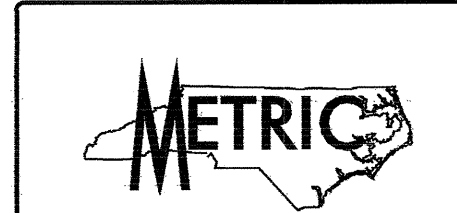
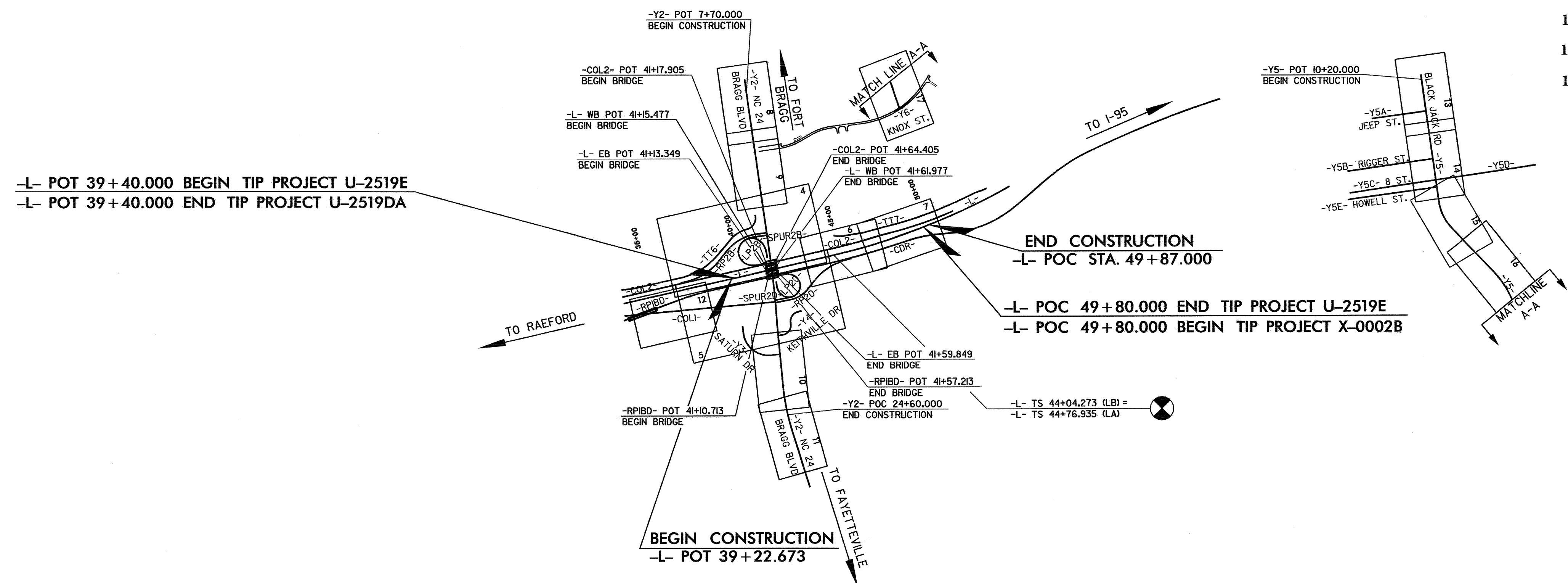


TIP PROJECT: U-2519E

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

LOCATION: FAYETTEVILLE OUTER LOOP FROM WEST OF NC 24 TO EAST OF NC 24 (BRAGG BOULEVARD)
TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, CULVERT, PAVING, TRAFFIC SIGNALS, RETAINING WALLS, & SIGNING



ALL DIMENSIONS IN THESE PLANS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2519E	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TS
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.01	Riser Basin	RB
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle	W
1634.01	Temporary Rock Sediment Dam Type-A	TRSDA
1634.02	Temporary Rock Sediment Dam Type-B	TRSDB
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPISTA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTB
1630.04	Stilling Basin	SB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SKB
	Tiered Skimmer Basin	TSKB
	Infiltration Basin	IB

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS

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 metric 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.

- 1622.01 Temporary Berms and Slope Drains
- 1630.03 Temporary Silt Ditch
- 1630.05 Temporary Diversion
- 1632.01 Rock Inlet Sediment Trap Type A
- 1632.02 Rock Inlet Sediment Trap Type B
- 1633.01 Temporary Rock Silt Check Type A
- 1633.02 Temporary Rock Silt Check Type B
- 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

05-MAR-2008 10:04
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 jsgoodwin 41 REV 2519E

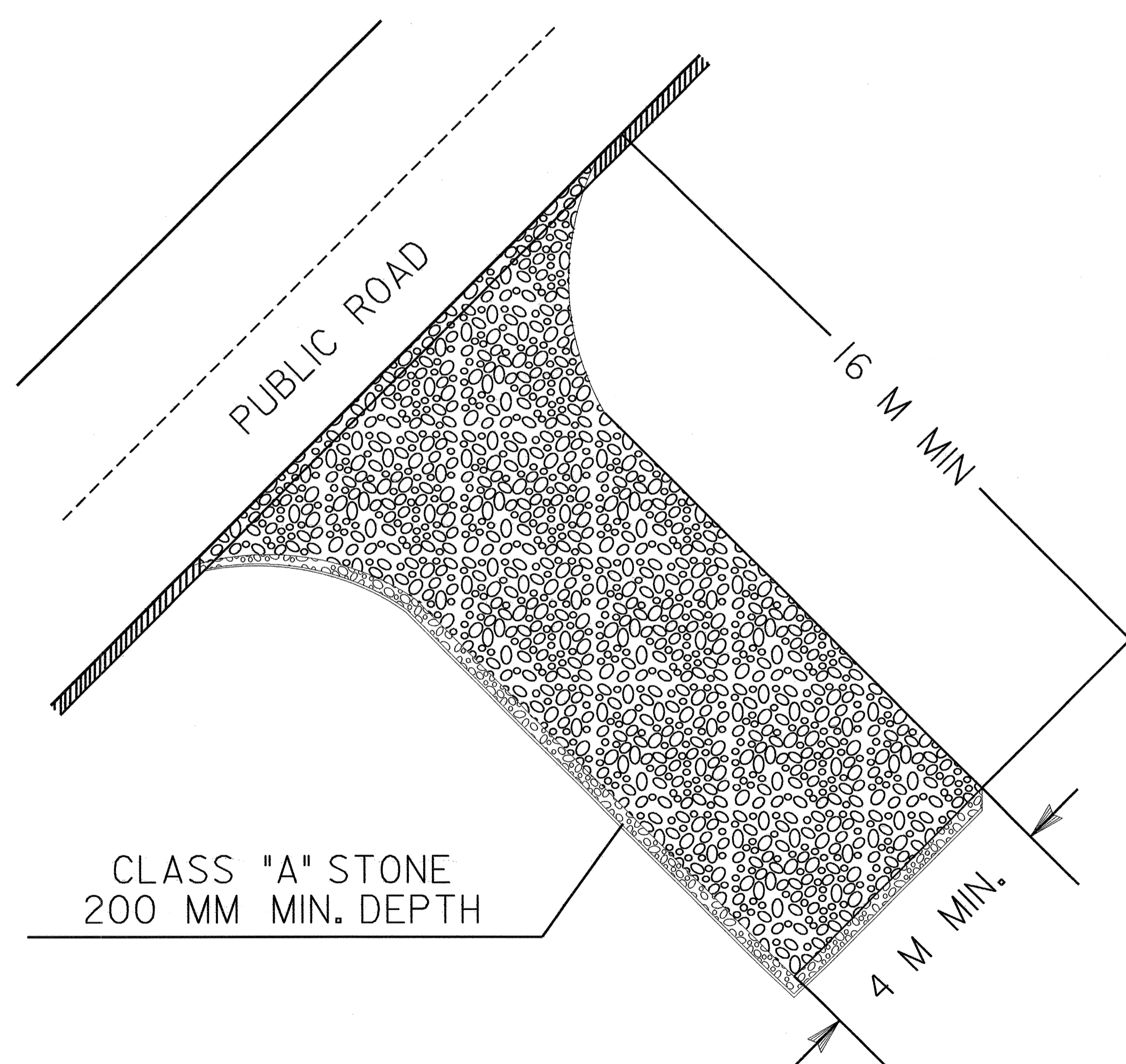


PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2
R / W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

NOTES:

1. TURNING RADIUS SUFFICIENT TO ACCOMODATE LARGE TRUCKS SHALL BE PROVIDED.
2. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
5. GRAVEL CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.
6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER

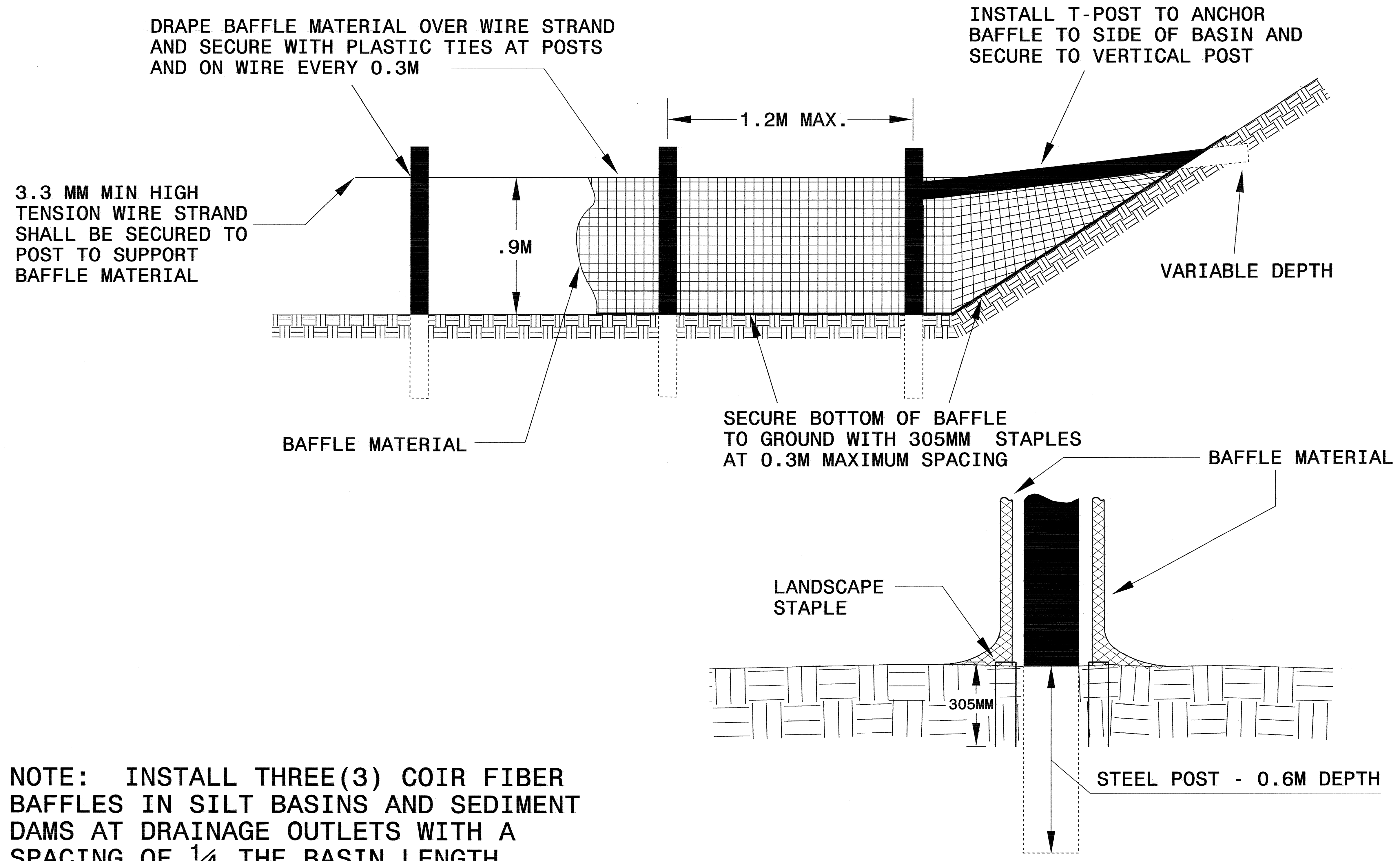


NOTE: FILTER FABRIC TO BE PLACED BENEATH STONE

COIR FIBER BAFFLE DETAIL




PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

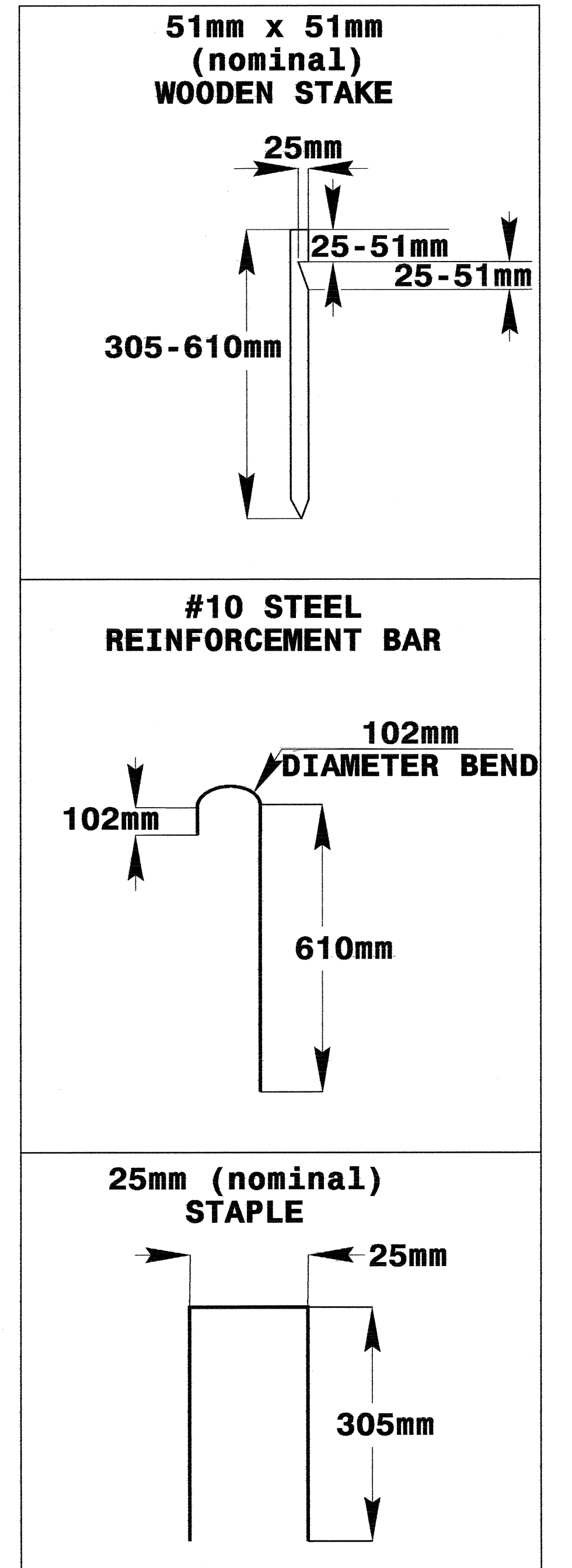
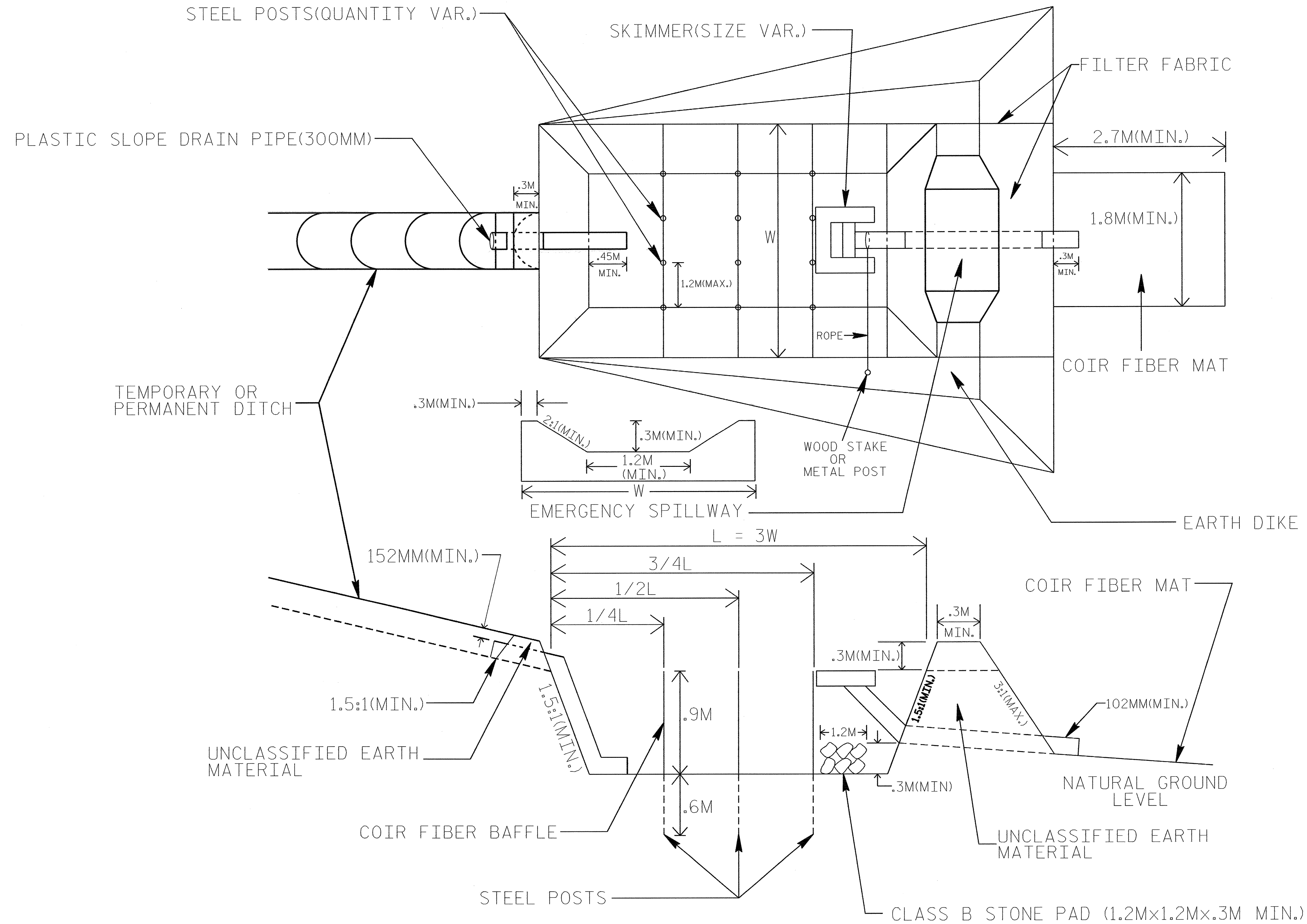


NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 6 M IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 305MM LANDSCAPE STAPLES

SKIMMER BASIN WITH BAFFLES DETAIL

		PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2B
		R/W SHEET NO.	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



COIR FIBER MAT ANCHOR OPTIONS

NOTES

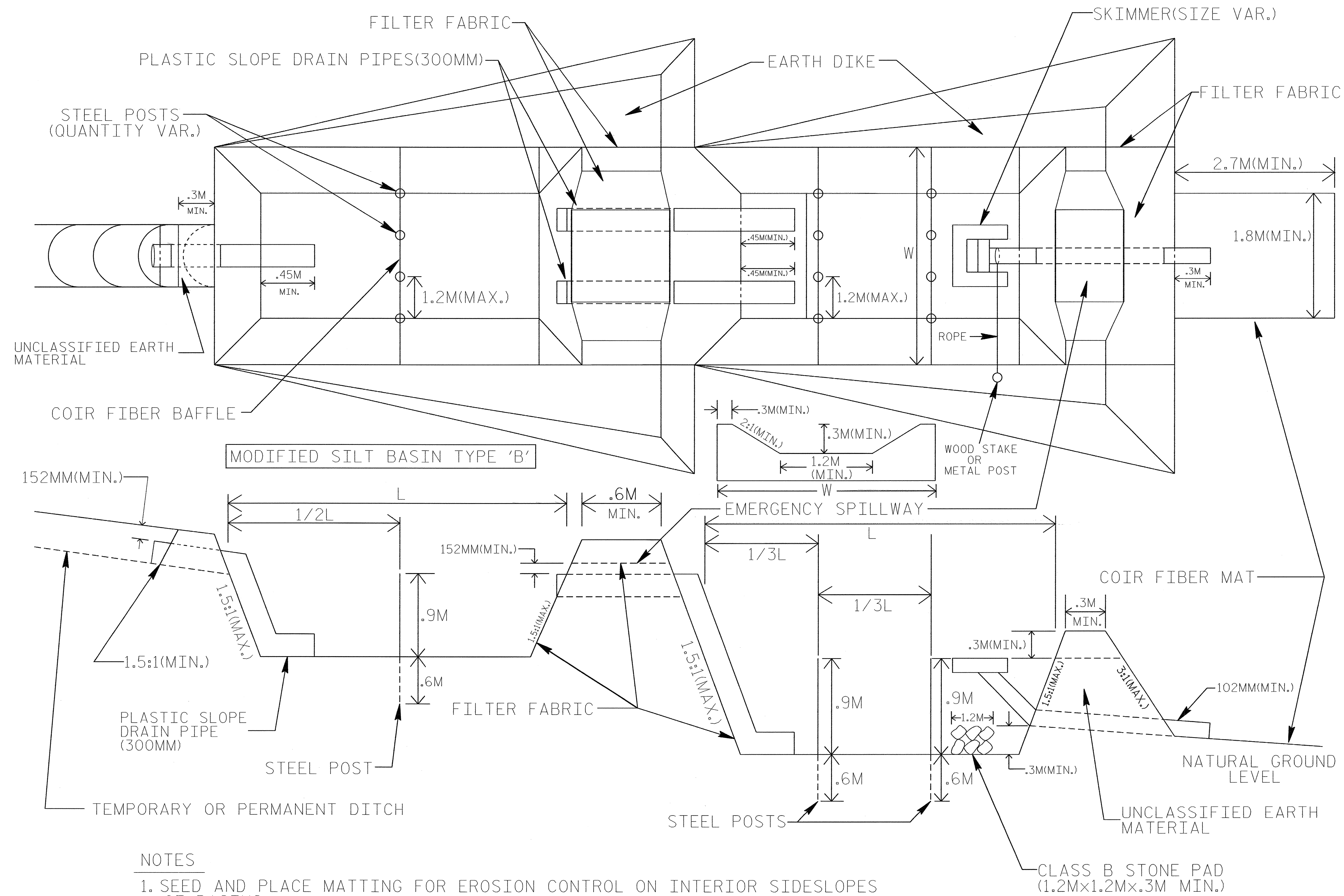
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 1.5M.
3. MINIMUM BASIN WIDTH SHALL BE 3M.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (M) USING $Q/0.074$, WHERE Q IS FLOW RATE (CMS) INTO BASIN.

NOT TO SCALE

TIERED SKIMMER BASIN DETAIL

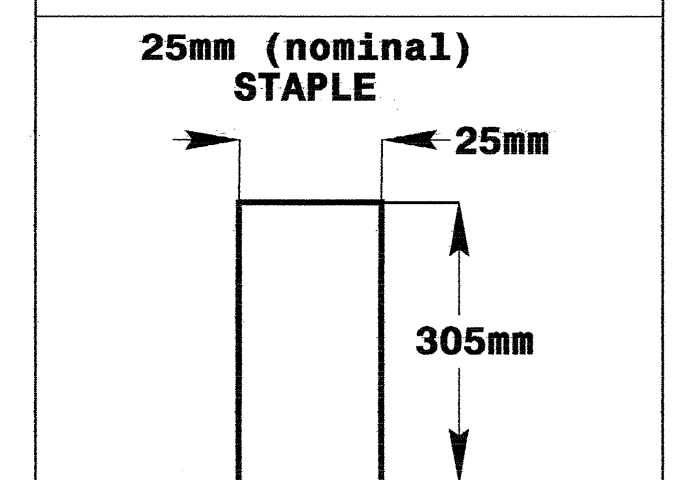
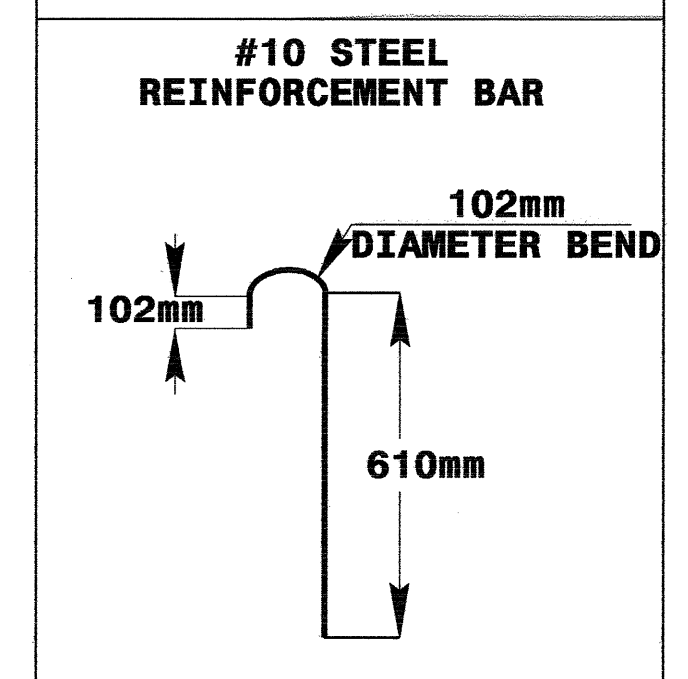
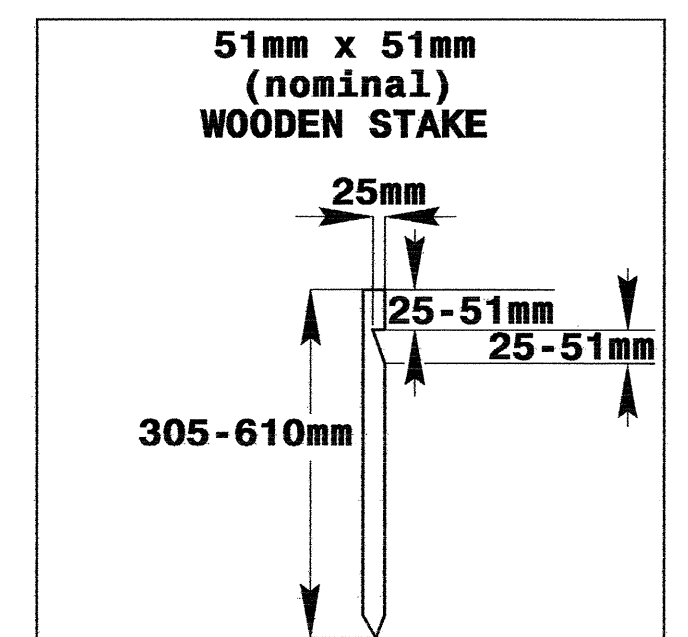


PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 1.5M.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. THE MINIMUM BASIN WIDTHS SHALL BE 3M.
5. DETERMINE EMERGENCY SPILLWAY LENGTHS (M) USING $Q/0.074$, WHERE Q IS FLOW RATE (CMS) INTO UPPER BASIN.



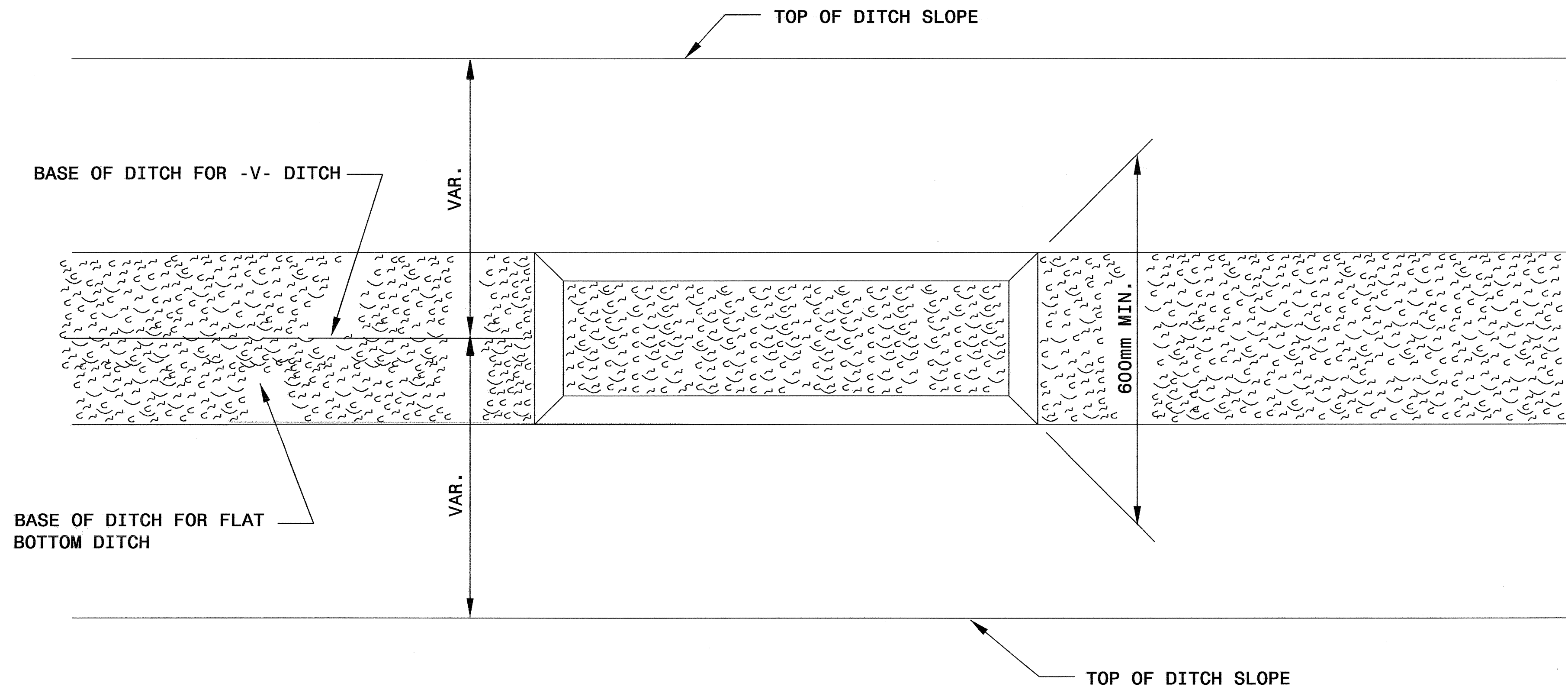
COIR FIBER MAT ANCHOR OPTIONS

NOT TO SCALE

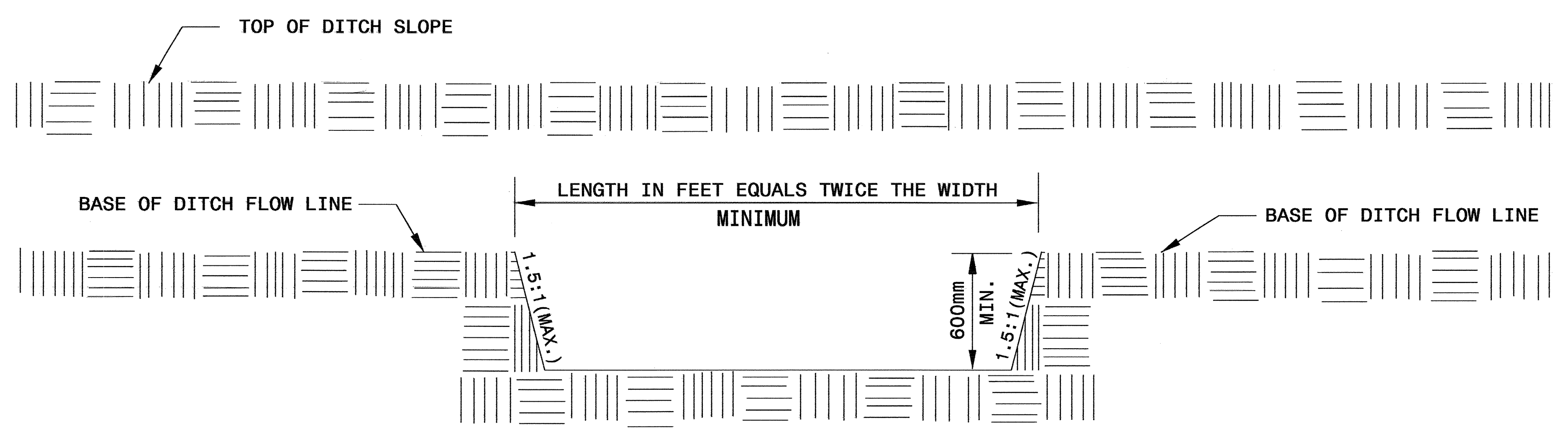


PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT BASIN 'B' DETAIL



PLAN

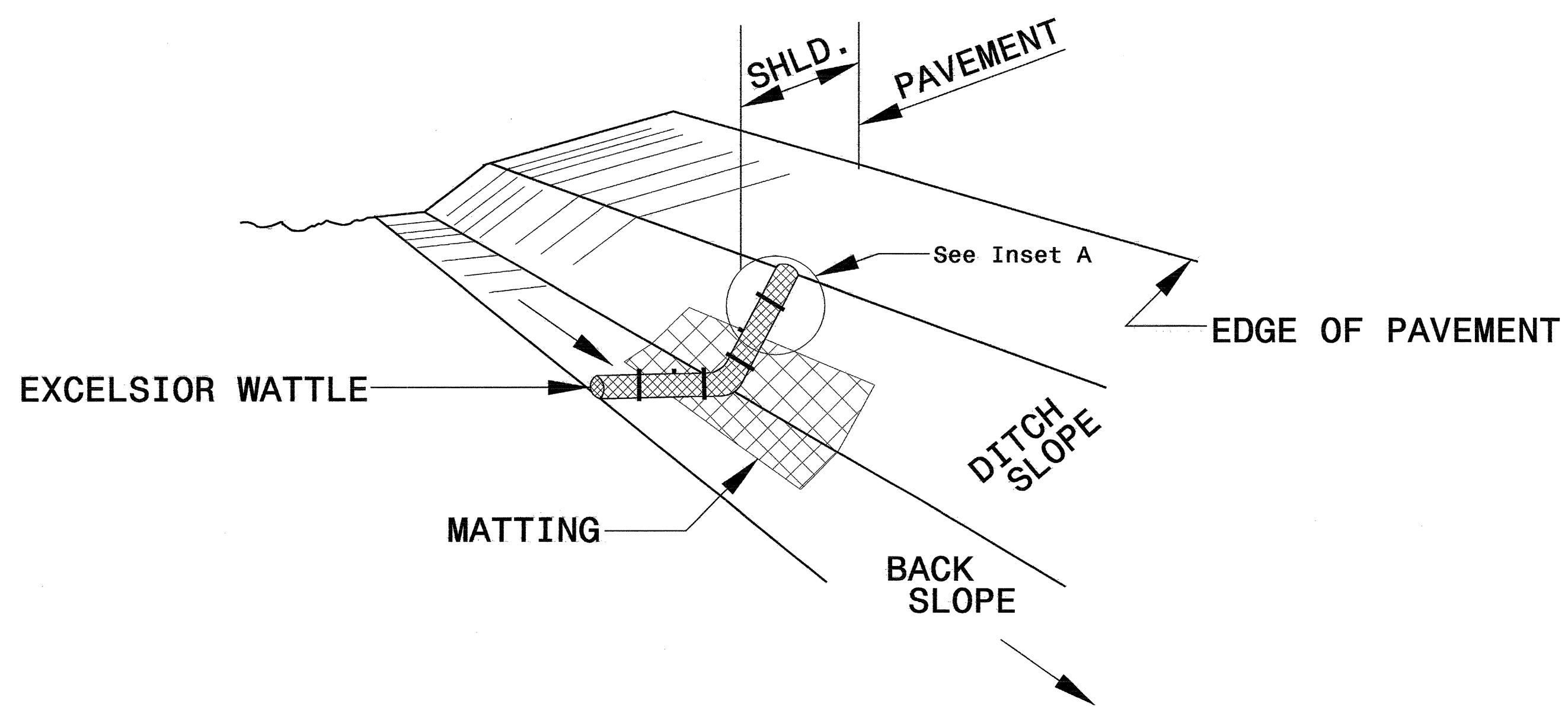


ELEVATION

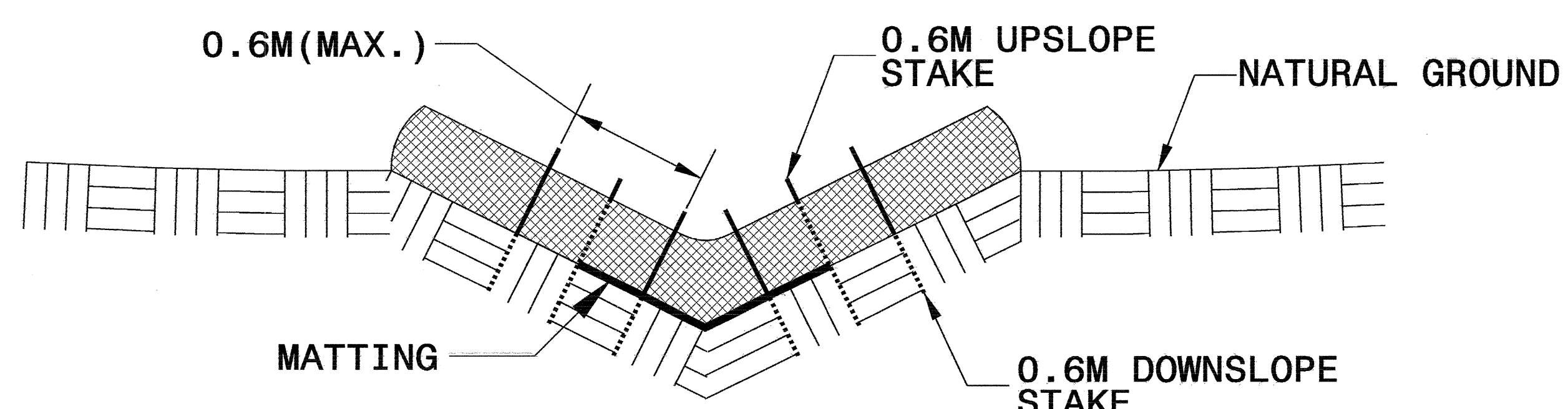


PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2E
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

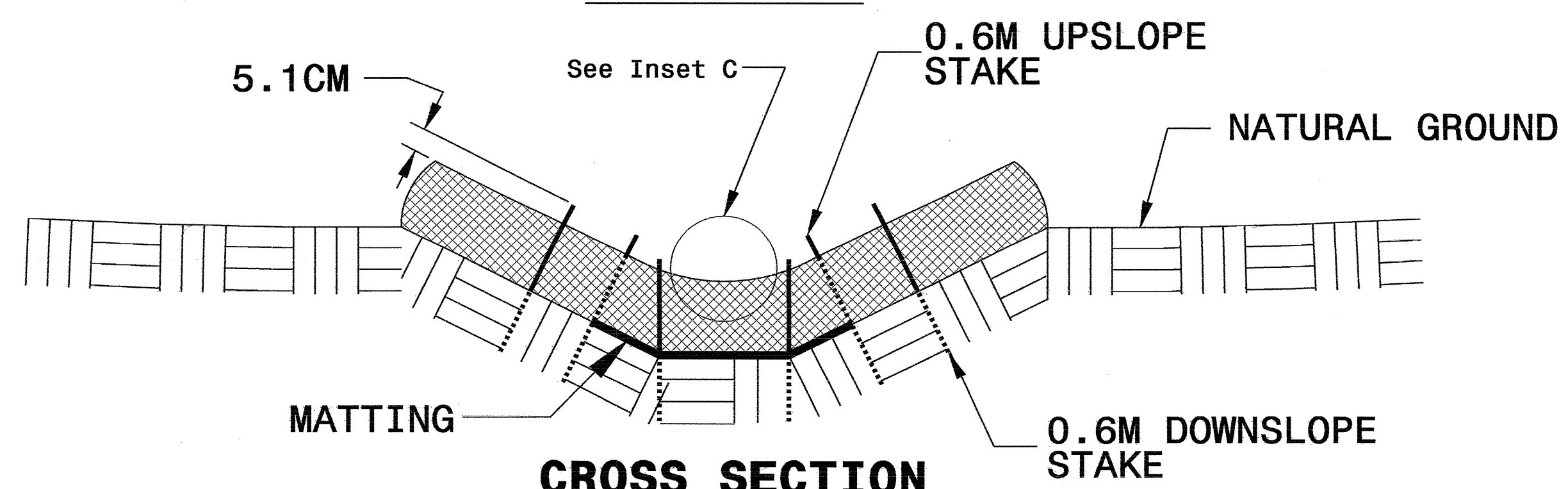
WATTLE WITH POLYACRYLAMIDE DETAIL



ISOMETRIC VIEW



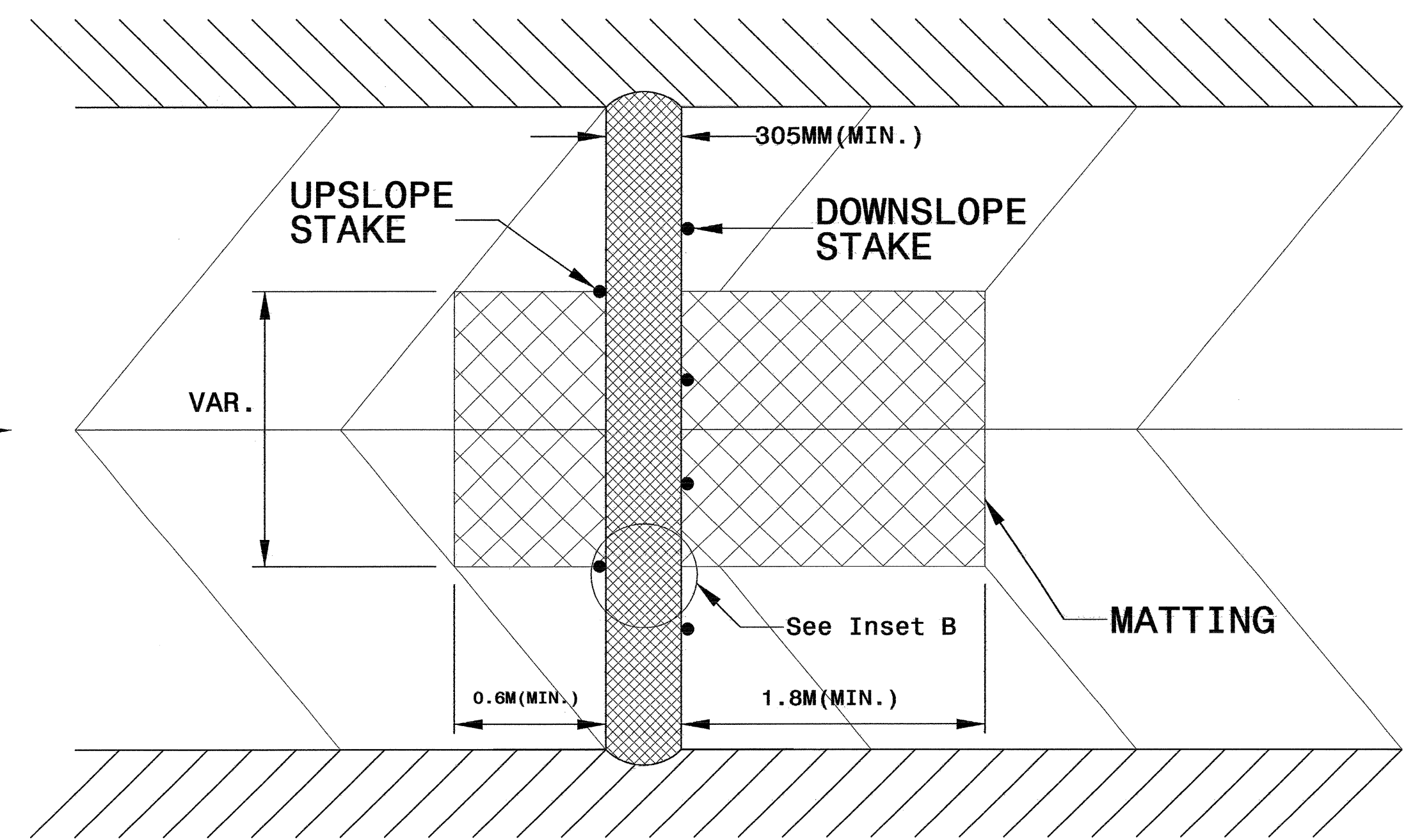
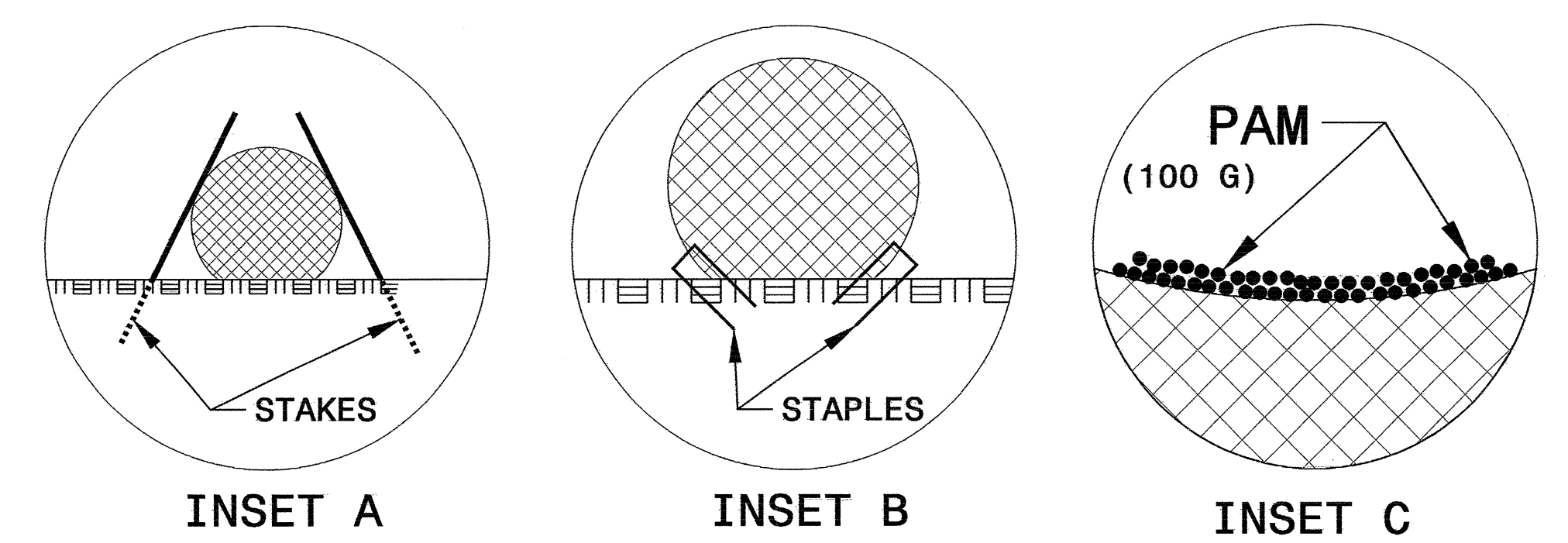
CROSS SECTION VEE DITCH



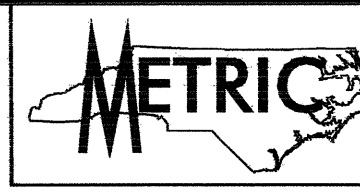
CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

- USE MINIMUM 305 MM DIAMETER EXCELSIOR WATTLE.
- USE 0.6 M WOODEN STAKES WITH A 5.1 CM BY 5.1 CM CROSS SECTION.
- 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 3 MM DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 305 MM IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 0.3 LINEAR METER 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.
- INITIALLY APPLY 100 GRAMS OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 6 MM.

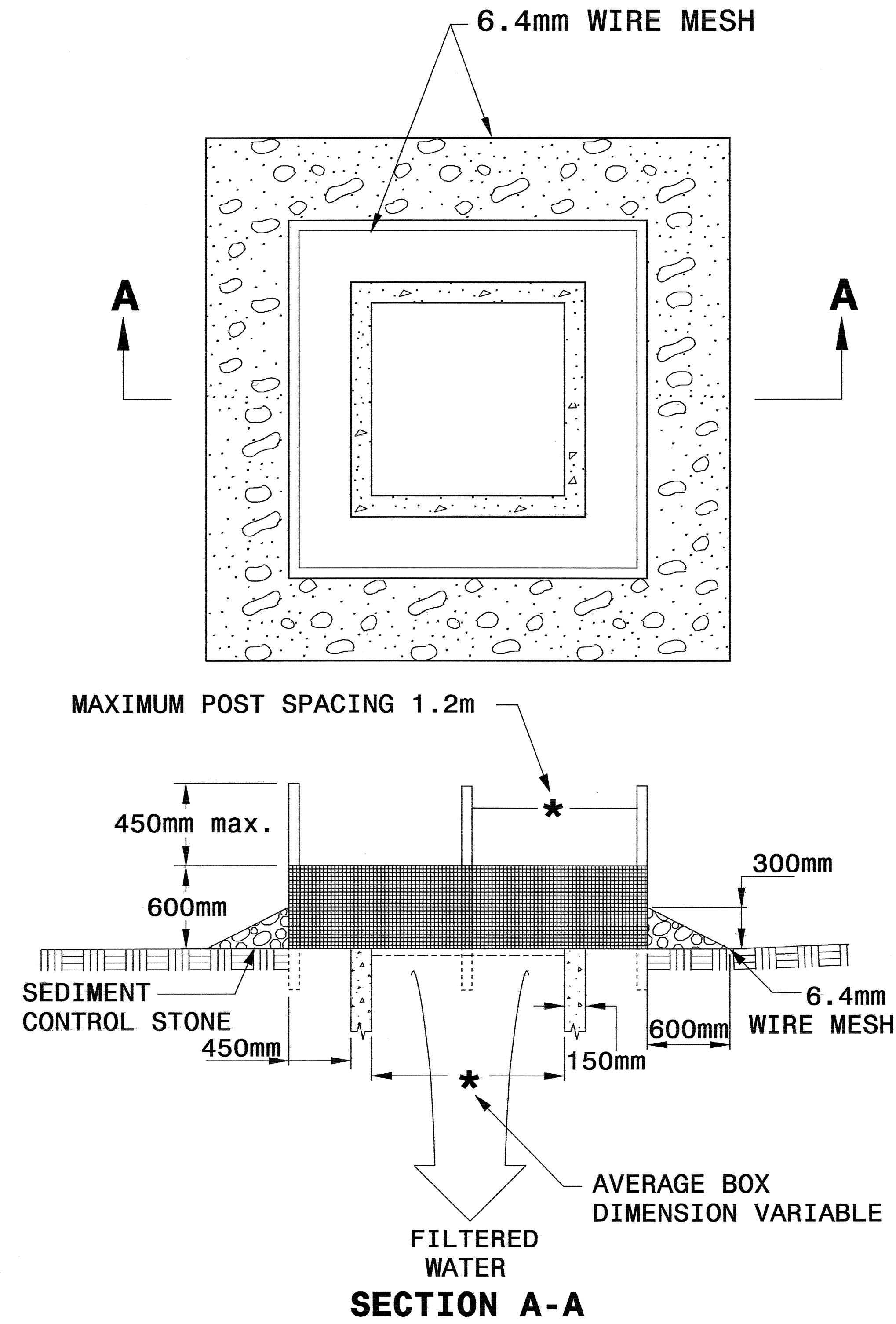


TOP VIEW



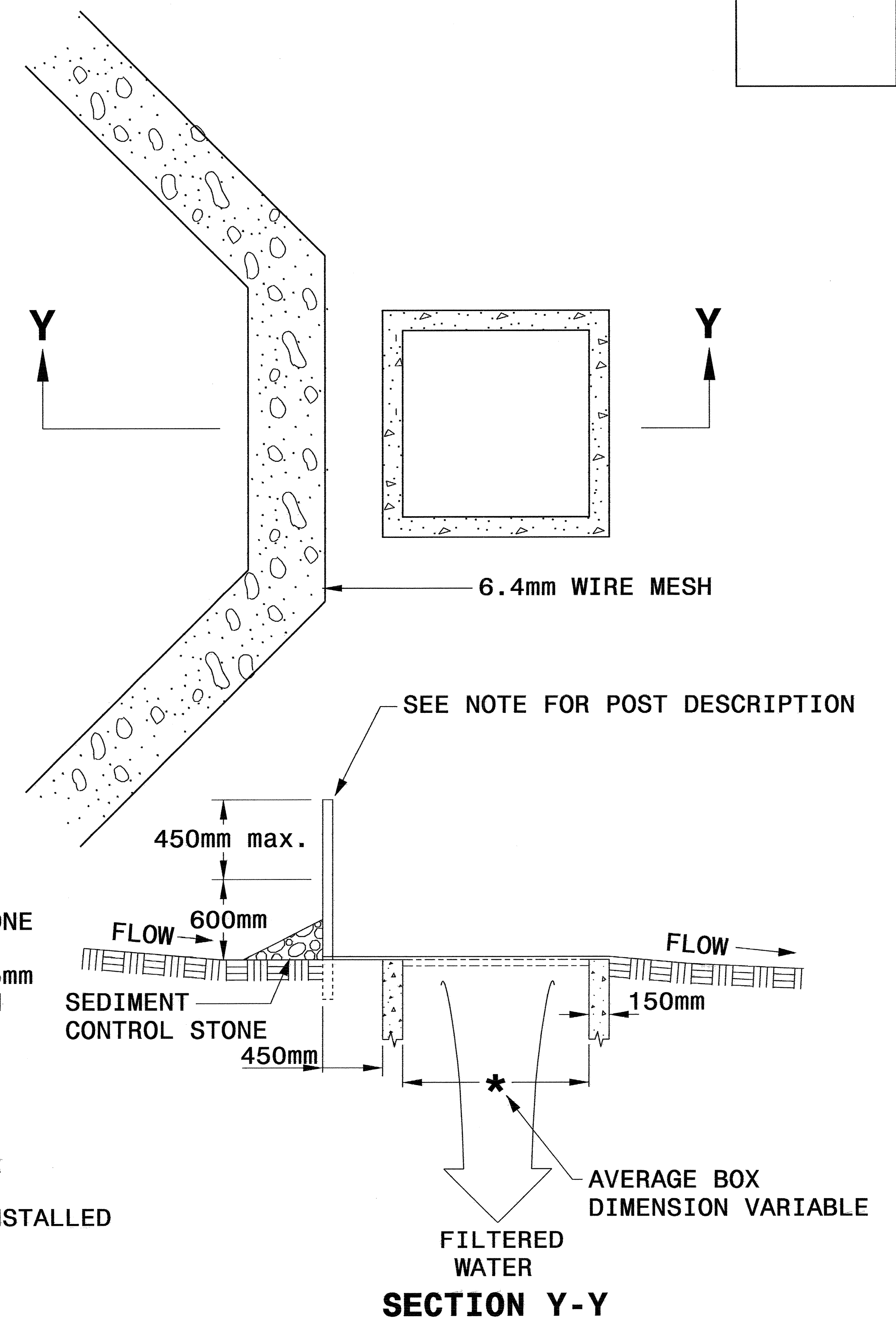
PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2F
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ROCK INLET SEDIMENT TRAP TYPE 'C' DETAIL



MULTI-DIRECTIONAL FLOW

NOTE
 USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
 USE HARDWARE CLOTH 0.65mm WIRE MESH WITH 6.4mm MESH OPENINGS.
 PLACE TOP OF WIRE MESH A MINIMUM OF 300mm BELOW THE SHOULDER OR ANY DIVERSION POINT.
 INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
 USE 1.5m STEEL POST, INSTALLED 450mm DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
 SPACE POST A MAXIMUM OF 1.2m.



SINGLE-DIRECTIONAL FLOW



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-26
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SPECIAL SEDIMENT CONTROL FENCE DETAIL

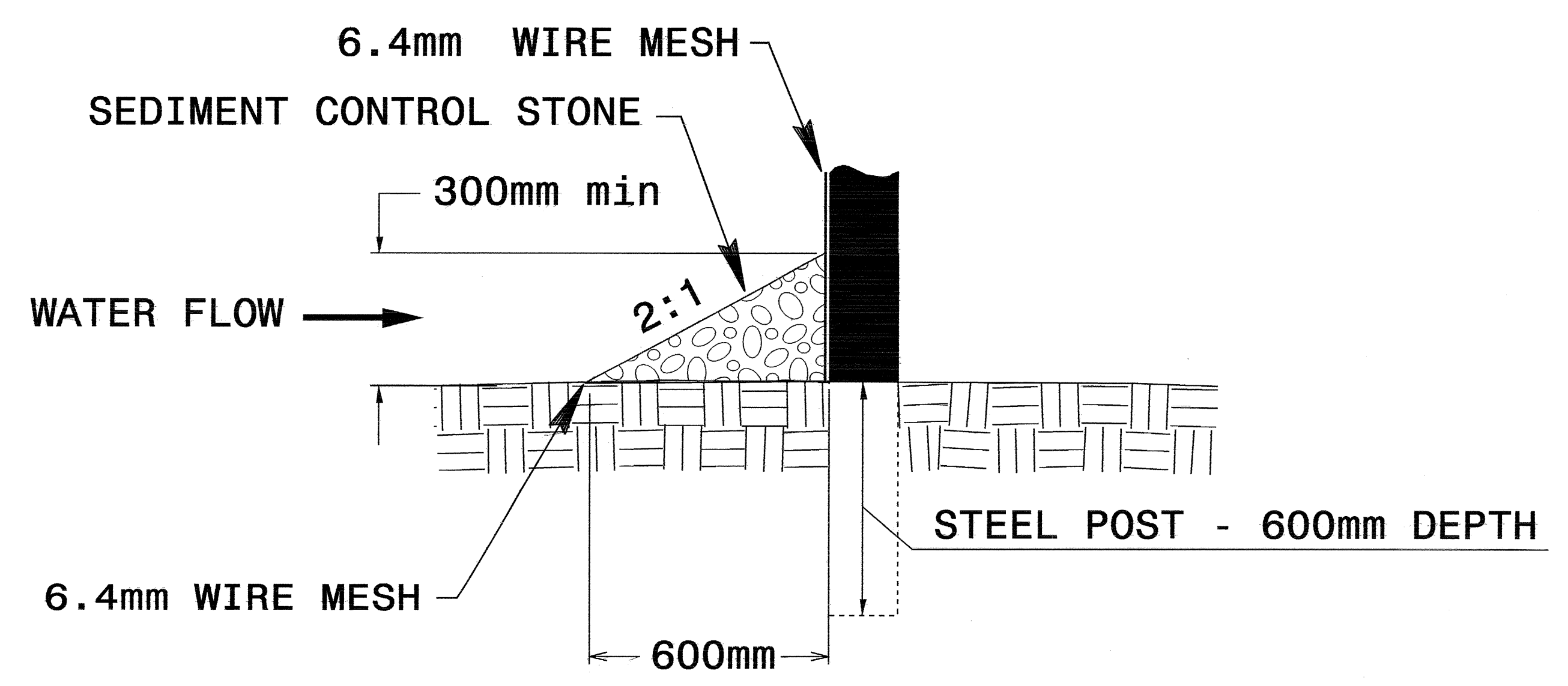
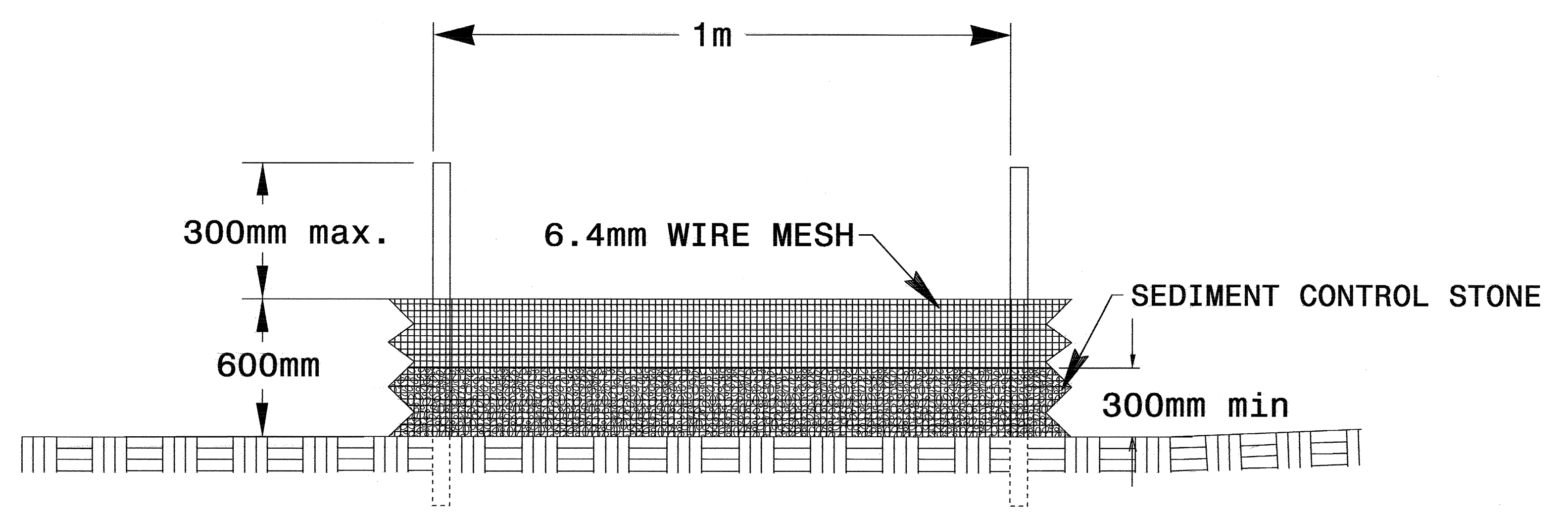
GENERAL NOTES:

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.

USE 0.65mm HARDWARE CLOTH WIRE MESH WITH 6.4 mm MESH OPENINGS.

INSTALL 1.5m SELF FASTENER ANGLE STEEL POST 600mm DEEP MINIMUM.

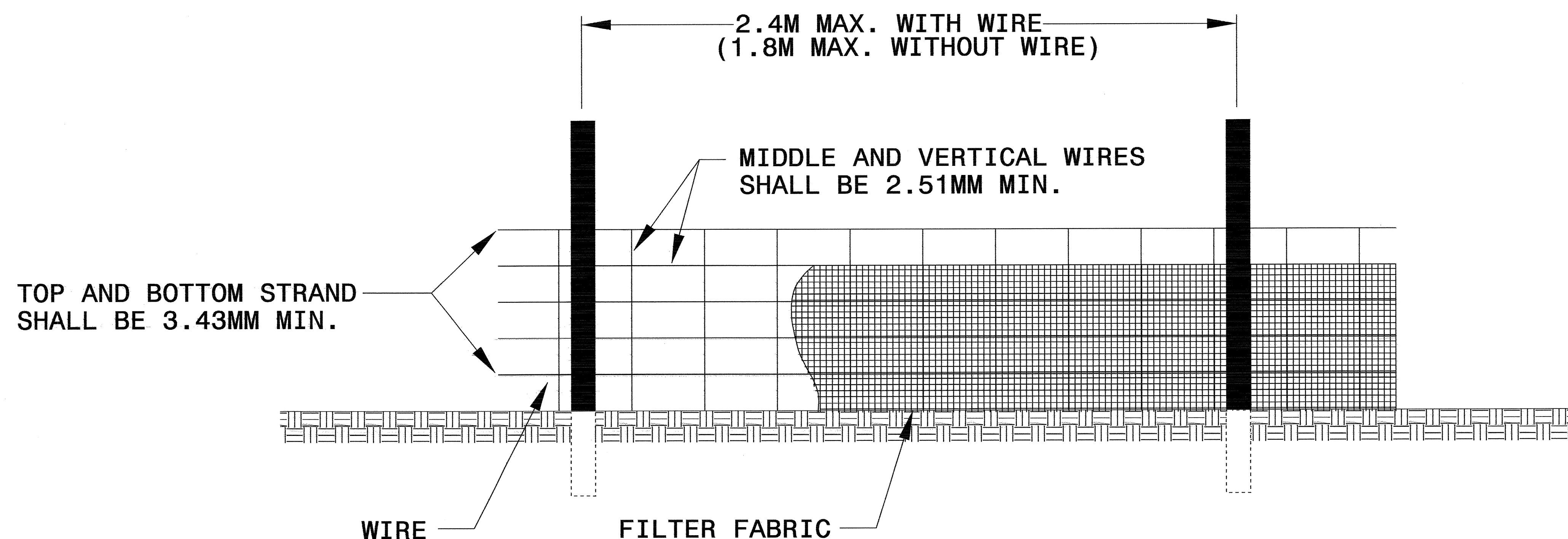
SPACE POST A MAXIMUM OF 1m.





PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-2H
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY SILT FENCE DETAIL

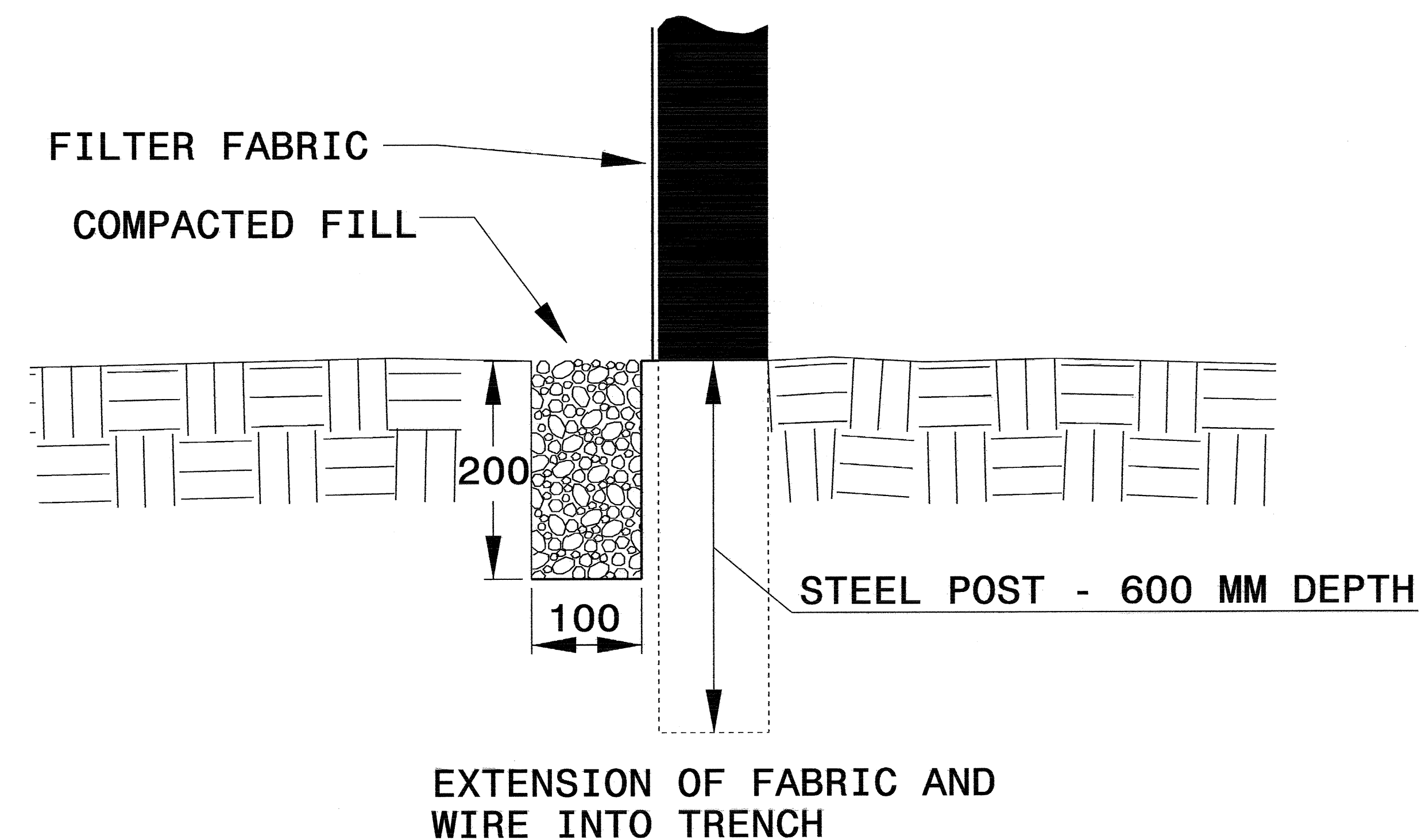


NOTES

USE WIRE A MINIMUM OF 800MM IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 300MM STAY SPACING.

USE FILTER FABRIC A MINIMUM OF 900MM IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.

PROVIDE 1.5M STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE. ANGLE STEEL TYPE.





PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STILLING BASIN

GENERAL NOTES:
CONSTRUCT THE COIR FIBER BAFFLES WITH A MATERIAL THAT MEETS THE SPECIFICATIONS OF THE COIR FIBER MAT SPECIAL PROVISION PROVIDED IN THE CONTRACT.

PROVIDE 1.5M STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 0.9M OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE STILLING BASIN WITH 12" STAPLES.

INSTALL THE TOP OF THE COIR FIBER BAFFLE A MINIMUM OF 300MM LOWER THAN THE TOP OF THE STILLING BASIN BERMS.

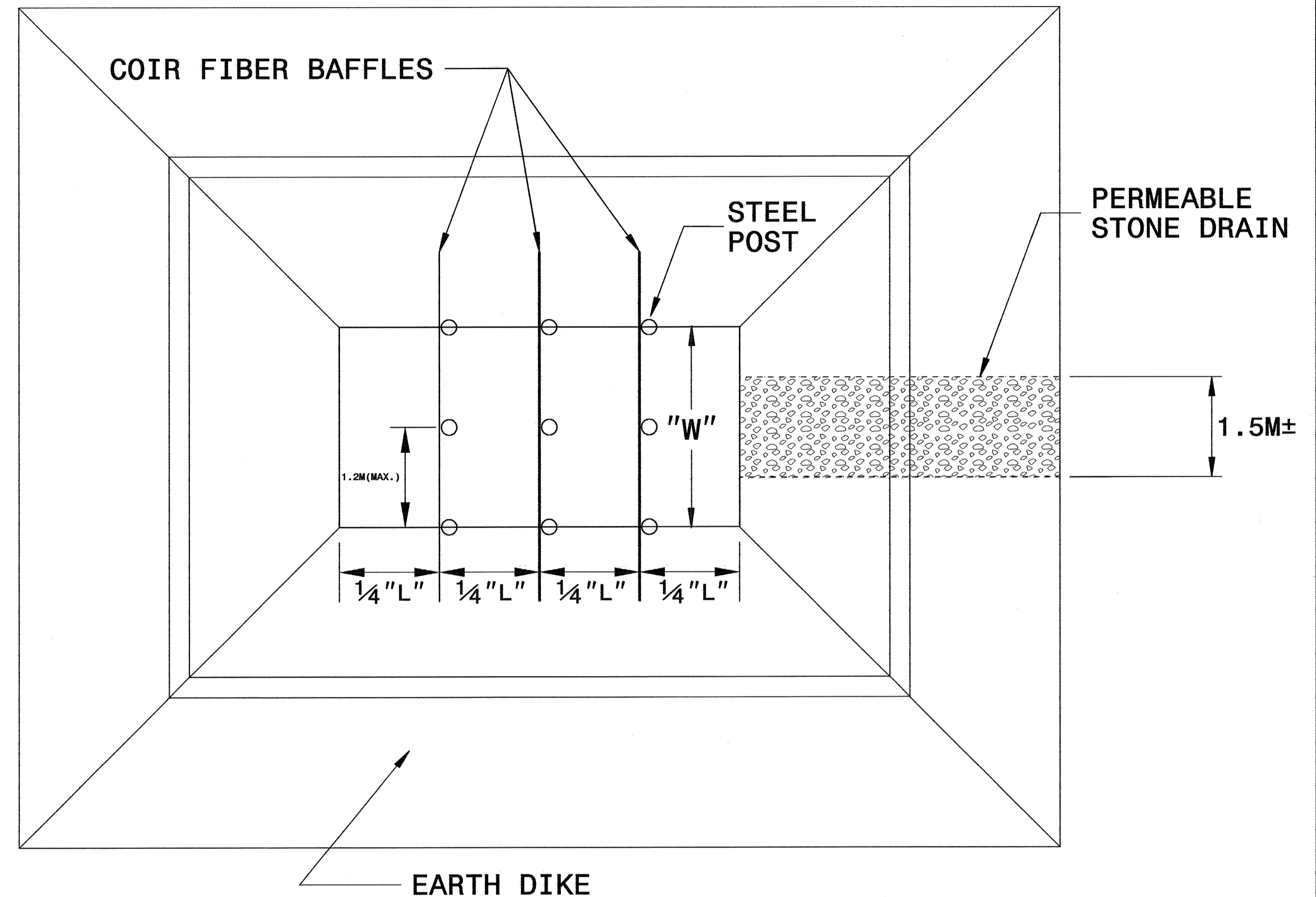
USE THE TYPICAL SECTION SHOWN FOR THE STILLING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A PERMEABLE STONE DRAIN.

DO NOT EXCEED 1.5M IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR STILLING BASINS. ADDITIONAL DEPTHS MAY BE ATTAINED BY EXCAVATING BELOW THE NATURAL GROUND LEVEL.

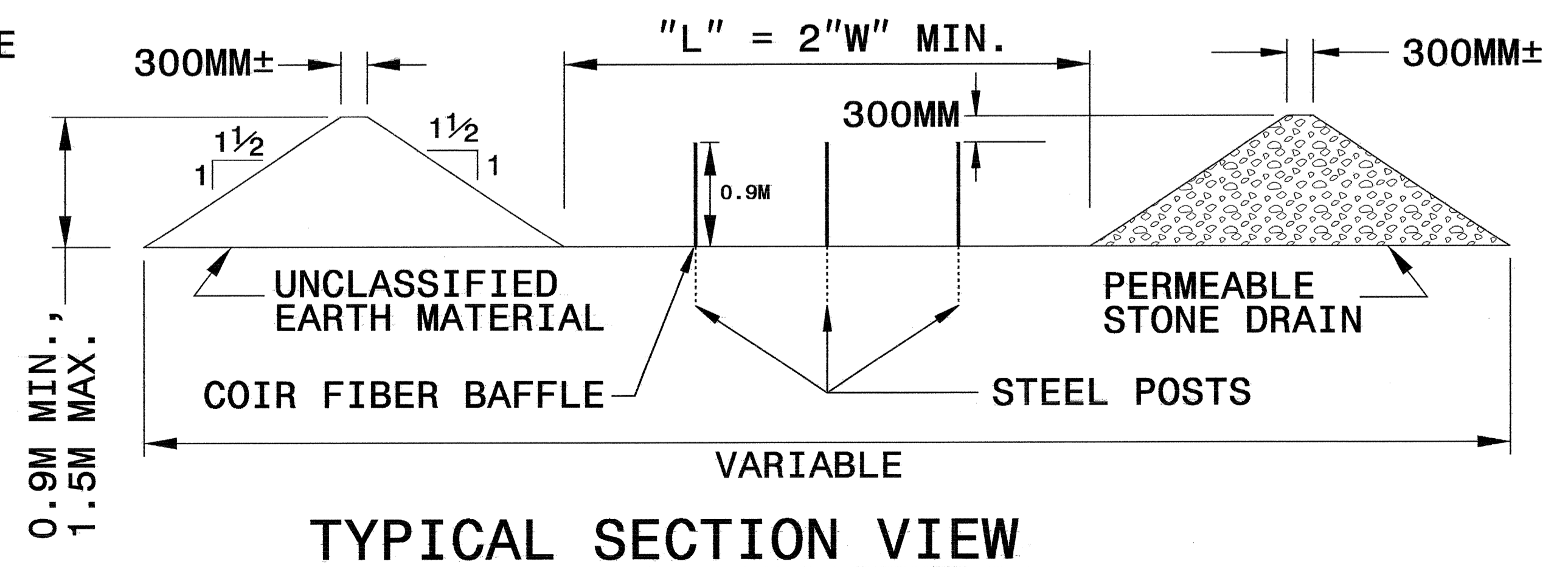
THE STILLING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

SUBMIT THE SIZE, LOCATION AND PERMEABLE STONE DRAIN MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE STILLING BASIN TO A MAXIMUM DEPTH OF 0.9 METERS.



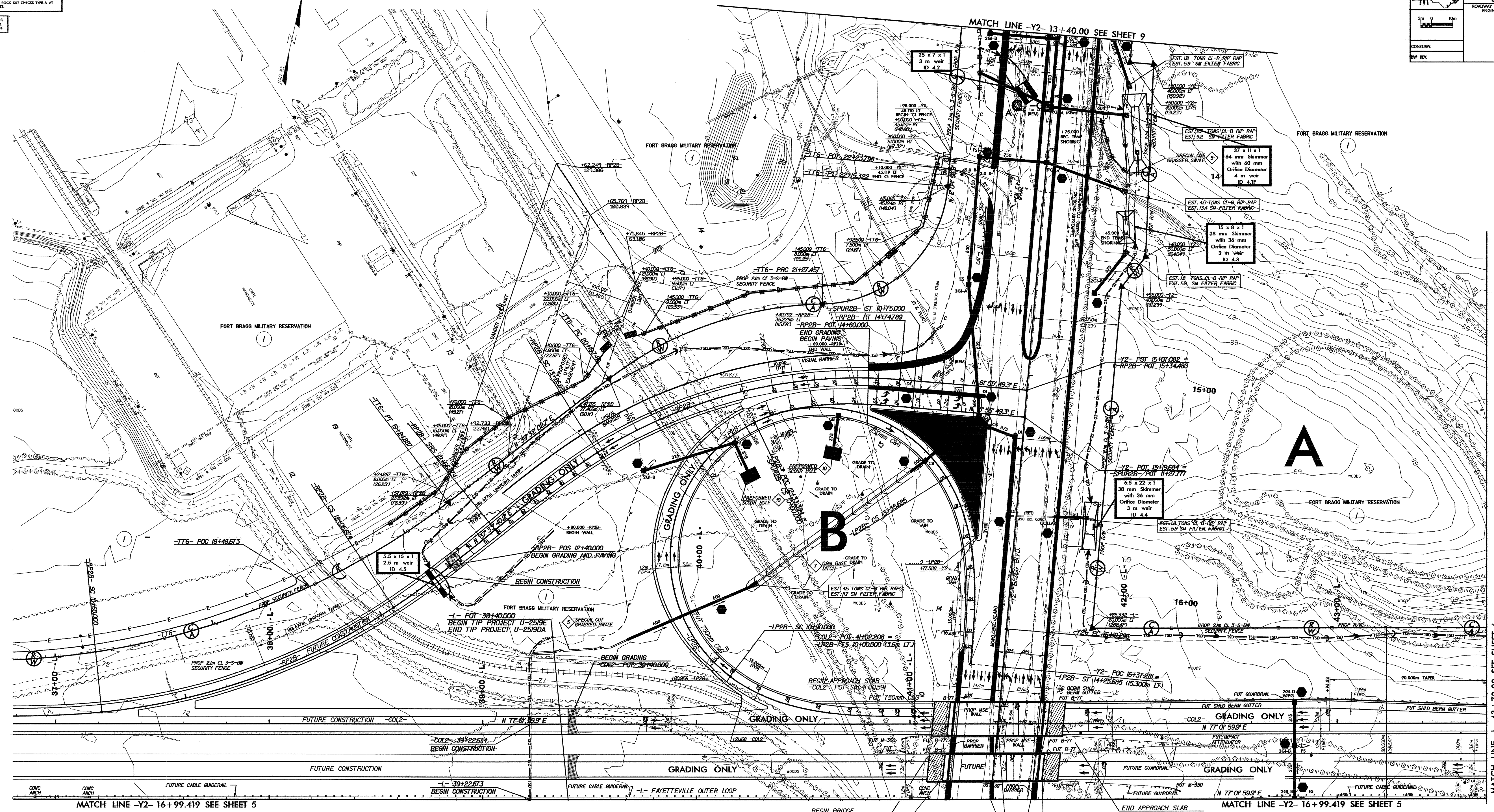
EARTH DIKE
PLAN



TYPICAL SECTION VIEW


NOTE: PLACE TEMPORARY ROCK STRENGTH DAMS TYPE-B AND TEMPORARY ROCK BUT CHECKS TYPE-A AT DRAINAGE OUTLET.

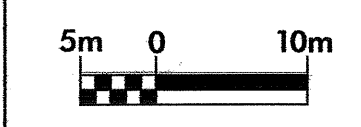
CLEARING AND GRUBBING BEGIN CONTROL CONSTRUCTION SHEET 04



SEE PLAN FOR
 ROADWAY DESIGN
 PROJECT U2539C

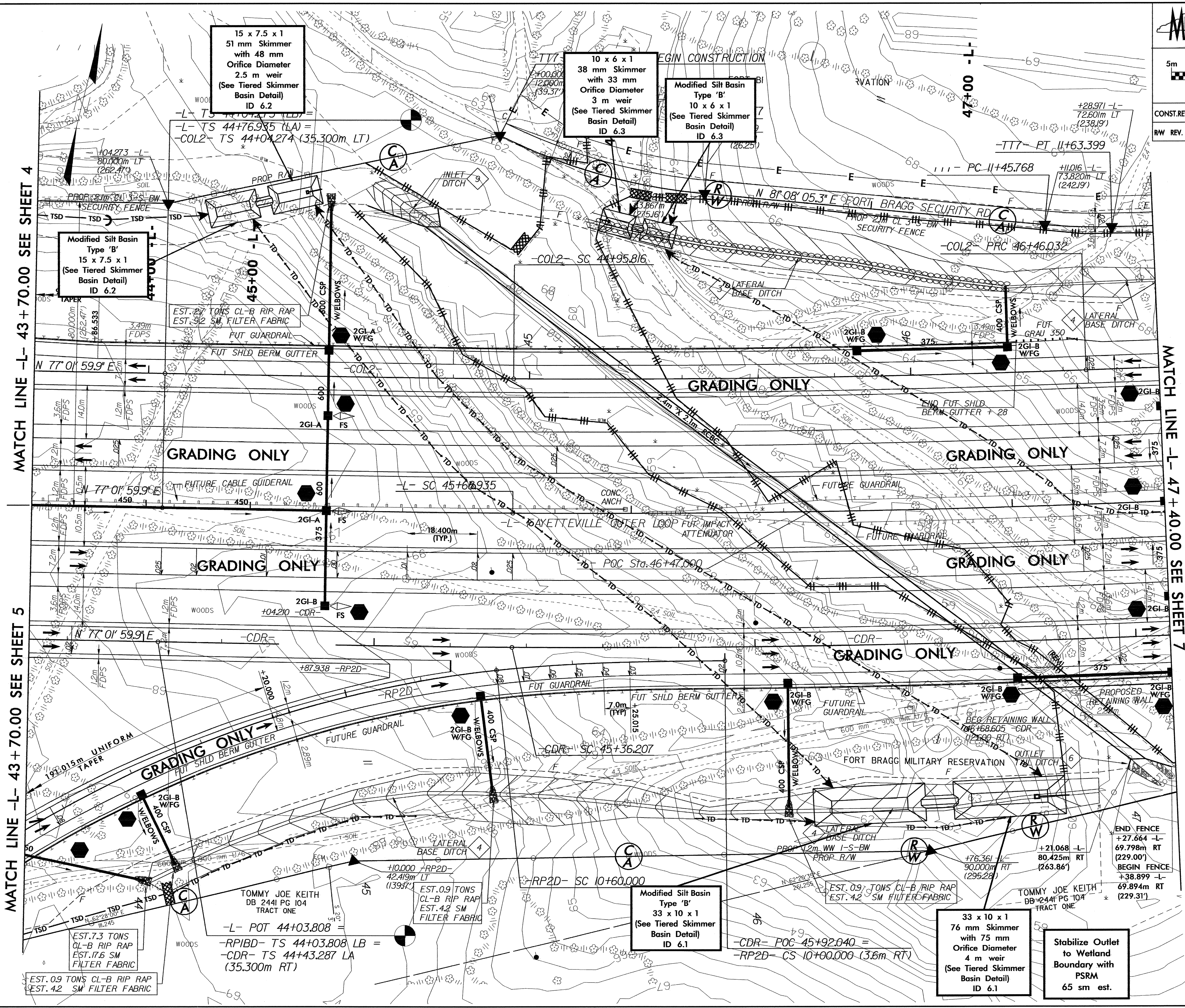
MATCH LINE -L- 43+70.00 SEE SHEET 6

	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-06/CONST.06
	R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
RW REV.		



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 6

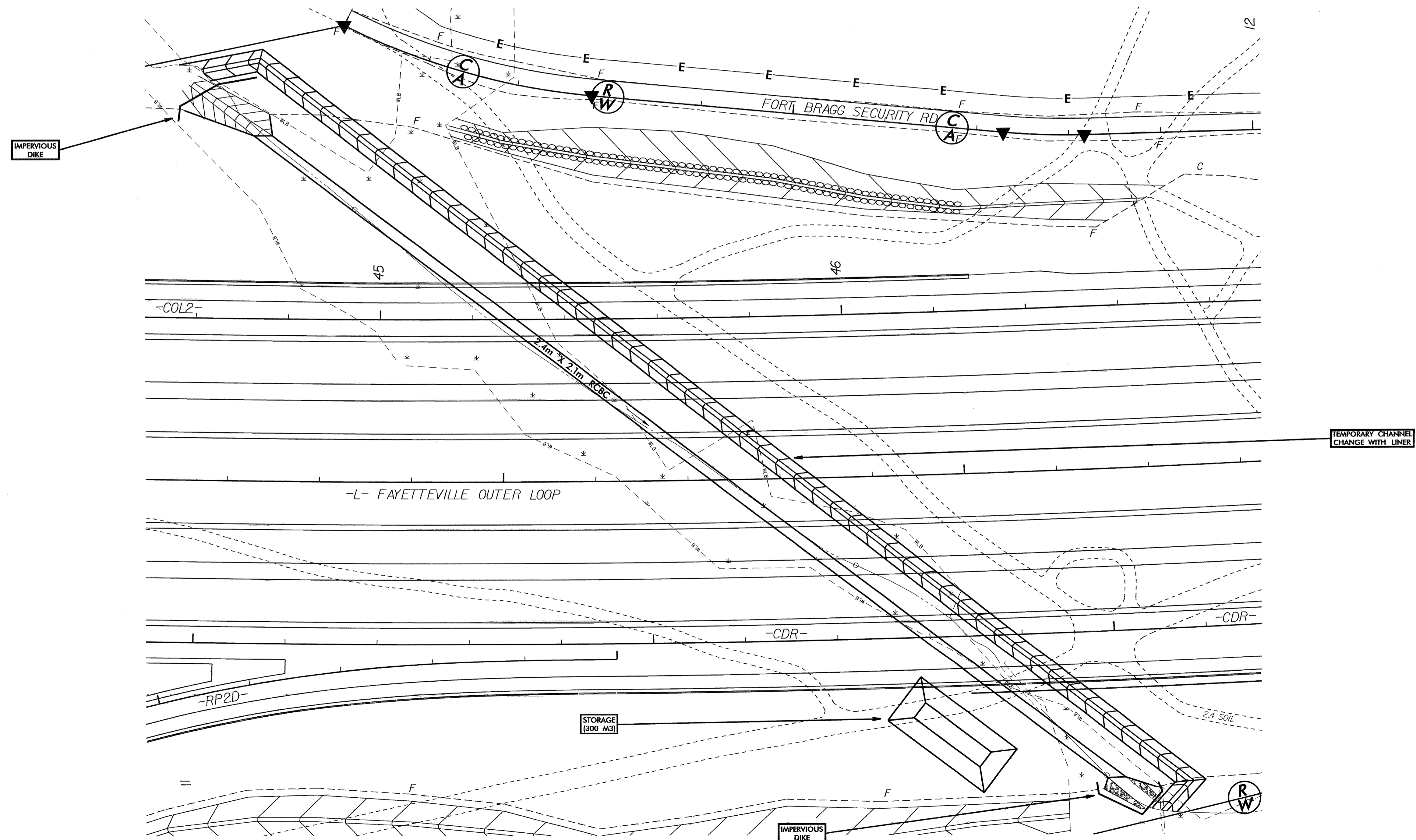




PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-7/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER


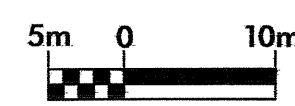
CULVERT CONSTRUCTION SEQUENCE STA. 46+40 -L-

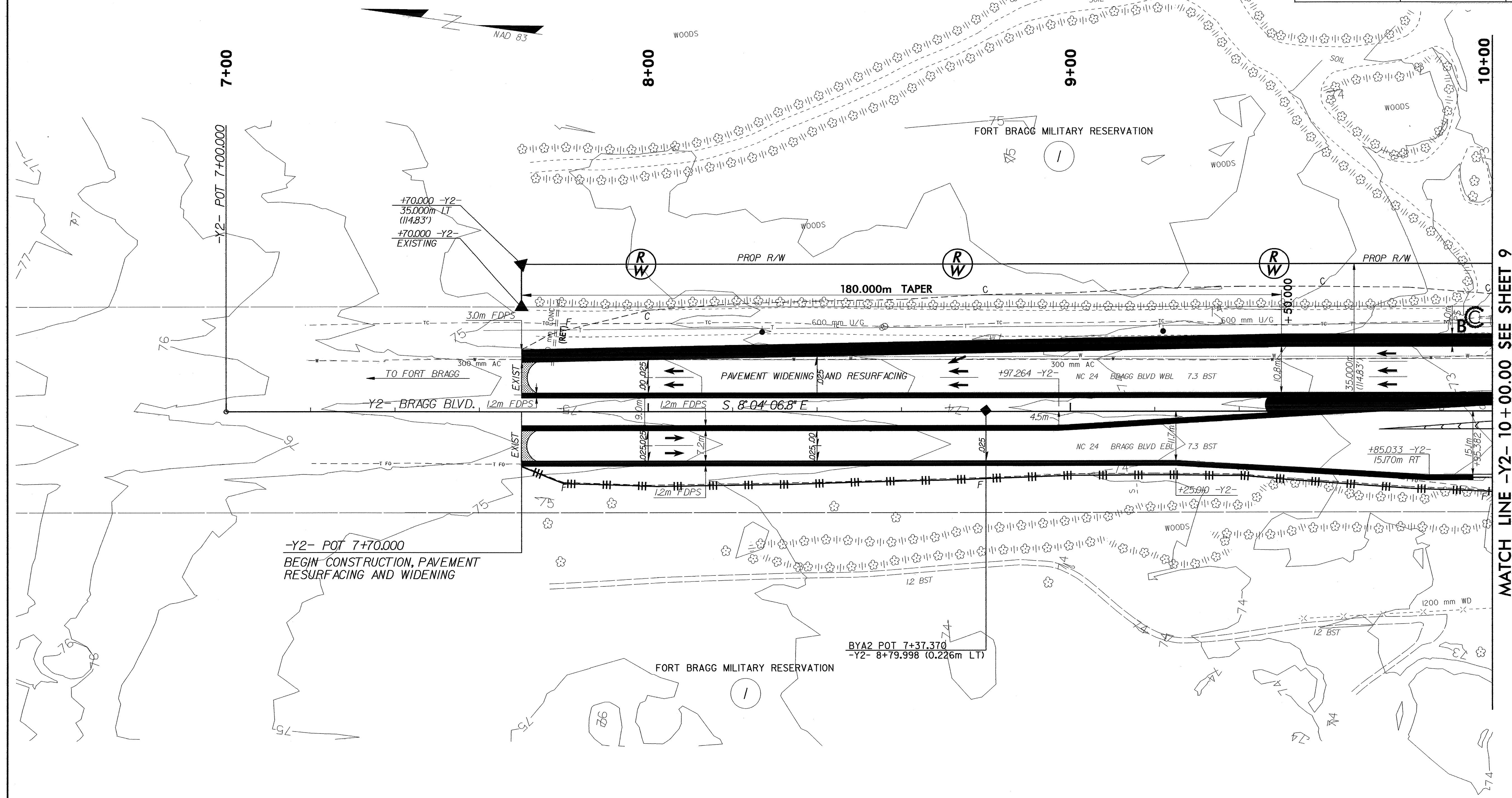
1. CONSTRUCT STILLING BASIN (300 M3).
2. CONSTRUCT IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE WITH LINER (1.0M BASE, 0.6M DEEP, 3:1 SIDE SLOPES), DIVERTING FLOW.
3. CONSTRUCT PROPOSED CULVERT AND AS MUCH OF INLET/OUTLET CHANNEL IMPROVEMENTS AS POSSIBLE.
4. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE.
5. COMPLETE INLET/OUTLET CHANNEL IMPROVEMENTS.
6. REMOVE STILLING BASIN AND COMPLETE ROADWAY.



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

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

	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-09/CONST.08
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.		
R/W REV.		



MATCH LINE -Y2- 10+00.00 SEE SHEET 9

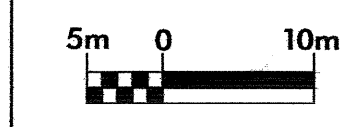
-Y2- POT 7+70.000
BEGIN CONSTRUCTION, PAVEMENT
RESURFACING AND WIDENING

BYA2 POT 7+37.370
-Y2- 8+79.998 (0.226m LT)

FILE: BRILES
SCALE: AS SHOWN
PLOT DRIVER: SPITDRWS
PEN TABLE: SPENTRLLS

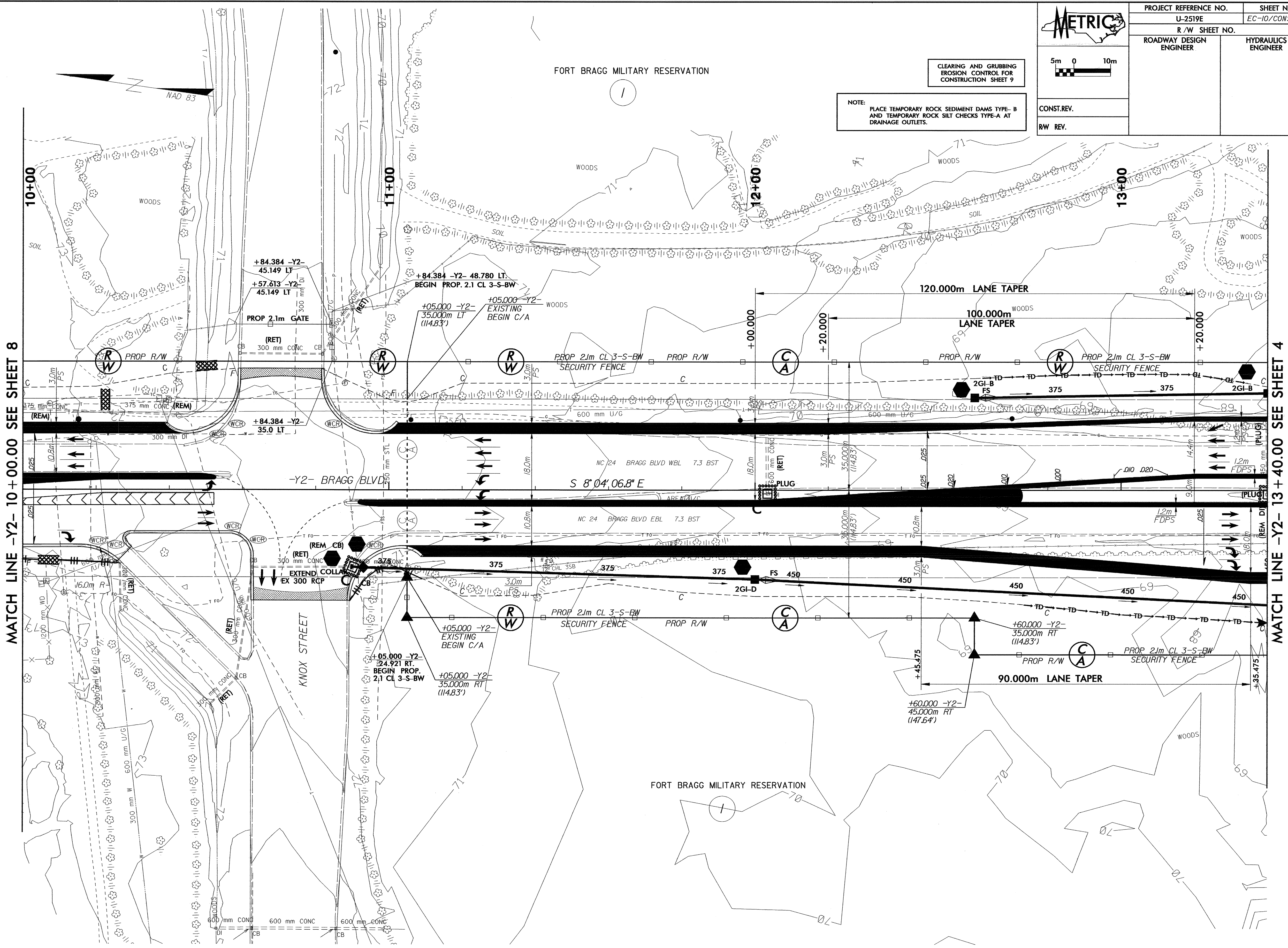


PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-10/CONST.09
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ROADWAY DESIGN ENGINEER
CONST. REV.	
R/W REV.	



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.

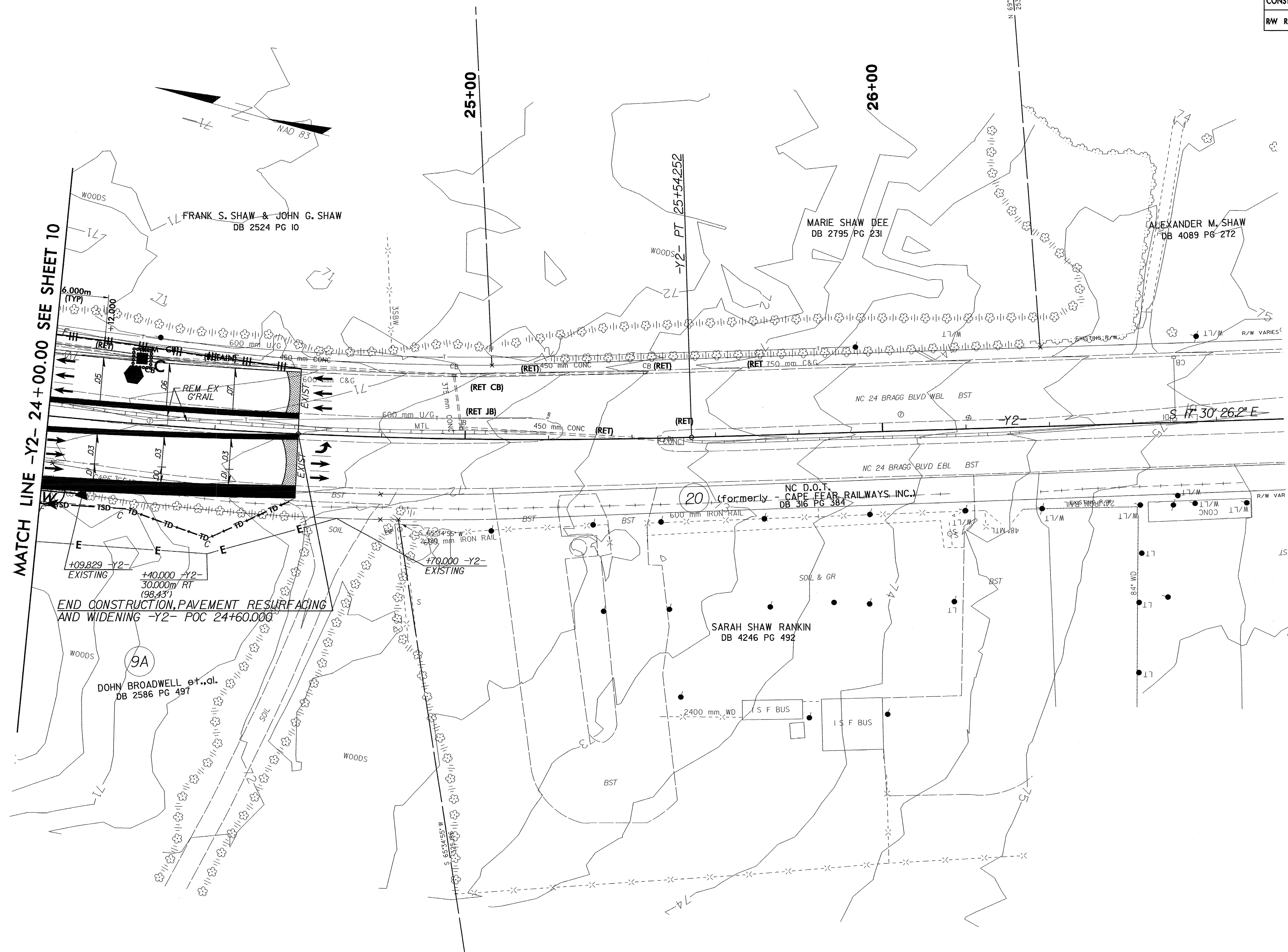


MATCH LINE -Y2- 10+00.00 SEE SHEET 8

MATCH LINE -Y2- 13+40.00 SEE SHEET 4

FILE: SERIALS
DATE: 5/14/08
PLOT DRIVER: SP/DRIV/LS
PEN TABLE: SPEN/TBL/LS

 5m 0 10m	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-12/CONST.II
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.		
R/W REV.		



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

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

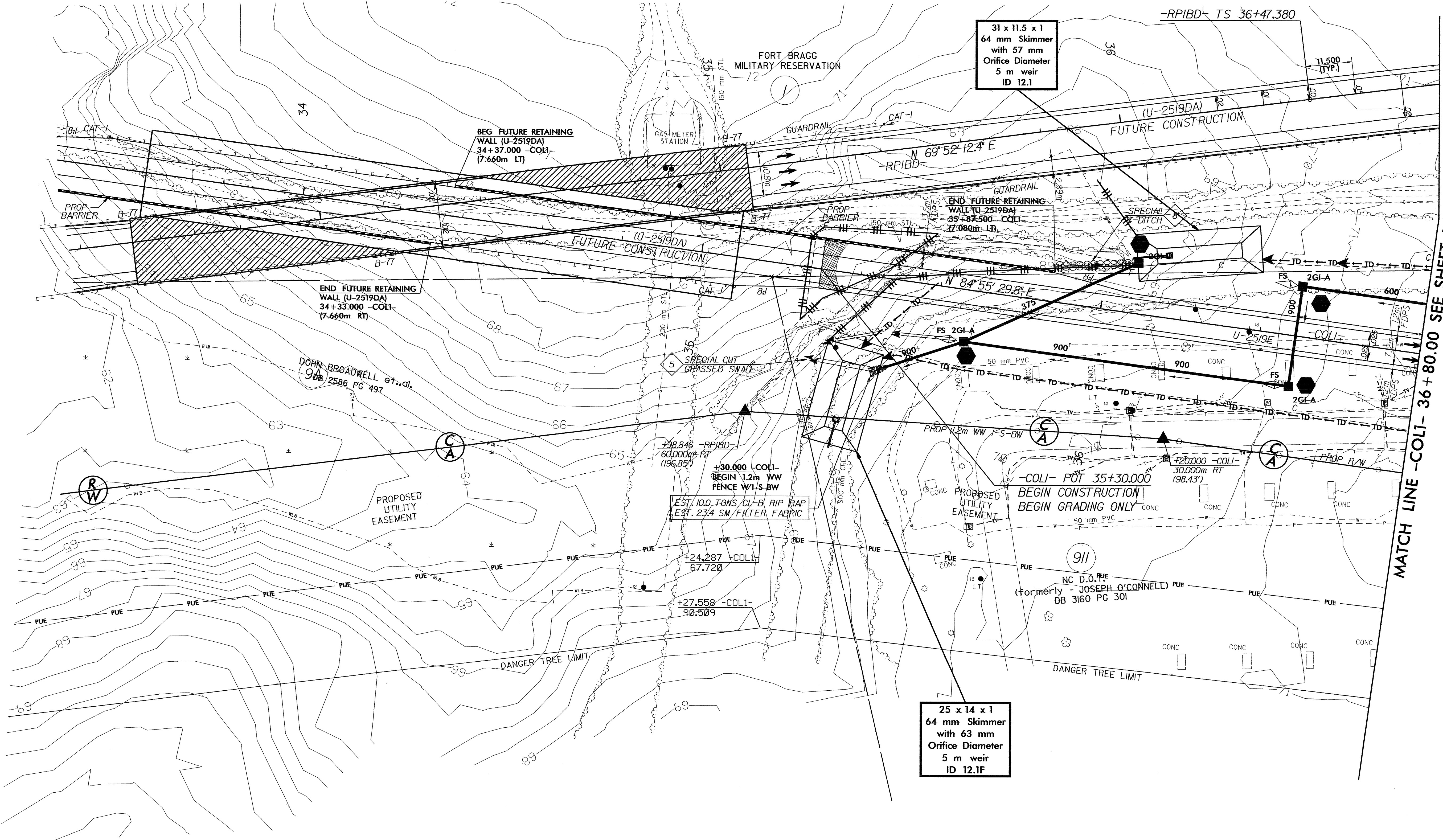
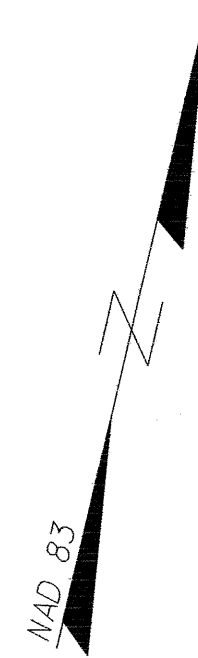
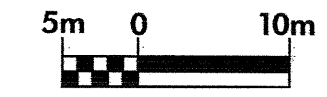
FILE: SFILES
STAGES
PLOT DRIVER: SPLOTDRVL
PEN TABLE: SPENIBLLS

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.



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-13/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	

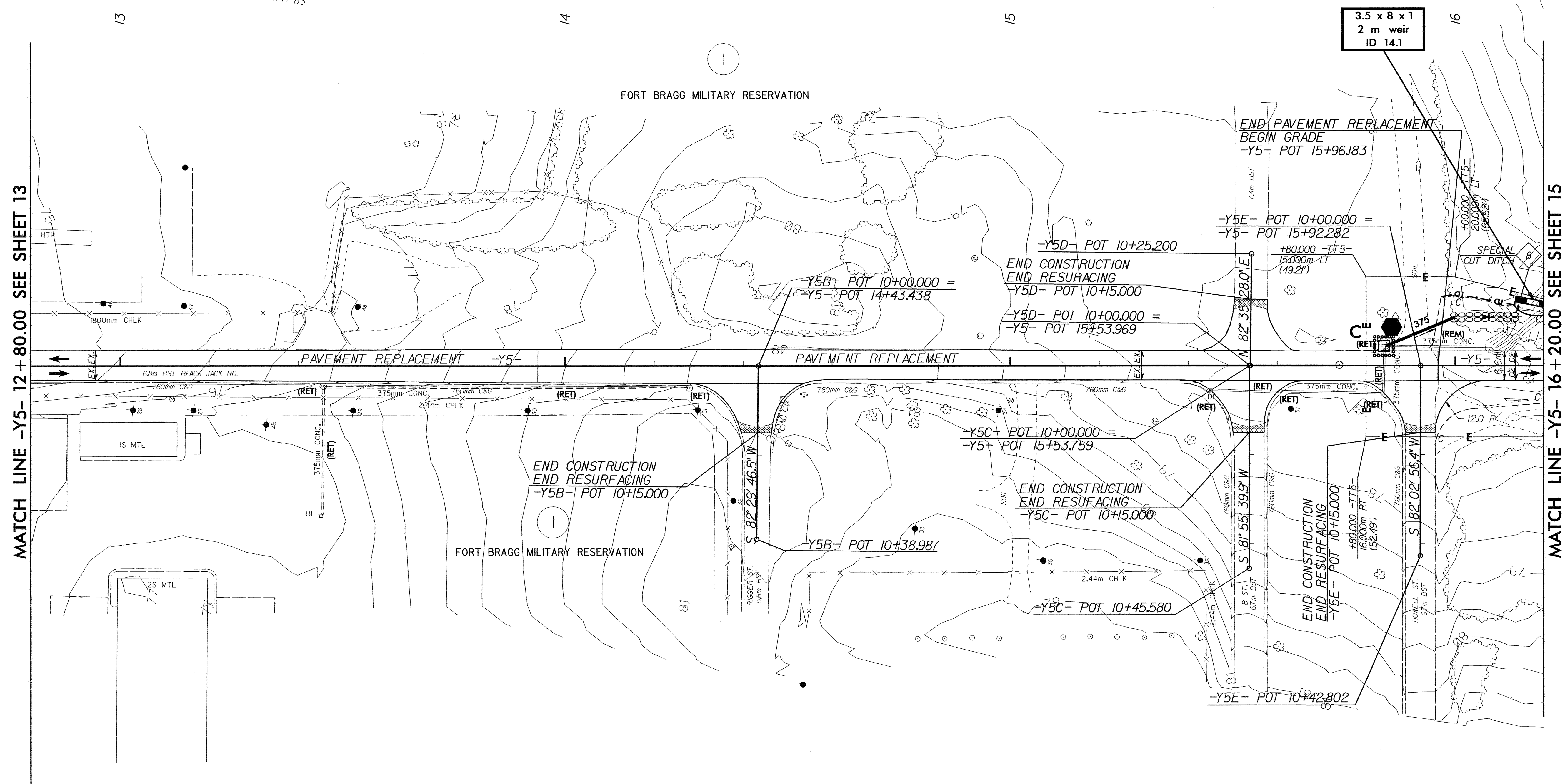
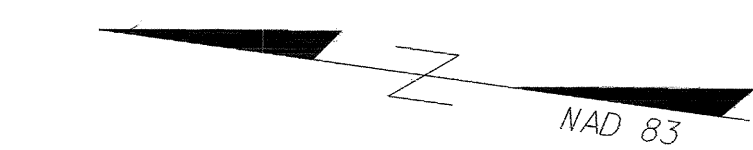


CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14

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



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-14/CONST.14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
RW REV.	



MATCH LINE -Y5- 12 + 80.00 SEE SHEET 13

MATCH LINE -Y5- 16 + 20.00 SEE SHEET 15

ALL WORK FROM STATION 10+5.000 TO STATION 15+96.183
IS TO BE CONTAINED WITHIN THE EXISTING CURB AND GUTTER

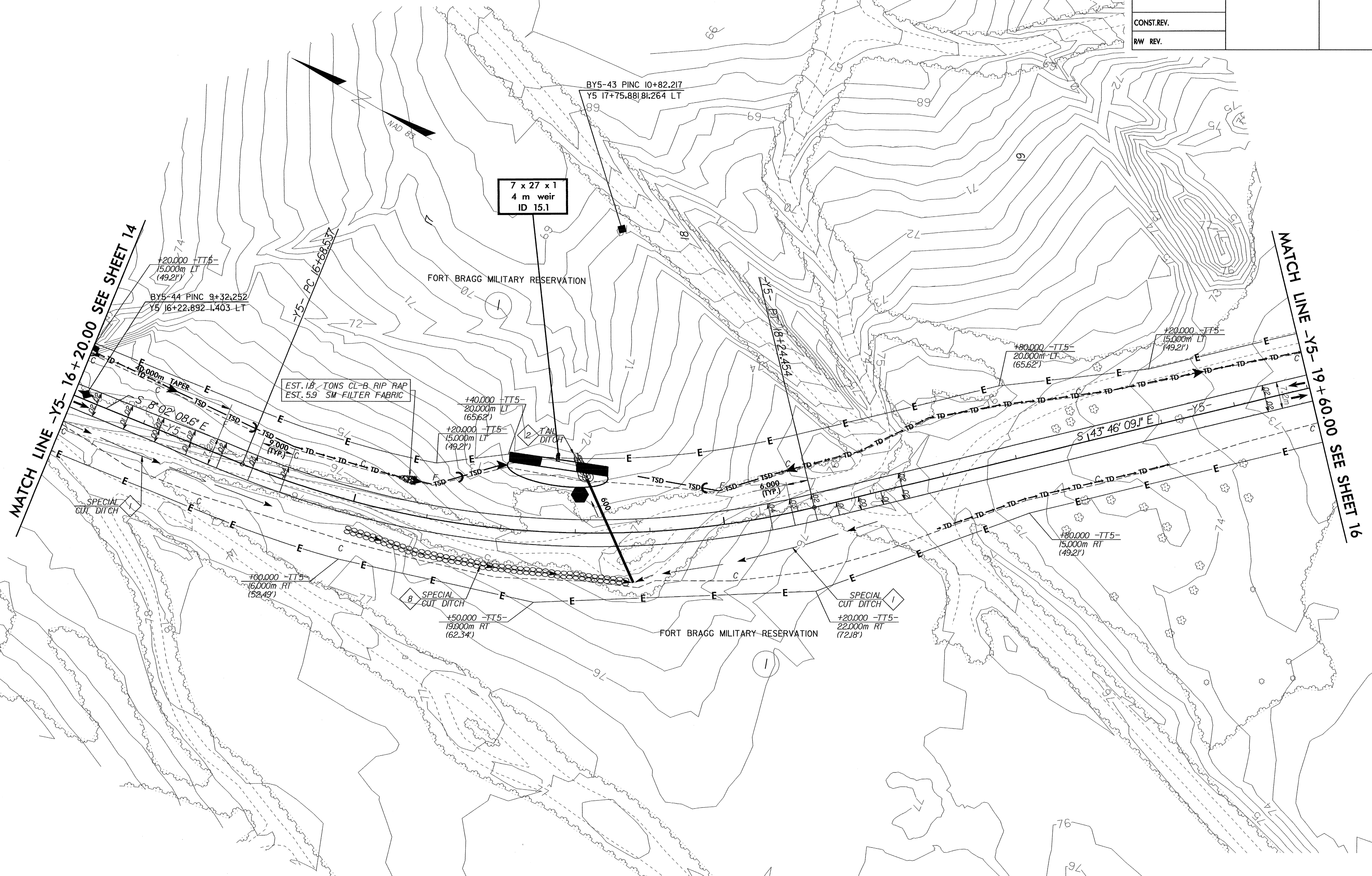
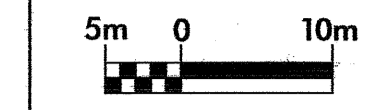
FILE: SFILES
DATE: 07/20/11
PROJECT: STIMES
DRAWN: SPENIBLLS
CHECKED: SPENIBLLS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 15

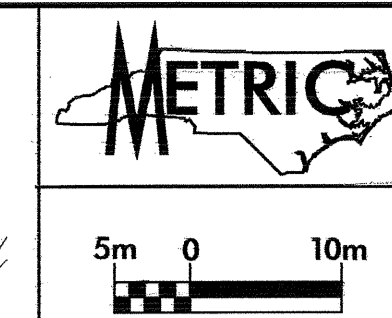
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



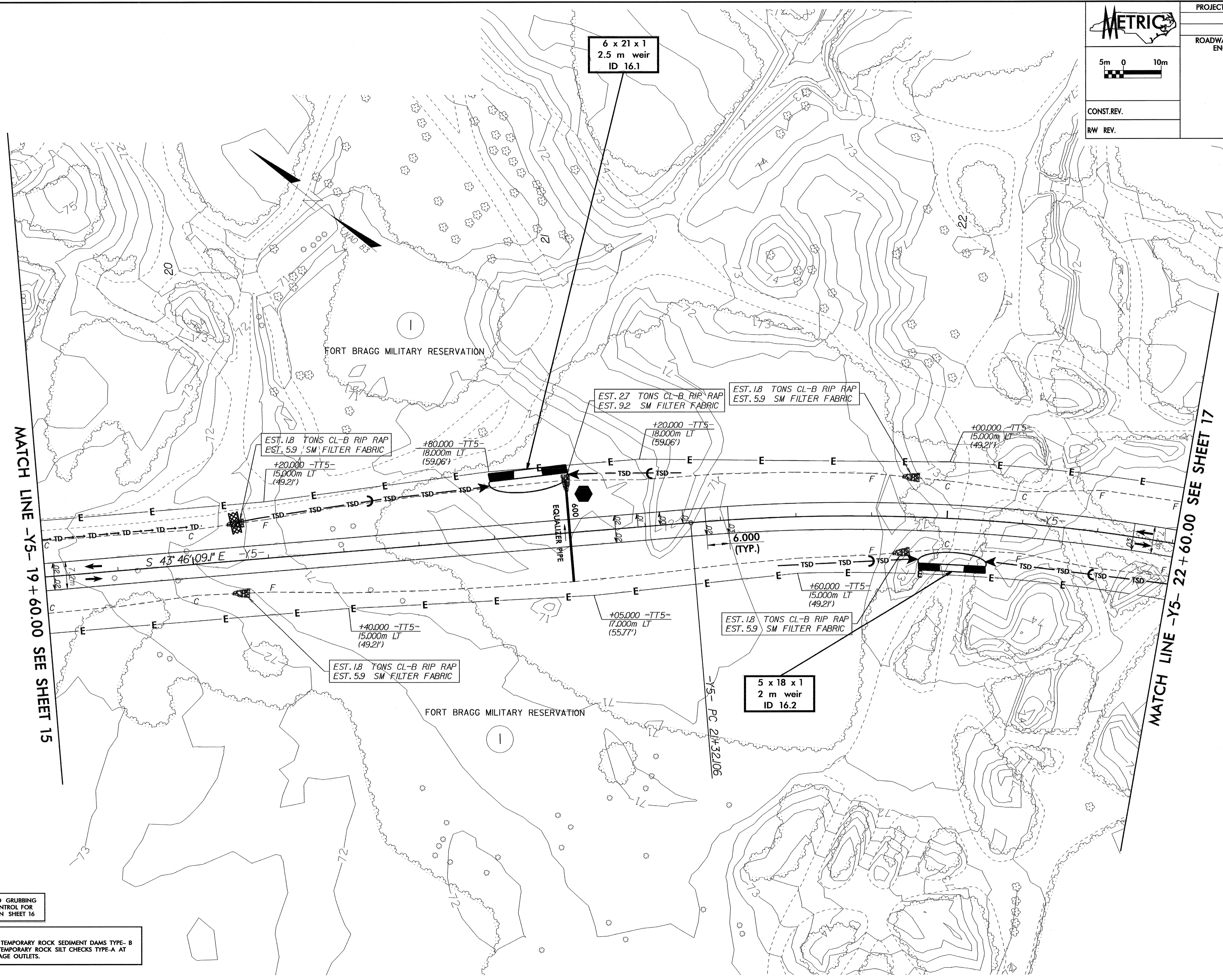
PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-15/CONST.15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	



FILE: SFILES
DRAWN: ETHAN
CHECKED: SPITZBERG
PLOT DRIVER: SPITZBERG
PEN TABLE: SPITZBERG



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-16/CONST.16
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER
CONST.REV.	
RW REV.	



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 16

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

FILE: SFILES
STWMS
PLOT-DRAWER: SRTDRAWS
PEN TABLE: SPENRIBLLS

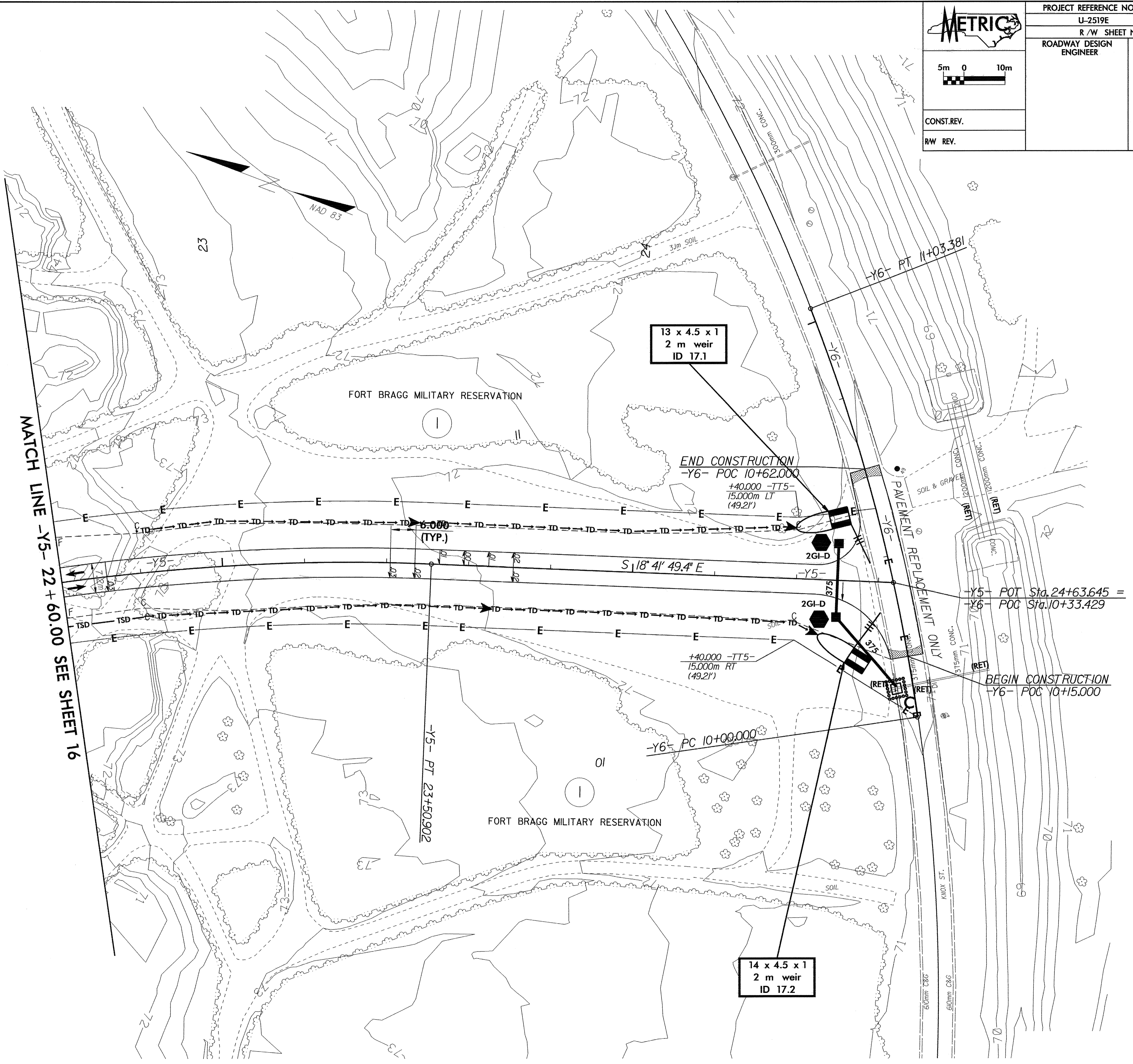
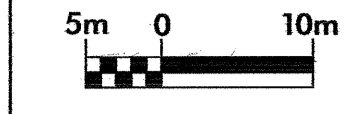
SEE SHEETS 34 & 35 FOR -Y5- PROFILE

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 17

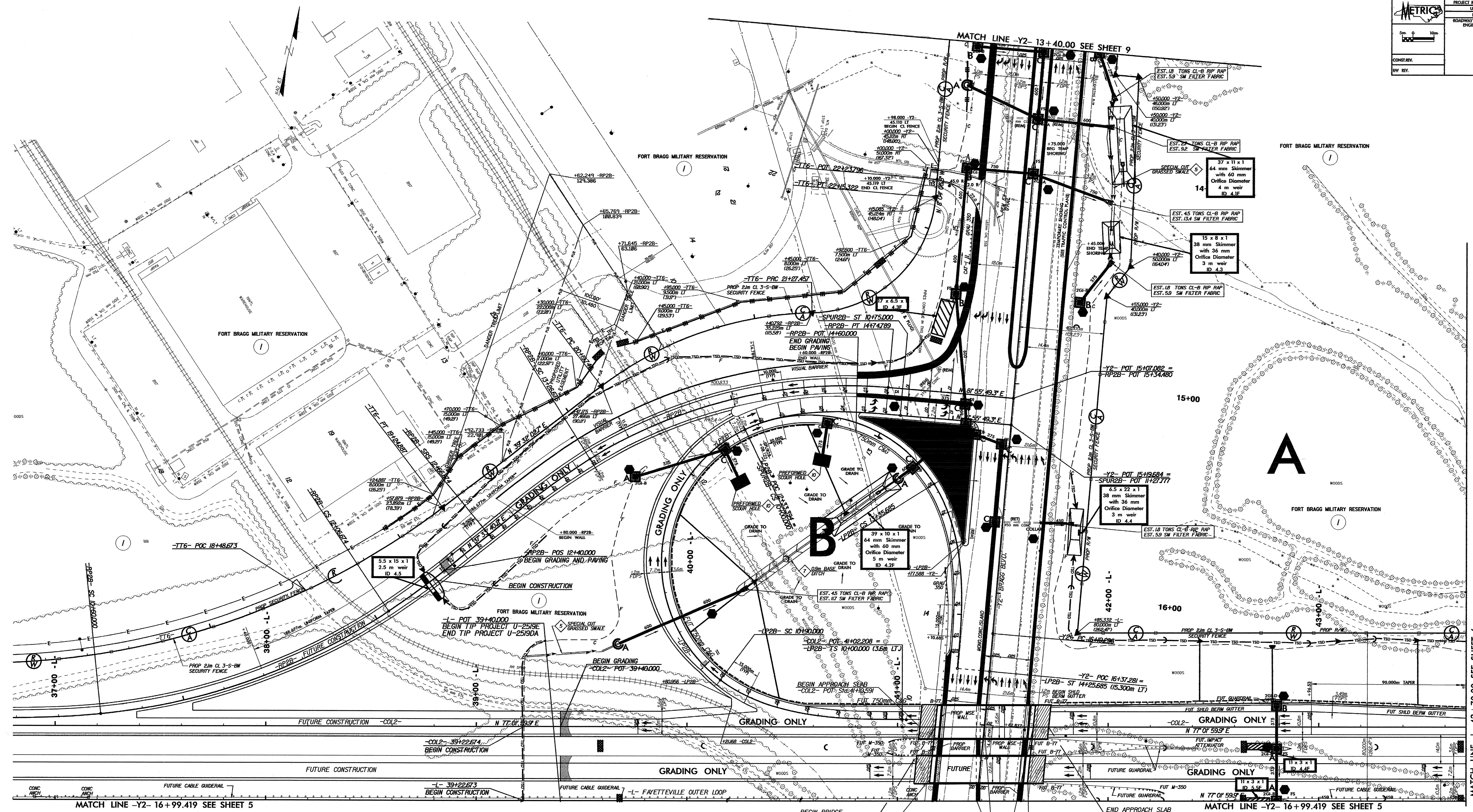
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE- B
AND TEMPORARY ROCK SILT CHECKS TYPE-A AT
DRAINAGE OUTLETS.



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-17/CONST.17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
RW REV.	



FILE: SFILES
STYLES
PLOT DRIVER: SP17DRAWS
PEN TABLE: SPENRBLLS



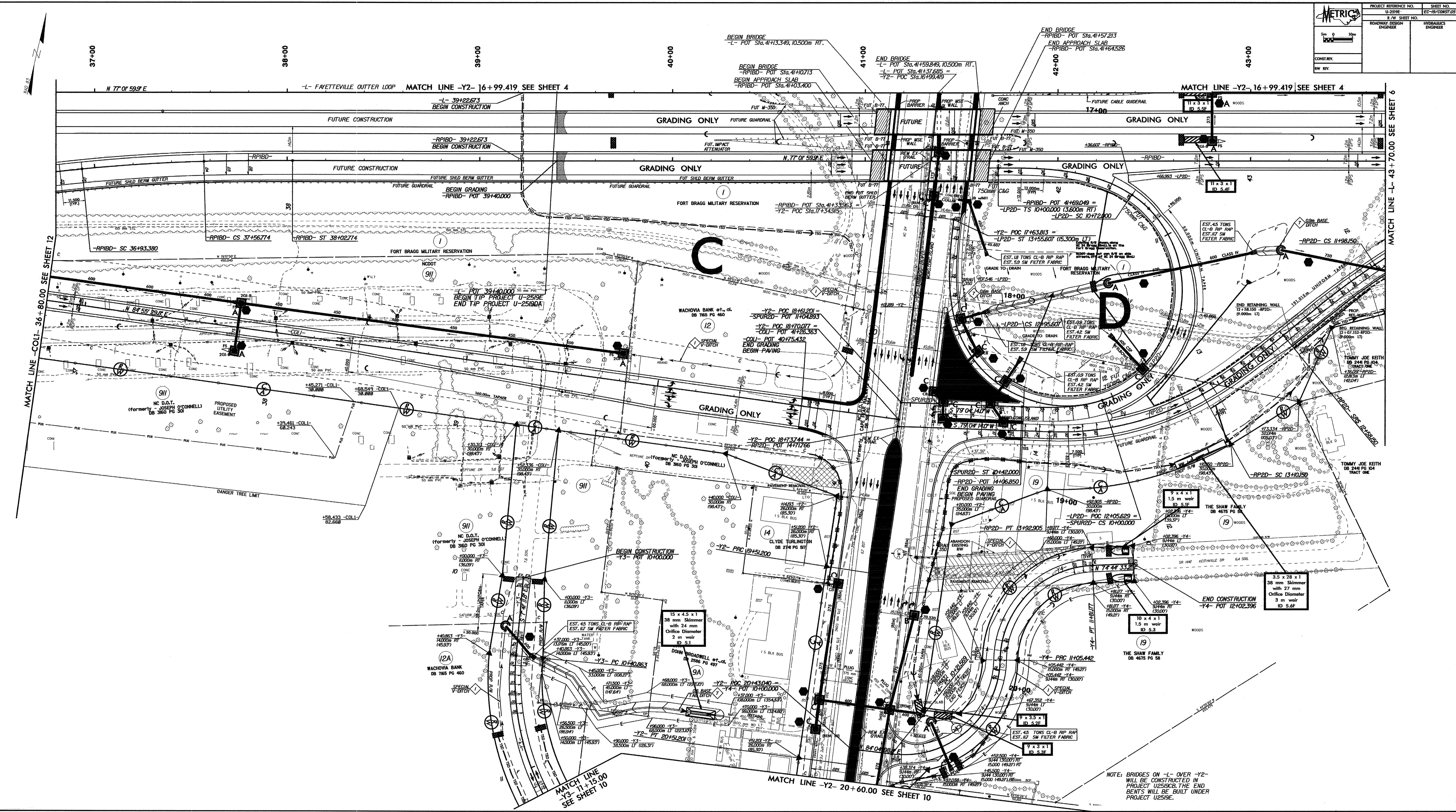
MATCH LINE -Y2- 16+99.419 SEE SHEET 5

MATCH LINE -Y2- 16+99.419 SEE SHEET 5

MATCH LINE -L- 43+70.00 SEE SHEET 6

NOTE: BRIDGES ON -L- OVER -Y2- WILL BE CONSTRUCTED IN PROJECT U2519CB, THE END BENTS WILL BE BUILT UNDER PROJECT U2519E.

SEE PLAN FOR
PROP. AND
CONC. ARCH.
PROP. AND
CONC. ARCH.
PROP. AND
CONC. ARCH.



MATCH LINE -COLL- 36+80.00 SEE SHEET 12

MATCH LINE -Y2- 16+99.419 SEE SHEET 4

MATCH LINE -Y2- 16+99.419 SEE SHEET 4


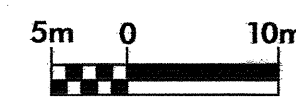
MATCH LINE -L- 43+70.00 SEE SHEET 6

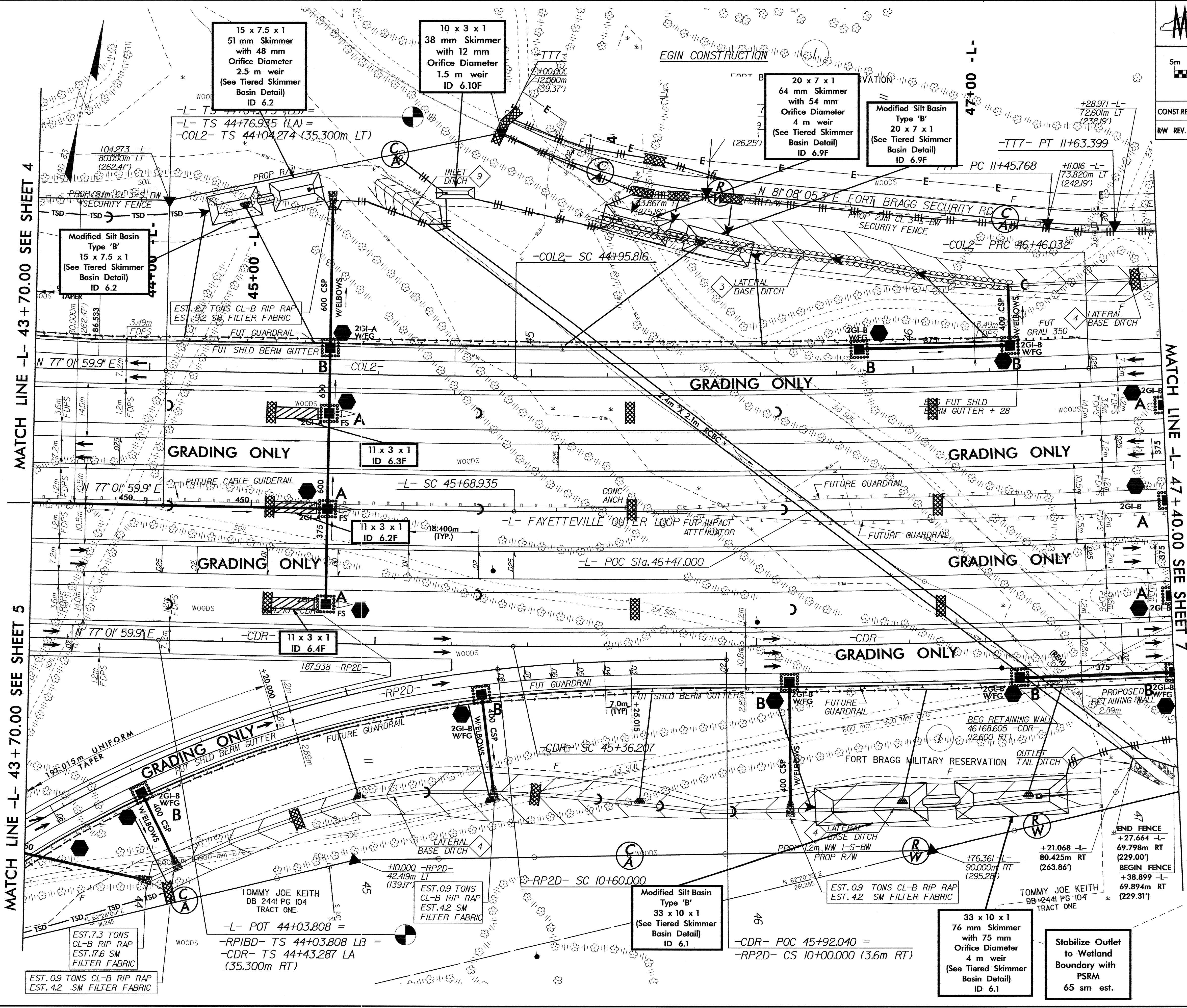
MATCH LINE -Y3- 11+15.00 SEE SHEET 10

MATCH LINE -Y2- 20+60.00 SEE SHEET 10

NOTE: BRIDGES ON -L- OVER -Y2- WILL BE CONSTRUCTED IN PROJECT U2519E. THE END BENTS WILL BE BUILT UNDER PROJECT U2519E.

FILE: P:\2519E\CONSTR\25\CONSTR.DWG
DATE: 08/20/2019
TIME: 10:00:00
USER: JACOB

	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-20/CONST.06
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.		
R/W REV.		



MATCH LINE -L- 43+70.00 SEE SHEET 4

MATCH LINE -L- 43+70.00 SEE SHEET 5

MATCH LINE -L- 47+40.00 SEE SHEET 7

FILE: S:\E\2519E\2519E.DWG
 PLOT: DRIVER: SPENTABLES
 PEN TABLE: SPENTABLES

EST. 0.9 TONS CL-B RIP RAP
EST. 4.2 SM FILTER FABRIC

TOMMY JOE KEITH
DB 2441 PG 104
TRACT ONE
-L- POT 44+03.808 =
-RP2D- TS 44+03.808 LB =
-CDR- TS 44+43.287 LA
(35.300m RT)

EST. 0.9 TONS CL-B RIP RAP
EST. 4.2 SM FILTER FABRIC


Modified Silt Basin
Type 'B'
33 x 10 x 1
(See Tiered Skimmer
Basin Detail)
ID 6.1

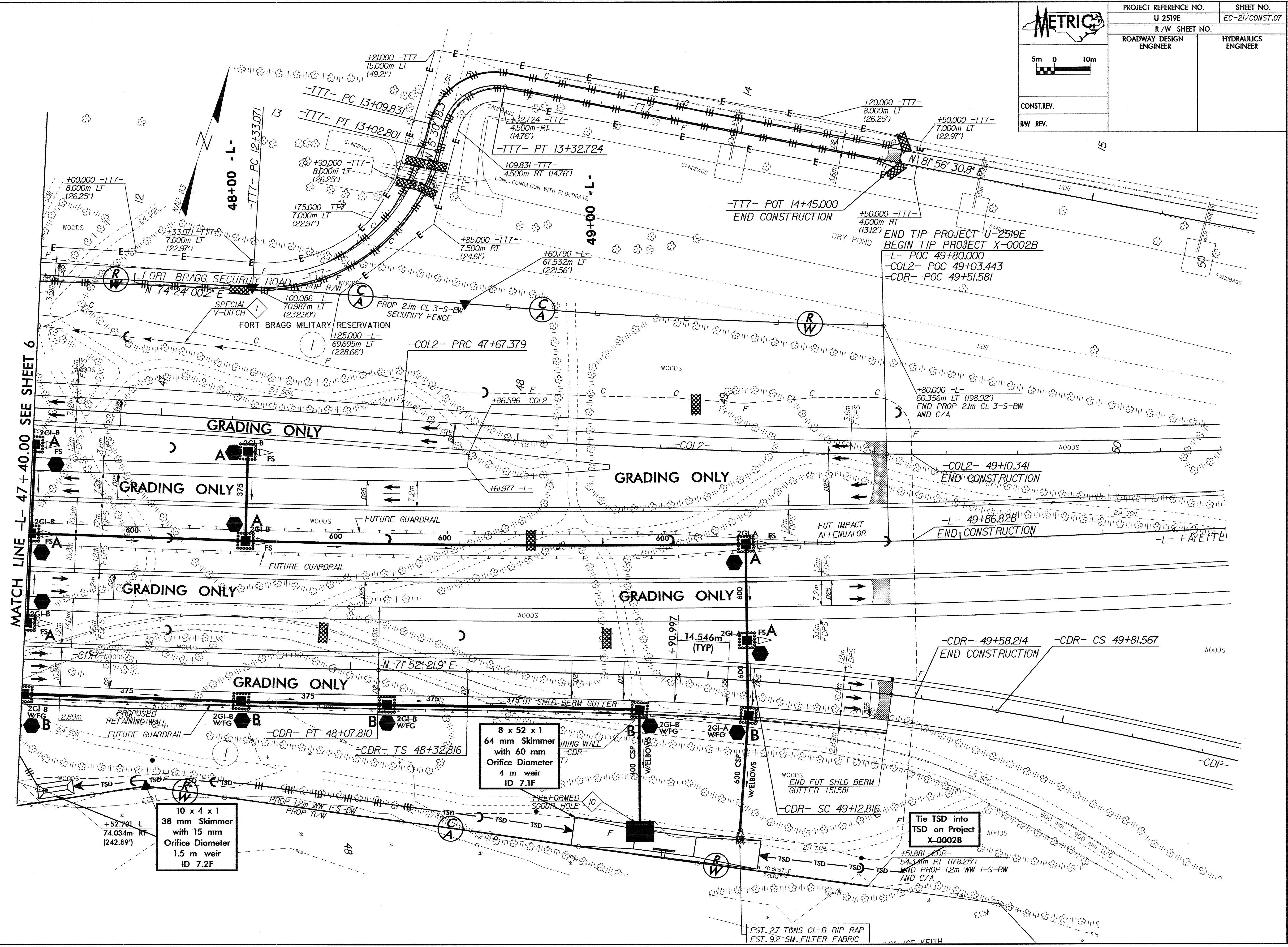
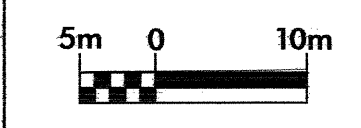
-CDR- POC 45+92.040 =
-RP2D- CS 10+00.000 (3.6m RT)

33 x 10 x 1
76 mm Skimmer
with 75 mm
Orifice Diameter
4 m weir
(See Tiered Skimmer
Basin Detail)
ID 6.1

Stabilize Outlet
to Wetland
Boundary with
PSRM
65 sm est.


END FENCE
+27.664 -L-
69.798m RT
(229.00')
BEGIN FENCE
+38.899 -L-
69.894m RT
(229.31')

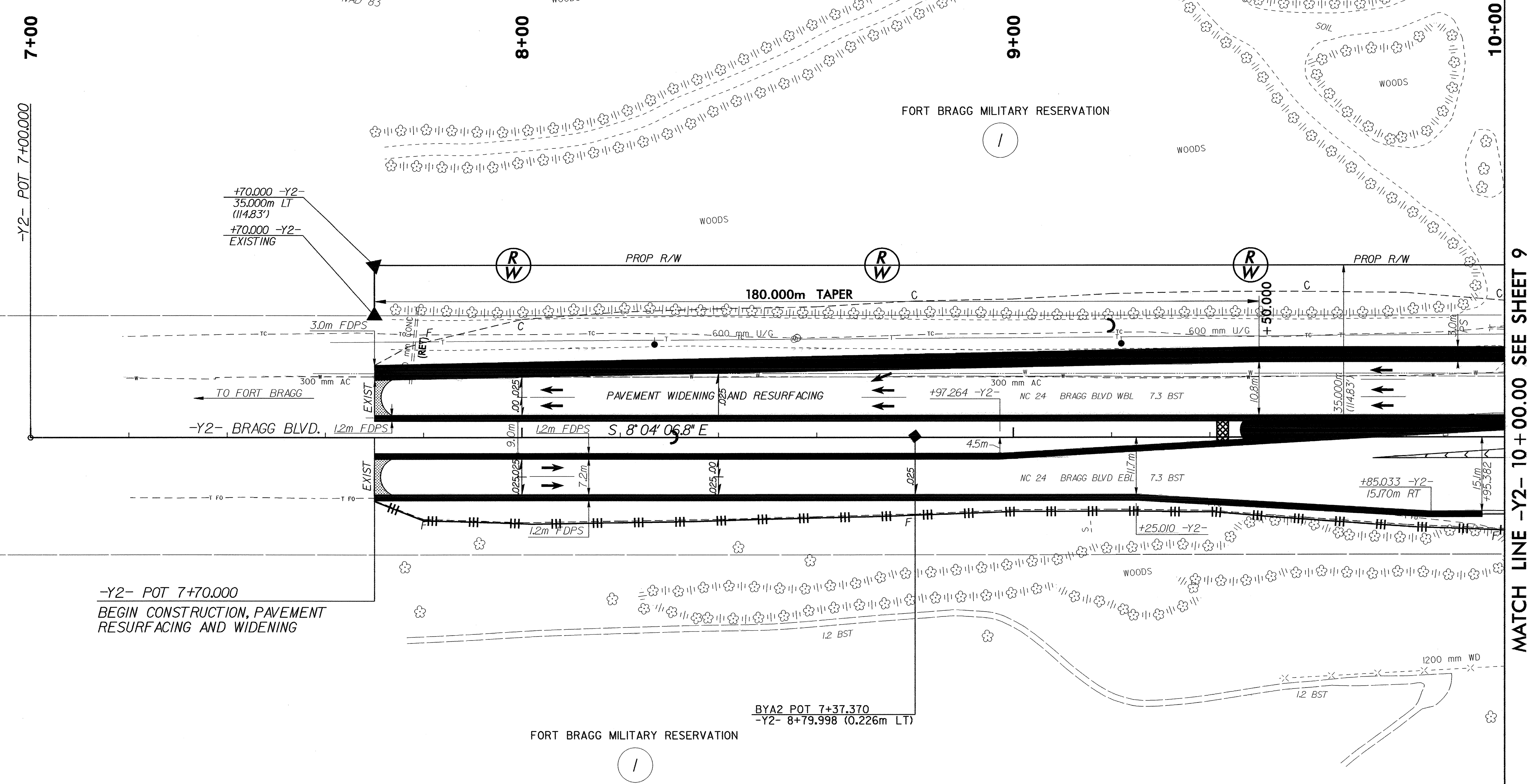
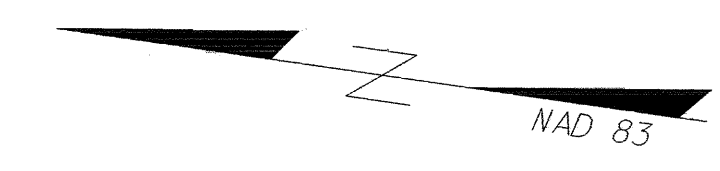
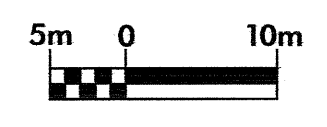
	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-21/CONST.07
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
R/W REV.		



MATCH LINE -L- 47+40.00 SEE SHEET 6

FILE: C:\FILES
 DATE: 04/15/05
 PLOT DRIVER: SP12DRVLS
 PEN TABLE: SPEN12BL

	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-22/CONST.08
	R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
R/W REV.		



-Y2- POT 7+70.000
 BEGIN CONSTRUCTION, PAVEMENT
 RESURFACING AND WIDENING

MATCH LINE -Y2- 10+00.00 SEE SHEET 9

FILE: SP1EELS - STWMS
 PLOT: DRAWS, SP1DRWLS
 PEN TABLE: SPEN1BLLS

METRIC

5m 0 10m

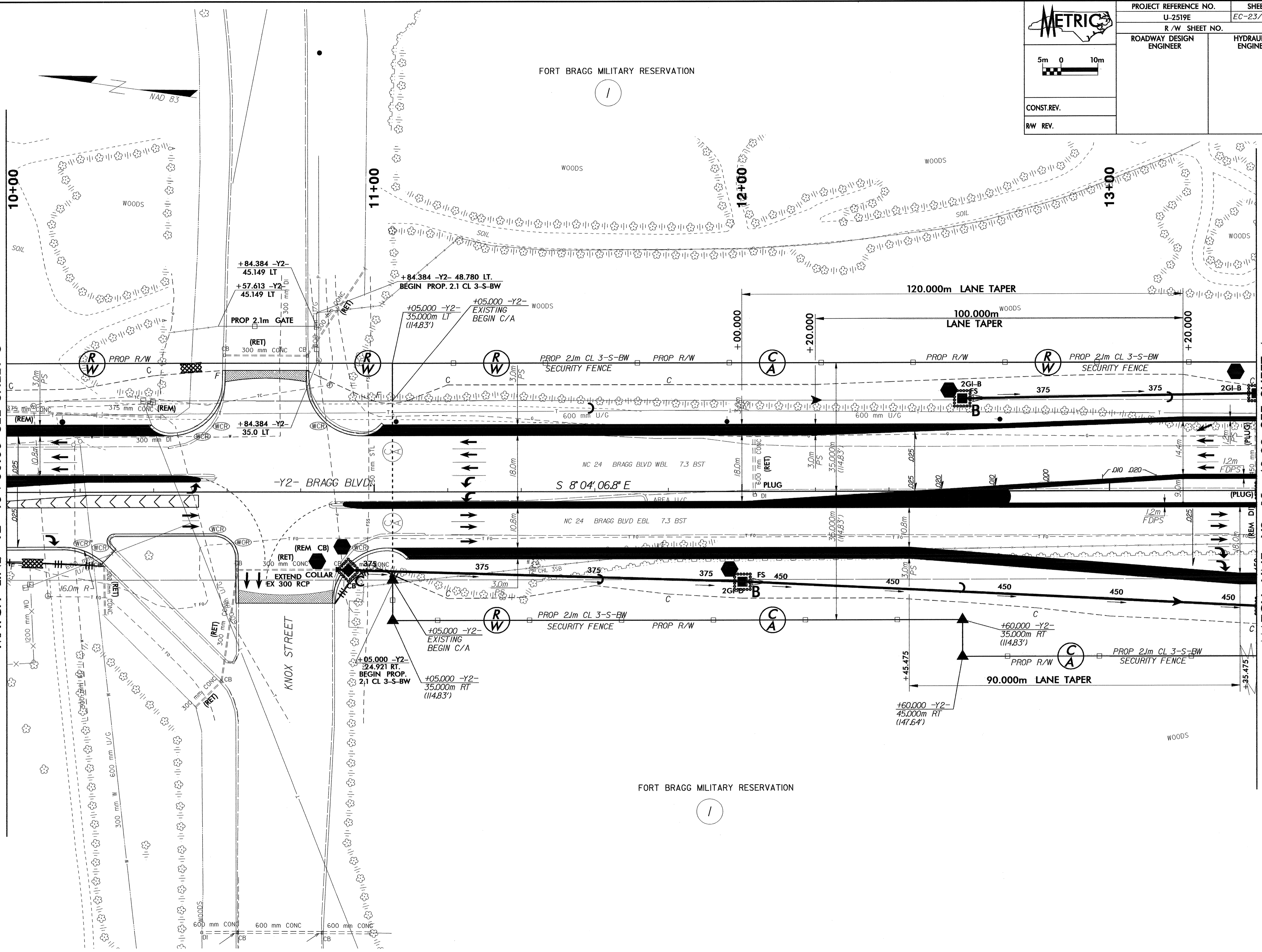
CONST. REV.

R/W REV.

PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-23/CONST.09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE -Y2- 10 + 00.00 SEE SHEET 8

MATCH LINE -Y2- 13 + 40.00 SEE SHEET 4



FILE: SP1EELS
STWIKES
PLOT DRIVES: SP1EELS
PEN TABLE: SPEN1BLLS

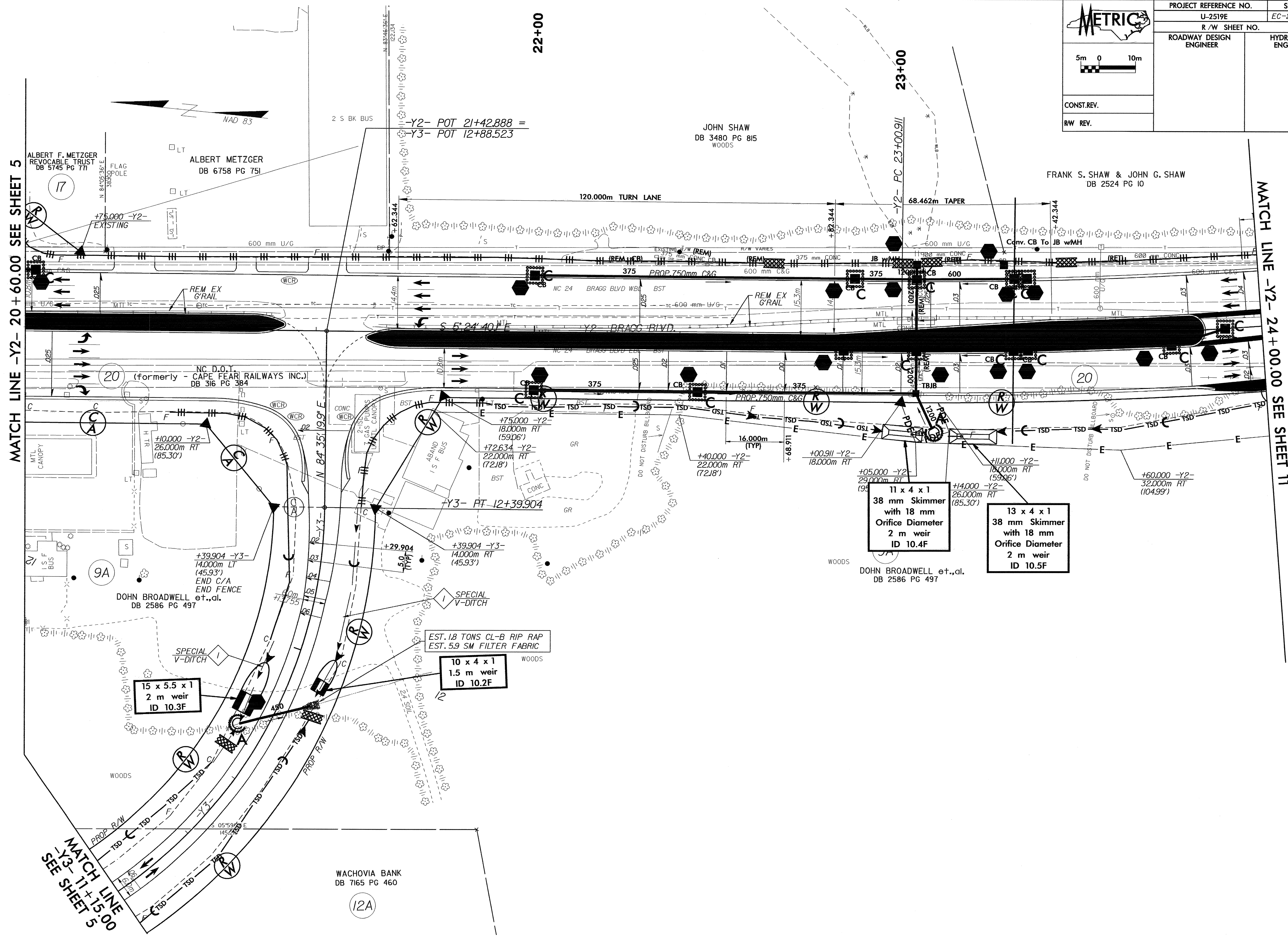
METRIC

CONST. REV.
RW REV.

PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-24/CONST/10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATCH LINE -Y2- 20 + 60.00 SEE SHEET 5

MATCH LINE -Y2- 24 + 00.00 SEE SHEET 11



15 x 5.5 x 1
2 m weir
ID 10.3F

10 x 4 x 1
1.5 m weir
ID 10.2F

11 x 4 x 1
38 mm Skimmer
with 18 mm
Orifice Diameter
2 m weir
ID 10.4F

13 x 4 x 1
38 mm Skimmer
with 18 mm
Orifice Diameter
2 m weir
ID 10.5F

EST. 1.8 TONS CL-B RIP RAP
EST. 5.9 SM FILTER FABRIC

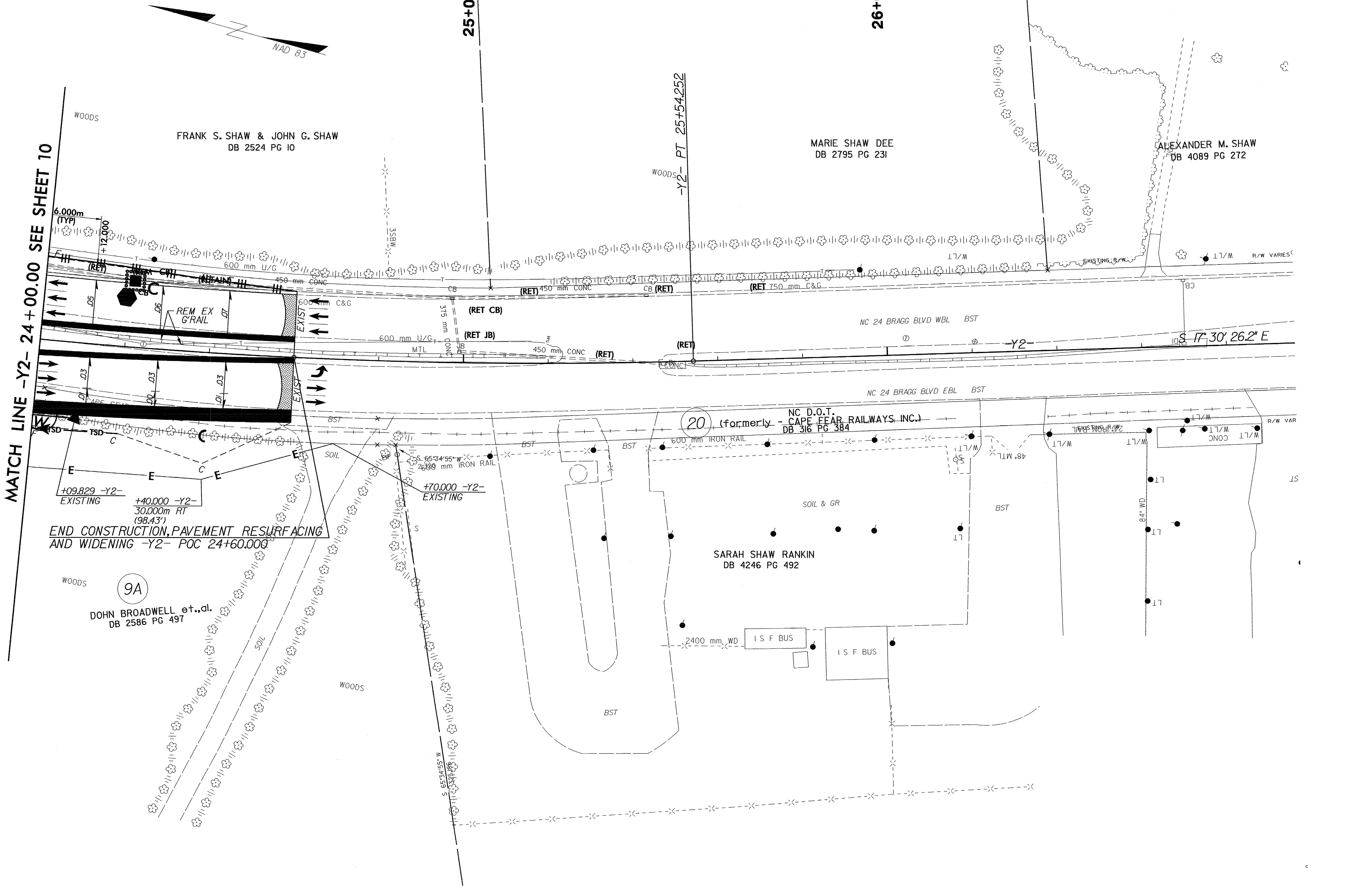
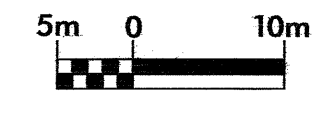
MATCH LINE
-Y3- 11 + 15.00
SEE SHEET 5

FILE: SP11ELS
DATE: 04/25/15
PLOT DRIVER: SP11DRAWS
PEN TABLE: SP11PBLLS

STWMS
SP11DRAWS
SP11PBLLS



PROJECT REFERENCE NO.	SHEET NO.
U-2519E	EC-25/CONST.II
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
CONST. REV.	
R/W REV.	



MATCH LINE -Y2- 24+00.00 SEE SHEET 10

END CONSTRUCTION, PAVEMENT RESURFACING AND WIDENING -Y2- POC 24+60.000

9A
DOHN BROADWELL et., al.
DB 2586 PG 497

20 (formerly - CAPE FEAR RAILWAYS INC.)
DB 316 PG 384

SARAH SHAW RANKIN
DB 4246 PG 492

FRANK S. SHAW & JOHN G. SHAW
DB 2524 PG 10

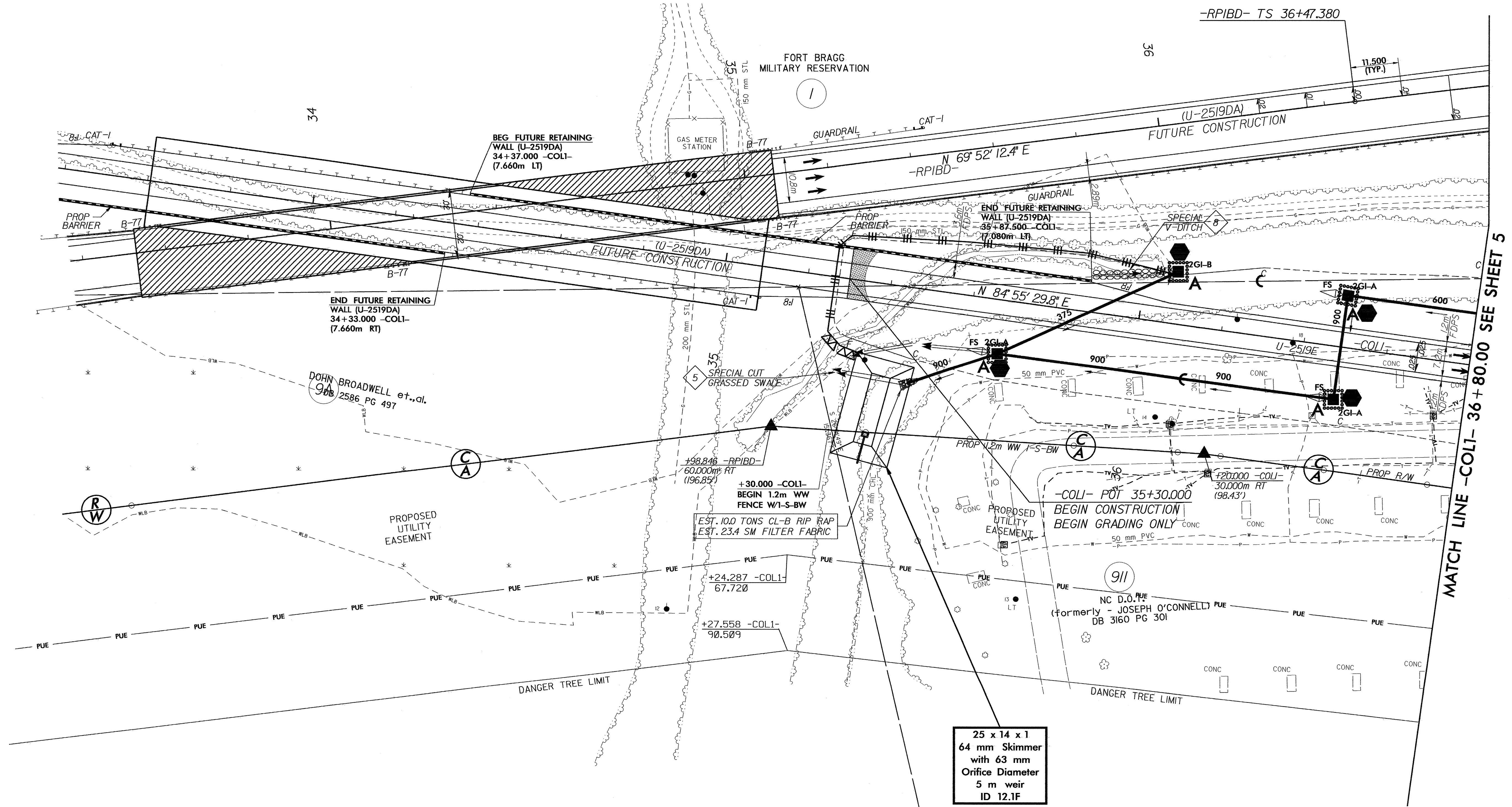
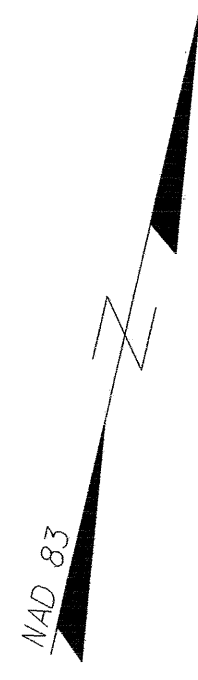
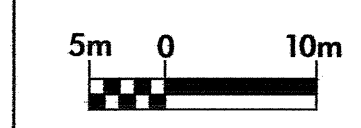
MARIE SHAW DEE
DB 2795 PG 231

ALEXANDER M. SHAW
DB 4089 PG 272

FILE: SFILES
PLOT: SFILES
PLOT DRIVER: SPLOTDRVL
PEN TABLE: SPENRBL




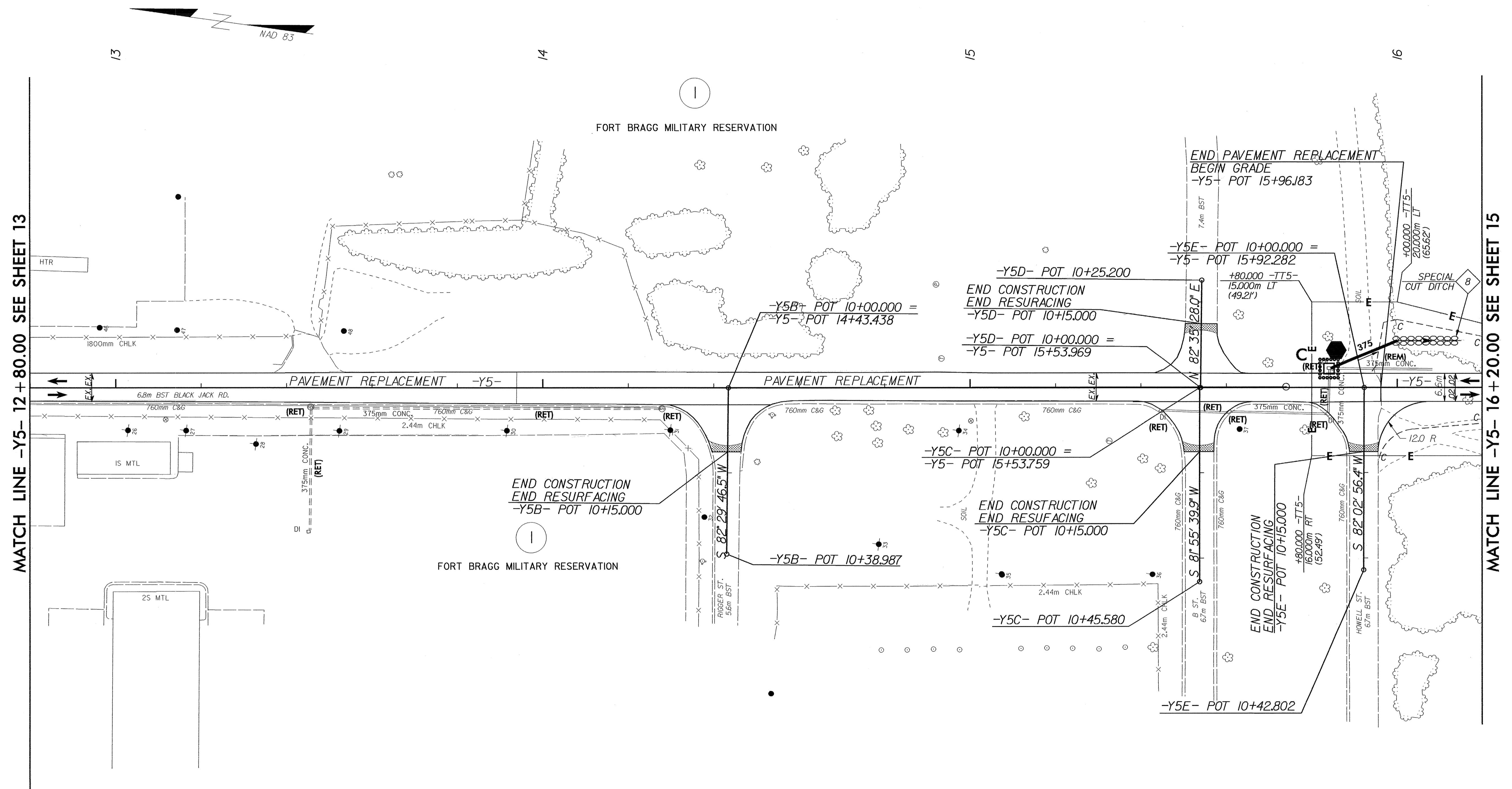
PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-26/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	



MATCH LINE - COL1- 36+80.00 SEE SHEET 5

PUE, SPICES, STIMES
DATE, PLOT DRIVER, SP/DRIVALS
PEN TABLE, SPENTILLS

 5m 0 10m	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-27/CONST.14
	R/W SHEET NO.	
CONST. REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R/W REV.		




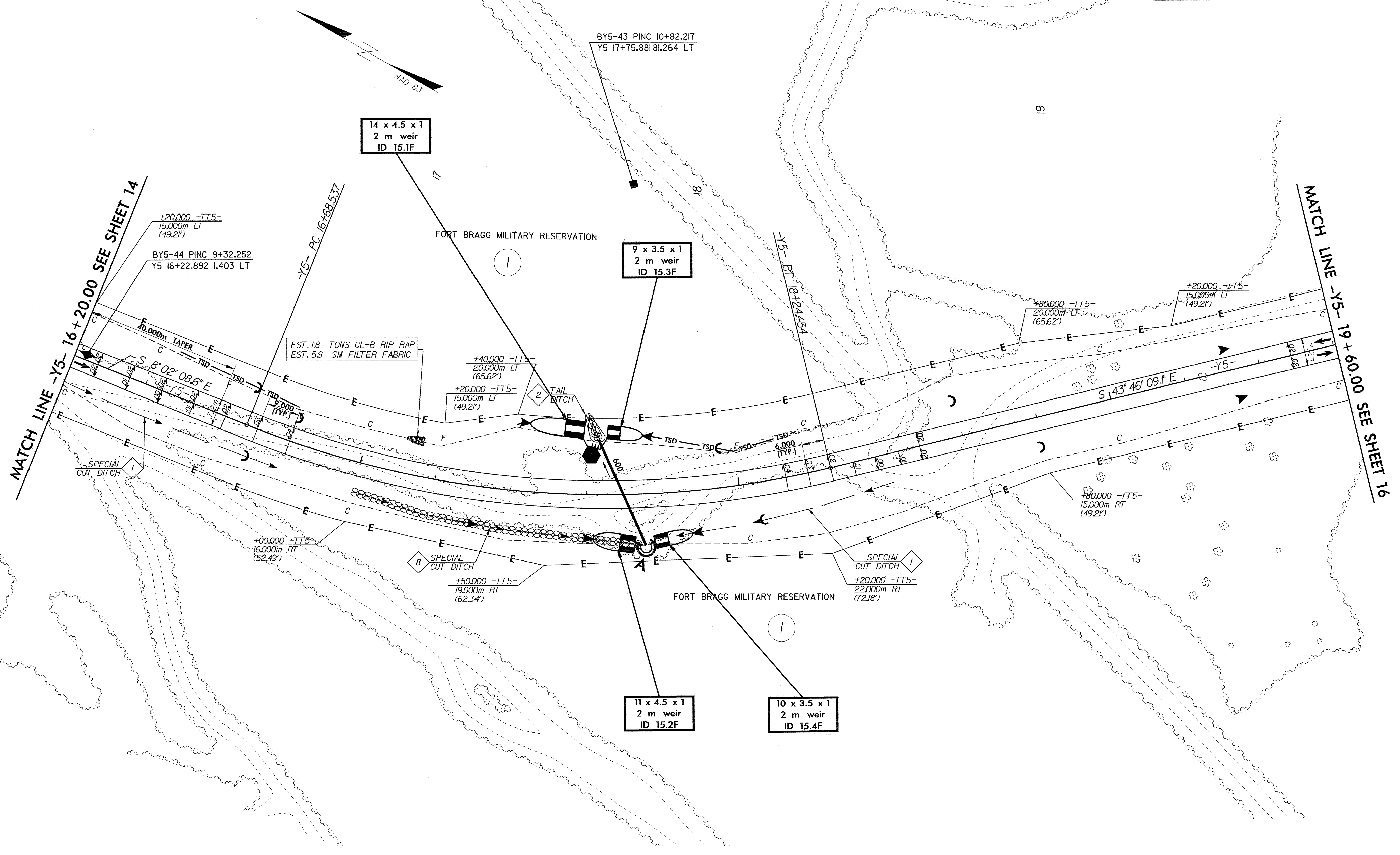
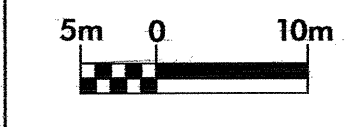
MATCH LINE -Y5- 12 + 80.00 SEE SHEET 13

MATCH LINE -Y5- 16 + 20.00 SEE SHEET 15

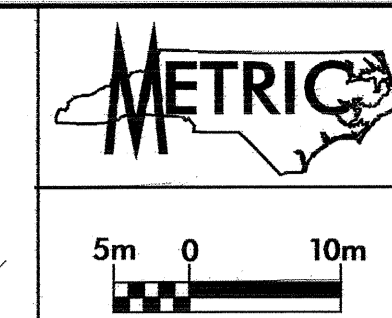
ALL WORK FROM STATION 10+5.000 TO STATION 15+96.183 IS TO BE CONTAINED WITHIN THE EXISTING CURB AND GUTTER

FILE: \$FILES\$ \$TIMES\$
DATE: \$DATE\$ \$TIME\$ \$SPRINT\$ \$PEN TABLE: \$PEN\$ \$SPENT\$

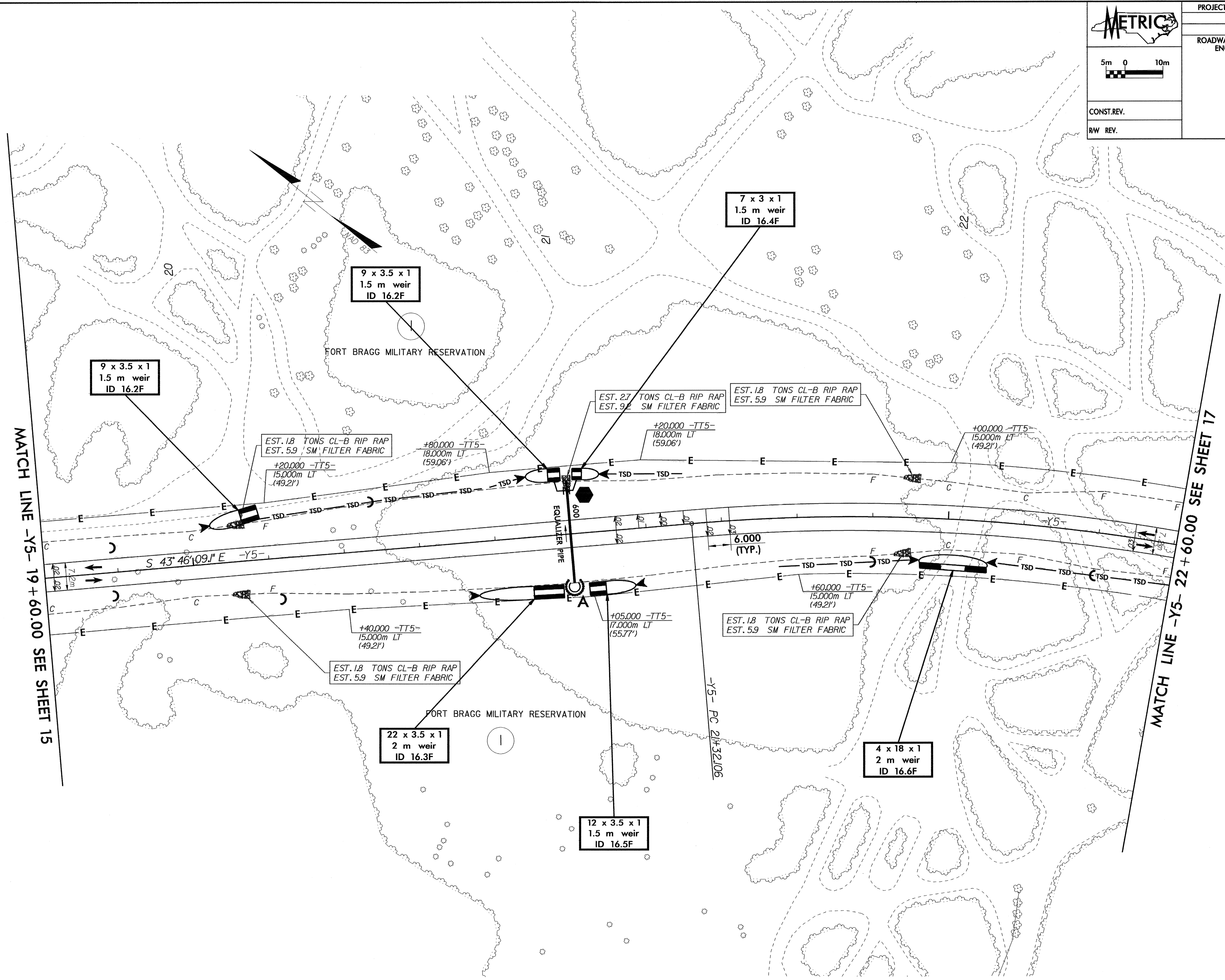
	PROJECT REFERENCE NO.	SHEET NO.
	U-2519E	EC-28/CONST.15
	R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
CONST. REV.		
RW REV.		



FILE: SP100LS
DATE: 01/05/2010
DRAWN: SP100LS
CHECK: SP100LS
APP: SP100LS



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-29/CONST.16
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
CONST. REV.	
R/W REV.	



MATCH LINE -Y5- 19+60.00 SEE SHEET 15

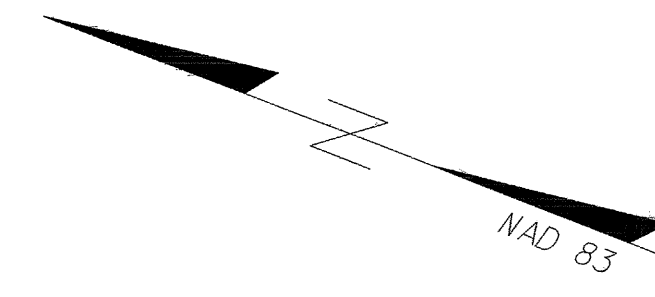
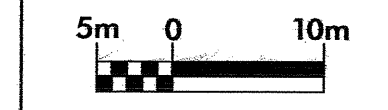
MATCH LINE -Y5- 22+60.00 SEE SHEET 17

FILE: SFILES
 DATE: 01/11/16
 PROJ: BRIDGE SPURWAYS
 PEN: TABLE - SPENTULLS

SEE SHEETS 34 & 35 FOR -Y5- PROFILE



PROJECT REFERENCE NO. U-2519E	SHEET NO. EC-30/CONST.17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
RW REV.	



23

14 x 3.5 x 1
38 mm Skimmer
with 18 mm
Orifice Diameter
2 m weir
ID 17.1F

MATCH LINE -Y5- 22+60.00 SEE SHEET 16

FORT BRAGG MILITARY RESERVATION

END CONSTRUCTION
-Y6- POC 10+62.000
+40.000 -TT5-
15.000m LT
(49.21')

6.000
(TYP.)

S 18° 41' 49.4" E

+40.000 -TT5-
15.000m RT
(49.21')

-Y5- POT Sta. 24+63.645 =
-Y6- POC Sta. 10+33.429

BEGIN CONSTRUCTION
-Y6- POC 10+15.000

FORT BRAGG MILITARY RESERVATION

15 x 3.5 x 1
38 mm Skimmer
with 18 mm
Orifice Diameter
2 m weir
ID 17.2F

FILE: SP16LS STIMES
DATE: 04/27/05
PLOT DRIVER: SP16DRWS
PEN TABLE: SP16TABLS