

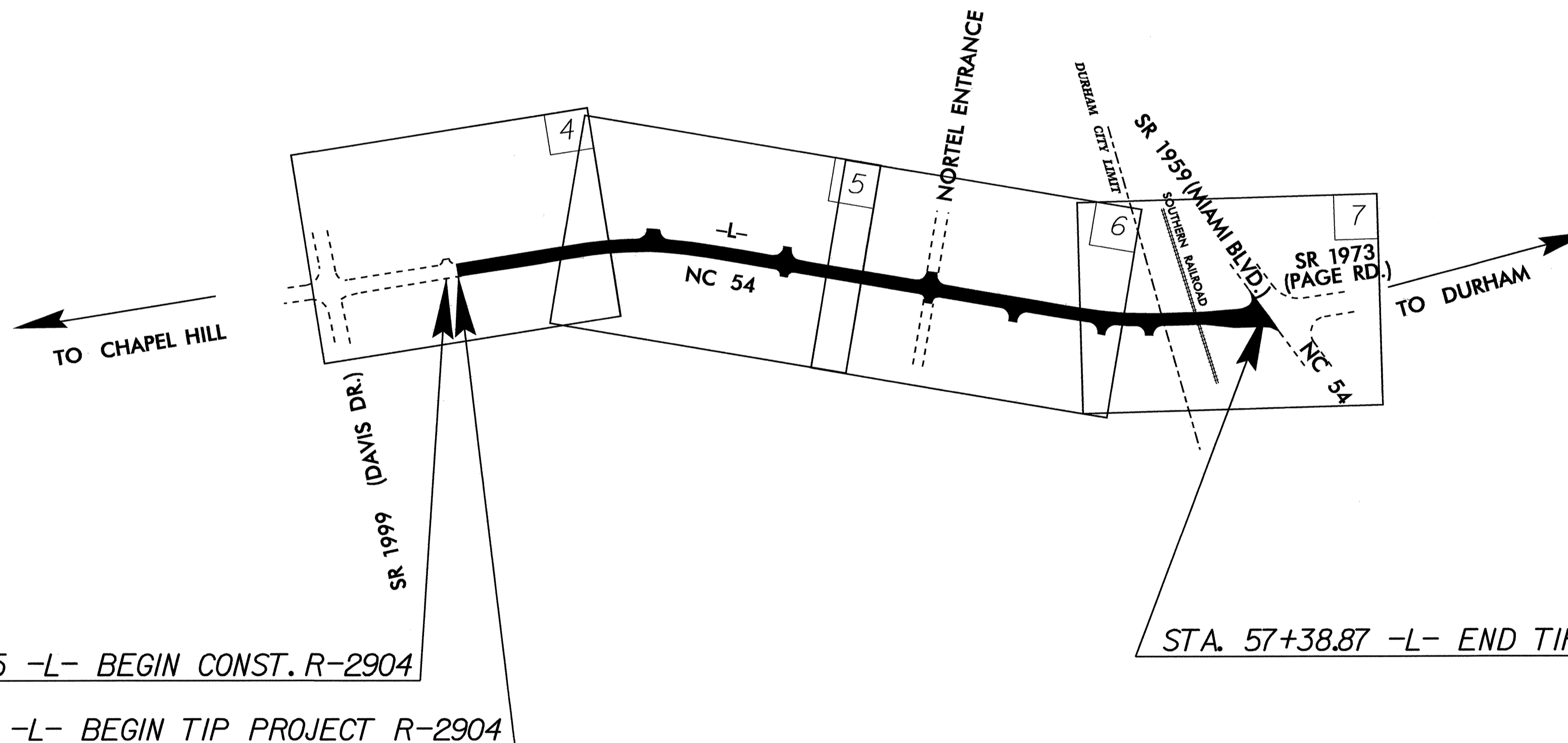
TIP PROJECT: R-2904

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

DURHAM COUNTY

LOCATION: NC 54 FROM SR 1999 (DAVIS DRIVE) TO SR 1959 (MIAMI BLVD.)

TYPE OF WORK: GRADING, PAVING, DRAINAGE, GUARDRAIL, SIGNALS, AND SIGNING



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2904	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
Rock Inlet Sediment Trap:		
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	

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

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

GRAPHIC SCALE

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	1630.05 Temporary Diversion
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
1630.02 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

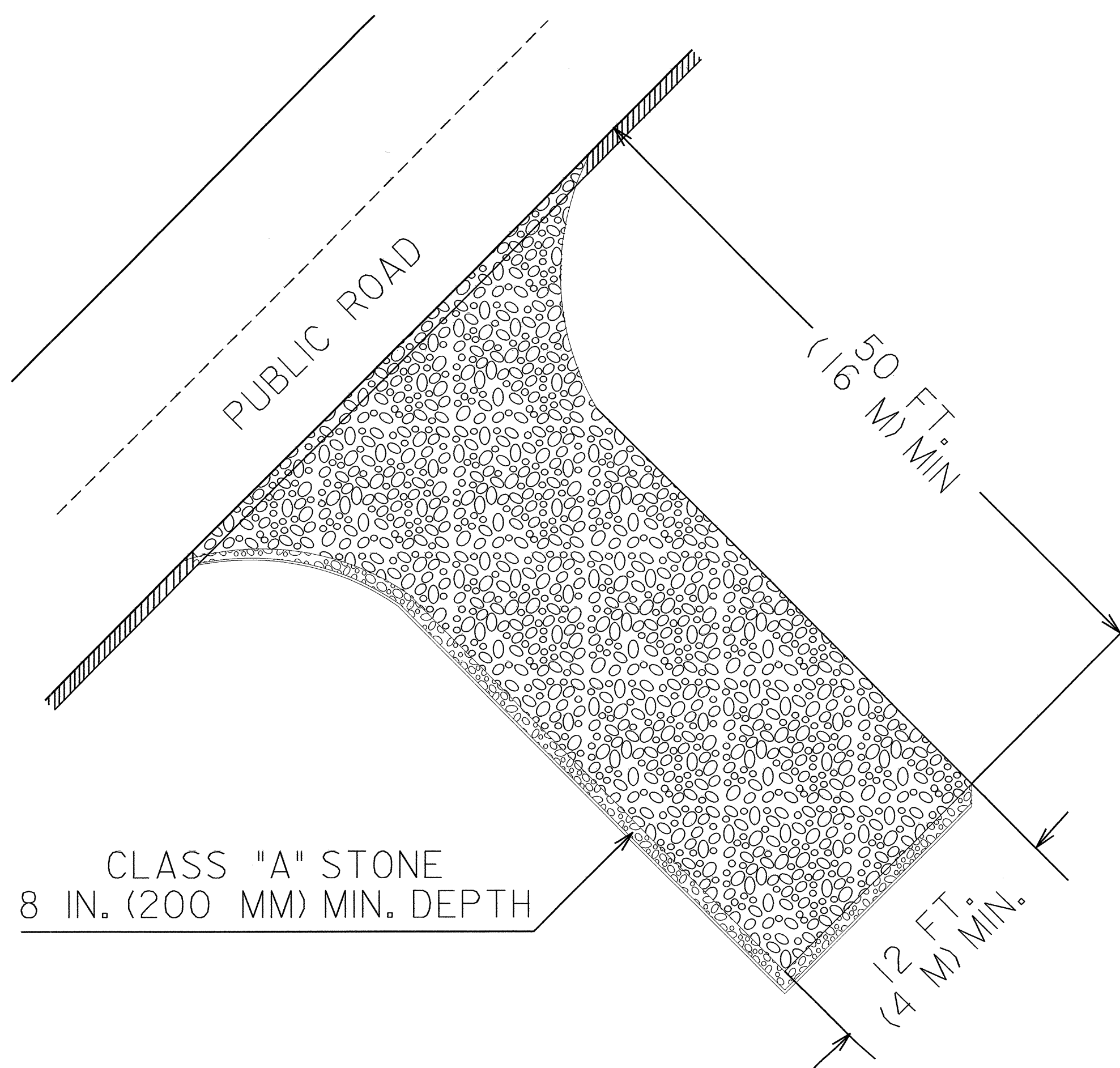
24-APR-2006 12:20:09 design\A-2904.txd
 bbl\esb\blm\atg\TIP\REVISION\2904.dwg

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
R-2904	EC-2	
STATE PROJECT NO.	F.A. PROJ. NO.	DESCRIPTION

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

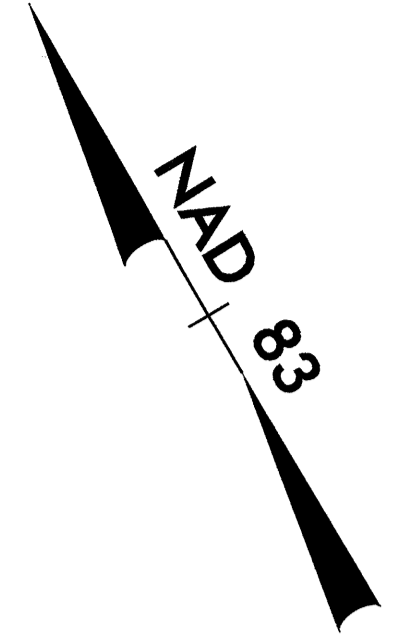


NOTE: FILTER FABRIC TO BE PLACED BENEATH STONE

PROJECT REFERENCE NO.	SHEET NO.
R-2904	EC-3/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

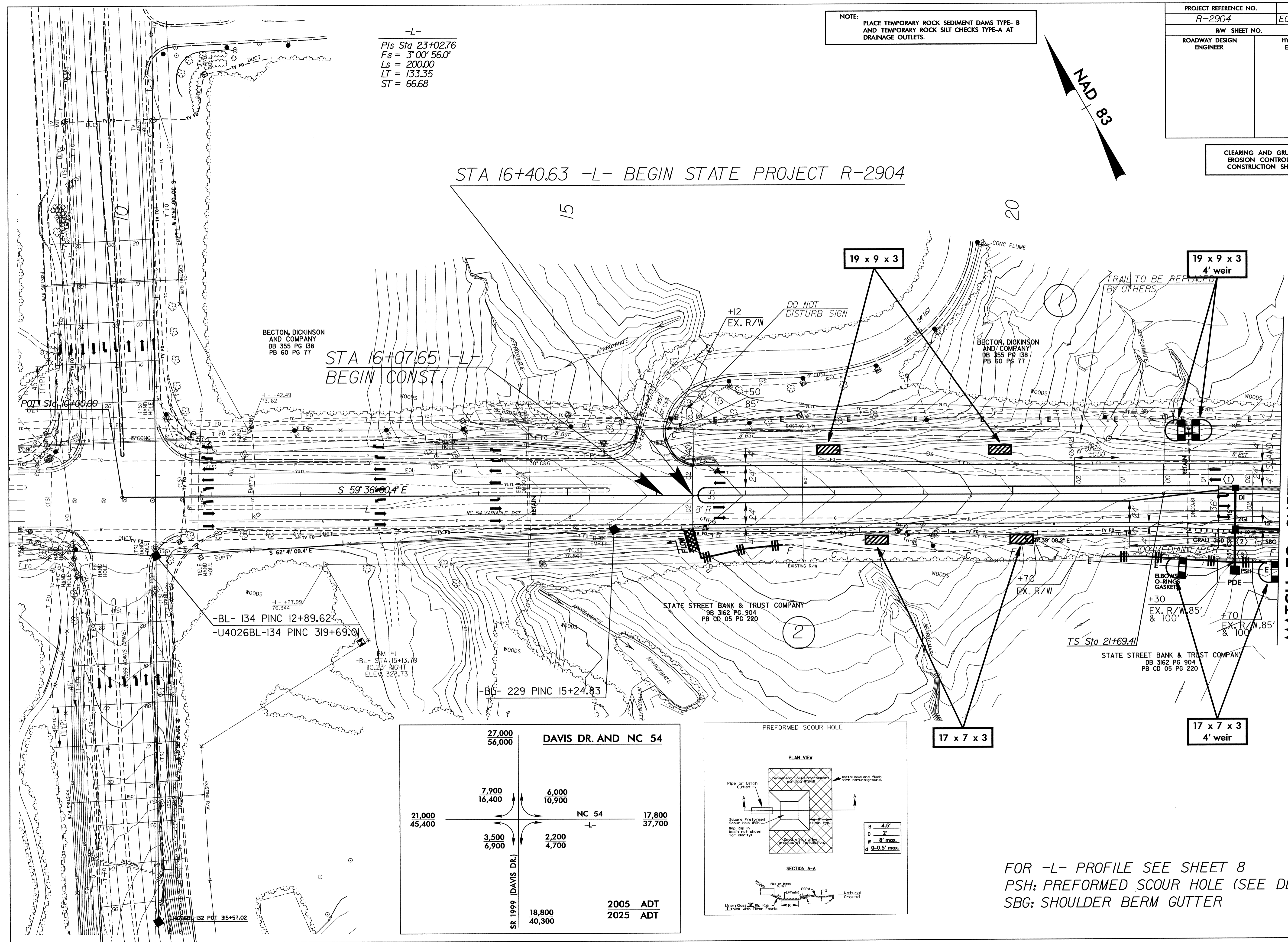
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

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

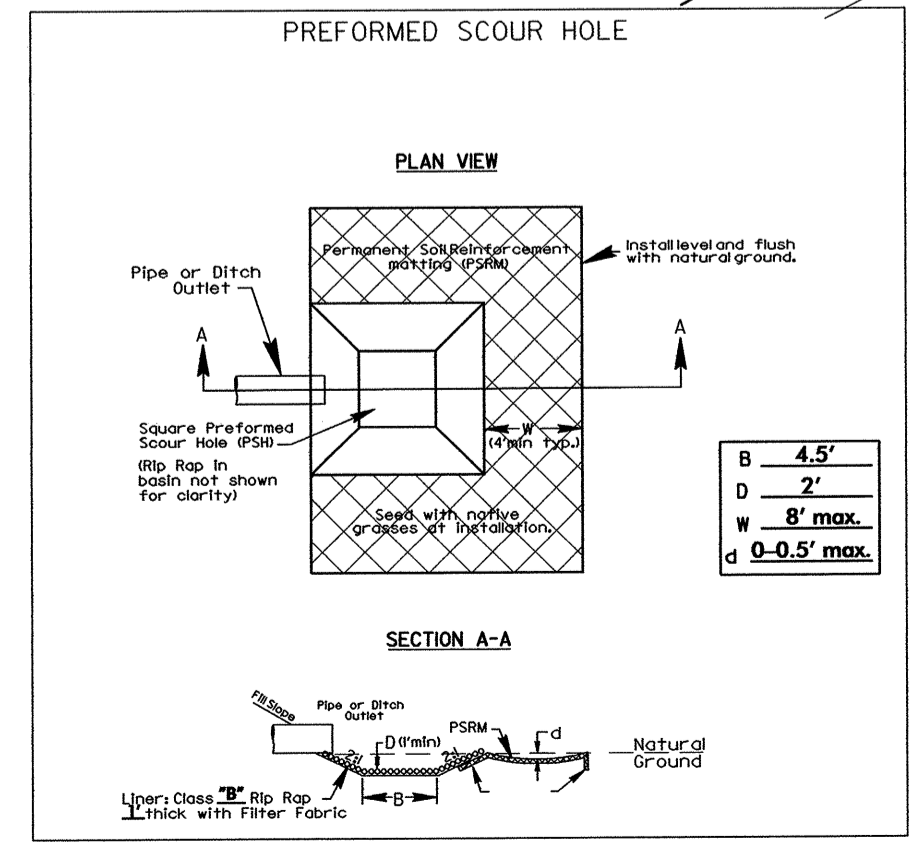
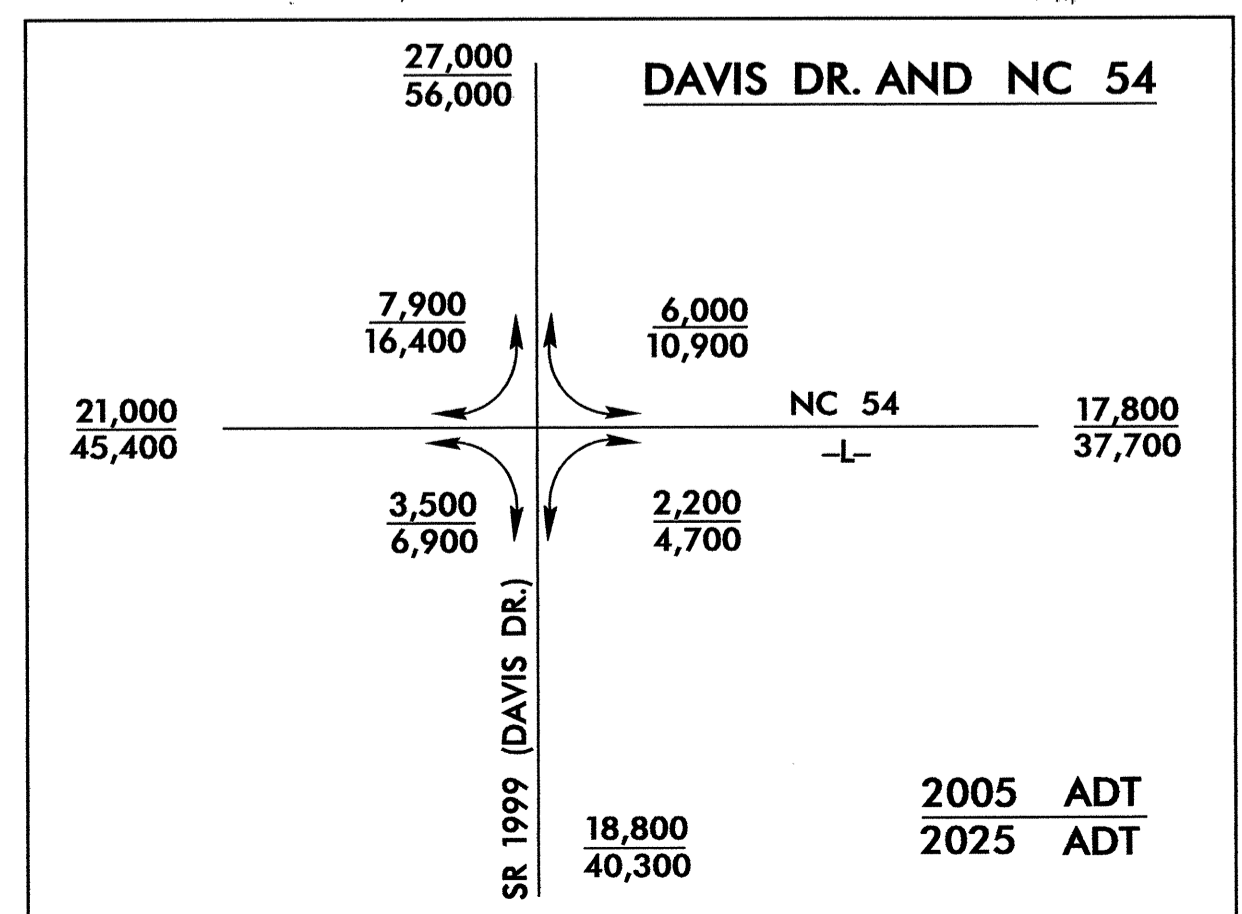


-L-
Pls Sta 23+02.76
Fs = 3' 00" 56.0"
Ls = 200.00
LT = 133.35
ST = 66.68

STA 16+40.63 -L- BEGIN STATE PROJECT R-2904

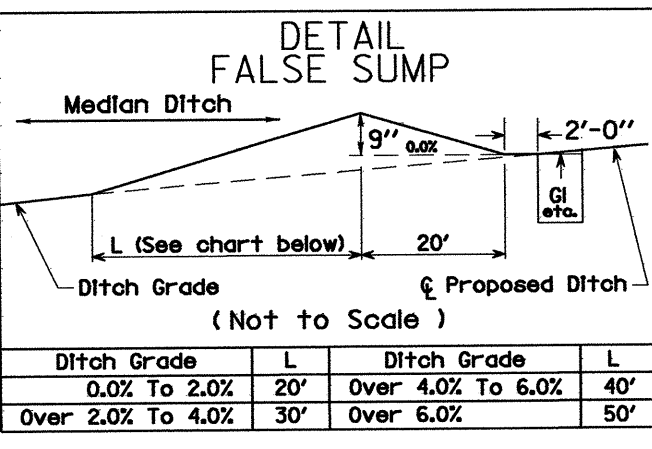
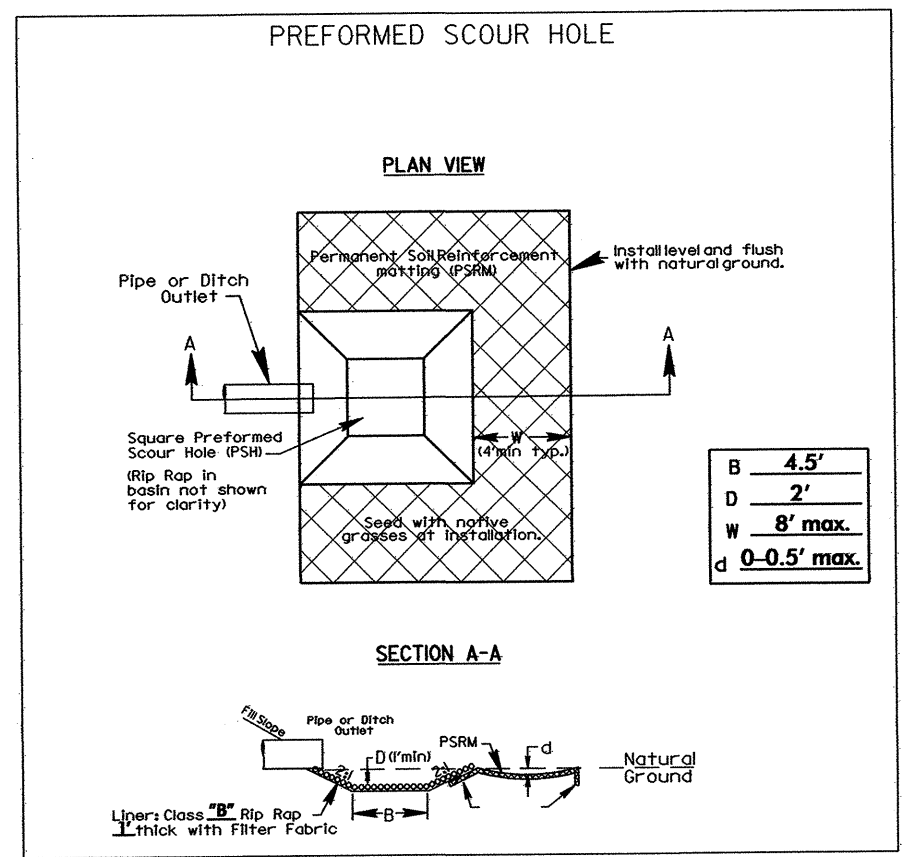
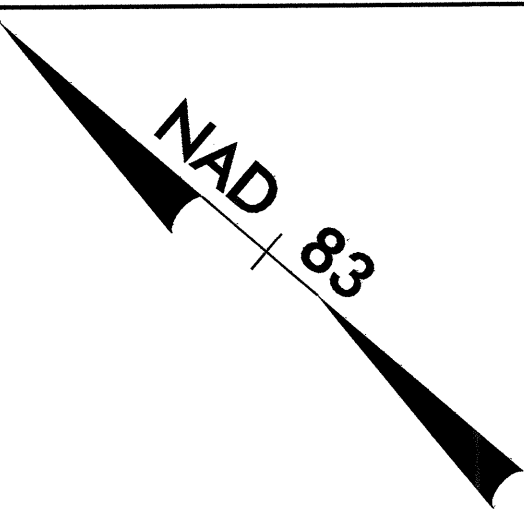


MATCH TO SHEET 5 STA. 23+00



FOR -L- PROFILE SEE SHEET 8
PSH: PREFORMED SCOUR HOLE (SEE DETAIL)
SBG: SHOULDER BERM GUTTER

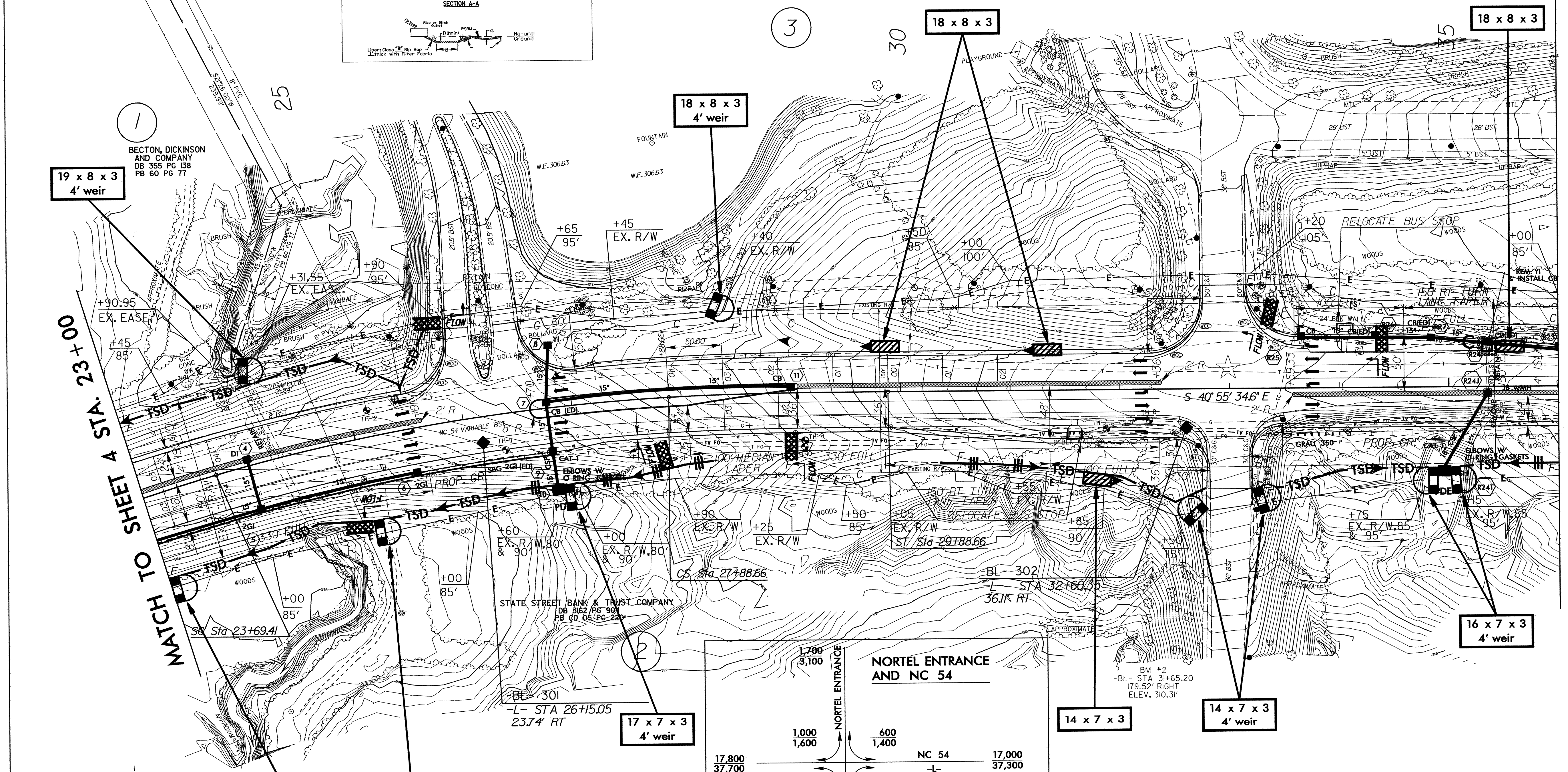
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE-B AND TEMPORARY ROCK SILT CHECKS TYPE-A AT DRAINAGE OUTLETS.



STATE STREET BANK & TRUST COMPANY, TRUSTEE
 DB 3162 PG 790
 PB 95 PG 197
 PB 99 PG 147

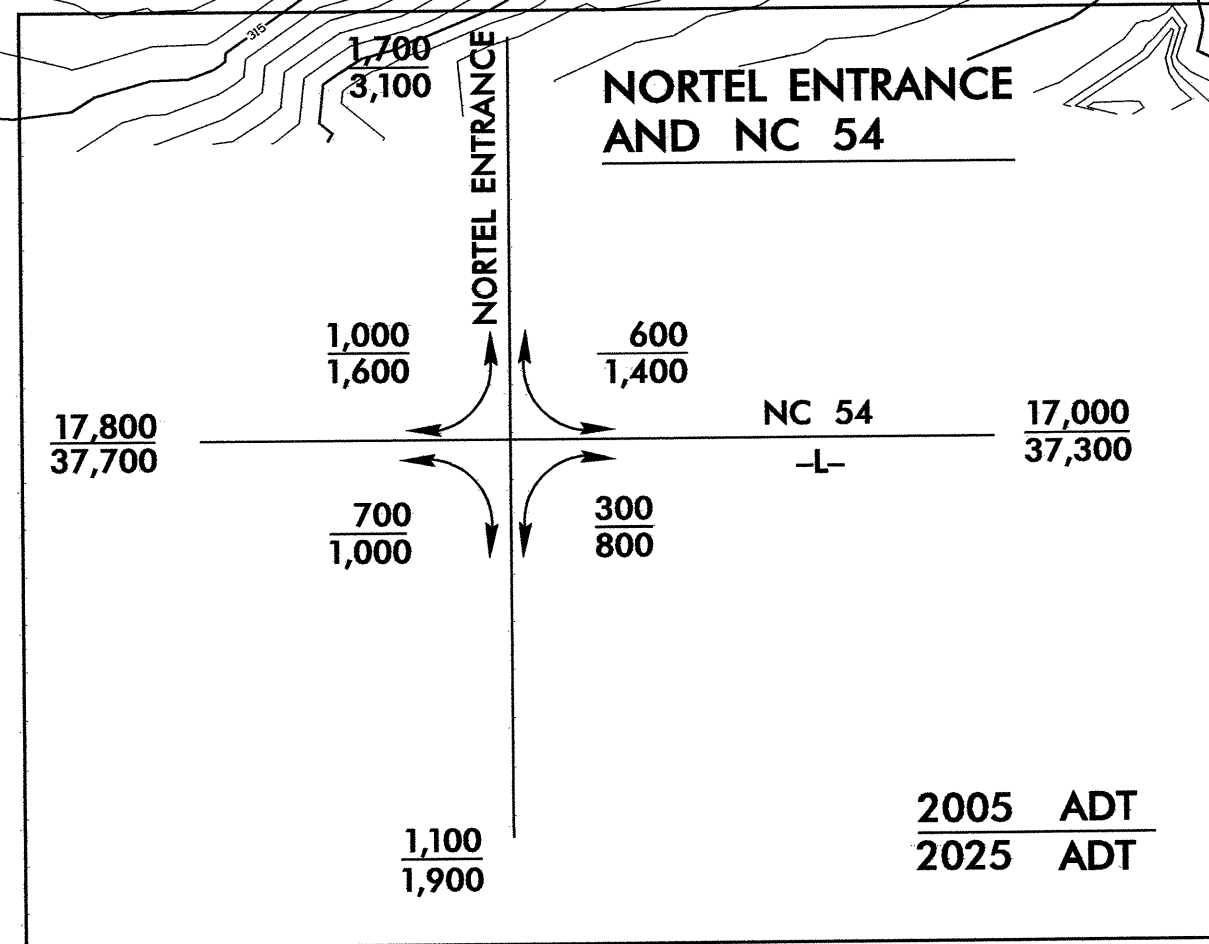
-L-

Pls Sta 23+02.76	Pl Sta 25+79.89	Pls Sta 28+55.34
Fs = 3'00" 56.0"	Δ = 12'38" 33.8" (RT)	Fs = 3'00" 56.0"
Ls = 200.00	D = 3'00" 56.0"	Ls = 200.00
LT = 133.35	L = 419.25	LT = 133.35
ST = 66.68	T = 210.48	ST = 66.68
	R = 1,900.00	
	SE = 0.04	



MATCH TO SHEET A STA. 23+00

MATCH TO SHEET 6 STA. 36+00



☆ EXIST. SIGNAL
 FOR -L- PROFILE SEE SHEET 8
 PSH: PREFORMED SCOUR HOLE (SEE DETAIL)
 SBG: SHOULDER BERM GUTTER

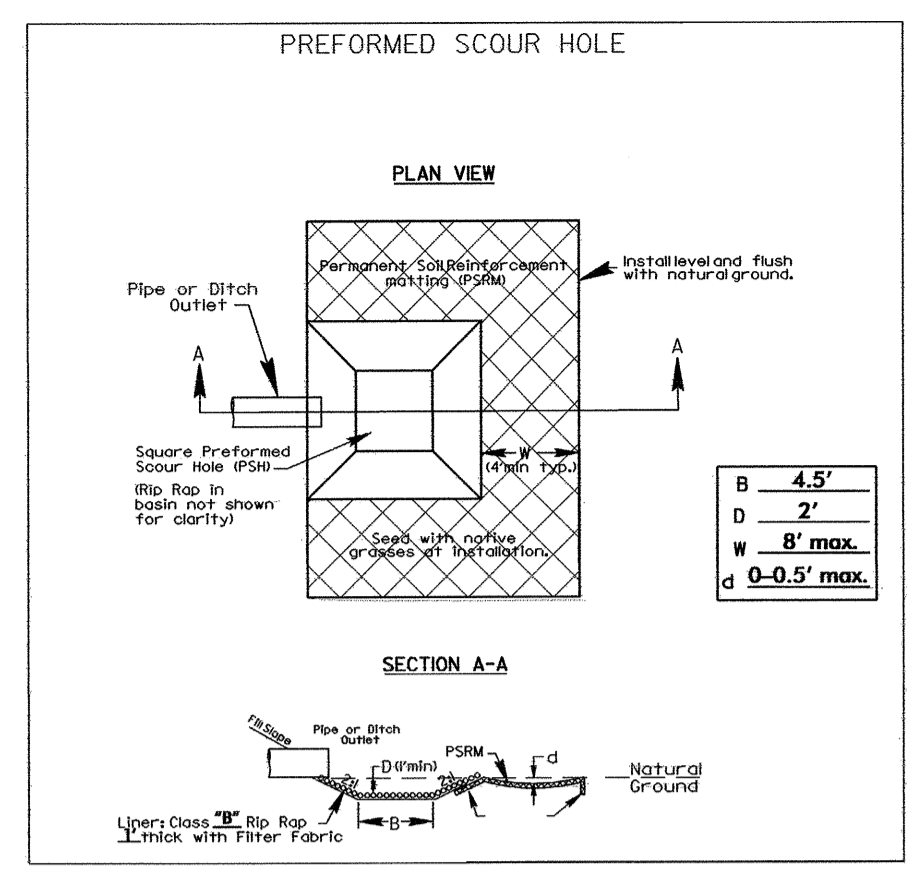
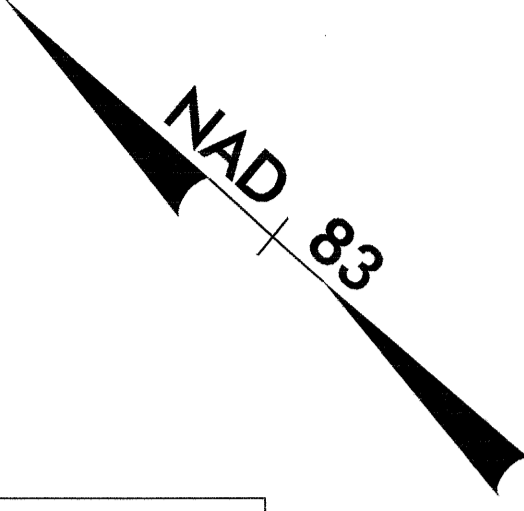
2005 ADT
 2025 ADT

PROJECT REFERENCE NO.	SHEET NO.
R-2904	EC-5/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

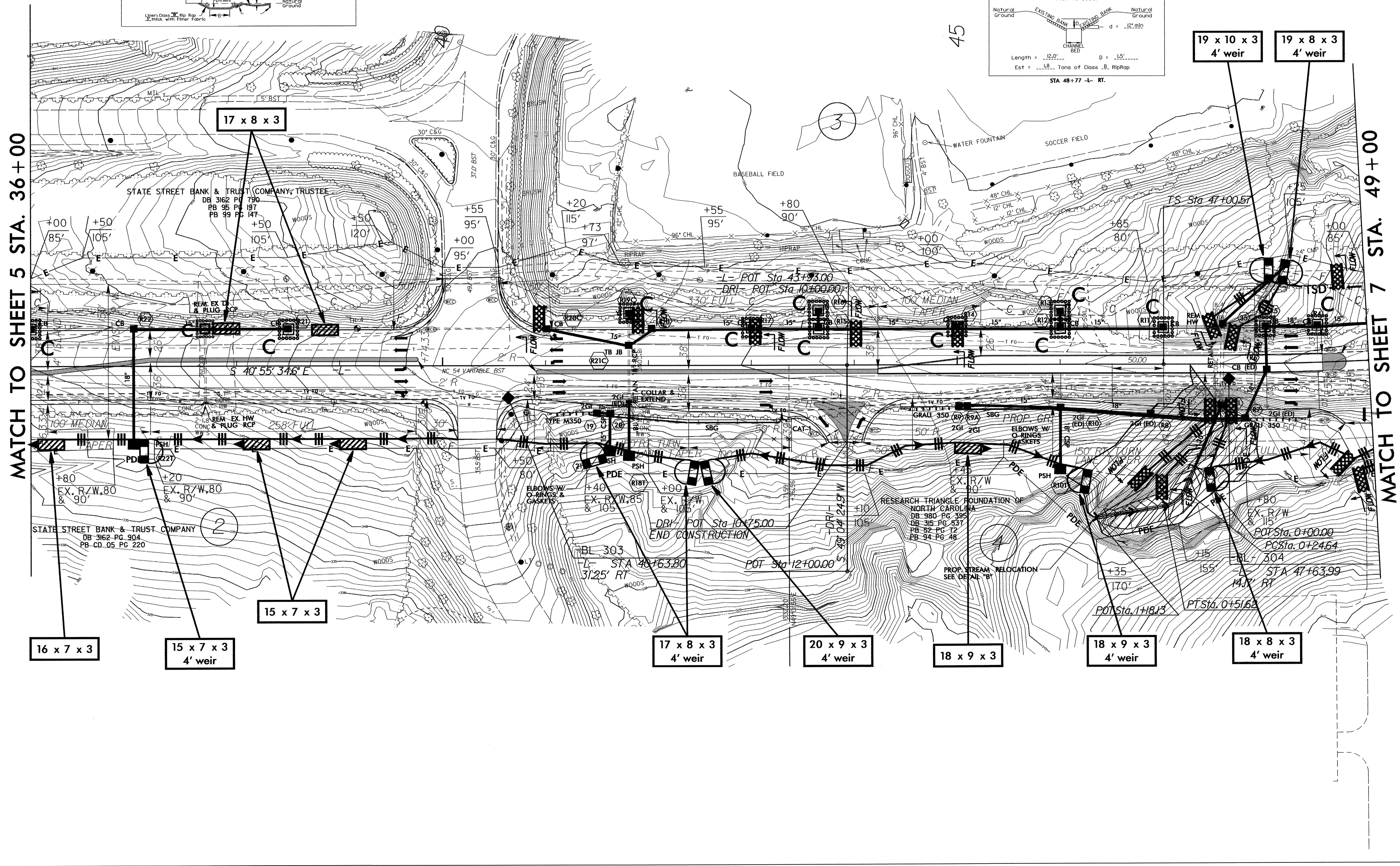
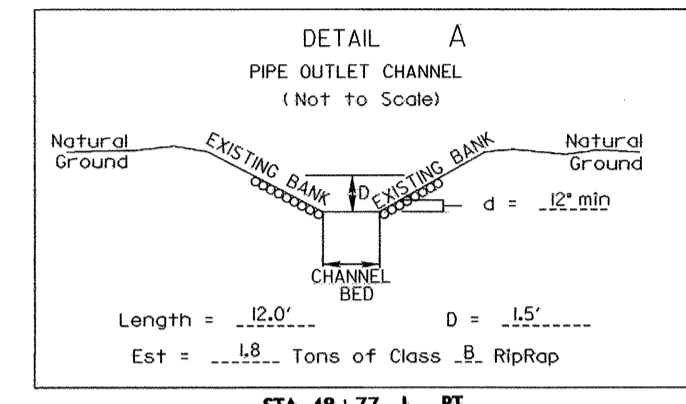
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6

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

ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS



-L-
Pls Sta 48+33.92
Fs = 3'00'56.0"
Ls = 200.00
LT = 133.35
ST = 66.68



MATCH TO SHEET 5 STA. 36+00

MATCH TO SHEET 7 STA. 49+00

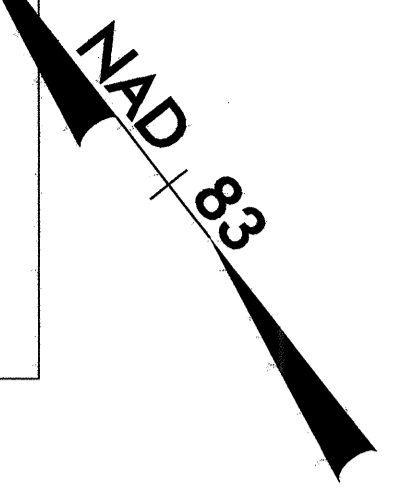
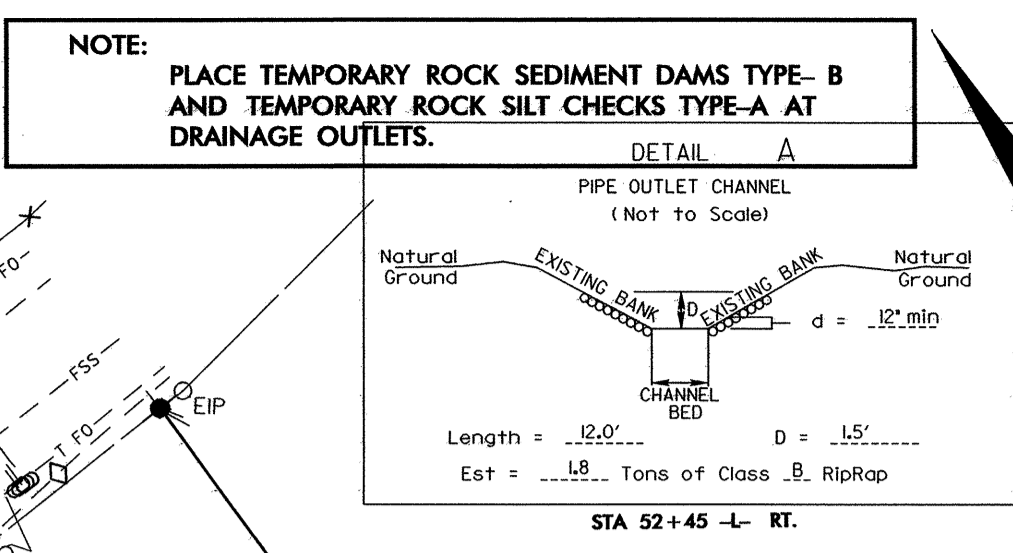
-L-

Pls Sta 48+33.92 *Pls Sta 49+85.99* *Pls Sta 51+37.98*
Fs = 3'00" 56.0" *Δ = 5'08" 54.3" (LT)* *Fs = 3'00" 56.0"*
Ls = 200.00 *D = 3'00" 56.0"* *Ls = 200.00*
LT = 133.35 *L = 170.73* *LT = 133.35*
T = 85.42 *R = 1,900.00* *ST = 66.68*
ST = 66.68 *SE = 0.04*

NOTE: EXIST. RR BRIDGE MAY STILL HAVE FOUNDATION IN PLACE UNDER EXIST. ROAD.

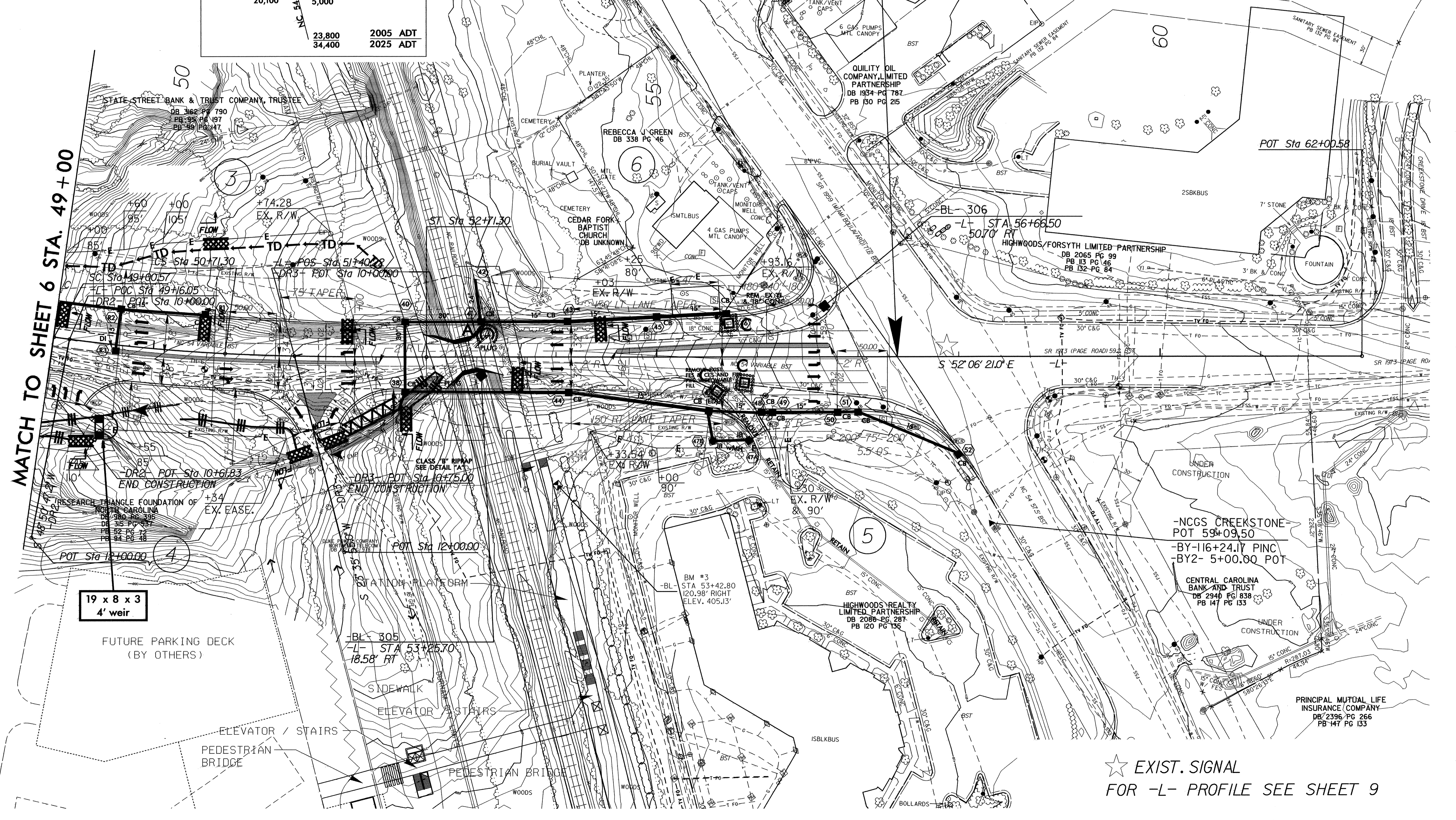
NC 54, MIAMI BLVD. AND PAGE RD.

18,100	23,100		
3,600	2,100		
9,000	4,800		
17,000	10,900		
37,300	18,000		
8,000	3,400		
20,100	5,000		
	23,800	2005 ADT	
	34,400	2025 ADT	



CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 7

STA 57+38.87 -L- END STATE PROJECT R-2904



19 x 8 x 3
4' weir

FUTURE PARKING DECK
(BY OTHERS)

ELEVATOR / STAIRS
PEDESTRIAN BRIDGE

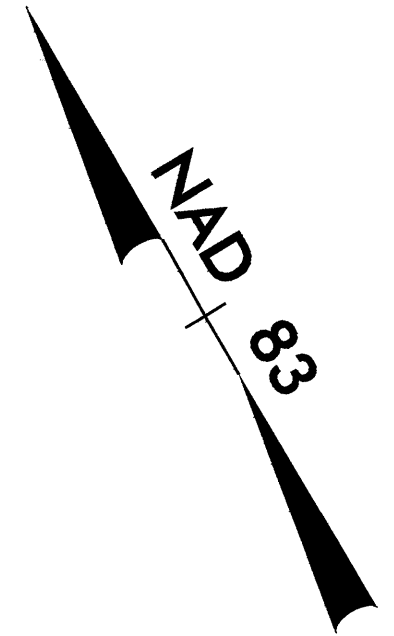
SIDEWALK
ELEVATOR / STAIRS

PEDESTRIAN BRIDGE

☆ EXIST. SIGNAL
FOR -L- PROFILE SEE SHEET 9

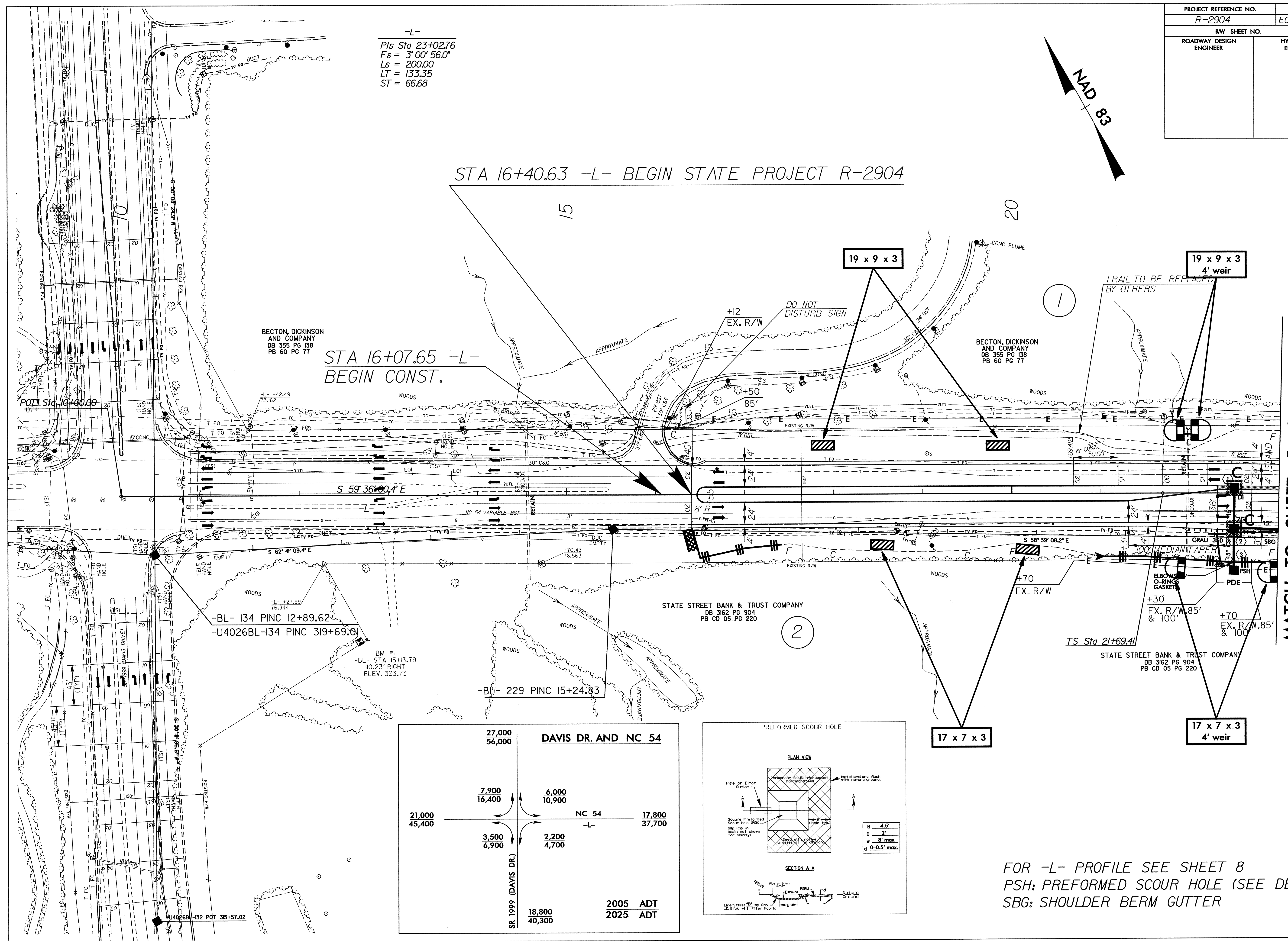
PROJECT REFERENCE NO.		SHEET NO.	
R-2904		EC-7/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

-L-
 PIs Sta 23+02.76
 Fs = 3'00" 56.0"
 Ls = 200.00
 LT = 133.35
 ST = 66.68

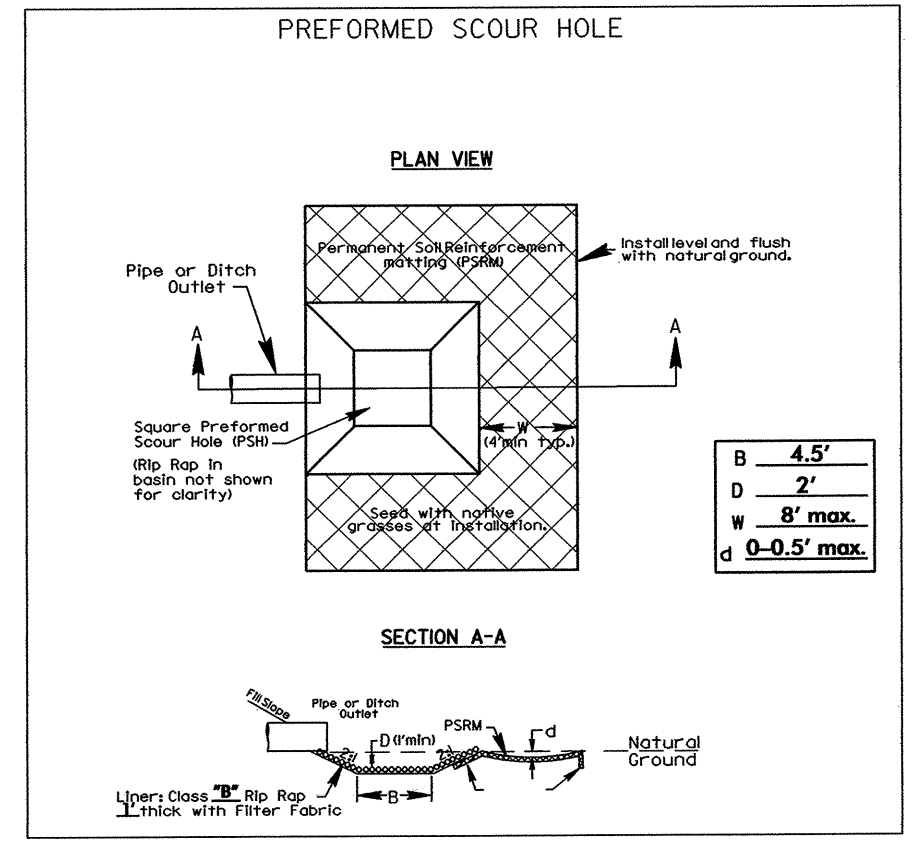
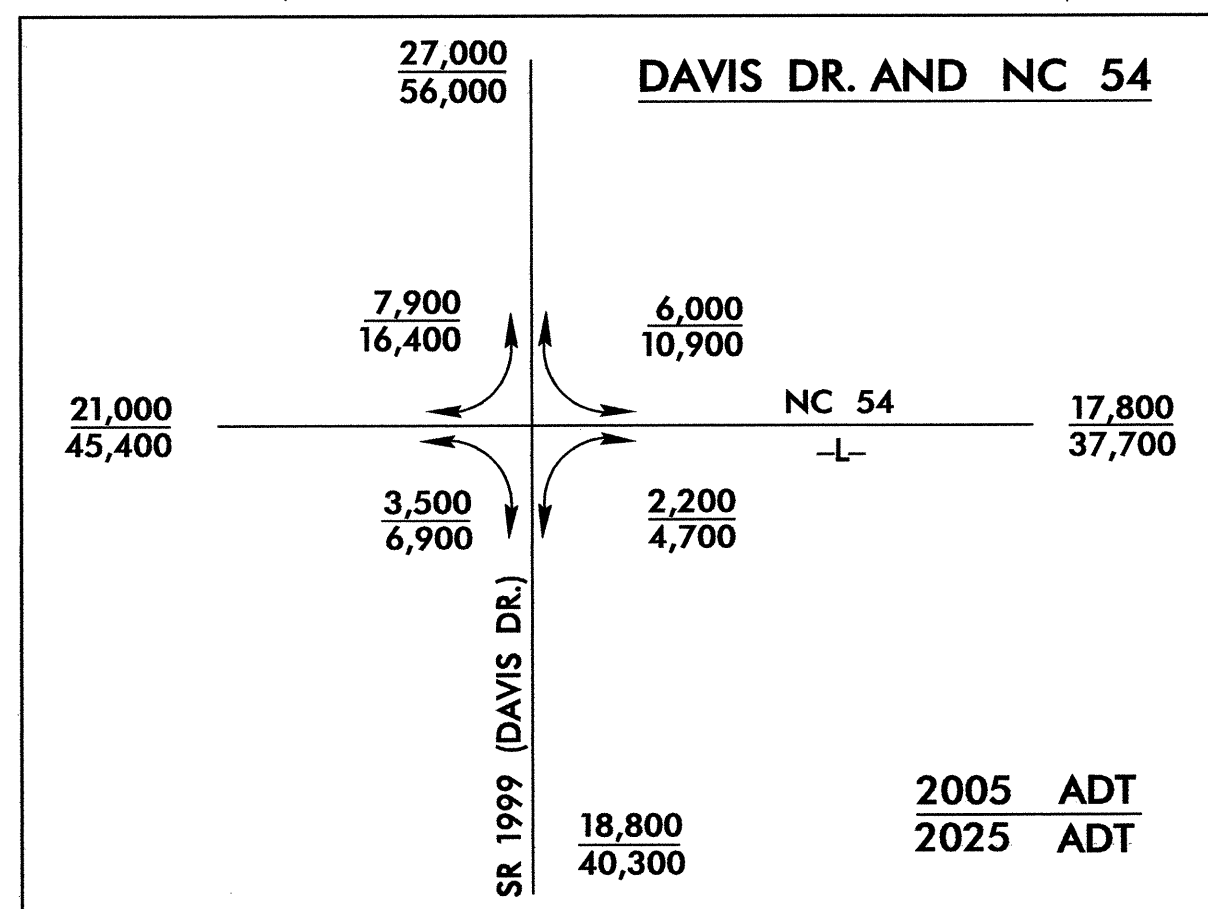


STA 16+40.63 -L- BEGIN STATE PROJECT R-2904

STA 16+07.65 -L- BEGIN CONST.

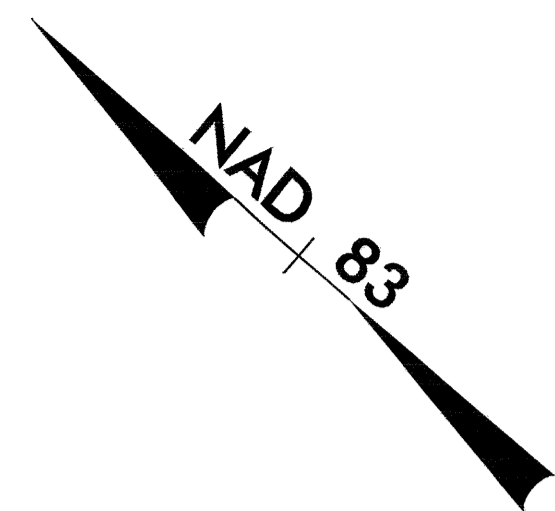
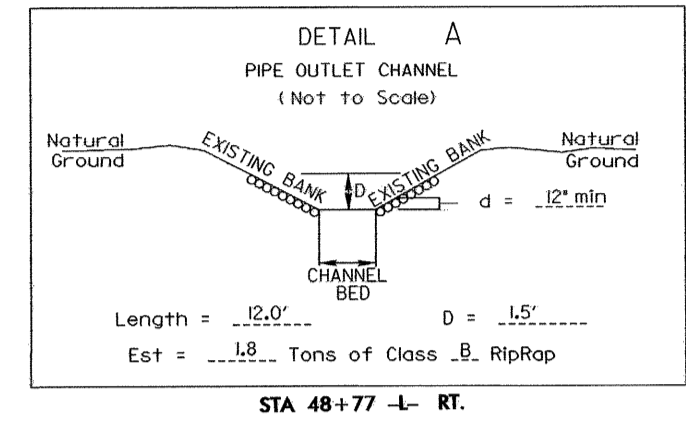
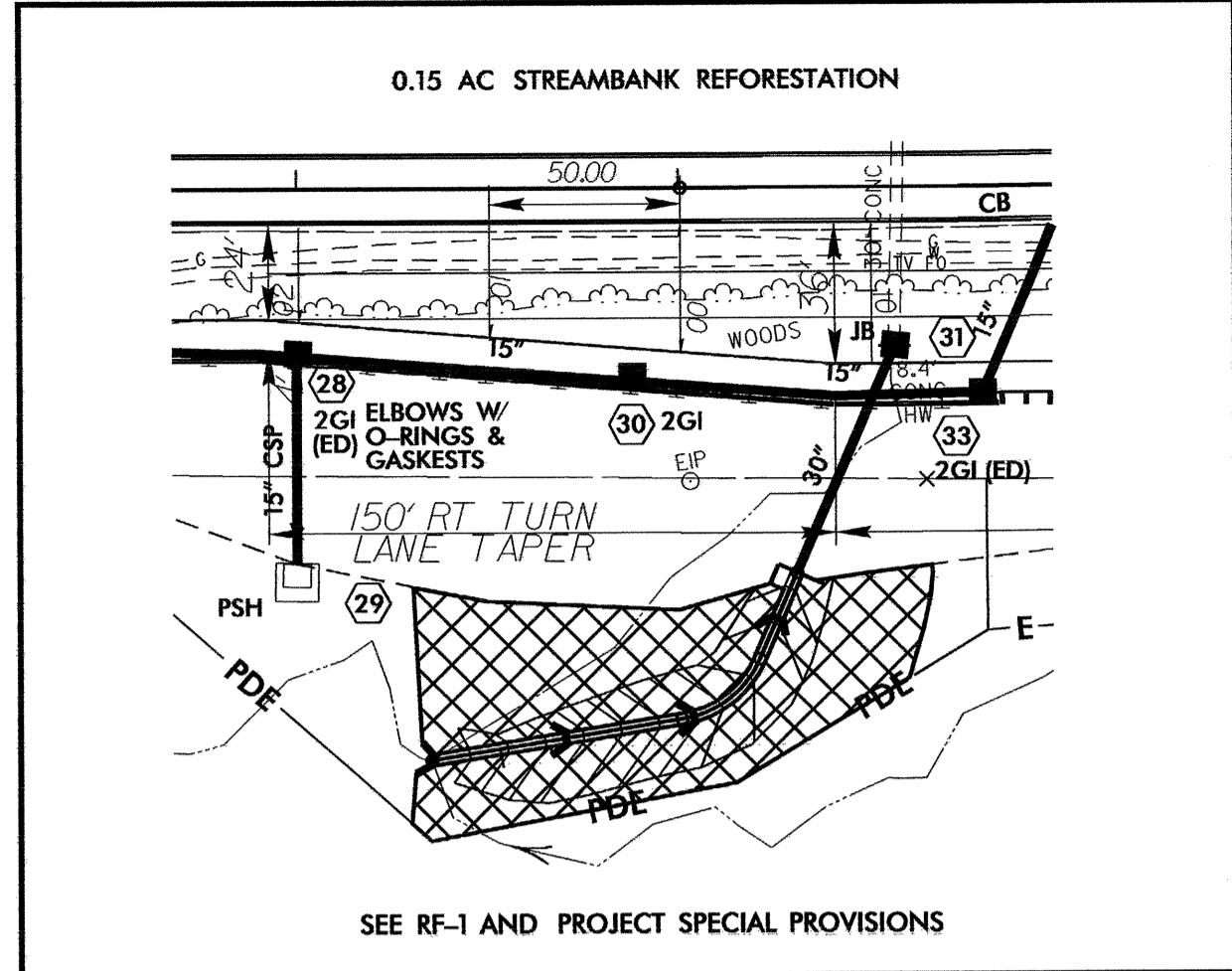
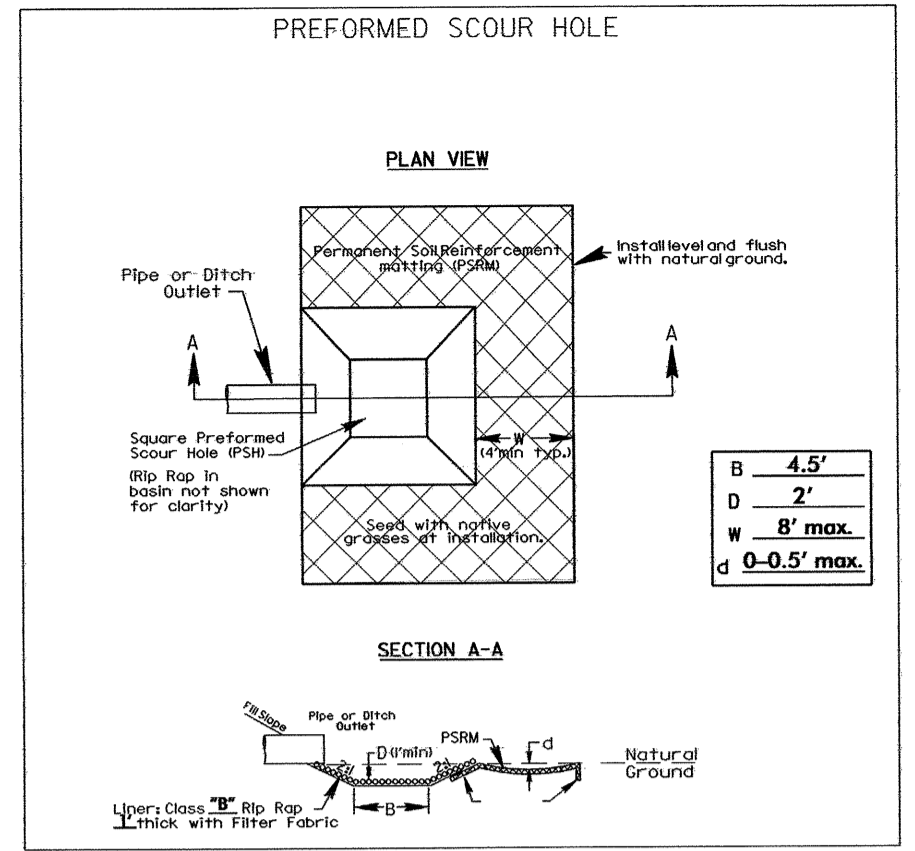


MATCH TO SHEET 5 STA. 23+00



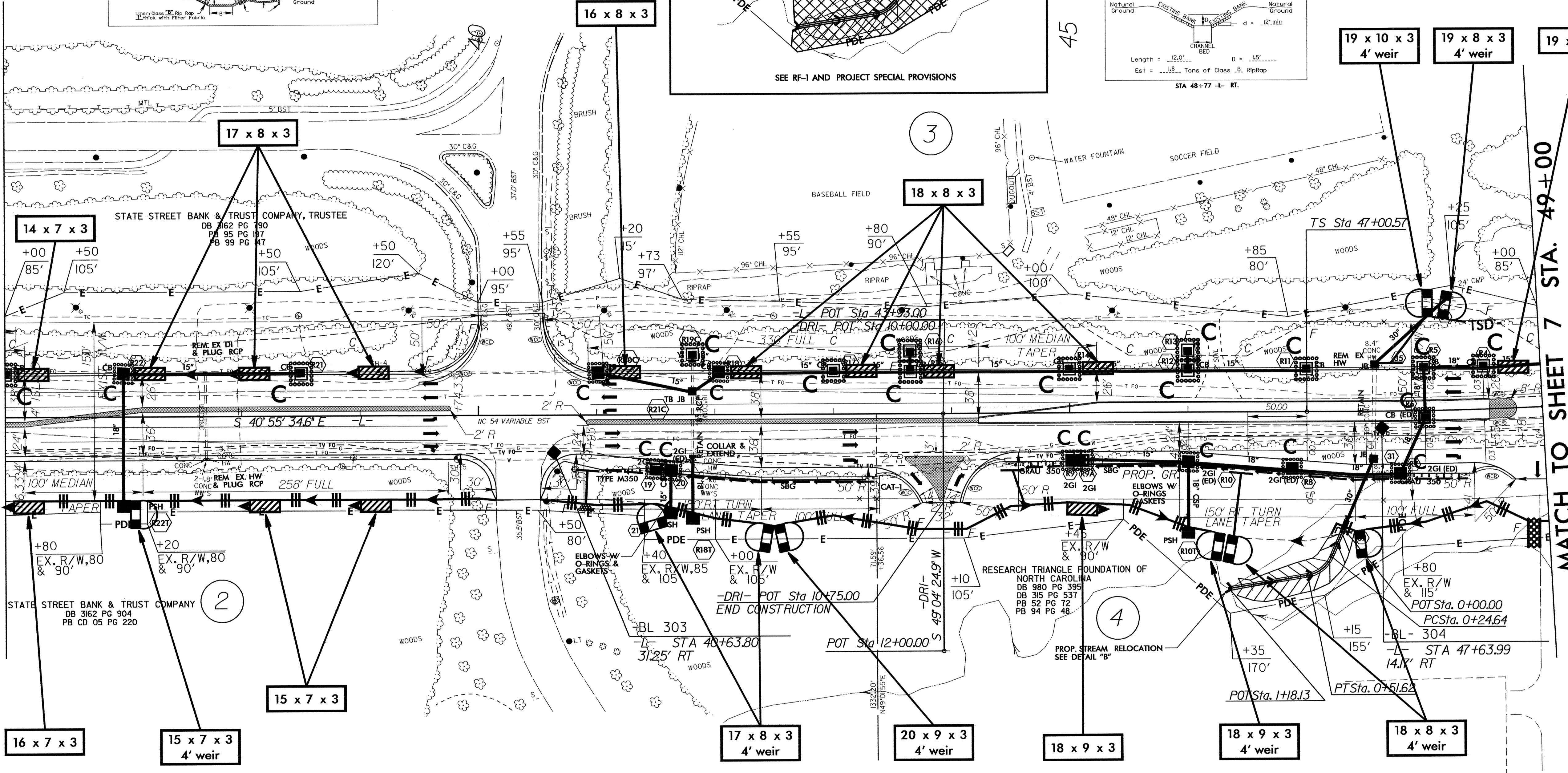
FOR -L- PROFILE SEE SHEET 8
 PSH: PREFORMED SCOUR HOLE (SEE DETAIL)
 SBG: SHOULDER BERM GUTTER

PROJECT REFERENCE NO.	SHEET NO.
R-2904	EC-9/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCH TO SHEET 5 STA. 36+00

MATCH TO SHEET 7 STA. 49+00



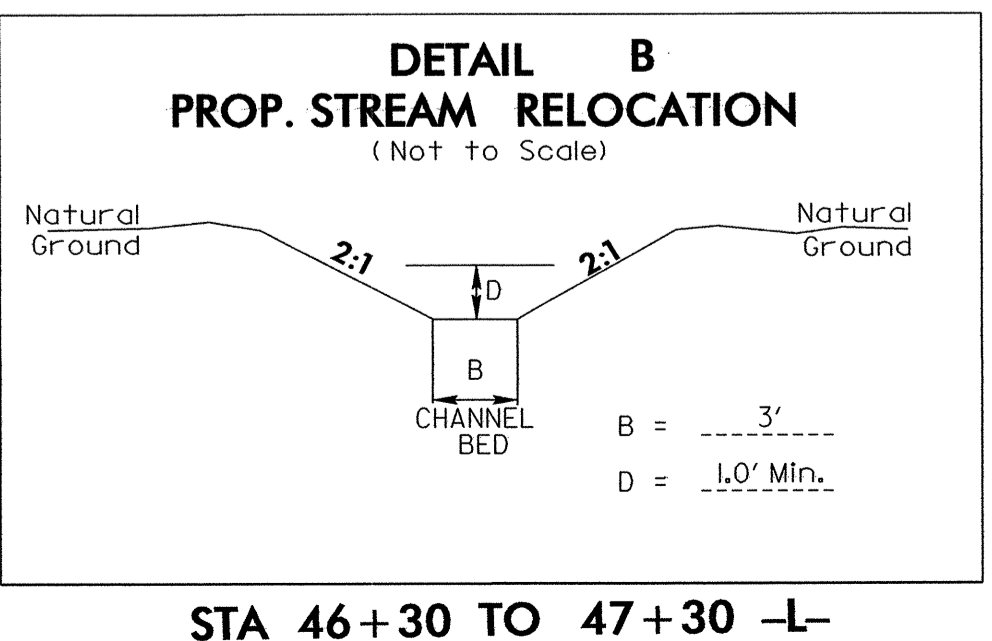
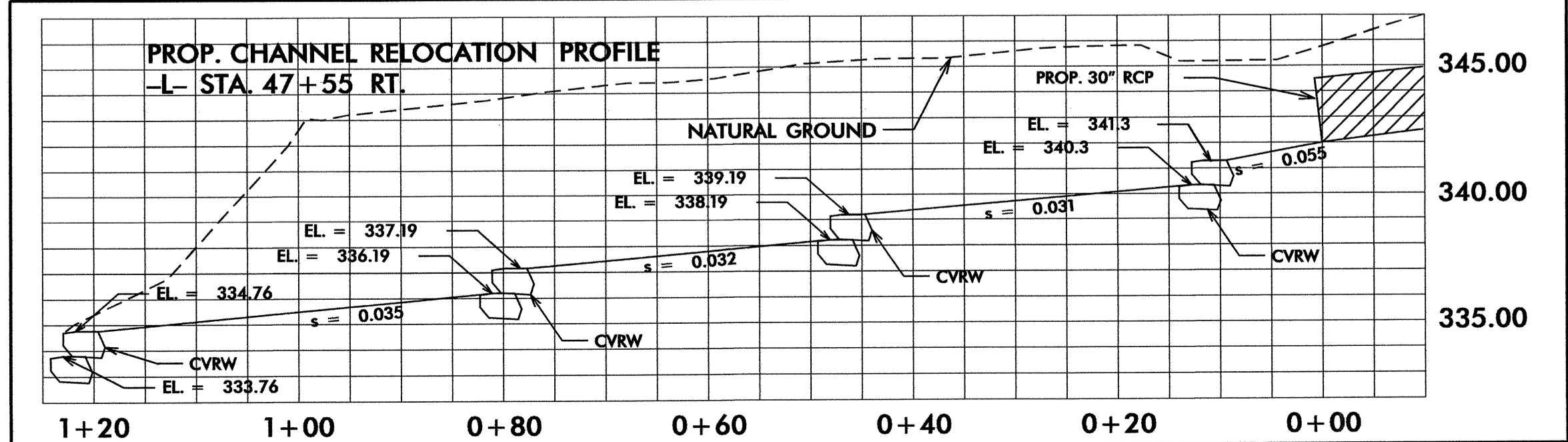
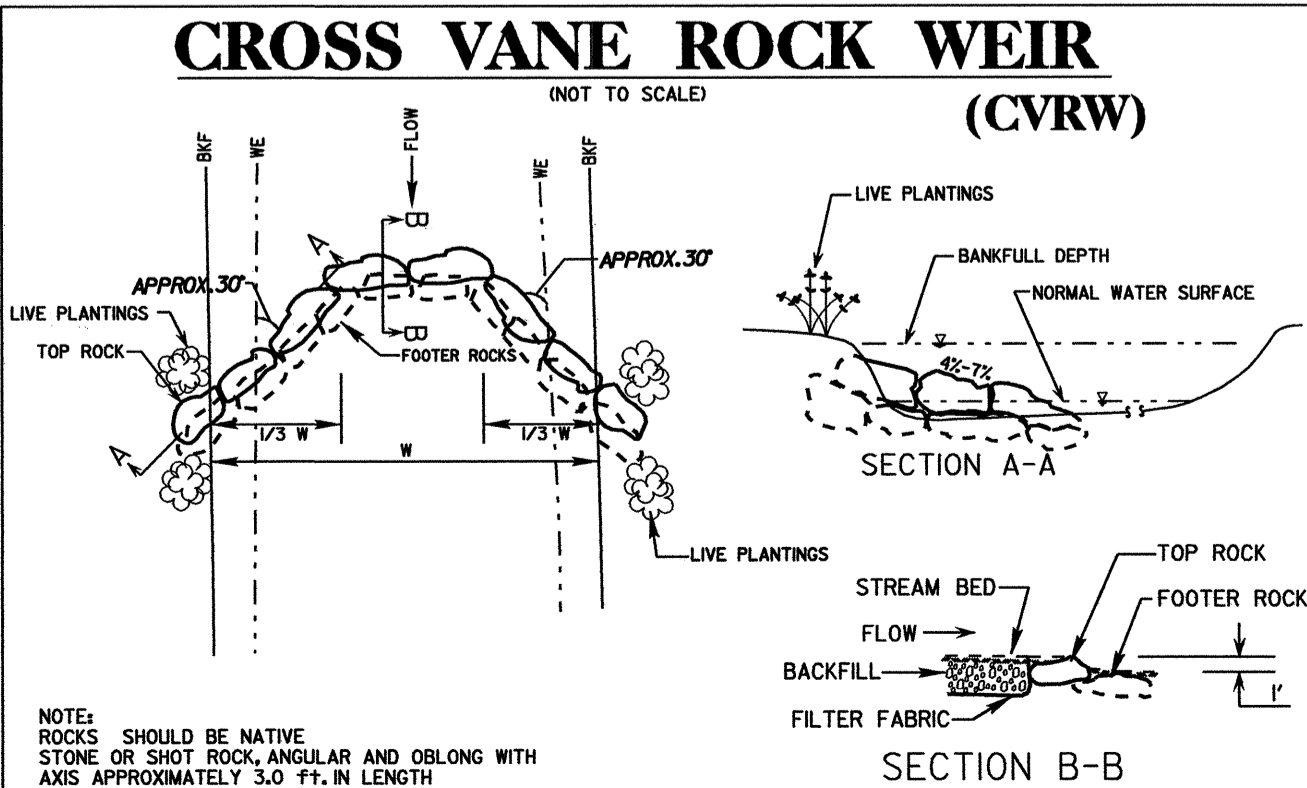
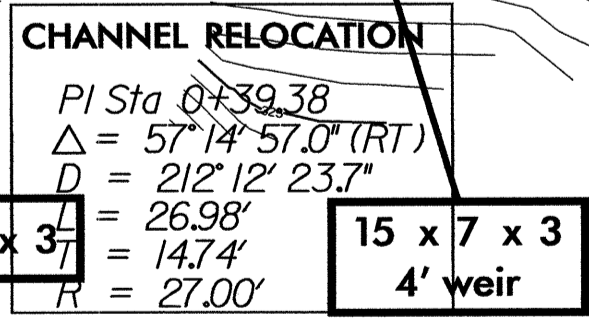
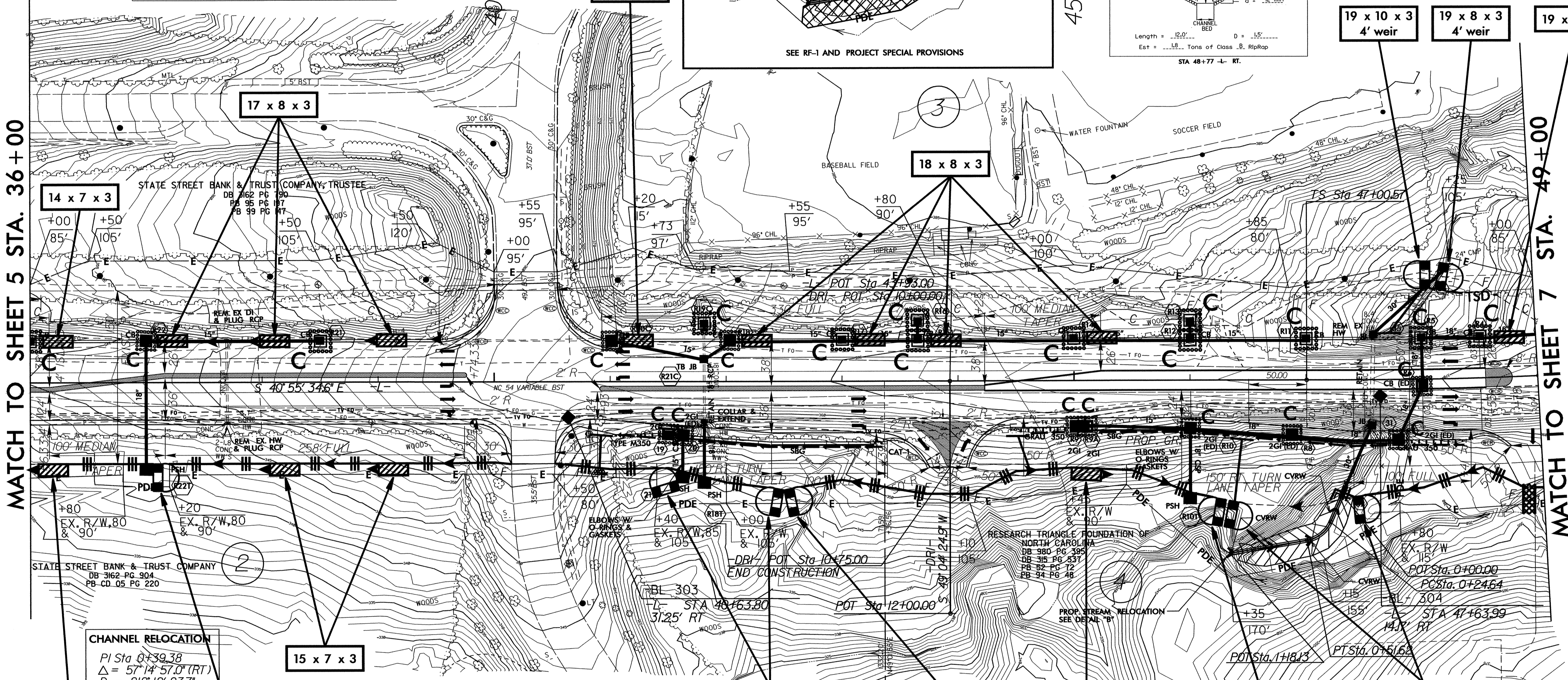
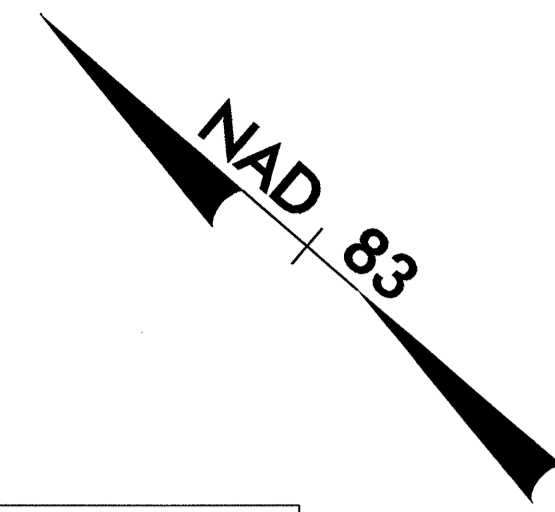
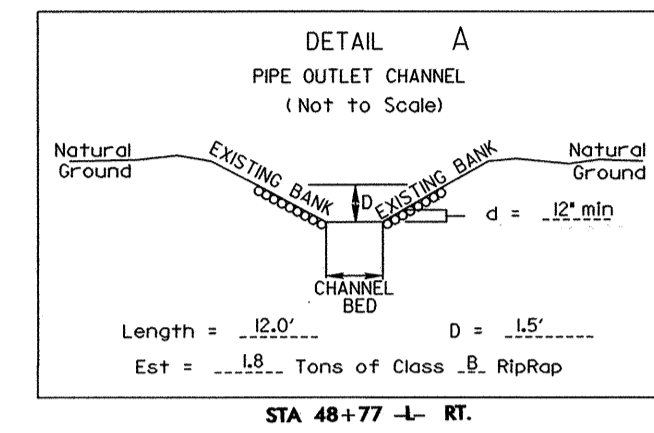
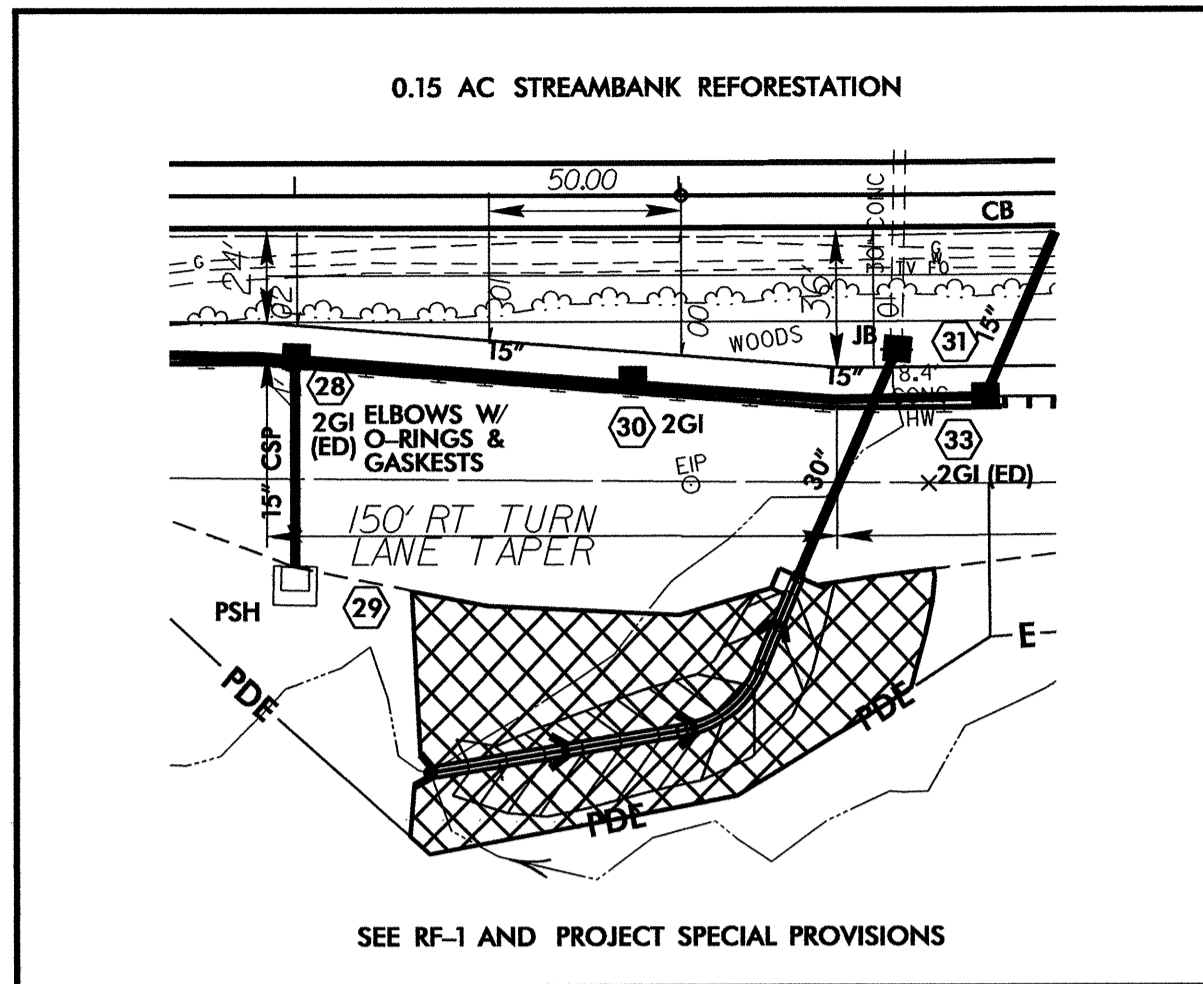
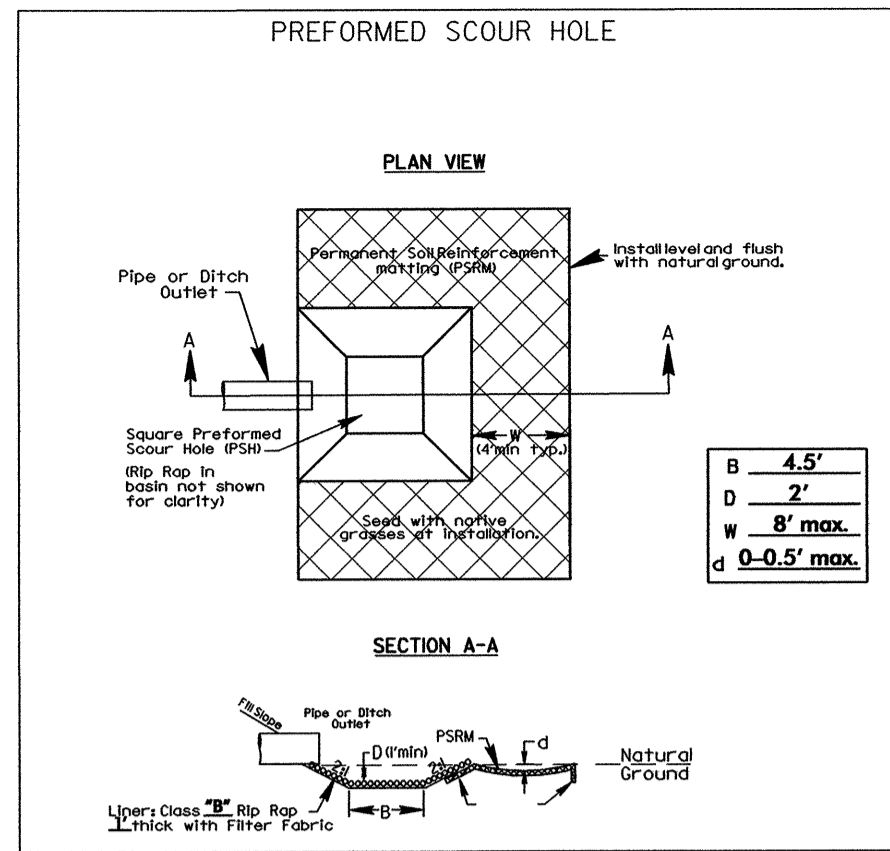
-L-
Pls Sta 48+33.92
Fs = 3' 00" 56.0'
Ls = 200.00
LT = 133.35
ST = 66.68

45

3

2

4



PROJECT REFERENCE NO.	SHEET NO.
R-2904	EC-10/CONST.7
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

-L-

Pls Sta 48+33.92 Pls Sta 49+85.99 Pls Sta 51+37.98
 $Fs = 3'00'' 56.0''$ $\Delta = 5'08'' 54.3'' (LT)$ $Fs = 3'00'' 56.0''$
 $Ls = 200.00$ $D = 3'00'' 56.0''$ $Ls = 200.00$
 $LT = 133.35$ $L = 170.73$ $LT = 133.35$
 $ST = 66.68$ $T = 85.42$ $ST = 66.68$
 $R = 1900.00$
 $SE = 0.04$

NOTE: EXIST. RR BRIDGE MAY STILL HAVE FOUNDATION IN PLACE UNDER EXIST. ROAD.

