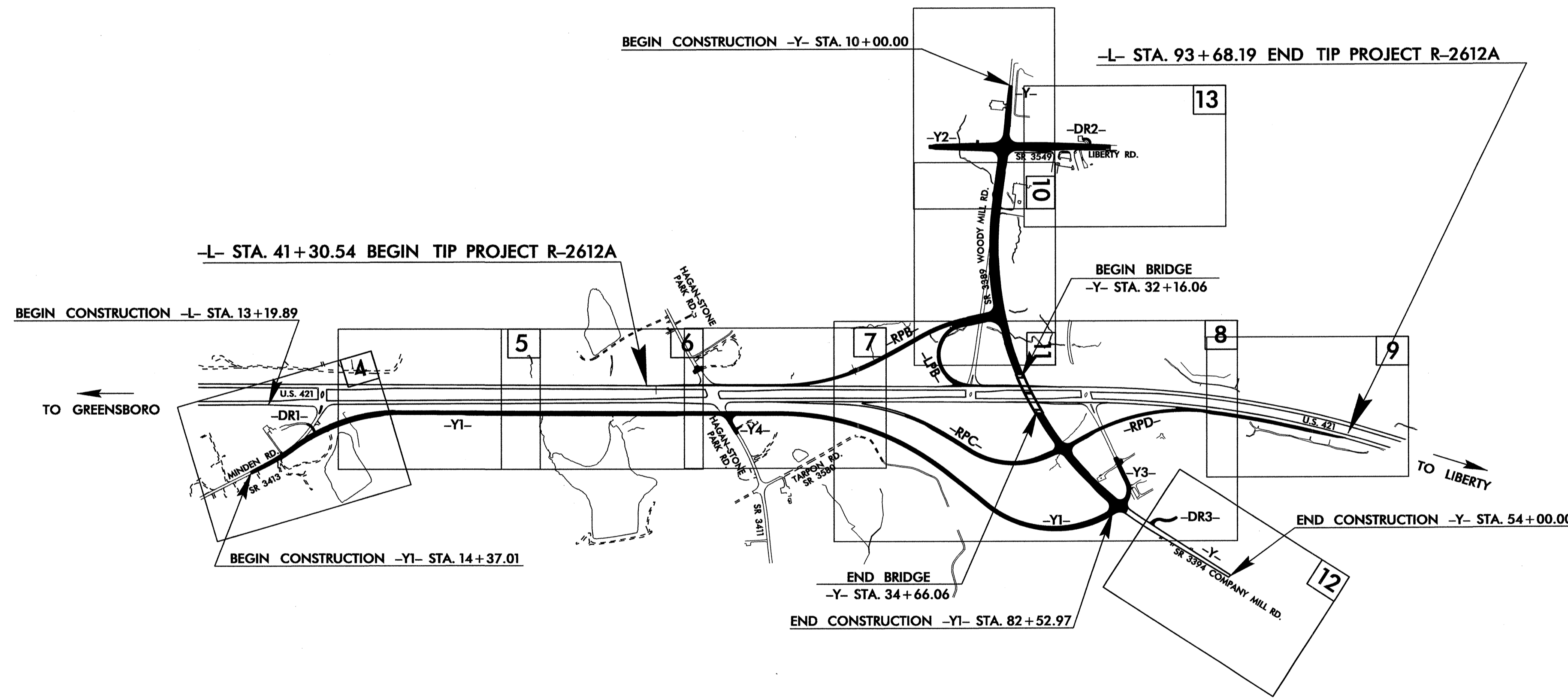


TIP PROJECT: R-2612A

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

LOCATION: US 421 AT SR 3389 (WOODY MILL ROAD) SOUTH OF GREENSBORO
TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURE, CULVERT AND SIGNALS



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2612A	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	III III III
1622.01	Temporary Berms and Slope Drains	—
	Silt Basin Type B	▭
1633.01	Temporary Rock Silt Check Type-A	▭
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	▭
	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	▭
1632.02	Type B	▭
1632.03	Type C	▭
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

THIS PROJECT CONTAINS
 EROSION CONTROL PLANS
 FOR CLEARING AND
 GRUBBING PHASE OF
 CONSTRUCTION.

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

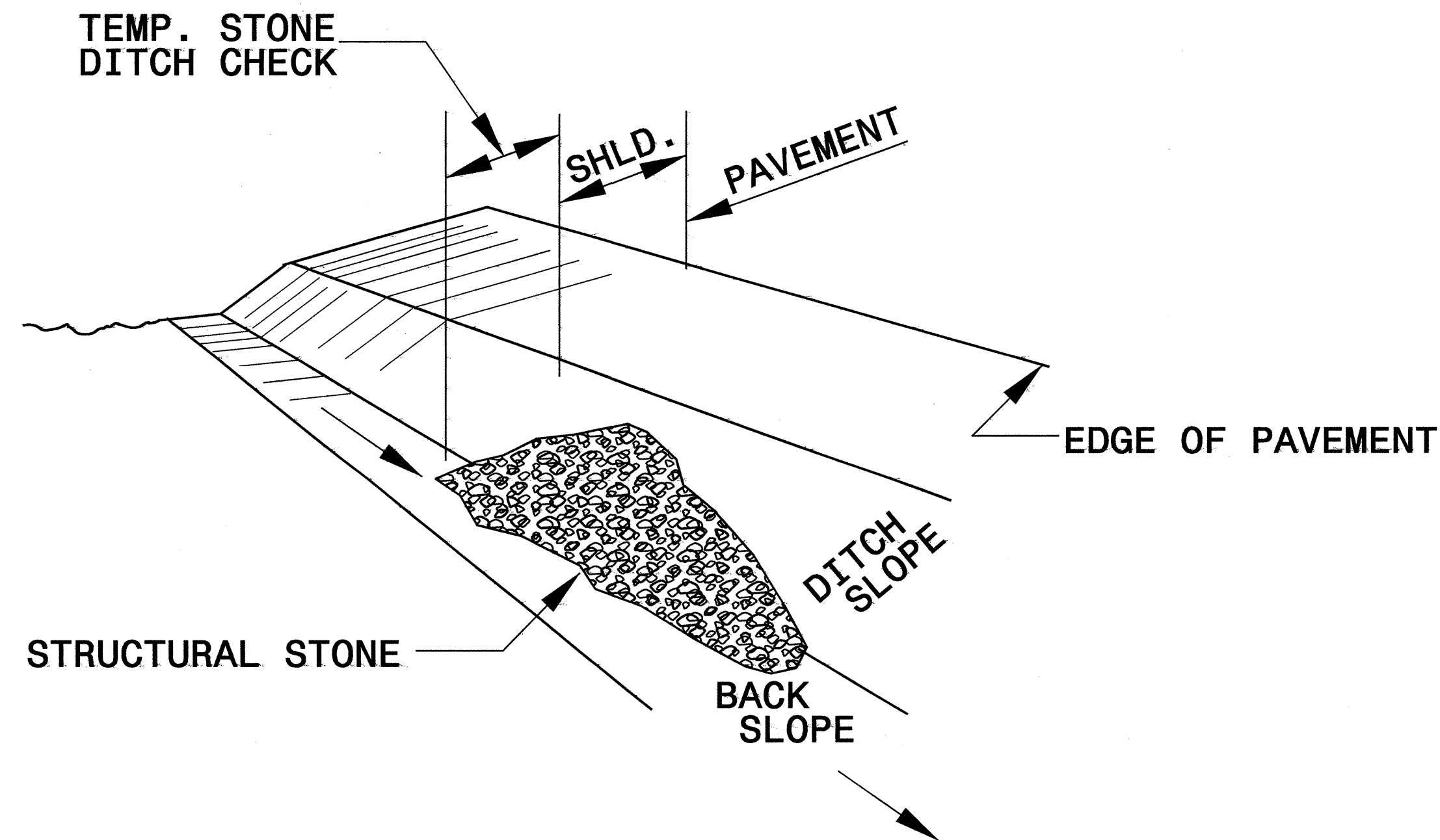
The following roadway english standards as appear in "Roadway Standard Drawings" - Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	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	

R-29-JUL-2010 09:47
 jennif...
 R-2612A-EC.tch.dgn

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

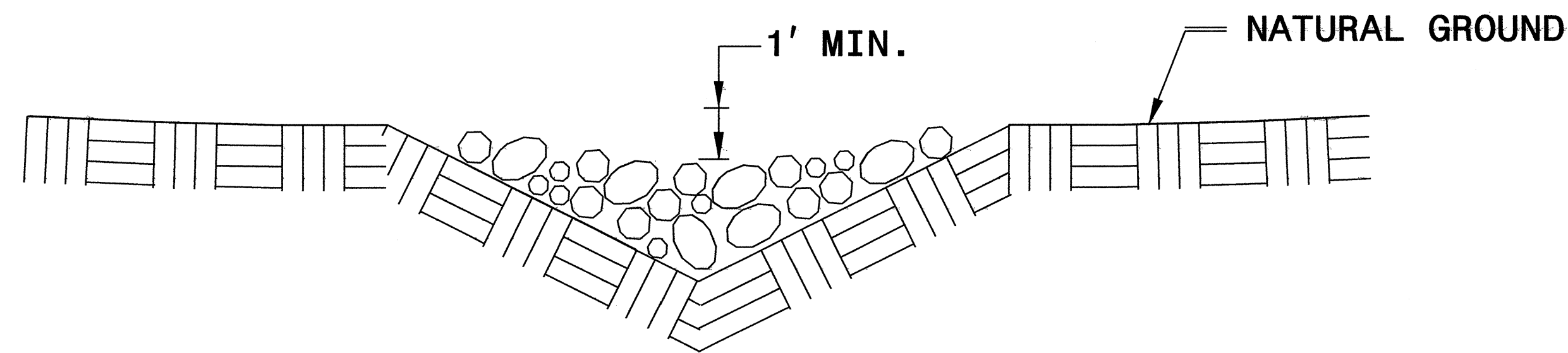


ISOMETRIC VIEW

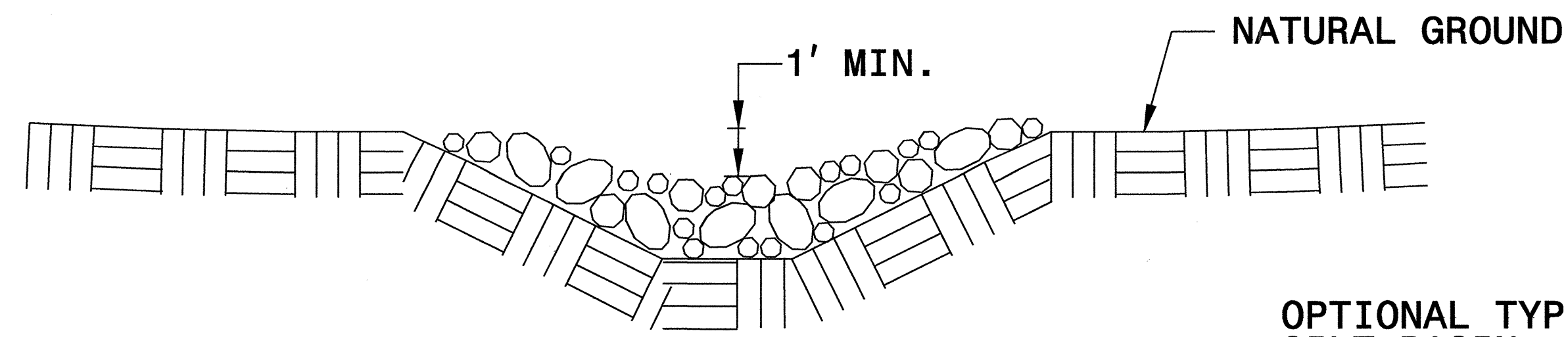
NOTES:

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

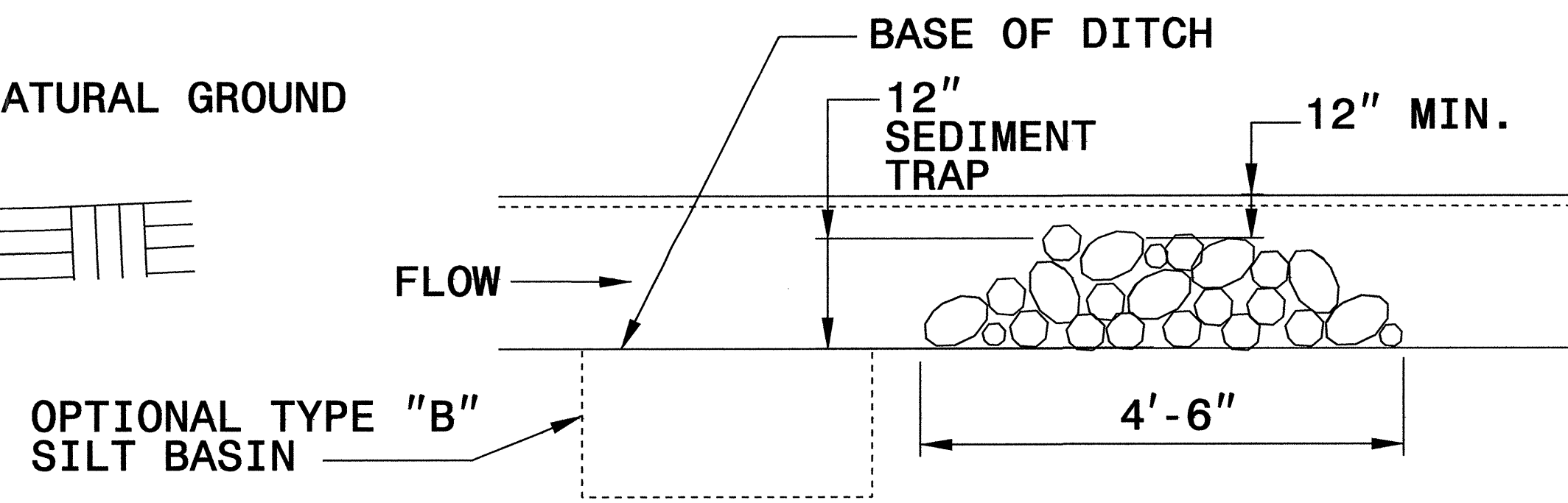
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



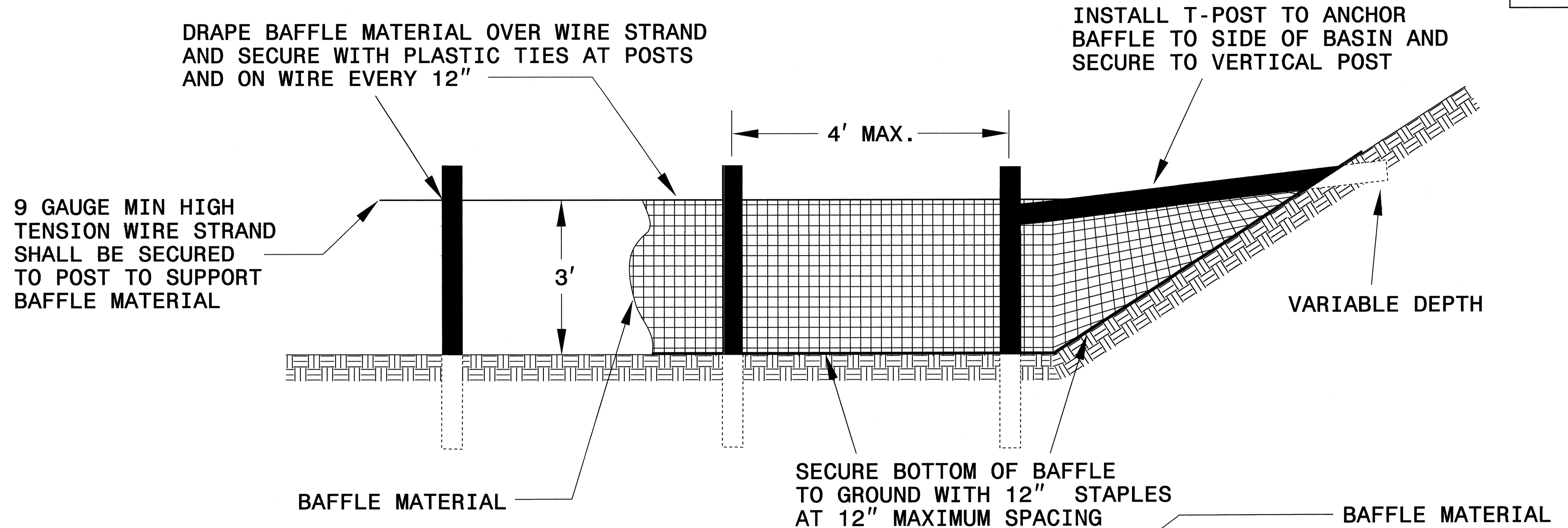
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

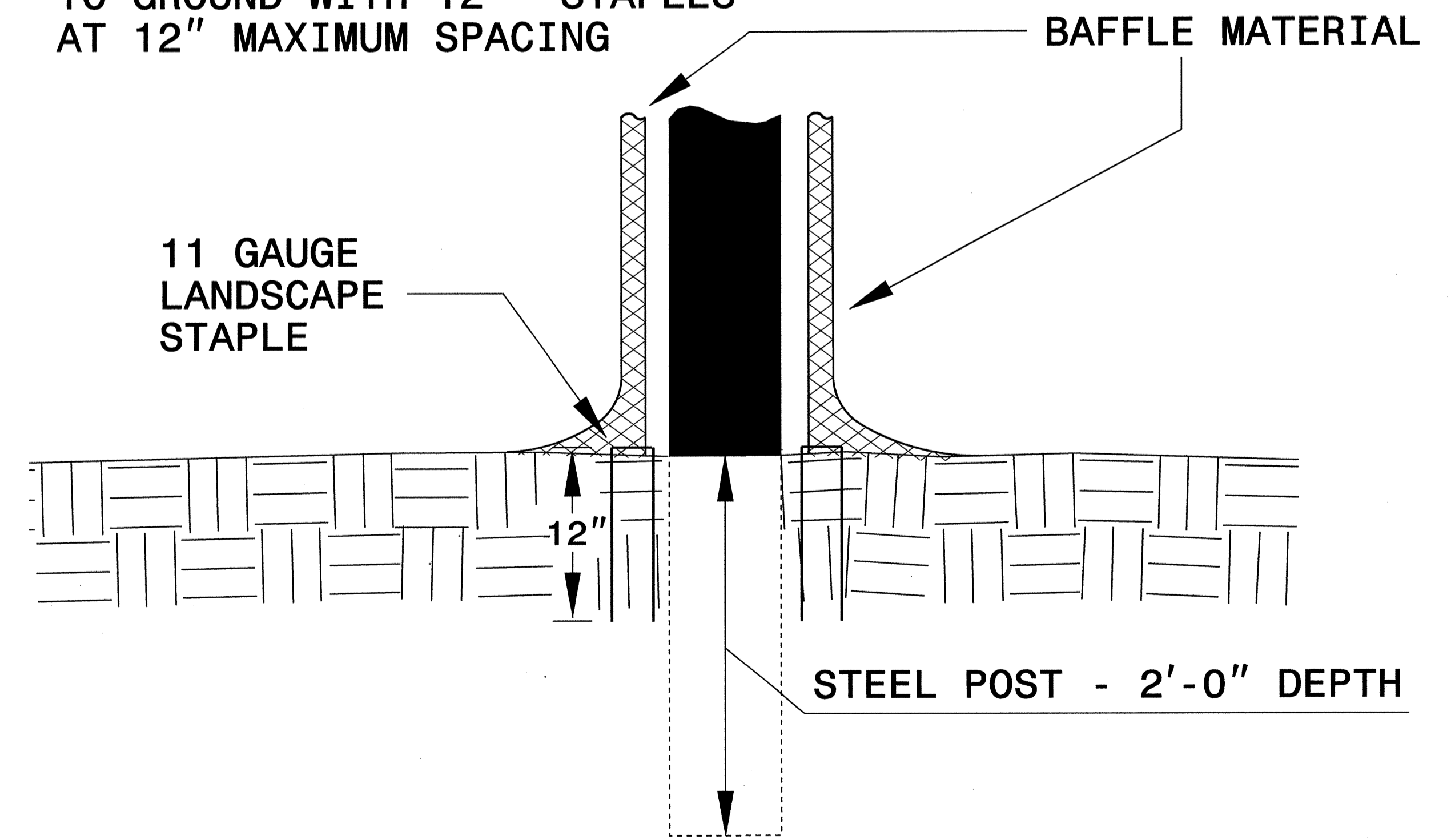
PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



NOTES:

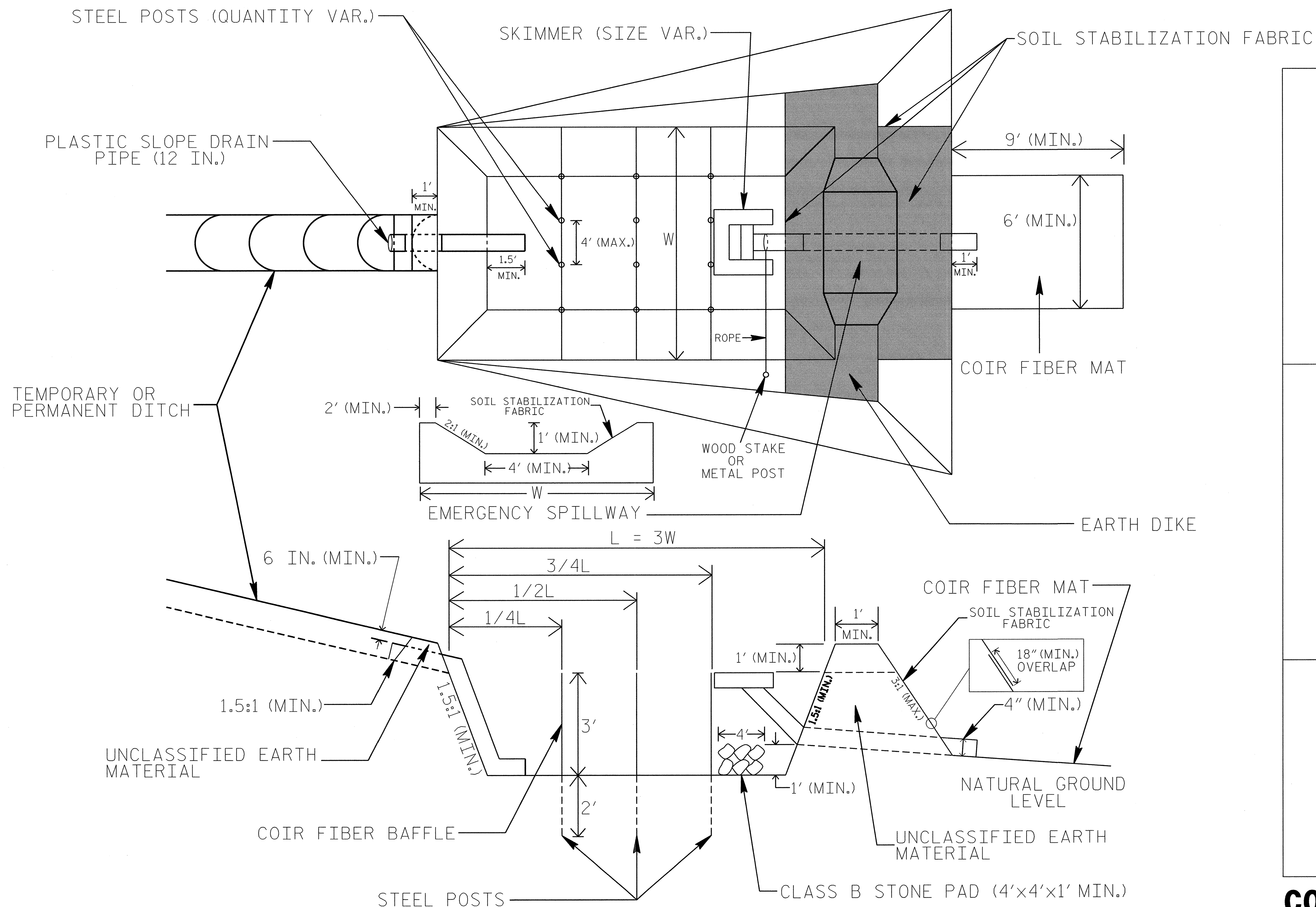
1. INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH.
2. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.
3. TOP HEIGHT OF COIR FIBER BAFFLES SHALL NOT BE BELOW BASE OF EMERGENCY SPILLWAY ELEVATION.



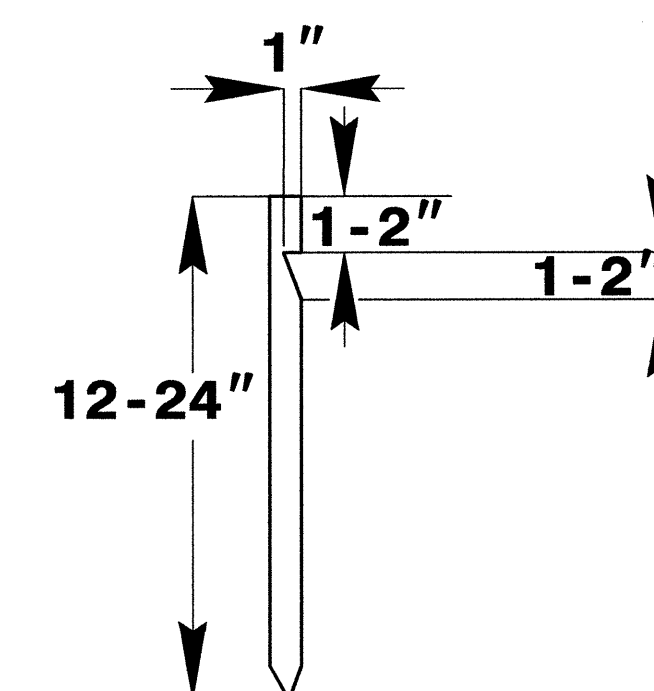
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

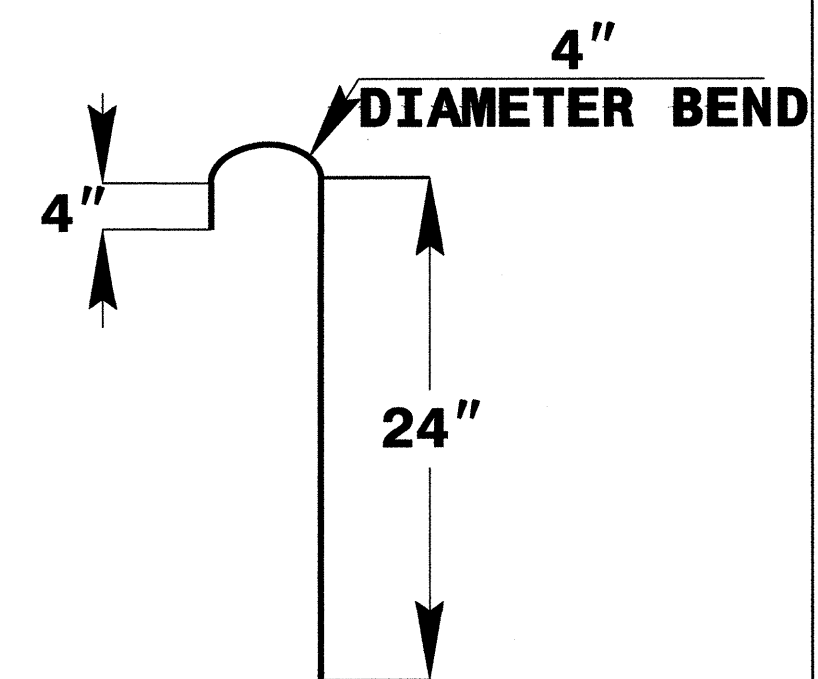
PROJECT REFERENCE NO. R-26/2A	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



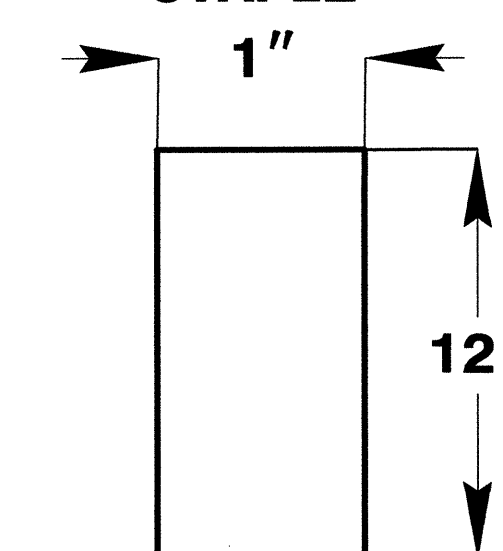
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

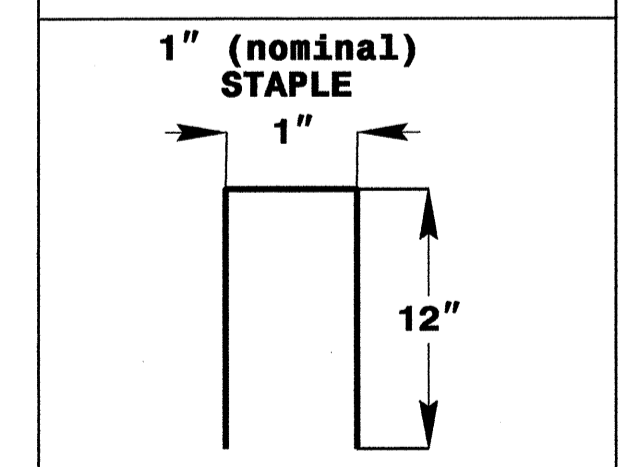
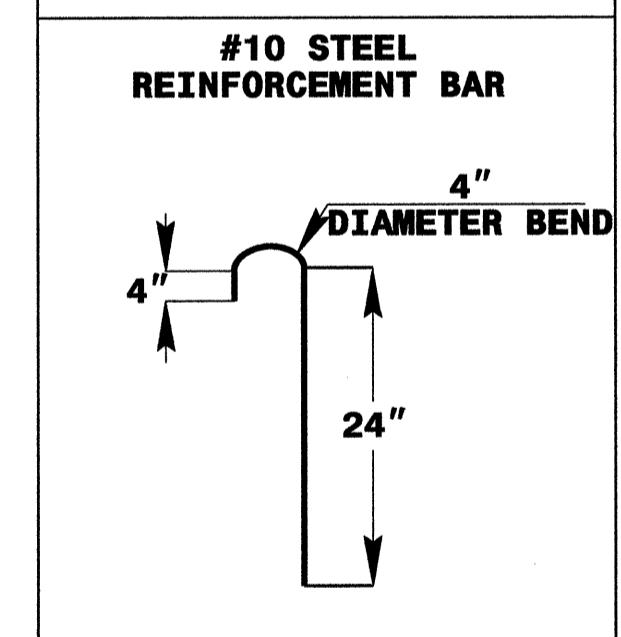
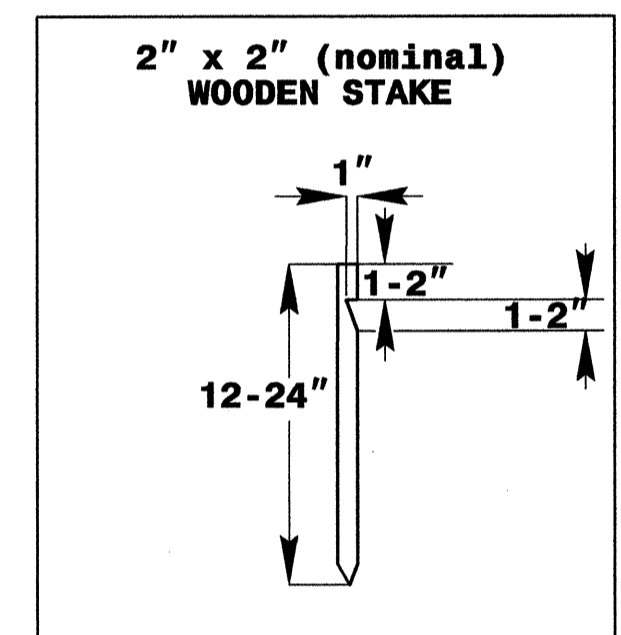
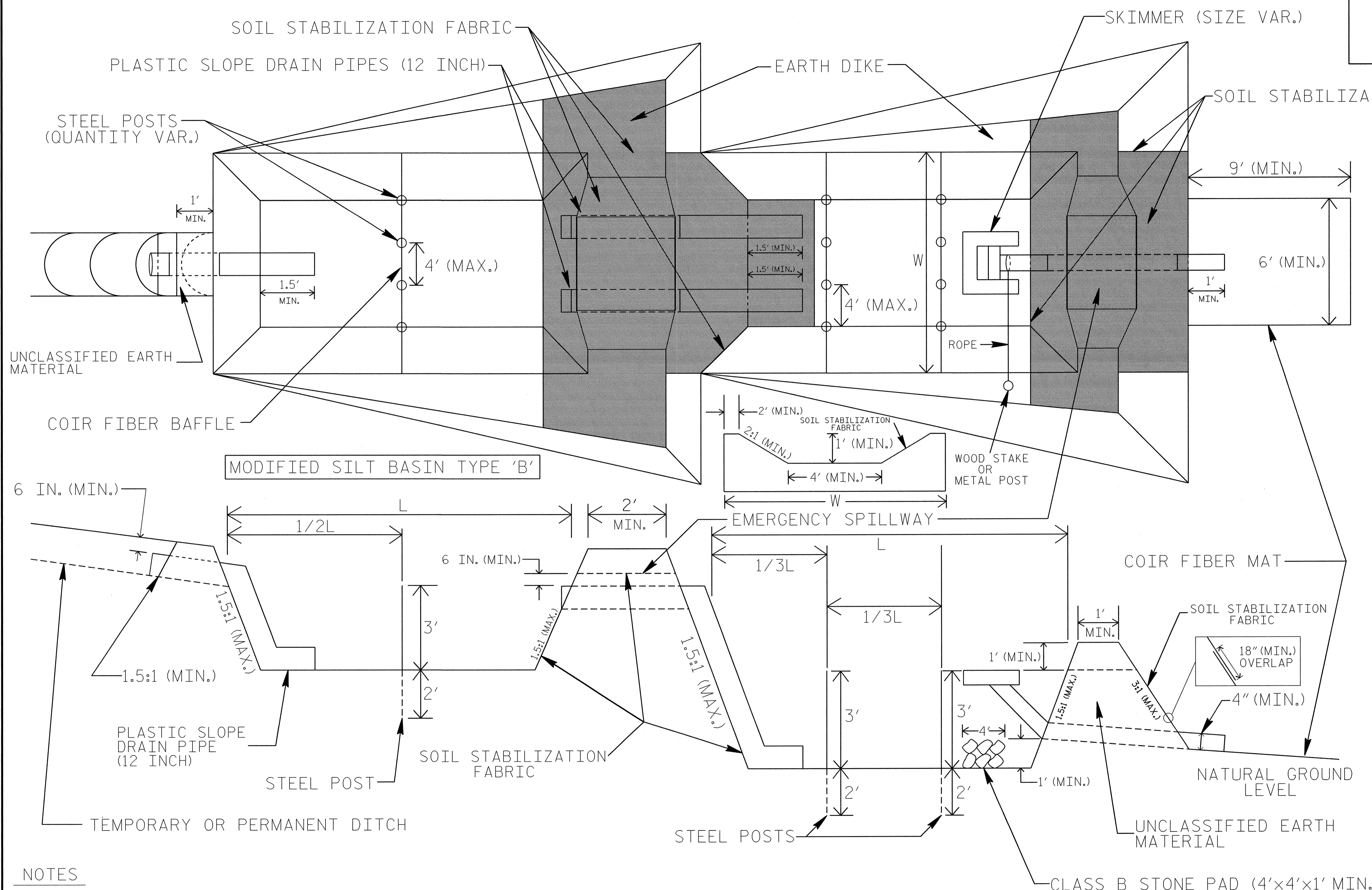
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTER FABRIC AS DIRECTED.
6. SOIL STABILIZATION FABRIC FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" AS SHOWN.

NOT TO SCALE

TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

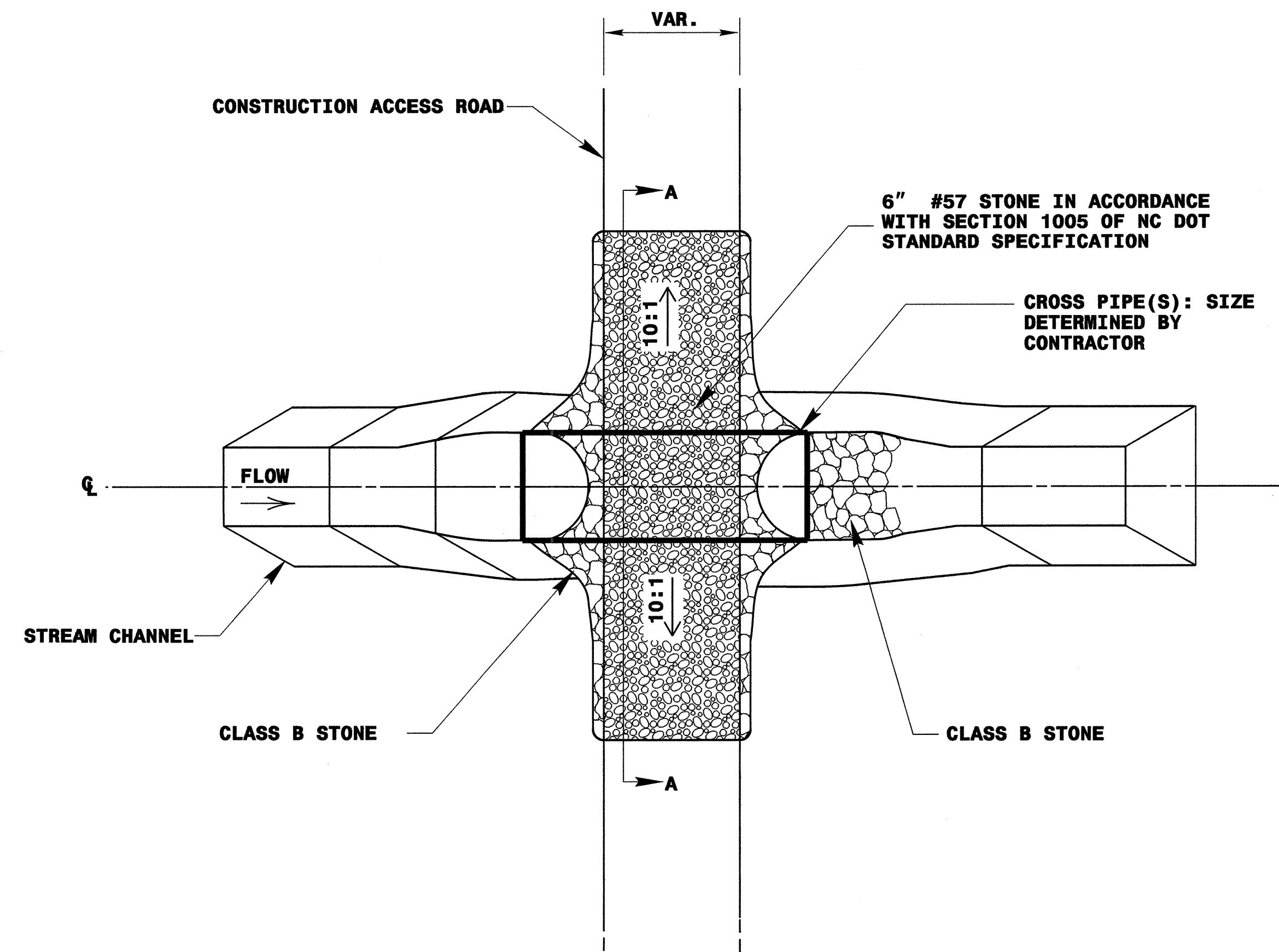
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3 FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE EMERGENCY SPILLWAY LENGTHS (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION FABRIC FOR EMERGENCY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18" (MIN.) AS SHOWN.

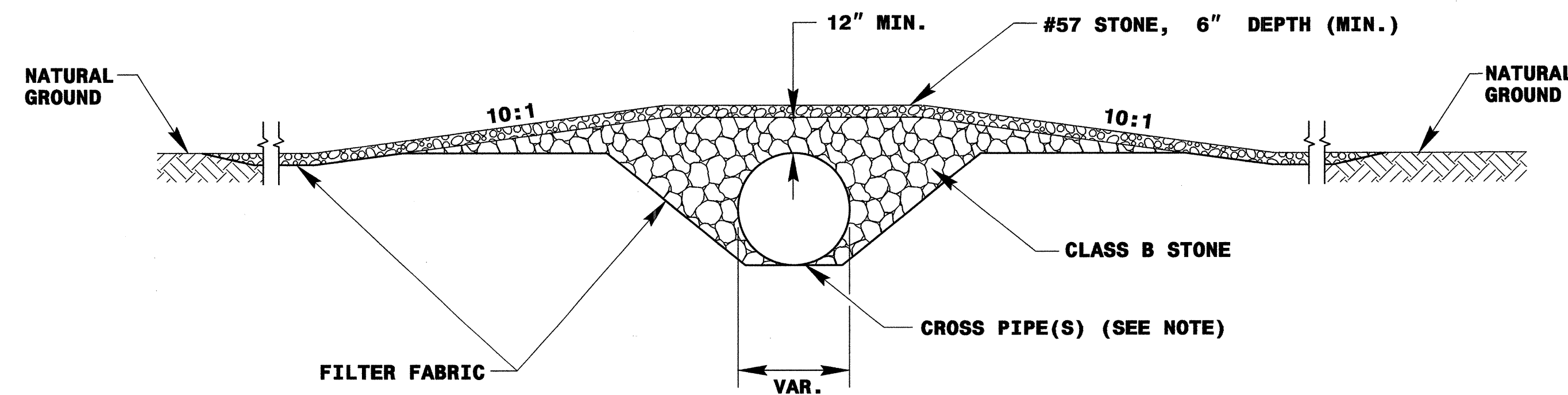
NOT TO SCALE

PROJECT REFERENCE NO. <i>R-2612A</i>	SHEET NO. <i>EC-2D</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY STREAM CROSSING



PLAN VIEW

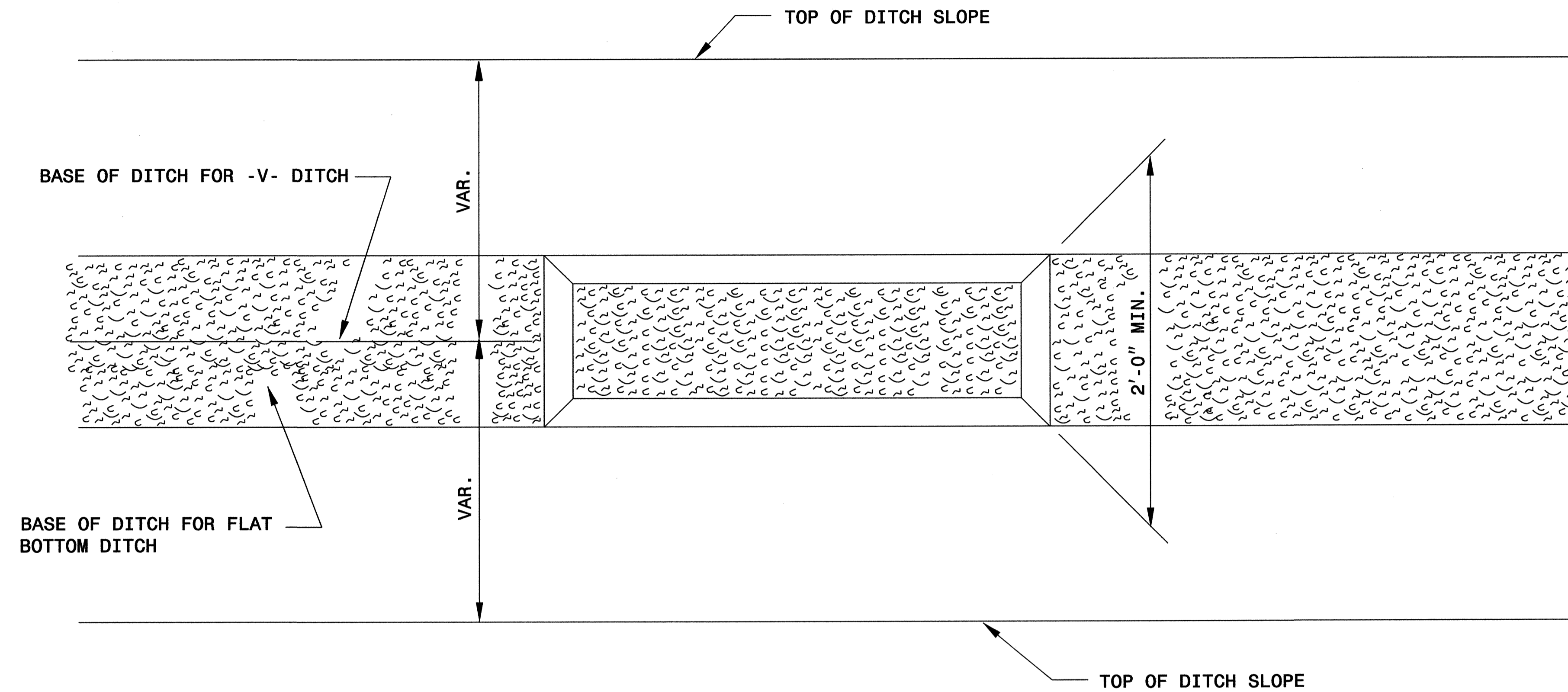


SECTION A-A
NOT TO SCALE

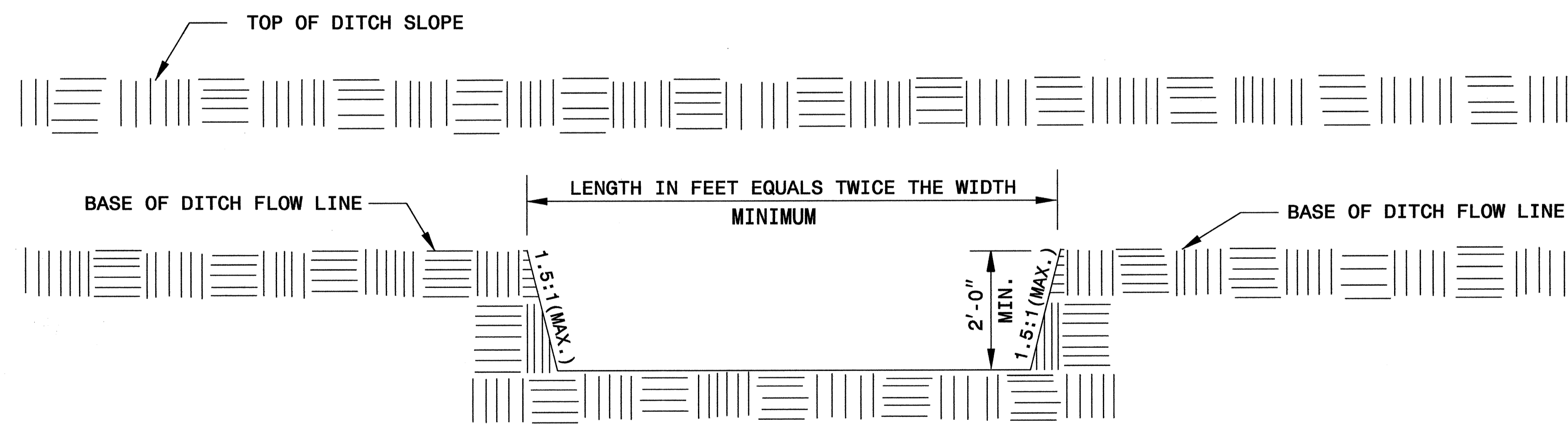
NOTE: PIPE(S) FOR TEMPORARY STREAM CROSSING SHALL BE DESIGNED TO PASS THE PEAK OR BANKFULL FLOW, WHICHEVER IS LESS, FROM A 2-YEAR PEAK STORM, WITHOUT OVER TOPPING.

PROJECT REFERENCE NO. <i>R-2612A</i>	SHEET NO. <i>EC-2E</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT BASIN 'B' DETAIL



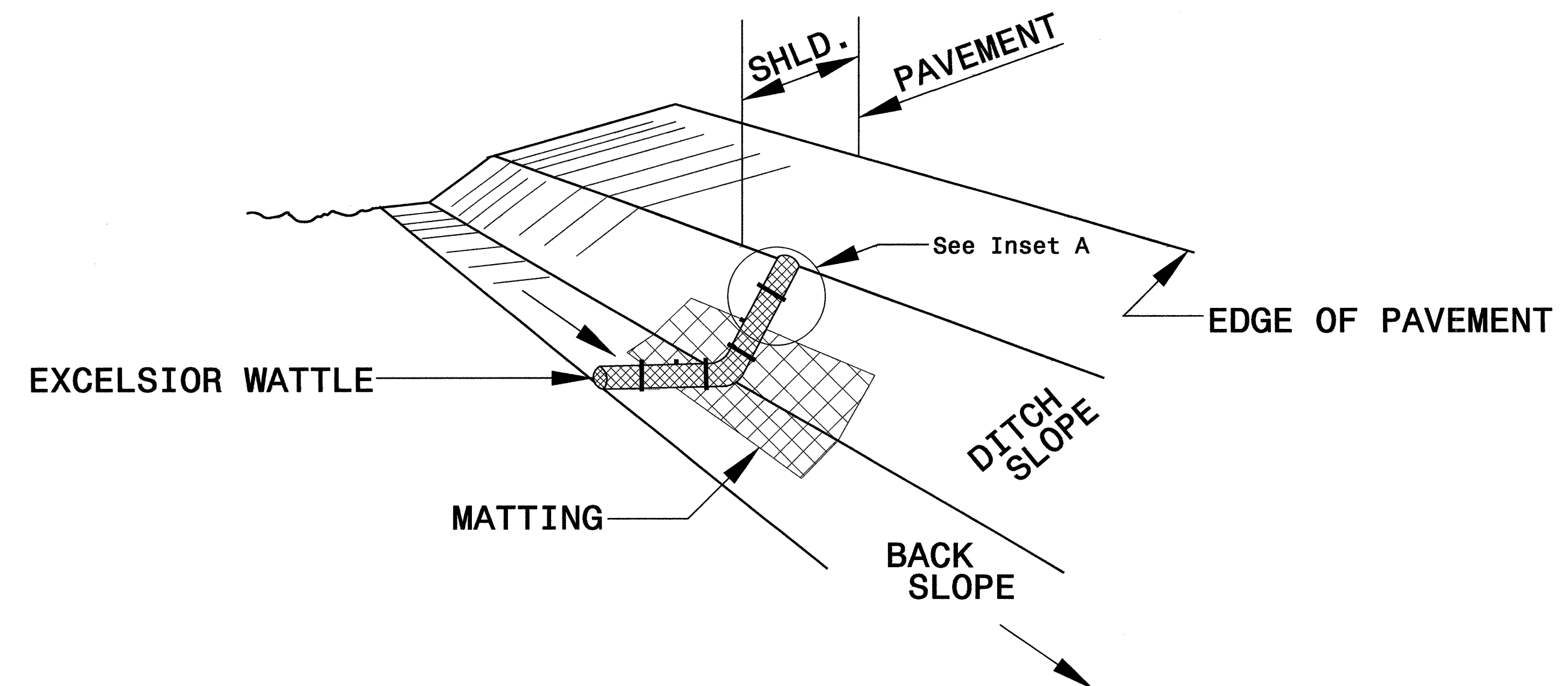
PLAN



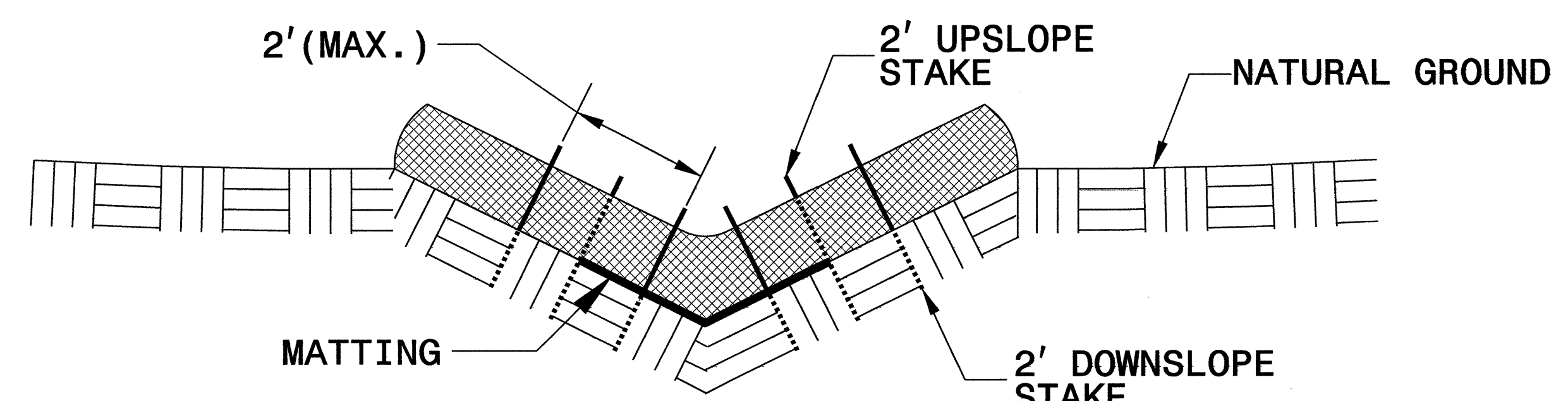
ELEVATION

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-2F
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

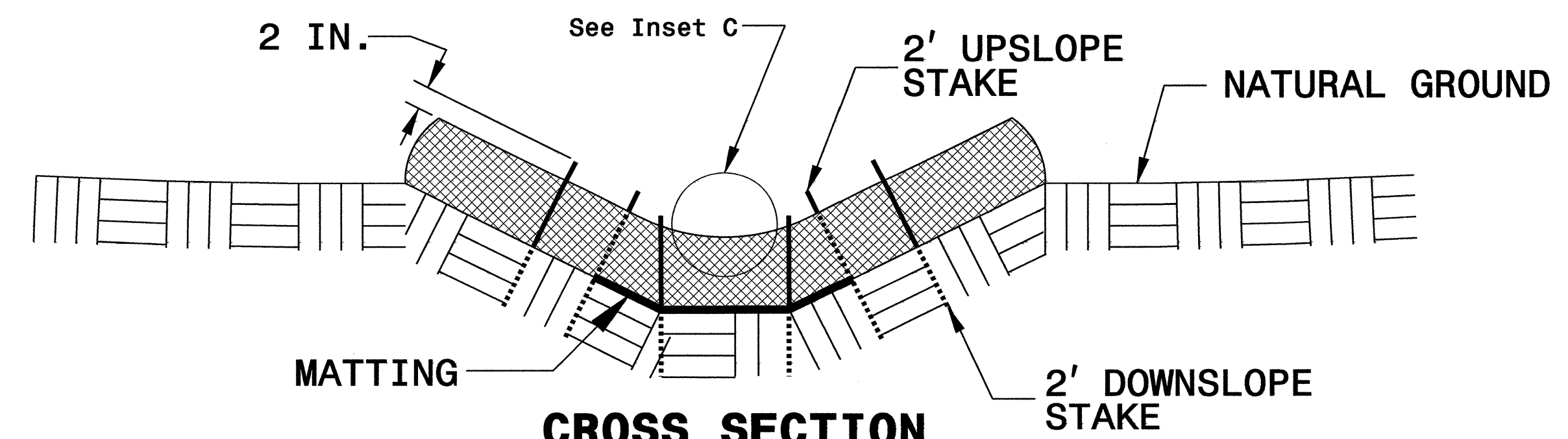
WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



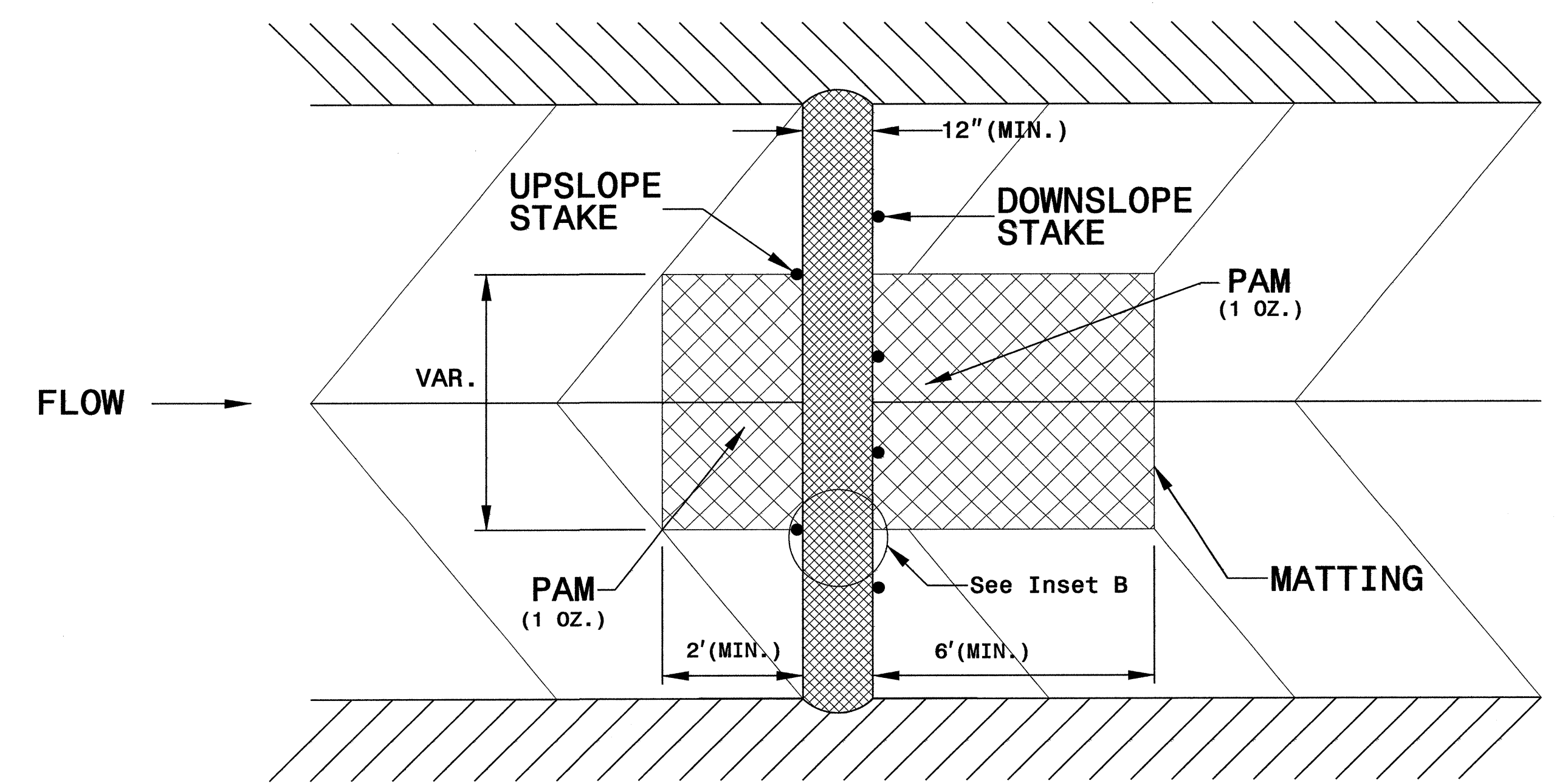
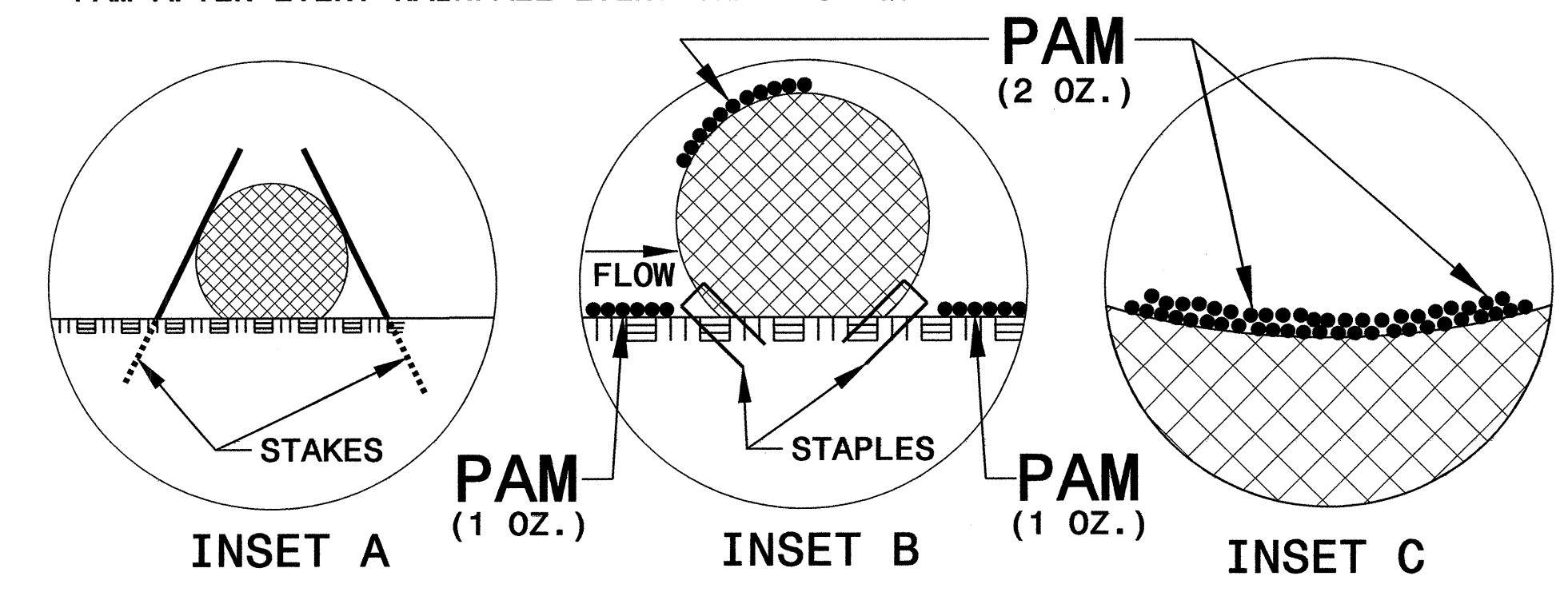
CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

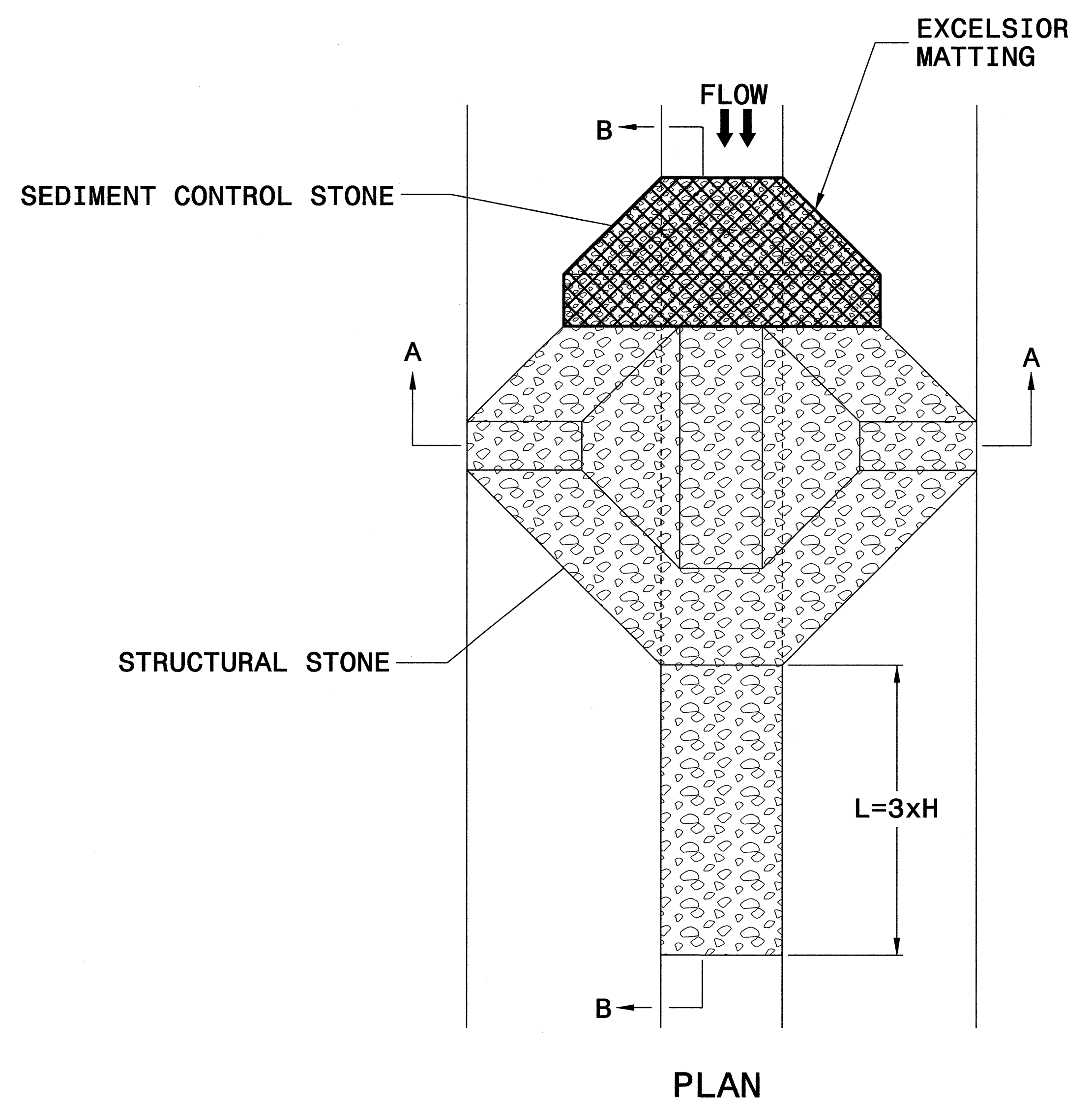
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES 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.



TOP VIEW

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-26
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)

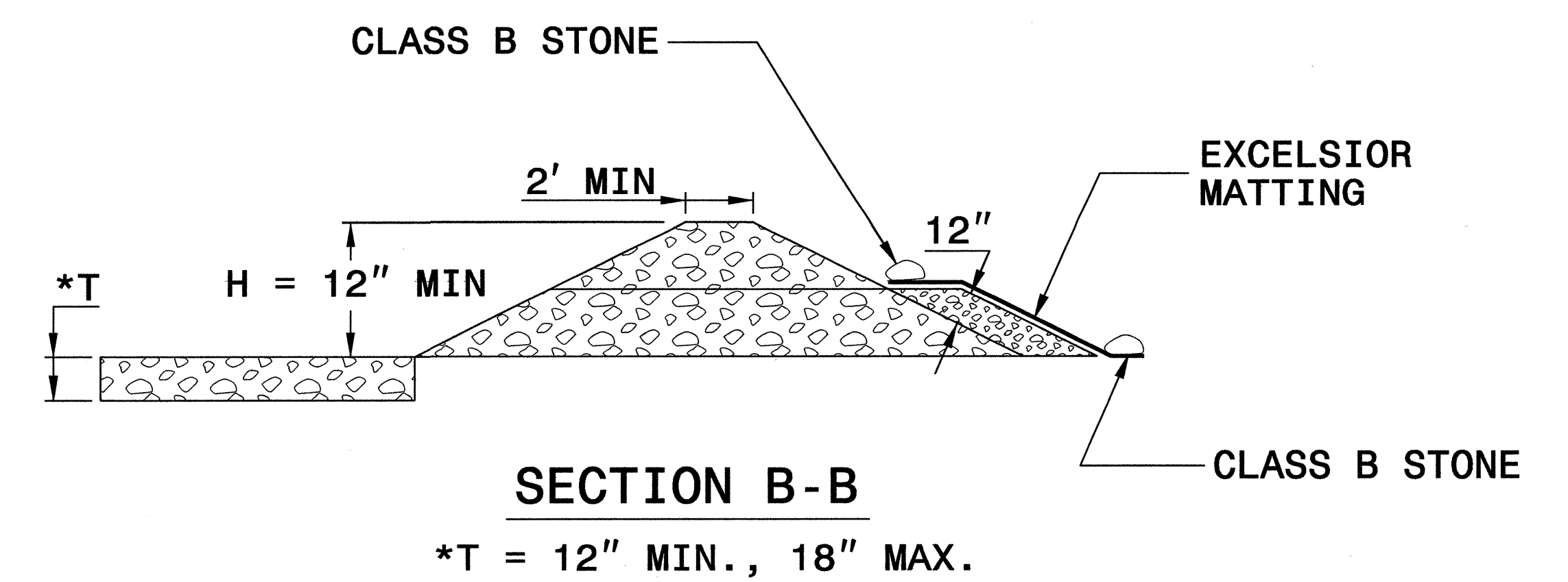
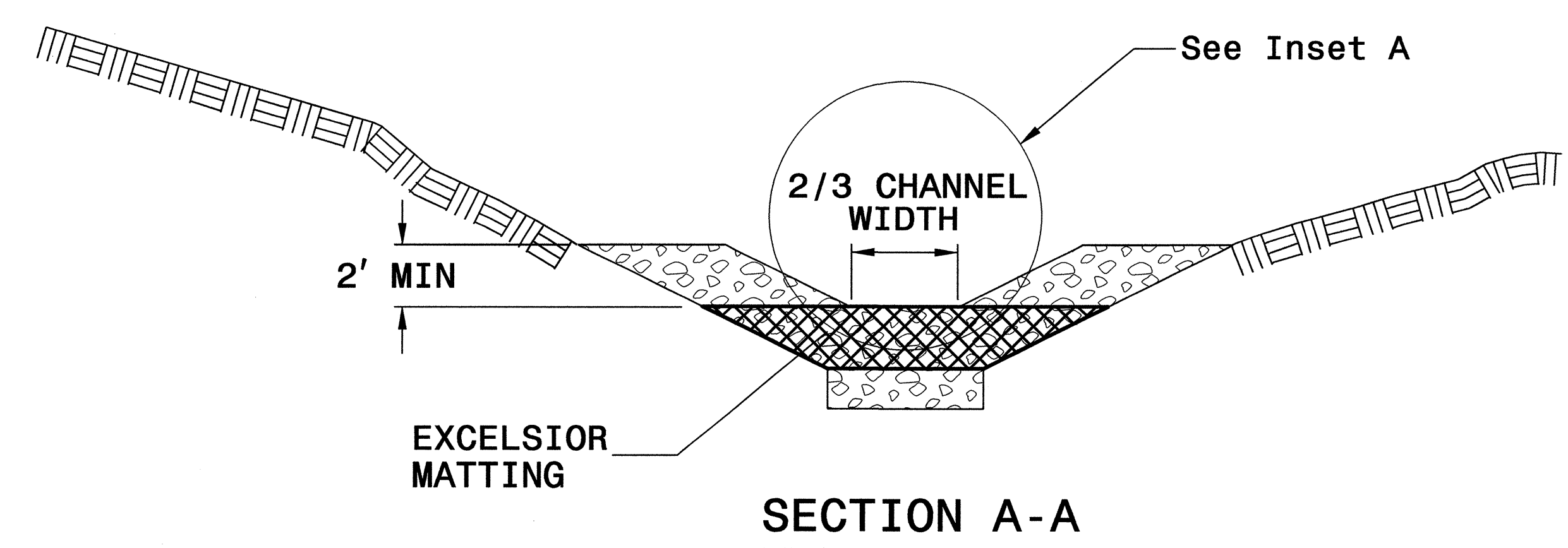
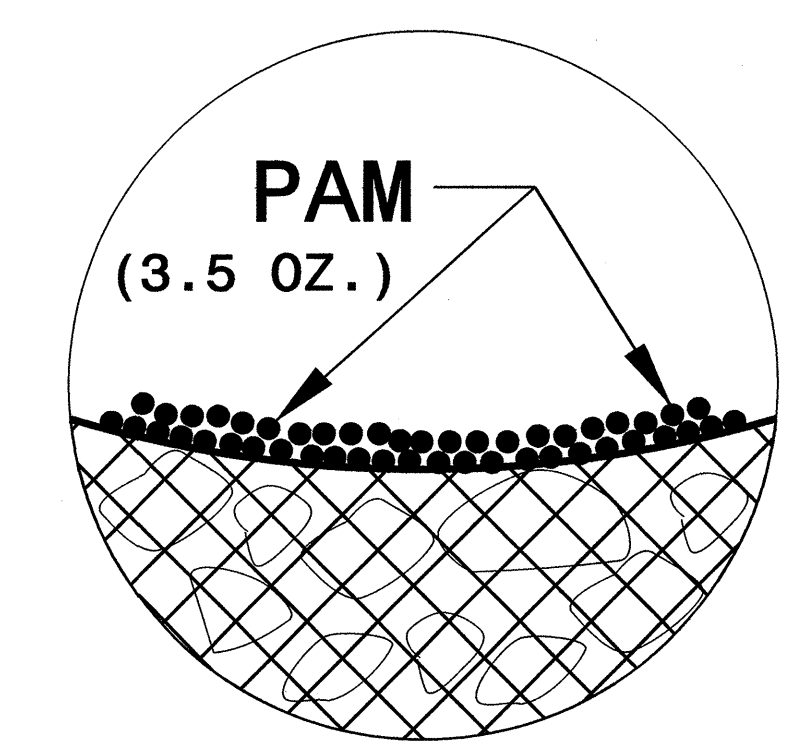


NOTES

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 ROCK SILT CHECK.

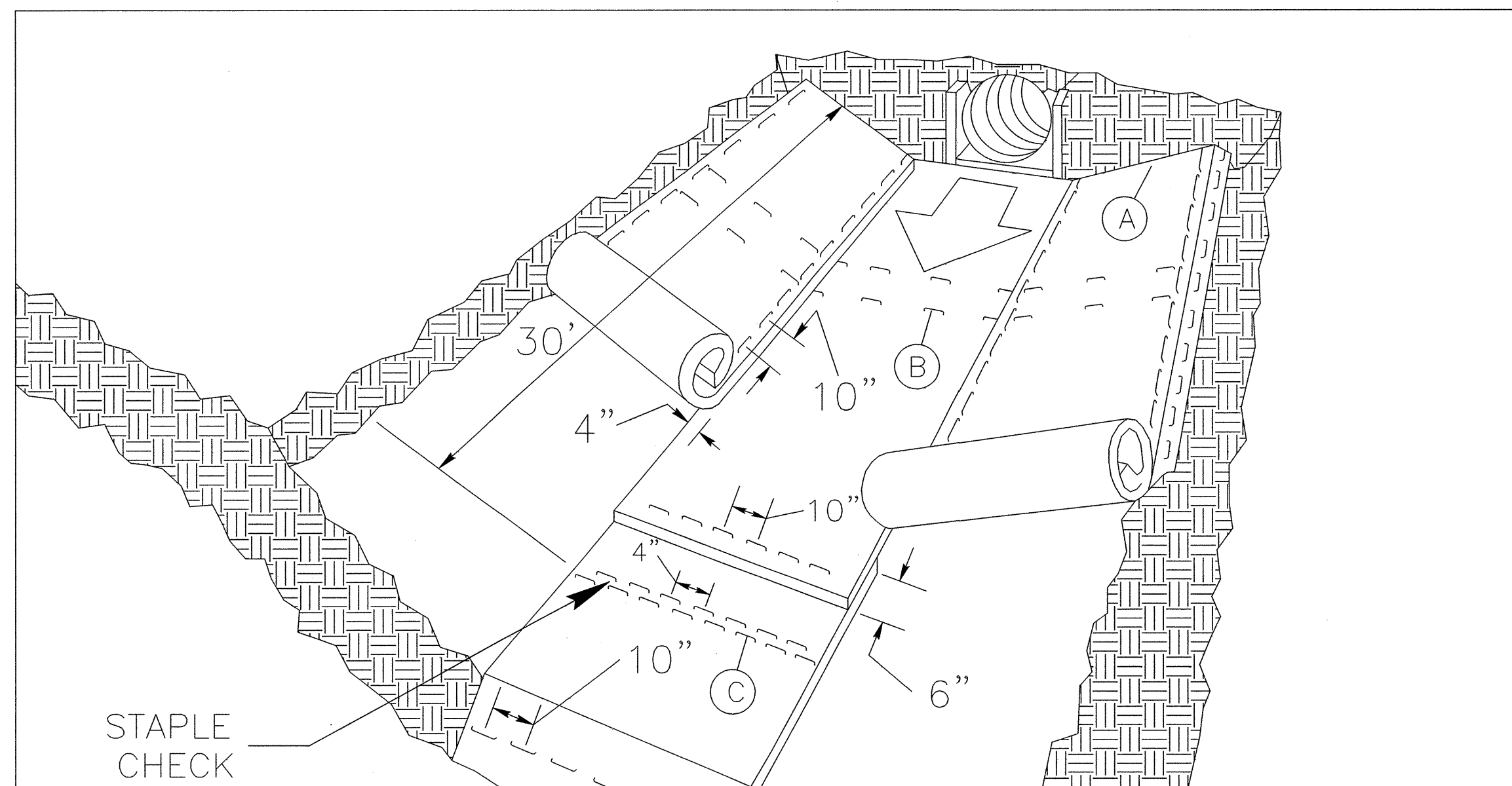
INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-2H
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

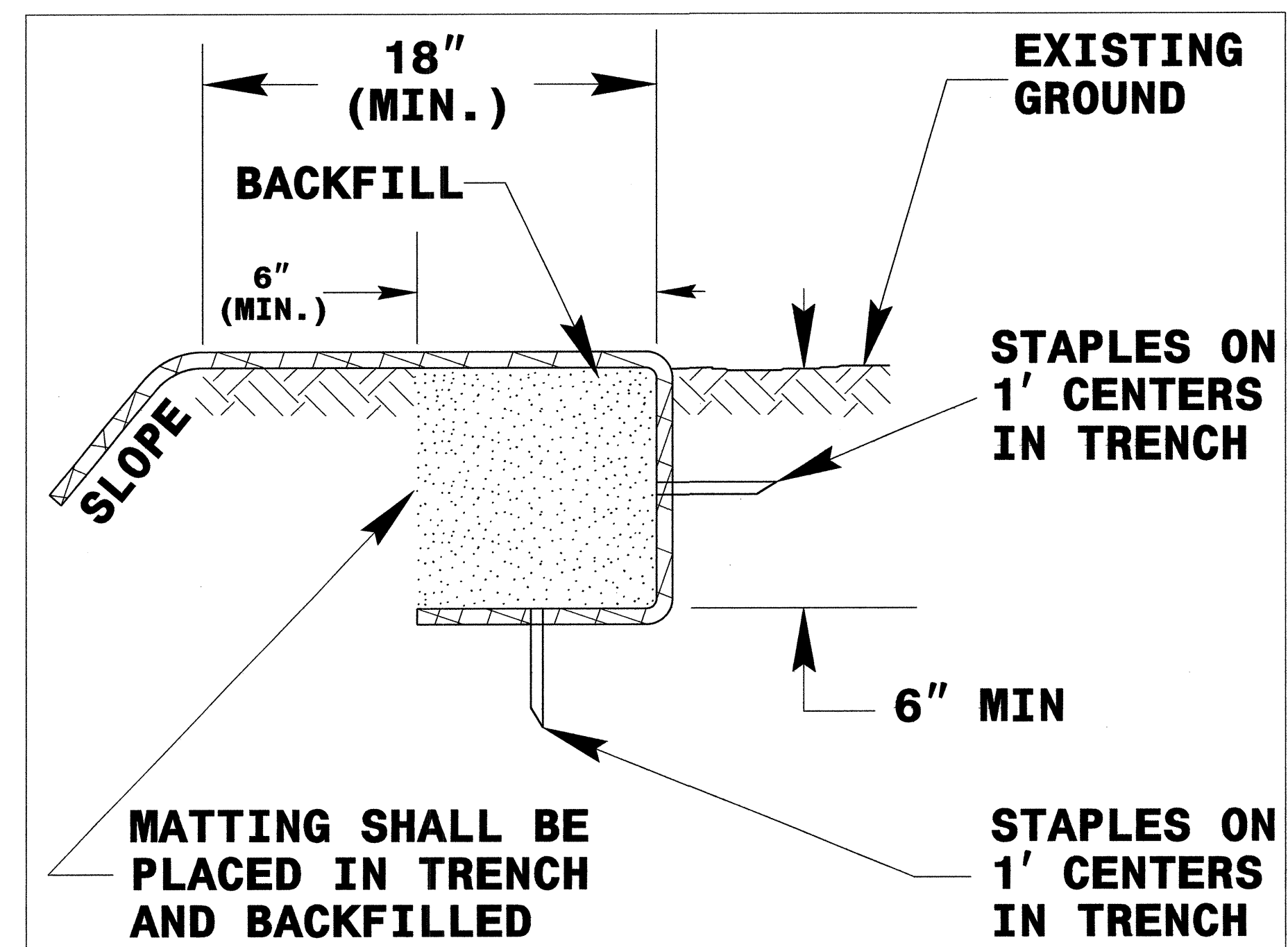
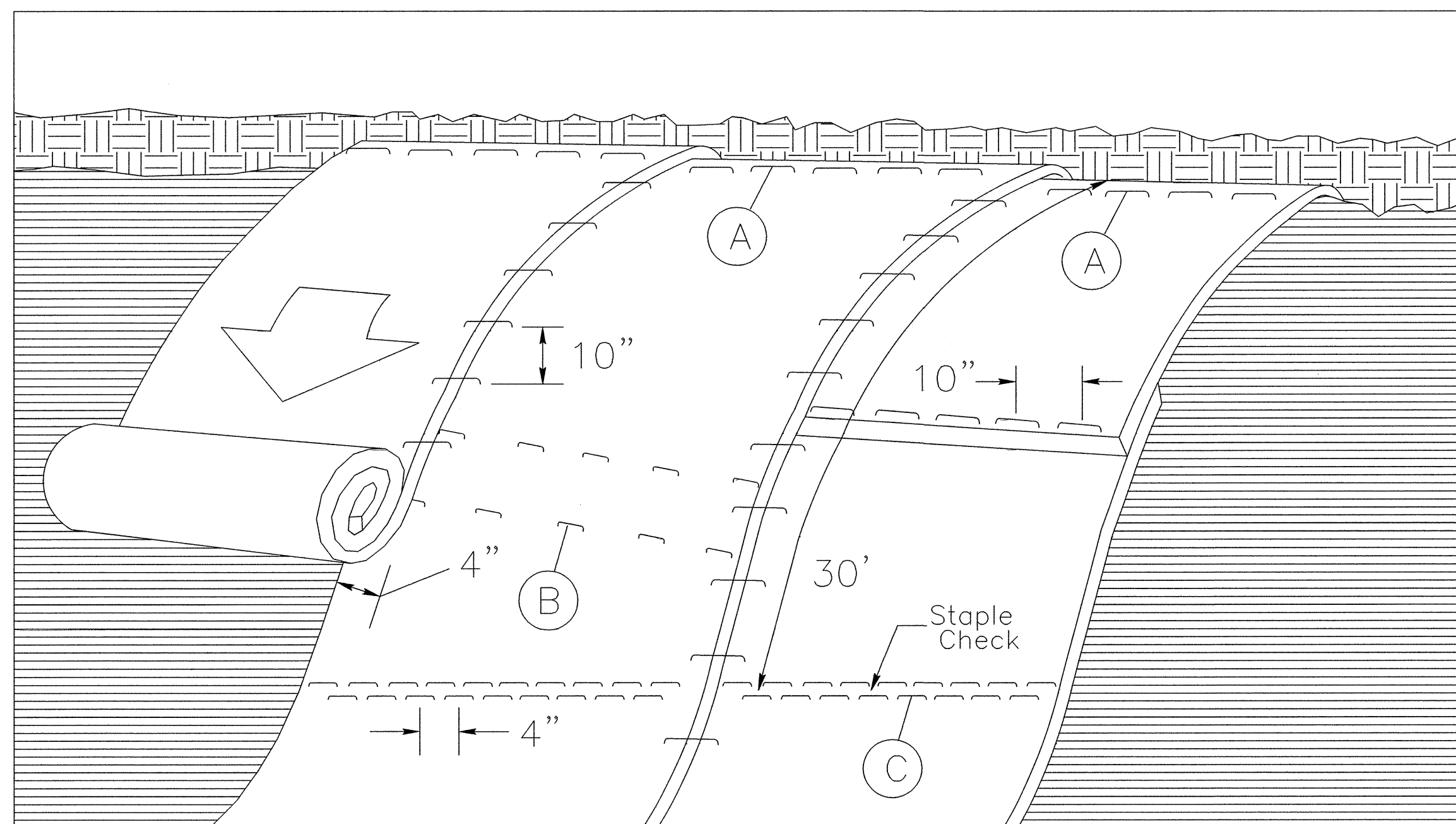


DIAGRAM (A)



MATTING ON SLOPES

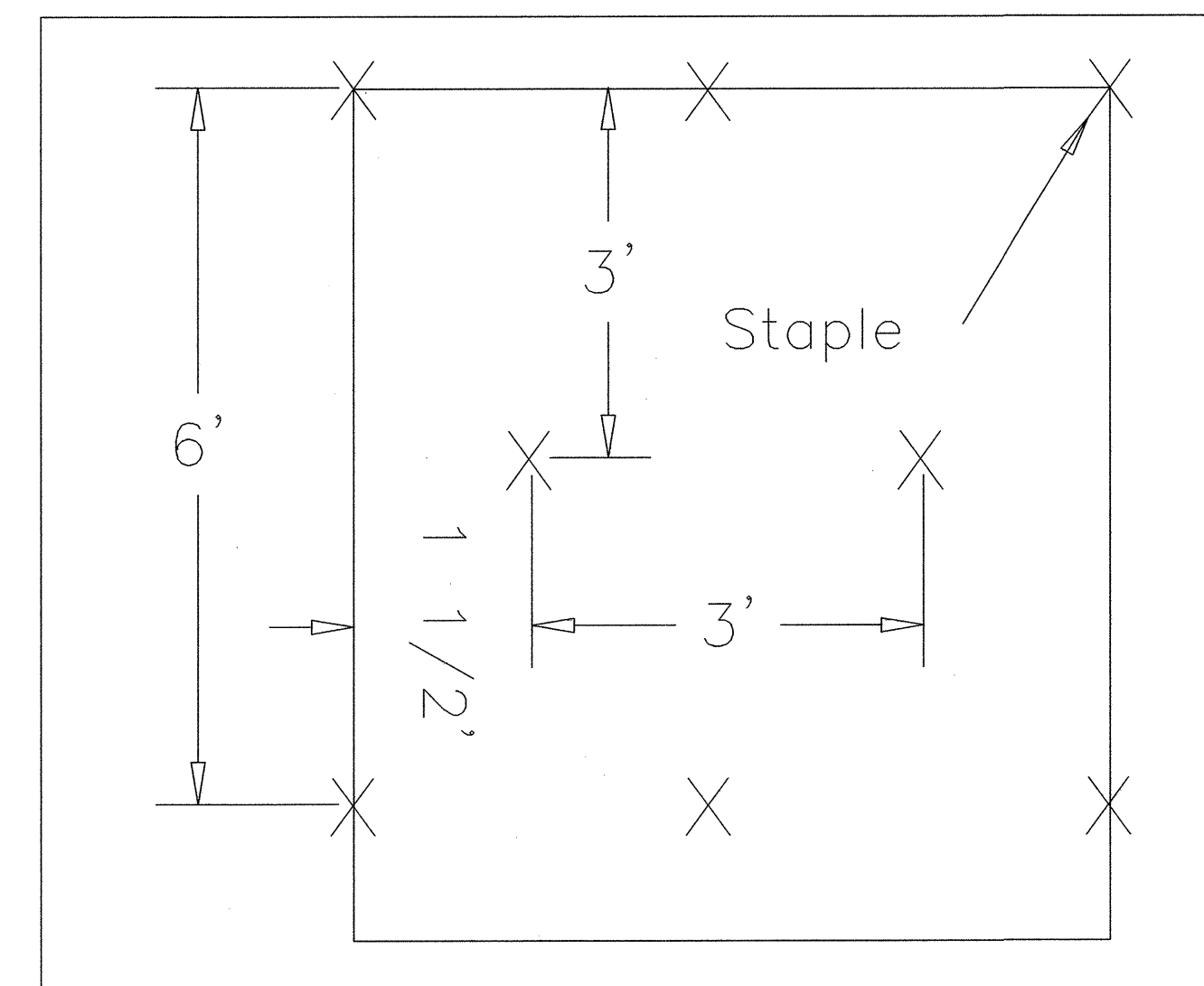


DIAGRAM (B)

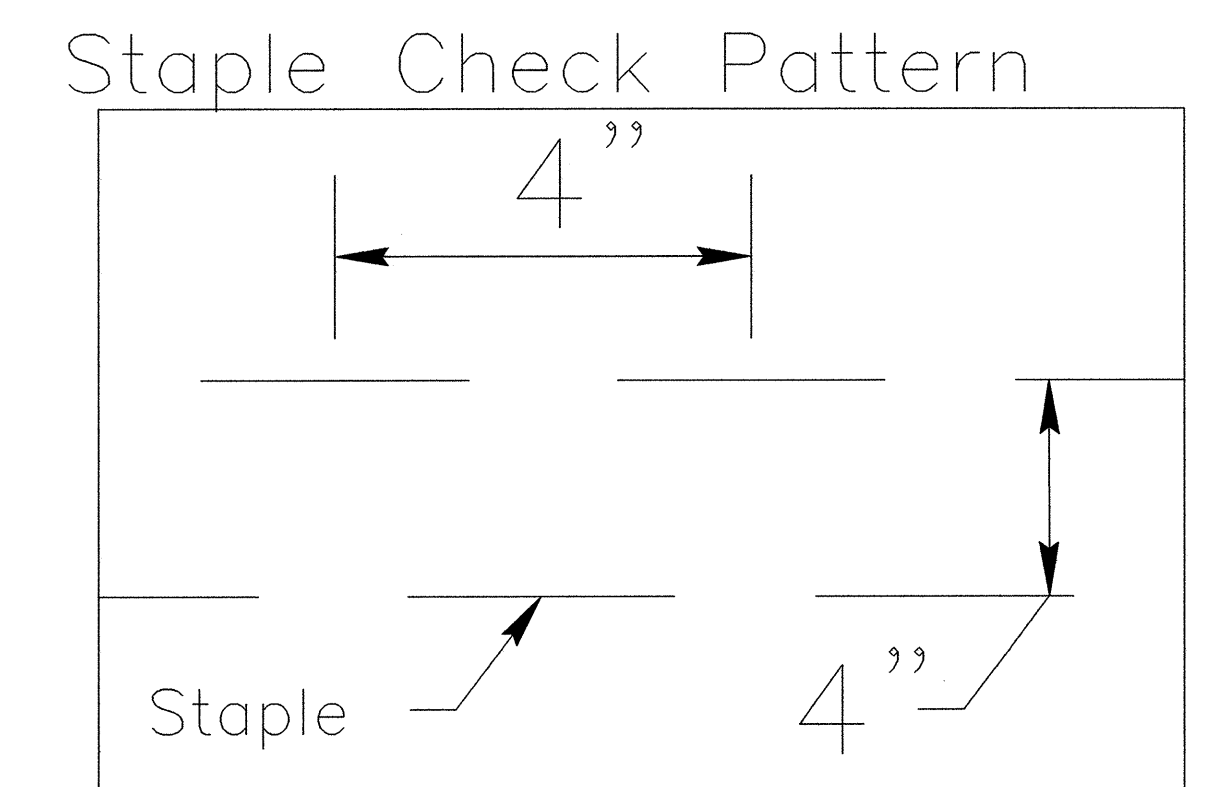


DIAGRAM (C)

NOTES:

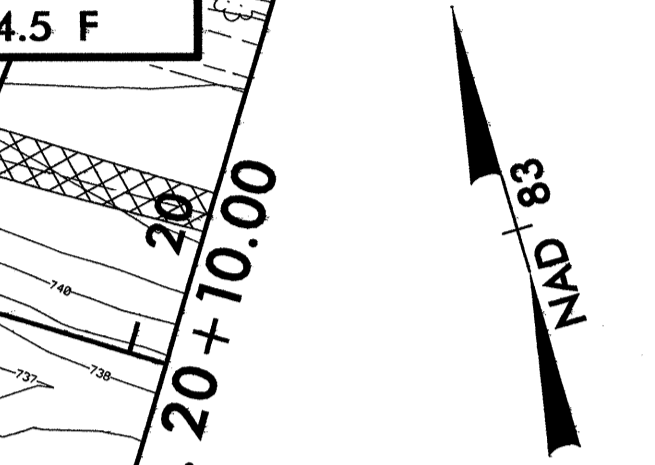
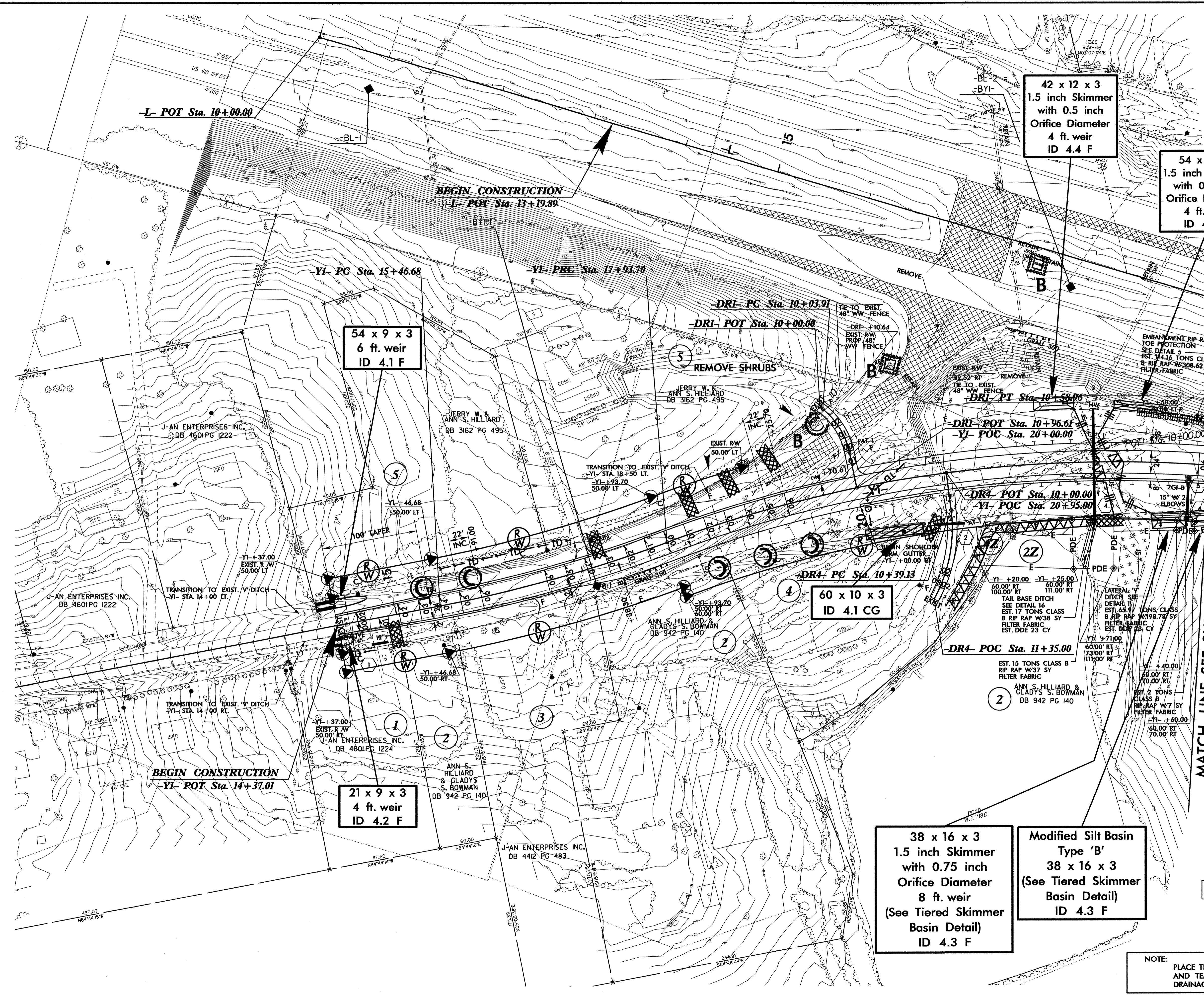
THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99
 AUG-2010 08:47
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 12612A.ec



MATCH LINE SEE SHEET 5 -YI- STA. 23+70.68

PAVEMENT REMOVAL

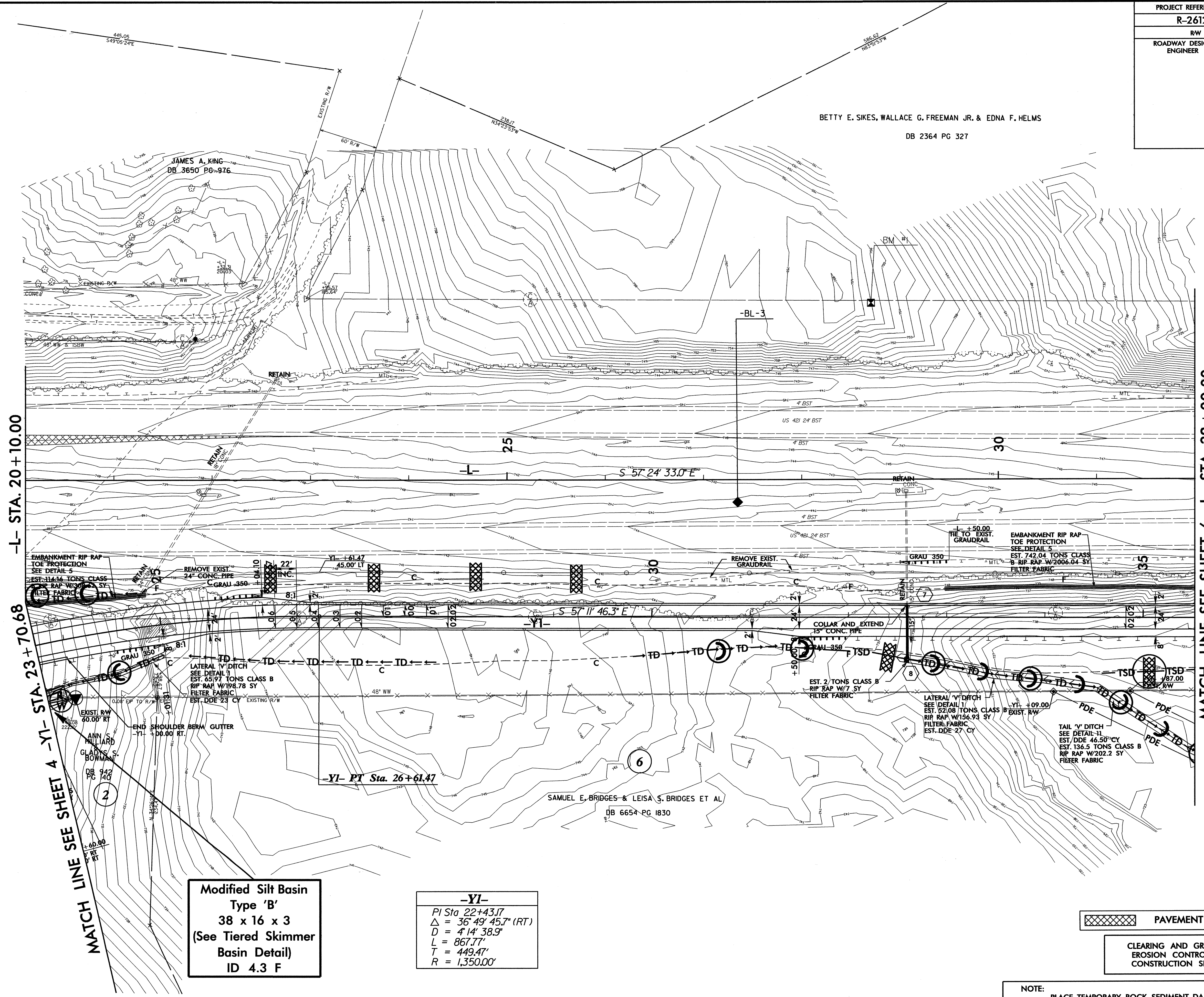
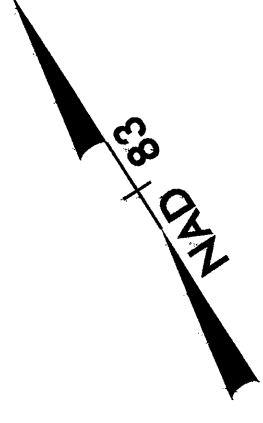
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4

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

8/17/99

PROJECT REFERENCE NO.		SHEET NO.	
R-2612A		EC-5/CONST.5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

BETTY E. SIKES, WALLACE G. FREEMAN JR. & EDNA F. HELMS
DB 2364 PG 327



-L- STA. 20+10.00

MATCH LINE SEE SHEET 4 -YI- STA. 23+70.68

MATCH LINE SEE SHEET 6 -L- STA. 32+00.00

**Modified Silt Basin
Type 'B'
38 x 16 x 3
(See Tiered Skimmer
Basin Detail)
ID 4.3 F**

-YI-
PI Sta 22+43.17
 $\Delta = 36' 49' 45.7'' (RT)$
 $D = 4' 14' 38.9''$
 $L = 867.77'$
 $T = 449.47'$
 $R = 1,350.00'$

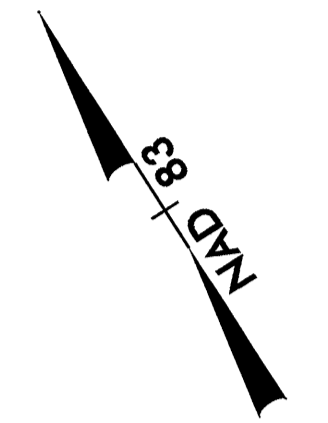
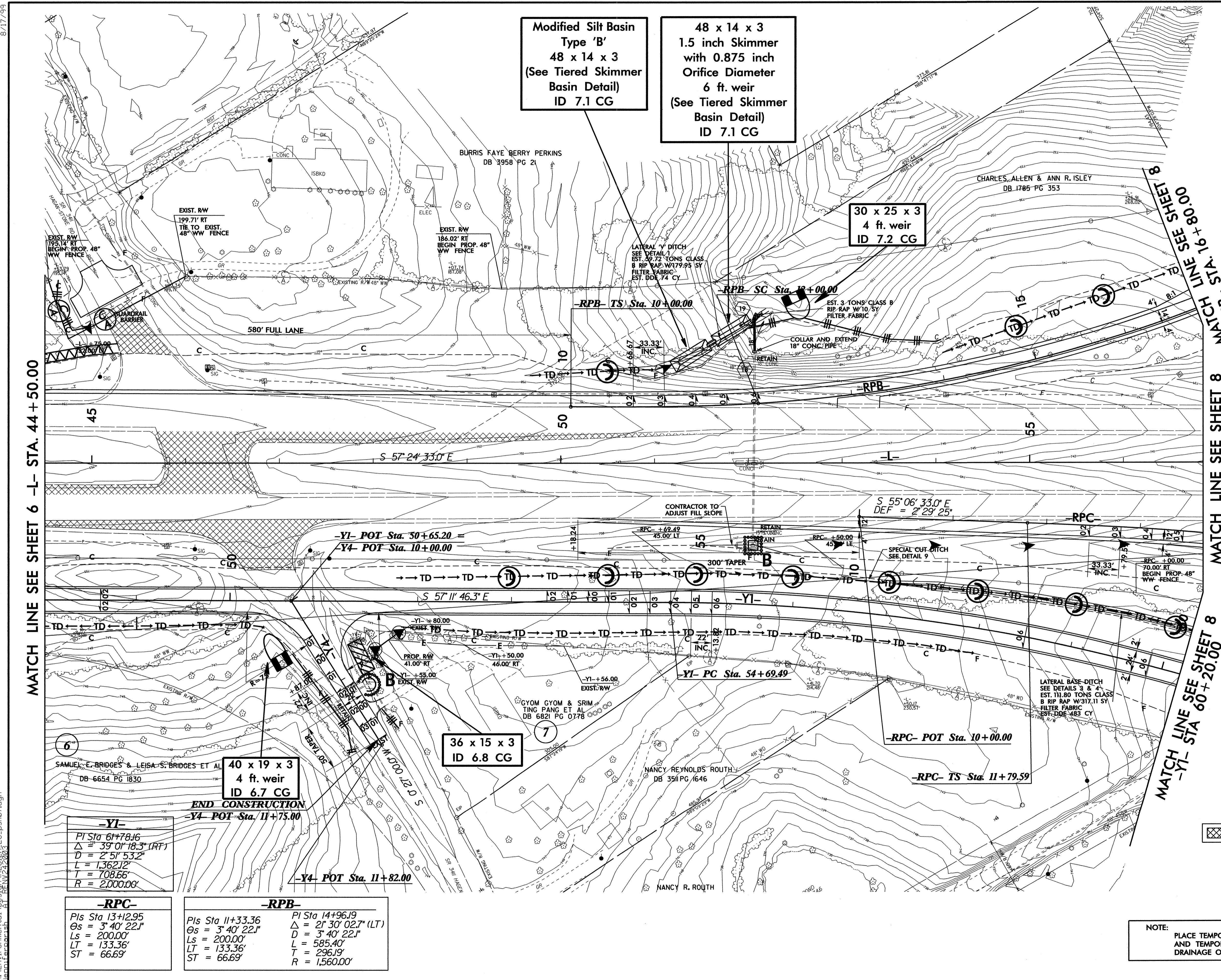
PAVEMENT REMOVAL

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

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2/2/2003

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-7/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PAVEMENT REMOVAL

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

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

-YI-
PI Sta 6+78.16
 $\Delta = 39^{\circ} 01' 18.3''$ (RT)
D = 2' 51" 53.2"
L = 1,362.12'
T = 708.66'
R = 2,000.00'

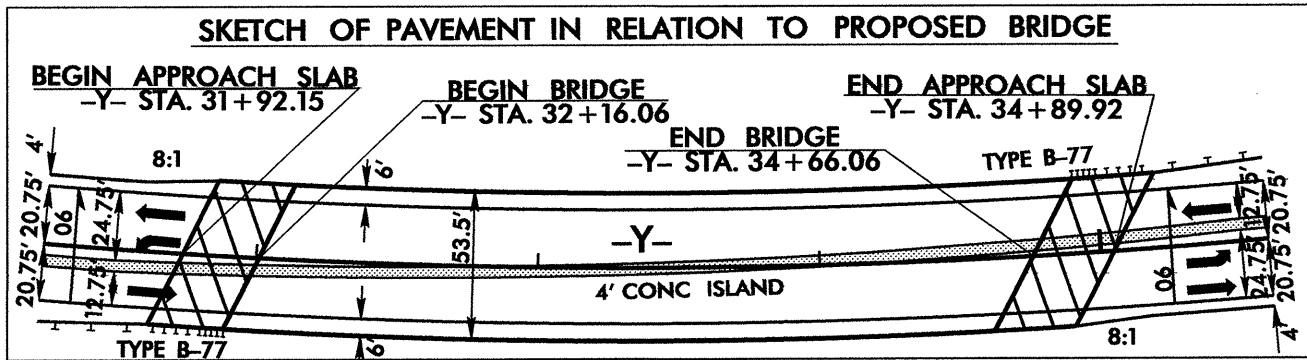
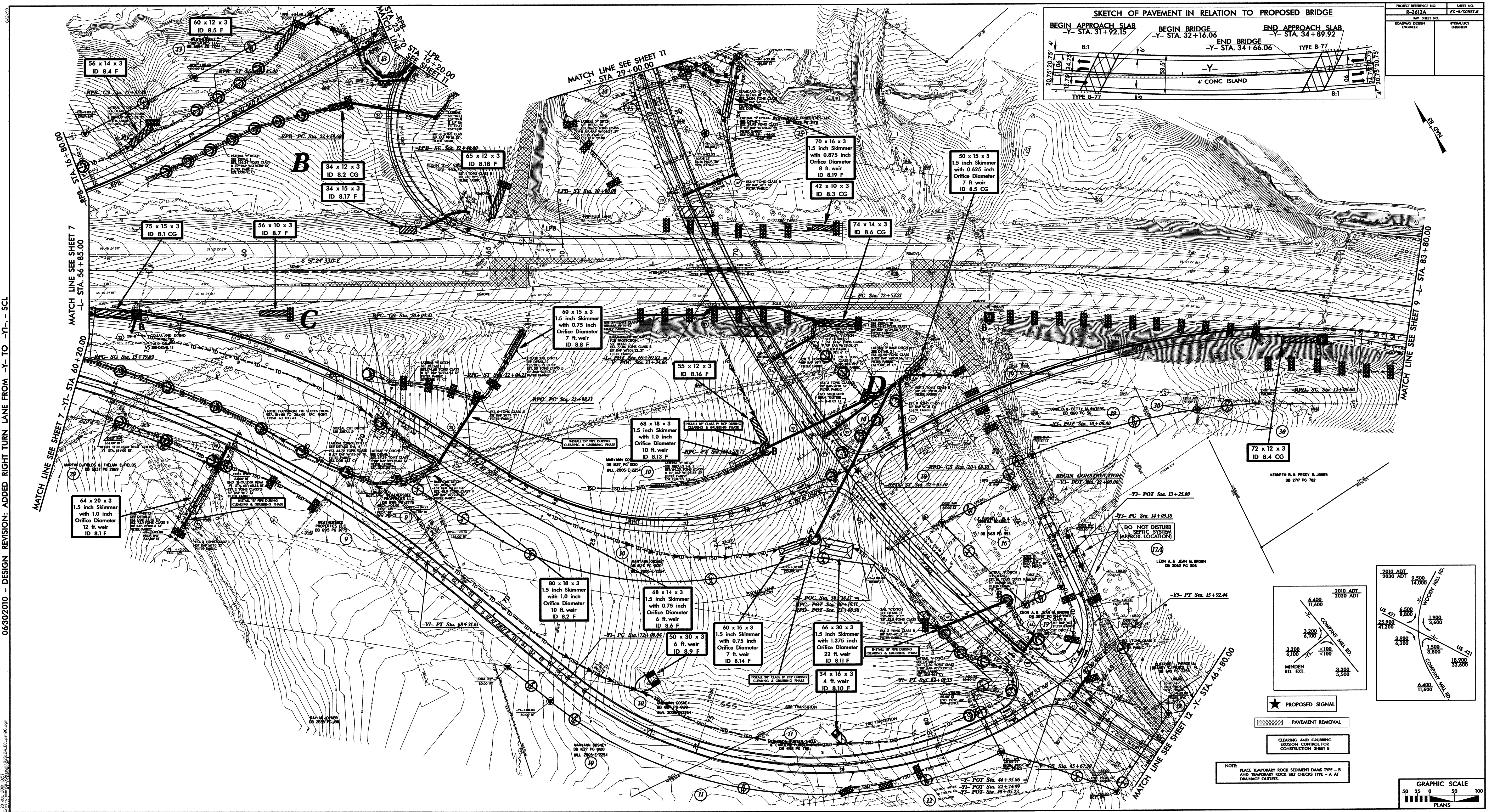
-RPC-
PIs Sta 13+12.95
 $\Theta_s = 3^{\circ} 40' 22.1''$
Ls = 200.00'
LT = 133.36'
ST = 66.69'

-RPB-
PIs Sta 11+33.36
 $\Theta_s = 3^{\circ} 40' 22.1''$
Ls = 200.00'
LT = 133.36'
ST = 66.69'

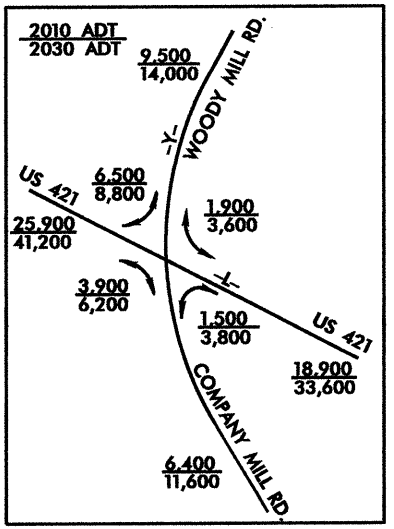
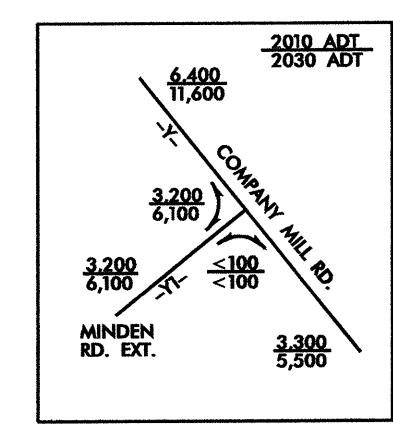
PI Sta 14+96.19
 $\Delta = 21^{\circ} 30' 02.7''$ (LT)
D = 3' 40" 22.1"
L = 585.40'
T = 296.19'
R = 1,560.00'

8/17/99
23 JUL 2010 15:06
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EC-7/CONST.7

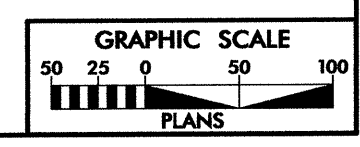
06/20/2010 - DESIGN REVISION: ADDED RIGHT TURN LANE FROM -Y- TO -Y1-- -SCL



PROJECT REFERENCE NO.	R-2612A	SHEET NO.	EC-8/CONST. 8
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



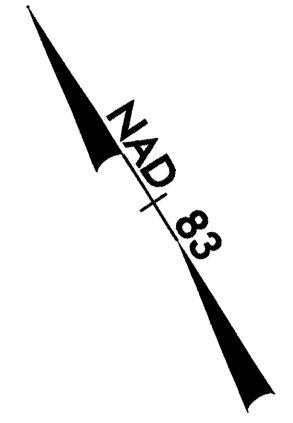
- ★ PROPOSED SIGNAL
 - ▨ PAVEMENT REMOVAL
 - ▭ CLEARING AND GRUBBING REGION CONTROL FOR CONSTRUCTION SHEET 6
- NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.



PROJECT REFERENCE NO. R-2612A	SHEET NO. <i>EC-9/CONST.9</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

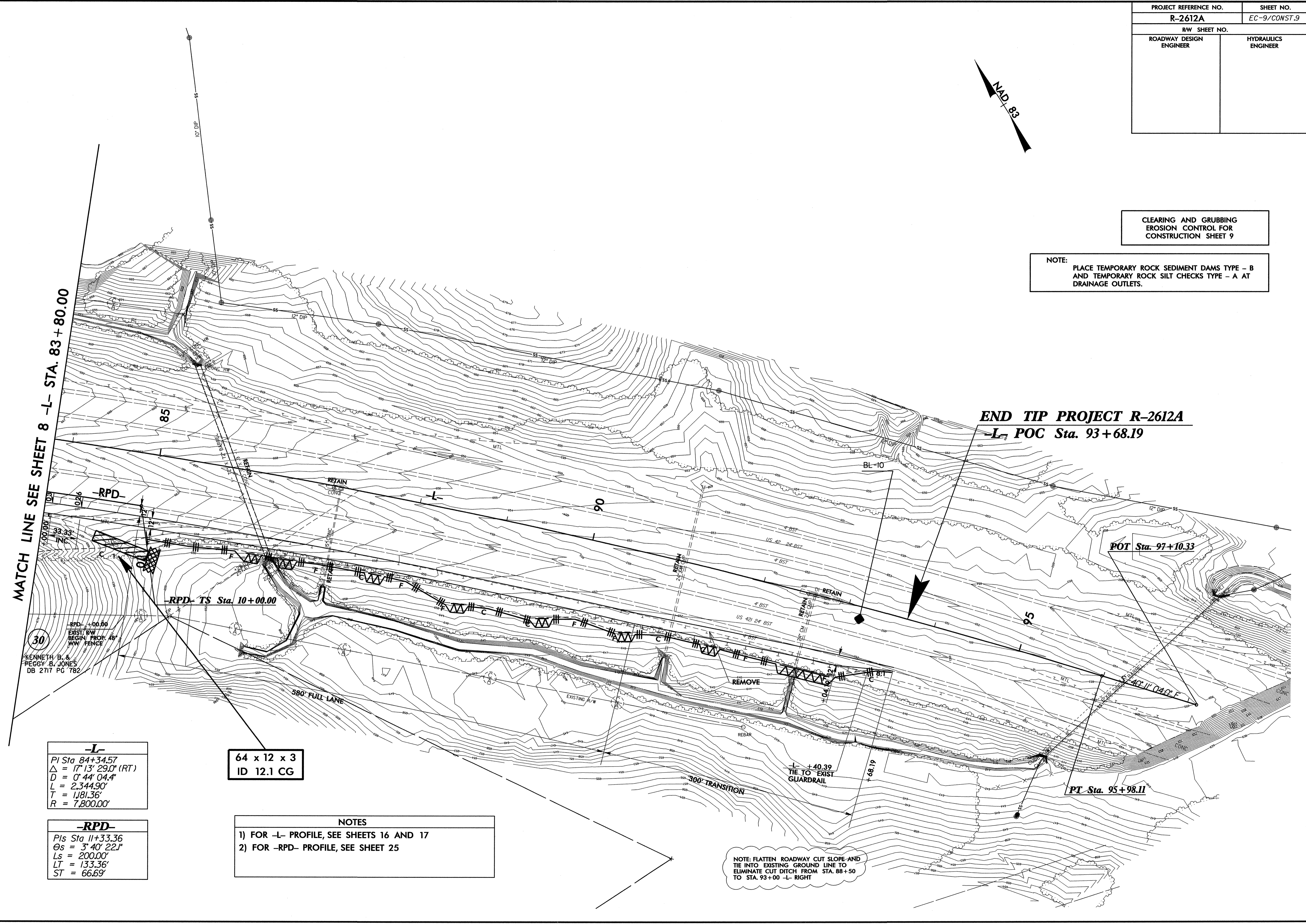
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

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



8/17/99

23-JUL-2010 15:07
D:\proj\2612A\EC\psh09.dgn
HEWLETT-PACKARD



-L-
PI Sta 84+34.57
 $\Delta = 17^{\circ} 13' 29.0''$ (RT)
D = 0' 44' 04.4"
L = 2,344.90'
T = 1,181.36'
R = 7,800.00'

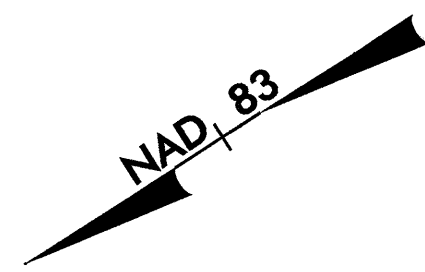
-RPD-
PIs Sta 11+33.36
 $\theta_s = 3^{\circ} 40' 22.1''$
Ls = 200.00'
LT = 133.36'
ST = 66.69'

64 x 12 x 3
ID 12.1 CG

NOTES
1) FOR -L- PROFILE, SEE SHEETS 16 AND 17
2) FOR -RPD- PROFILE, SEE SHEET 25

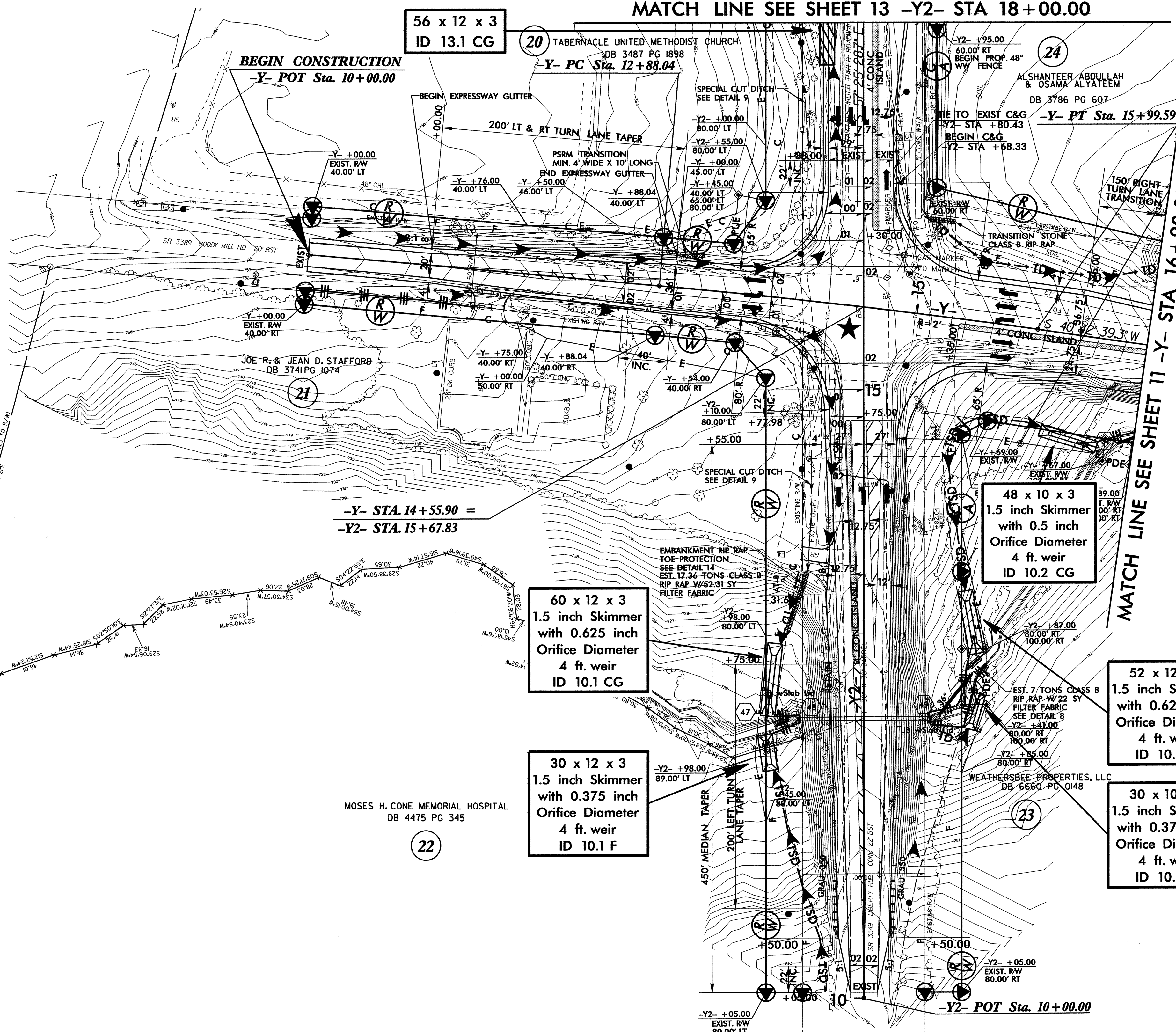
NOTE: FLATTEN ROADWAY CUT SLOPE AND
TIE INTO EXISTING GROUND LINE TO
ELIMINATE CUT DITCH FROM STA. 88+50
TO STA. 93+00 -L- RIGHT

8/17/99



MATCH LINE SEE SHEET 13 -Y2- STA 18+00.00

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



56 x 12 x 3
ID 13.1 CG

48 x 10 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
4 ft. weir
ID 10.2 CG

60 x 12 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 10.1 CG

30 x 12 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
4 ft. weir
ID 10.1 F

52 x 12 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 10.3 F

30 x 10 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
4 ft. weir
ID 10.2 F

★ REVISED SIGNAL

-Y-
 PI Sta 14+43.85
 $\Delta = 3' 0'' 22.6''$ (RT)
 $D = 0' 58' 13.1''$
 $L = 311.55'$
 $T = 155.81'$
 $R = 5,905.00'$

- NOTES**
- 1) FOR -Y- PROFILE, SEE SHEET 17
 - 2) FOR -Y2- PROFILE, SEE SHEET 22
 - 3) DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED

DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

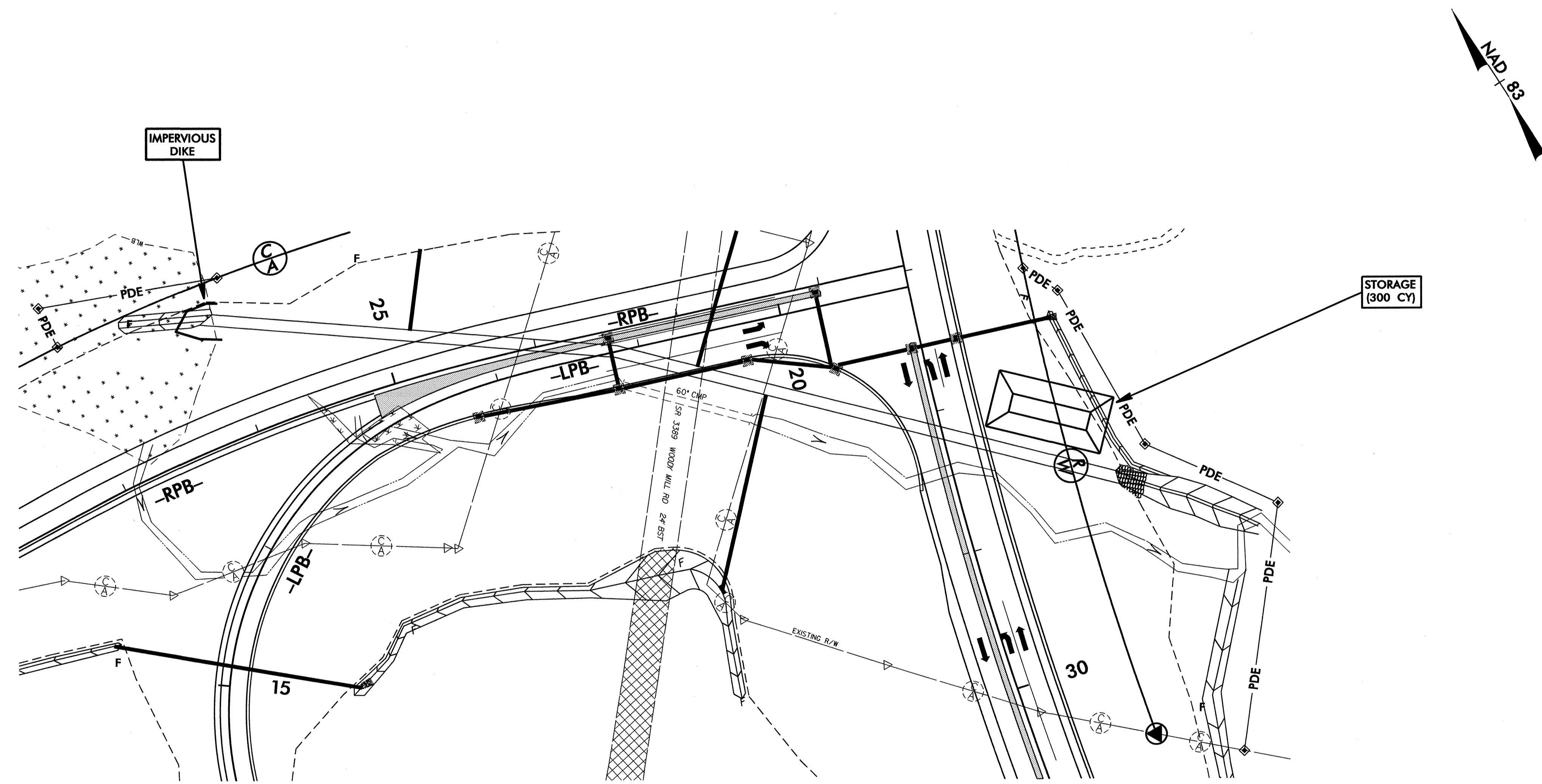
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

29-JUL-2010 14:00
R:\Environmental_Visit\2612A\EC-10.dgn
10/17/99

PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-12/CONST. II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

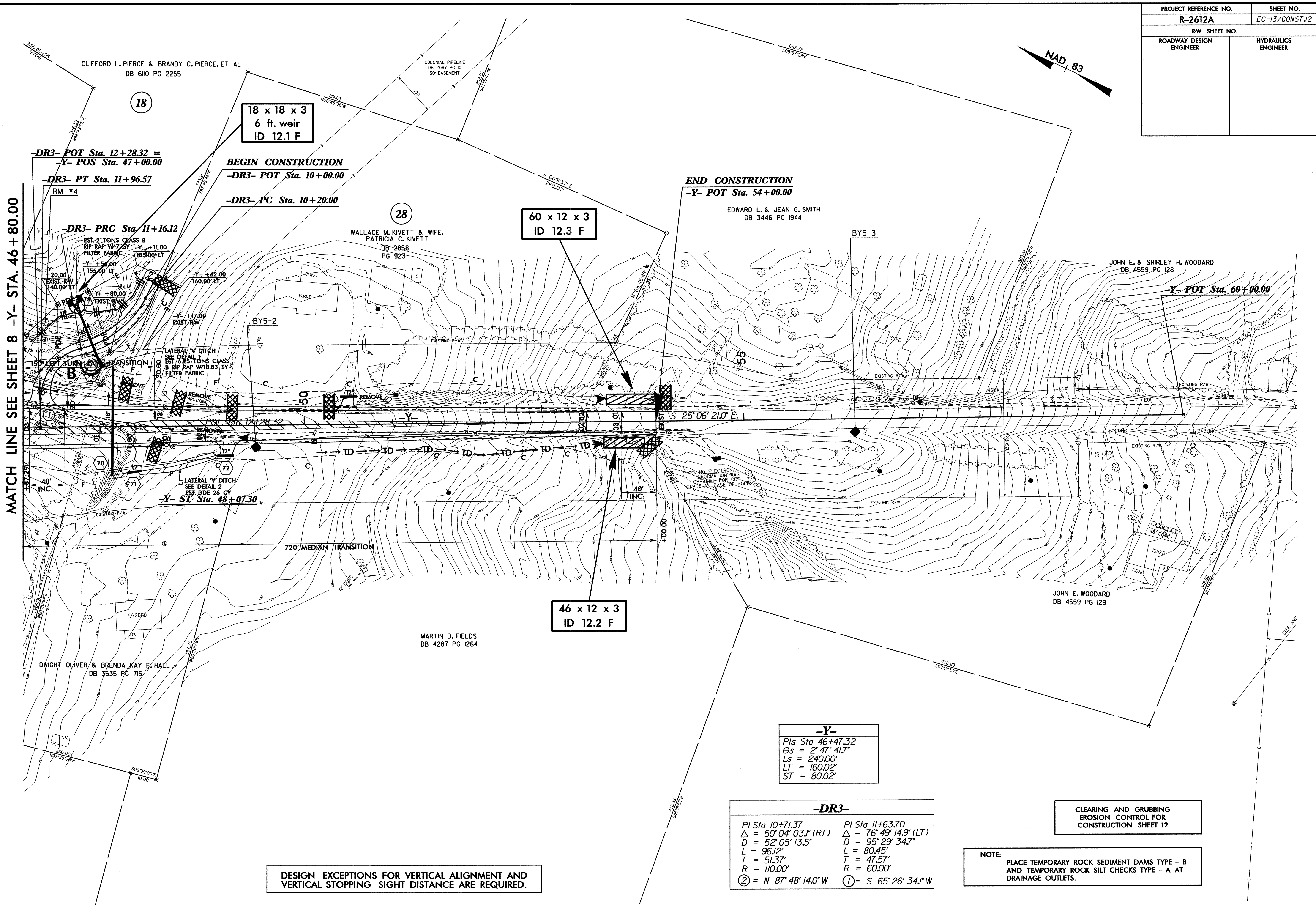
CULVERT CONSTRUCTION SEQUENCE STA. 26 + 05.11 -RPB-

1. CONSTRUCT STILLING BASIN (300 CY).
2. CONSTRUCT IMPERVIOUS DIKE.
3. CONSTRUCT PROPOSED CULVERT.
4. REMOVE IMPERVIOUS DIKE.
5. CONSTRUCT INLET/OUTLET CHANNEL IMPROVEMENTS, DIVERTING FLOW THROUGH THE PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



PROJECT REFERENCE NO. R-2612A	SHEET NO. EC-13/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99



MATCH LINE SEE SHEET 8 -Y- STA. 46 + 80.00

DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

-Y-
 Pls Sta 46+47.32
 $\Delta = 2^{\circ} 47' 41.7''$
 $L_s = 240.00'$
 $LT = 160.02'$
 $ST = 80.02'$

-DR3-	
PI Sta 10+71.37	PI Sta 11+63.70
$\Delta = 50^{\circ} 04' 03.1''$ (RT)	$\Delta = 76^{\circ} 49' 14.9''$ (LT)
$D = 52^{\circ} 05' 13.5''$	$D = 95^{\circ} 29' 34.7''$
$L = 96.12'$	$L = 80.45'$
$T = 51.37'$	$T = 47.57'$
$R = 110.00'$	$R = 60.00'$
② = N 87° 48' 14.0" W	① = S 65° 26' 34.1" W

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

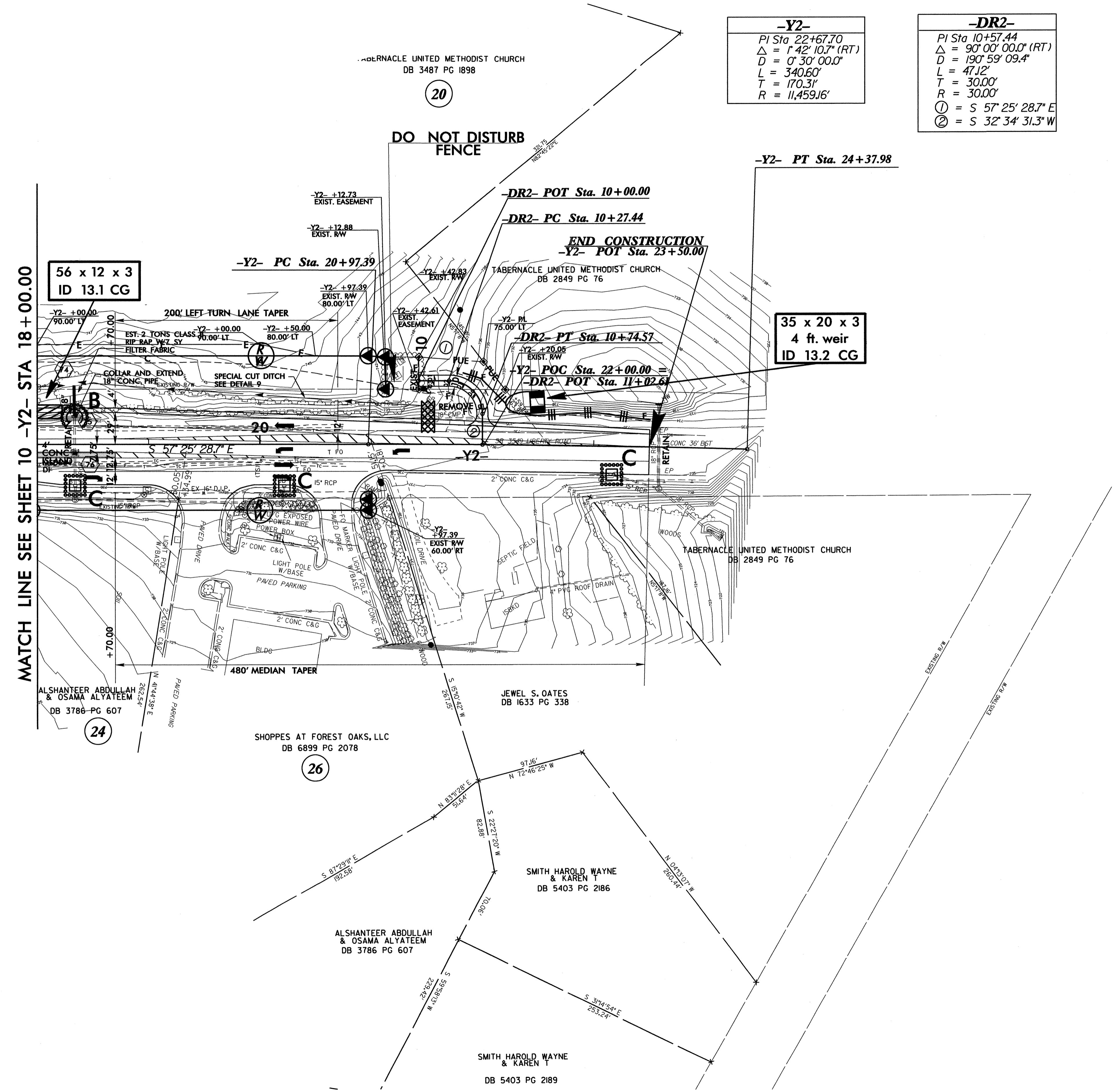
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

20 JUL - 2010 15:36
 D:\projects\B2612A_EC-ps\sh12.dgn
 User: jkennedy
 Plot: 13/12

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-14/CONST.13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y2-
 PI Sta 22+67.70
 $\Delta = 1^{\circ} 42' 10.7" (RT)$
 $D = 0^{\circ} 30' 00.0"$
 $L = 340.60'$
 $T = 170.31'$
 $R = 11,459.16'$

-DR2-
 PI Sta 10+57.44
 $\Delta = 90^{\circ} 00' 00.0" (RT)$
 $D = 190^{\circ} 59' 09.4"$
 $L = 47.12'$
 $T = 30.00'$
 $R = 30.00'$
 ① = S 57° 25' 28.7" E
 ② = S 32° 34' 31.3" W



CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 13

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

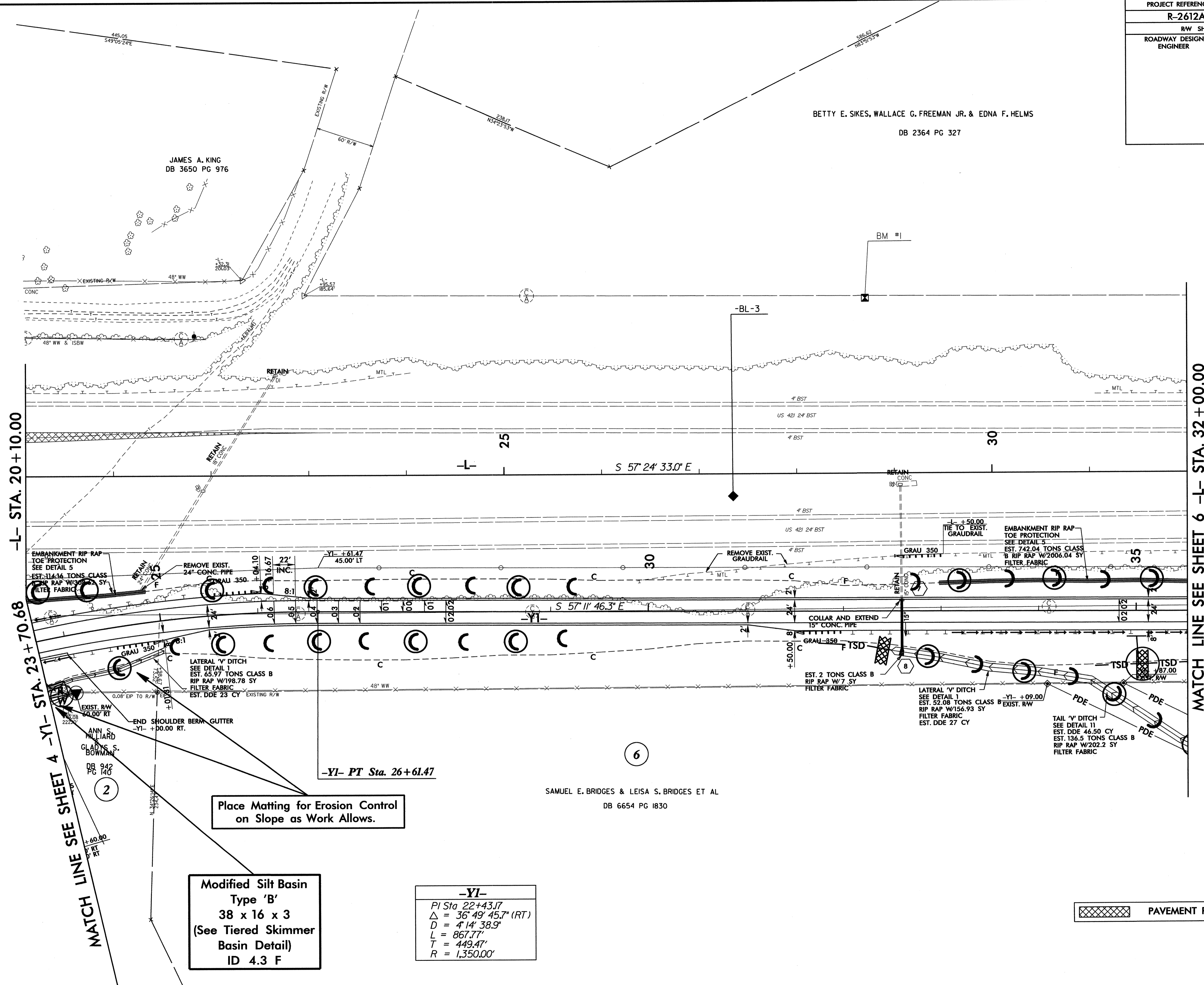
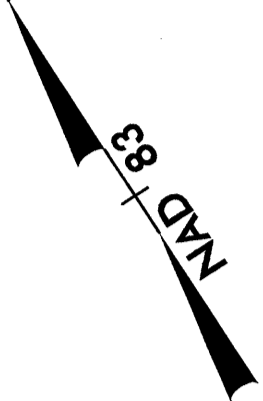
8/17/99

PS: JUL-2010 15:38
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 PS: 10/22/2010 10:38
 D:\ps\10\1026126\EC-ps\h13.dgn

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-16/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BETTY E. SIKES, WALLACE G. FREEMAN JR. & EDNA F. HELMS
DB 2364 PG 327



-L- STA. 20+10.00

-L- STA. 23+70.68

MATCH LINE SEE SHEET 6 -L- STA. 32+00.00

MATCH LINE SEE SHEET 4 -YI- STA. 23+70.68

Place Matting for Erosion Control on Slope as Work Allows.

Modified Silt Basin Type 'B'
38 x 16 x 3
(See Tiered Skimmer Basin Detail)
ID 4.3 F

-YI-
PI Sta 22+43.17
Δ = 36° 49' 45.7" (RT)
D = 4' 14" 38.9"
L = 867.77'
T = 449.47'
R = 1,350.00'

PAVEMENT REMOVAL

29-JUL-2010 13:41
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annle@arup.com

PROJECT REFERENCE NO. R-2612A	SHEET NO. <i>EC-17/CONST.6</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BETTY E. SIKES, WALLACE G. FREEMAN JR. & EDNA F. HELMS
DB 2364 PG 327

BARRY PIERSON FIELDS
DB 3969 PG 1074

MELVIN B. & MILLIE M. PROPST
DB 1846 PG 146

LEIGHANN SMITH OSBORNE
DB 4032 PG 1433

BEGIN TIP PROJECT R-2612A
-L- POT Sta. 41+30.54

MATCH LINE SEE SHEET 5 -L- STA. 32+00.00

MATCH LINE SEE SHEET 7 -L- STA. 44+50.00

Place Matting for Erosion Control on Slope as Work Allows.

TIE TO EXISTING GUARDRAIL

78 x 14 x 3
ID 6.1 F

88 x 16 x 3
ID 6.2 F

54 x 14 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
6 ft. weir
ID 6.2 CG

36 x 16 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
8 ft. weir
ID 6.4 CG

42 x 18 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
10 ft. weir
ID 6.5 CG

52 x 20 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
12 ft. weir
ID 6.6 CG

Modified Silt Basin
Type 'B'
56 x 12 x 3
(See Tiered Skimmer
Basin Detail)
ID 6.1 CG

56 x 12 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 6.1 CG

48 x 12 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 6.3 CG

Modified Silt Basin
Type 'B'
48 x 12 x 3
(See Tiered Skimmer
Basin Detail)
ID 6.3 CG

Place Matting for Erosion Control on Slope as Work Allows.

NOTE: ADJUST HILL SLOPES TO 2:1 FROM STA. 38+00 TO 40+50 -Y1- LEFT

SPECIAL 'Y' DITCH SEE DETAIL 7 EST. 158.88 TONS CLASS B RIP RAP W/28.49 SY FILTER FABRIC

EMBANKMENT RIP RAP TOE PROTECTION SEE DETAIL 5 EST. 742.04 TONS CLASS B RIP RAP W/2006.04 SY FILTER FABRIC

REMOVE EXIST. 15" CONC. PIPE

LATERAL 'Y' DITCH SEE DETAIL 10 EST. 90.27 TONS CLASS B RIP RAP W/272.02 SY FILTER FABRIC

EST. 3 TONS CLASS B RIP RAP W/11 SY FILTER FABRIC

SPECIAL 'Y' DITCH SEE DETAIL 11 EST. 69.44 TONS CLASS B RIP RAP W/209.24 SY FILTER FABRIC

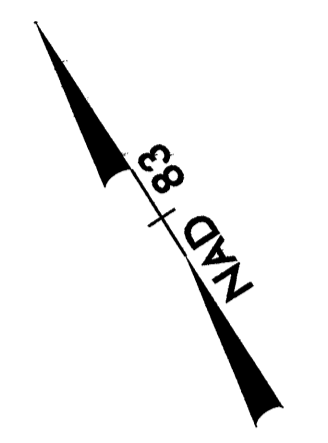
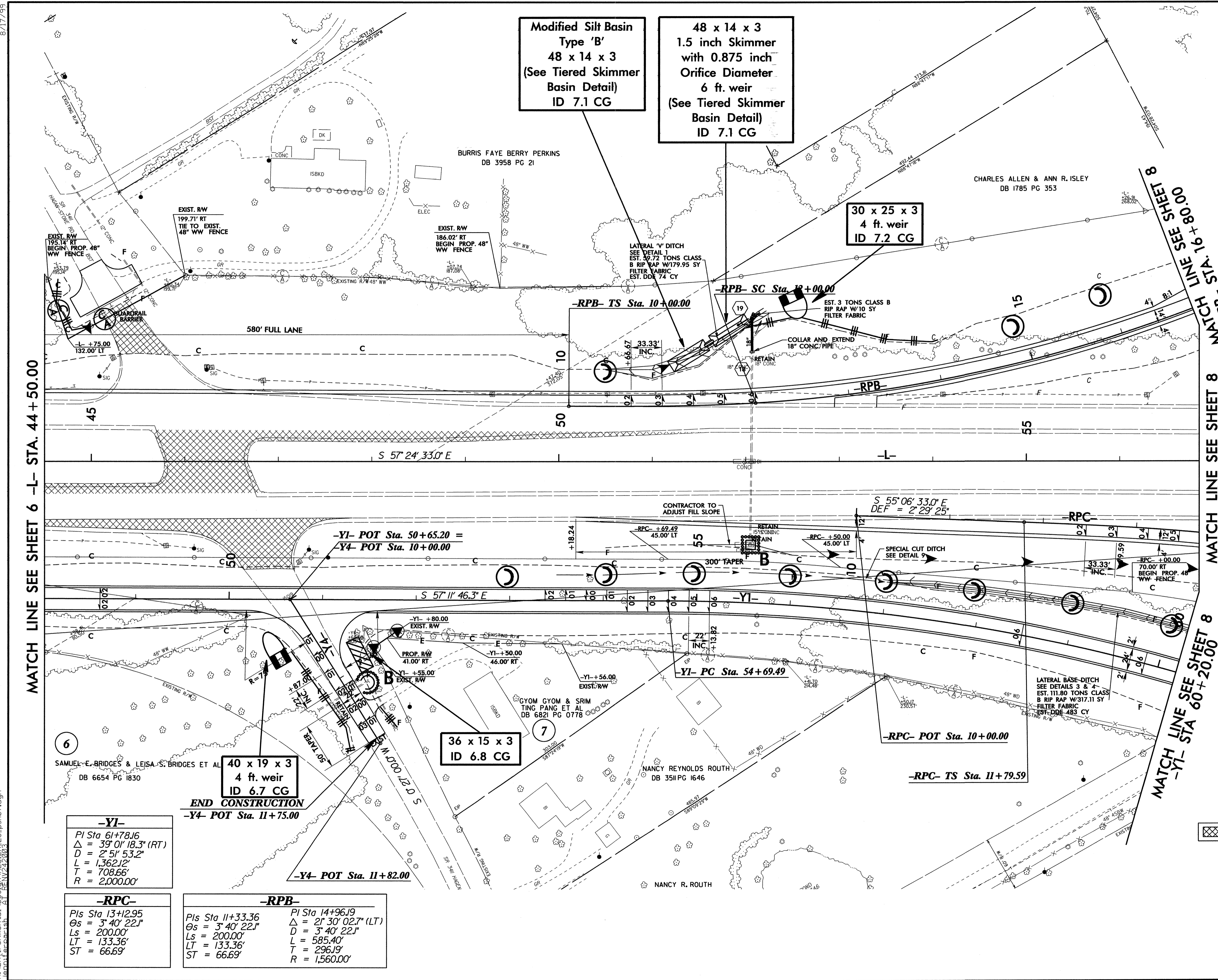
TAIL 'Y' DITCH SEE DETAIL 11 EST. DDE 46.50 CY EST. 136.5 TONS CLASS B RIP RAP W/202.2 SY FILTER FABRIC

BASE TAIL DITCH SEE DETAIL 12 EST. DDE 5.67 CY EST. 25.3 TONS CLASS B RIP RAP W/37.5 SY FILTER FABRIC

SAMUEL E. BRIDGES & LEISA S. BRIDGES ET AL
DB 6654 PG 1830

8/17/99
23-JUL-2010 13:48 RA:Environmental - EC-17/CONST.6 EC-psh06.dgn

PROJECT REFERENCE NO.		SHEET NO.	
R-2612A		EC-18/CONST.7	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



PAVEMENT REMOVAL

MATCH LINE SEE SHEET 6 -L- STA. 44 + 50.00

MATCH LINE SEE SHEET 8 -R- STA. 60 + 20.00
 MATCH LINE SEE SHEET 8 -L- STA. 56 + 85.00
 MATCH LINE SEE SHEET 8 -A- STA. 61 + 91.00

-YI-
 PI Sta 61+78.16
 $\Delta = 39^{\circ} 01' 18.3''$ (RT)
 $D = 2^{\circ} 51' 53.2''$
 $L = 1,362.12'$
 $T = 708.66'$
 $R = 2,000.00'$

-RPC-
 Pls Sta 13+12.95
 $\Theta_s = 3^{\circ} 40' 22.1''$
 $L_s = 200.00'$
 $LT = 133.36'$
 $ST = 66.69'$

-RPB-
 Pls Sta 11+33.36
 $\Theta_s = 3^{\circ} 40' 22.1''$
 $L_s = 200.00'$
 $LT = 133.36'$
 $ST = 66.69'$

PI Sta 14+96.19
 $\Delta = 21^{\circ} 30' 02.7''$ (LT)
 $D = 3^{\circ} 40' 22.1''$
 $L = 585.40'$
 $T = 296.19'$
 $R = 1,560.00'$

END CONSTRUCTION
 -Y4- POT Sta. 11+75.00

-Y4- POT Sta. 11+82.00

36 x 15 x 3
 ID 6.8 CG

Modified Silt Basin
 Type 'B'
 48 x 14 x 3
 (See Tiered Skimmer
 Basin Detail)
 ID 7.1 CG

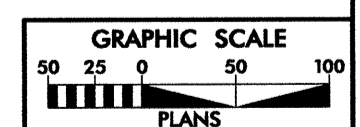
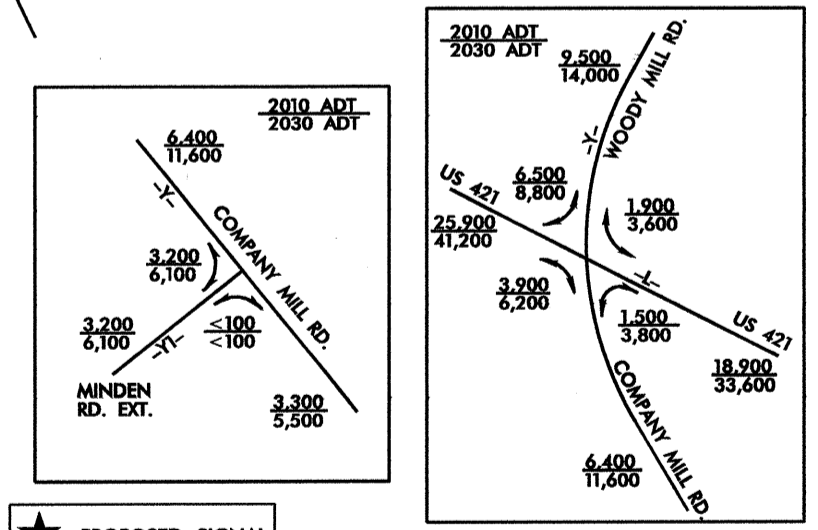
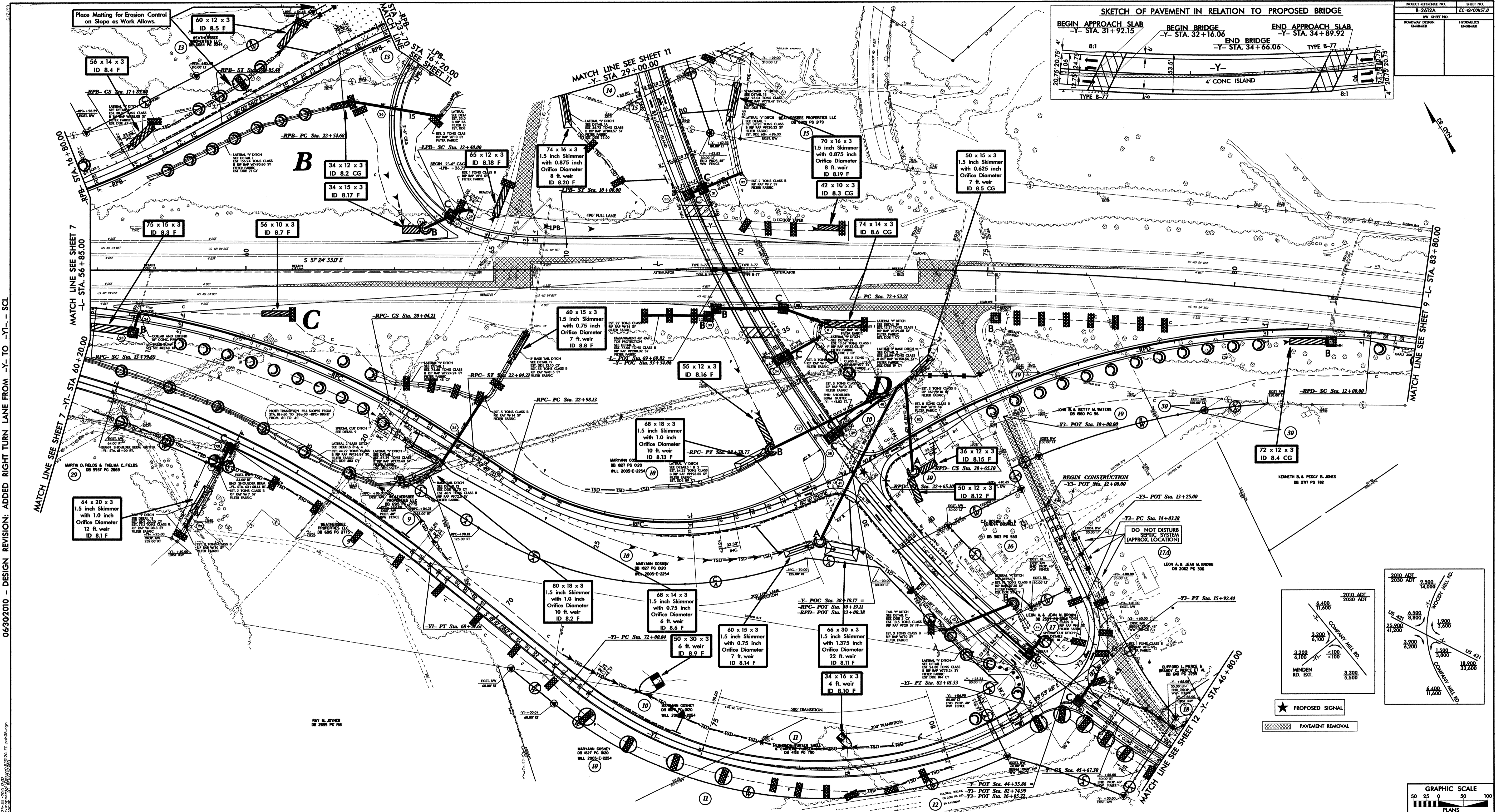
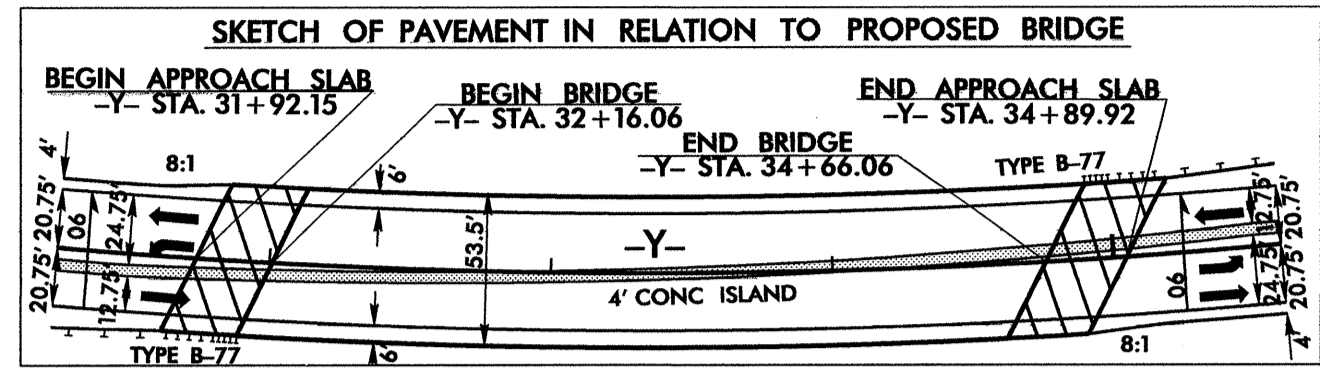
48 x 14 x 3
 1.5 inch Skimmer
 with 0.875 inch
 Orifice Diameter
 6 ft weir
 (See Tiered Skimmer
 Basin Detail)
 ID 7.1 CG

30 x 25 x 3
 4 ft weir
 ID 7.2 CG

40 x 19 x 3
 4 ft weir
 ID 6.7 CG

8/17/99
 23-JUL-2010 15:05
 RA:Envtl-comments...
 N:\Projects\2612A_EC-psht07.dgn
 07/24/03

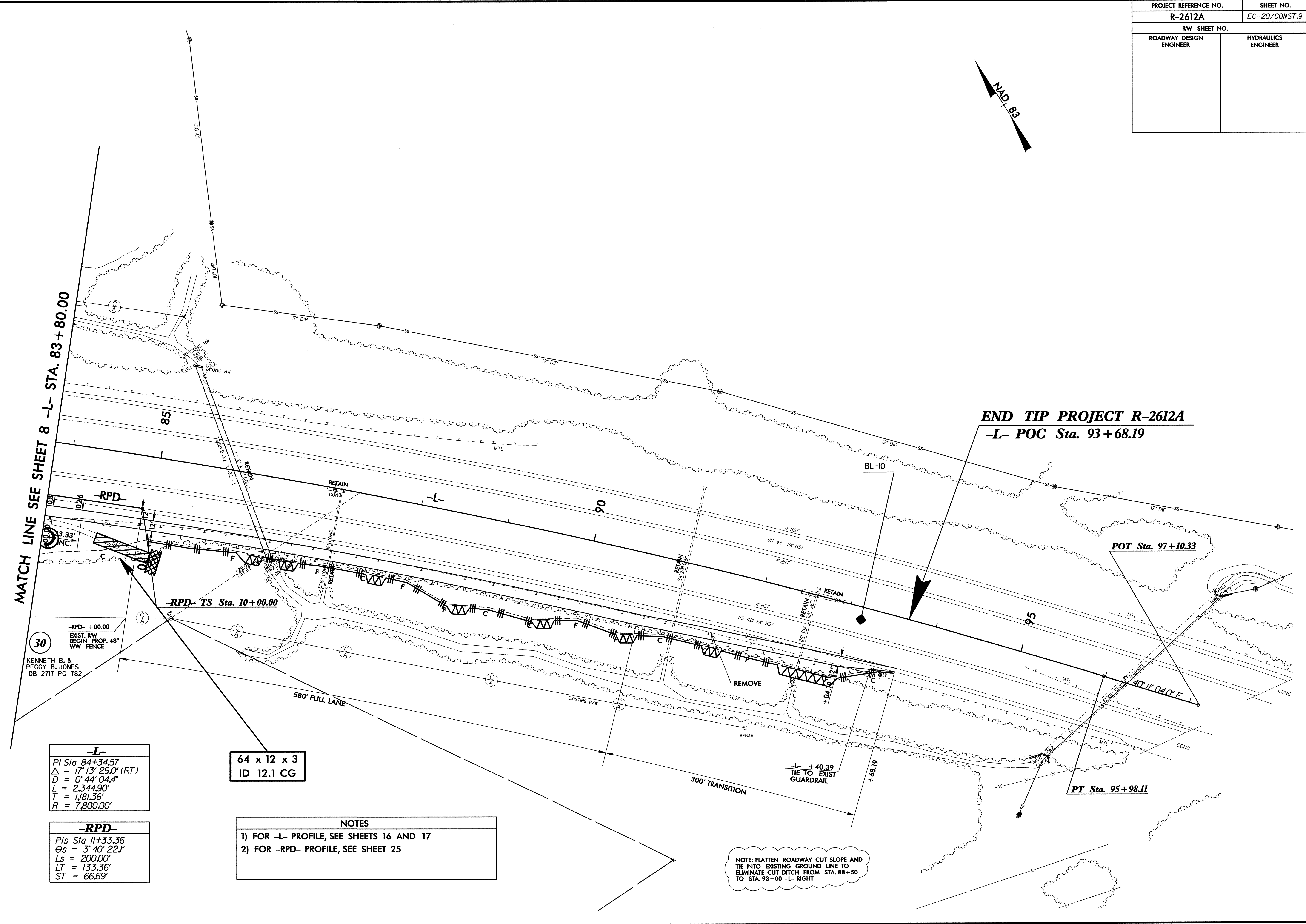
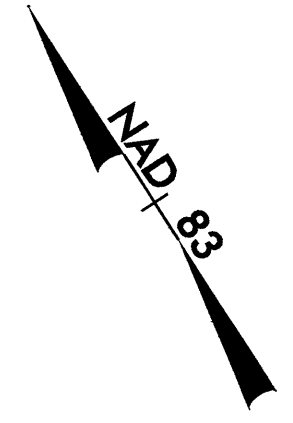
PROJECT REFERENCE NO.	SHEET NO.
B-2612A	EC-19/CONST B
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER



06/30/2010 - DESIGN REVISION: ADDED RIGHT TURN LANE FROM -Y- TO -Y1-- SCL

RAY M. JONES
DB 2005 PC 198

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-20/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH LINE SEE SHEET 8 -L- STA. 83+80.00

END TIP PROJECT R-2612A
-L- POC Sta. 93+68.19

POT Sta. 97+10.33

PT Sta. 95+98.11

30
 -RPD- +00.00
 EXIST. RW BEGIN PROP. 48"
 WW FENCE
 KENNETH B. &
 PEGGY B. JONES
 DB 2717 PG 782

-L-
 PI Sta 84+34.57
 $\Delta = 17' 13" 29.0'$ (RT)
 $D = 0' 44" 04.4'$
 $L = 2,344.90'$
 $T = 1,181.36'$
 $R = 7,800.00'$

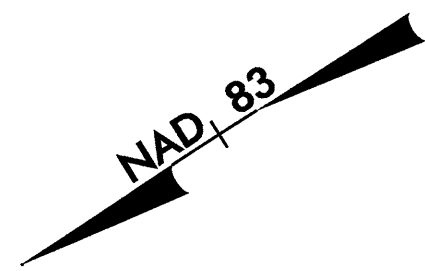
-RPD-
 PIs Sta 11+33.36
 $\theta_s = 3' 40' 22.1"$
 $L_s = 200.00'$
 $LT = 133.36'$
 $ST = 66.69'$

64 x 12 x 3
 ID 12.1 CG

NOTES
 1) FOR -L- PROFILE, SEE SHEETS 16 AND 17
 2) FOR -RPD- PROFILE, SEE SHEET 25

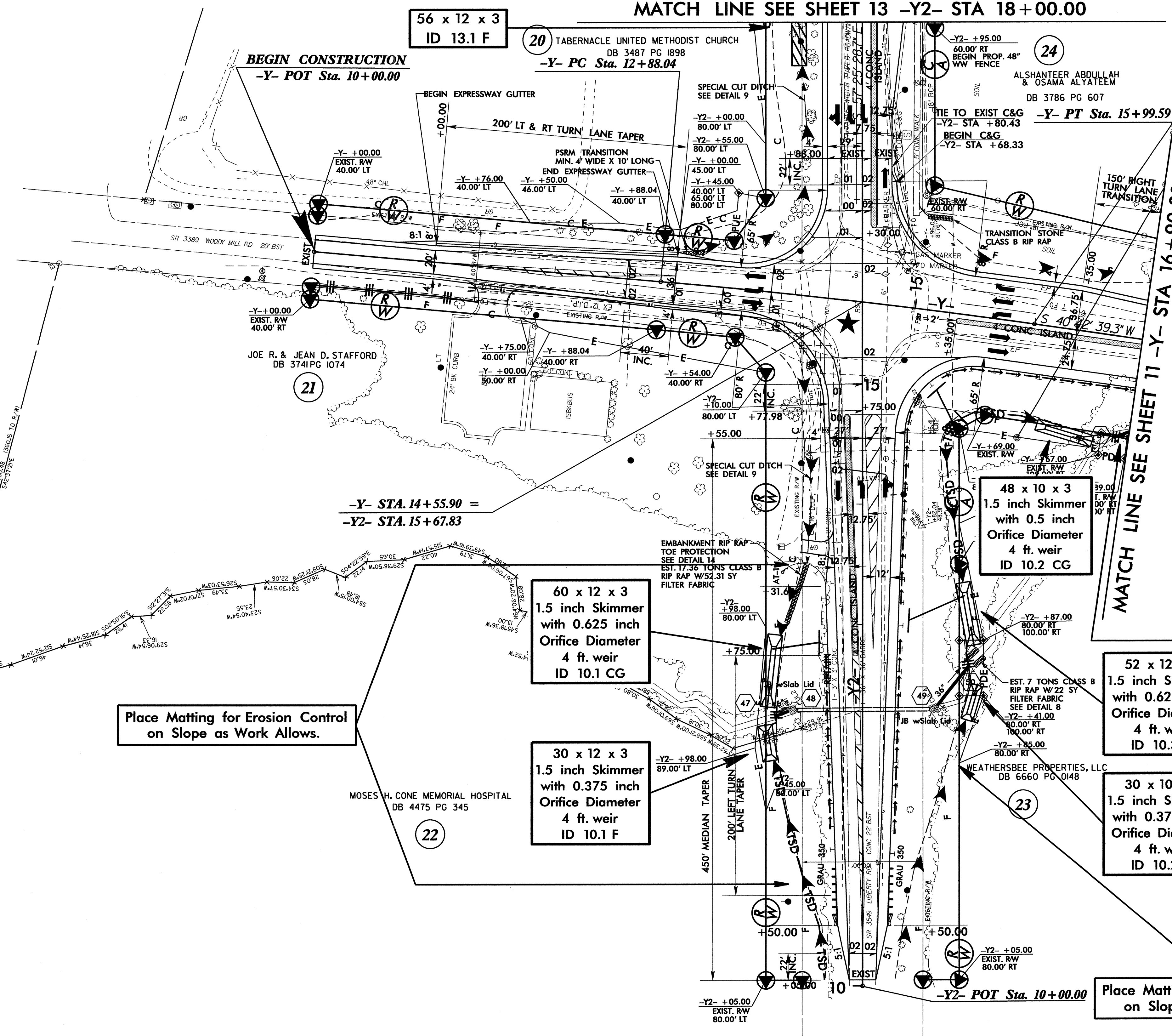
NOTE: FLATTEN ROADWAY CUT SLOPE AND TIE INTO EXISTING GROUND LINE TO ELIMINATE CUT DITCH FROM STA. 88+50 TO STA. 93+00 -L- RIGHT

29-JUL-2010 15:08 R:\Environmental\2010\2612A_EC_psh09.dgn 8/17/99



PROJECT REFERENCE NO. R-2612A		SHEET NO. EC-21/CONST.10	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

MATCH LINE SEE SHEET 13 -Y2- STA 18+00.00



Place Matting for Erosion Control on Slope as Work Allows.

Place Matting for Erosion Control on Slope as Work Allows.

★ REVISED SIGNAL

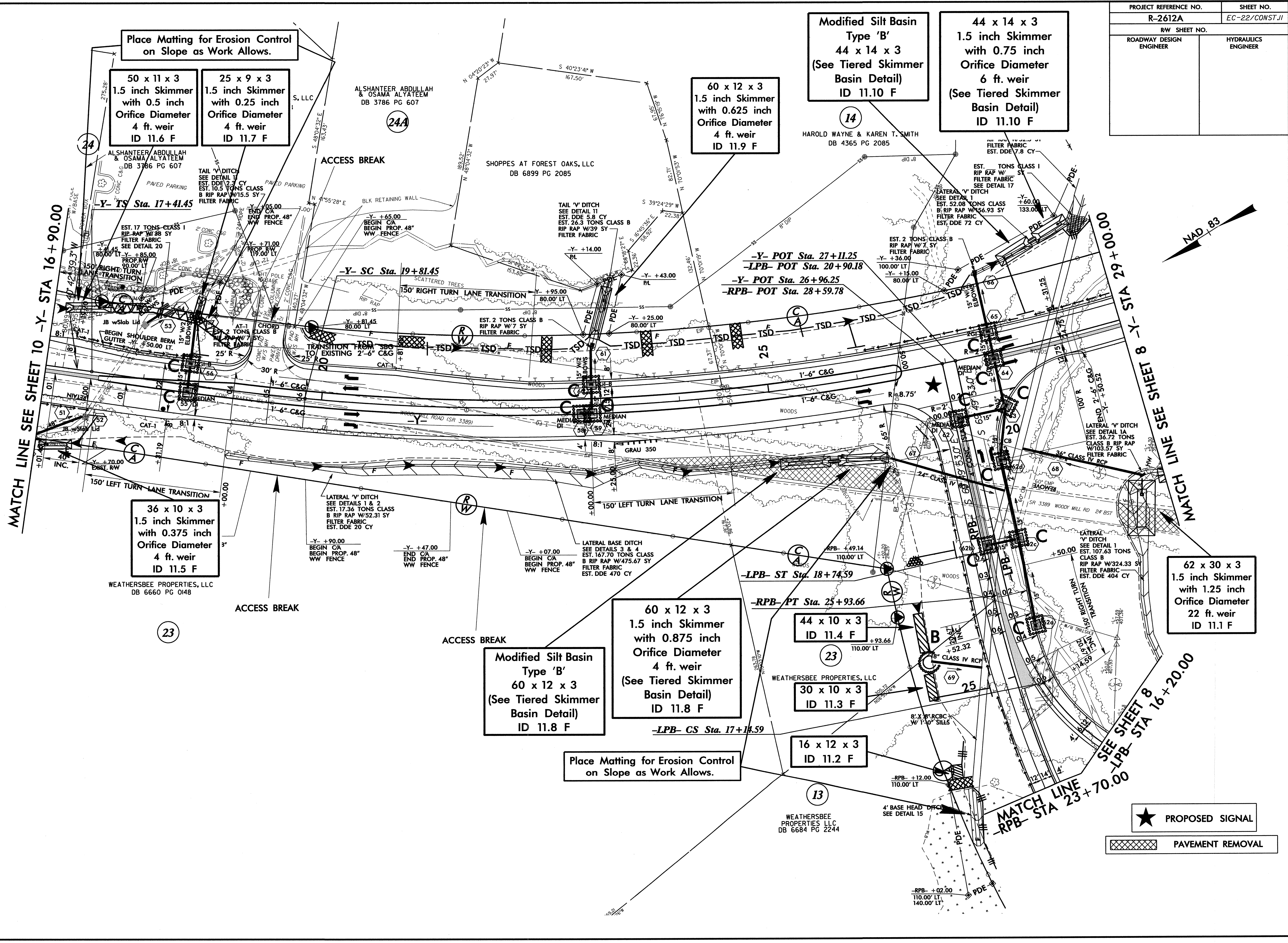
-Y-
 PI Sta 14+43.85
 $\Delta = 3^{\circ} 01' 22.6''$ (RT)
 $D = 0' 58'' 13.1''$
 $L = 311.55'$
 $T = 155.81'$
 $R = 5,905.00'$

- NOTES**
- 1) FOR -Y- PROFILE, SEE SHEET 17
 - 2) FOR -Y2- PROFILE, SEE SHEET 22
 - 3) DRIVEWAY RADII ARE 10' UNLESS OTHERWISE NOTED

DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-22/CONST.II
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99
 06/30/2010 - DESIGN REVISION: REMOVED MEDIAN LEFT TURN AT -Y- STATION 19+75.00. - SCL
 23 JUL 2010 15:34
 H:\ENR\environmental\06112612A_EC-ps-h1.dgn
 11/24/2009 10:41:31 AM



Place Matting for Erosion Control on Slope as Work Allows.

50 x 11 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
4 ft. weir
ID 11.6 F

25 x 9 x 3
1.5 inch Skimmer
with 0.25 inch
Orifice Diameter
4 ft. weir
ID 11.7 F

60 x 12 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 11.9 F

Modified Silt Basin
Type 'B'
44 x 14 x 3
(See Tiered Skimmer
Basin Detail)
ID 11.10 F

44 x 14 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
6 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 11.10 F

36 x 10 x 3
1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
4 ft. weir
ID 11.5 F

Modified Silt Basin
Type 'B'
60 x 12 x 3
(See Tiered Skimmer
Basin Detail)
ID 11.8 F

60 x 12 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 11.8 F

44 x 10 x 3
ID 11.4 F

30 x 10 x 3
ID 11.3 F

16 x 12 x 3
ID 11.2 F

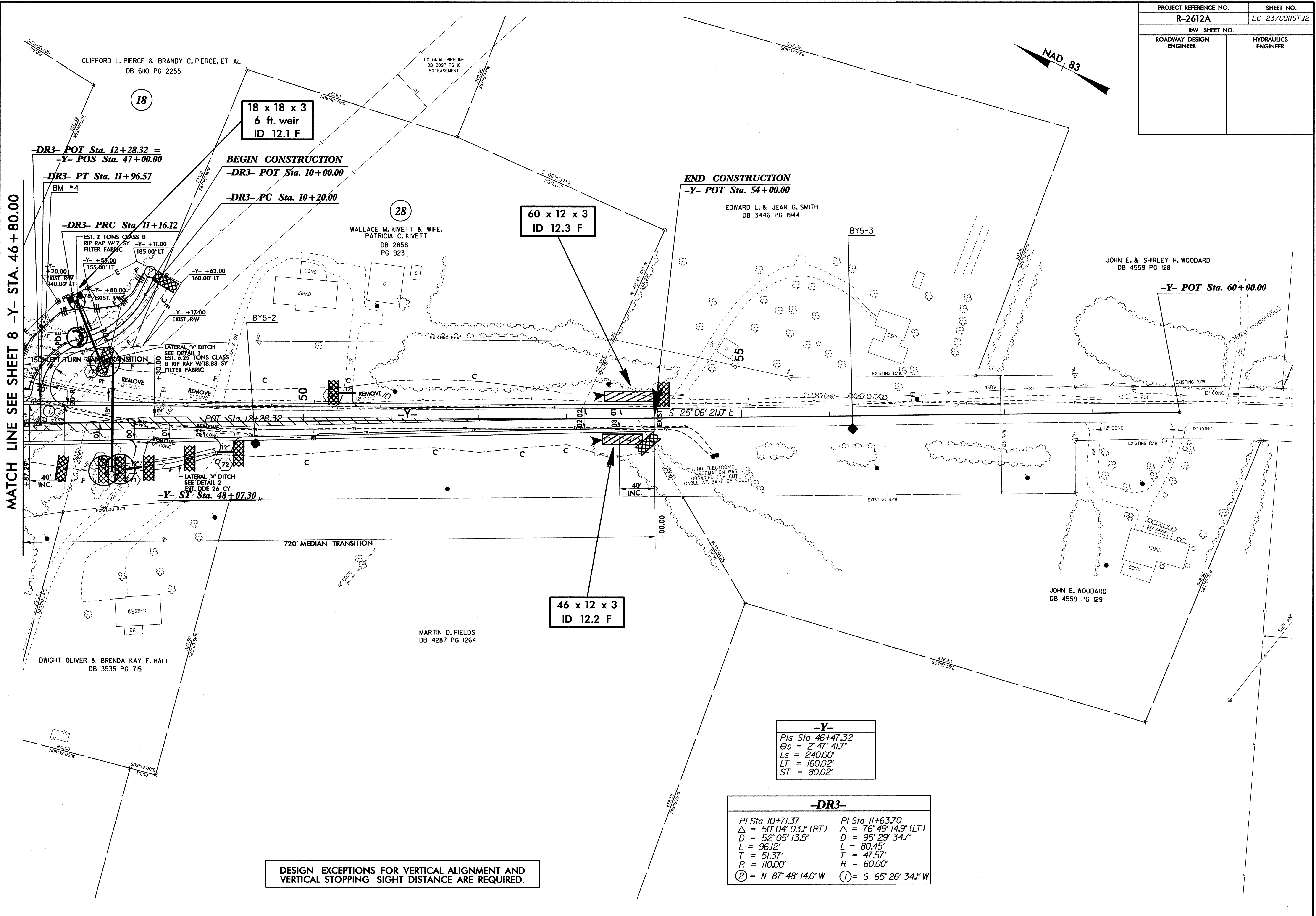
62 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
22 ft. weir
ID 11.1 F

★ PROPOSED SIGNAL

PAVEMENT REMOVAL

PROJECT REFERENCE NO.	SHEET NO.
R-2612A	EC-23/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99
23 JUL 2000 15:35 D:\proj\2612A\EC\psh12.dgn
PLOT: PSH12



MATCH LINE SEE SHEET 8 -Y- STA. 46+80.00

DESIGN EXCEPTIONS FOR VERTICAL ALIGNMENT AND VERTICAL STOPPING SIGHT DISTANCE ARE REQUIRED.

-Y-
 Pts Sta 46+47.32
 Gs = 2' 47' 41.7"
 Ls = 240.00'
 LT = 160.02'
 ST = 80.02'

-DR3-

PI Sta 10+71.37	PI Sta 11+63.70
Δ = 50° 04' 03.1" (RT)	Δ = 76° 49' 14.9" (LT)
D = 52° 05' 13.5"	D = 95° 29' 34.7"
L = 96.12'	L = 80.45'
T = 51.37'	T = 47.57'
R = 110.00'	R = 60.00'
② = N 87° 48' 14.0" W	① = S 65° 26' 34.1" W

