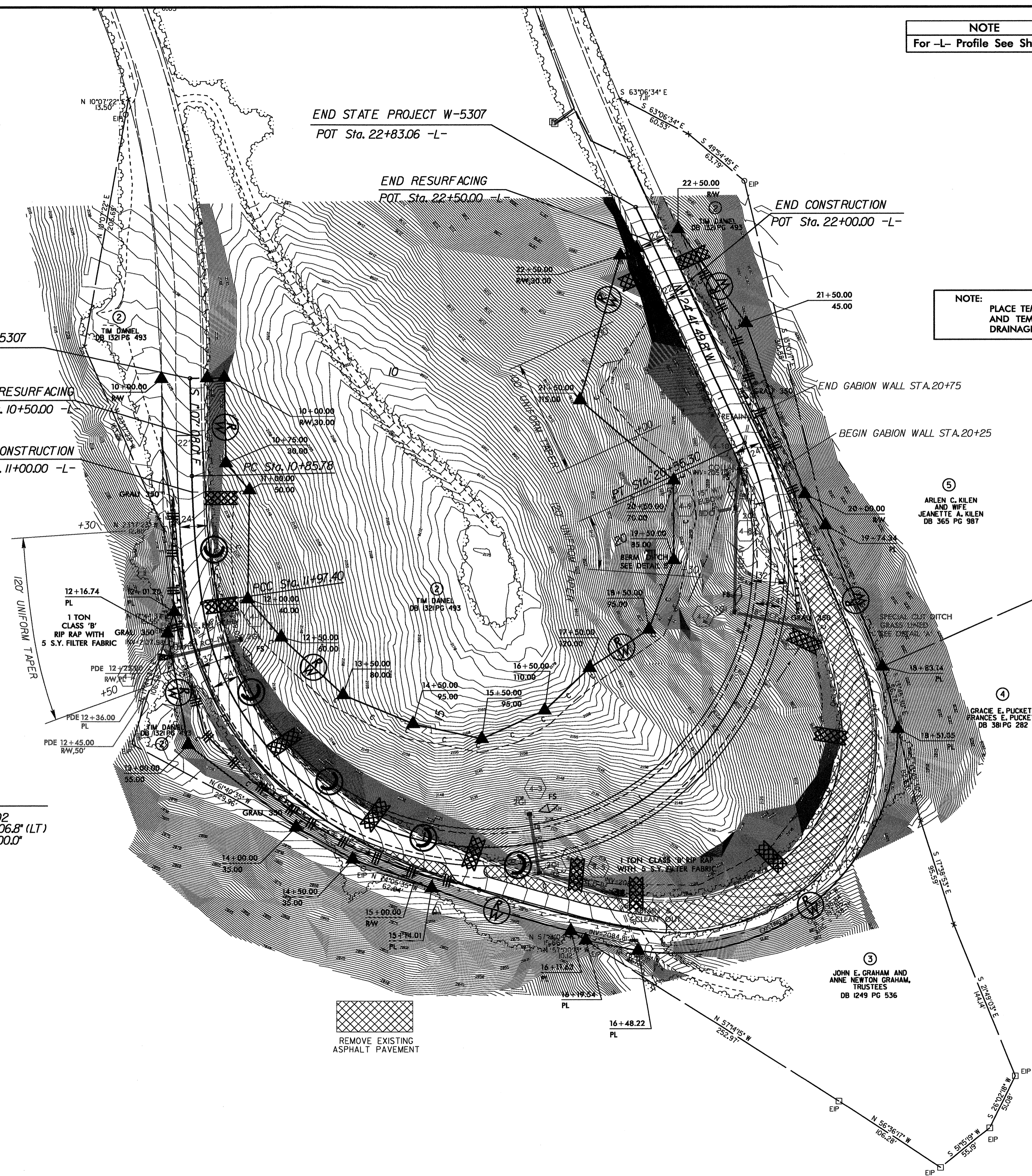
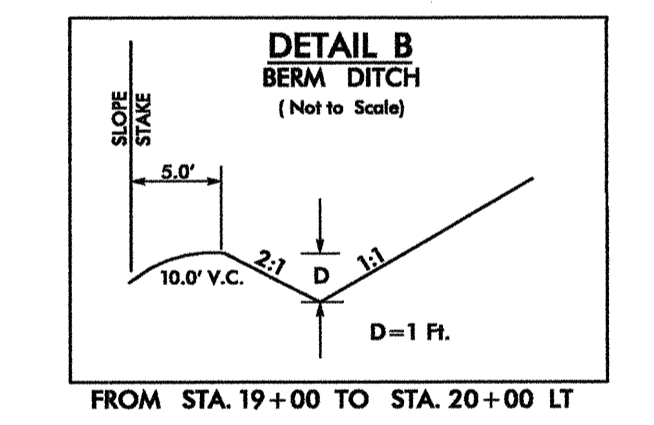
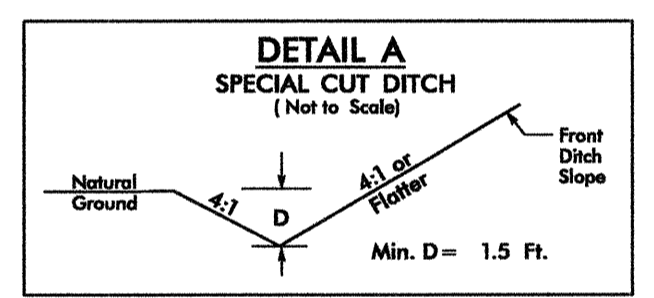
⑤  
ARLEN C. KILEN  
AND WIFE  
JEANETTE A. KILEN  
DB 365 PG 987

④  
GRACE E. PUCKETT  
FRANCES E. PUCKETT  
DB 381 PG 282

③  
JOHN E. GRAHAM AND  
ANNE NEWTON GRAHAM,  
TRUSTEES  
DB 1249 PG 536

-L-  
PI Sta 11+41.66      PI Sta 29+11.02  
Δ = 6° 58' 35.0" (LT)      Δ = 196° 36' 06.8" (LT)  
D = 6' 15" 00.0"      D = 22' 55" 00.0"  
L = 111.62'      L = 857.90'  
T = 55.88'      T = 1,713.61'  
R = 916.73'      R = 250.02'

  
REMOVE EXISTING  
ASPHALT PAVEMENT

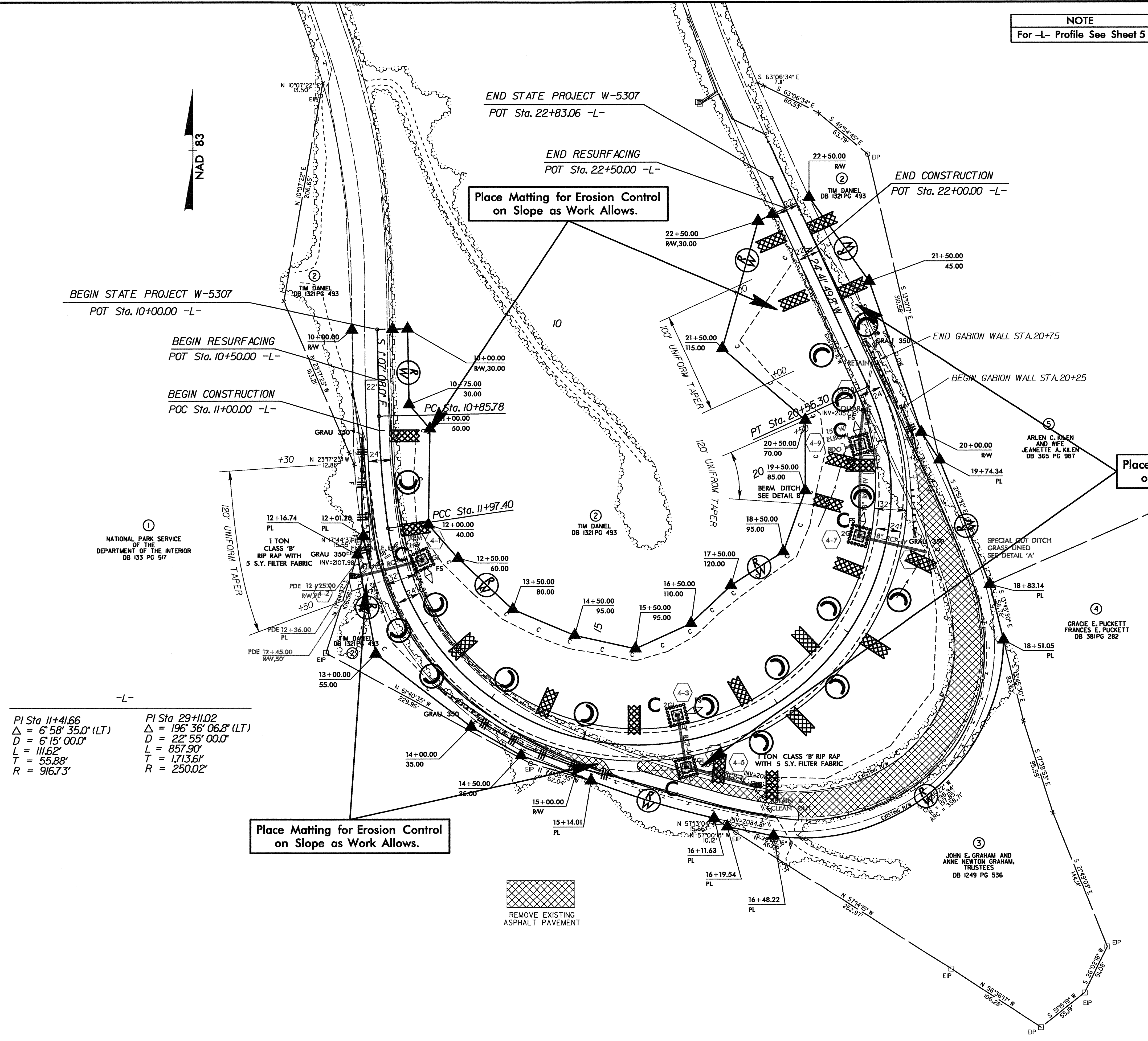


8/17/99

30-APR-2012 10:05  
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mehancock AT REN24768

**NOTE**  
For -L- Profile See Sheet 5

PROJECT REFERENCE NO. W-5307	SHEET NO. EC-05/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

-L-

PI Sta 11+41.66	PI Sta 29+11.02
$\Delta = 6^{\circ} 58' 35.0''$ (LT)	$\Delta = 196^{\circ} 36' 06.8''$ (LT)
$D = 6' 15'' 00.0''$	$D = 22' 55'' 00.0''$
$L = 111.62'$	$L = 857.90'$
$T = 55.88'$	$T = 1,713.61'$
$R = 916.73'$	$R = 250.02'$

