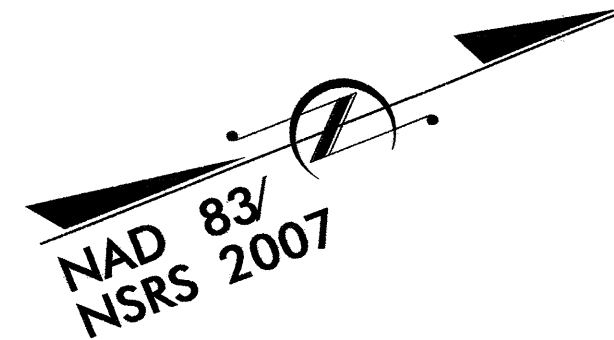


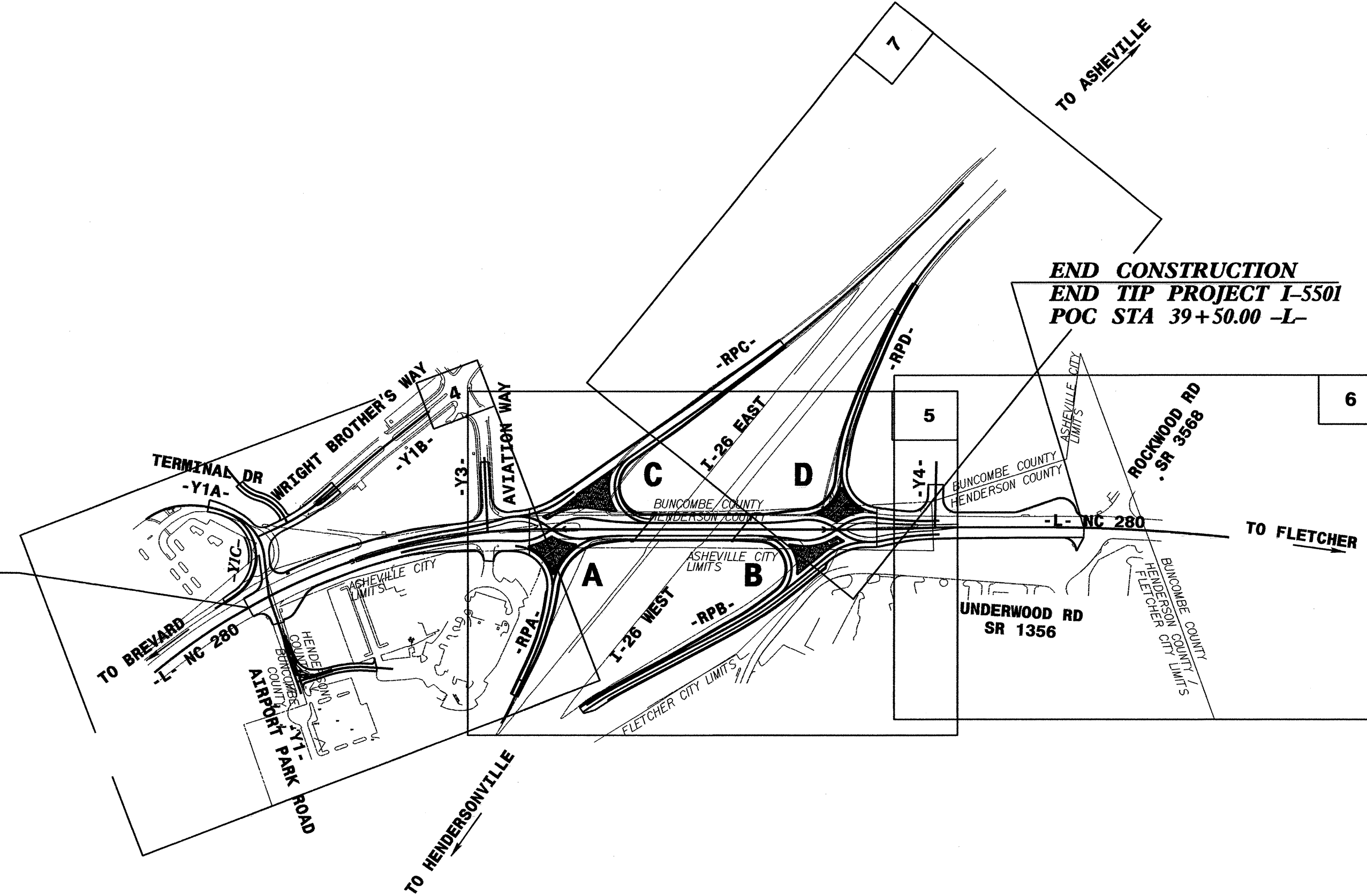
TIP PROJECT: I-5501



STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
**BUNCOMBE &
 HENDERSON COUNTIES**

**LOCATION: I-26 / NC 280 INTERCHANGE IN ASHEVILLE
 TYPE OF WORK: GRADING, PAVING, DRAINAGE AND SIGNALS**

**BEGIN CONSTRUCTION
 BEGIN TIP PROJECT I-5501
 POT STA 13+50.00 -L-**



**END CONSTRUCTION
 END TIP PROJECT I-5501
 POC STA 39+50.00 -L-**

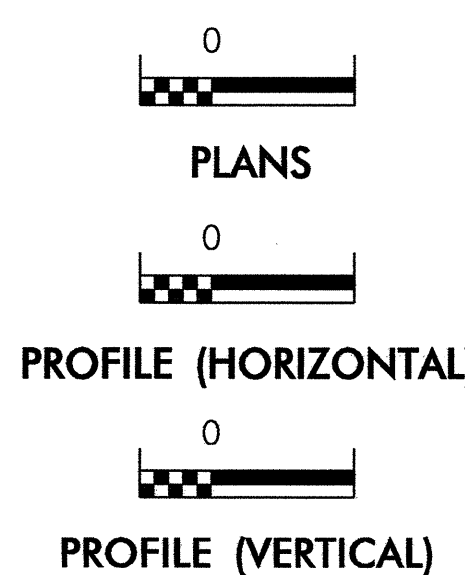
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5501	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	TSF
1606.01	Special Sediment Control Fence	SSCF
1622.01	Temporary Berms and Slope Drains	TBSD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	TRSCA
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	TRSCA-PAM
1633.02	Temporary Rock Silt Check Type-B	TRSCB
	Wattle / Coir Fiber Wattle	W/CFW
	Wattle / Coir Fiber Wattle with Polyacrylamide (PAM)	W/CFW-PAM
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	RPISTRA
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPISTRB
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SSB
	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.**

GRAPHIC SCALE



**ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA**

**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY
 WITH THE REGULATIONS SET FORTH BY THE
 NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011
 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
 NATURAL RESOURCES DIVISION OF WATER QUALITY.**

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

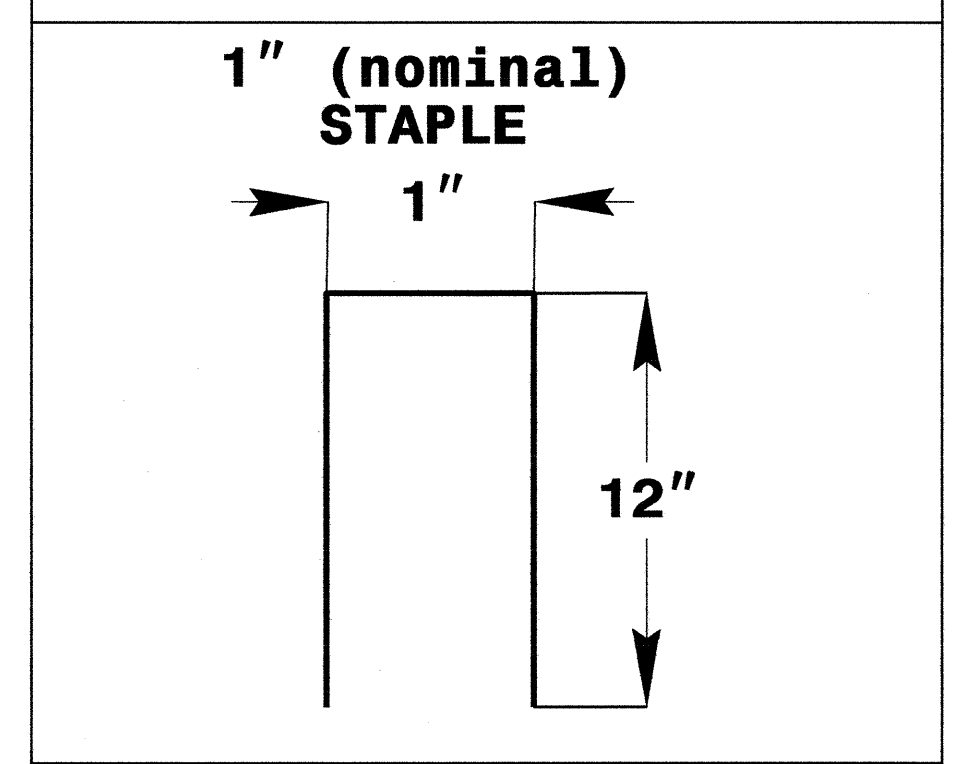
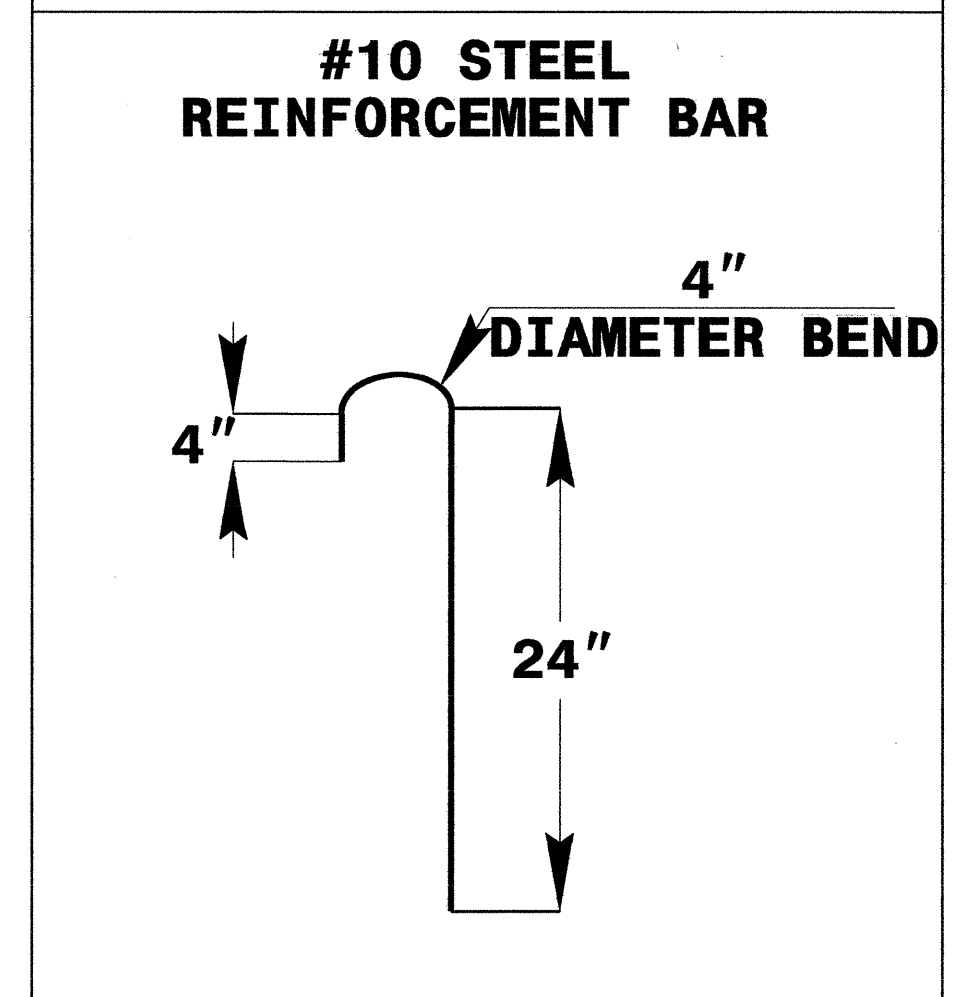
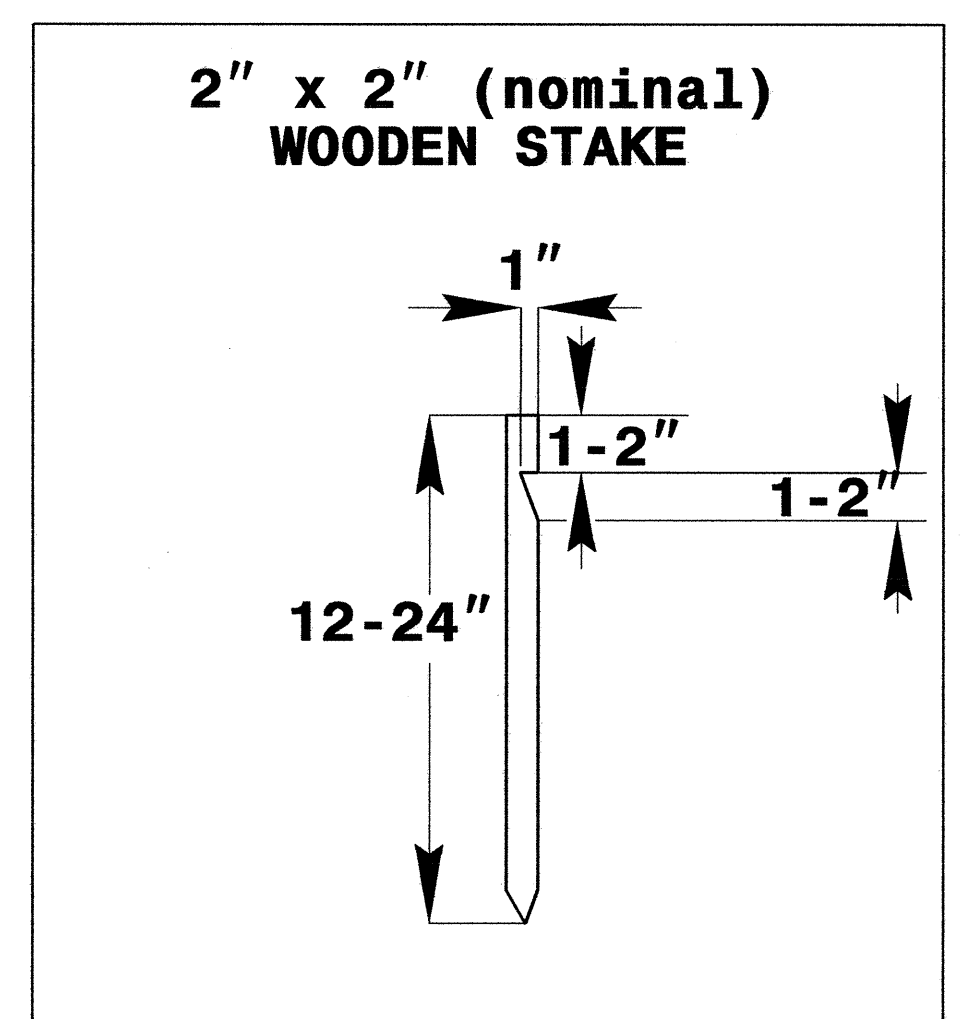
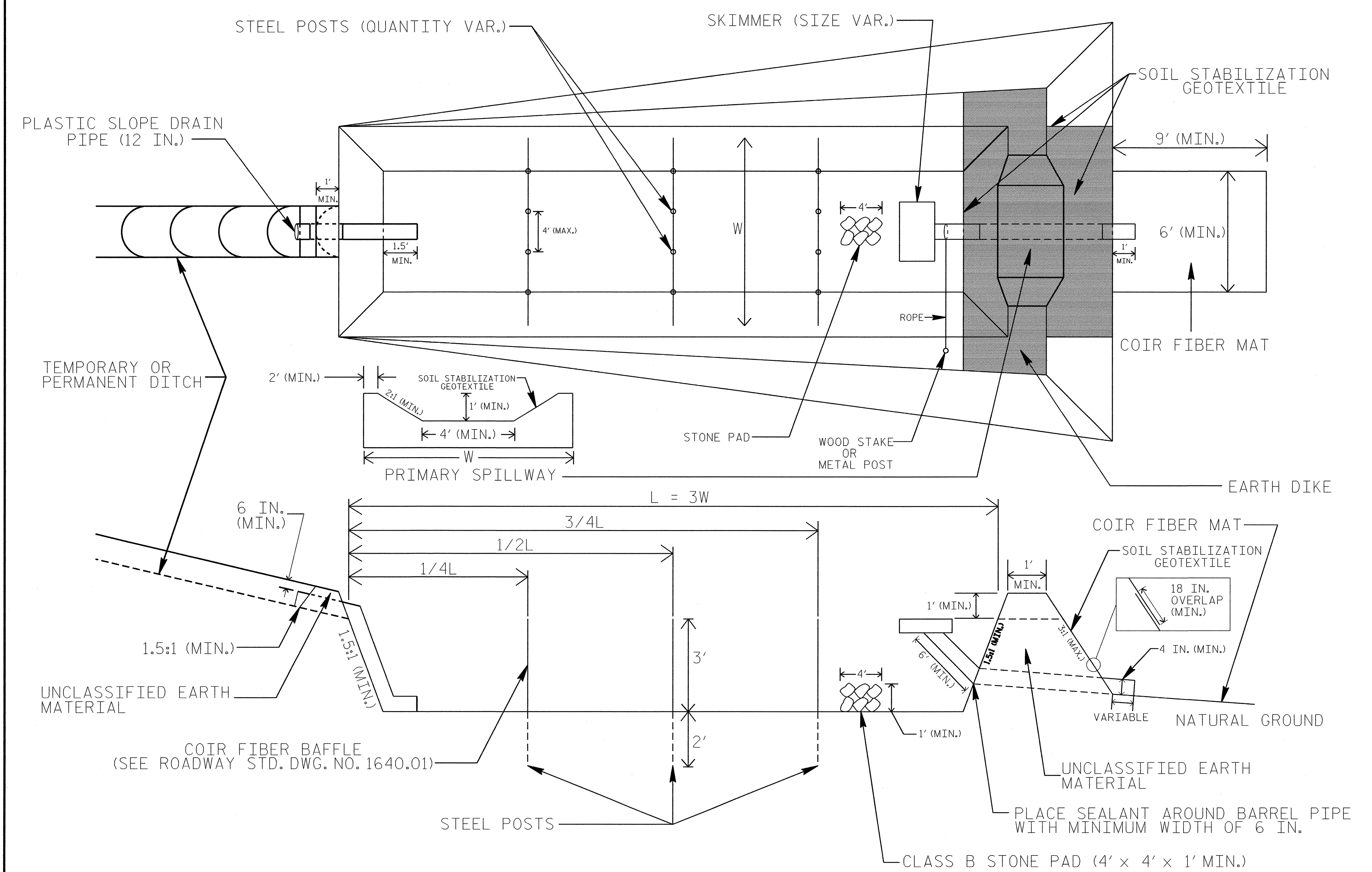
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
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	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	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	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

PROJECT REFERENCE NO. 1-5501	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL



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 PRIMARY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.4$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

PROJECT REFERENCE NO. 1-5501	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTES:

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

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

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

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

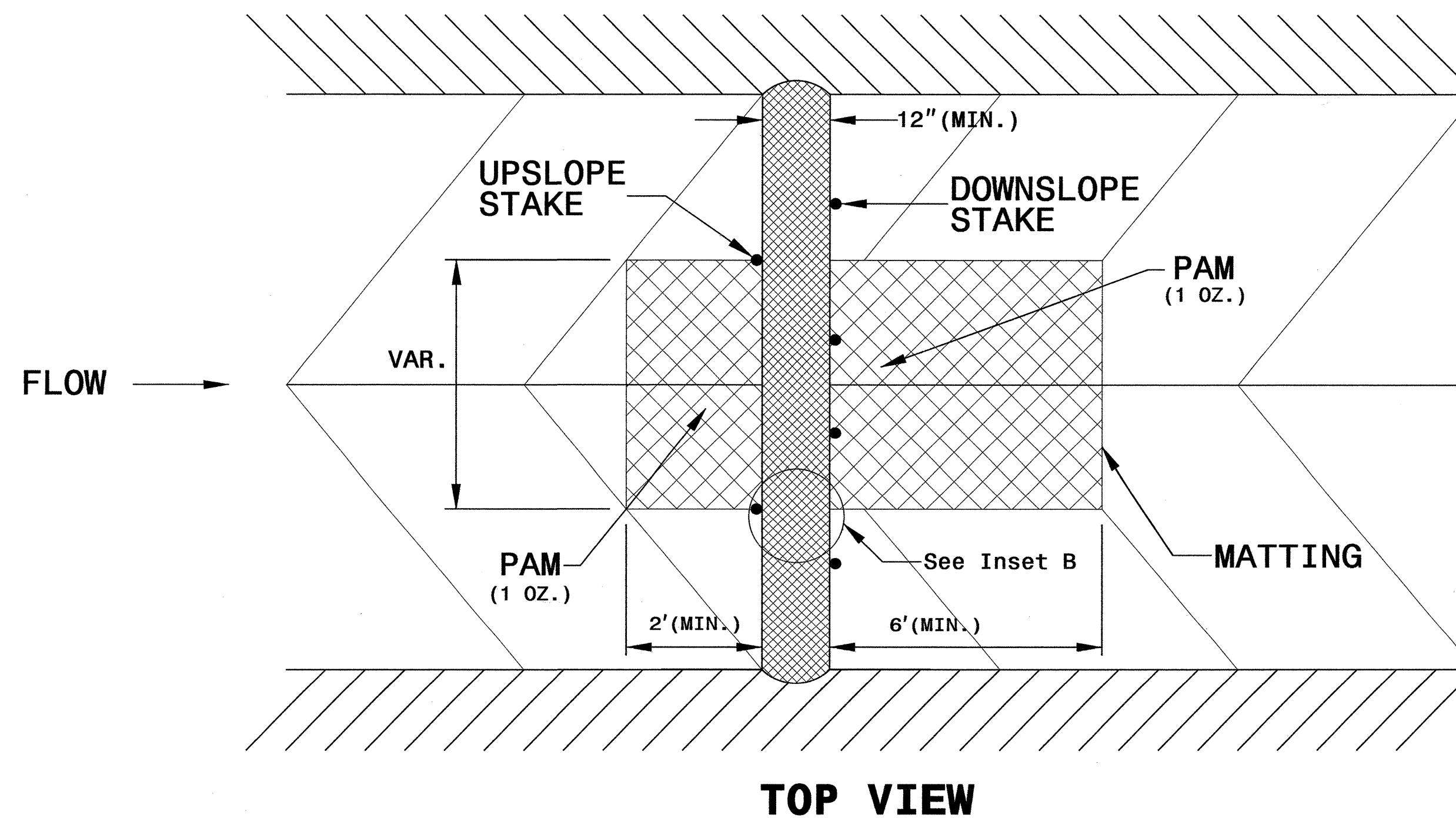
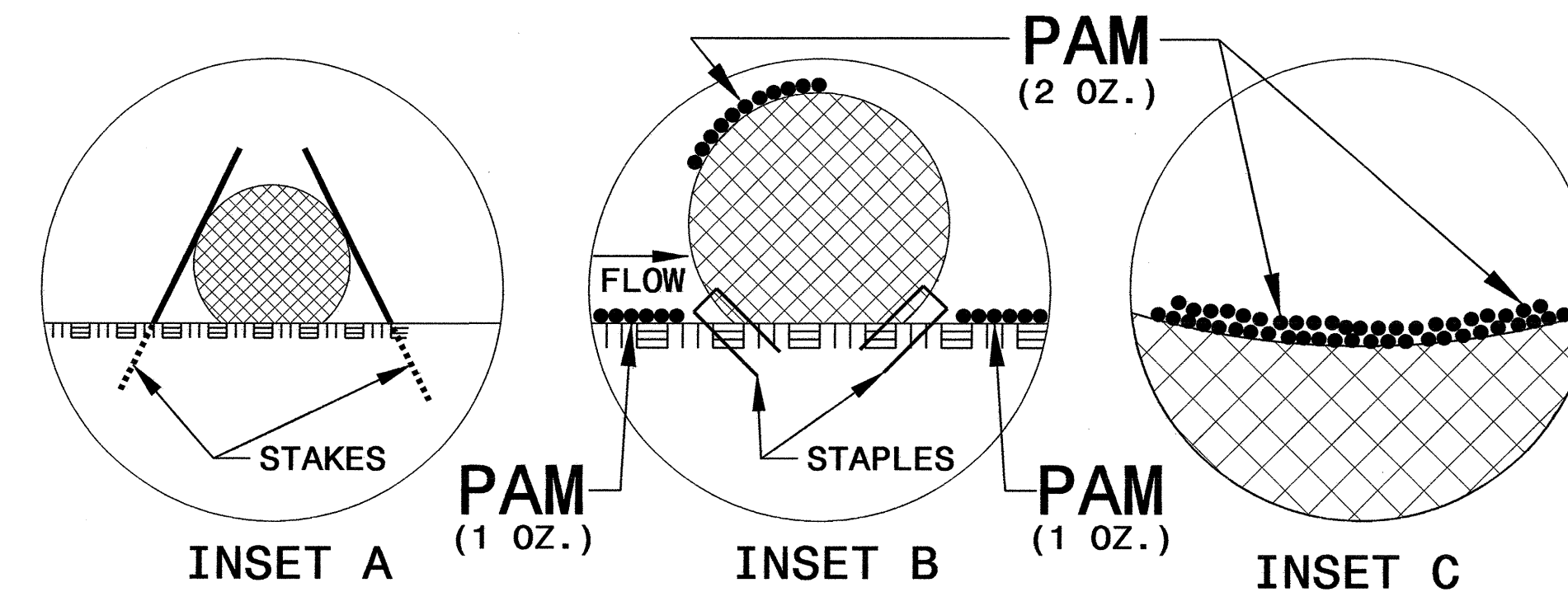
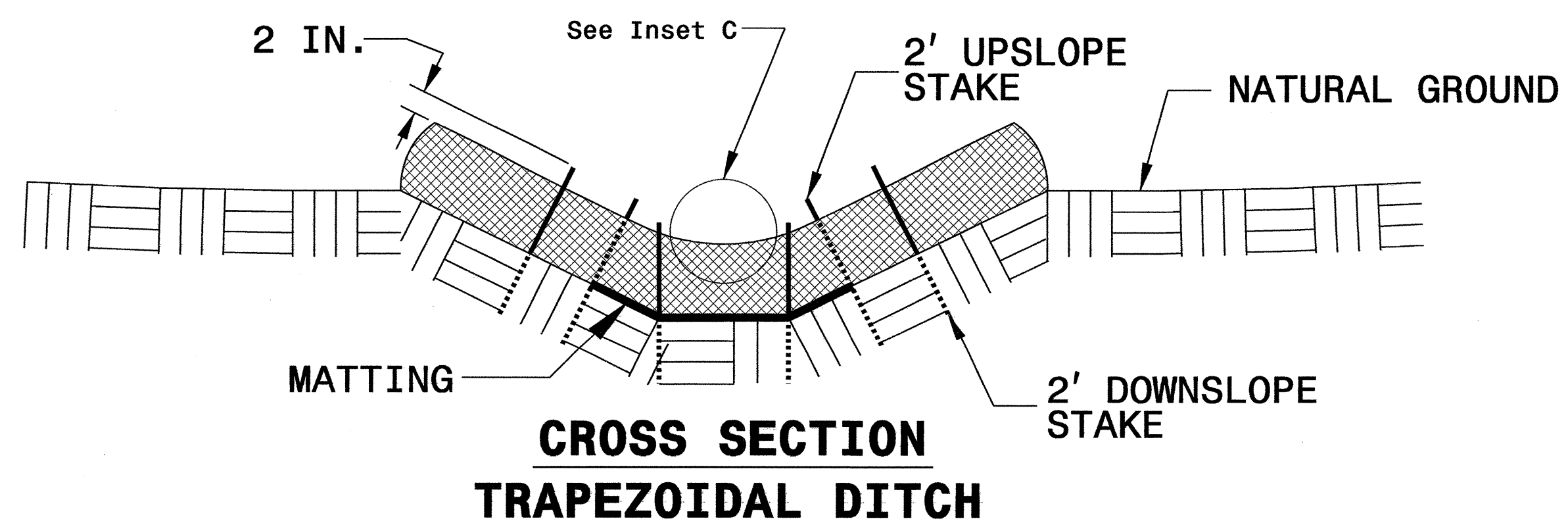
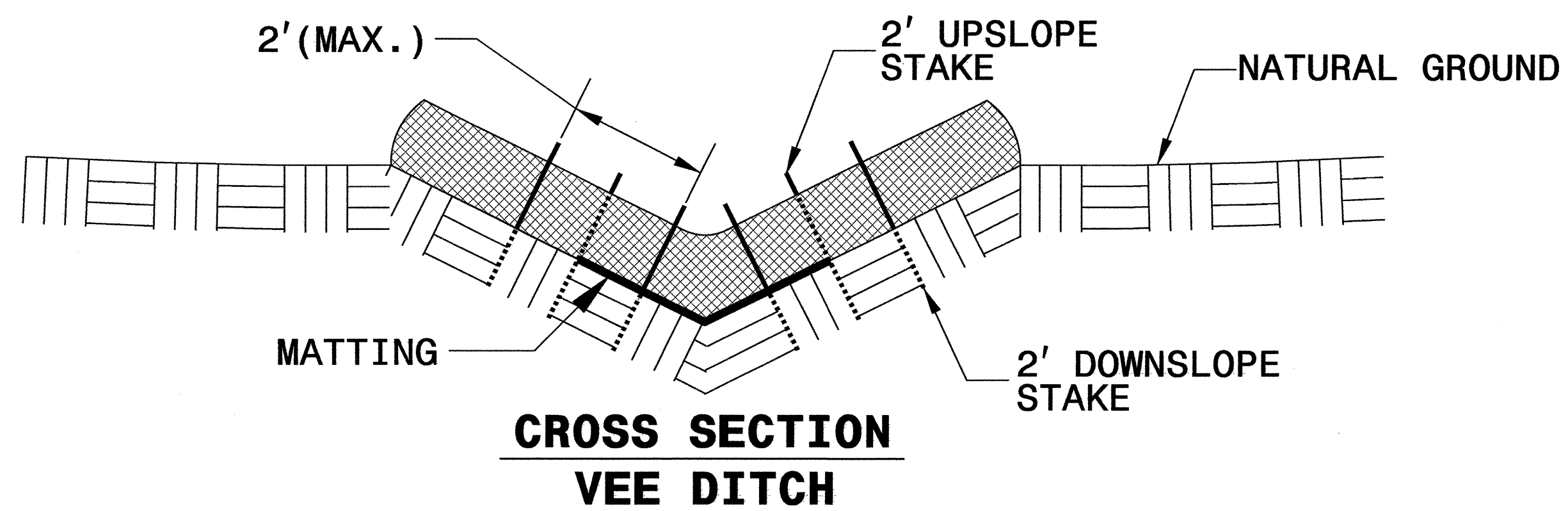
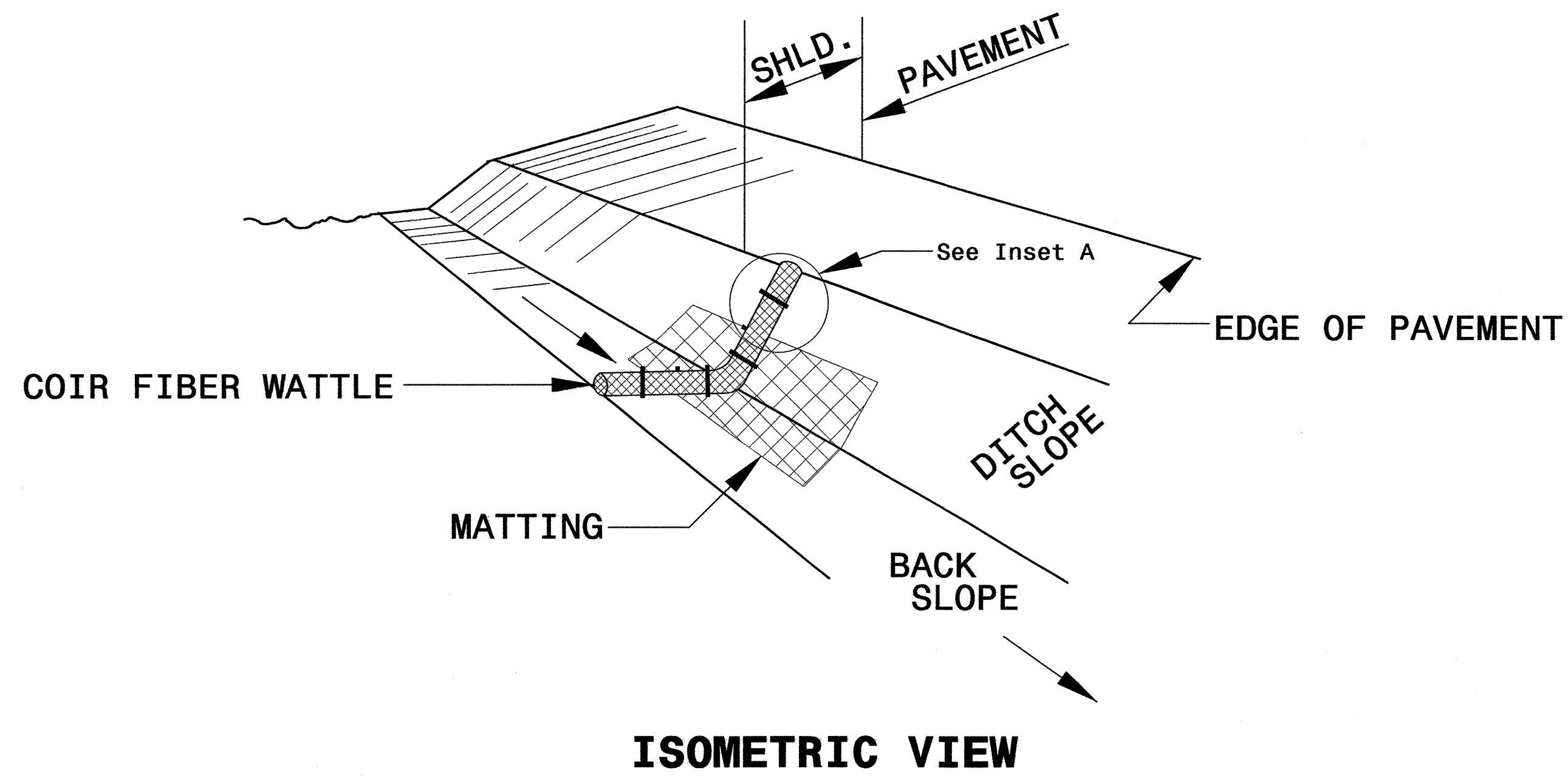
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

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

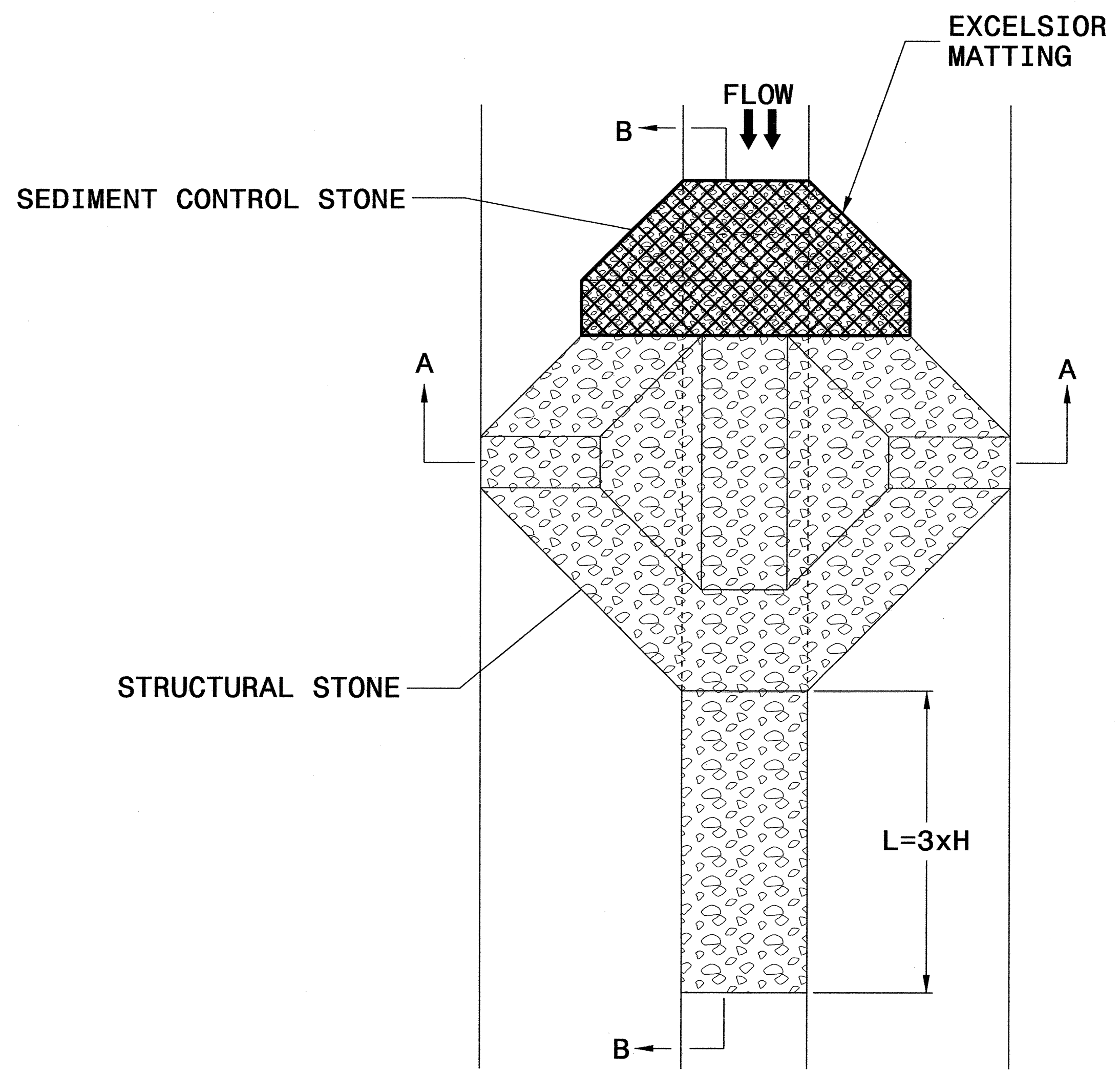
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

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.



PROJECT REFERENCE NO. 1-5501	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



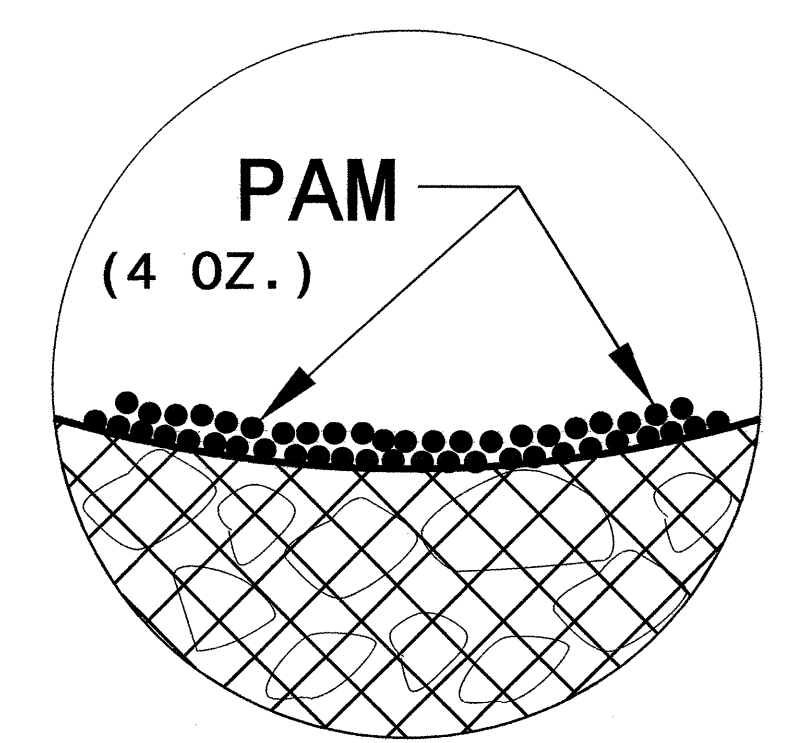
PLAN

NOTES

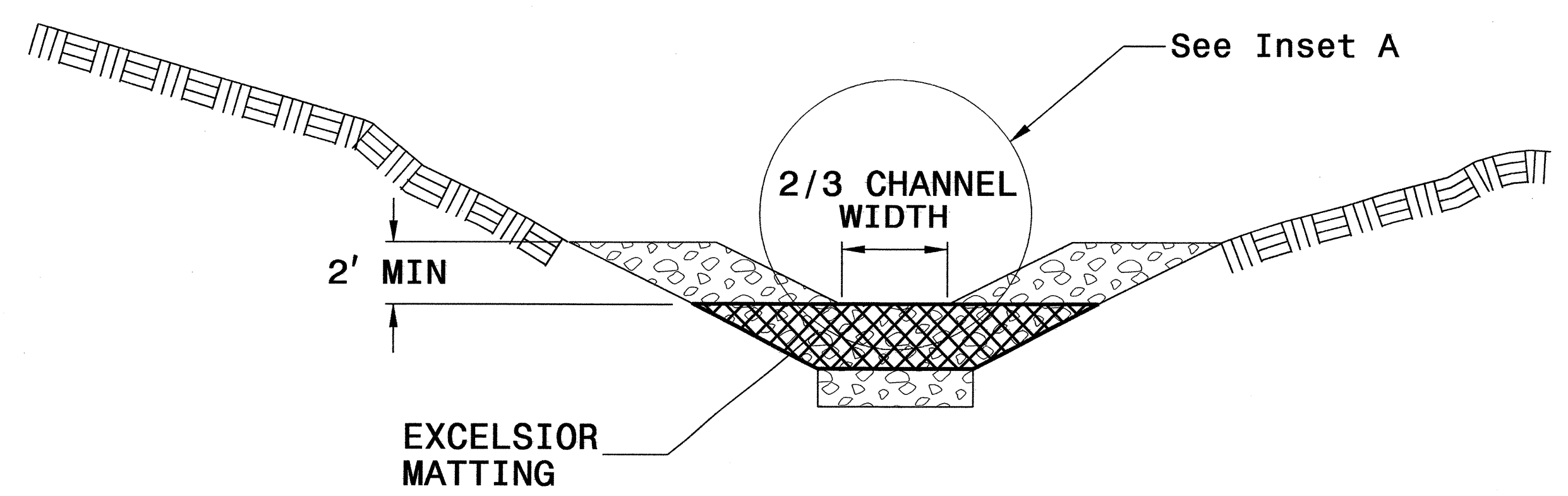
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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.

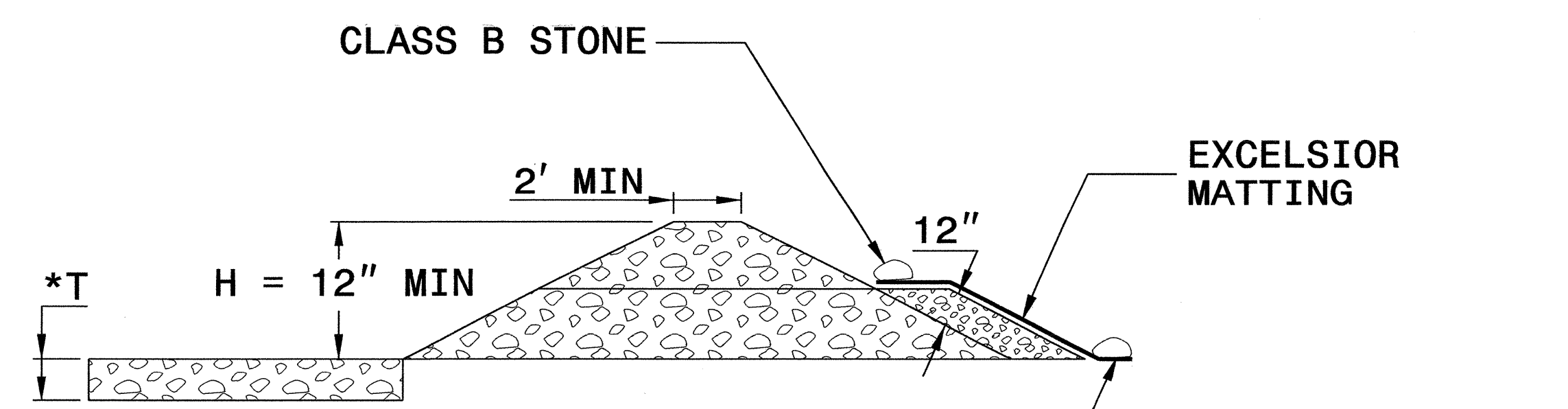
INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION A-A



SECTION B-B

*T = 12" MIN., 18" MAX.

NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. I-550I	SHEET NO. EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	14+50	15+00	RT	25
4	-L-	18+50	20+50	LT	100
5	-RPB*SPUR*RT-	10+55	11+05	RT	30
			SUBTOTAL		155
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER				4,300
			TOTAL		4,455
			SAY		4,500

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
5	-RPB-	14+50	21+00	RT	390
5	-RPD-	13+65	18+50	LT	650
			SUBTOTAL		1,040
	ADDITIONAL PSRM TO BE INSTALLED				95
			TOTAL		1,135
			SAY		1,150

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>I-550I</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

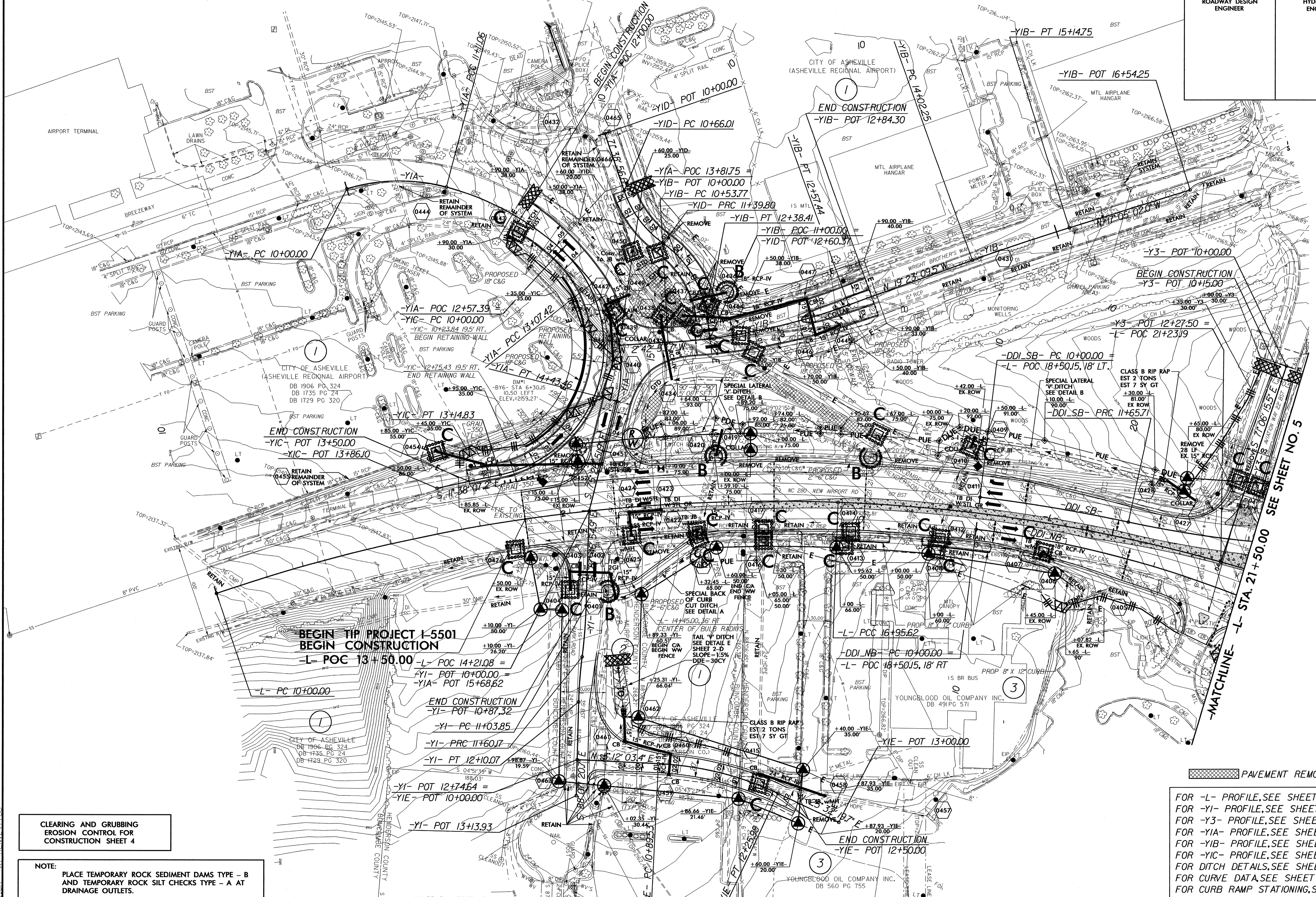
<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

8/17/1999

SEWER LINE IS CURRENTLY UNDER CONSTRUCTION AND AS OF JANUARY 4TH, 2013, HAS NOT BEEN COMPLETED.

NAD 83/NSRS 2007

PROJECT REFERENCE NO.	SHEET NO.
I-5501	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

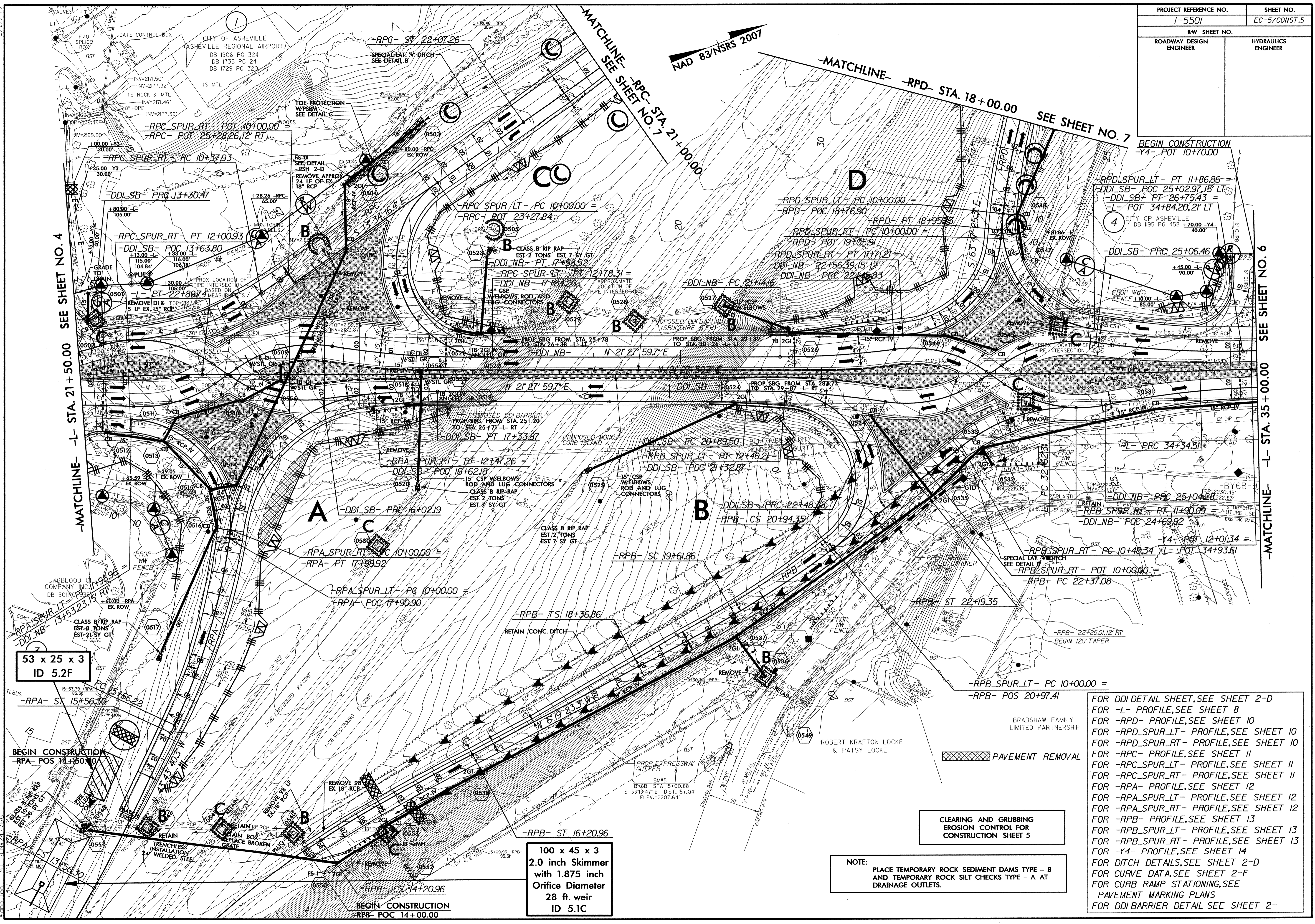
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHEET 8
FOR -YI- PROFILE, SEE SHEET 14
FOR -Y3- PROFILE, SEE SHEET 14
FOR -YIA- PROFILE, SEE SHEET 15
FOR -YIB- PROFILE, SEE SHEET 15
FOR -YIC- PROFILE, SEE SHEET 15
FOR DITCH DETAILS, SEE SHEET 2-D
FOR CURVE DATA, SEE SHEET 2-F
FOR CURB RAMP STATIONING, SEE
PAVEMENT MARKING PLANS

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schellen AT ENV24728

PROJECT REFERENCE NO. 1-5501	SHEET NO. EC-5/CONST.5
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



-MATCHLINE- L- STA. 21 + 50.00 SEE SHEET NO. 4

-MATCHLINE- L- STA. 35 + 00.00 SEE SHEET NO. 6

-MATCHLINE- RPD- STA. 18 + 00.00 SEE SHEET NO. 7

53 x 25 x 3
ID 5.2F

100 x 45 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
28 ft. weir
ID 5.1C

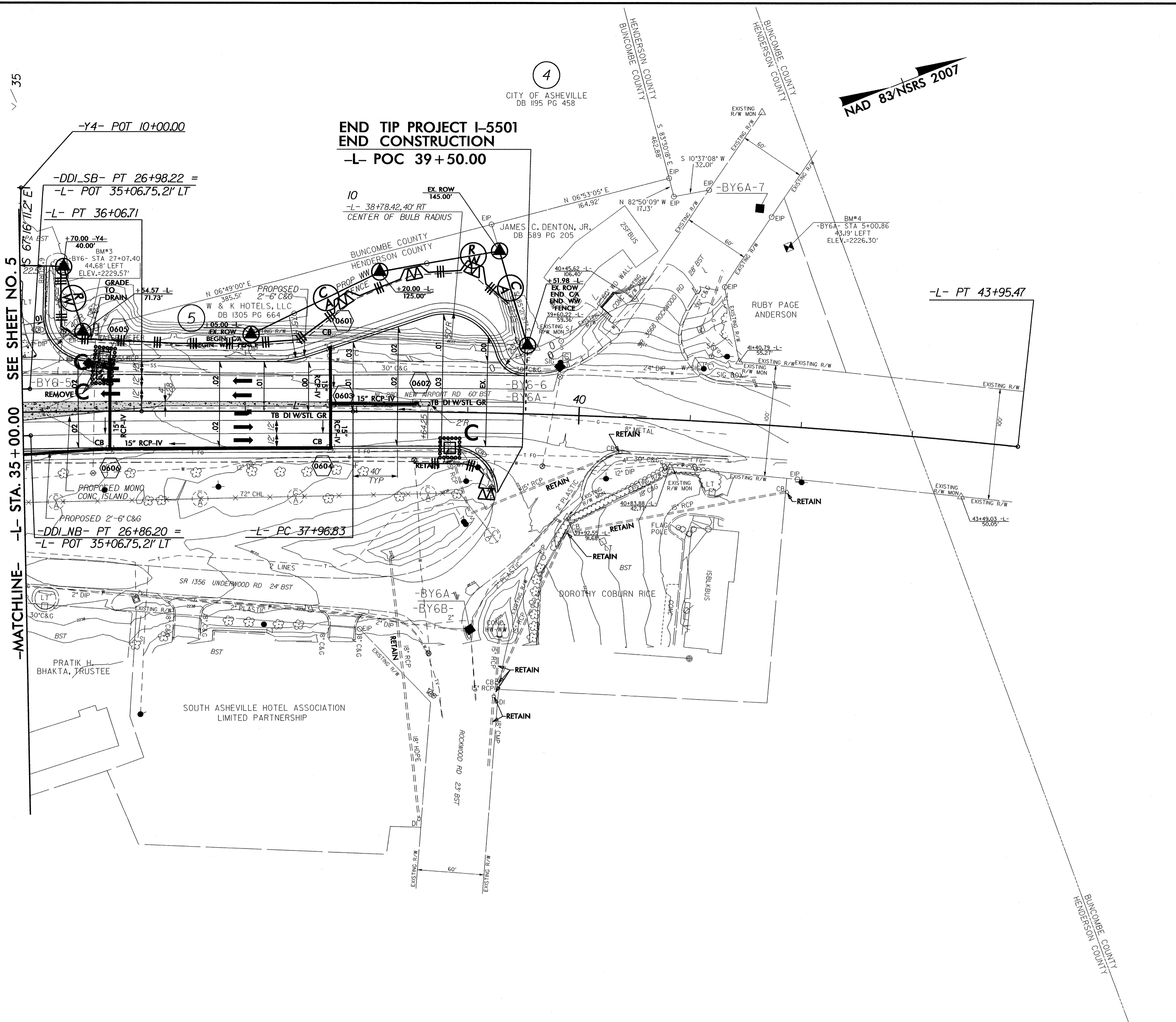
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

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

FOR DDI DETAIL SHEET, SEE SHEET 2-D
FOR -L- PROFILE, SEE SHEET 8
FOR -RPD- PROFILE, SEE SHEET 10
FOR -RPD-SPUR-LT- PROFILE, SEE SHEET 10
FOR -RPD-SPUR-RT- PROFILE, SEE SHEET 10
FOR -RPC- PROFILE, SEE SHEET 11
FOR -RPC-SPUR-LT- PROFILE, SEE SHEET 11
FOR -RPC-SPUR-RT- PROFILE, SEE SHEET 11
FOR -RPA- PROFILE, SEE SHEET 12
FOR -RPA-SPUR-LT- PROFILE, SEE SHEET 12
FOR -RPA-SPUR-RT- PROFILE, SEE SHEET 12
FOR -RPB- PROFILE, SEE SHEET 13
FOR -RPB-SPUR-LT- PROFILE, SEE SHEET 13
FOR -RPB-SPUR-RT- PROFILE, SEE SHEET 13
FOR -Y4- PROFILE, SEE SHEET 14
FOR DITCH DETAILS, SEE SHEET 2-D
FOR CURB DATA, SEE SHEET 2-F
FOR CURB RAMP STATIONING, SEE
PAVEMENT MARKING PLANS
FOR DDI BARRIER DETAIL SEE SHEET 2-

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PROJECT REFERENCE NO.	SHEET NO.
I-5501	EC-6/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**END TIP PROJECT I-5501
END CONSTRUCTION**
-L- POC 39+50.00

NAD 83/NSRS 2007

SEE SHEET NO. 5
-L- STA. 35+00.00

-MATCHLINE-

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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

FOR -L- PROFILE, SEE SHEET 9
FOR -Y4- PROFILE, SEE SHEET 14
FOR -RPA- PROFILE, SEE SHEET 12
FOR -RPB- PROFILE, SEE SHEET 13
FOR DITCH DETAILS, SEE SHEET 2-D
FOR CURVE DATA, SEE SHEET 2-F
FOR CURB RAMP STATIONING, SEE
PAVEMENT MARKING PLANS

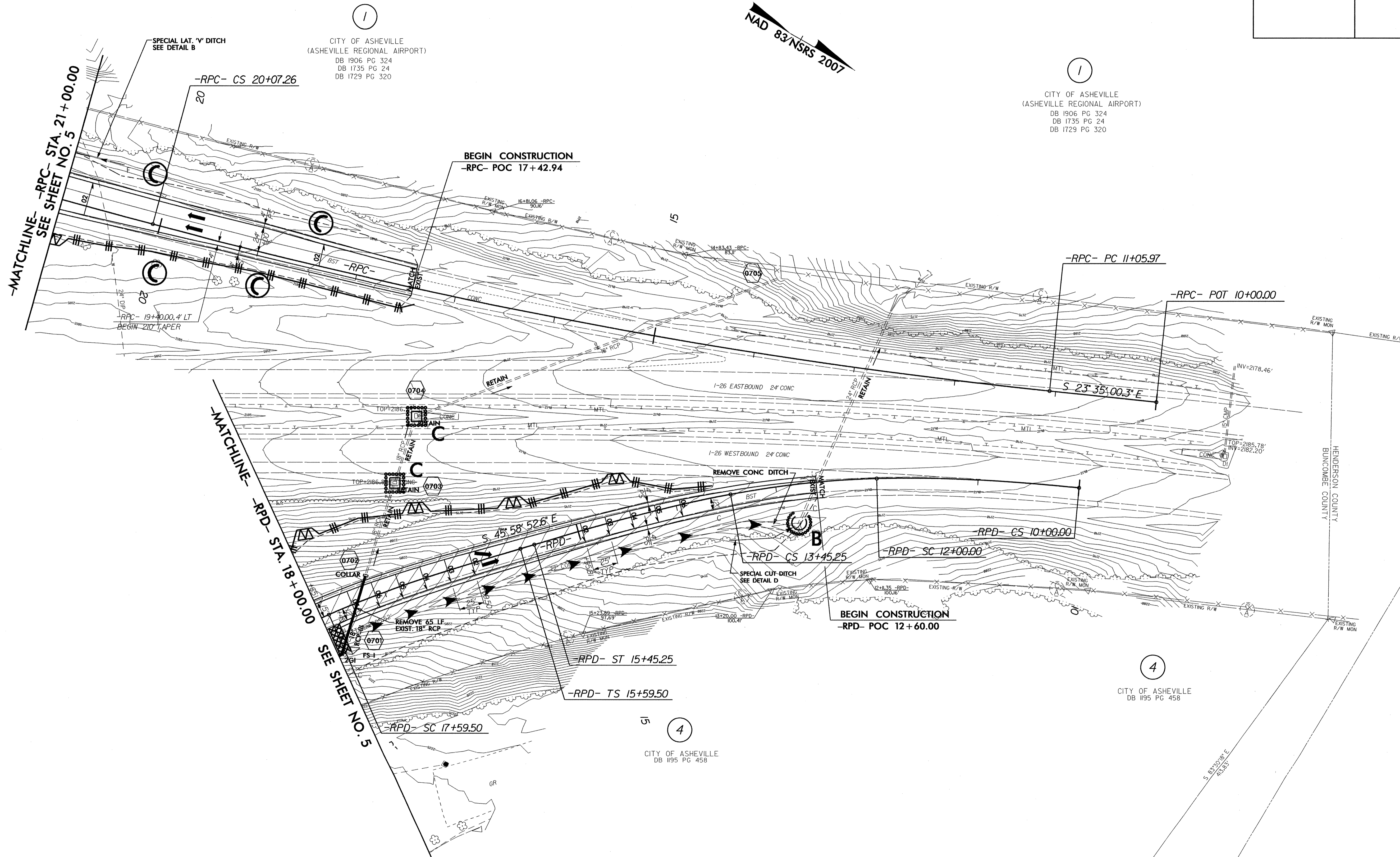
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 schellen AT BENTLEY

8/17/99

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.

PROJECT REFERENCE NO.	SHEET NO.
1-5501	EC-7/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NAD 83 NSRS 2007

CITY OF ASHEVILLE
(ASHEVILLE REGIONAL AIRPORT)
DB 1906 PG 324
DB 1735 PG 24
DB 1729 PG 320

CITY OF ASHEVILLE
(ASHEVILLE REGIONAL AIRPORT)
DB 1906 PG 324
DB 1735 PG 24
DB 1729 PG 320

CITY OF ASHEVILLE
DB 1195 PG 458

CITY OF ASHEVILLE
DB 1195 PG 458

FOR -RPD- PROFILE, SEE SHEET 10
FOR -RPC- PROFILE, SEE SHEET 11
FOR DITCH DETAILS, SEE SHEET 2-F
FOR CURVE DATA SEE SHEET 2-F

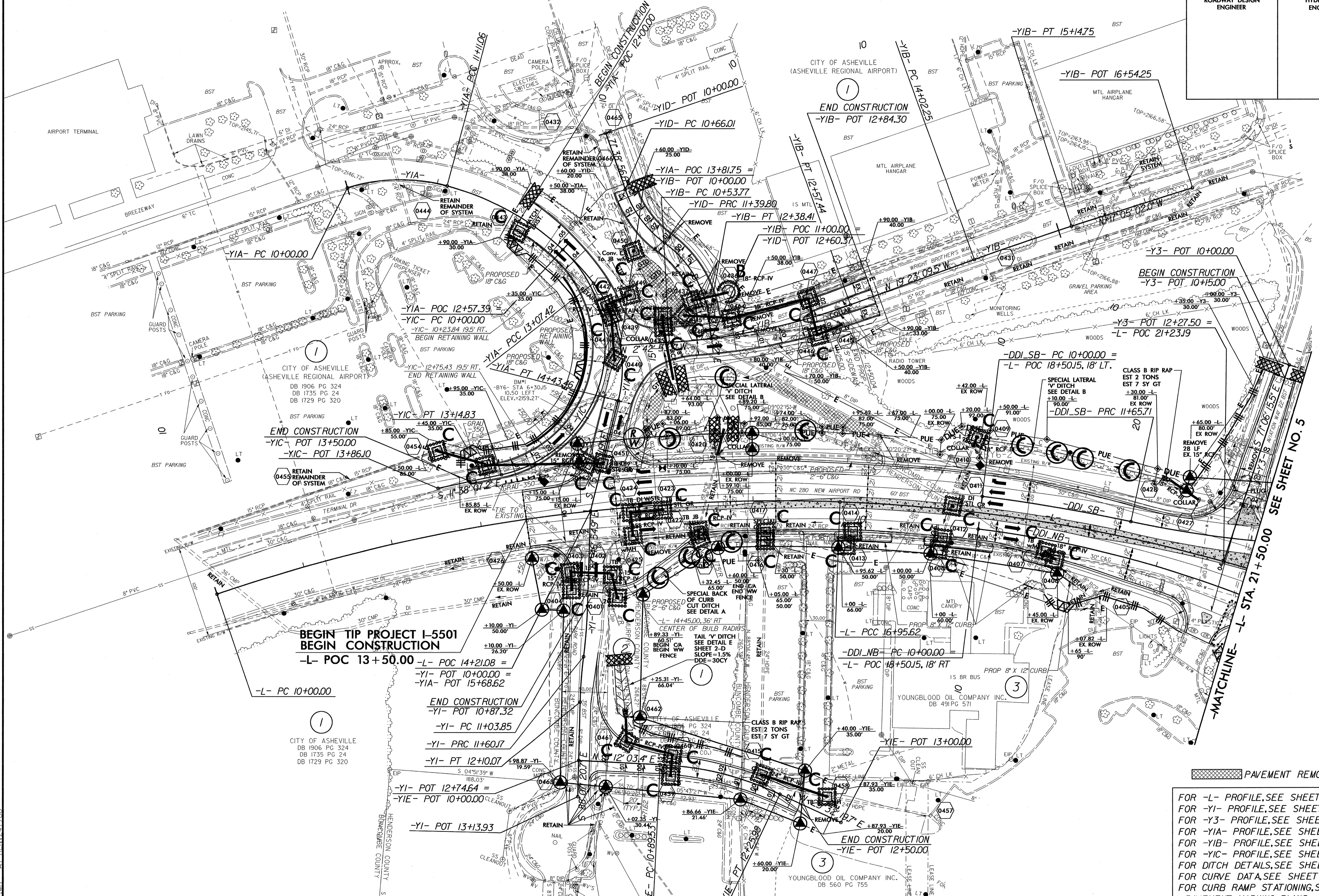
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8/17/199

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NAD 83/NSRS 2007

PROJECT REFERENCE NO.	SHEET NO.
I-5501	EC-8/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHEET 8
 FOR -YI- PROFILE, SEE SHEET 14
 FOR -Y3- PROFILE, SEE SHEET 14
 FOR -YIA- PROFILE, SEE SHEET 15
 FOR -YIB- PROFILE, SEE SHEET 15
 FOR -YIC- PROFILE, SEE SHEET 15
 FOR DITCH DETAILS, SEE SHEET 2-F
 FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS

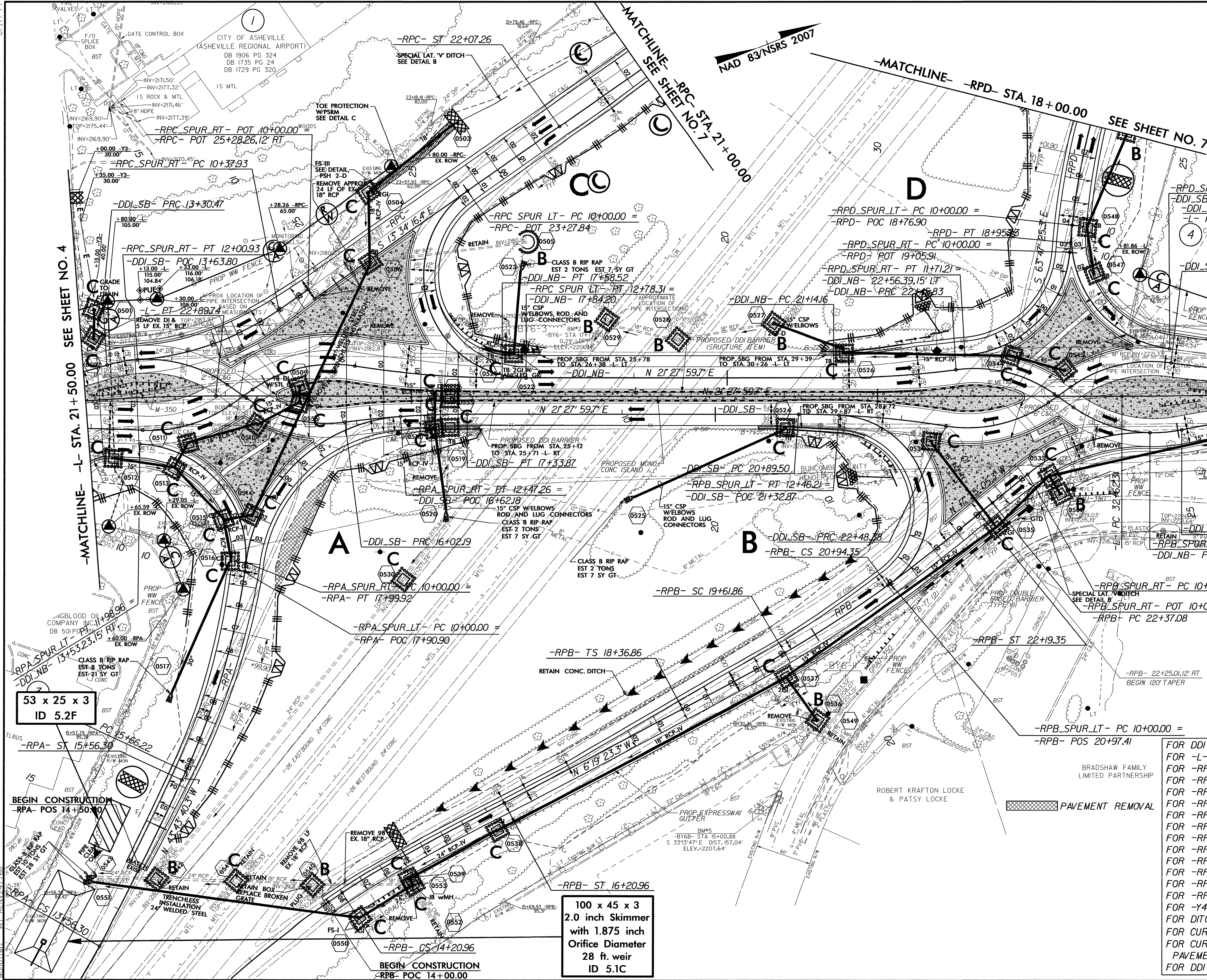
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**BEGIN TIP PROJECT I-5501
 BEGIN CONSTRUCTION**
 -L- POC 13+50.00

END CONSTRUCTION
 -YI- POT 10+87.32

END CONSTRUCTION
 -YIE- POT 12+50.00

PROJECT REFERENCE NO.		SHEET NO.	
1-5501		EC-9/CONST.5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



53 x 25 x 3
ID 5.2F

100 x 45 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
28 ft. weir
ID 5.1C

FOR DDI DETAIL SHEET, SEE SHEET 2-D
 FOR -L- PROFILE, SEE SHEET 8
 FOR -RPD- PROFILE, SEE SHEET 10
 FOR -RPD_SPUR_LT- PROFILE, SEE SHEET 10
 FOR -RPA- PROFILE, SEE SHEET 10
 FOR -RPC- PROFILE, SEE SHEET 11
 FOR -RPC_SPUR_LT- PROFILE, SEE SHEET 11
 FOR -RPA_SPUR_RT- PROFILE, SEE SHEET 12
 FOR -RPA_SPUR_LT- PROFILE, SEE SHEET 12
 FOR -RPA- PROFILE, SEE SHEET 13
 FOR -RPB- PROFILE, SEE SHEET 13
 FOR -RPB_SPUR_LT- PROFILE, SEE SHEET 13
 FOR -RPB_SPUR_RT- PROFILE, SEE SHEET 13
 FOR -Y4- PROFILE, SEE SHEET 14
 FOR DITCH DETAILS, SEE SHEET 2-D
 FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS
 FOR DDI BARRIER DETAIL SEE SHEET 2-

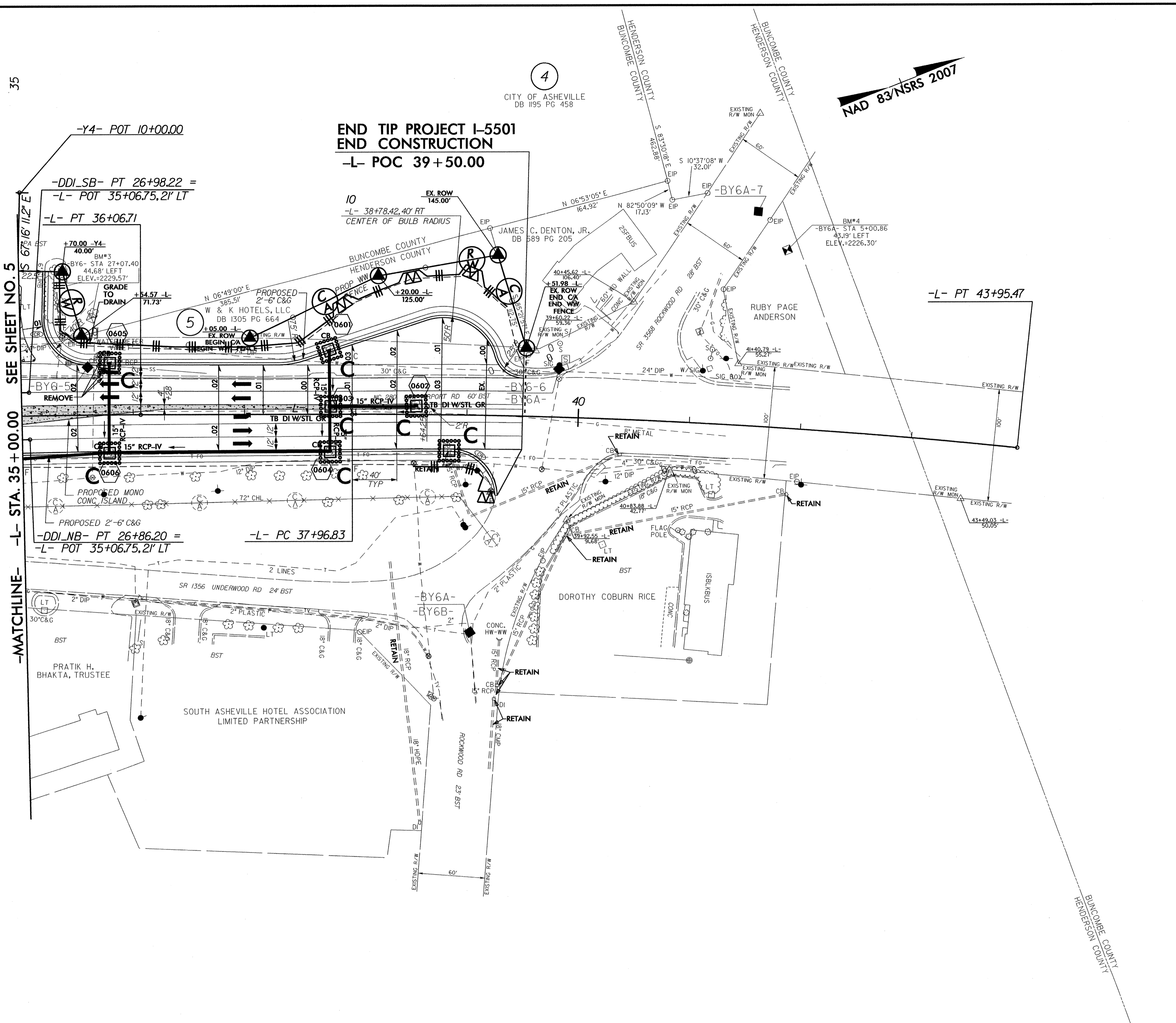
PAVEMENT REMOVAL

BRADSHAW FAMILY LIMITED PARTNERSHIP

ROBERT KRAFTON LOCKE & PATSY LOCKE

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PROJECT REFERENCE NO.	SHEET NO.
I-5501	EC-10/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**END TIP PROJECT I-5501
END CONSTRUCTION
-L- POC 39+50.00**

NAD 83/NSRS 2007

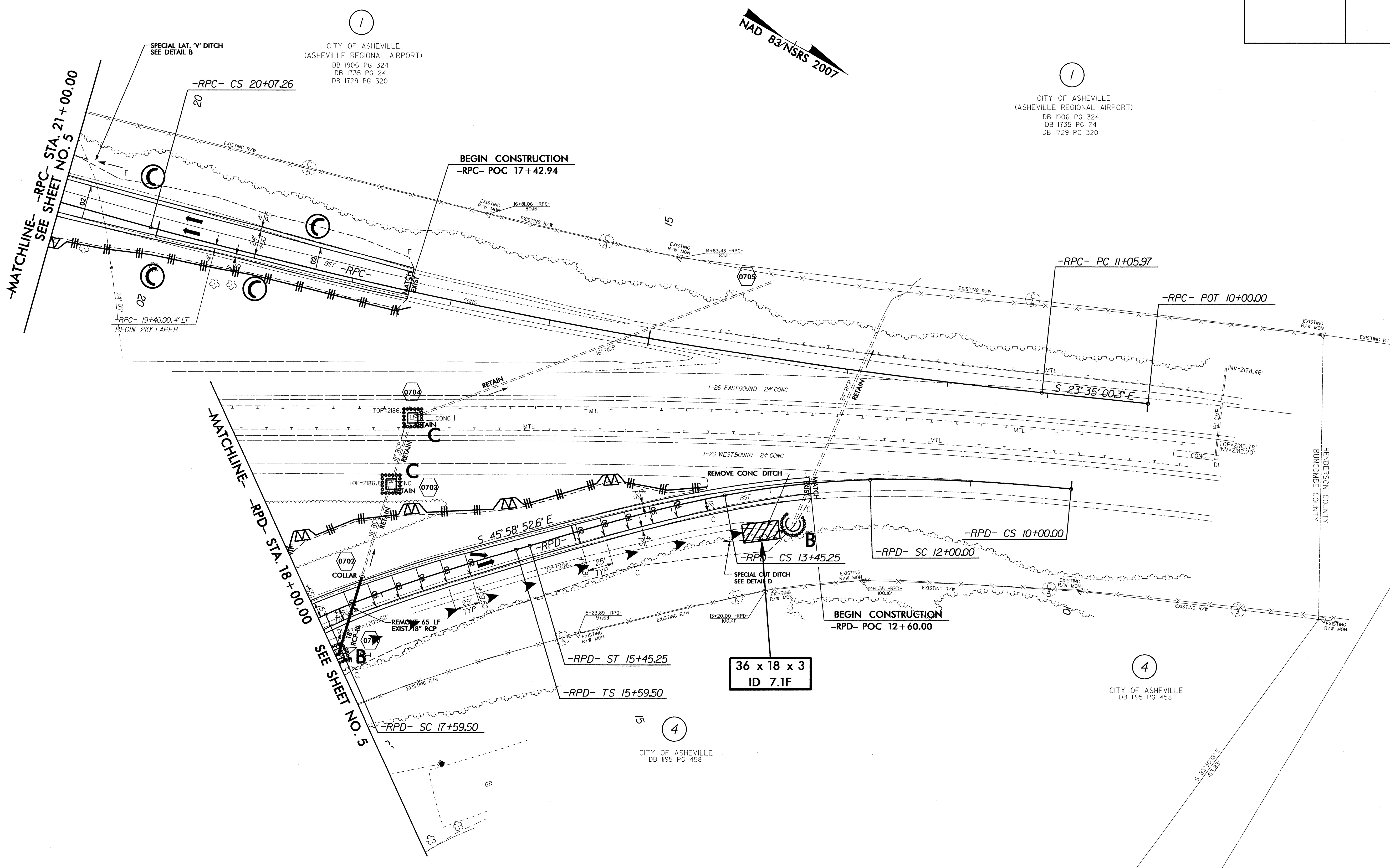
SEE SHEET NO. 5
-L- STA. 35+00.00
-MATCHLINE-

FOR -L- PROFILE, SEE SHEET 9
FOR -Y4- PROFILE, SEE SHEET 14
FOR -RPA- PROFILE, SEE SHEET 12
FOR -RPB- PROFILE, SEE SHEET 13
FOR DITCH DETAILS, SEE SHEET 2-D
FOR CURVE DATA, SEE SHEET 2-F
FOR CURB RAMP STATIONING, SEE PAVEMENT MARKING PLANS

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PROJECT REFERENCE NO.	SHEET NO.
I-550I	EC-II/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 adholien AT BENTLEY



FOR -RPD- PROFILE, SEE SHEET 10
 FOR -RPC- PROFILE, SEE SHEET 11
 FOR DITCH DETAILS, SEE SHEET 2-F
 FOR CURVE DATA SEE SHEET 2-F