

09/08/99

See Sheet 1-A For Index of Sheets

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

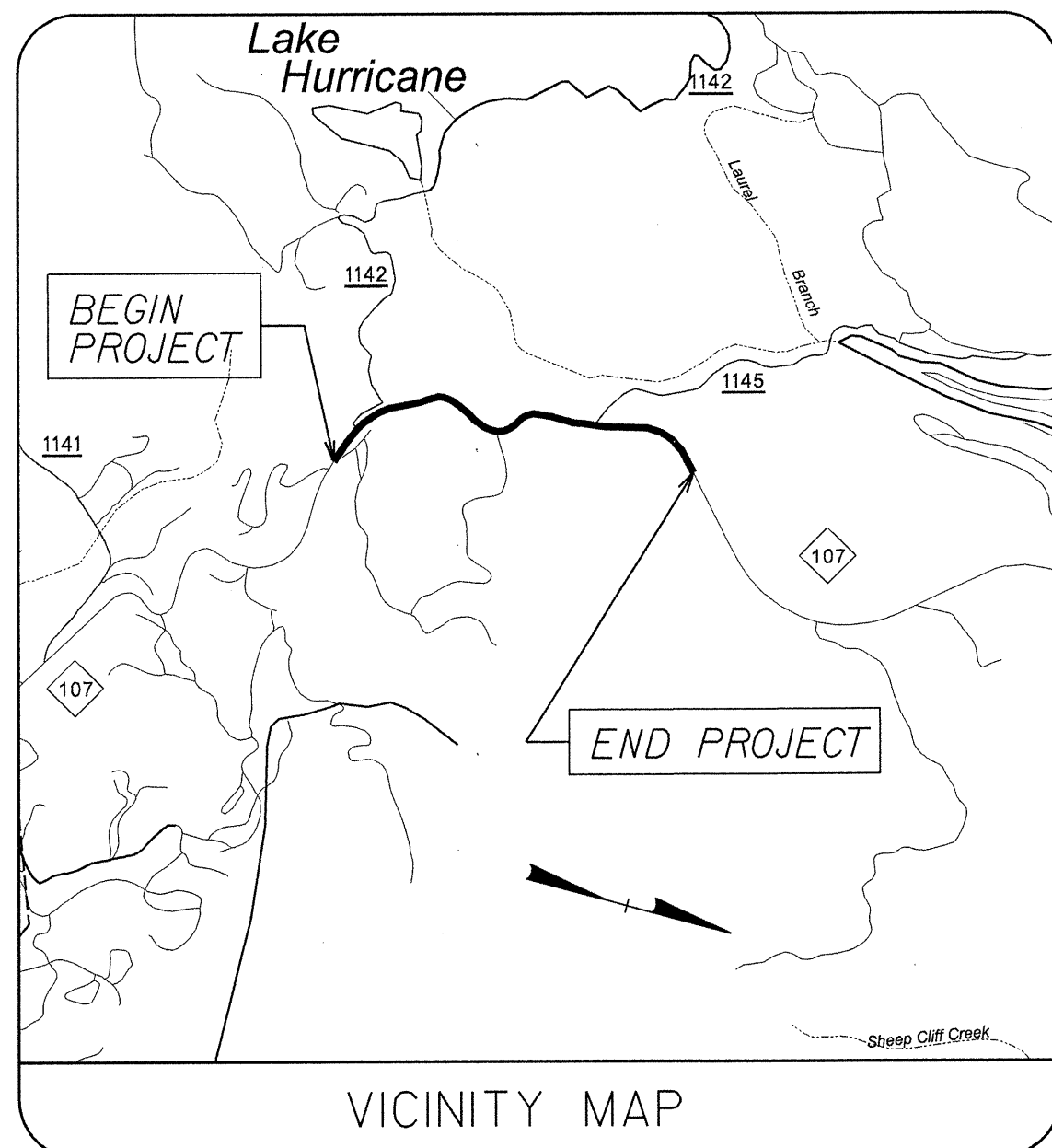
JACKSON COUNTY

LOCATION: NC 107 FROM JUST SOUTH OF SR 1142 (LAUREL KNOB ROAD) TO JUST NORTH OF SR 1145 (NORTH NORTON ROAD)

TYPE OF WORK: EROSION CONTROL

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5202	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42803.1.ST1	STM-0107(11)	P.E.	
42803.3.ST1	STM-0107(11)	CONST.	

PROJECT: R-5202

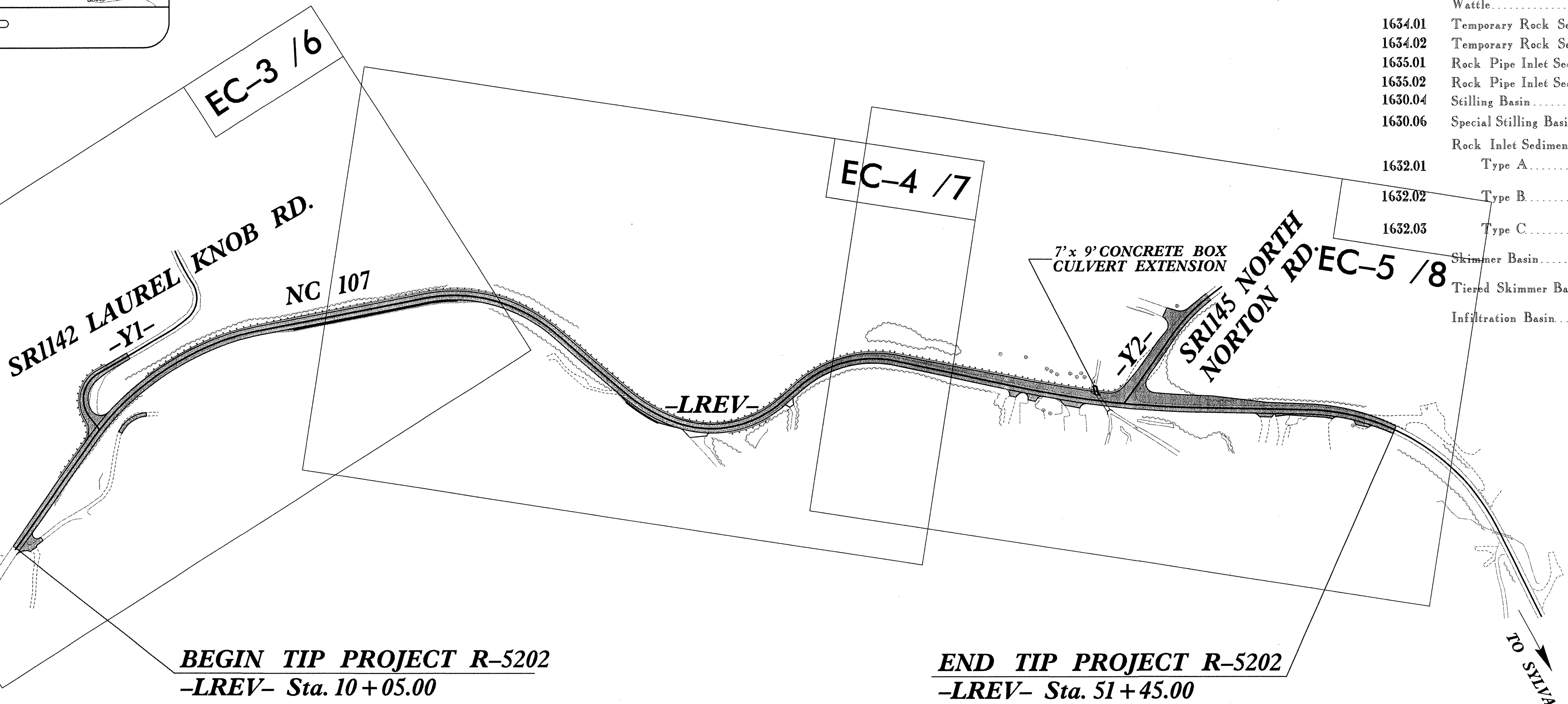


ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
 Refer To E. C. Special Provisions for Special Considerations.

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT
 High Quality Water Zone(s) Exist
 From Sta. STA. 43+15 +/-
 to Sta. STA. 43+85 +/-
 Refer To E. C. Special Provisions for Special Considerations.

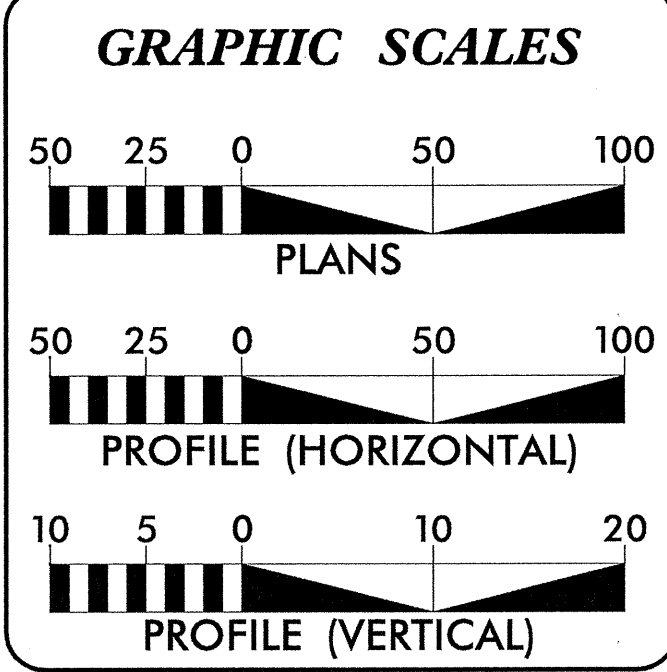


EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	▲▲▲▲▲
1622.01	Temporary Berms and Slope Drains	T
	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	⌒
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	U
1635.02	Rock Pipe Inlet Sediment Trap Type-B	U
1630.04	Stilling Basin	▭
1630.06	Special Stilling Basin	▭
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	▭
	Tiered Skimmer Basin	▭
	Infiltration Basin	▭

CONTRACT: C202251

DESIGN EXCEPTION REQUIRED FOR HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, SHOULDER WIDTH, AND STOPPING SIGHT DISTANCE.



PROJECT LENGTH

Length Roadway	
TIP Project R-5202	0.784 Mi.
TOTAL LENGTH	
TIP Project R-5202	0.784 Mi.

PLANS PREPARED BY :

RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE, SUITE 350
 RALEIGH, NORTH CAROLINA 27609
 NC LICENSE NO. F-0112

DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

ROW DATE: April 16, 2007

LETTING DATE:

B. Keith Skinner, P.E.
 PROJECT ENGINEER

Matthew L. Cook, P.E.
 EROSION CONTROL DESIGN ENGINEER
 LEVEL IIIA CERTIFICATION NO. 117

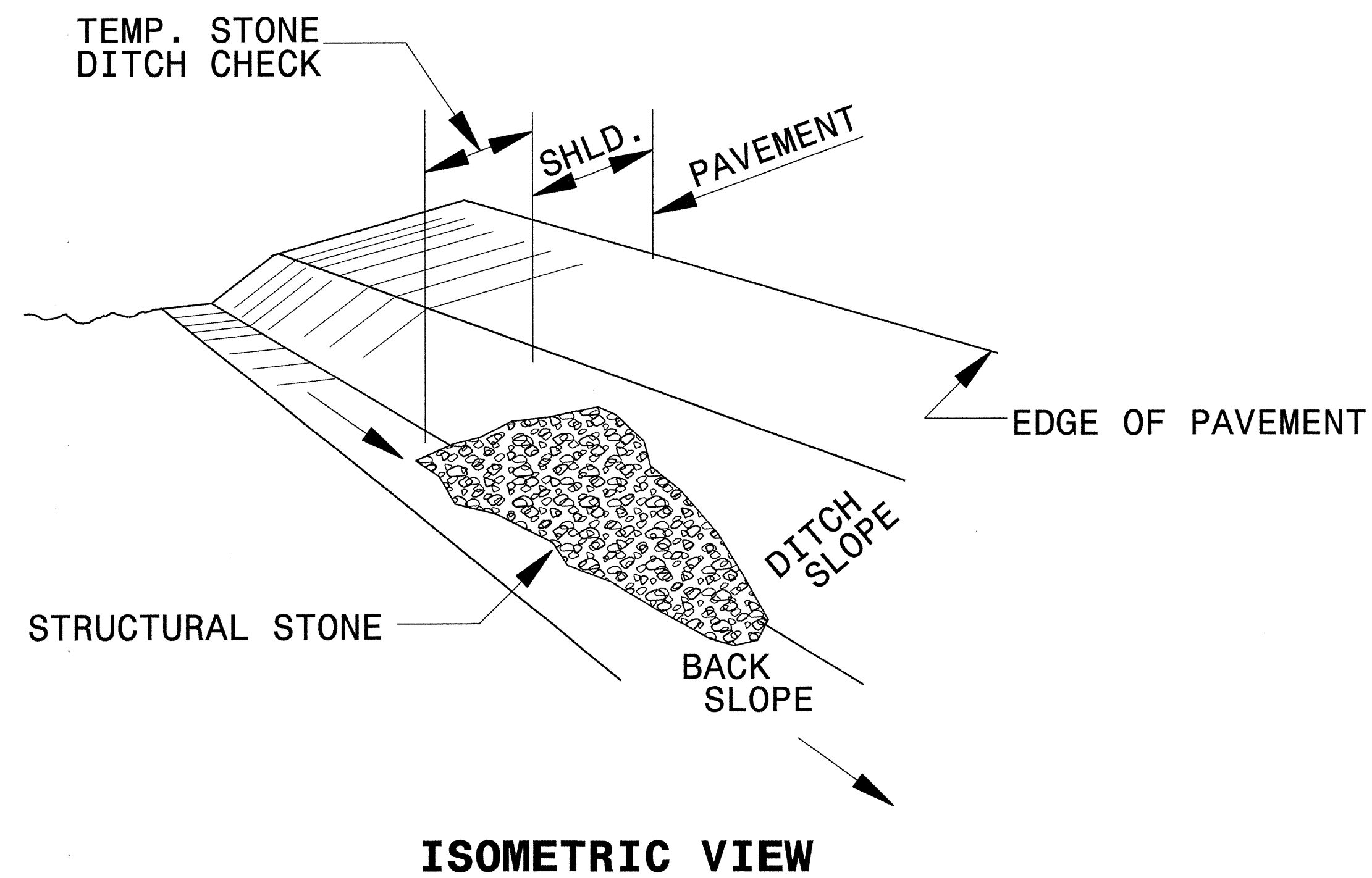
Roadway Standard Drawings

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
1606.01	Special Sediment Control Fence
1622.01	Temporary Berms and Slope Drains
1632.03	Rock Inlet Sediment Trap Type C
1633.01	Temporary Rock Silt Check Type A
1635.01	Rock Pipe Inlet Sediment Trap Type A
1635.02	Rock Pipe Inlet Sediment Trap Type B

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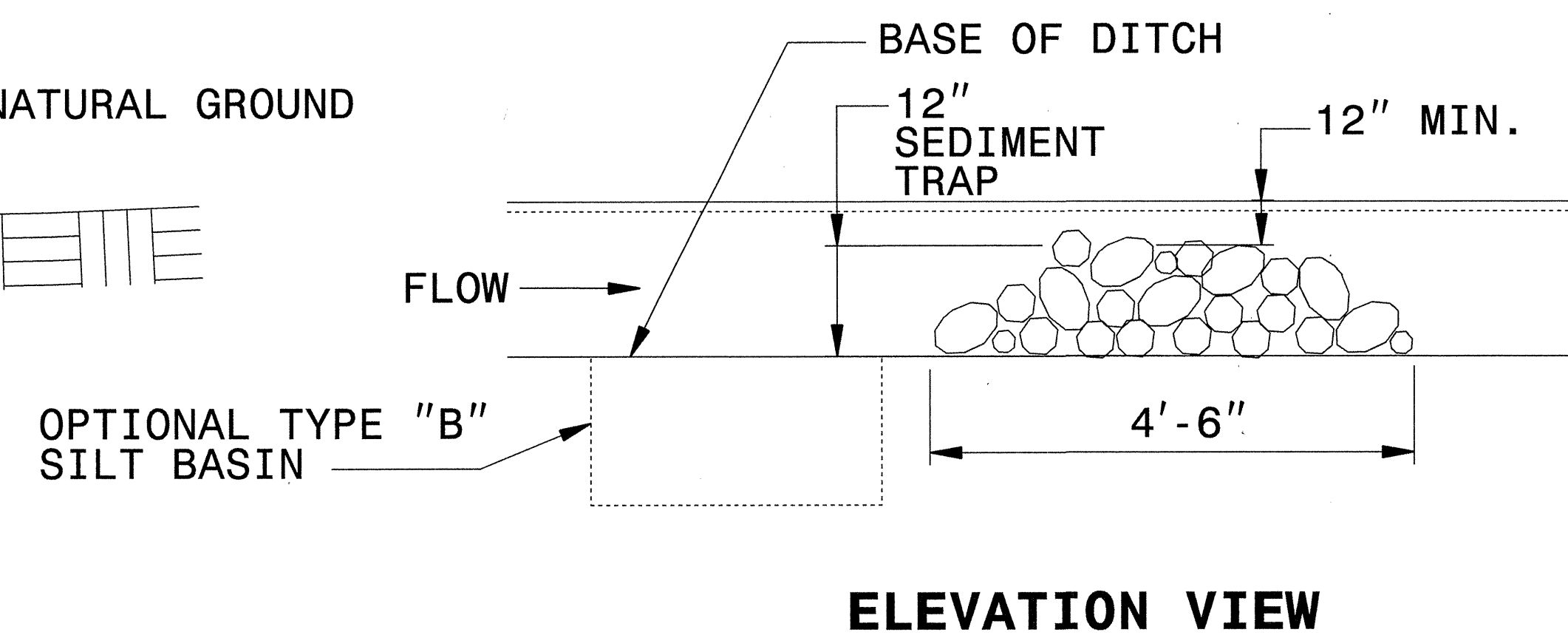
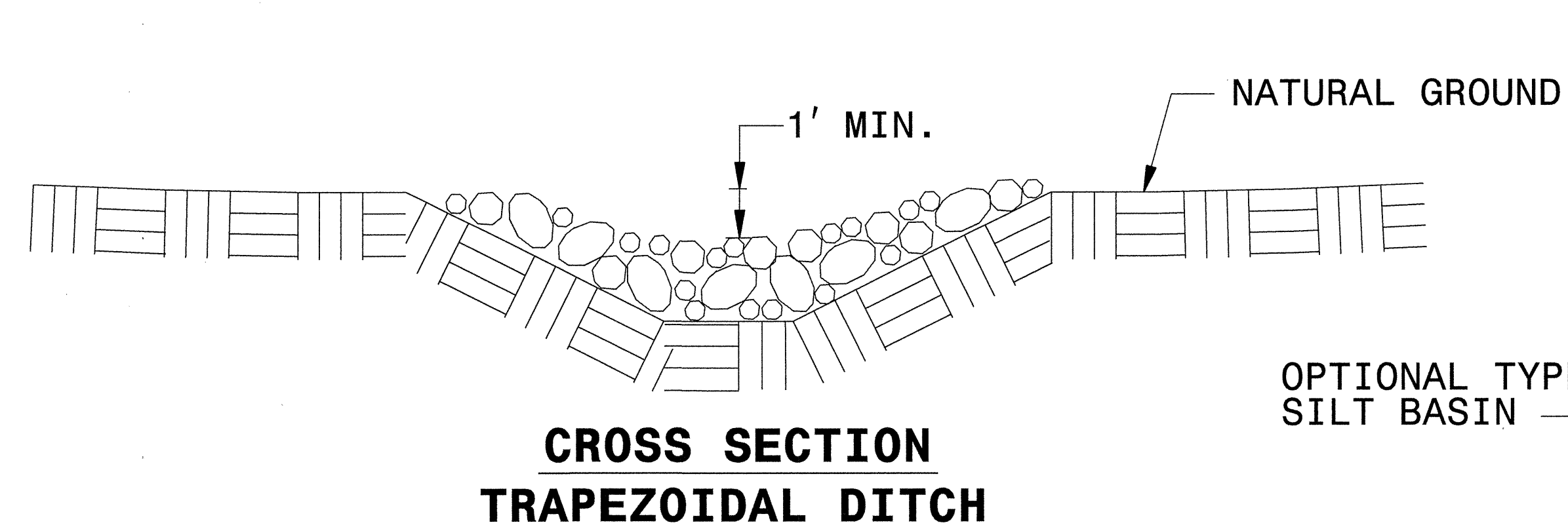
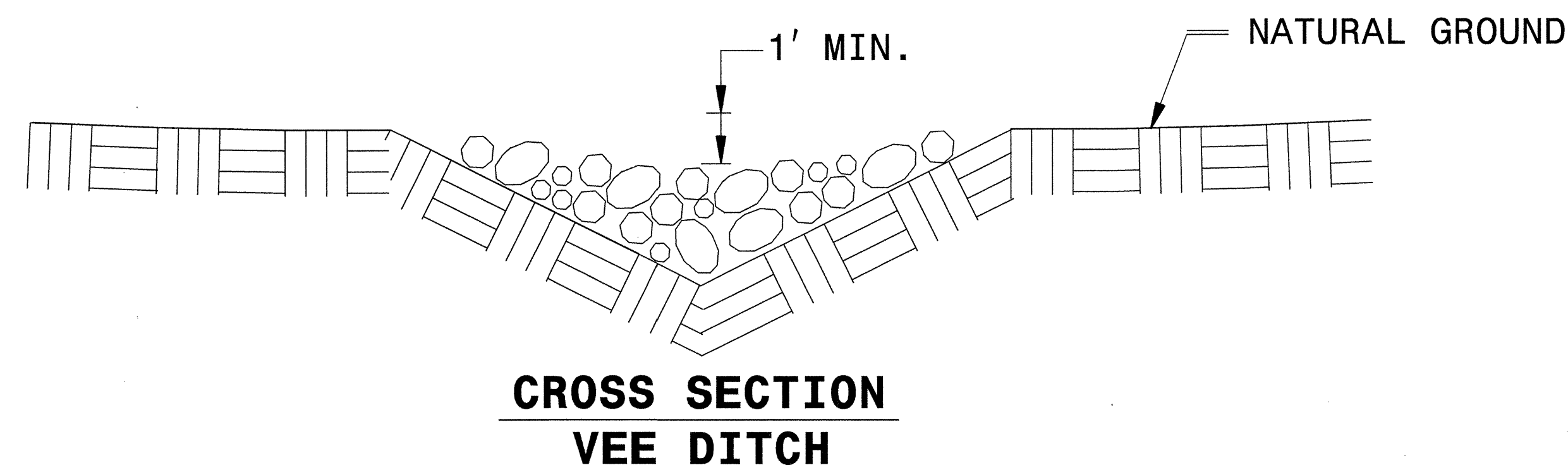
TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



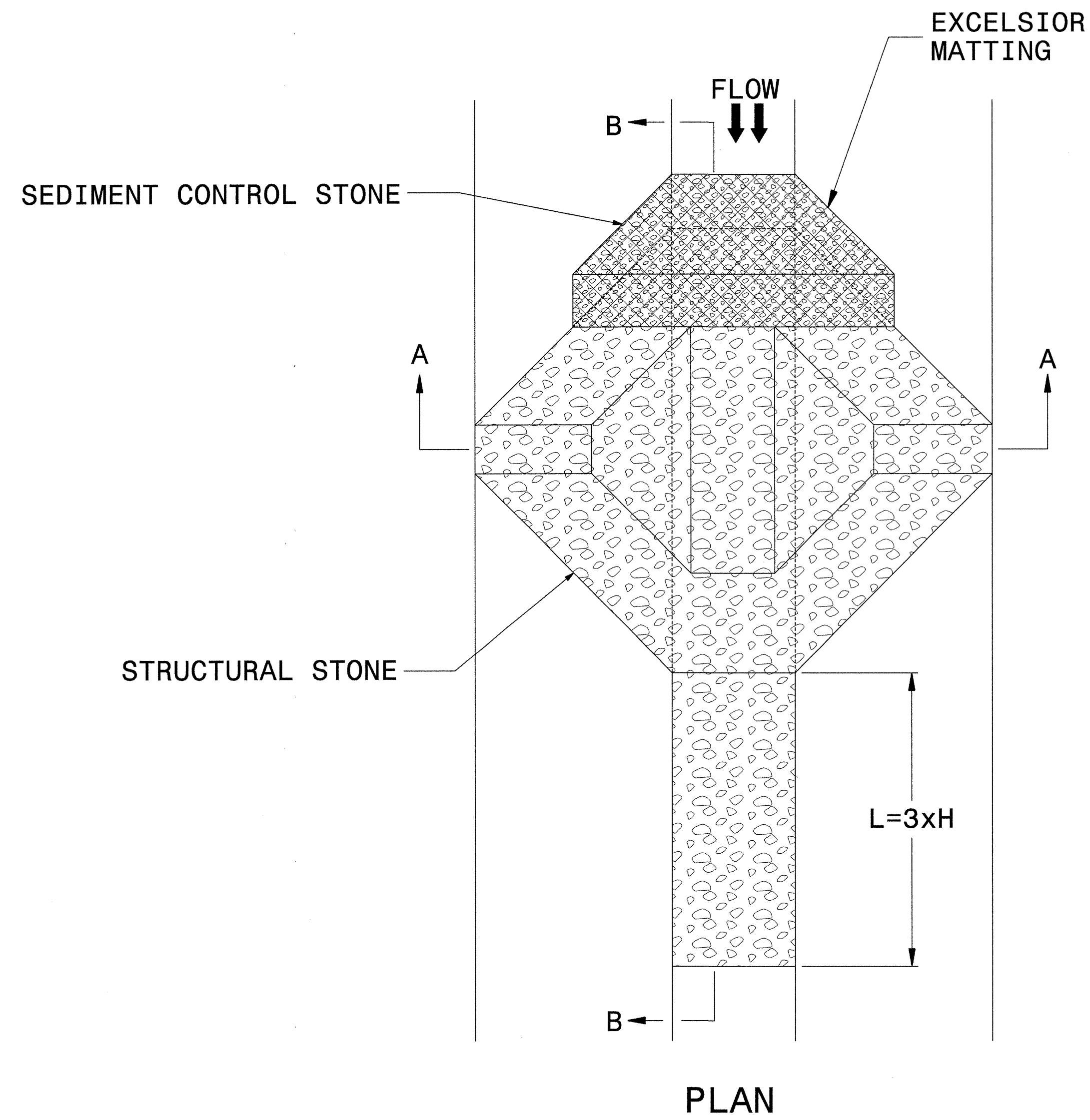
NOTES:

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%.



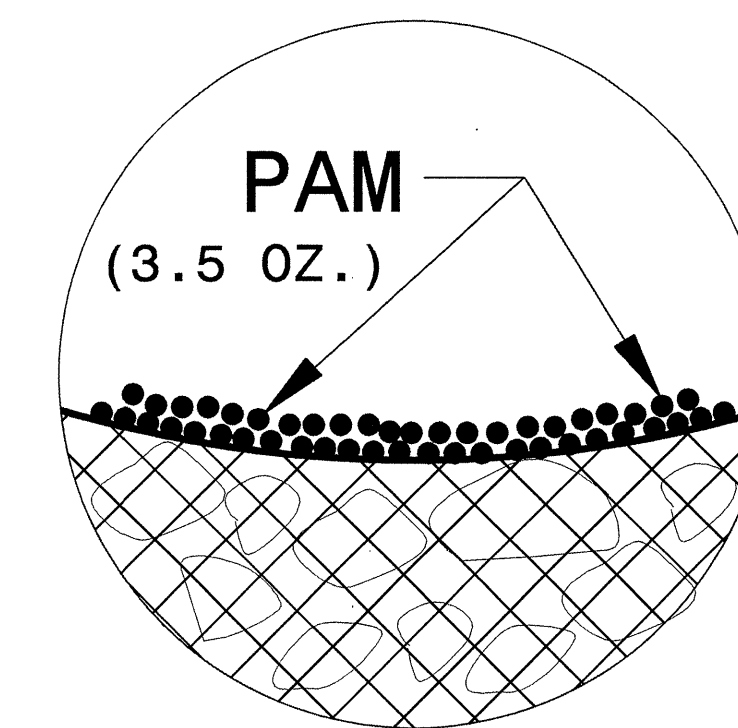
TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



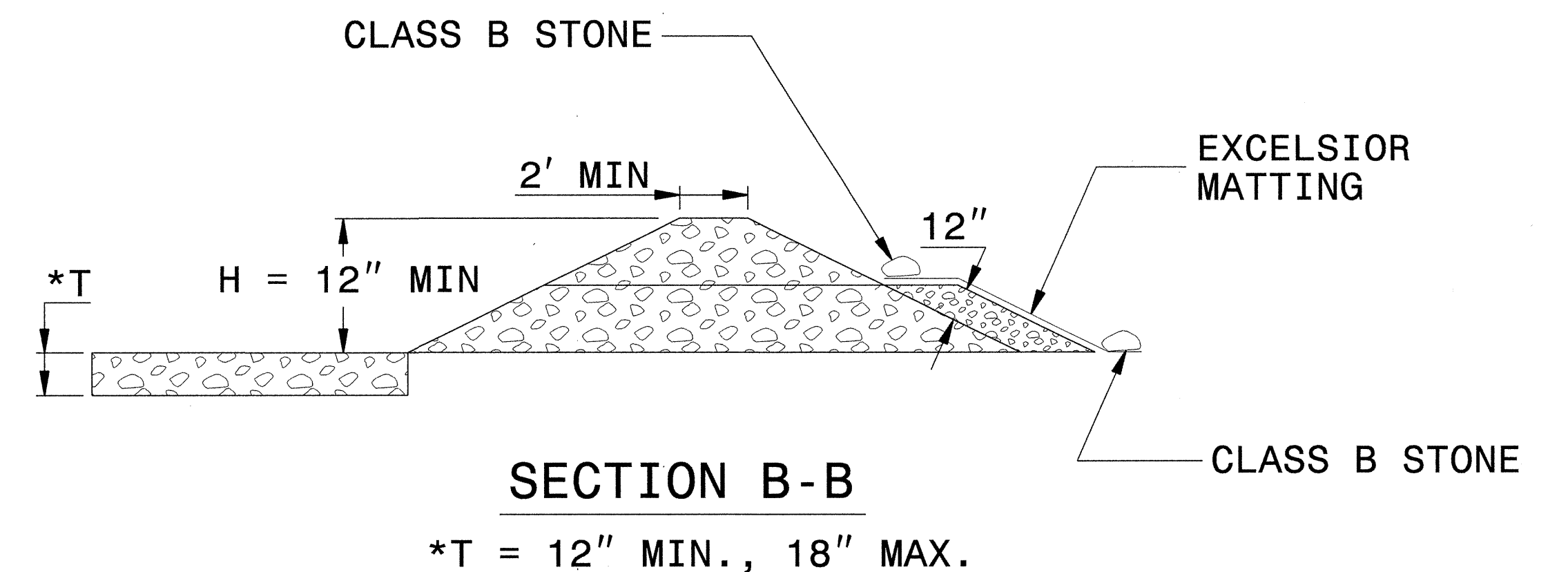
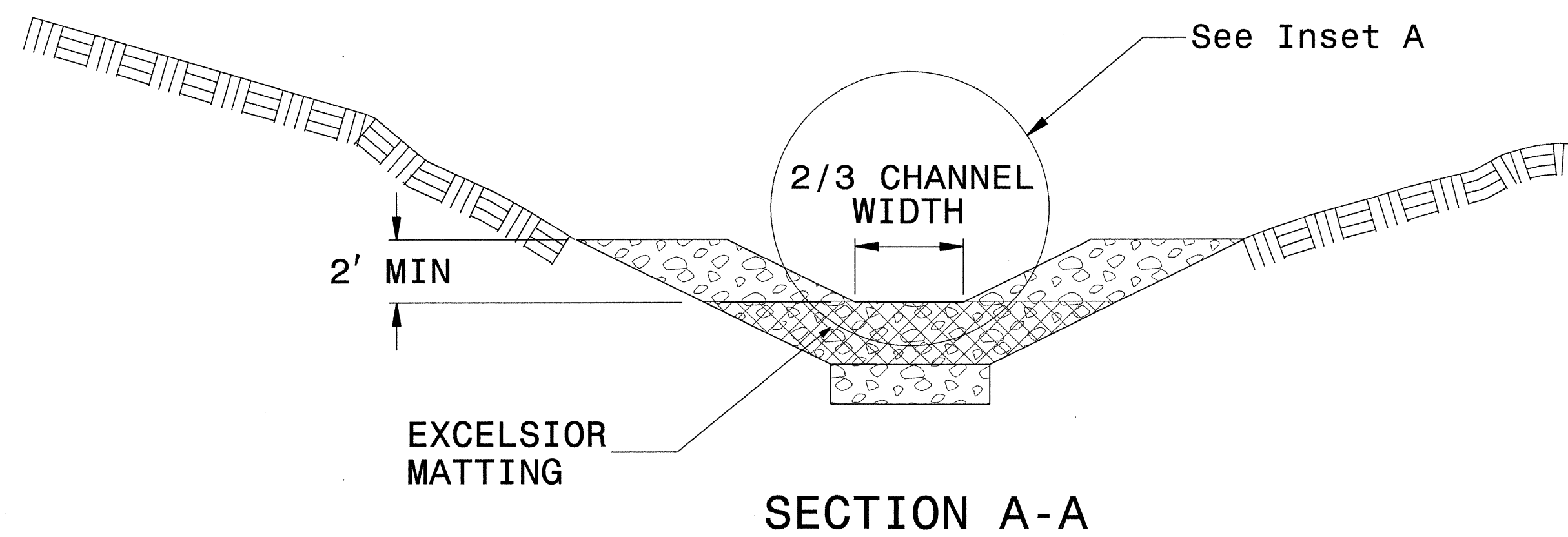
NOTES

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

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.



INSET A



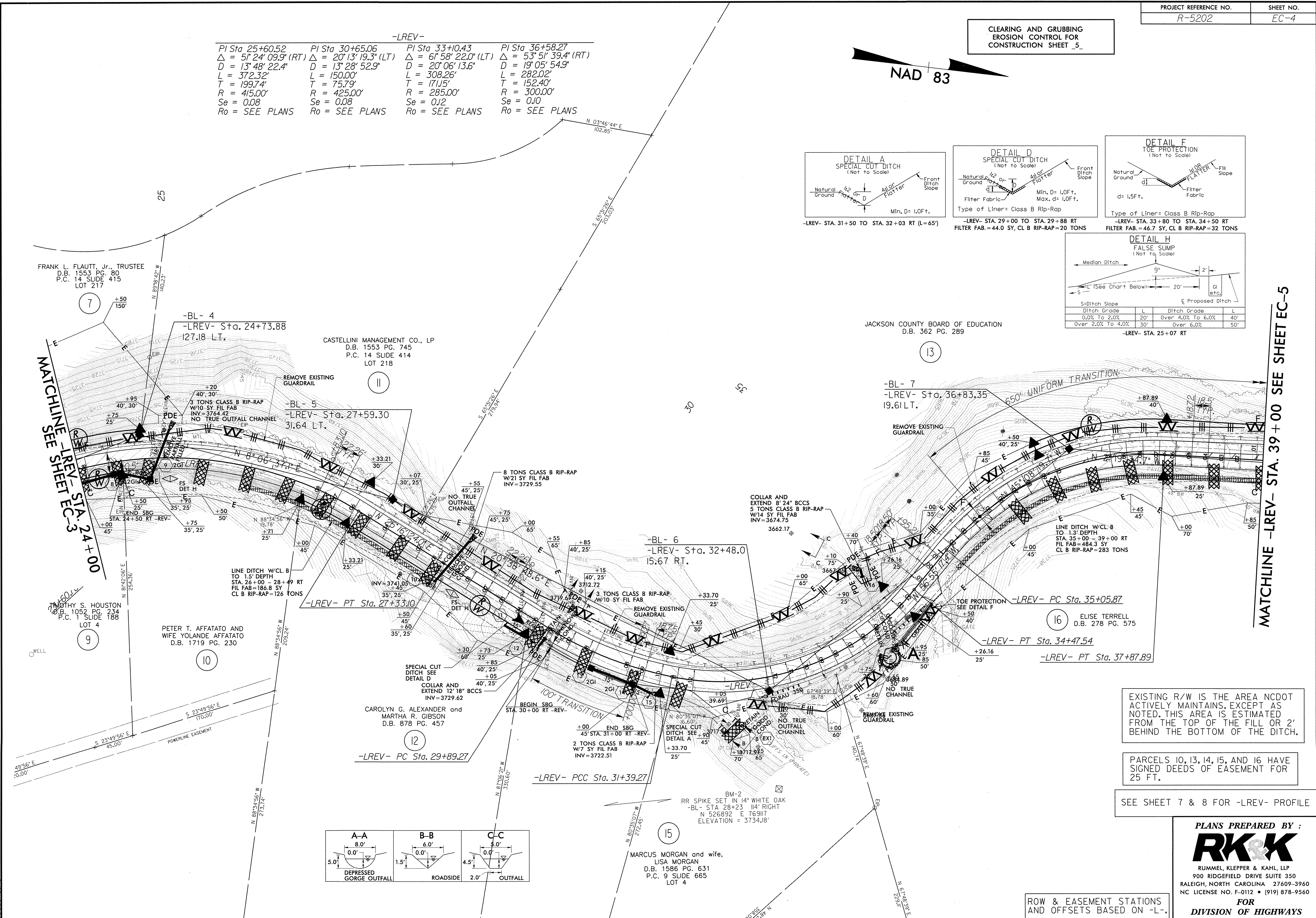
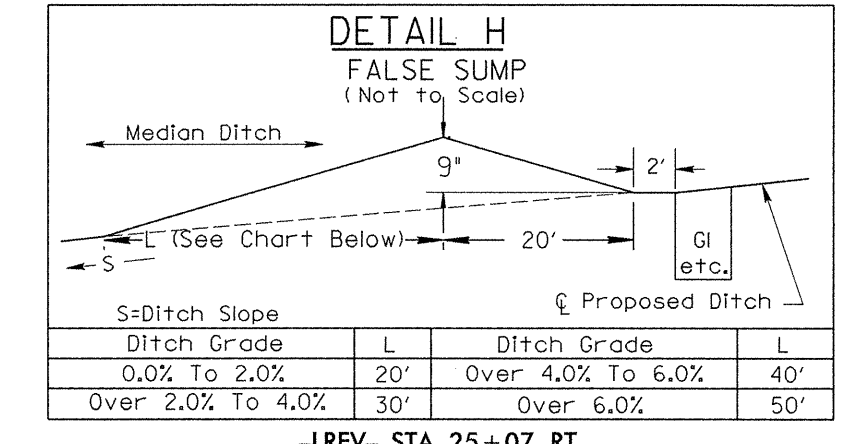
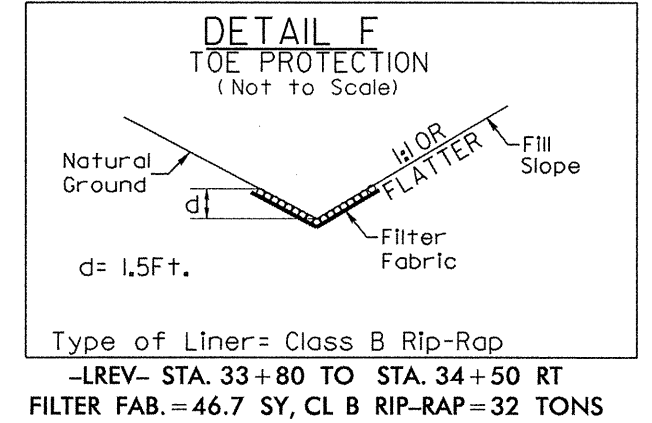
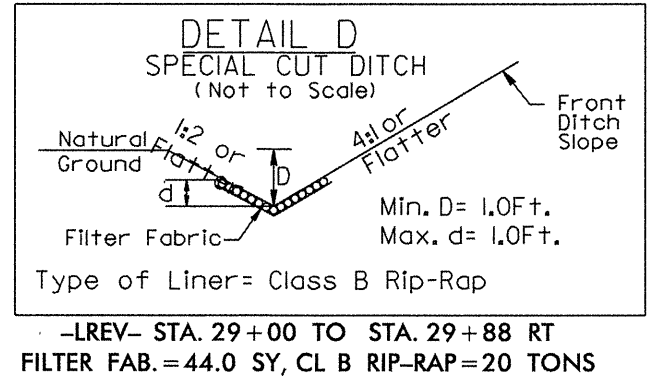
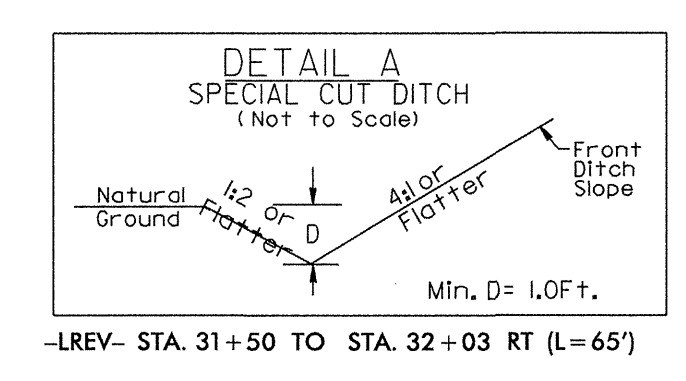
NOT TO SCALE

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET_5_

NAD 83

-LREV-

PI Sta 25+60.52 Δ = 51° 24' 09.9" (RT) D = 13' 48' 22.4" L = 372.32' T = 199.74' R = 415.00' Se = 0.08 Ro = SEE PLANS	PI Sta 30+65.06 Δ = 20° 13' 19.3" (LT) D = 13' 28' 52.9" L = 150.00' T = 75.79' R = 425.00' Se = 0.08 Ro = SEE PLANS	PI Sta 33+10.43 Δ = 61° 58' 22.0" (LT) D = 20' 06' 13.6" L = 308.26' T = 171.15' R = 285.00' Se = 0.12 Ro = SEE PLANS	PI Sta 36+58.27 Δ = 53° 51' 39.4" (RT) D = 19' 05' 54.9" L = 282.02' T = 152.40' R = 300.00' Se = 0.10 Ro = SEE PLANS
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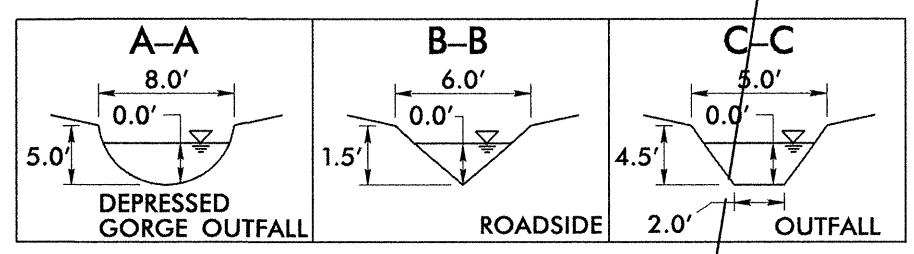
MATCHLINE -LREV- STA. 24+00
SEE SHEET EC-3

MATCHLINE -LREV- STA. 39+00 SEE SHEET EC-5

EXISTING R/W IS THE AREA NCDOT ACTIVELY MAINTAINS, EXCEPT AS NOTED, THIS AREA IS ESTIMATED FROM THE TOP OF THE FILL OR 2' BEHIND THE BOTTOM OF THE DITCH.

PARCELS 10, 13, 14, 15, AND 16 HAVE SIGNED DEEDS OF EASEMENT FOR 25 FT.

SEE SHEET 7 & 8 FOR -LREV- PROFILE



ROW & EASEMENT STATIONS AND OFFSETS BASED ON -L-

PLANS PREPARED BY :

RK&K

RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

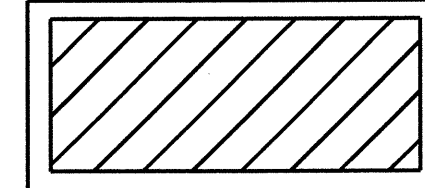
FOR
DIVISION OF HIGHWAYS

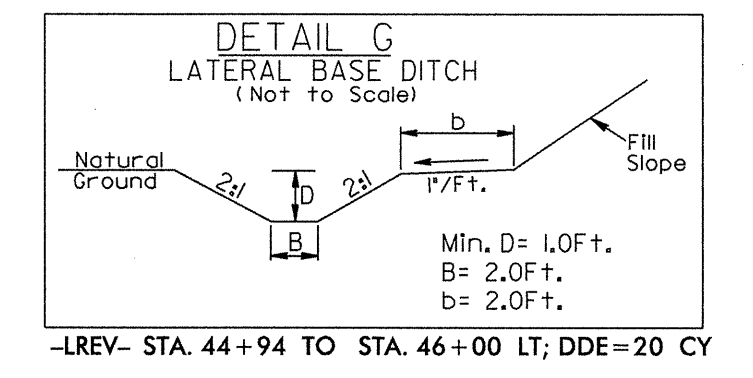
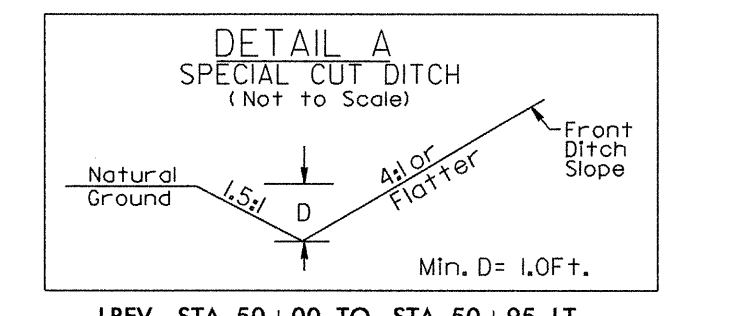
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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

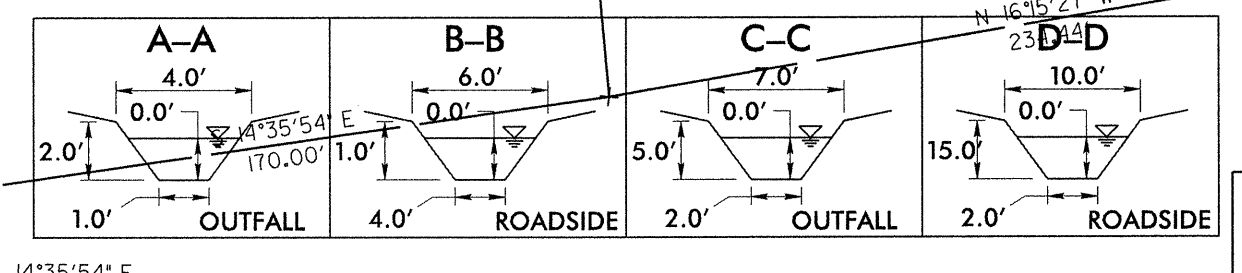
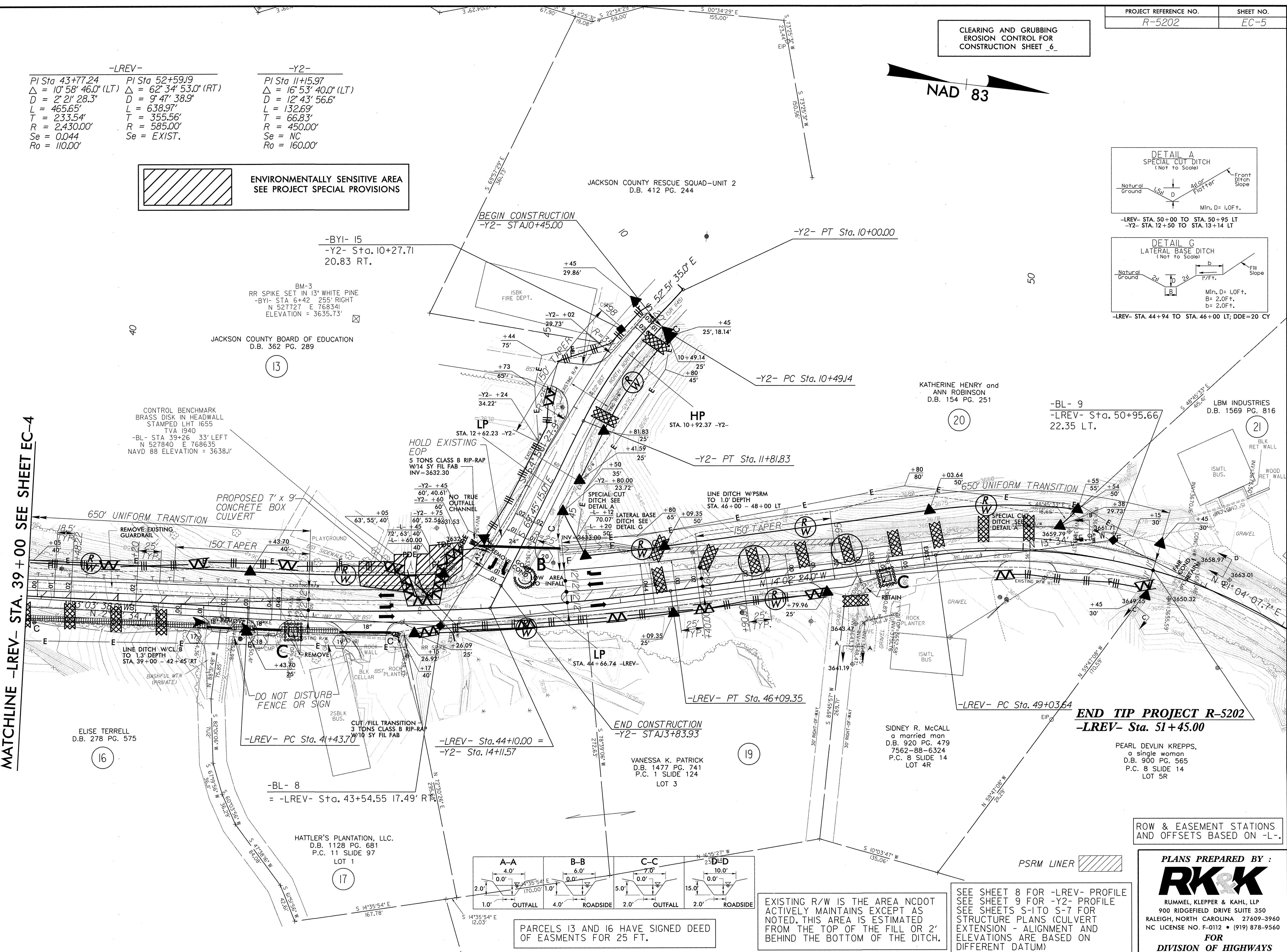
NAD 83

-LREV-		-Y2-	
PI Sta 43+77.24	PI Sta 52+59.19	PI Sta 11+15.97	
$\Delta = 10' 58' 46.0''$ (LT)	$\Delta = 62' 34' 53.0''$ (RT)	$\Delta = 16' 53' 40.0''$ (LT)	
D = 2' 21' 28.3"	D = 9' 47' 38.9"	D = 12' 43' 56.6"	
L = 465.65'	L = 638.97'	L = 132.69'	
T = 233.54'	T = 355.56'	T = 66.83'	
R = 2,430.00'	R = 585.00'	R = 450.00'	
Se = 0.044	Se = EXIST.	Se = NC	
Ro = 110.00'		Ro = 160.00'	

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



MATCHLINE -LREV- STA. 39+00 SEE SHEET EC-4




PARCELS 13 AND 16 HAVE SIGNED DEED OF EASEMENTS FOR 25 FT.

EXISTING R/W IS THE AREA NCDOT ACTIVELY MAINTAINS EXCEPT AS NOTED. THIS AREA IS ESTIMATED FROM THE TOP OF THE FILL OR 2' BEHIND THE BOTTOM OF THE DITCH.

SEE SHEET 8 FOR -LREV- PROFILE
SEE SHEET 9 FOR -Y2- PROFILE
SEE SHEETS S-1 TO S-7 FOR
STRUCTURE PLANS (CULVERT
EXTENSION - ALIGNMENT AND
ELEVATIONS ARE BASED ON
DIFFERENT DATUM)

ROW & EASEMENT STATIONS
AND OFFSETS BASED ON -L-.

PLANS PREPARED BY:

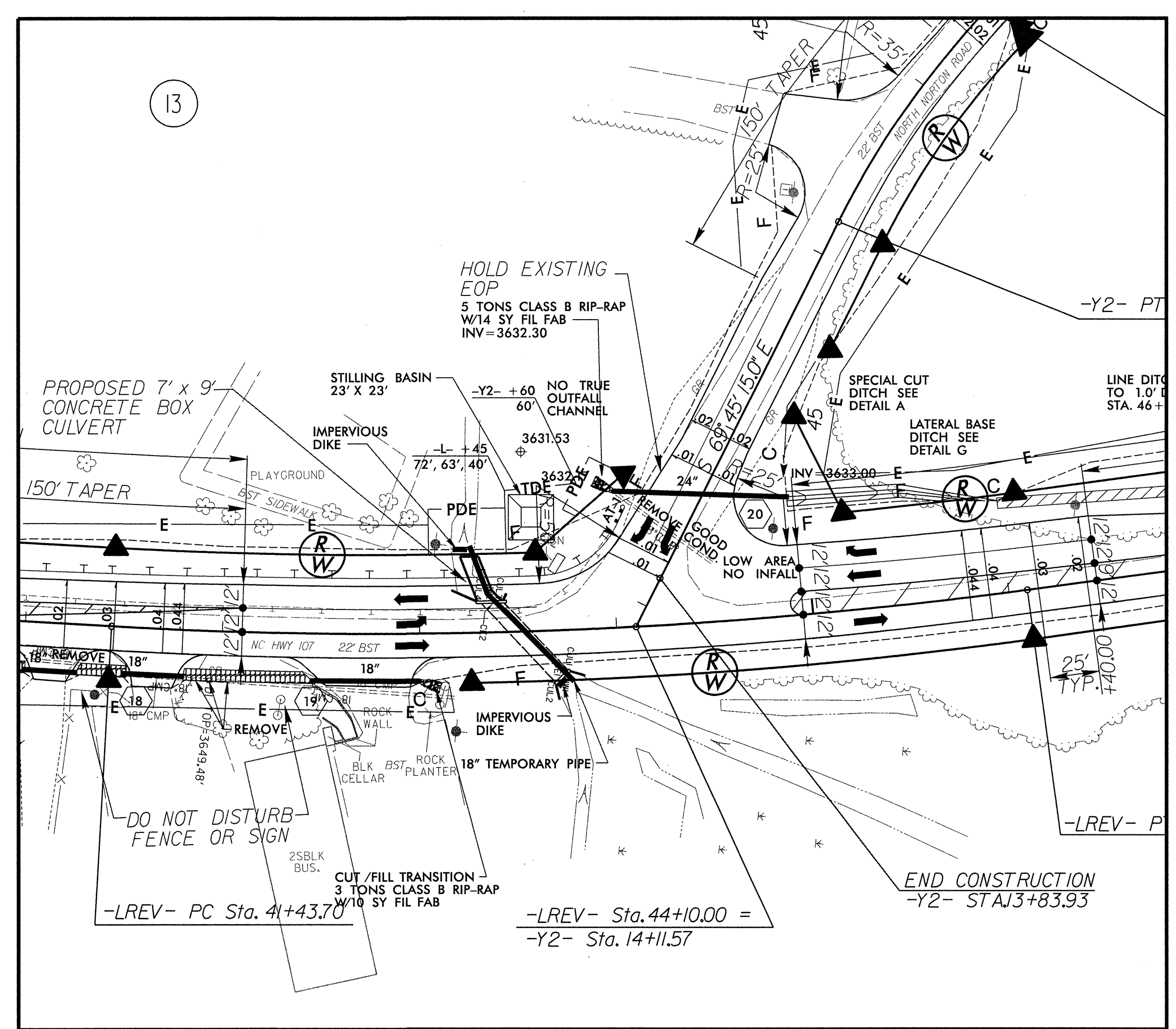


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900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
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FOR
DIVISION OF HIGHWAYS

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CONSTRUCTION SEQUENCE FOR RCBC - LREV- 43+50 UNNAMED TRIB. TO HURRICANE CREEK

1. CONSTRUCT IMPERVIOUS DIKES (I.E. SAND BAGS) WITH 1-18" TEMPORARY PIPE UPSTREAM AND DOWNSTREAM FROM THE PROPOSED CULVERT WORK AREA.
2. CONSTRUCT EITHER A 23' X 23' TEMPORARY STILLING BASIN WITH A MINIMUM CAPACITY OF 60 CYD OR A SPECIAL STILLING BASIN (BLACK BAG).
3. CONSTRUCT PROPOSED 27' - 9' X 7' RCBC EXTENSION.
4. REMOVE THE IMPERVIOUS DIKES AND TEMPORARY PIPE.
5. REMOVE THE TEMPORARY STILLING BASIN OR SPECIAL STILLING BASIN (BLACK BAG).
6. INSTALL RIPRAP AT OUTLET AS SHOWN ON THE CULVERT SURVEY REPORT PLAN AND CHANNEL TYPICAL SECTIONS.
7. CONSTRUCT EMBANKMENTS AND PERMANENT PAVEMENT.

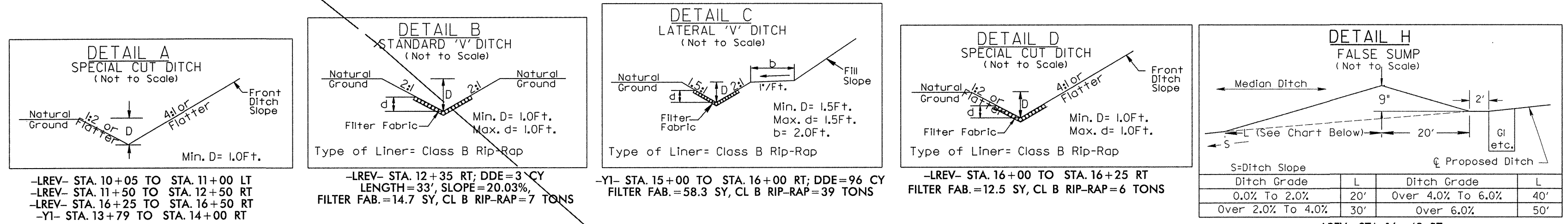


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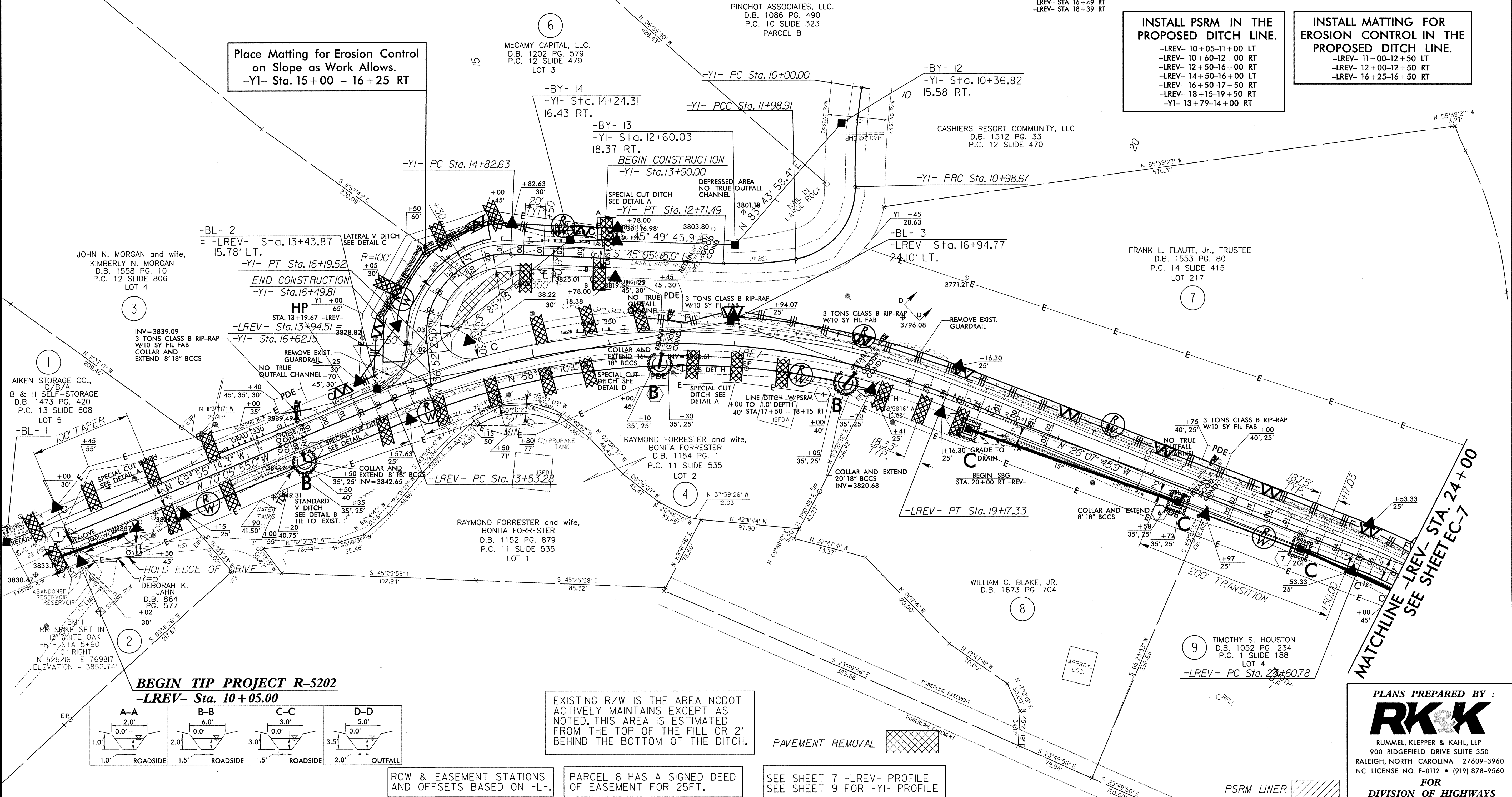
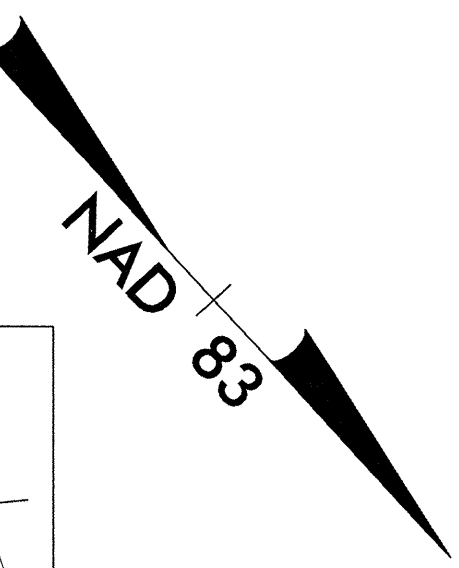
PLANS PREPARED BY :
RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560
 FOR
 DIVISION OF HIGHWAYS

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "R2224A-A5" WITH NAD 1983 STATE PLANE GROUND COORDINATES OF NORTHING: 531164.0779(±) EASTING: 770135.6022(±) ALL LINEAR DISTANCES ARE LOCALIZED HORIZONTAL DISTANCES. THE VERTICAL DATUM IS BASED ON NCGS (TVA) MONUMENT "LHT-1655" (ELEV. 3638.10') (NAVD 88) THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "R2224A-A5" TO -LREV- STATION 10+05.00 IS S 3° 17' 30.2" W 6,037.07' ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

-LREV-		-YI-	
PI Sta 16+50.01 Δ = 43° 58' 09.1" (RT) D = 7' 47' 43.2" L = 564.04' T = 296.73' R = 735.00' Se = 0.06 Ro = 110'	PI Sta 25+60.52 Δ = 51° 24' 09.9" (RT) D = 13' 48' 22.4" L = 372.32' T = 199.74' R = 415.00' Se = 0.08	PI Sta 10+49.47 Δ = 10° 34' 00.3" (LT) D = 10' 42' 34.2" L = 98.67' T = 49.47' R = 535.00'	PI Sta 11+59.57 Δ = 82° 02' 49.1" (RT) D = 81' 51' 04.0" L = 100.24' T = 60.90' R = 70.00'



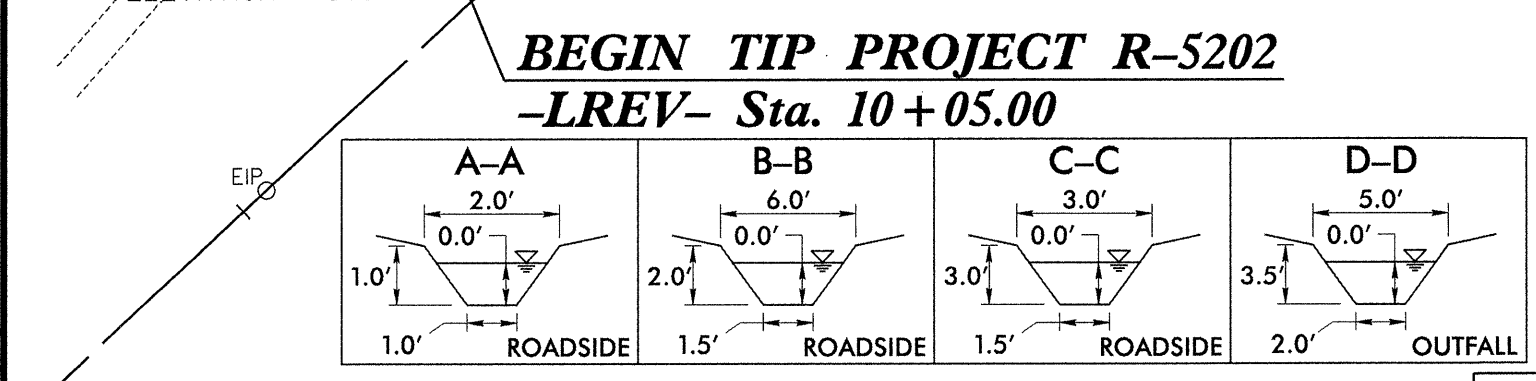
Ditch Slope	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'



Place Matting for Erosion Control on Slope as Work Allows.
 -YI- Sta. 15+00 - 16+25 RT

INSTALL PSRM IN THE PROPOSED DITCH LINE.
 -LREV- 10+05-11+00 LT
 -LREV- 10+60-12+00 RT
 -LREV- 12+50-16+00 RT
 -LREV- 14+50-16+00 LT
 -LREV- 16+50-17+50 RT
 -LREV- 18+15-19+50 RT
 -YI- 13+79-14+00 RT

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.
 -LREV- 11+00-12+50 LT
 -LREV- 12+00-12+50 RT
 -LREV- 16+25-16+50 RT



EXISTING R/W IS THE AREA NCDOT ACTIVELY MAINTAINS EXCEPT AS NOTED. THIS AREA IS ESTIMATED FROM THE TOP OF THE FILL OR 2' BEHIND THE BOTTOM OF THE DITCH.

ROW & EASEMENT STATIONS AND OFFSETS BASED ON -L-

PARCEL 8 HAS A SIGNED DEED OF EASEMENT FOR 25FT.

PAVEMENT REMOVAL

SEE SHEET 7 -LREV- PROFILE
 SEE SHEET 9 FOR -YI- PROFILE

PSRM LINER

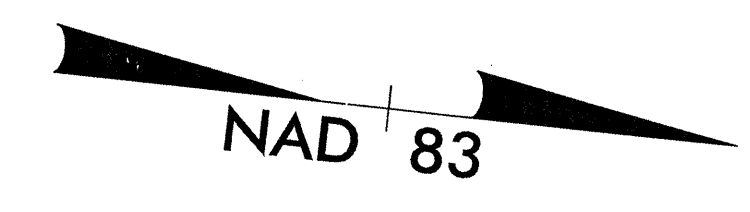
PLANS PREPARED BY:
RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560
 FOR
DIVISION OF HIGHWAYS

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-LREV-
 PI Sta 43+77.24
 $\Delta = 10' 58" 46.0" (LT)$
 $D = 2' 21" 28.3"$
 $L = 465.65'$
 $T = 233.54'$
 $R = 2,430.00'$
 $Se = 0.044$
 $Ro = 110.00'$

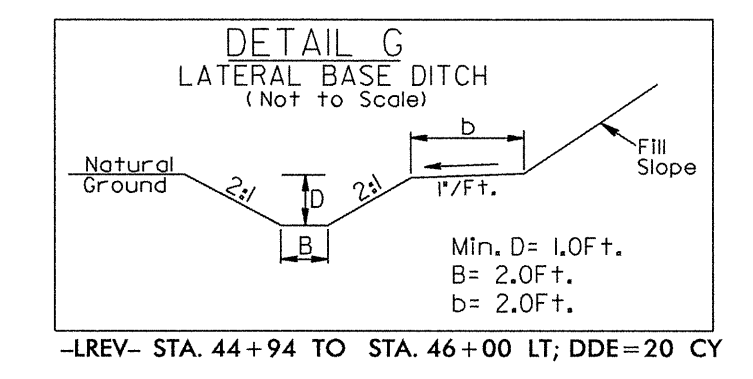
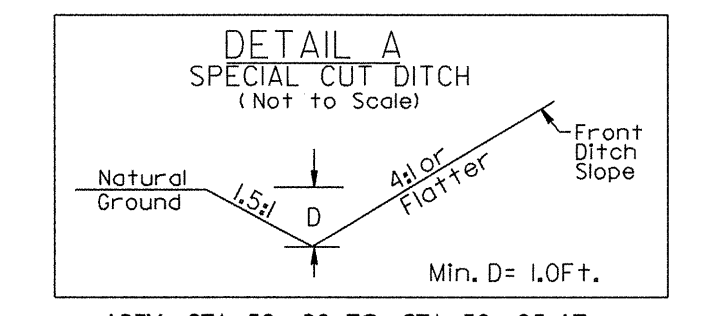
-Y2-
 PI Sta 52+59.19
 $\Delta = 62' 34" 53.0" (RT)$
 $D = 9' 47" 38.9"$
 $L = 638.97'$
 $T = 355.56'$
 $R = 585.00'$
 $Se = EXIST.$

-Y2-
 PI Sta 11+15.97
 $\Delta = 16' 53" 40.0" (LT)$
 $D = 12' 43" 56.6"$
 $L = 132.69'$
 $T = 66.83'$
 $R = 450.00'$
 $Se = NC$
 $Ro = 160.00'$

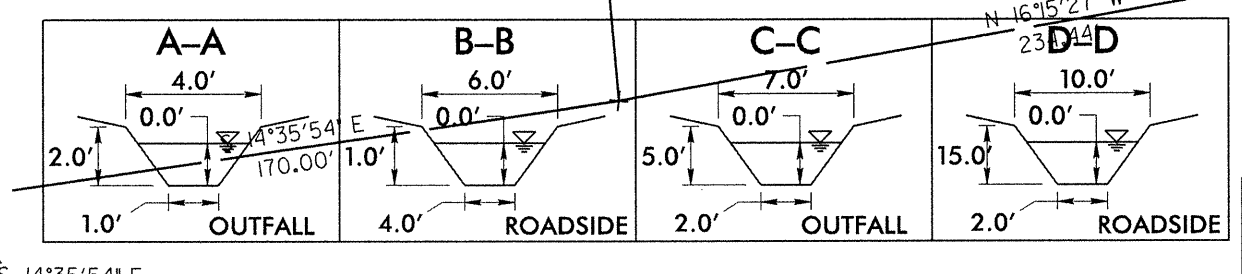
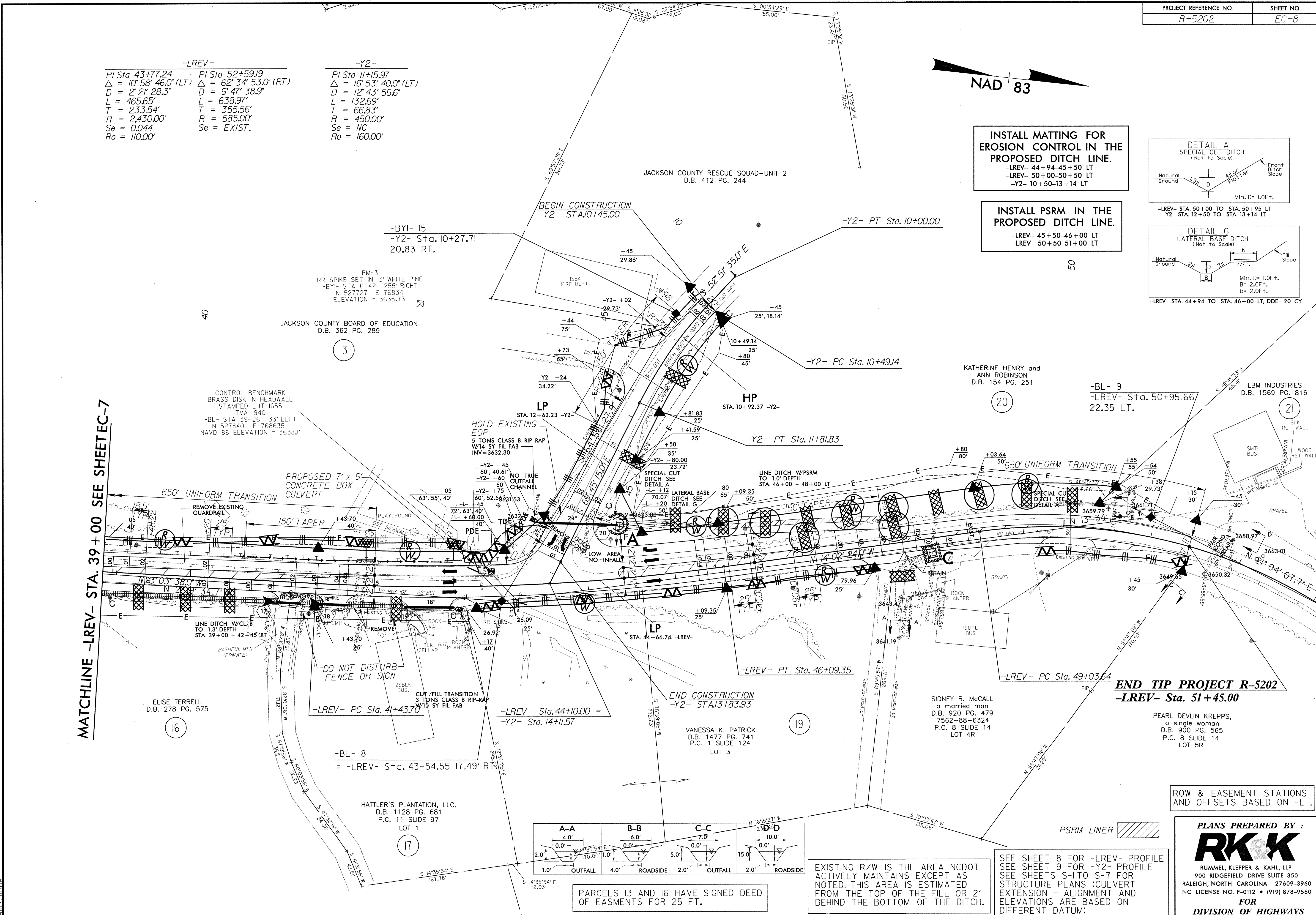


INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.
 -LREV- 44+94-45+50 LT
 -LREV- 50+00-50+50 LT
 -Y2- 10+50-13+14 LT

INSTALL PSRM IN THE PROPOSED DITCH LINE.
 -LREV- 45+50-46+00 LT
 -LREV- 50+50-51+00 LT



MATCHLINE -LREV- STA. 39+00 SEE SHEET EC-7



PARCELS 13 AND 16 HAVE SIGNED DEED OF EASEMENTS FOR 25 FT.

EXISTING R/W IS THE AREA NCDOT ACTIVELY MAINTAINS EXCEPT AS NOTED. THIS AREA IS ESTIMATED FROM THE TOP OF THE FILL OR 2' BEHIND THE BOTTOM OF THE DITCH.

SEE SHEET 8 FOR -LREV- PROFILE
 SEE SHEET 9 FOR -Y2- PROFILE
 SEE SHEETS S-1 TO S-7 FOR STRUCTURE PLANS (CULVERT EXTENSION - ALIGNMENT AND ELEVATIONS ARE BASED ON DIFFERENT DATUM)

ROW & EASEMENT STATIONS AND OFFSETS BASED ON -L-.

PLANS PREPARED BY :

 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 RALEIGH, NORTH CAROLINA 27609-3960
 NC LICENSE NO. F-0112 • (919) 878-9560
FOR
DIVISION OF HIGHWAYS

8/17/99
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