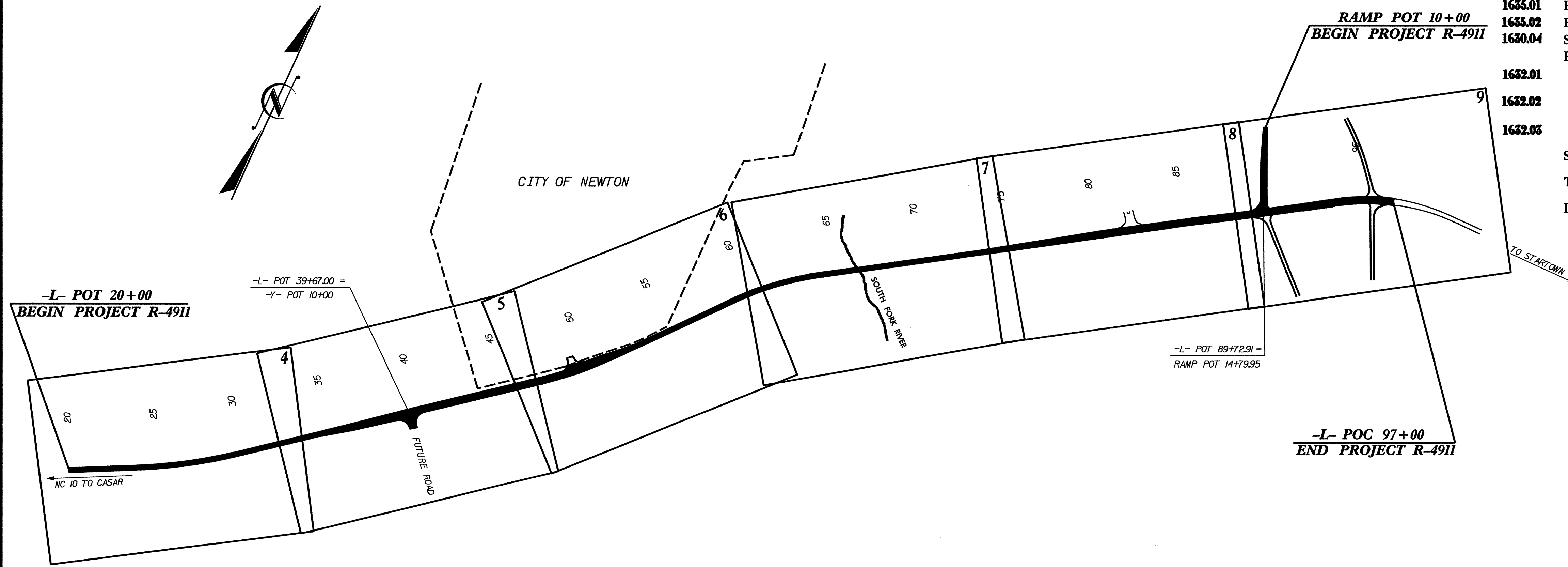


TIP PROJECT: R-4911

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

LOCATION: NC 10 FROM 1000' EAST OF SR 1008 TO US 321 NB RAMPS
TYPE OF WORK: GRADING, PAVING AND DRAINAGE, GUARDRAIL, PAVEMENT MARKINGS AND MARKERS



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4911	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

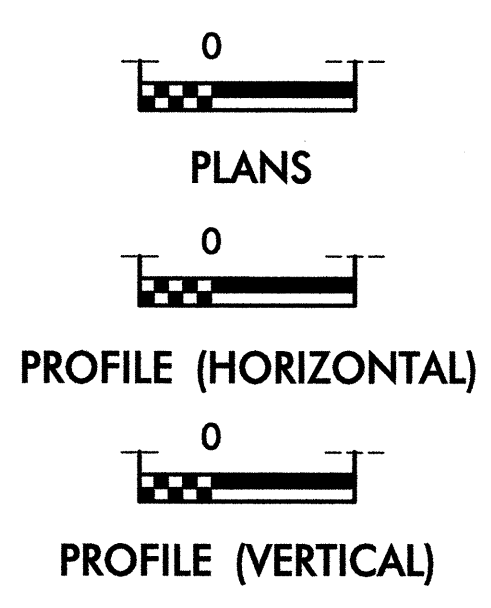
EROSION AND SEDIMENT CONTROL MEASURES

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.....	
	Skimmer Basin.....	
	Tiered Skimmer Basin.....	
	Infiltration Basin.....	

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

Steven Douglas Macdonald
 3/7/08

GRAPHIC SCALE



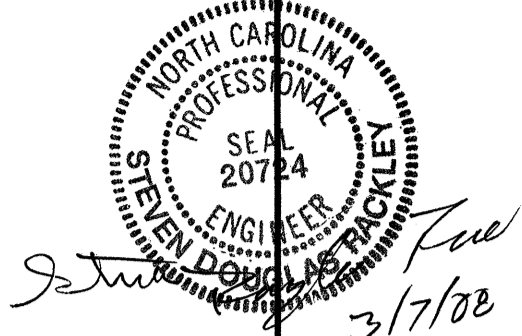
ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

Prepared In the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2006 STANDARD SPECIFICATIONS

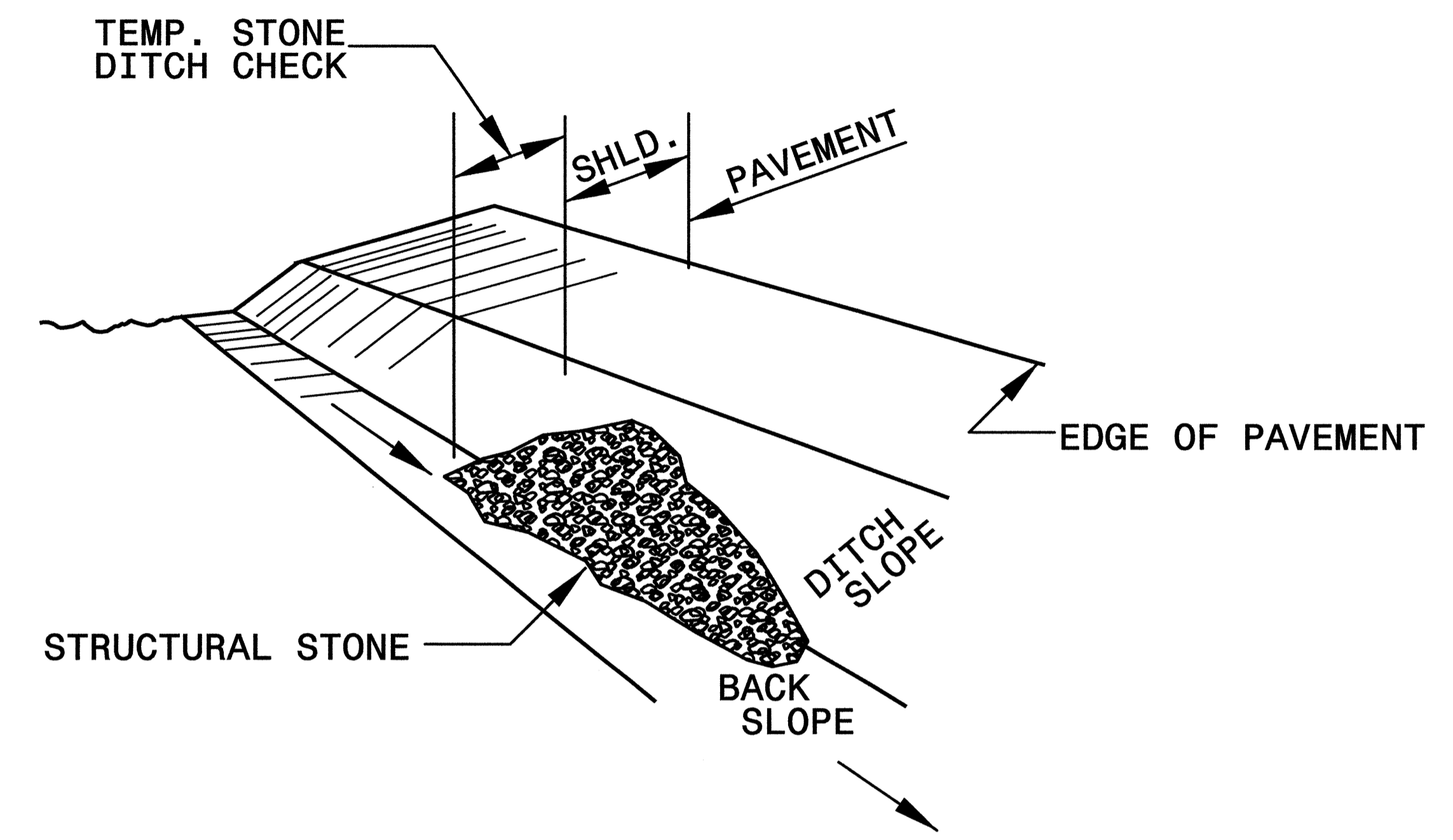
Roadway Standard Drawings

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	1632.02 Rock Inlet Sediment Trap Type B
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1622.01 Temporary Berms and Slope Drains	1633.01 Temporary Rock Silt Check Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	

PROJECT REFERENCE NO. R-4911	SHEET NO. EC-2
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
3/7/08	

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

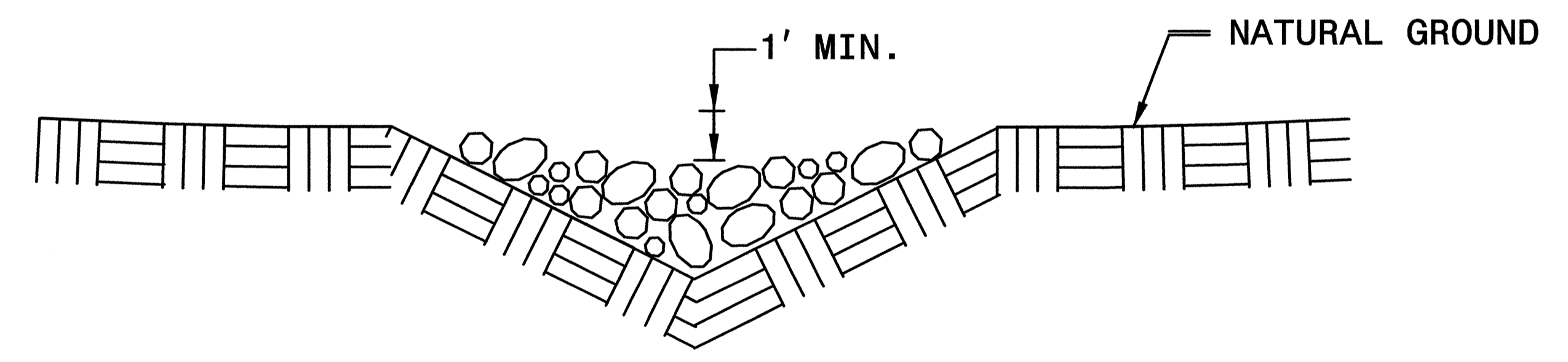


ISOMETRIC VIEW

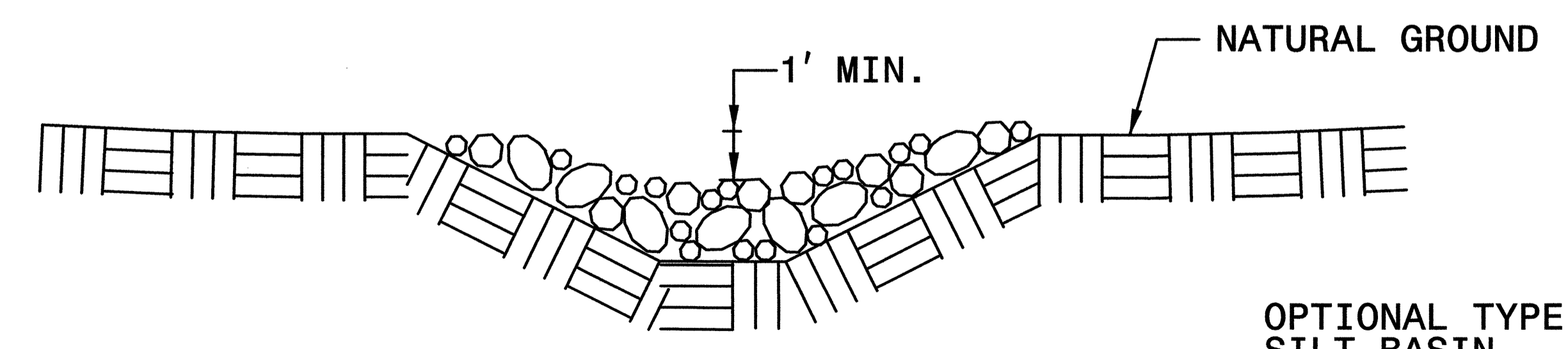
NOTES:

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

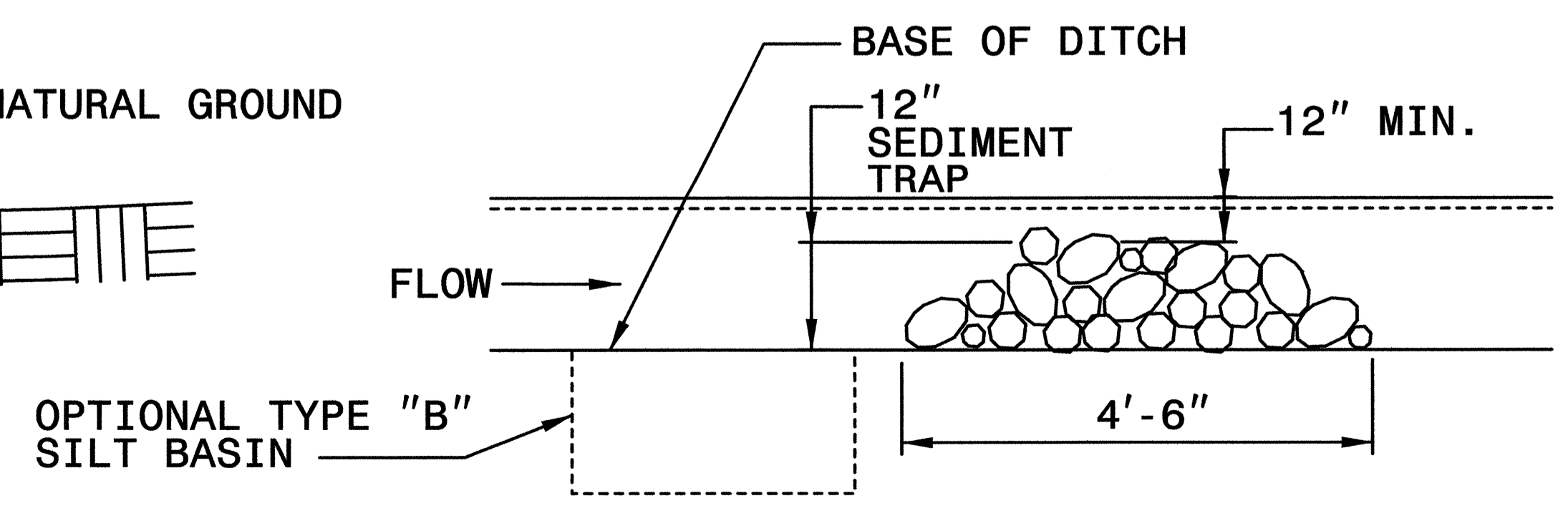
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



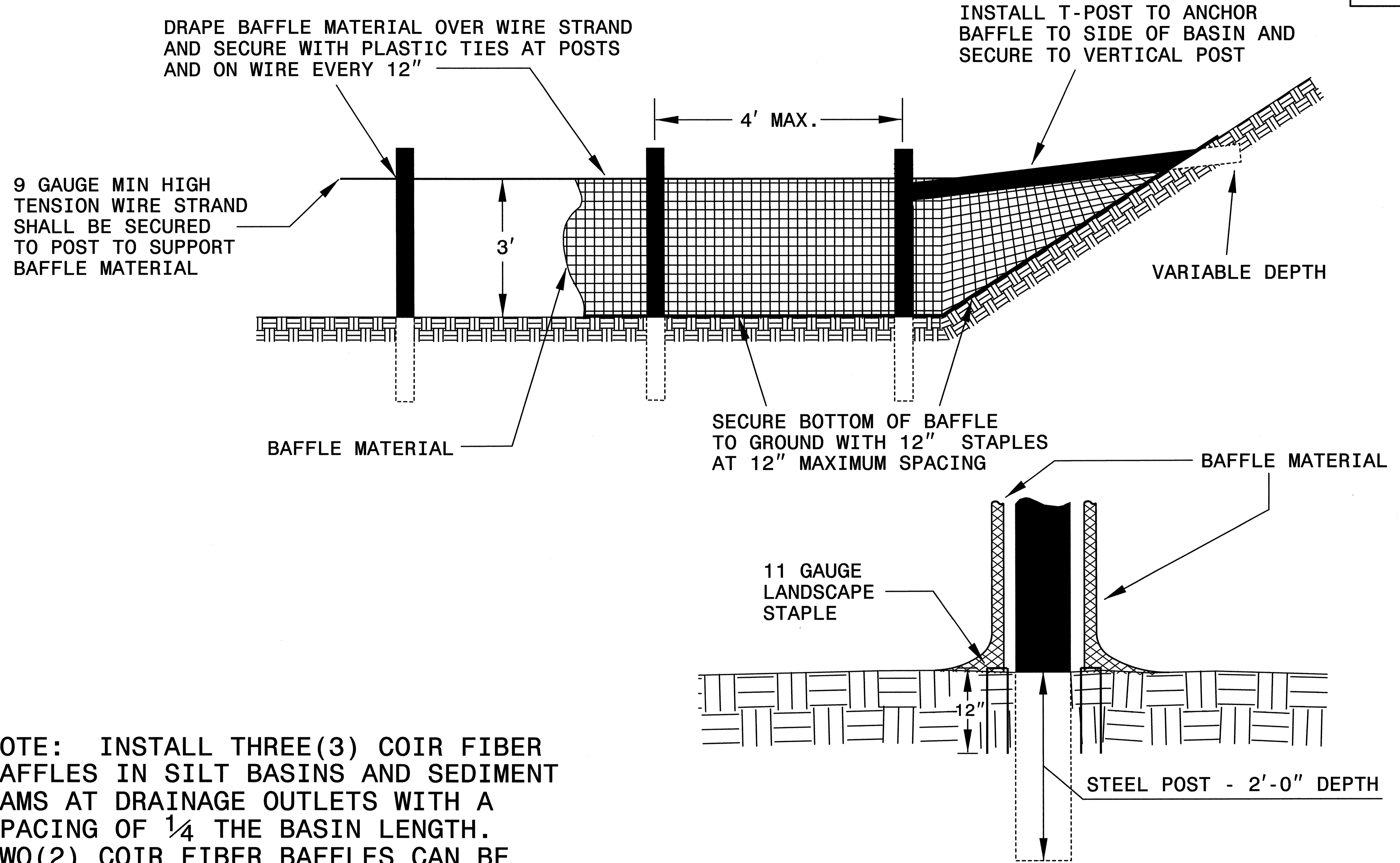
CROSS SECTION TRAPEZOIDAL DITCH



ELEVATION VIEW

PROJECT REFERENCE NO. R-4911	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL

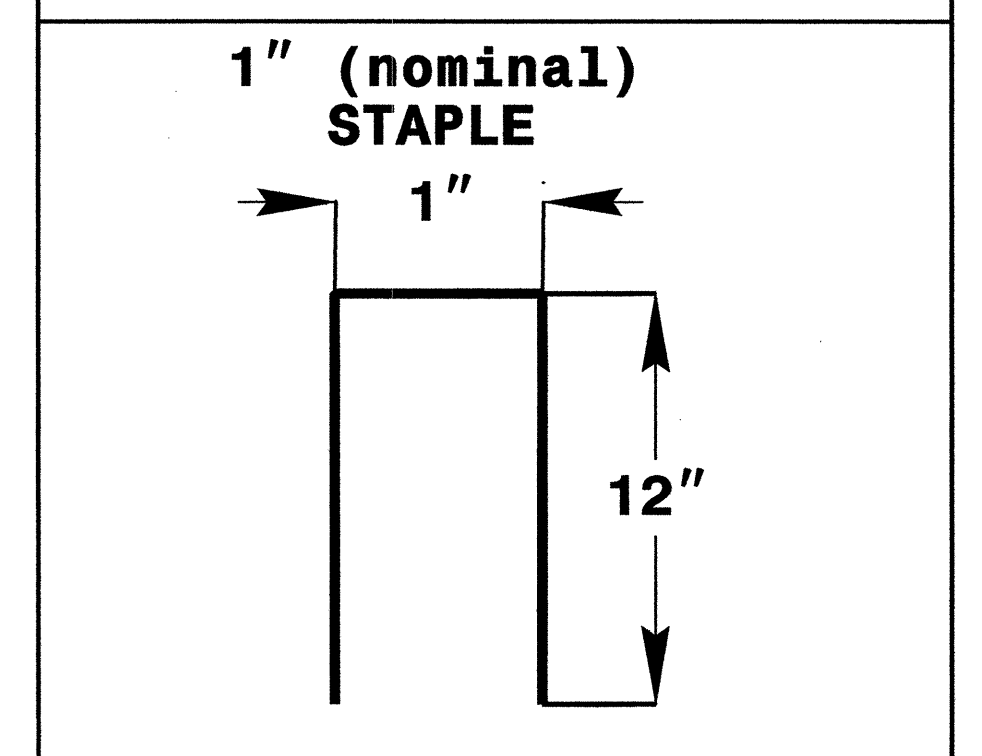
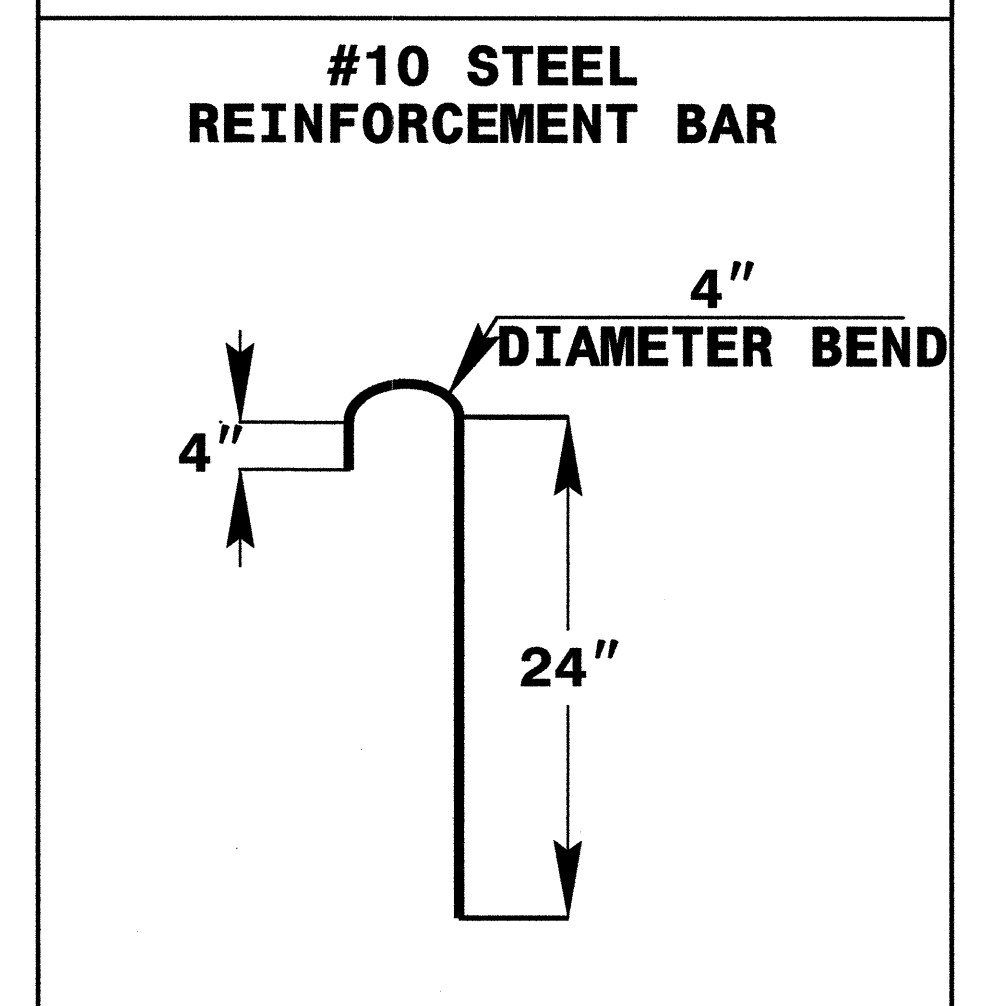
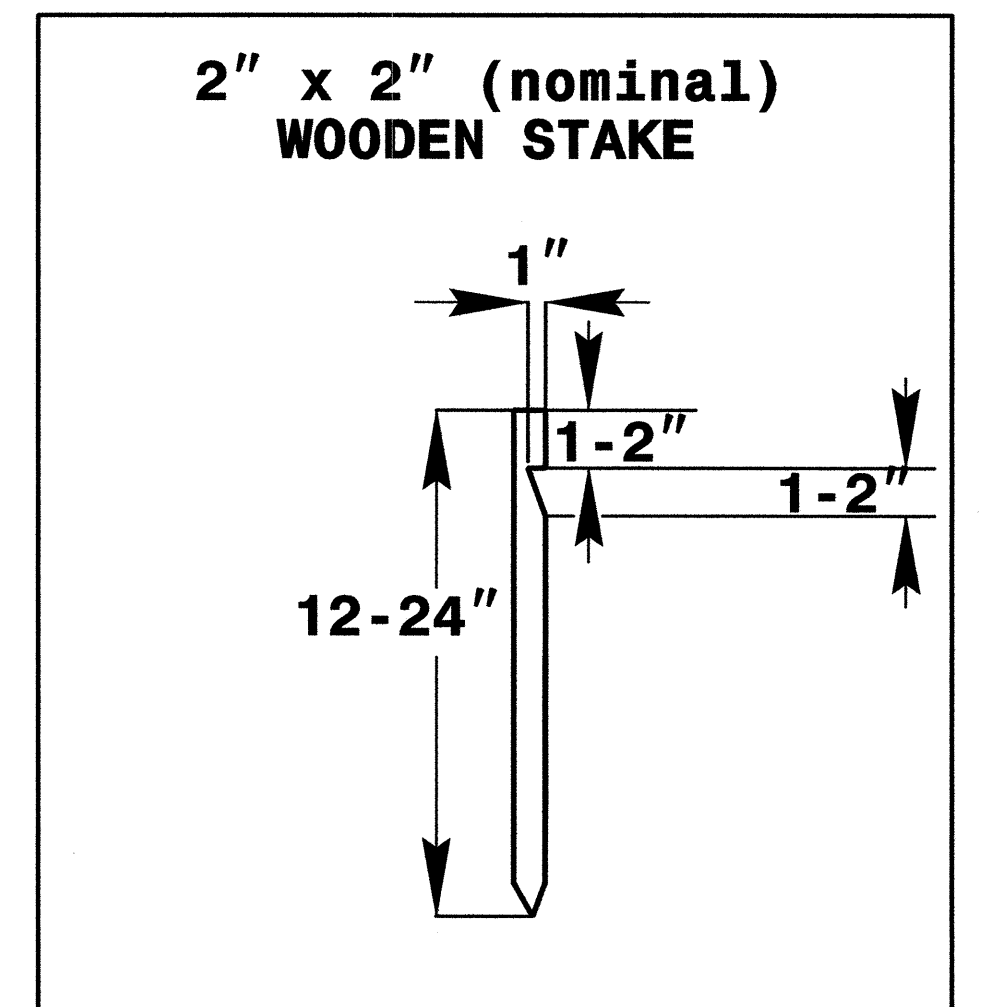
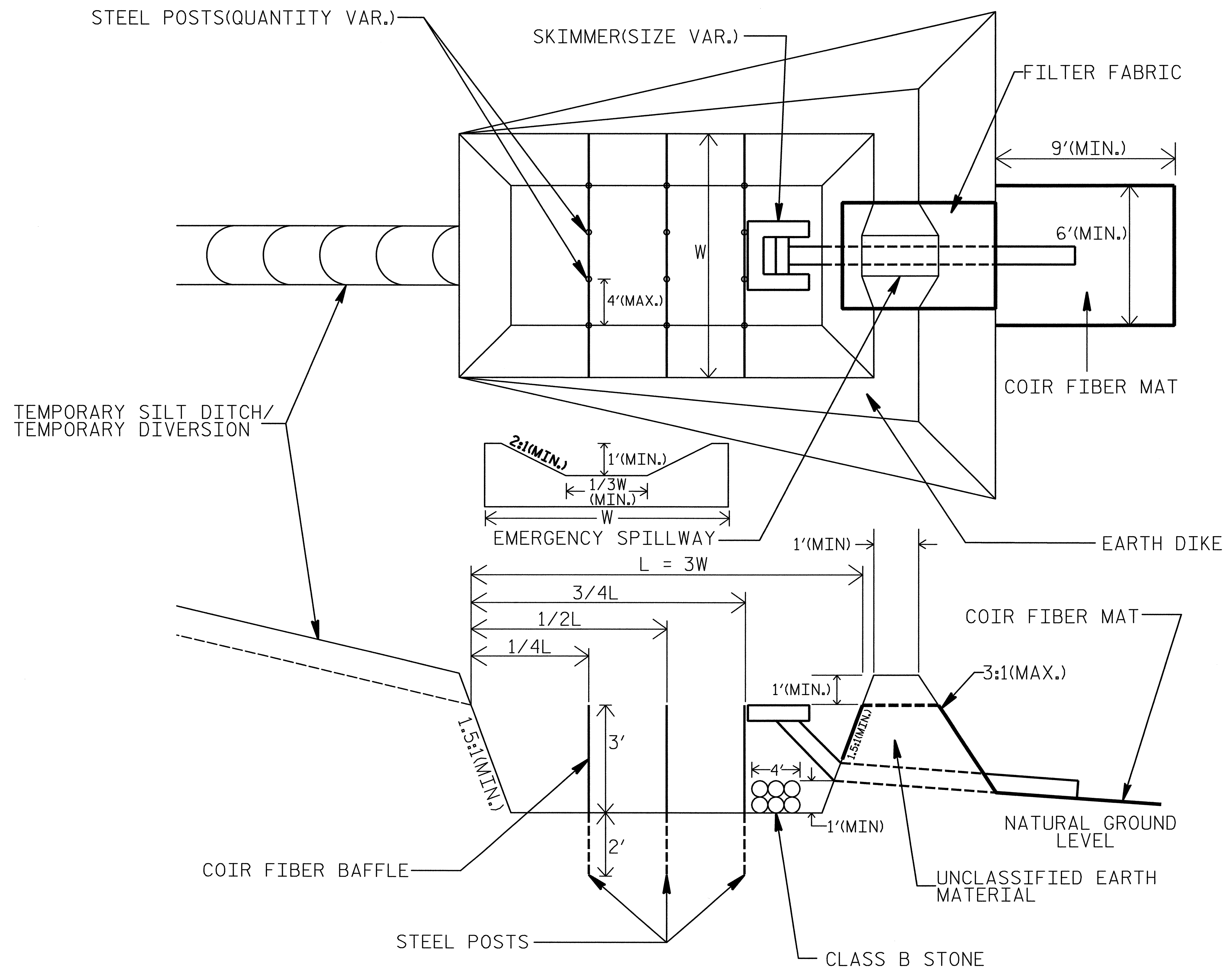


NOTE: INSTALL THREE (3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF $\frac{1}{4}$ THE BASIN LENGTH. TWO (2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF $\frac{1}{3}$ THE BASIN LENGTH.

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

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. R-4911	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<i>Douglas Ruckley</i> 3/7/68	

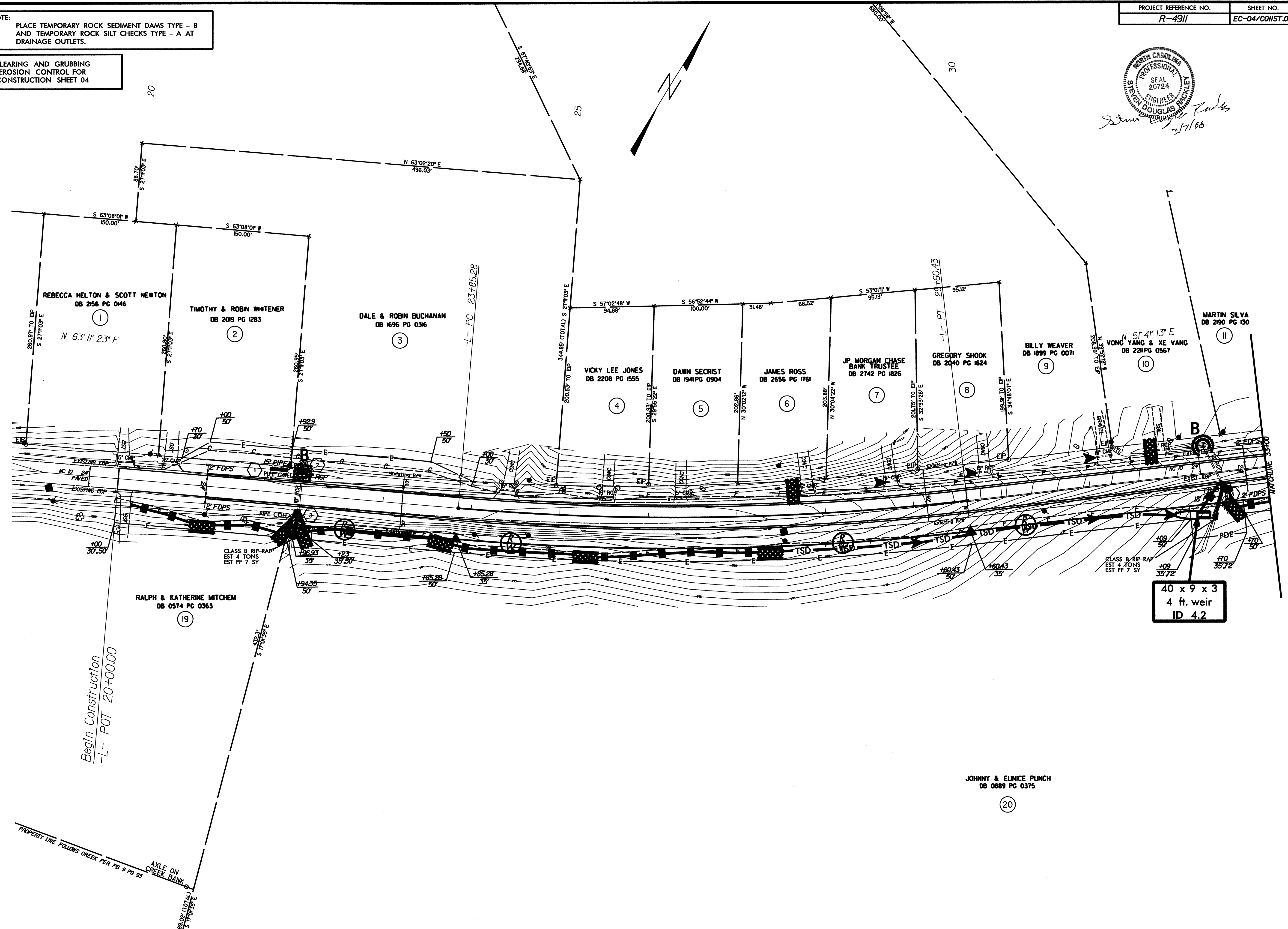


COIR FIBER MAT ANCHOR OPTIONS

- NOTES:**
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON SIDESLOPES.
 2. LIMIT EARTH DIKE HEIGHT TO 5 FT.

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 04



Begin Construction
-L- POT 20+00.00

40 x 9 x 3
4 ft. weir
ID 4.2

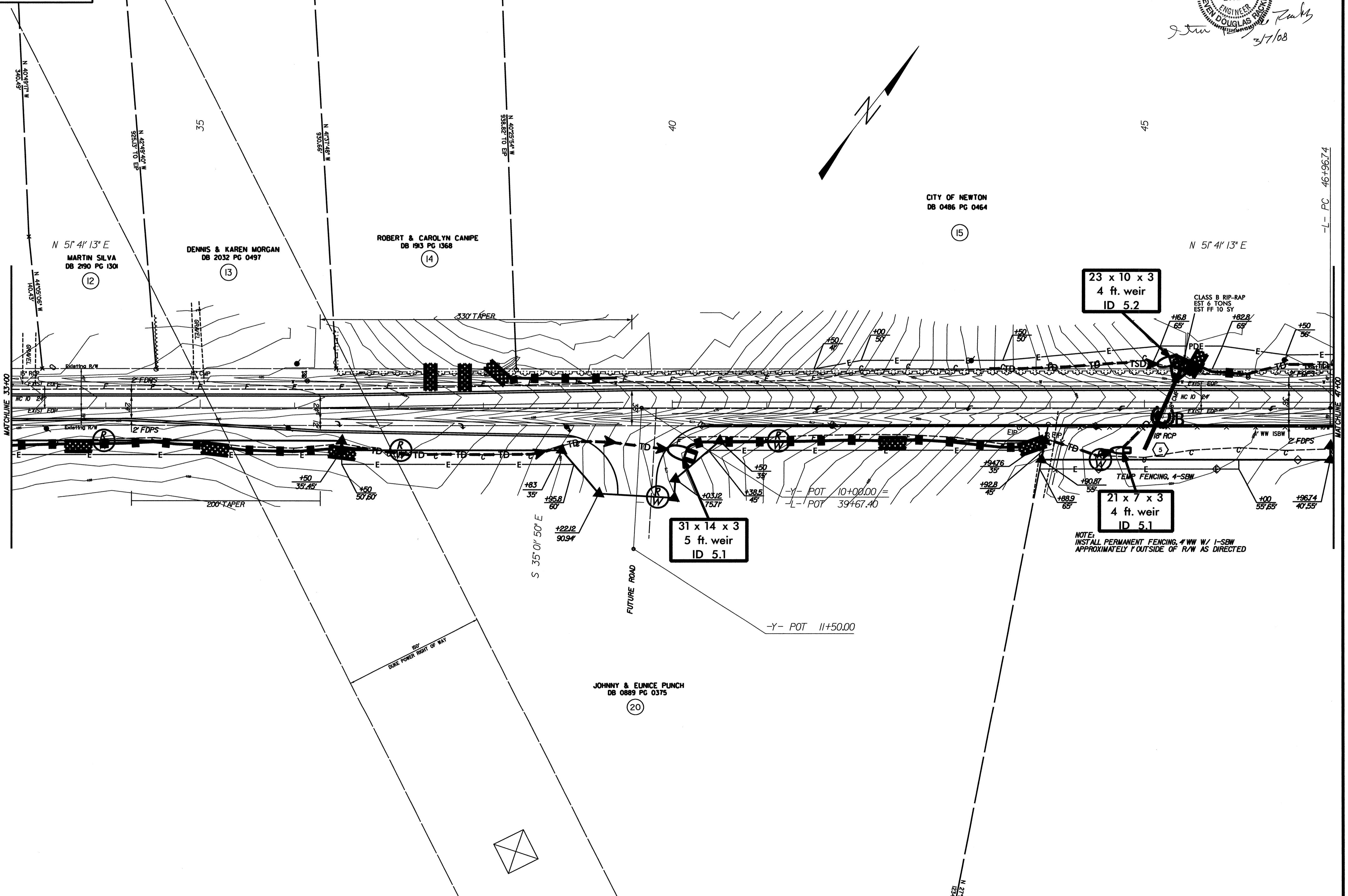
JOHNNY & EUNICE PUNCH
DB 0889 PG 0375

PROPERTY LINE FOLLOWS CREEK PER PG 9 PG 93
AXLE ON CREEK BANK
-L- POT 20+00.00

SEAL 20724
 NORTH CAROLINA PROFESSIONAL ENGINEER
 STEVEN DOUGLAS
 J. [Signature] 2/7/08

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 05



23 x 10 x 3
 4 ft. weir
 ID 5.2

31 x 14 x 3
 5 ft. weir
 ID 5.1

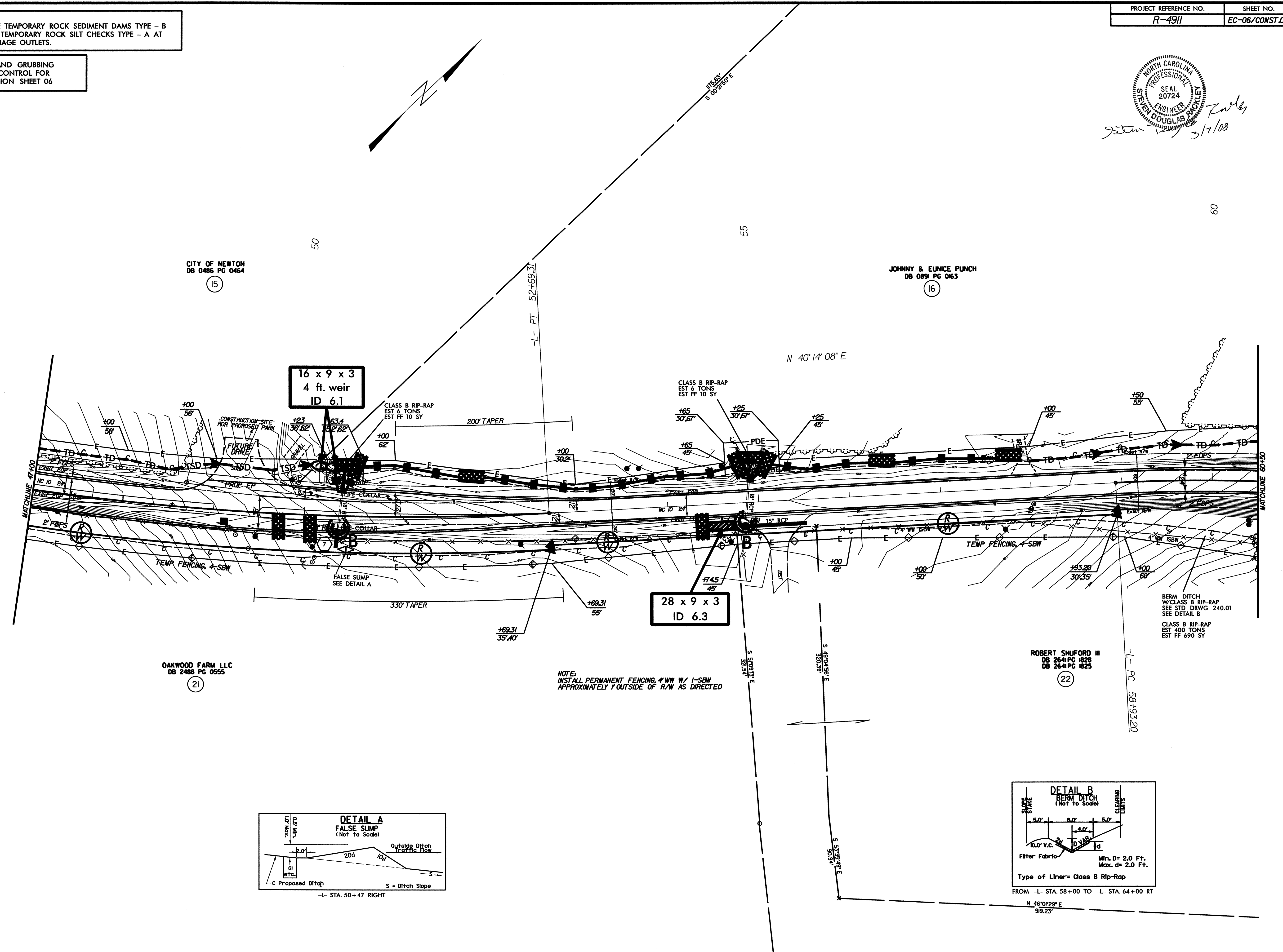
21 x 7 x 3
 4 ft. weir
 ID 5.1

NOTE: INSTALL PERMANENT FENCING, 4' WW W/ 1'-SEW APPROXIMATELY 1' OUTSIDE OF R/W AS DIRECTED

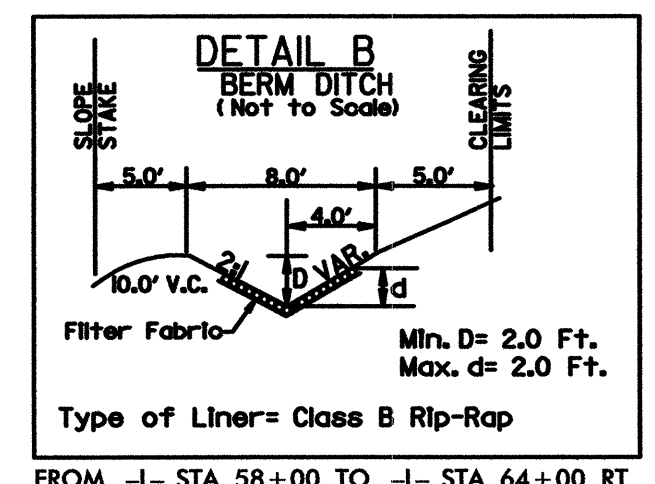
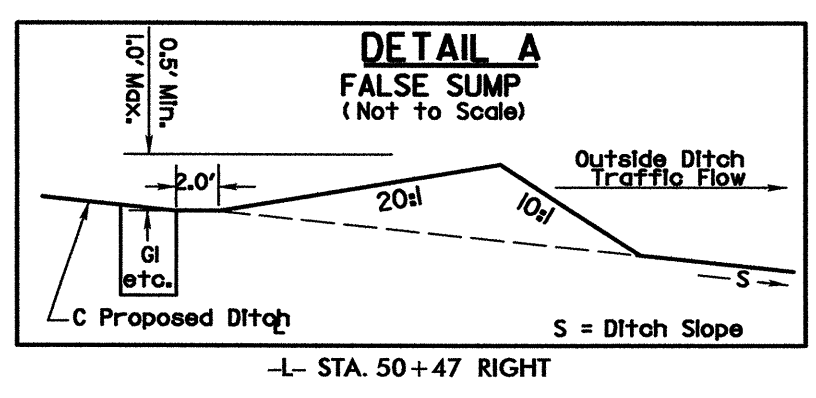
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

NORTH CAROLINA
PROFESSIONAL
SEAL
20724
ENGINEER
STEVEN DOUGLAS PICKLEY
John 3/1/08



NOTE:
INSTALL PERMANENT FENCING, 4" WW W/ 1'-SBW
APPROXIMATELY 1' OUTSIDE OF R/W AS DIRECTED



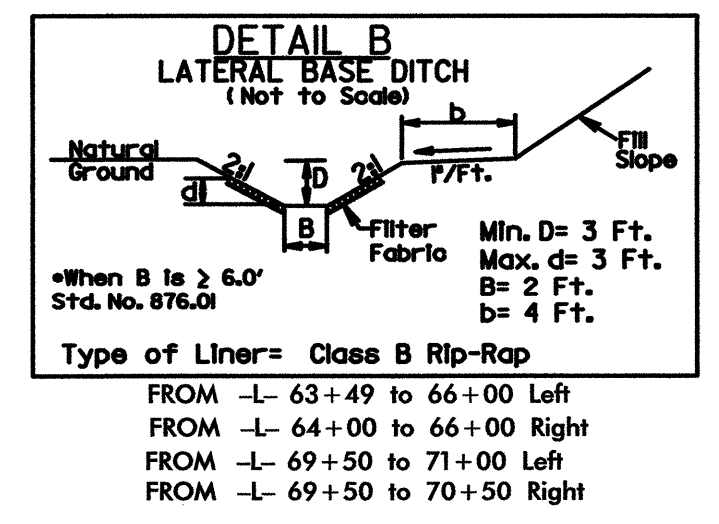
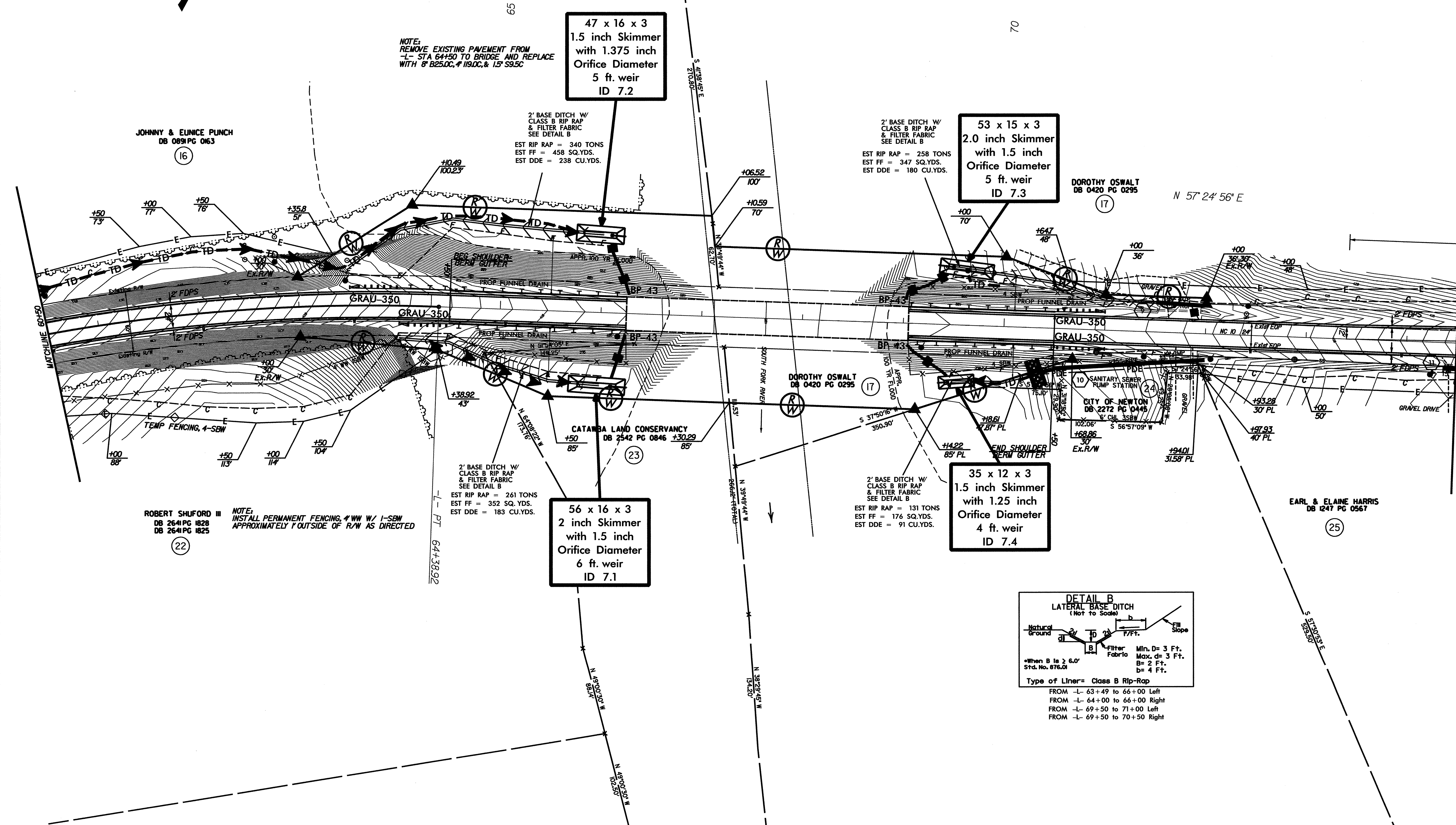


Steven Douglas Rickley
3/7/08

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 07

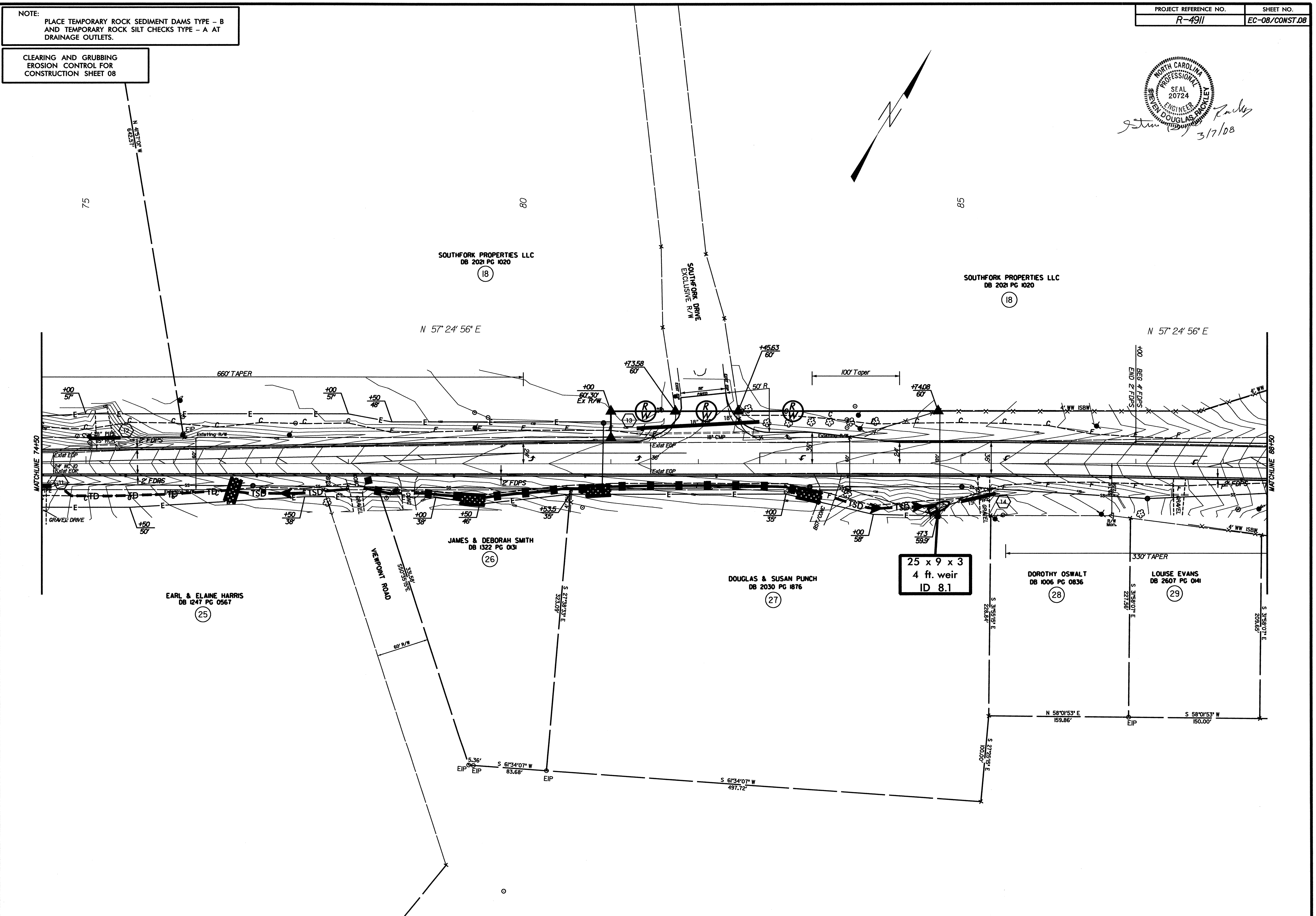
NOTE:
REMOVE EXISTING PAVEMENT FROM
-L- STA 64+50 TO BRIDGE AND REPLACE
WITH 8" B25.0C, 4" 119.0C, & 15" S9.5C



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 08


 Douglas Brockley
 3/7/08

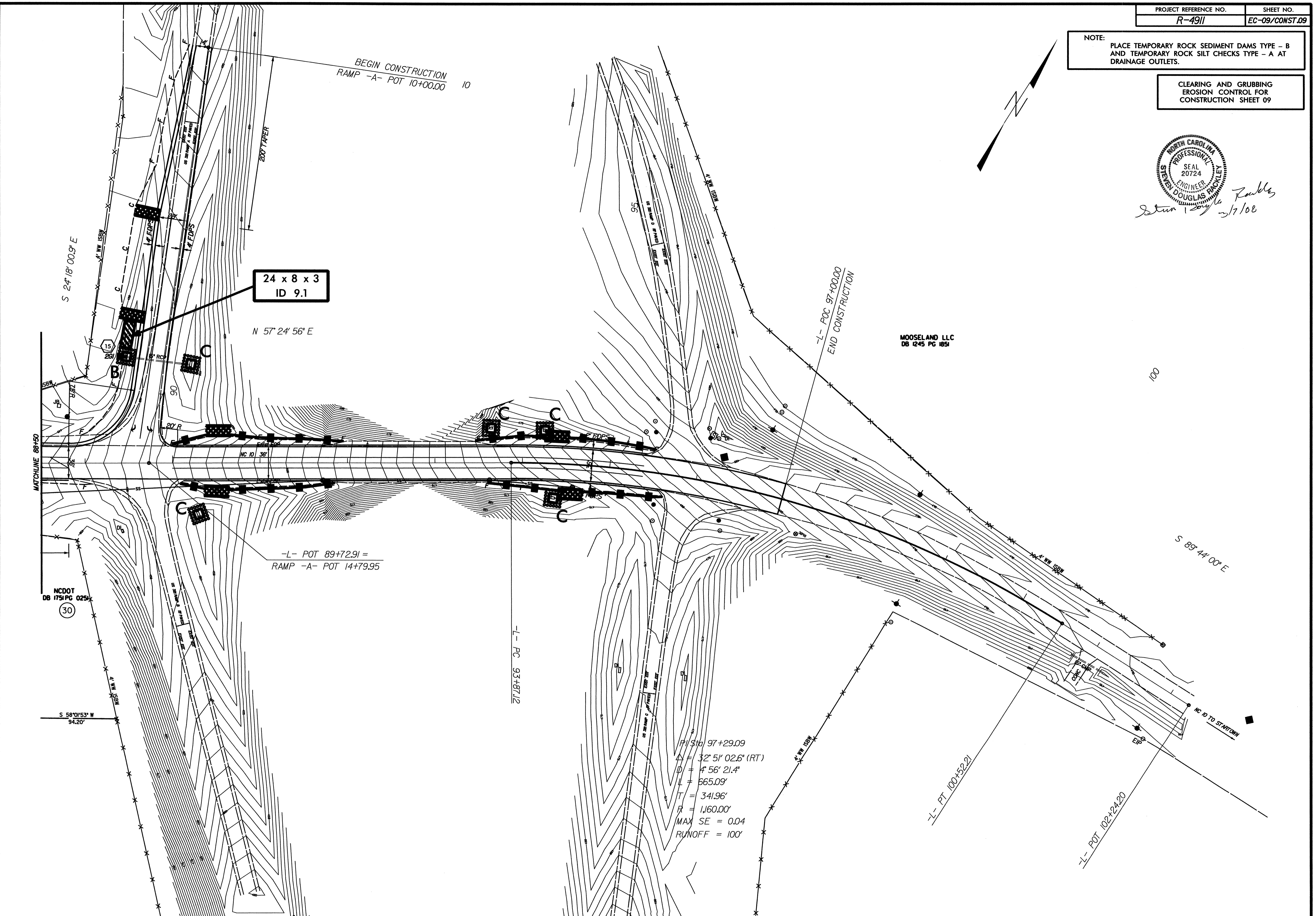


NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 09

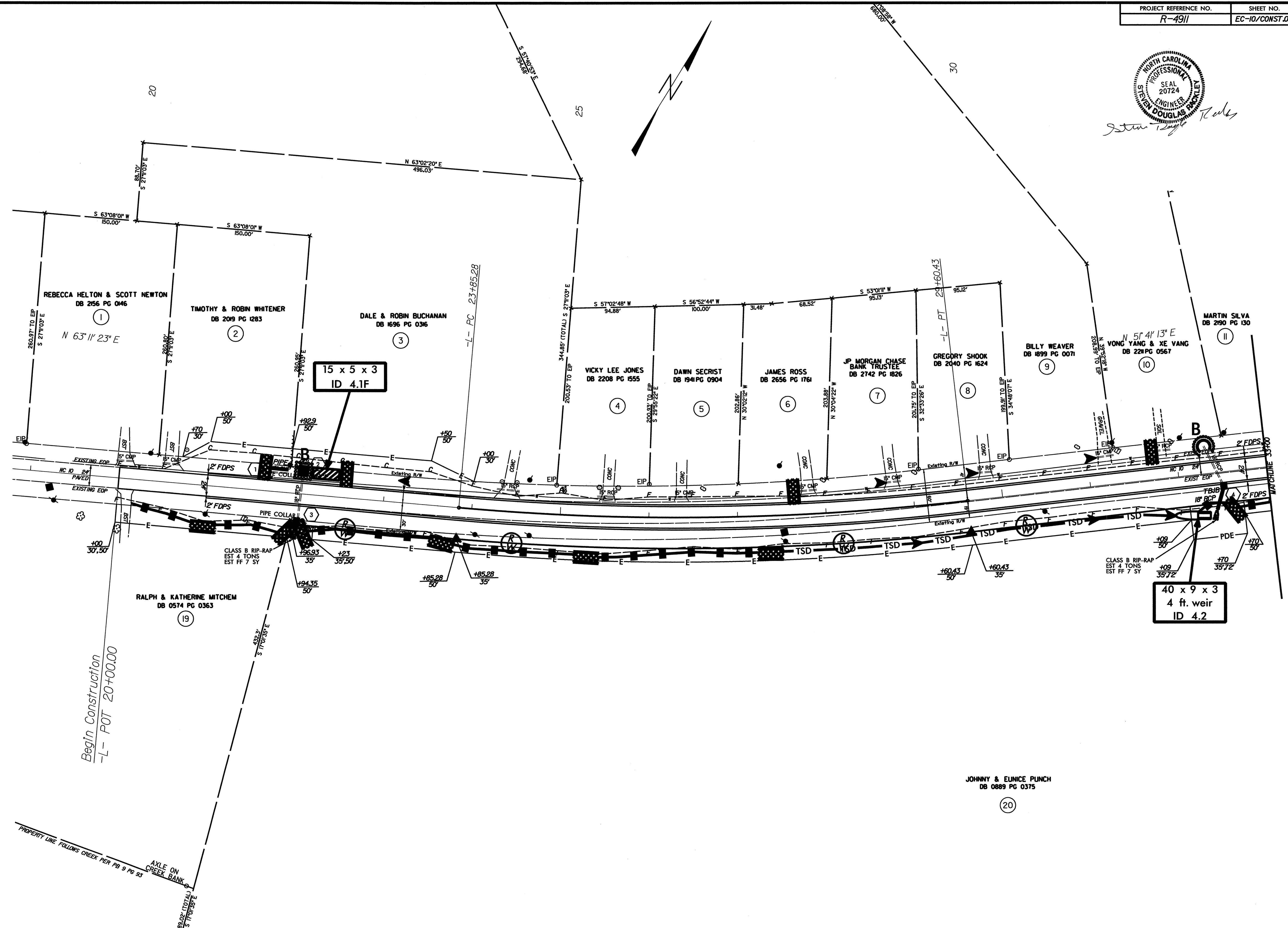


Stuart Rankley
2/7/08



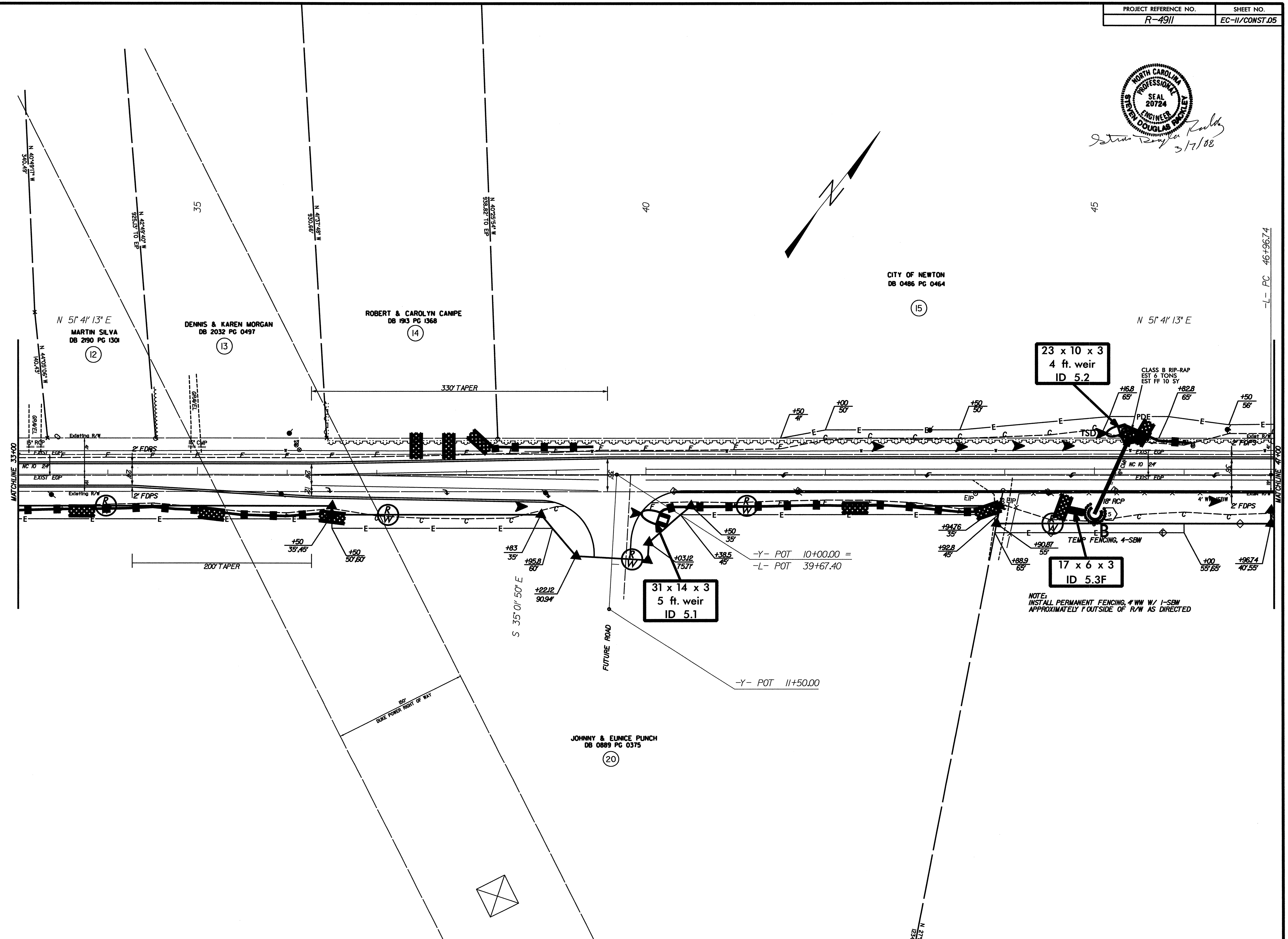


Steven Douglas Rodes





Steven Douglas Raulo
1/7/08



CITY OF NEWTON
DB 0486 PG 0464

N 51° 41' 13" E
MARTIN SILVA
DB 2190 PG 1301

DENNIS & KAREN MORGAN
DB 2032 PG 0497

ROBERT & CAROLYN CANIPE
DB 1913 PG 1368

N 51° 41' 13" E

23 x 10 x 3
4 ft. weir
ID 5.2

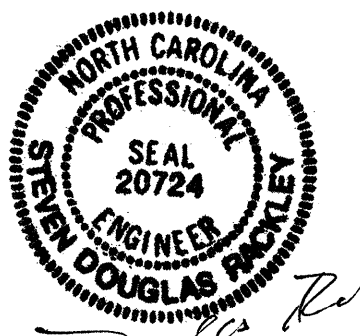
CLASS B RIP-RAP
EST 6 TONS
EST FF TO ST

31 x 14 x 3
5 ft. weir
ID 5.1

17 x 6 x 3
ID 5.3F

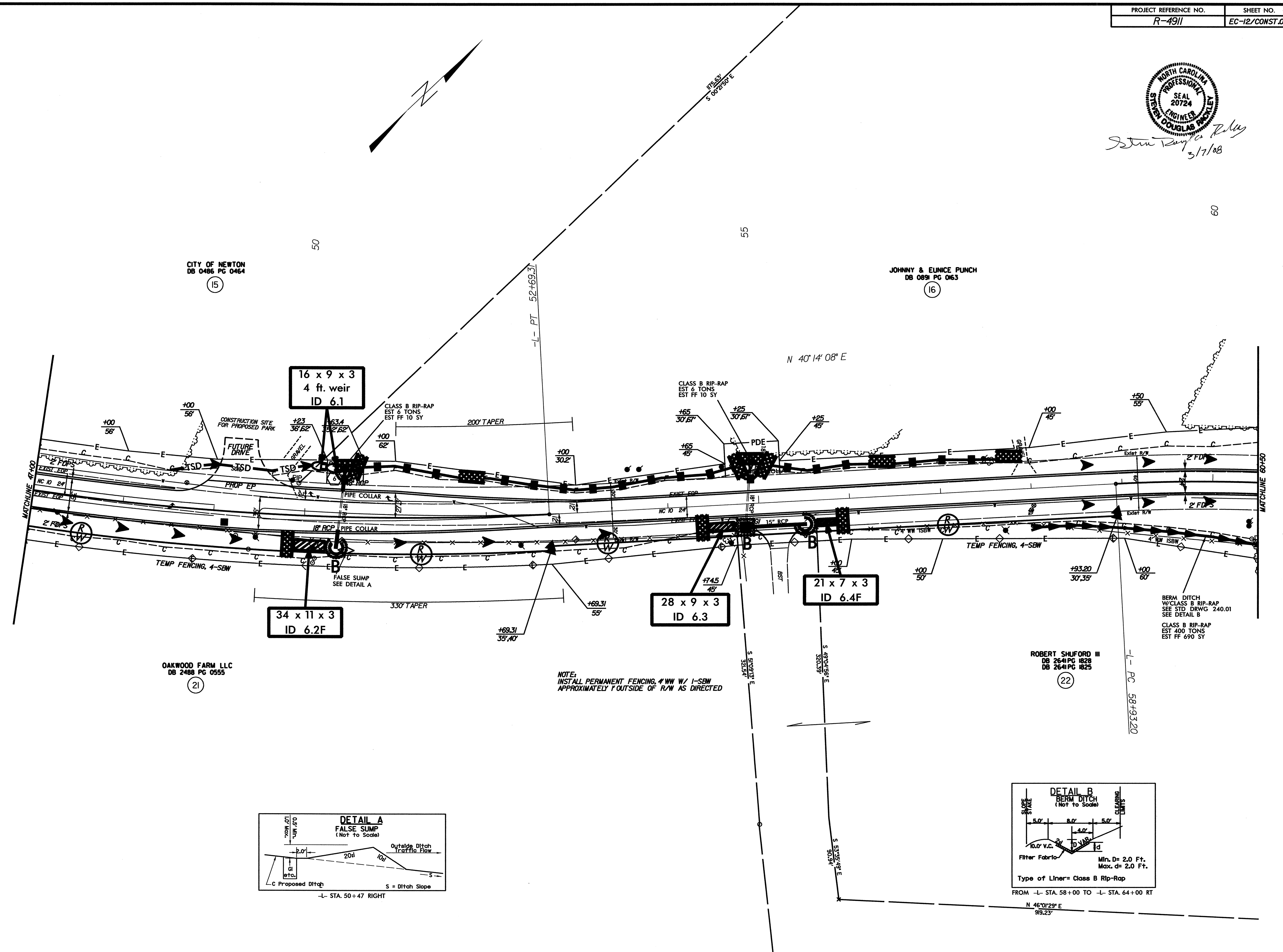
NOTE:
INSTALL PERMANENT FENCING, 4' WW W/ 1'-SBW
APPROXIMATELY 1' OUTSIDE OF R/W AS DIRECTED

JOHNNY & EUNICE PUNCH
DB 0889 PG 0375



Douglas R. Kelly
3/7/08

60



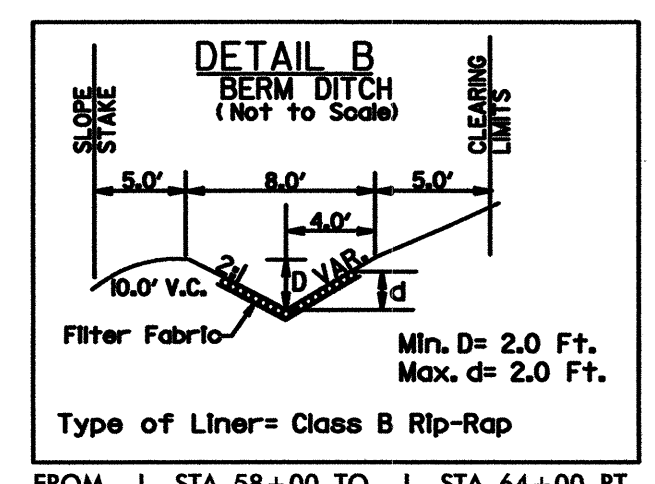
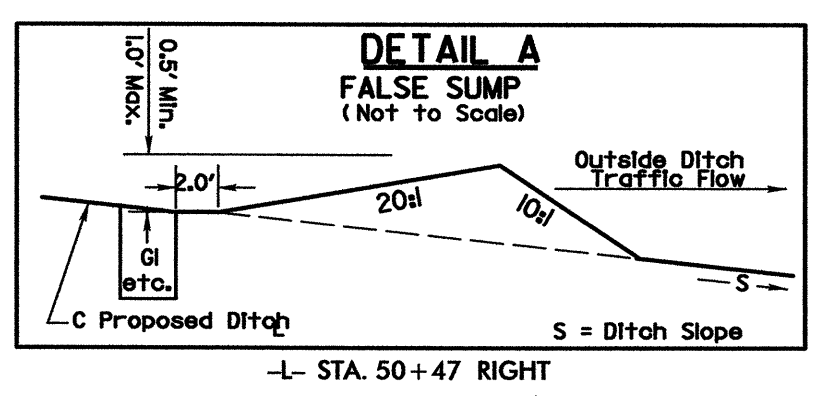
CITY OF NEWTON
DB 0486 PG 0464
(15)

JOHNNY & EUNICE PUNCH
DB 0891 PG 0163
(16)

OAKWOOD FARM LLC
DB 2488 PG 0555
(21)

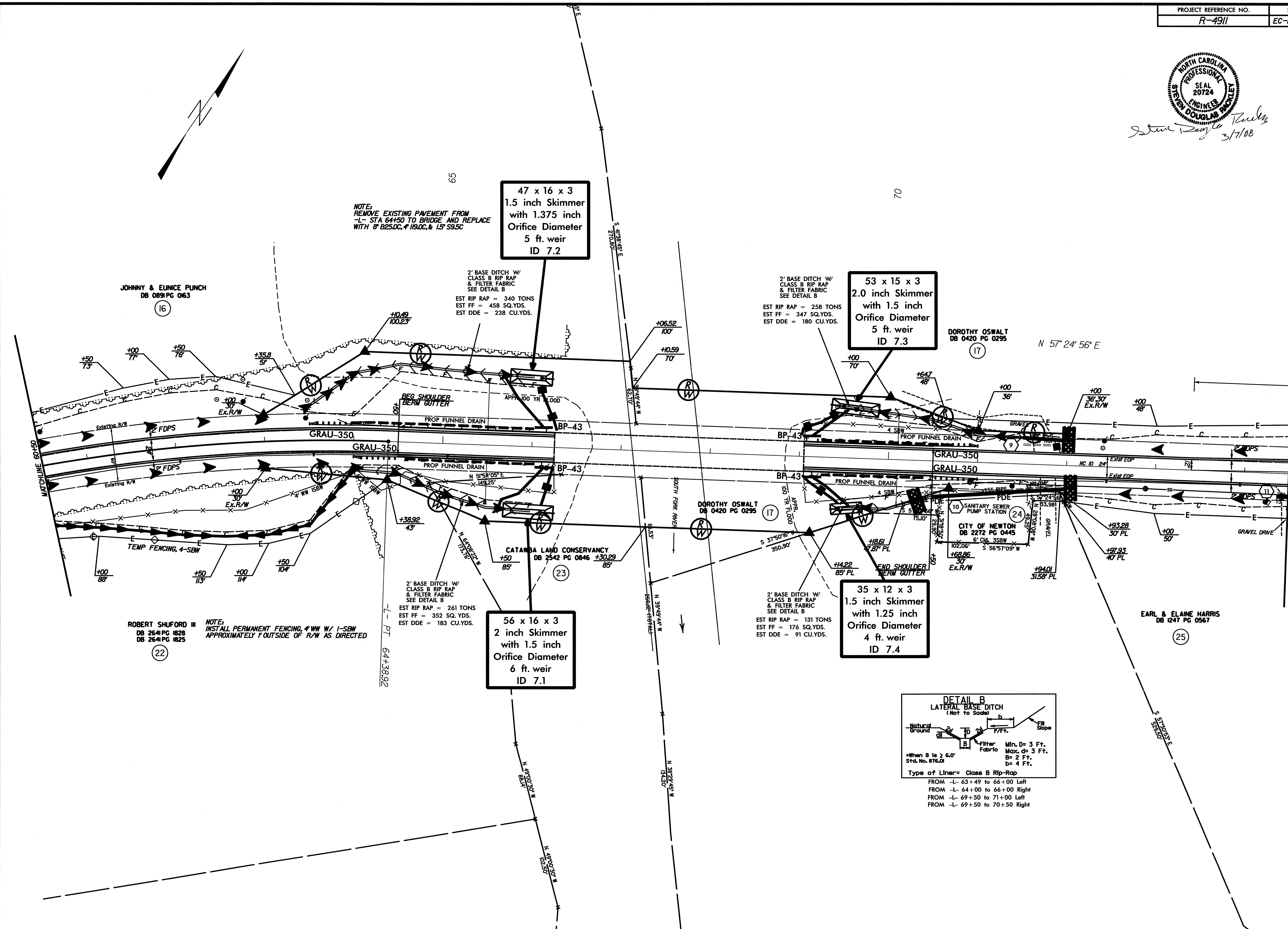
ROBERT SHUFORD III
DB 2641 PG 1828
DB 2641 PG 1825
(22)

NOTE:
INSTALL PERMANENT FENCING, 4\"/>





Steven Douglas Ruelke
3/7/88



NOTE:
REMOVE EXISTING PAVEMENT FROM
-L- STA 64+50 TO BRIDGE AND REPLACE
WITH 8" B25.DC, # 119.DC, & 15" S9.5C

47 x 16 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
5 ft. weir
ID 7.2

53 x 15 x 3
2.0 inch Skimmer
with 1.5 inch
Orifice Diameter
5 ft. weir
ID 7.3

56 x 16 x 3
2 inch Skimmer
with 1.5 inch
Orifice Diameter
6 ft. weir
ID 7.1

35 x 12 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
4 ft. weir
ID 7.4

JOHNNY & ELAINE PUNCH
DB 0891 PG 0163
(16)

DOROTHY OSWALT
DB 0420 PG 0295
(17)

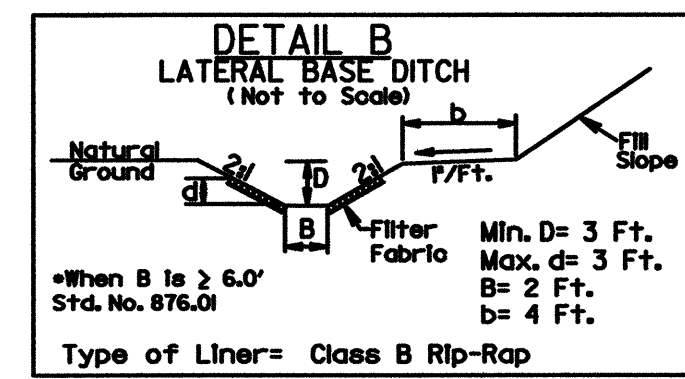
CATAMBA LAND CONSERVANCY
DB 2542 PG 0846
(23)

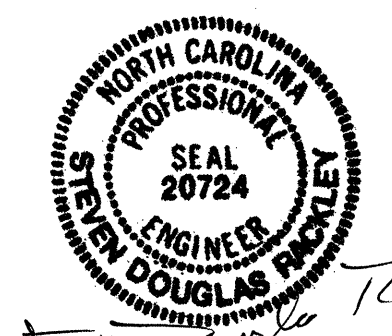
CITY OF NEWTON
DB 2272 PG 0445
(24)

ROBERT SHUFORD III
DB 264 PG 1828
DB 264 PG 1829
(22)

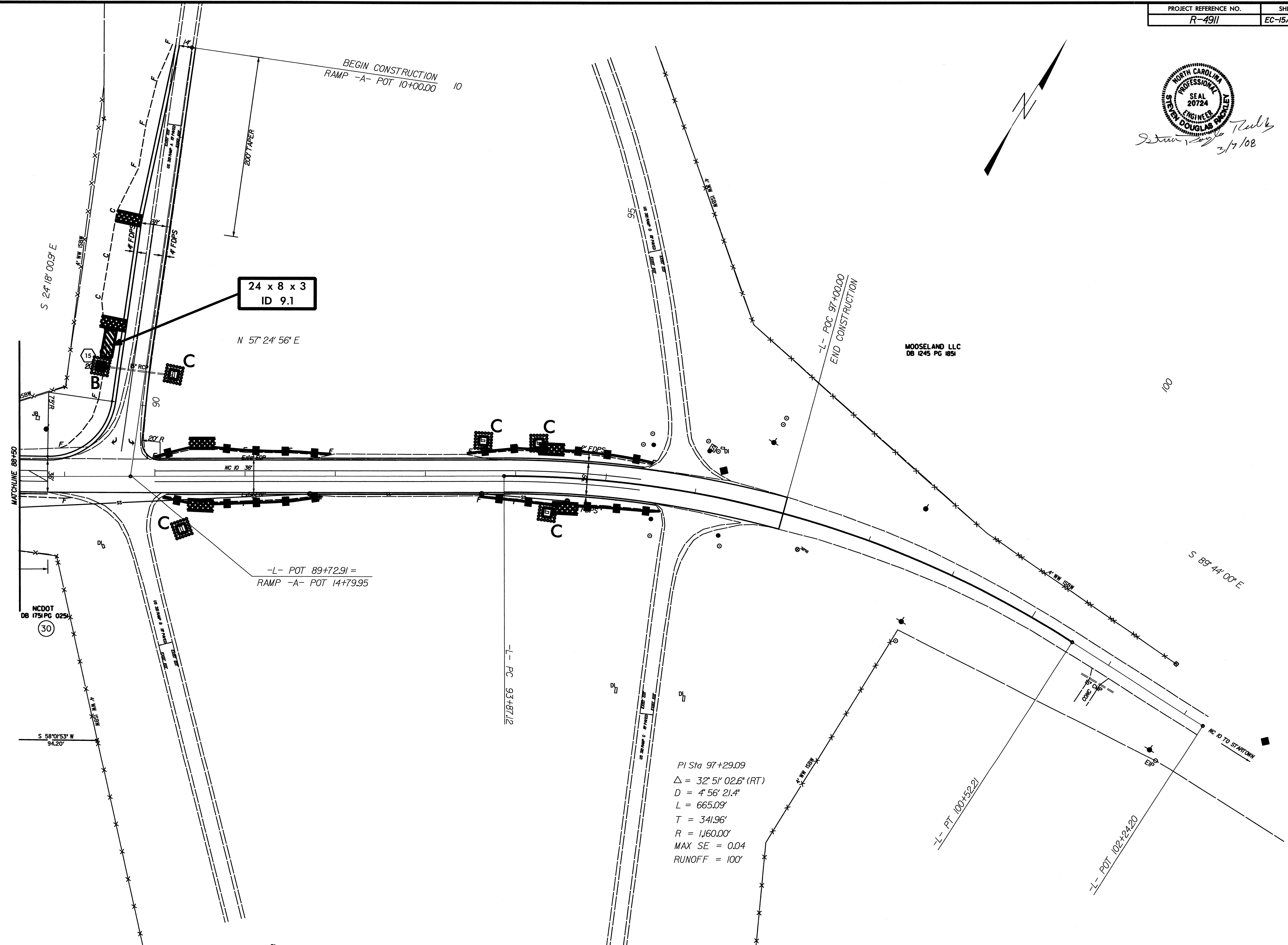
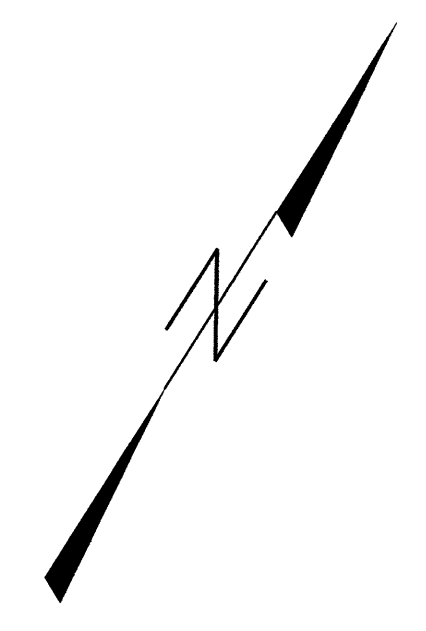
EARL & ELAINE HARRIS
DB 1247 PG 0567
(25)

NOTE:
INSTALL PERMANENT FENCING, 4" WW W/ 1" SBW
APPROXIMATELY 1' OUTSIDE OF R/W AS DIRECTED





John Riddle
3/7/08



**24 x 8 x 3
ID 9.1**

N 57° 24' 56" E

-L- POT 89+72.91 =
RAMP -A- POT 14+79.95

PI Sta 97+29.09
 $\Delta = 32^\circ 51' 02.6" (RT)$
 $D = 4' 56' 21.4"$
 $L = 665.09'$
 $T = 341.96'$
 $R = 1,160.00'$
 MAX SE = 0.04
 RUNOFF = 100'