TIP PROJECT: B-4326

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4326	EC-1	

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

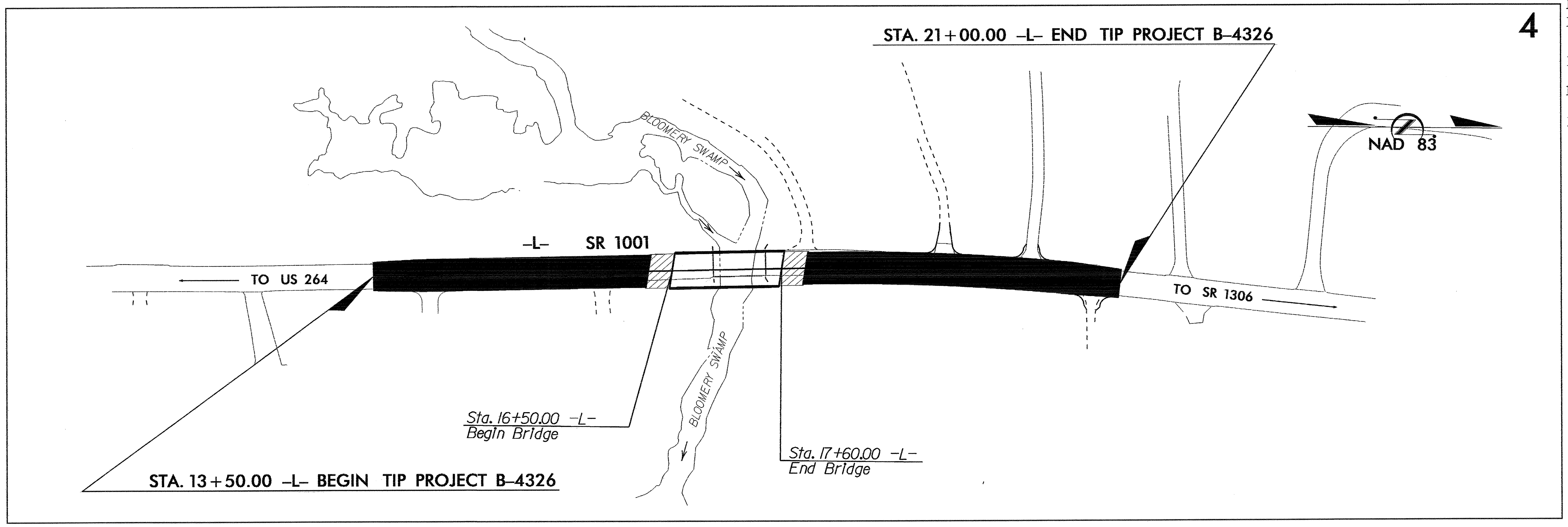
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

WILSON COUNTY

LOCATION: BRIDGE NO. 79 OVER BLOOMERY SWAMP ON SR 1001

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	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	
1630.04	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	

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.

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

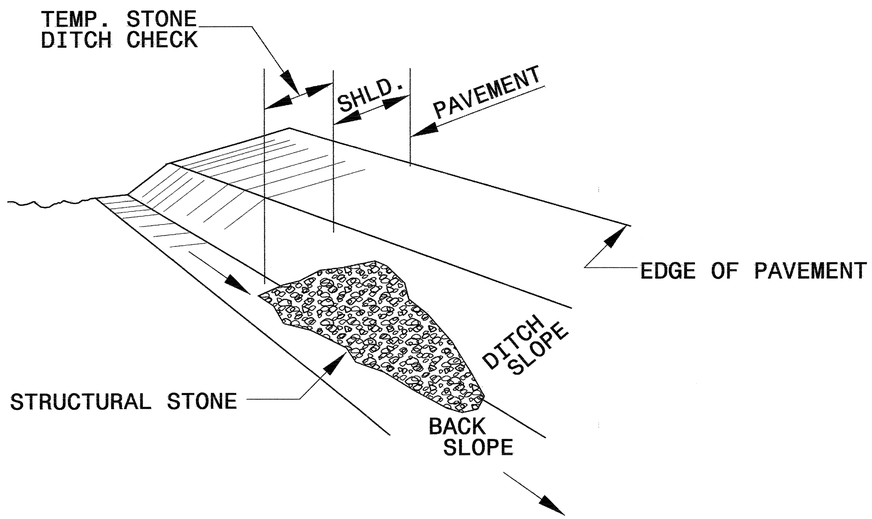
Roadway Standard Drawings

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	1630.06	Special Stilling Basin
1607.01	Gravel Construction Entrance	1632.02	Rock Inlet Sediment Trap Type B
1622.01	Temporary Berms and Slope Drains	1633.01	Temporary Rock Silt Check Type A
1630.05	Temporary Diversion	1634.02	Temporary Rock Sediment Dam Type B

PROJECT REFERENCE NO.	SHEET NO.
B-4326	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

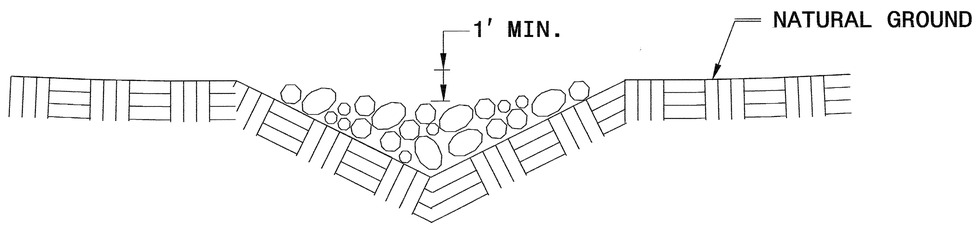


ISOMETRIC VIEW

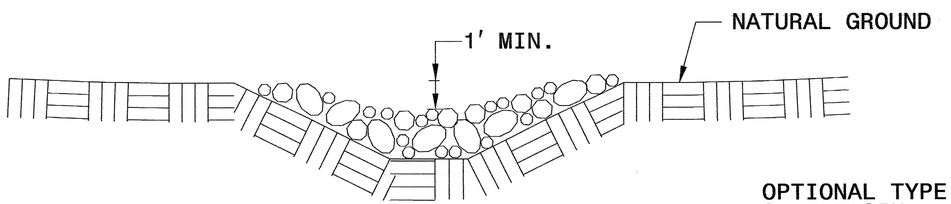
NOTES:

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

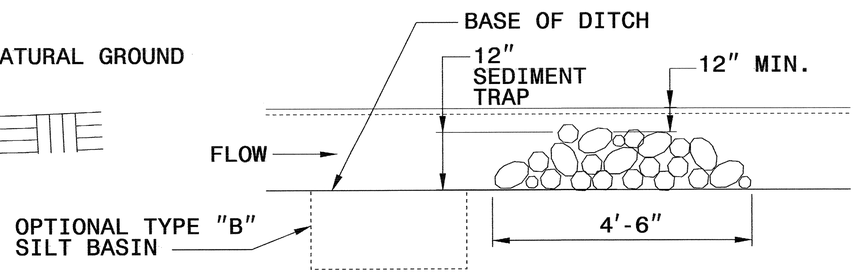
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



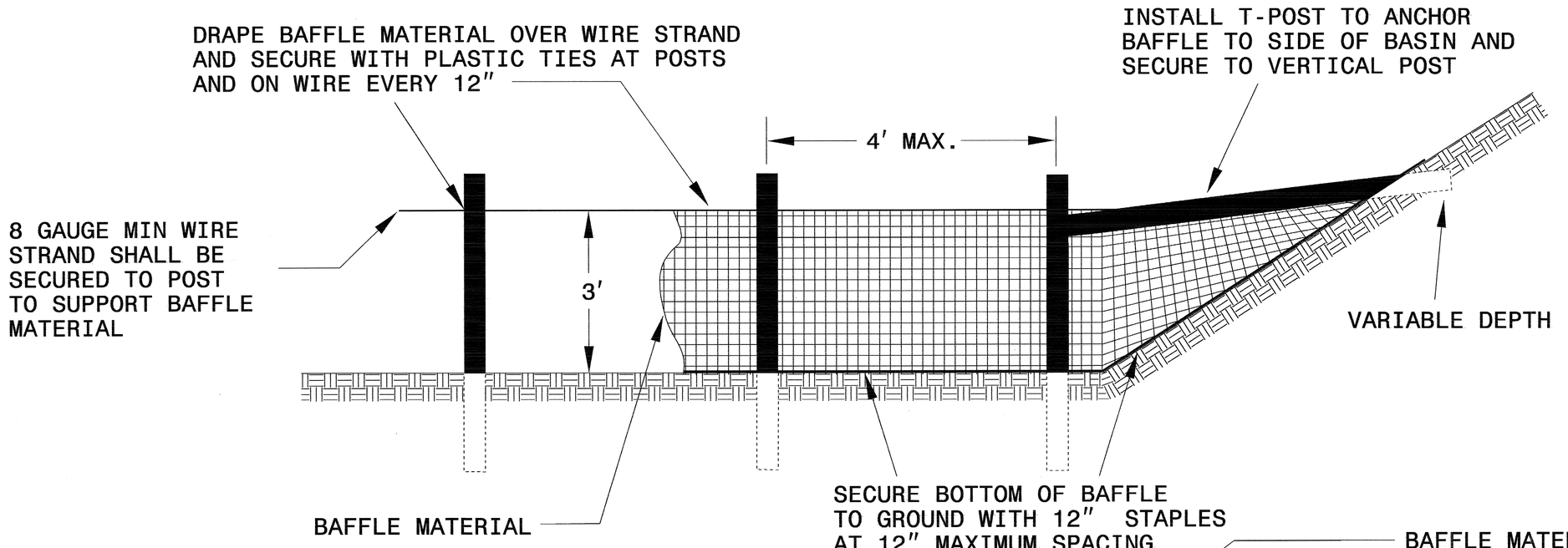
CROSS SECTION TRAPEZOIDAL DITCH

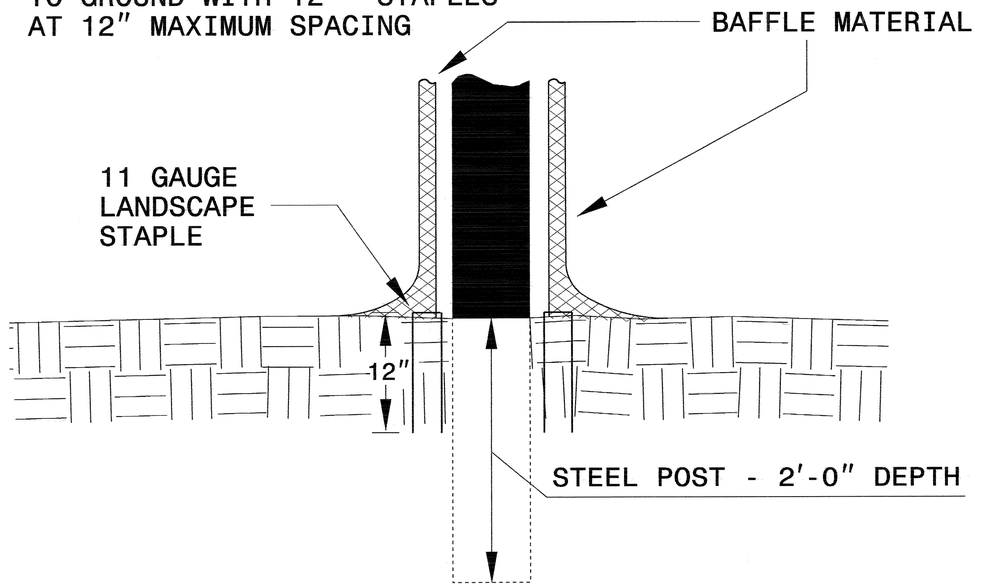


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
B-4326	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-4326	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

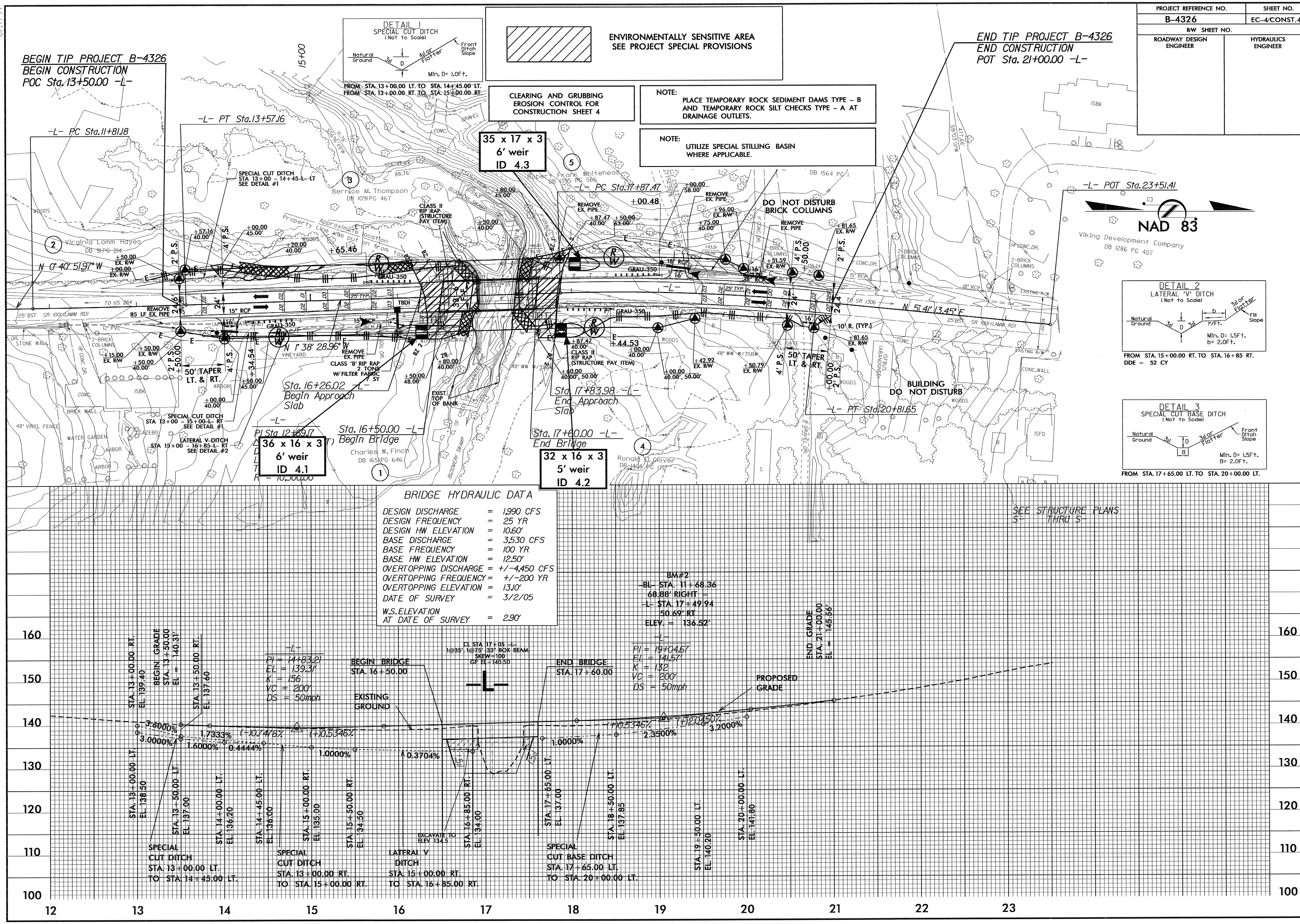
SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

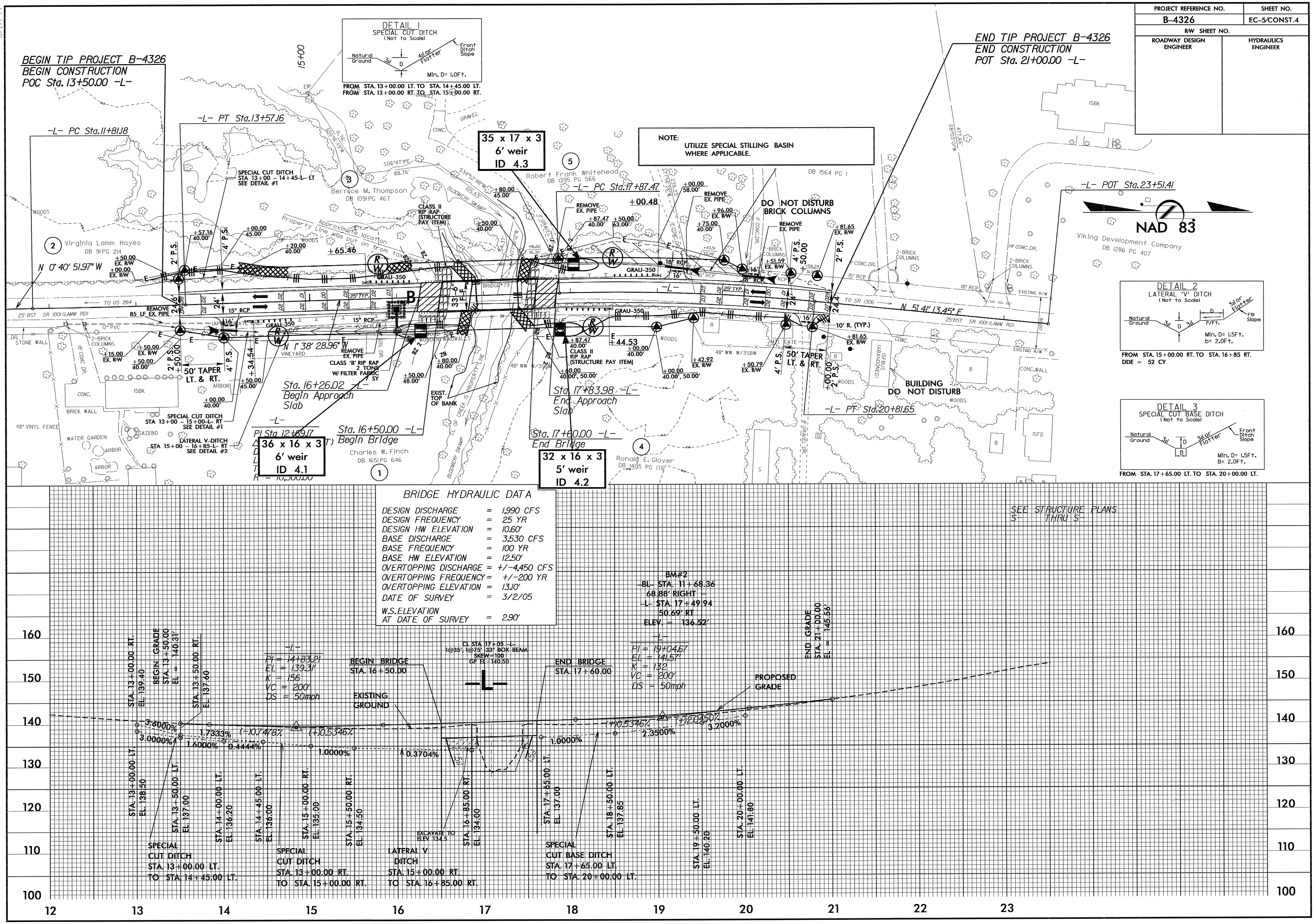
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	L	13+50	16+85	RT	245
4	L	17+65	20+50	LT	460
				SUBTOTAL	705
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					145
				TOTAL	850
				SAY	850

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)


PROJECT REFERENCE NO. B-4326
SHEET NO. EC-4/CONST.4
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
8/17/99
BEGIN TIP PROJECT B-4326
BEGIN CONSTRUCTION
POC Sta. 13+50.00 -L-
END TIP PROJECT B-4326
END CONSTRUCTION
POT Sta. 21+00.00 -L-
DETAIL 1
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground
4:1 or Flatter
Front Ditch Slope
Min. D= 1.0Ft.
FROM STA. 13+00.00 LT. TO STA. 14+45.00 LT.
FROM STA. 13+00.00 RT. TO STA. 15+00.00 RT.
ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS
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.
NOTE:
UTILIZE SPECIAL STILLING BASIN WHERE APPLICABLE.
35 x 17 x 3
6' weir
ID 4.3
36 x 16 x 3
6' weir
ID 4.1
32 x 16 x 3
5' weir
ID 4.2
-L- PC Sta.11+81.18
-L- PT Sta.13+57.16
-L- PC Sta.17+87.47
-L- PT Sta.20+81.65
-L- POT Sta.23+51.41
N 0° 40' 51.97" W
N 1° 38' 28.96" W
N 5° 41' 13.45" E
Sta. 16+26.02 -L-
Begin Approach Slab
Sta. 16+50.00 -L-
Begin Bridge
Sta. 17+60.00 -L-
End Bridge
Sta. 17+83.98 -L-
End Approach Slab
SPECIAL CUT DITCH
STA 13+00 – 14+45-L- LT
SEE DETAIL #1
SPECIAL CUT DITCH
STA 13+00 – 15+00-L- RT
SEE DETAIL #1
LATERAL V-DITCH
STA 15+00 – 16+85-L- RT
SEE DETAIL #2
Virginia Lamm Hayes
DB 91 PG 214
Bernice M. Thompson
DB 1091 PG 467
Robert Frank Whitehead
DB 1395 PG 566
Charles W. Finch
DB 1651 PG 646
Ronald E. Glover
DB 1405 PG 176
Viking Development Company
DB 1286 PG 407
DB 1564 PG 1
25' BST SR 1001 (LAMM RD)
TO US 264
TO SR 1306
REMOVE 85 LF EX. PIPE
CLASS 'B' RIP RAP 2 TONS W/FILTER FABRIC 7 SY
CLASS II RIP RAP (STRUCTURE PAY ITEM)
DO NOT DISTURB BRICK COLUMNS
BUILDING DO NOT DISTURB
50' TAPER LT. & RT.
NAD 83
DETAIL 2
LATERAL 'V' DITCH
(Not to Scale)
Natural Ground
3:1 or Flatter
Fill Slope
Min. D= 1.5Ft.
b= 2.0Ft.
FROM STA. 15+00.00 RT. TO STA. 16+85 RT.
DDE = 52 CY
DETAIL 3
SPECIAL CUT BASE DITCH
(Not to Scale)
Natural Ground
3:1 or Flatter
Front Ditch Slope
Min. D= 1.5Ft.
B= 2.0Ft.
FROM STA. 17+65.00 LT. TO STA. 20+00.00 LT.
BRIDGE HYDRAULIC DATA
DESIGN DISCHARGE = 1,990 CFS
DESIGN FREQUENCY = 25 YR
DESIGN HW ELEVATION = 10.60'
BASE DISCHARGE = 3,530 CFS
BASE FREQUENCY = 100 YR
BASE HW ELEVATION = 12.50'
OVERTOPPING DISCHARGE = +/-4,450 CFS
OVERTOPPING FREQUENCY = +/-200 YR
OVERTOPPING ELEVATION = 13.10'
DATE OF SURVEY = 3/2/05
W.S.ELEVATION AT DATE OF SURVEY = 2.90'
SEE STRUCTURE PLANS S- THRU S-
BM#2
-BL- STA. 11+68.36
68.88' RIGHT =
-L- STA. 17+49.94
50.69' RT
ELEV. = 136.52'
-L-
PI = 14+83.21
EL = 139.31'
K = 156
VC = 200'
DS = 50mph
PI = 19+04.67
EL = 141.57'
K = 132
VC = 200'
DS = 50mph
BEGIN GRADE STA. 13+50.00 EL = 140.31'
END GRADE STA. 21+00.00 EL = 145.56'
BEGIN BRIDGE STA. 16+50.00
END BRIDGE STA. 17+60.00
CL STA 17+05 -L-
1@35', 1@75' 33" BOX BEAM
SKEW=100
GP EL=140.50
EXISTING GROUND
PROPOSED GRADE
EXCAVATE TO ELEV 134.5
SPECIAL CUT DITCH STA. 13+00.00 LT. TO STA. 14+45.00 LT.
SPECIAL CUT DITCH STA. 13+00.00 RT. TO STA. 15+00.00 RT.
LATERAL V DITCH STA. 15+00.00 RT. TO STA. 16+85.00 RT.
SPECIAL CUT BASE DITCH STA. 17+65.00 LT. TO STA. 20+00.00 LT.
STA. 13+00.00 RT. EL. 139.40
STA. 13+50.00 RT. EL. 137.60
STA. 13+00.00 LT. EL. 138.50
STA. 13+50.00 LT. EL. 137.00
STA. 14+00.00 LT. EL. 136.20
STA. 14+45.00 LT. EL. 136.00
STA. 15+00.00 RT. EL. 135.00
STA. 15+50.00 RT. EL. 134.50
STA. 16+85.00 RT. EL. 134.00
STA. 17+65.00 LT. EL. 137.00
STA. 18+50.00 LT. EL. 137.85
STA. 19+50.00 LT. EL. 140.20
STA. 20+00.00 LT. EL. 141.80
3.6000%
3.0000%
1.7333%
1.6000%
0.4444%
(-)0.7478%
(+)0.5346%
1.0000%
0.3704%
(+)2.0450%
2.3500%
3.2000%
160
150
140
130
120
110
100
12
13
14
15
16
17
18
19
20
21
22
23

PROJECT REFERENCE NO.	SHEET NO.
B-4326	EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	=	1,990 CFS
DESIGN FREQUENCY	=	25 YR
DESIGN HW ELEVATION	=	10.60'
BASE DISCHARGE	=	3,530 CFS
BASE FREQUENCY	=	100 YR
BASE HW ELEVATION	=	12.50'
OVERTOPPING DISCHARGE	=	+/-4,450 CFS
OVERTOPPING FREQUENCY	=	+/-200 YR
OVERTOPPING ELEVATION	=	13.10'
DATE OF SURVEY	=	3/2/05
W.S. ELEVATION AT DATE OF SURVEY	=	2.90'