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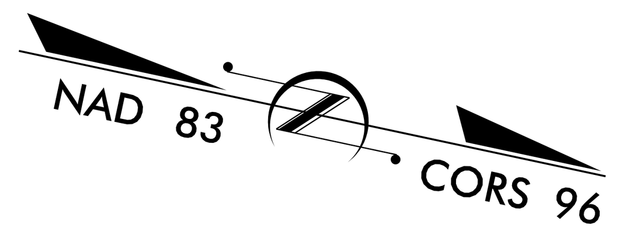
TIP PROJECT: B-2500AB

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-2500AB	EC-1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS



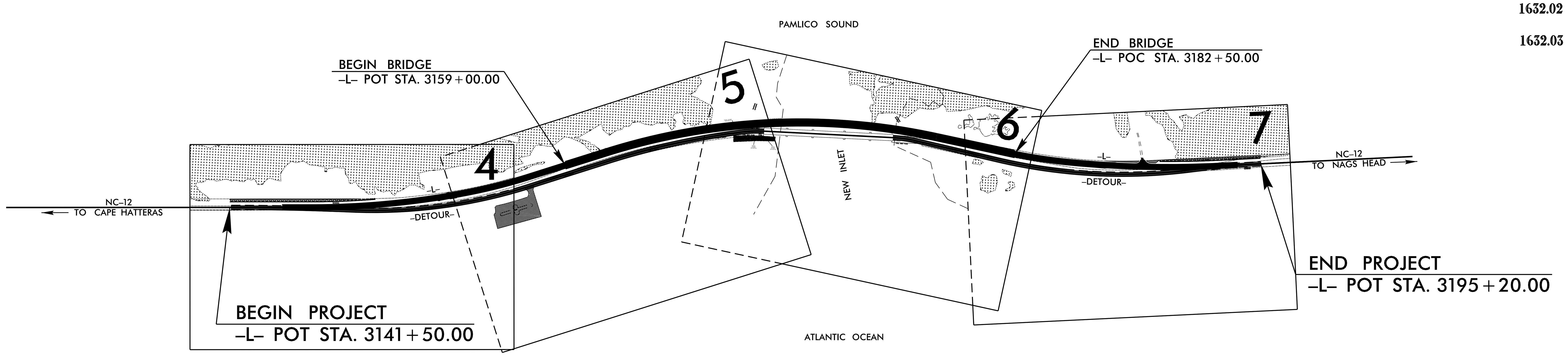
PLAN FOR PROPOSED

HIGHWAY EROSION CONTROL

DARE COUNTY

LOCATION: PHASE II, NC-12 SHORT-TERM IMPROVEMENTS AT PEA ISLAND

TYPE OF WORK: GRADING, PAVING, DRAINAGE & STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
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	EW / CFW
	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 HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist
From Sta. Beginning
to Sta. End
Refer To E. C. Special Provisions for Special Considerations.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS 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

Designed by:

BARNEY BLACKBURN	*3442*
NAME	*LEVEL III CERTIFICATION NO.*

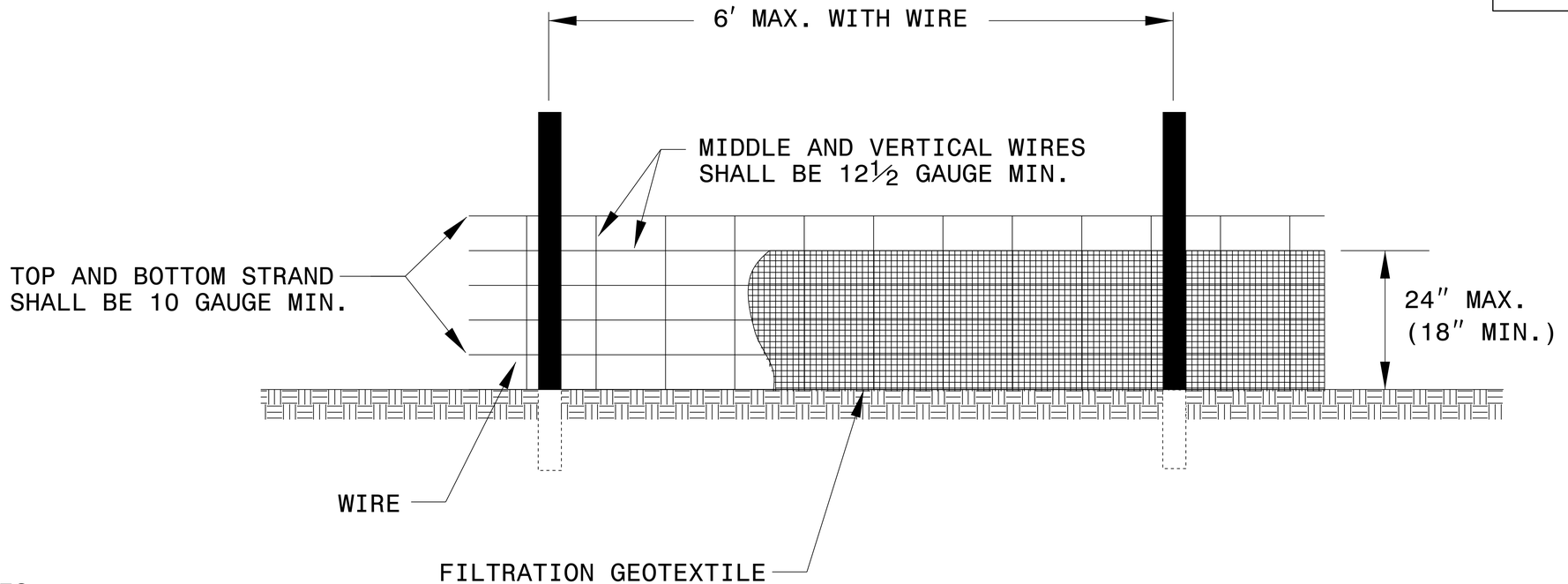
Roadway Standard Drawings

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 revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

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

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REINFORCED TEMPORARY SILT FENCE DETAIL



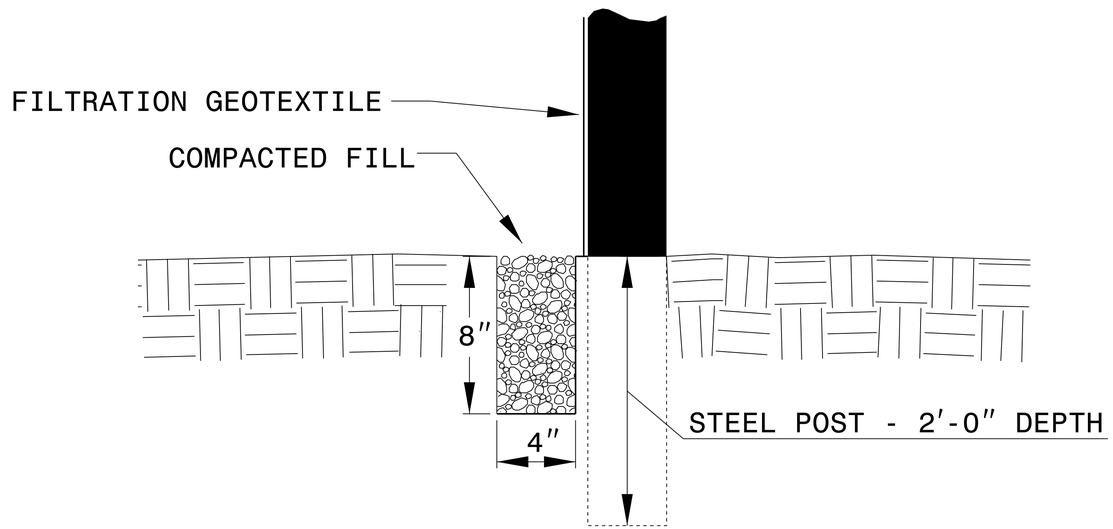
NOTES

USE FILTRATION GEOTEXTILE A MINIMUM OF 36″ IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

USE WIRE A MINIMUM OF 32″ IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12″ STAY SPACING.

PROVIDE 5′-0″ STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

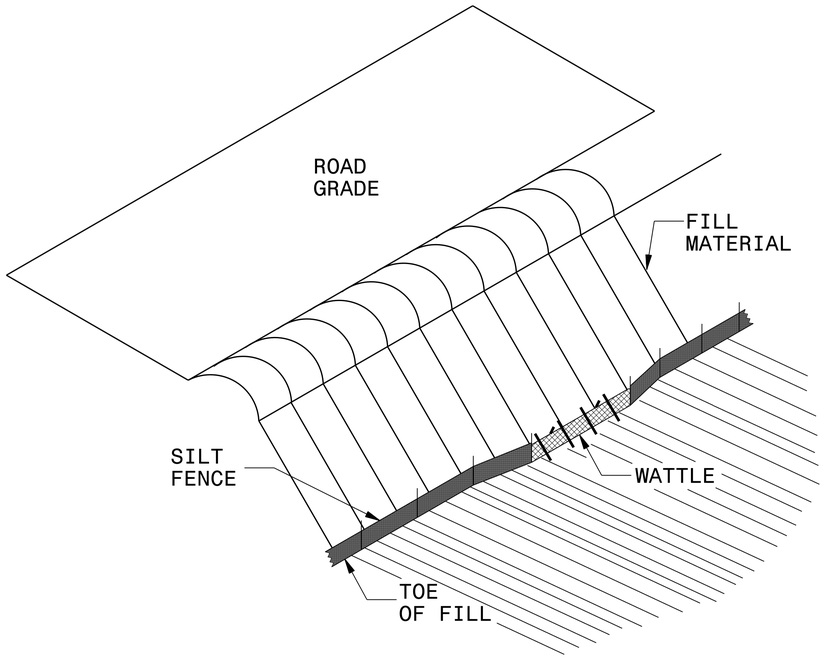
FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18″ ABOVE GROUND SURFACE.



EXTENSION OF GEOTEXTILE AND WIRE INTO TRENCH

SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ISOMETRIC VIEW

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.

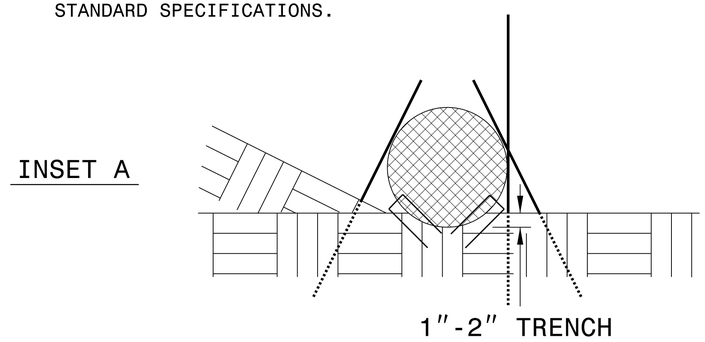
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

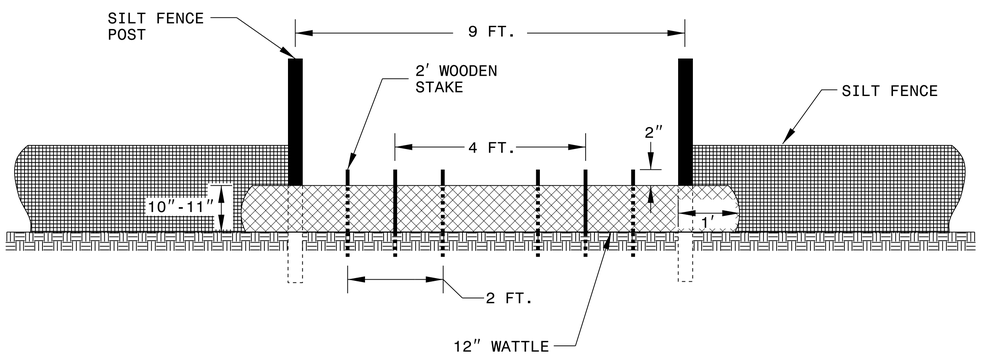
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

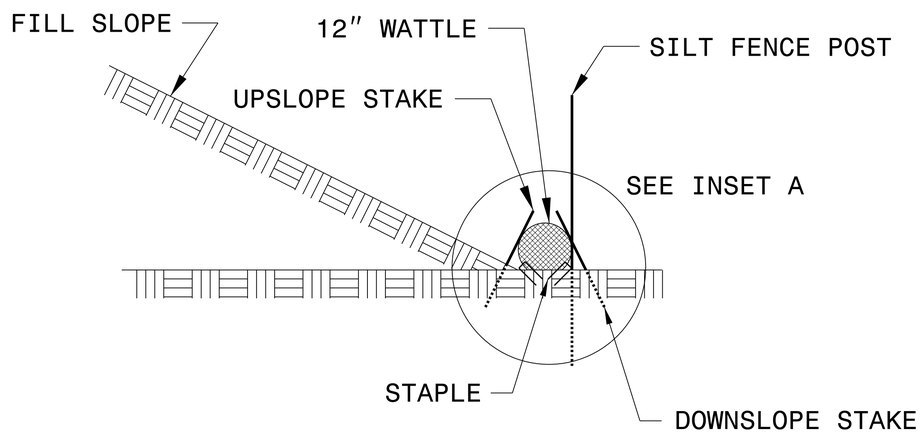
WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.





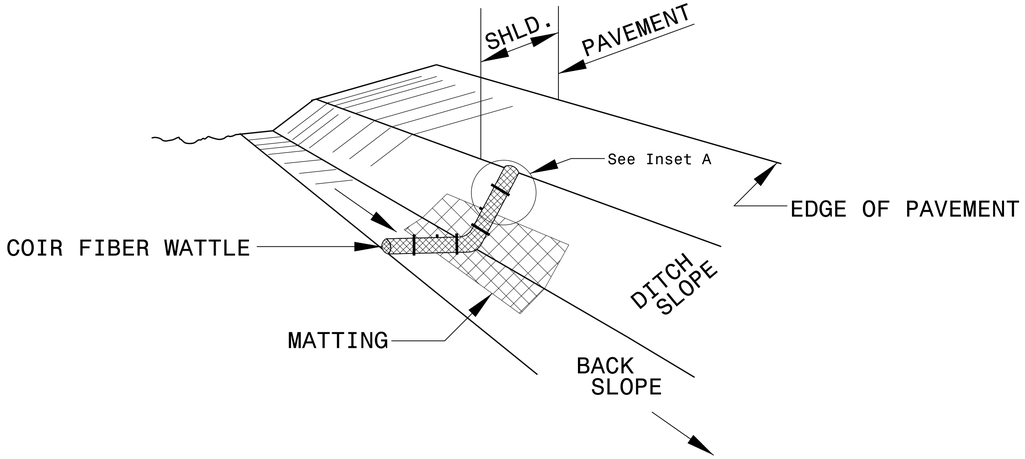
VIEW FROM SLOPE



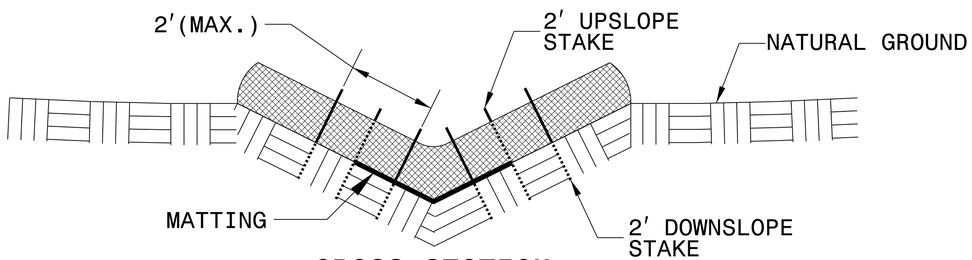
SIDE VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

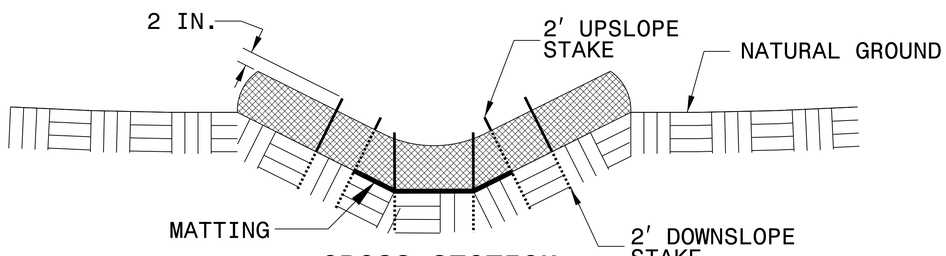
COIR FIBER WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

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

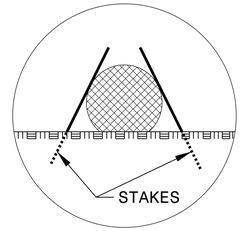
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

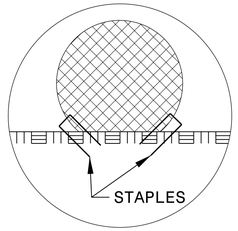
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

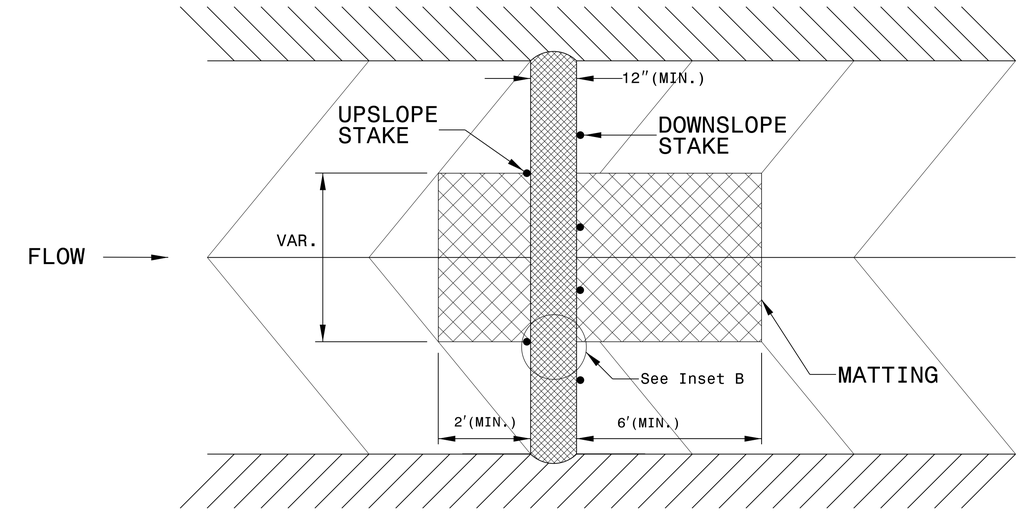
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL DETAIL FOR PAVEMENT REMOVAL

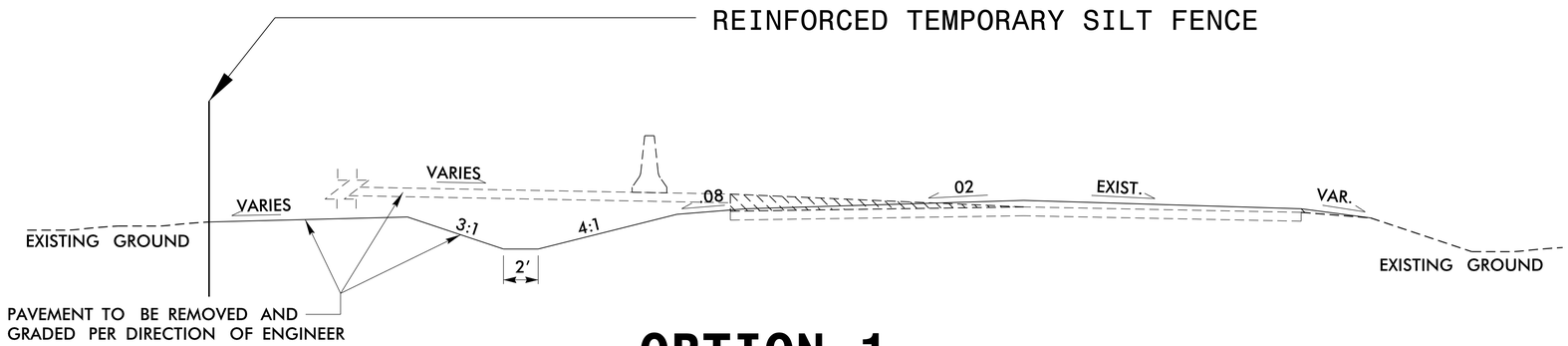
NOTES

INSTALL REINFORCED TEMPORARY SILT FENCE IN PAVEMENT REMOVAL AREAS IN ACCORDANCE WITH THIS DETAIL AND AS DIRECTED.

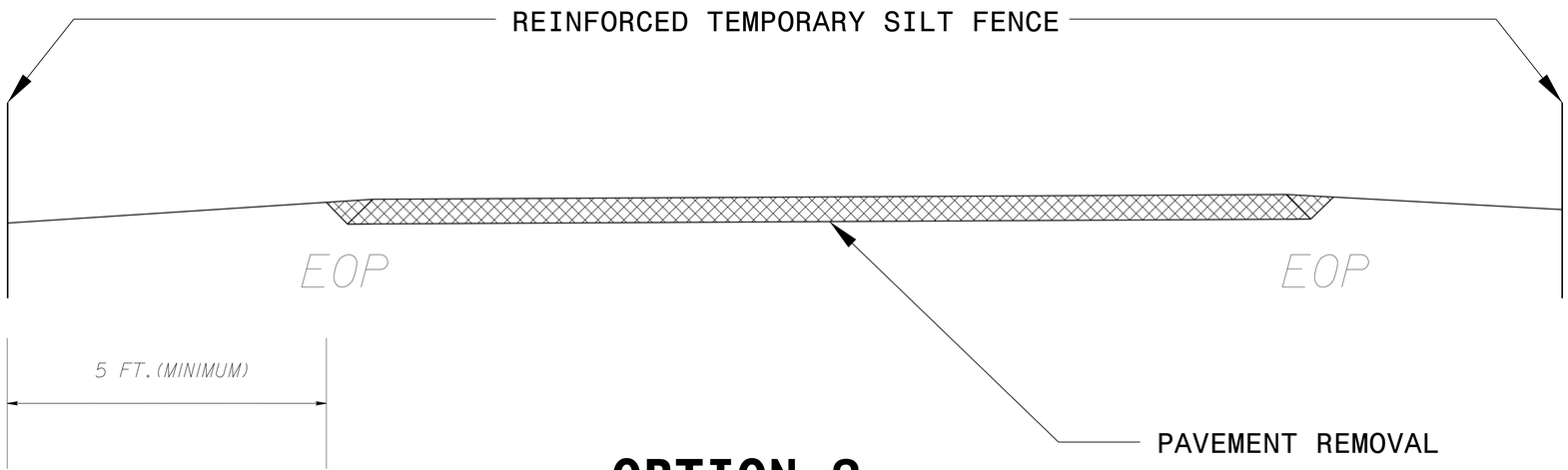
PLACE COIR FIBER WATTLE BREAKS IN LONG SECTIONS OF REINFORCED TEMPORARY SILT FENCE IN ACCORDANCE WITH DETAIL ON SHEET EC-2A AND AS DIRECTED.

INSTALL COIR FIBER WATTLES IN DITCHES AND DITCH OUTLETS FOR OPTION 1 IN ACCORDANCE WITH DETAIL ON SHEET EC-2B AND AS DIRECTED.

THIS DETAIL APPLIES TO THE PROJECT LOCATIONS IN THE PAVEMENT REMOVAL SUMMARY ON SHEET EC-3.



OPTION 1



OPTION 2

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PAVEMENT REMOVAL SUMMARY SHEET FOR EROSION CONTROL DETAIL

PAVEMENT REMOVAL SUMMARY (B-2500A)

LINE	FROM STATION	TO STATION	SIDE	ASPHALT REMOVAL ESTIMATE (SY)
DETOUR PAVEMENT				
-ELN-	3078+13	3141+50		
-ELN-	3194+20	3214+00		
TEMPORARY WIDENING				
-ELN-	3112+80	3122+20		
-ELN-	3195+20	3195+80		
**DETOUR RIGHT SLOPE PLATING				
-ELN-	3085+40	3090+50		
-ELN-	3096+00	3104+00		
-ELN-	3109+00	3119+80		
-ELN-	3140+50	3141+50		

PAVEMENT REMOVAL SUMMARY (B-2500AB)

LINE	FROM STATION	TO STATION	SIDE	ASPHALT REMOVAL ESTIMATE (SY)	CONCRETE REMOVAL ESTIMATE (SY)
-L-	3141+50	3153+80			
-L-	3149+04	3154+00			
-L-	3154+00	3168+64			
-L-	3177+02	3186+00			
-L-	3181+15	3186+00			
-L-	3186+00	3190+20			
-L-	3186+50	DRIVE			
-L-	DRIVE	3194+00			
-DETOUR-	13+38	26+24			
-DETOUR-	26+24	39+47			
-DETOUR-	46+12	55+14			
-DETOUR-	55+14	64+02			
PARKING LOT, RIGHT OR -DETOUR-					
-DETOUR-	24+90	27+23			
-DETOUR-	25+38	26+89			

*REFER TO ROADWAY PLANS FOR PAVEMENT REMOVAL QUANTITIES

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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-2500AB	EC-4/CONST.2B-7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BEGIN DETOUR
-L- POT. STA. 3141+57.38 =
-DETOUR- PC STA. 11+57.38
-DETOUR-
PI Sta 14+66.54
Δ = 2° 28' 37.5" (RT)
D = 0° 24' 02.4"
L = 618.23'
T = 309.16'
R = 14,300.00'
SE = EXIST.
PI Sta 22+43.78
Δ = 20° 02' 15.8" (LT)
D = 2° 09' 43.6"
L = 926.77'
T = 468.17'
R = 2,650.00'
SE = EXIST.
NAD 83
CORS 96
DETAIL A
TEMPORARY STANDARD 'V' DITCH
(Not to Scale)
Natural Ground
3:1
D
Min. D= 0.5 Ft.
FROM STA. 22+05.21 TO STA. 28+62.69 -DETOUR- LT.
UNITED STATES OF AMERICA
-L- PC Sta. 3145+68.66
-ELN- POT STA. 3140+00.00
-L- POT STA. 3140+00.00 =
-DETOUR- POT STA. 10+00.00
-L- +68.66
55.00'
+36.98
46.65'
2' PS EACH SIDE
R = 2810.07'
TEMP. STANDARD 'V' DITCH
SEE DETAIL A
EST. 89 CY DDE
SEE TMP FOR END TREATMENT
-L-
-L- PCC Sta. 3153+68.66
+68.66
30.00
+89.88
35.00'
30.00'
ABANDONED
N 12° 07' 54.6" W
EXIST. ROW
100'
-DETOUR-
CFW
BEGIN WIDENING USING
EXIST. GRADE & SUPER EL.
-DETOUR- PRC Sta. 17+75.61
MATCHLINE SEE SHEET 2B-8
-DETOUR- STA. 24+00.00
REMOVE EXIST. PAVEMENT
AFTER FINAL IS BUILT
PER DIRECTION OF THE ENGINEER
(REFER TO SHEET 3B-1 FOR QUANTITY)
PAVEMENT REMOVAL
SLOTTED TEMP. BARRIER
-DETOUR-
DITCH LEGEND
LEFT DITCH
-ELN- STA. 3141+50.00 =
-DETOUR- STA. 11+50.00
BEGIN DETOUR WIDENING
STA. 11+57.38
WIDEN USING EXISTING GRADE AND SUPER ELEVATION
-DETOUR- STA. 11+57.38 TO STA. 26+23.97
(+) 0.0791%
(-) 0.0396%
(-) 1.444%
(-) 0.0788%
BEGIN 'V' DITCH LT
STA. =22+05.21
El = 4.53
STA. =22+55.75
El = 4.57
STA. =23+06.30
El = 4.55
STA. =23+56.85
El = 3.82
10
0
-10
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

8/17/99

31-AUG-2015 15:44
R:\Environmental\Design\B2500AB_ec_psh02B-1.dgn

PROJECT REFERENCE NO.
B-2500AB
SHEET NO.
EC-5/CONST.2B-8
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
DETAIL A
TEMPORARY STANDARD 'V' DITCH
(Not to Scale)
Natural Ground
Natural Ground
D
3:1
3:1
Min. D = 0.5 Ft.
FROM STA. 22+05.21 TO STA. 28+62.69 -DETOUR- LT.
UNITED STATES OF AMERICA
NAD 83
CORS 96
REMOVE EXIST. GUARDRAIL DURING PLACEMENT OF PCB
-DETOUR- STA. 26+23.97 END WIDENING USING EXIST. GRADE & SUPER EL. BEGIN PROPOSED GRADE & SUPER EL.
TEMP. STANDARD V DITCH SEE DETAIL A EST. 89 CY DDE
-L- PT Sta. 3157+05.77
-L- PC Sta. 3161+18.89
GRADE TO DRAIN
N 29°41'33.0" W
CFW
MATCHLINE SEE SHEET 2B-7 -DETOUR- STA. 24+00.00
MATCHLINE SEE SHEET 2B-9 -DETOUR- STA. 38+00.00
EXIST. STONE 300-400 LB.
R=3219.36'
REMOVE & RESET EXIST. GUARDRAIL
-DETOUR- PT Sta. 27+02.38
-DETOUR- PC Sta. 31+26.43
ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS
PAVEMENT REMOVAL
SLOTTED TEMP. BARRIER
-DETOUR-
PI Sta 22+43.78
Δ = 20° 02' 15.8" (LT)
D = 2° 09' 43.6"
L = 926.77'
T = 468.17'
R = 2,650.00'
SE = EXIST.
PI Sta 34+81.19
Δ = 10° 23' 43.1" (RT)
D = 1° 28' 08.8"
L = 707.59'
T = 354.77'
R = 3,900.00'
SE = NC
-DETOUR-
DITCH LEGEND
LEFT DITCH
BEGIN GRADE
STA. 26+23.97
EL = 5.94'
WIDEN USING EXISTING GRADE AND SUPER ELEVATION -DETOUR-
STA.11+57.38 TO STA.26+23.97
PI = 29+00.00
EL = 8.44'
VC = 100'
K = 452
PI = 36+00.00
EL = 6.16'
VC = 100'
K = 345
PI = 38+00.00
EL = 6.66'
VC = 100'
K = 68
(+)0.1811%
(-)0.0400%
(-)0.0400%
(+)0.2500%
(+)0.2500%
STA. =24+07.58 El = 3.78
STA. =24+58.42 El = 3.70
STA. =25+09.25 El = 3.68
STA. =25+60.09 El = 3.78
STA. =26+10.93 El = 3.96
STA. =26+61.76 El = 4.15
STA. =27+12.59 El = 4.32
STA. =27+62.69 El = 4.43
STA. =28+12.69 El = 4.52
END V DITCH LT STA. =28+62.69 El = 4.60
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-6/CONST.2B-9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS
NAD 83
CORS 96
UNITED STATES OF AMERICA
TIE PCB TO GUARDRAIL USING TRANSITION PANEL (SEE SHEET 2C-2 FOR DETAILS)
REMOVE EXIST. GUARDRAIL DURING PLACEMENT OF PCB (UP TO TRANSITION PANEL)
-L- PT Sta. 3178+38.99
PC Sta. 3182+06.45
GRADE TO DRAIN
N 1° 03' 26.2" E
N 9° 14' 03.1" W
-DETOUR-
-L-
MATCHLINE SEE SHEET 2B-8 -DETOUR- STA. 38+00.00
MATCHLINE SEE SHEET 2B-10 -DETOUR- STA. 52+00.00
-DETOUR- STA. 39+46.67 END PROPOSED GRADE & SUPER EL. AT EXIST. STRUCTURE
-DETOUR- STA. 46+11.90 BEGIN PROPOSED GRADE & SUPER EL. AT EXIST. STRUCTURE
REMOVE & RESET EXIST. GUARDRAIL
-DETOUR- PCC Sta. 38+34.01
-DETOUR- PT Sta. 39+45.54
-DETOUR- PC Sta. 46+12.55
-DETOUR- PT Sta. 47+34.69
-DETOUR- PC Sta. 51+63.71
EXIST. STONE 300-400 LB.
-DETOUR-
PI Sta 38+89.92
Δ = 10° 03' 46.8" (RT)
D = 9° 01' 22.6"
L = 111.53'
T = 55.91'
R = 635.00'
SE = .03
PI Sta 46+73.78
Δ = 10° 17' 29.4" (RT)
D = 8° 25' 33.1"
L = 122.14'
T = 61.24'
R = 680.00'
SE = .03
SLOTTED TEMP. BARRIER
-DETOUR-
END GRADE AT EXIST. BRIDGE
STA. 39+46.67
EL. 9.17'
BEGIN GRADE AT EXIST. BRIDGE
STA. 46+11.90
EL = 9.27'
PI = 38+00.00
EL = 6.66'
VC = 100'
K = 68
PI = 47+50.00
EL = 6.55'
VC = 100'
K = 56
PI = 49+50.00
EL = 6.19'
VC = 100'
K = 189
PI = 51+70.00
EL = 6.96'
VC = 100'
K = 175
EXISTING BRIDGE
(+)1.7113%
(-)1.9696%
(-)0.1800%
(+)0.3500%
(-)0.2200%
10
0
-10
38
39
40
41
42
43
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50
51
52

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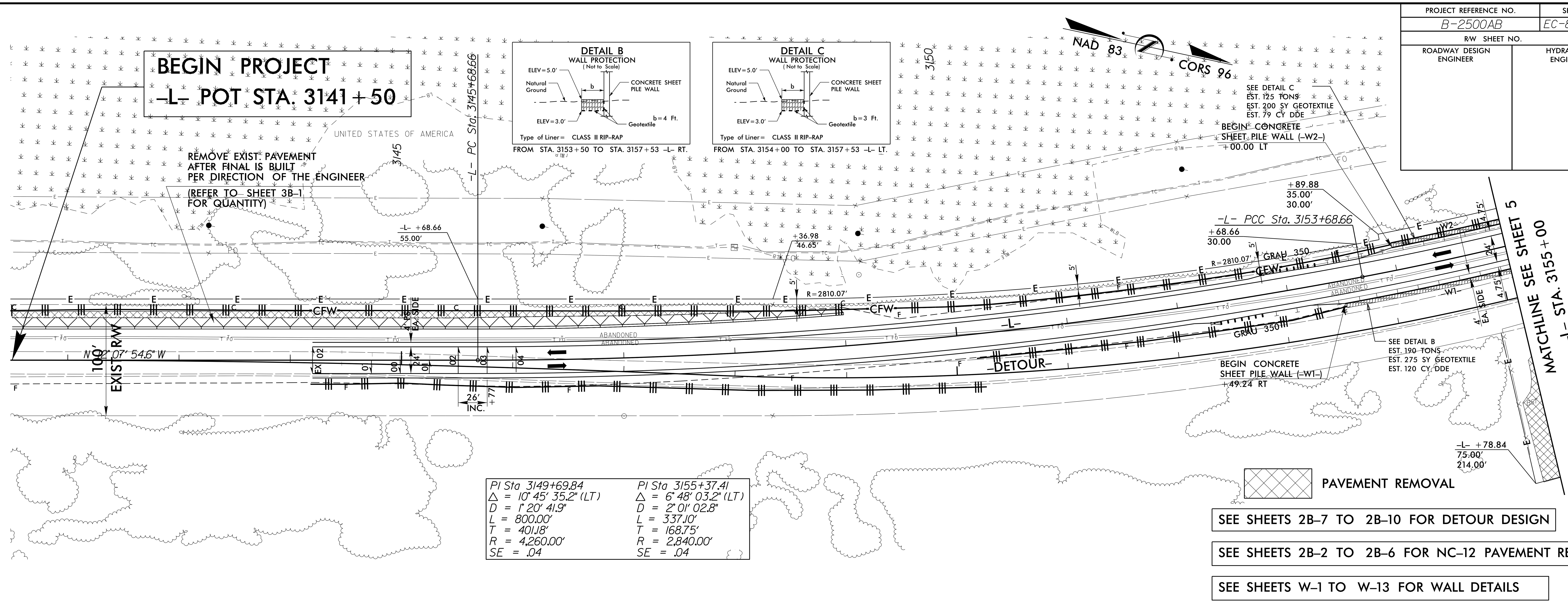
PROJECT REFERENCE NO.
B-2500AB
SHEET NO.
EC-7/CONST.2B-10
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
8/17/99
NAD 83
CORS 96
DETAIL A
TEMPORARY STANDARD 'V' DITCH
(Not to Scale)
Natural Ground
3:1
D
Min. D= 0.5 Ft.
FROM STA. 52+91.97 TO STA. 57+48.04 -DETOUR- LT.
-L- PC Sta. 3182+06.45
-L- PCC Sta. 3185+51.82
END DETOUR
-DETOUR- PT STA. 65+22.38 =
-L- POT STA. 3195+19.95
MATCHLINE SEE SHEET 2B-9
-DETOUR- STA. 52+00.00
TEMP. STANDARD V DITCH
SEE DETAIL A
EST. 78 CY DDE
50' POWER LINE EASEMENT
UNITED STATES OF AMERICA
SEE TMP FOR
END TREATMENT
R=2810.07'
R=2920.07'
-DETOUR- STA. 55+13.50
END PROPOSED GRADE
& SUPER EL.
BEGIN WIDENING USING
EXIST. GRADE & SUPER EL.
-L- PT Sta. 3193+05.55
-DETOUR- PT Sta. 65+22.38
N 14° 52' 02.1" W
-DETOUR-
PRC Sta. 61+59.21
-DETOUR-
PI Sta 56+66.77
Δ = 20° 22' 14.5" (LT)
D = 2° 02' 46.6"
L = 995.50'
T = 503.06'
R = 2,800.00'
SE = .025 ,EXIST.
PI Sta 63+40.89
Δ = 4° 26' 46.1" (RT)
D = 1° 13' 27.4"
L = 363.17'
T = 181.67'
R = 4,680.00'
SE = EXIST.
SLOTTED TEMP. BARRIER
-DETOUR-
DITCH LEGEND
LEFT DITCH
END GRADE
STA. 55+13.50
EL = 5.80'
PI = 53+70.00
EL = 6.52'
VC = 100'
K = 355
(-)0.2200%
(-)0.2200%
(-)0.5017%
(-)0.1573%
(-)0.4916%
(+)0.6096%
(-)0.4120%
(-)0.1770%
(-)0.0793%
(+)1.2289%
(+)0.0595%
BEGIN V DITCH,LT
STA. =52+91.97
El = 4.38
STA. =53+42.82
El = 4.30
STA. =53+93.67
El = 4.05
STA. =54+44.52
El = 3.74
STA. =54+95.37
El = 3.50
STA. =55+46.22
El = 3.41
STA. =55+96.69
El = 3.37
STA. =56+47.14
El = 3.99
END V DITCH,LT
STA. =57+48.04
El = 4.05
WIDEN USING EXISTING GRADE AND SUPER ELEVATION
-DETOUR- STA.55+13.50 TO STA.65+22.38
END DETOUR WIDENING
-DETOUR- STA.65+22.38
-DETOUR- POT STA.65+22.43 =
-L- POT STA.3195+20.00 =
-ELN- POT STA.3195+18.45
10
0
-10
52
53
54
55
56
57
58
59
60
61
62
63
64
65

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-8/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



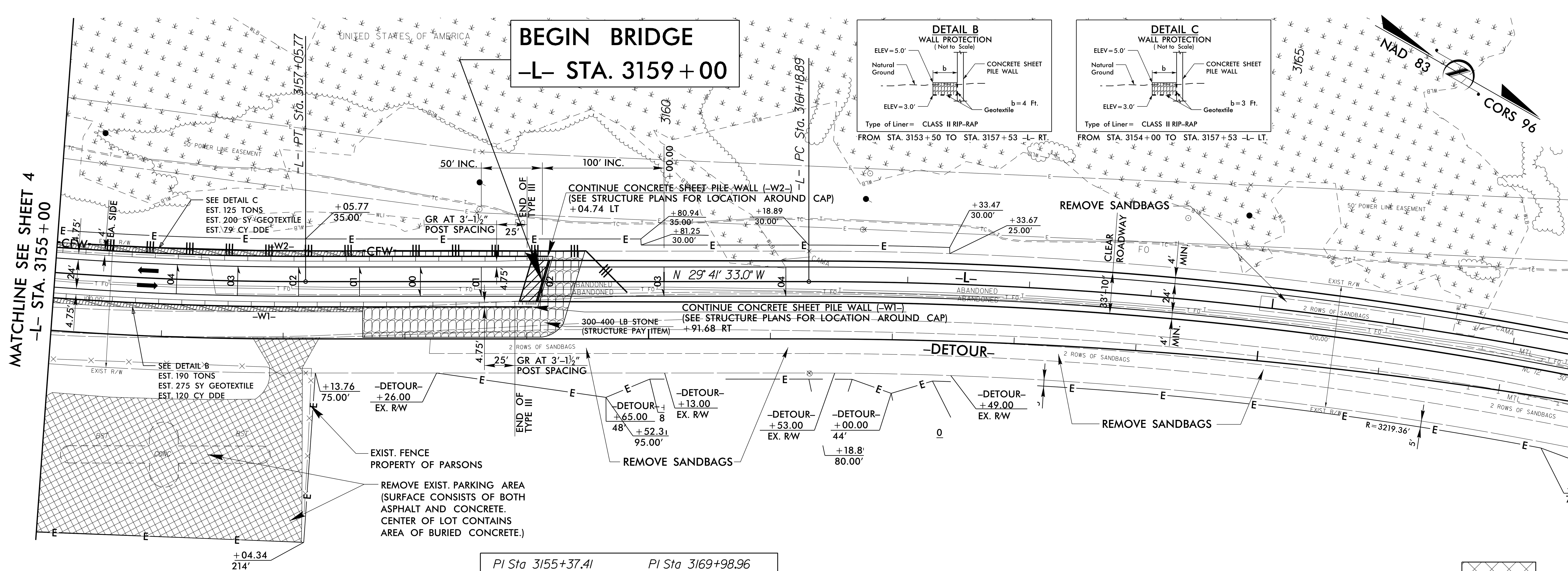
BEGIN PROJECT
-L- POT STA. 3141+50
REMOVE EXIST. PAVEMENT
AFTER FINAL IS BUILT
PER DIRECTION OF THE ENGINEER
(REFER TO SHEET 3B-1
FOR QUANTITY)
UNITED STATES OF AMERICA
-L- PC Sta. 3145+68.66
DETAIL B
WALL PROTECTION
(Not to Scale)
ELEV = 5.0'
Natural Ground
CONCRETE SHEET PILE WALL
ELEV = 3.0'
Geotextile
b = 4 Ft.
Type of Liner = CLASS II RIP-RAP
FROM STA. 3153+50 TO STA. 3157+53 -L- RT.
DETAIL C
WALL PROTECTION
(Not to Scale)
ELEV = 5.0'
Natural Ground
CONCRETE SHEET PILE WALL
ELEV = 3.0'
Geotextile
b = 3 Ft.
Type of Liner = CLASS II RIP-RAP
FROM STA. 3154+00 TO STA. 3157+53 -L- LT.
NAD 83
CORS 96
SEE DETAIL C
EST. 125 TONS
EST. 200 SY GEOTEXTILE
EST. 79 CY DDE
BEGIN CONCRETE
SHEET PILE WALL (-W2-)
+00.00 LT
+89.88
35.00'
30.00'
-L- PCC Sta. 3153+68.66
+68.66
30.00
R = 2810.07'
GRAU 350
CFW
-L- +68.66
55.00'
+36.98
46.65'
R = 2810.07'
N 72° 07' 54.6" W
100' EXIST. R/W
ABANDONED
-DETOUR-
26' INC.
SEE DETAIL B
EST. 190 TONS
EST. 275 SY GEOTEXTILE
EST. 120 CY DDE
BEGIN CONCRETE
SHEET PILE WALL (-W1-)
+49.24 RT
MATCHLINE SEE SHEET 5
-L- STA. 3155+00
-L- +78.84
75.00'
214.00'
PI Sta 3149+69.84
△ = 10° 45' 35.2" (LT)
D = 1° 20' 41.9"
L = 800.00'
T = 401.18'
R = 4,260.00'
SE = .04
PI Sta 3155+37.41
△ = 6° 48' 03.2" (LT)
D = 2° 01' 02.8"
L = 337.10'
T = 168.75'
R = 2,840.00'
SE = .04
PAVEMENT REMOVAL

SEE SHEETS 2B-7 TO 2B-10 FOR DETOUR DESIGN

SEE SHEETS 2B-2 TO 2B-6 FOR NC-12 PAVEMENT REPAIR

SEE SHEETS W-1 TO W-13 FOR WALL DETAILS

PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-9/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BEGIN BRIDGE
-L- STA. 3159+00
DETAIL B
WALL PROTECTION
(Not to Scale)
Type of Liner = CLASS II RIP-RAP
FROM STA. 3153+50 TO STA. 3157+53 -L- RT.
DETAIL C
WALL PROTECTION
(Not to Scale)
Type of Liner = CLASS II RIP-RAP
FROM STA. 3154+00 TO STA. 3157+53 -L- LT.
NAD 83
CORS 96
MATCHLINE SEE SHEET 4
-L- STA. 3155+00
MATCHLINE SEE SHEET 6
-L- STA. 3169+00
UNITED STATES OF AMERICA
SEE DETAIL C
EST. 125 TONS
EST. 200 SY GEOTEXTILE
EST. 79 CY DDE
SEE DETAIL B
EST. 190 TONS
EST. 275 SY GEOTEXTILE
EST. 120 CY DDE
GR AT 3'-1½" POST SPACING
CONTINUE CONCRETE SHEET PILE WALL (-W2-)
(SEE STRUCTURE PLANS FOR LOCATION AROUND CAP)
+04.74 LT
CONTINUE CONCRETE SHEET PILE WALL (-W1-)
(SEE STRUCTURE PLANS FOR LOCATION AROUND CAP)
+91.68 RT
300-400 LB STONE
(STRUCTURE PAY ITEM)
N 29° 41' 33.0" W
-L-
-DETOUR-
REMOVE SANDBAGS
REMOVE STEEL SHEET PILING AND STONE 300-400 LB.
(STRUCTURE PAY ITEM)
EXIST. FENCE
PROPERTY OF PARSONS
REMOVE EXIST. PARKING AREA
(SURFACE CONSISTS OF BOTH ASPHALT AND CONCRETE.
CENTER OF LOT CONTAINS AREA OF BURIED CONCRETE.)
-L- PT Sta. 3157+05.77
-L- PC Sta. 3161+18.89
R=3219.36'

PI Sta 3155+37.41	PI Sta 3169+98.96
△ = 6° 48' 03.2" (LT)	△ = 29° 51' 54.0" (RT)
D = 2° 01' 02.8"	D = 1° 44' 10.4"
L = 337.10'	L = 1,720.10'
T = 168.75'	T = 880.07'
R = 2,840.00'	R = 3,300.00'
SE = .04	SE = .04

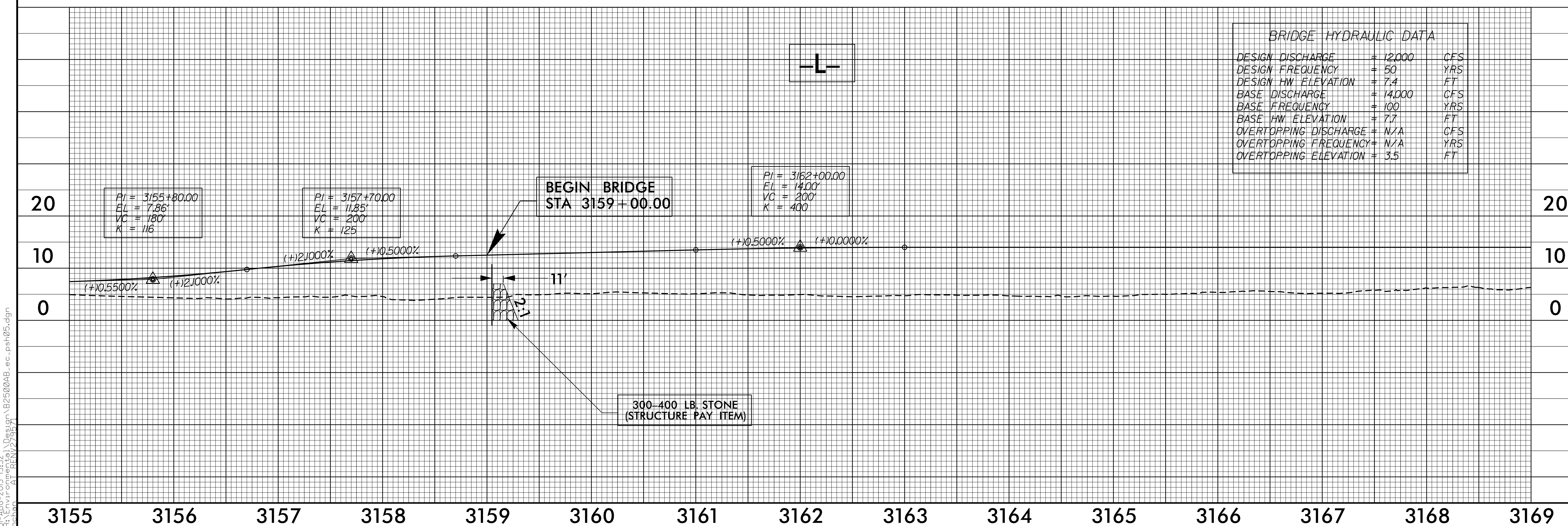
PAVEMENT REMOVAL

SEE SHEETS 2B-7 TO 2B-10 FOR DETOUR DESIGN

SEE SHEET 2B-1 FOR ROADWAY & BRIDGE RELATIONSHIP

SEE SHEETS W-1 TO W-13 FOR WALL DETAILS

SEE SHEETS S-1 TO S-44 FOR STRUCTURE PLANS



-L-
PI = 3155+80.00
EL = 7.86'
VC = 180'
K = 116
PI = 3157+70.00
EL = 11.85'
VC = 200'
K = 125
BEGIN BRIDGE
STA 3159+00.00
PI = 3162+00.00
EL = 14.00'
VC = 200'
K = 400
(+)0.5500%
(+)2.1000%
(+)0.5000%
(+)0.0000%
11'
2:1
300-400 LB. STONE
(STRUCTURE PAY ITEM)
3155 3156 3157 3158 3159 3160 3161 3162 3163 3164 3165 3166 3167 3168 3169

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 12,000	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 7.4	FT
BASE DISCHARGE	= 14,000	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 7.7	FT
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING FREQUENCY	= N/A	YRS
OVERTOPPING ELEVATION	= 3.5	FT

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PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-10/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PI Sta 3169+98.96
Δ = 29° 51' 54.0" (RT)
D = 1° 44' 10.4"
L = 1,720.10'
T = 880.07'
R = 3,300.00'
SE = .04
UNITED STATES OF AMERICA
NAD 83
CORS 96
MATCHLINE SEE SHEET 5 -L- STA. 3169+00
MATCHLINE SEE SHEET 7 -L- STA. 3182+00
-L- PT Sta. 3178+38.99
N 0° 10' 21.1" E
-DETOUR-
-L-
CLEAR ROADWAY
EXIST. STONE 300-400 LB.
REMOVE EXISTING BRIDGE (STRUCTURE PAY ITEM)
REMOVE STEEL SHEET PILING AND STONE 300-400 LB. (STRUCTURE PAY ITEM)
REMOVE STEEL SHEET PILING (STRUCTURE PAY ITEM)
REMOVE SANDBAGS
2 ROWS OF SANDBAGS
STEEL SHEET PILING
ABANDONED
+38.82 80.00'
+80.78 25.00'
+91.08 40.00'
+64.41 40.00'
+50.00
100' INC.
SEE SHEETS 2B-7 TO 2B-10 FOR DETOUR DESIGN
SEE SHEETS S-1 TO S-44 FOR STRUCTURE PLANS
SEE SHEET 2B-1 FOR ROADWAY & BRIDGE RELATIONSHIP
-L-
PI = 3179+50.00
EL = 14.00'
VC = 200'
K = 286
(+)0.0000%
(-)0.7000%
20
10
0
3169
3170
3171
3172
3173
3174
3175
3176
3177
3178
3179
3180
3181
3182

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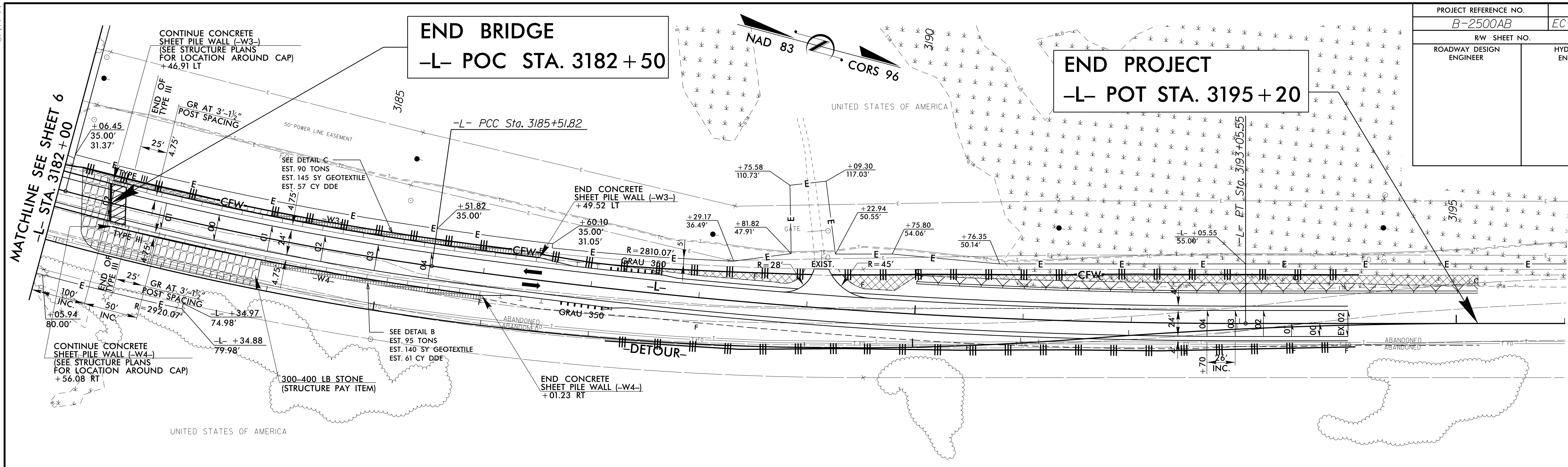
PROJECT REFERENCE NO.	SHEET NO.
B-2500AB	EC-II/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



END BRIDGE
-L- POC STA. 3182+50
END PROJECT
-L- POT STA. 3195+20
MATCHLINE SEE SHEET 6
-L- STA. 3182+00
NAD 83
CORS 96
CONTINUE CONCRETE SHEET PILE WALL (-W3-) (SEE STRUCTURE PLANS FOR LOCATION AROUND CAP) +46.91 LT
END OF TYPE III
GR AT 3'-1½" POST SPACING
-L- PCC Sta. 3185+51.82
50' POWER LINE EASEMENT
SEE DETAIL C
EST. 90 TONS
EST. 145 SY GEOTEXTILE
EST. 57 CY DDE
END CONCRETE SHEET PILE WALL (-W3-) +49.52 LT
UNITED STATES OF AMERICA
-L- PT Sta. 3193+05.55
CONTINUE CONCRETE SHEET PILE WALL (-W4-) (SEE STRUCTURE PLANS FOR LOCATION AROUND CAP) +56.08 RT
SEE DETAIL B
EST. 95 TONS
EST. 140 SY GEOTEXTILE
EST. 61 CY DDE
300-400 LB STONE (STRUCTURE PAY ITEM)
END CONCRETE SHEET PILE WALL (-W4-) +01.23 RT
-DETOUR-
-CFW-
-L-
GRAU 350
R=2810.07'
R=2920.07'
R=28'
R=45'
EXIST.
GATE
ABANDONED

DETAIL B	DETAIL C
WALL PROTECTION (Not to Scale)	WALL PROTECTION (Not to Scale)
Type of Liner= CLASS II RIP-RAP b=4 Ft.	Type of Liner= CLASS II RIP-RAP b=3 Ft.
FROM STA. 3183+97 TO STA. 3186+00 -L- RT.	FROM STA. 3183+97 TO STA. 3186+50 -L- LT.

PI Sta 3183+79.35	PI Sta 3189+29.31
Δ = 6° 58' 03.6" (LT)	Δ = 8° 04' 19.6" (LT)
D = 2° 01' 02.8"	D = 1° 04' 15.4"
L = 345.37'	L = 753.73'
T = 172.90'	T = 377.49'
R = 2,840.00'	R = 5,350.00'
SE = .04	SE = .04

SEE SHEETS 2B-7 TO 2B-10 FOR DETOUR DESIGN

SEE SHEETS 2B-11 TO 2B-12 FOR NC-12 PAVEMENT REPAIR

SEE SHEET 2B-1 FOR ROADWAY & BRIDGE RELATIONSHIP

SEE SHEETS W-1 TO W-13 FOR WALL DETAILS

SEE SHEETS S-1 TO S-44 FOR STRUCTURE PLANS

-L-
END BRIDGE
STA 3182+50.00
END GRADE
STA. 3194+00.00
EL. 4.68'
PI = 3183+80.00
EL = 10.99'
VC = 200'
K = 121
PI = 3186+40.00
EL = 4.88'
VC = 320'
K = 123
PI = 3189+60.00
EL = 5.68'
VC = 180'
K = 360
PI = 3193+00.00
EL = 4.83'
VC = 180'
K = 1800
(-)0.7000%
(-)2.3500%
(+)0.2500%
(-)0.2500%
(-)0.1500%
11'
2:1
300-400 LB. STONE (STRUCTURE PAY ITEM)
20
10
0
3182
3183
3184
3185
3186
3187
3188
3189
3190
3191
3192
3193
3194
3195
3196

8/17/99

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