TIP PROJECT: B-3613

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3613	EC-1	

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

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

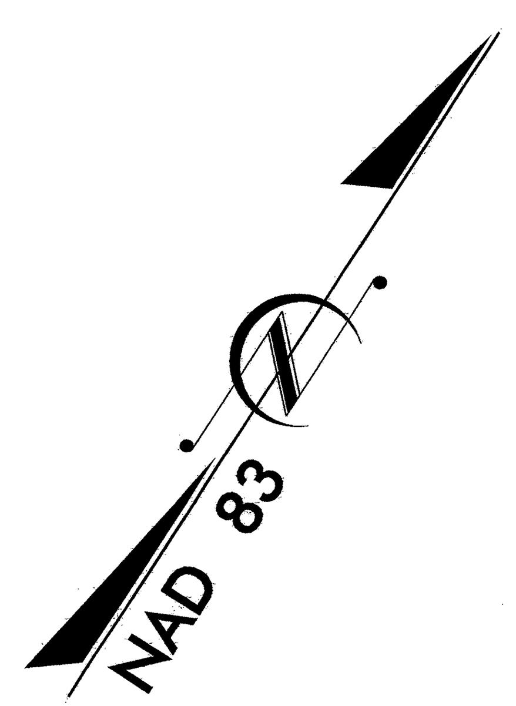
PLAN FOR PROPOSED

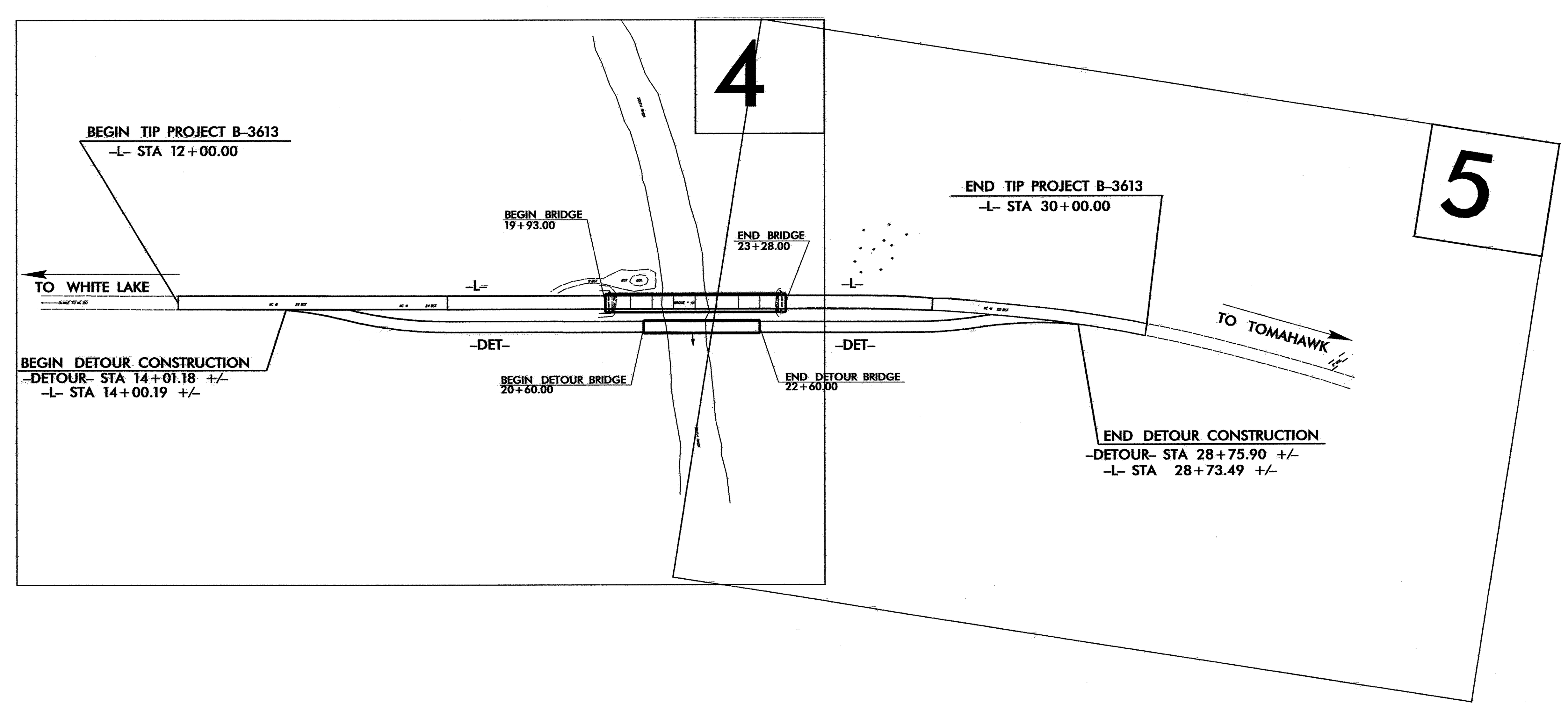
HIGHWAY EROSION CONTROL

BLADEN / SAMPSON COUNTIES

LOCATION: BRIDGE NO. 44 ON NC 41 AND APPROACHES OVER THE SOUTH RIVER

TYPE OF WORK: RESURFACING, GRADING, PAVING, DRAINAGE, DETOUR CONSTRUCTION, STRUCTURE, GUARDRAIL, TEMPORARY STRUCTURE AND TEMPORARY GUARDRAIL





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	
1630.01	Riser Basin	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
	Wattle	
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. Beginning to Sta. End

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

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2006 STANDARD SPECIFICATIONS

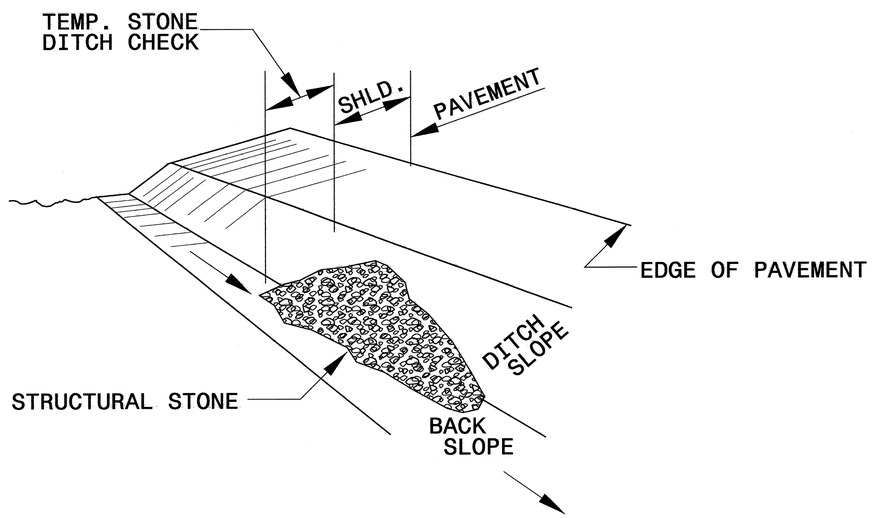
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01	Temporary Silt Fence
1606.01	Special Sediment Control Fence
1607.01	Gravel Construction Entrance
1622.01	Temporary Berms and Slope Drains
1630.03	Temporary Silt Ditch
1630.05	Temporary Diversion
1632.03	Rock Inlet Sediment Trap Type C
1633.01	Temporary Rock Silt Check Type A

PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

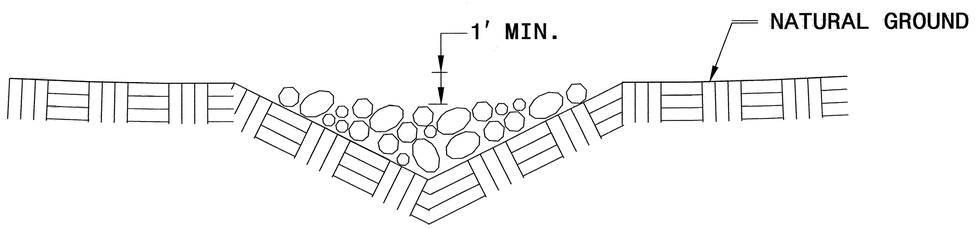


ISOMETRIC VIEW

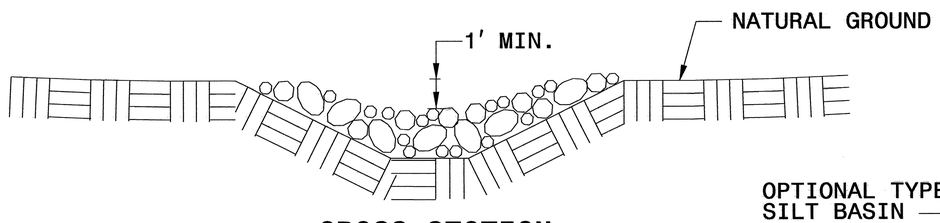
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

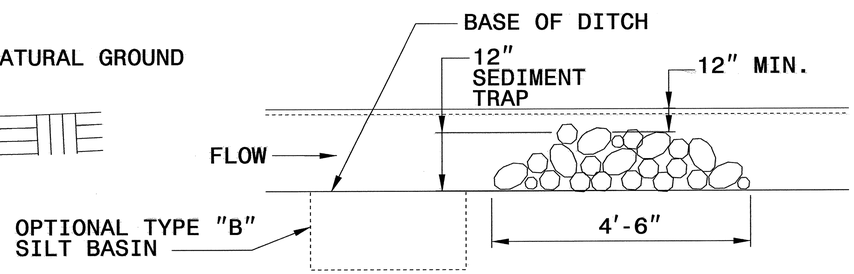
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



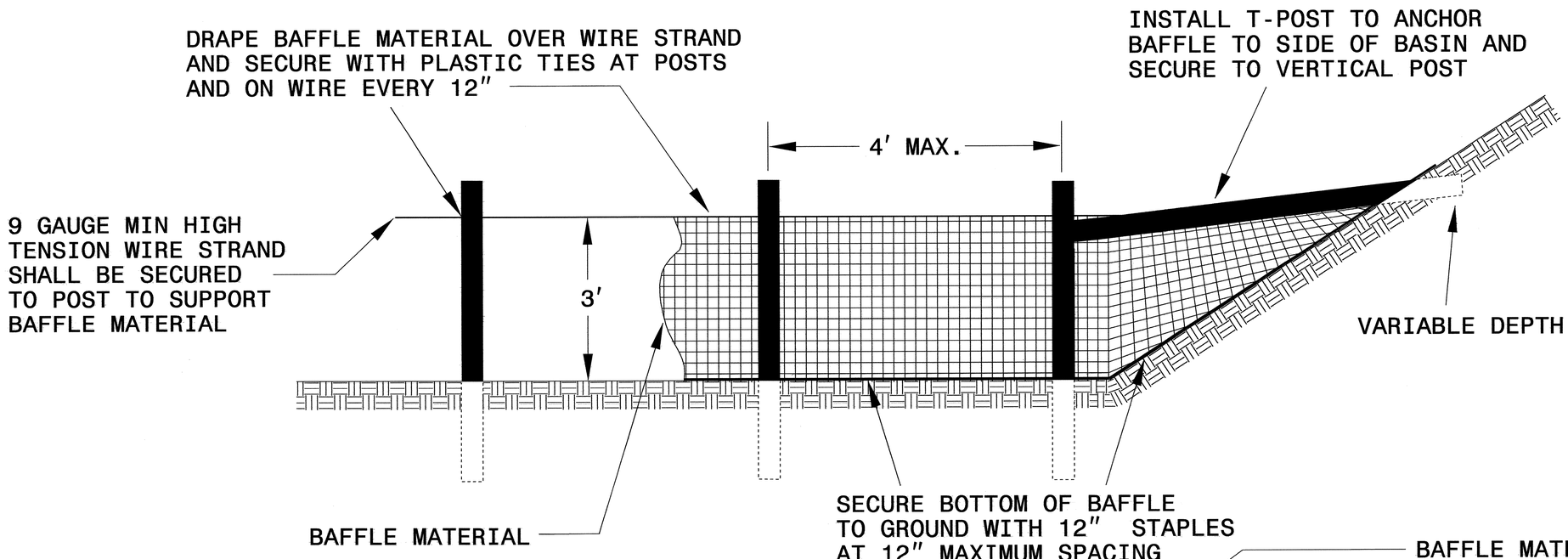
CROSS SECTION TRAPEZOIDAL DITCH

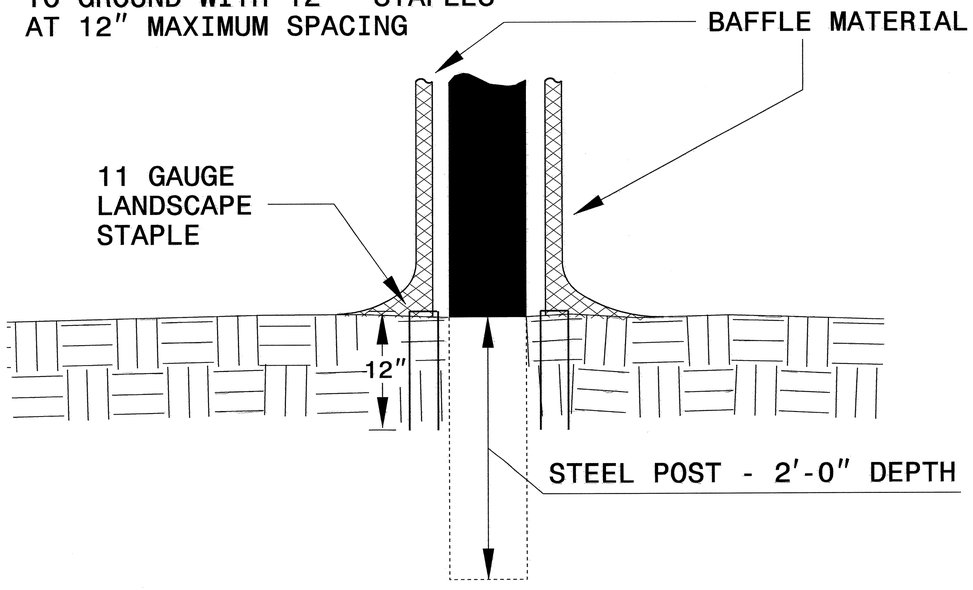


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



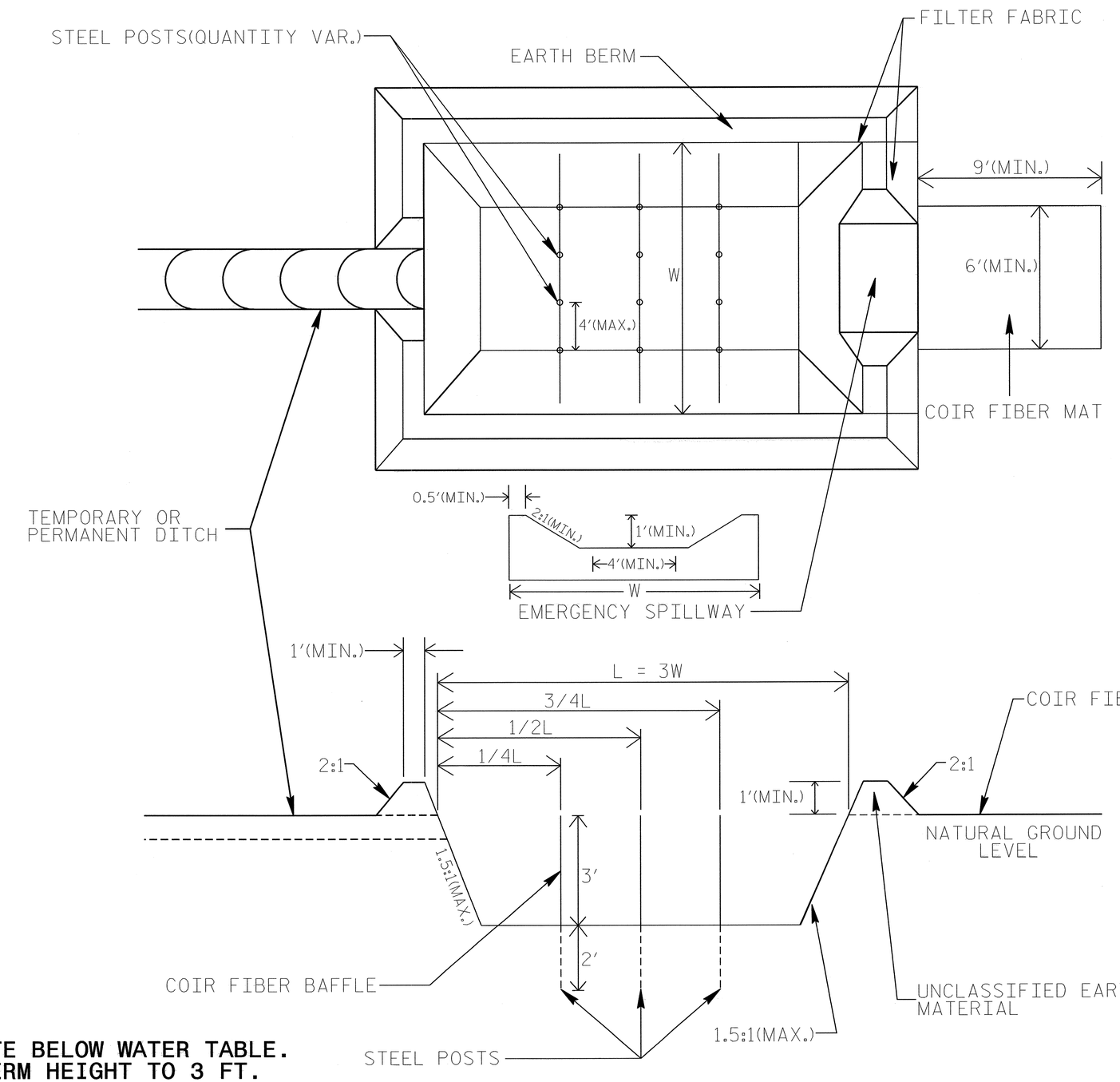


BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

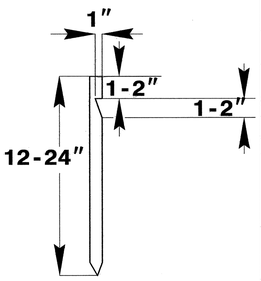
NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

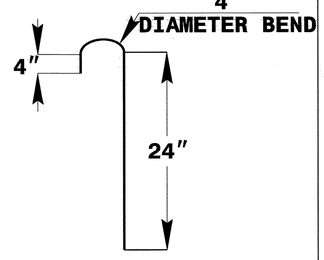
INFILTRATION BASIN WITH BAFFLES DETAIL



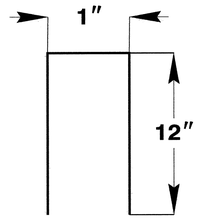
2" x 2" (nominal) WOODEN STAKE



#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. THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE INTO BASIN.

PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-3/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

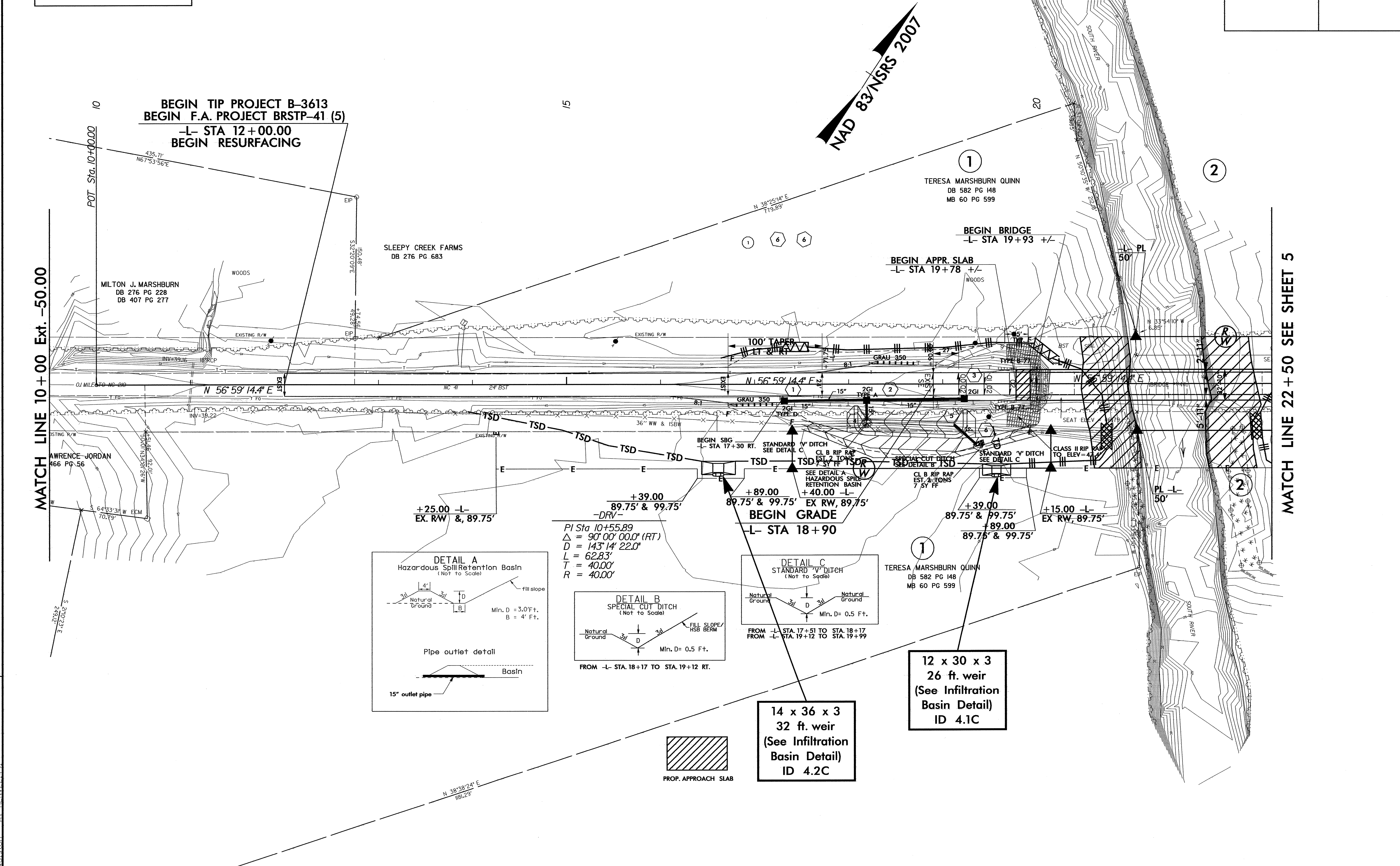
8/17/99

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

NOTE:
UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



NAD 83/NSRS 2007
BEGIN TIP PROJECT B-3613
BEGIN F.A. PROJECT BRSTP-41 (5)
-L- STA 12+00.00
BEGIN RESURFACING
POT Sta. 10+00.00
MATCH LINE 10+00 Ext. -50.00
MATCH LINE 22+50 SEE SHEET 5
MILTON J. MARSHBURN
DB 276 PG 228
DB 407 PG 277
SLEEPY CREEK FARMS
DB 276 PG 683
TERESA MARSHBURN QUINN
DB 582 PG 148
MB 60 PG 599
LAWRENCE JORDAN
SOUTH RIVER
BEGIN BRIDGE
-L- STA 19+93 +/-
BEGIN APPR. SLAB
-L- STA 19+78 +/-
100' TAPER
N 56°59' 14.4" E
BEGIN GRADE
-L- STA 18+90
+25.00 -L-
EX. R/W &, 89.75'
+39.00
89.75' & 99.75'
-DRV-
PI Sta 10+55.89
Δ = 90° 00' 00.0" (RT)
D = 143° 14' 22.0"
L = 62.83'
T = 40.00'
R = 40.00'
+89.00
89.75' & 99.75'
+40.00 -L-
EX RW, 89.75'
+15.00 -L-
EX RW, 89.75'
SEE DETAIL A
HAZARDOUS SPILL
RETENTION BASIN
DETAIL A
Hazardous Spill Retention Basin
(Not to Scale)
Min. D = 3.0' Ft.
B = 4' Ft.
Pipe outlet detail
Basin
15" outlet pipe
DETAIL B
SPECIAL CUT DITCH
(Not to Scale)
Min. D= 0.5 Ft.
FROM -L- STA. 18+17 TO STA. 19+12 RT.
DETAIL C
STANDARD 'V' DITCH
(Not to Scale)
Min. D= 0.5 Ft.
FROM -L- STA. 17+51 TO STA. 18+17
FROM -L- STA. 19+12 TO STA. 19+99
14 x 36 x 3
32 ft. weir
(See Infiltration Basin Detail)
ID 4.2C
12 x 30 x 3
26 ft. weir
(See Infiltration Basin Detail)
ID 4.1C
PROP. APPROACH SLAB

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PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-4/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

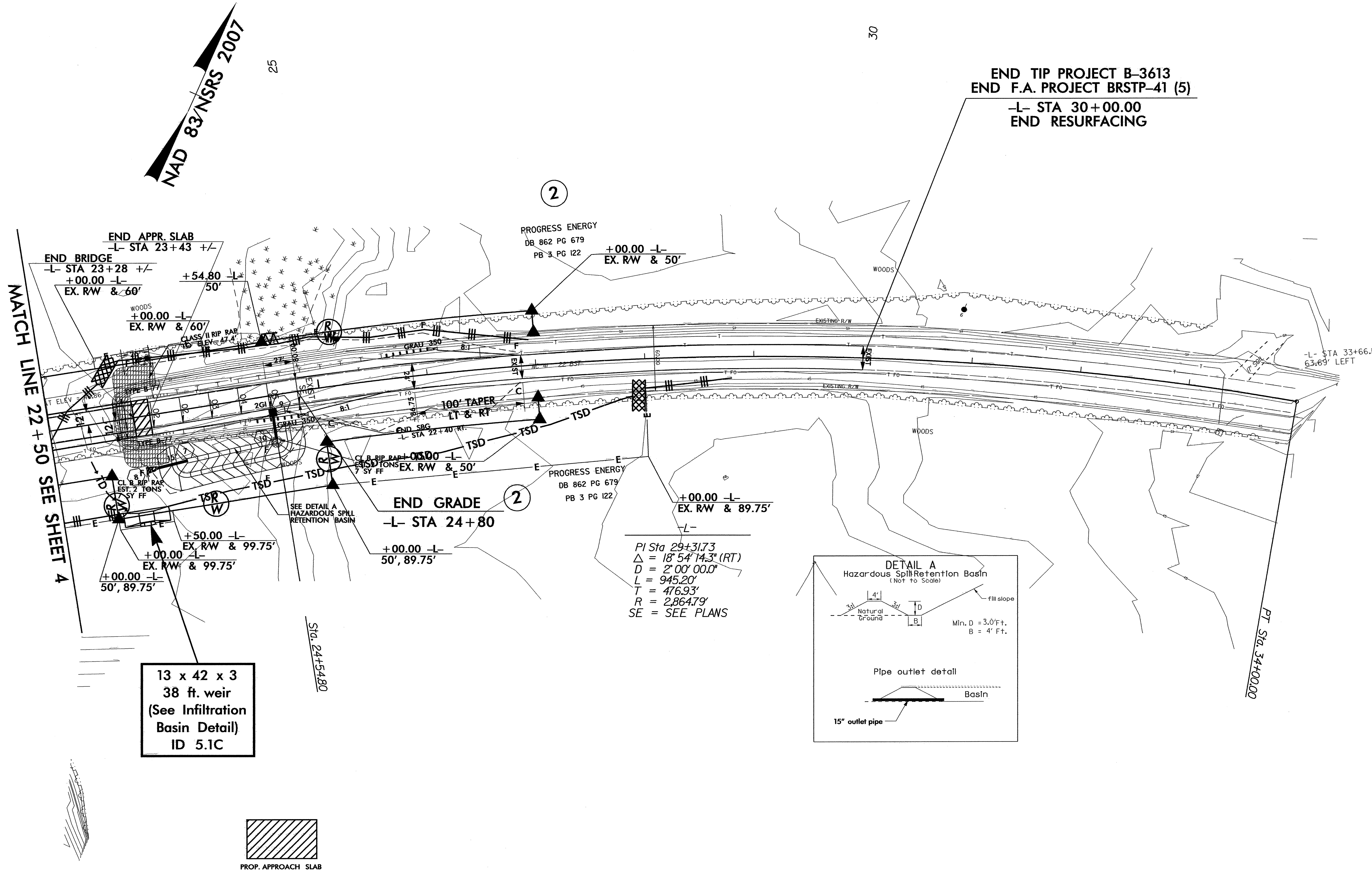
8/17/99

REVISIONS

NOTE:
UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE – A AS STILLING BASIN WHERE APPLICABLE.

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



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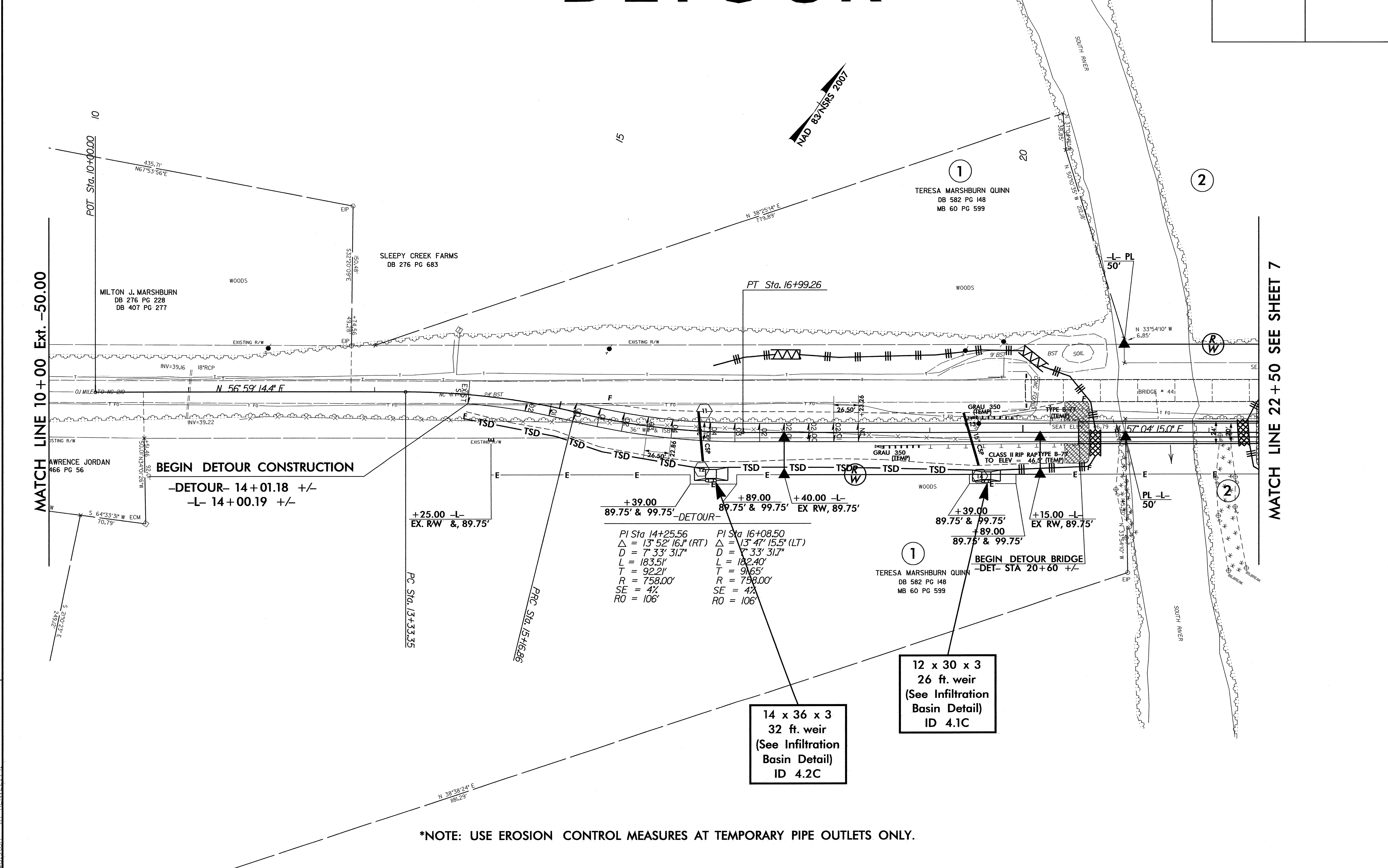
DETOUR

PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-5/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.



NAD 83/NSRS 2007
MATCH LINE 10+00 Ext. -50.00
MATCH LINE 22+50 SEE SHEET 7
POT Sta. 10+00.00
MILTON J. MARSHBURN
DB 276 PG 228
DB 407 PG 277
SLEEPY CREEK FARMS
DB 276 PG 683
WOODS
TERESA MARSHBURN QUINN
DB 582 PG 148
MB 60 PG 599
SOUTH RIVER
LAWRENCE JORDAN
466 PG 56
N 38°25'14" E
779.89'
N 56° 59' 14.4" E
PT Sta. 16+99.26
-L- PL
50'
PL -L-
50'
BEGIN DETOUR CONSTRUCTION
-DETOUR- 14+01.18 +/-
-L- 14+00.19 +/-
+25.00 -L-
EX. R/W &, 89.75'
+39.00
89.75' & 99.75'
-DETOUR-
+89.00
89.75' & 99.75'
+40.00 -L-
EX RW, 89.75'
+39.00
89.75' & 99.75'
+89.00
89.75' & 99.75'
+15.00 -L-
EX RW, 89.75'
BEGIN DETOUR BRIDGE
-DET- STA 20+60 +/-
PI Sta 14+25.56
Δ = 13° 52' 16.1" (RT)
D = 7° 33' 31.7"
L = 183.51'
T = 92.21'
R = 758.00'
SE = 4%
RO = 106'
PI Sta 16+08.50
Δ = 13° 47' 15.5" (LT)
D = 7° 33' 31.7"
L = 182.40'
T = 91.65'
R = 758.00'
SE = 4%
RO = 106'
PC Sta. 13+33.35
PRC Sta. 15+16.86
GRAU 350 (TEMP)
CLASS II RIP RAP TO ELEV = 46.4'
TYPE B-77 (TEMP)
BRIDGE = 44
14 x 36 x 3
32 ft. weir
(See Infiltration Basin Detail)
ID 4.2C
12 x 30 x 3
26 ft. weir
(See Infiltration Basin Detail)
ID 4.1C
N 38°38'24" E
1181.29'

*NOTE: USE EROSION CONTROL MEASURES AT TEMPORARY PIPE OUTLETS ONLY.

REVISIONS

8/17/99

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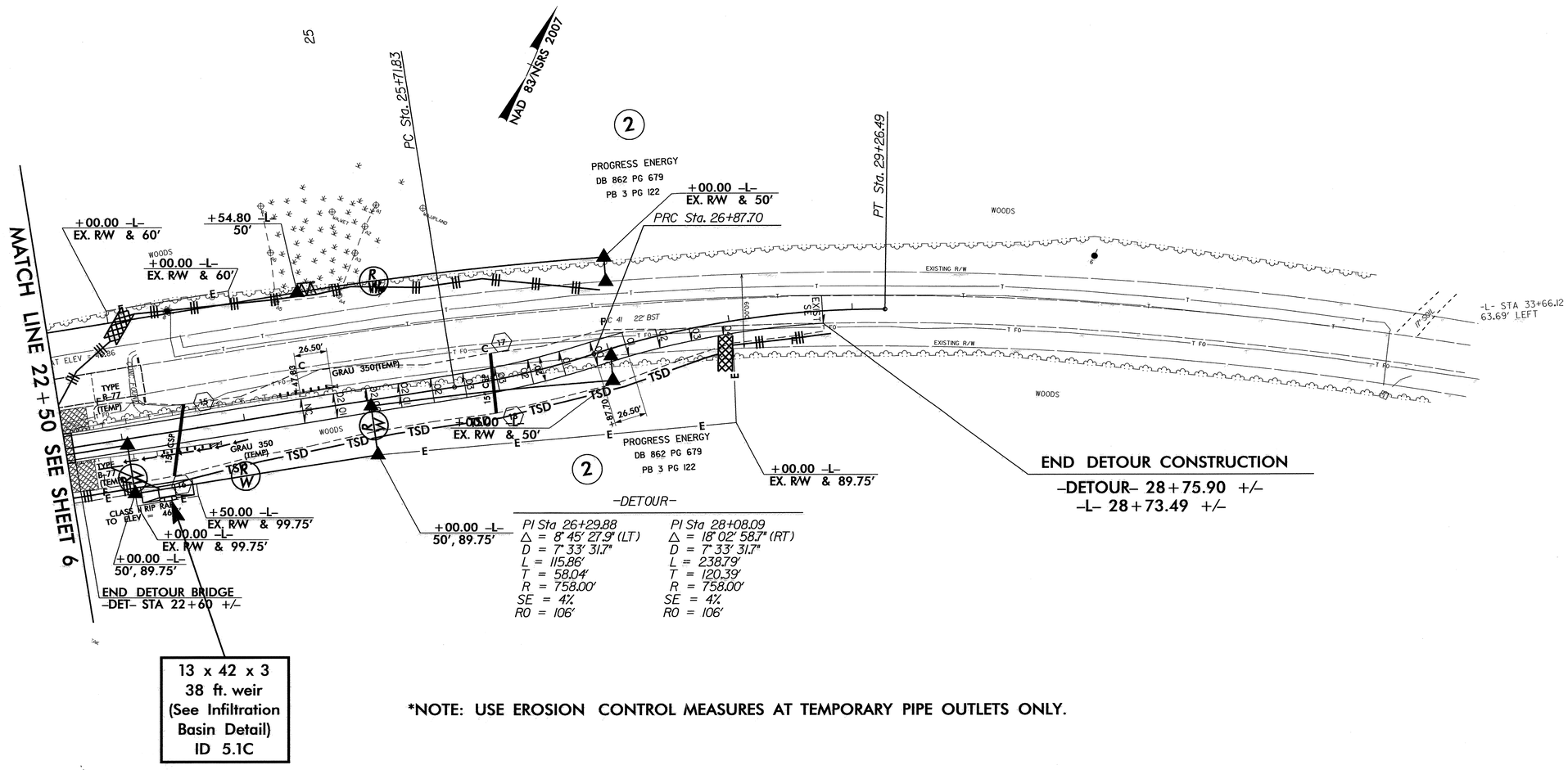
PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-6/CONST.7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS 8/17/99

NOTE: UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE – A AS STILLING BASIN WHERE APPLICABLE.

DETOUR



*NOTE: USE EROSION CONTROL MEASURES AT TEMPORARY PIPE OUTLETS ONLY.

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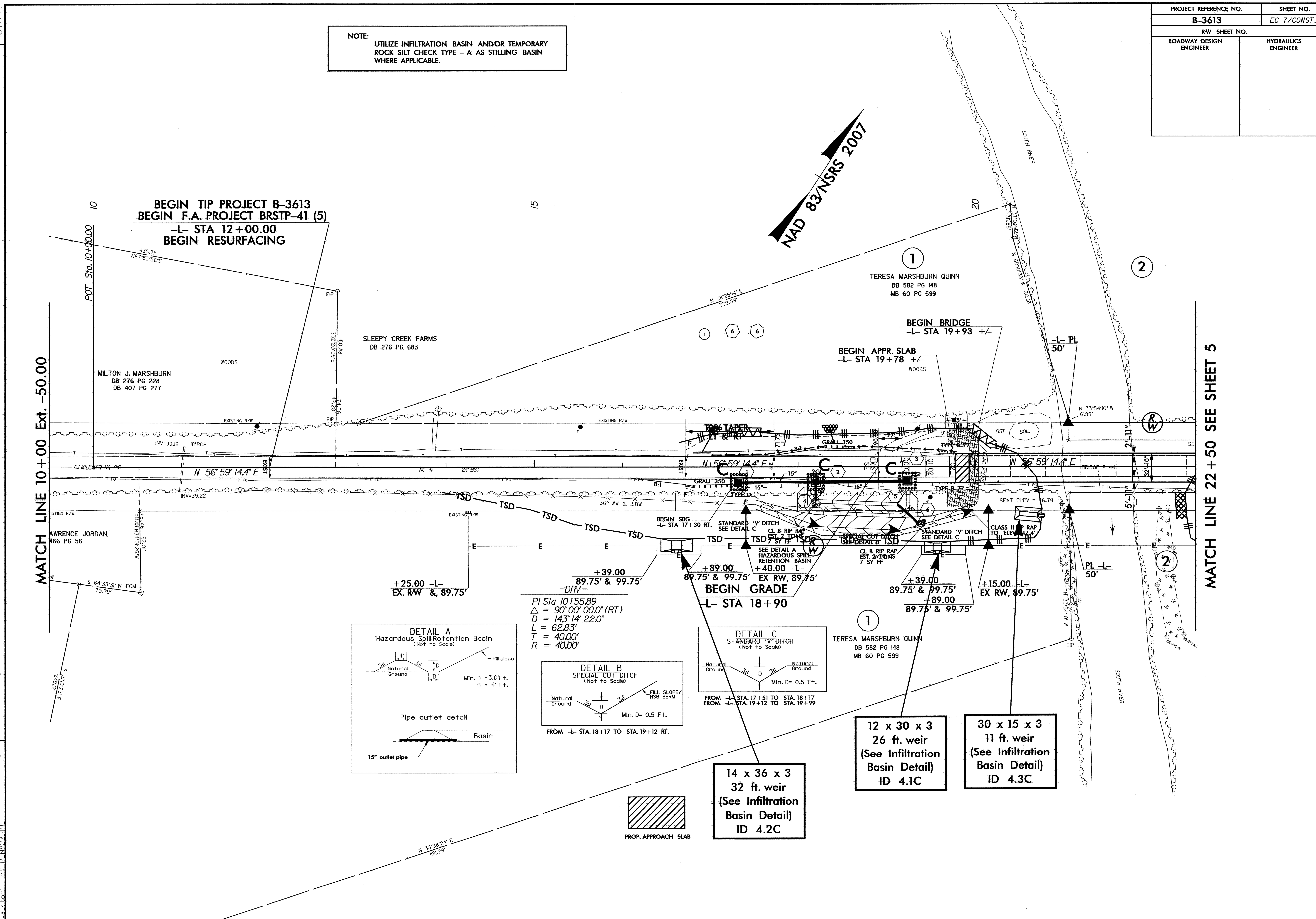


PROJECT REFERENCE NO.
B-3613
SHEET NO.
EC-7/CONST.4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NOTE:
UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE - A AS STILLING BASIN WHERE APPLICABLE.
BEGIN TIP PROJECT B-3613
BEGIN F.A. PROJECT BRSTP-41 (5)
-L- STA 12+00.00
BEGIN RESURFACING
NAD 83/NSRS 2007
POT Sta. 10+00.00
MATCH LINE 10+00 Ext. -50.00
MATCH LINE 22+50 SEE SHEET 5
MILTON J. MARSHBURN
DB 276 PG 228
DB 407 PG 277
SLEEPY CREEK FARMS
DB 276 PG 683
WOODS
TERESA MARSHBURN QUINN
DB 582 PG 148
MB 60 PG 599
LAWRENCE JORDAN
466 PG 56
SOUTH RIVER
BEGIN BRIDGE
-L- STA 19+93 +/-
BEGIN APPR. SLAB
-L- STA 19+78 +/-
-L- PL
50'
PL -L-
50'
N 56° 59' 14.4" E
NC 41
24' BST
EXISTING R/W
BEGIN SBG
-L- STA 17+30 RT.
STANDARD 'V' DITCH
SEE DETAIL C
CL B RIP RAP
EST. 2 TONS
7 SY FF
SEE DETAIL A
HAZARDOUS SPILL RETENTION BASIN
+40.00 -L-
EX RW, 89.75'
SPECIAL CUT DITCH
SEE DETAIL B
CLASS II RIP RAP
SEAT ELEV = 46.79
+25.00 -L-
EX. R/W &, 89.75'
+39.00
89.75' & 99.75'
-DRV-
+89.00
89.75' & 99.75'
BEGIN GRADE
-L- STA 18+90
+15.00 -L-
EX RW, 89.75'
PI Sta 10+55.89
Δ = 90° 00' 00.0" (RT)
D = 143° 14' 22.0"
L = 62.83'
T = 40.00'
R = 40.00'
DETAIL A
Hazardous Spill Retention Basin
(Not to Scale)
Natural Ground
fill slope
Min. D = 3.0'Ft.
B = 4' Ft.
Pipe outlet detail
Basin
15" outlet pipe
DETAIL B
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground
FILL SLOPE/HSB BERM
Min. D= 0.5 Ft.
FROM -L- STA. 18+17 TO STA. 19+12 RT.
DETAIL C
STANDARD 'V' DITCH
(Not to Scale)
Natural Ground
Min. D= 0.5 Ft.
FROM -L- STA. 17+51 TO STA. 18+17
FROM -L- STA. 19+12 TO STA. 19+99
14 x 36 x 3
32 ft. weir
(See Infiltration Basin Detail)
ID 4.2C
12 x 30 x 3
26 ft. weir
(See Infiltration Basin Detail)
ID 4.1C
30 x 15 x 3
11 ft. weir
(See Infiltration Basin Detail)
ID 4.3C
PROP. APPROACH SLAB
15-OCT-2008 11:14

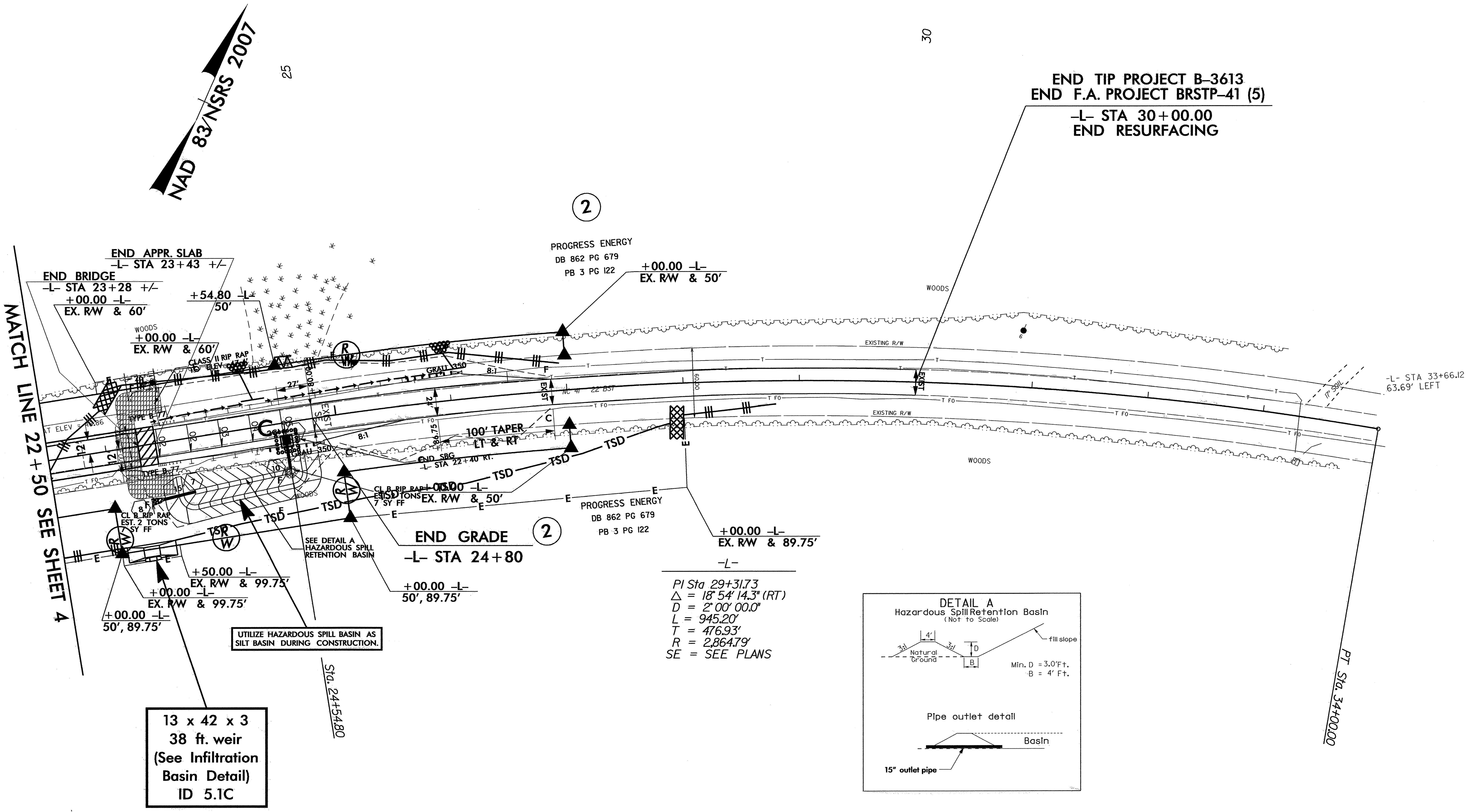
PROJECT REFERENCE NO.	SHEET NO.
B-3613	EC-8/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

REVISIONS

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

NOTE:
UTILIZE INFILTRATION BASIN AND/OR TEMPORARY ROCK SILT CHECK TYPE – A AS STILLING BASIN WHERE APPLICABLE.



-L-

PI Sta 29+31.73
Δ = 18° 54' 14.3" (RT)
D = 2° 00' 00.0"
L = 945.20'
T = 476.93'
R = 2,864.79'
SE = SEE PLANS

PROP. APPROACH SLAB

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jdwalston AT RENV22149I