

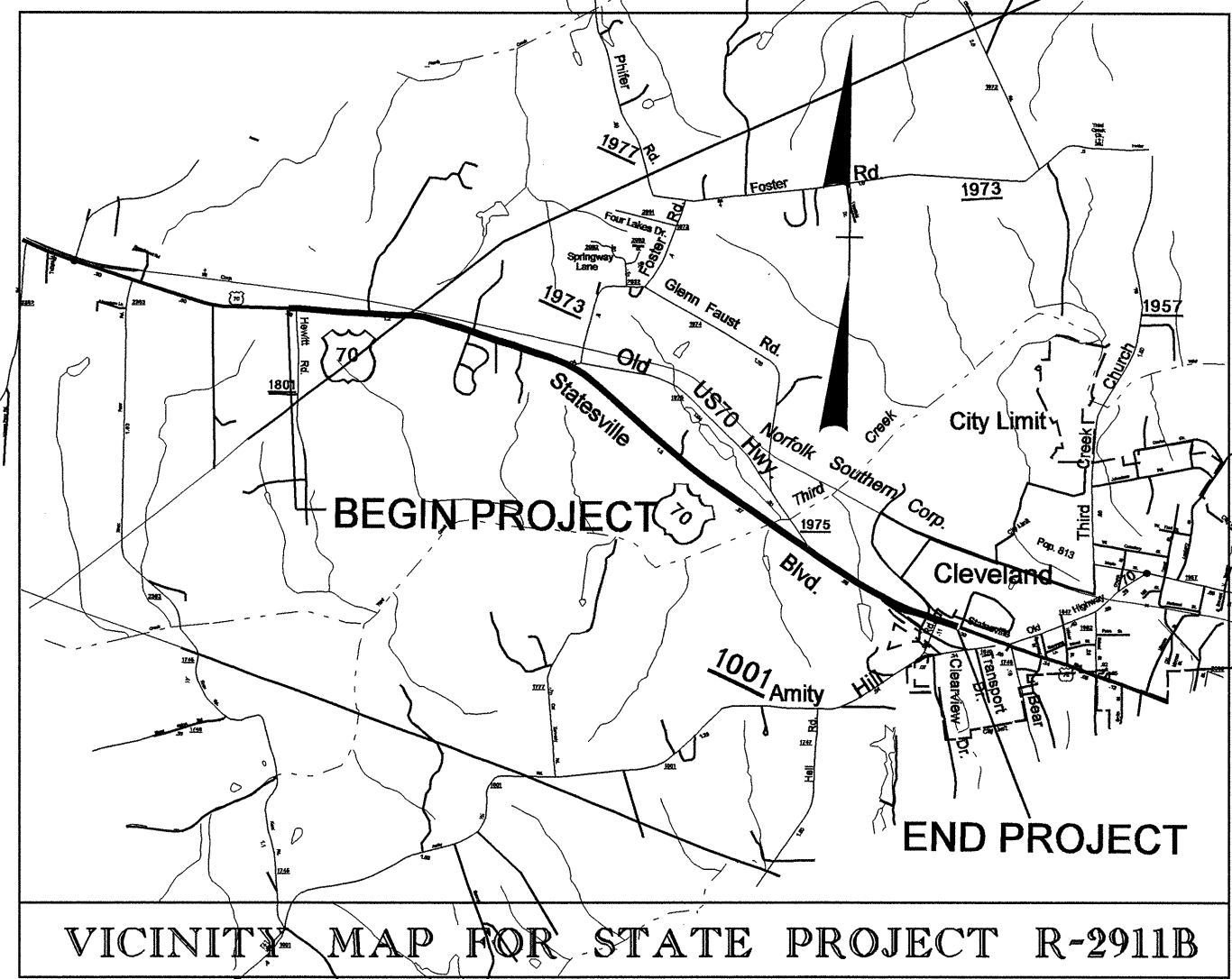
T.I.P. NO.	SHEET NO.
R-2911B	UC-1

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

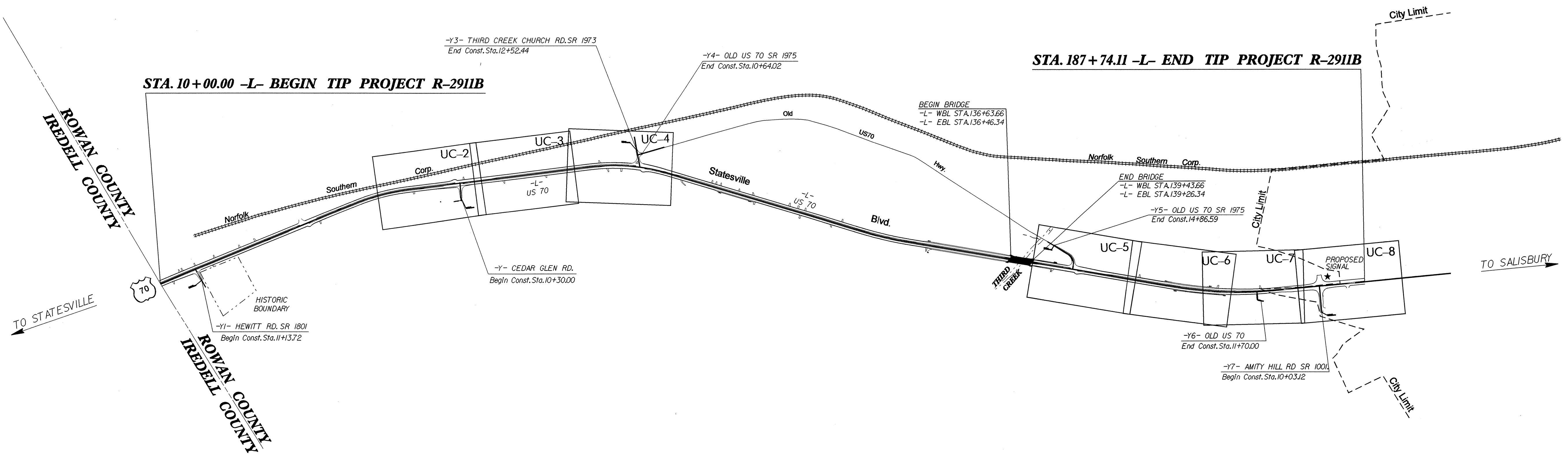
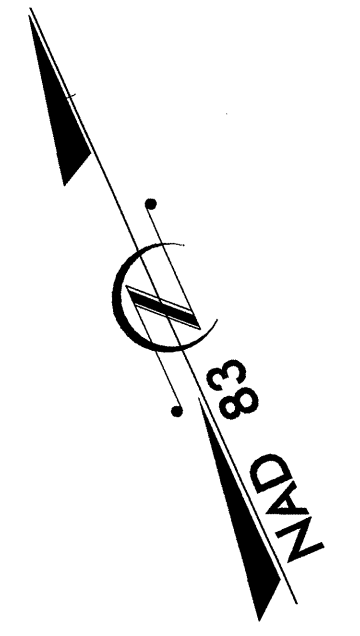
**UTILITY CONSTRUCTION PLANS  
ROWAN COUNTY**

**LOCATION: US 70 FROM IREDELL COUNTY LINE  
TO EAST OF SR 1001 (AMITY HILL ROAD)**

**TYPE OF WORK: UTILITY CONSTRUCTION**

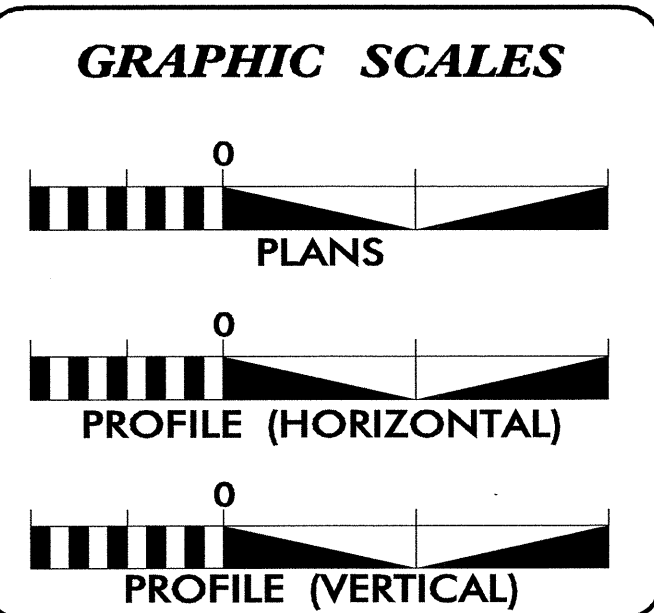


VICINITY MAP FOR STATE PROJECT R-2911B



**TIP PROJECT: R-2911B**

**CONTRACT: C201932**

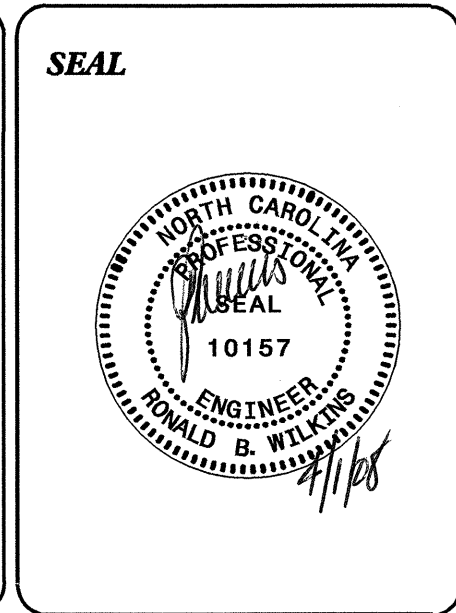


**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2 THRU UC-8	UTILITY CONSTRUCTION PLAN SHEETS
UC-9	PROFILE SHEET
UC-10	DETAILS SHEET

**WATER AND SEWER OWNERS ON PROJECT**

(1) WATER - SALISBURY-ROWAN UTILITIES



PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
PROJECT SERVICES  
UTILITY SECTION**

1591 MAIL SERVICES CENTER  
RALEIGH, NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

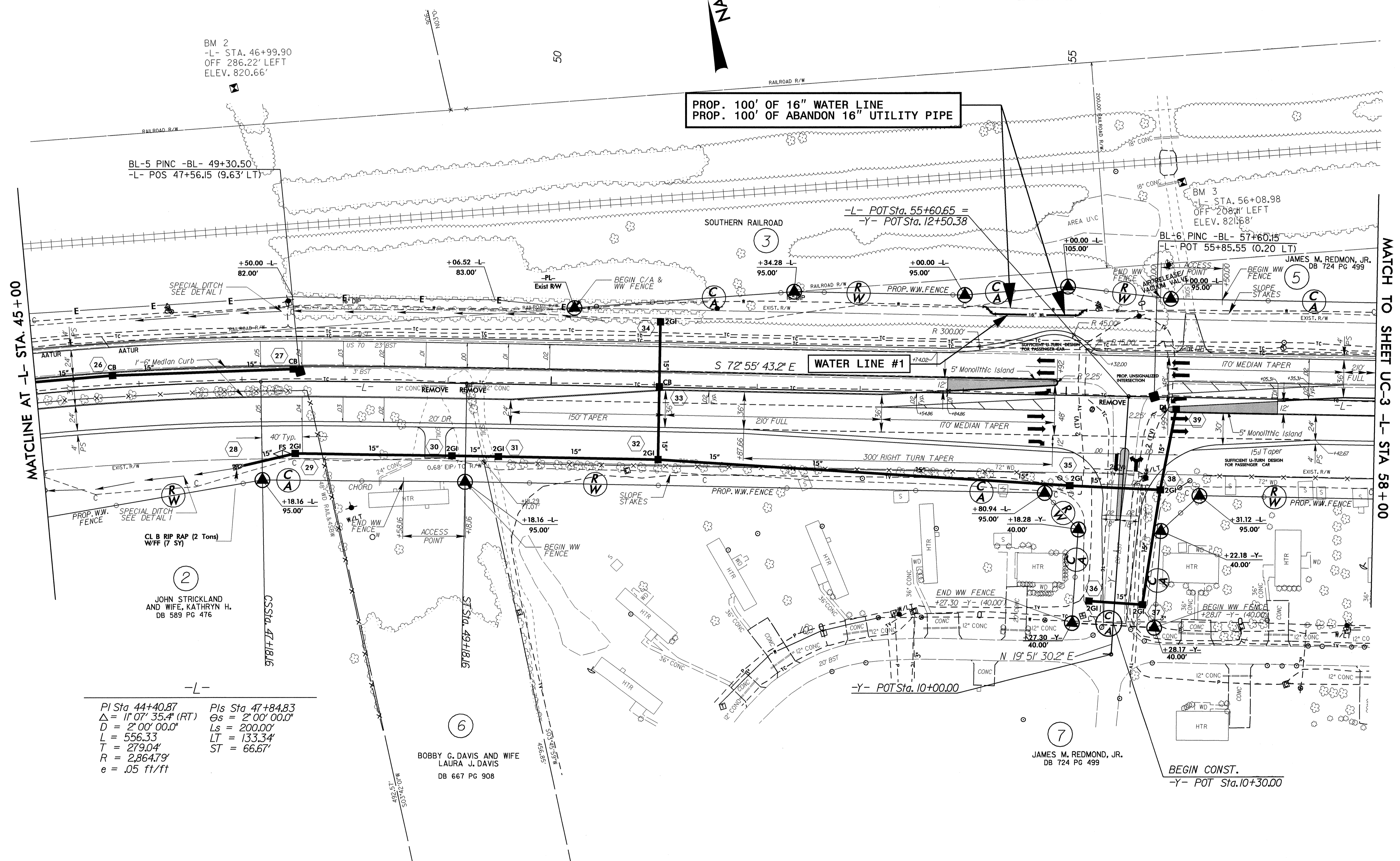
**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**R. B. WILKINS, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**MICHAEL R. BRIGHT** UTILITIES PROJECT DESIGNER

PROJECT REFERENCE NO.	SHEET NO.
R-2911B	UC-2
DESIGNED BY: MRB	
DRAWN BY: MRB	
CHECKED BY: RBW	
APPROVED BY: RBW	
REVISER:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT SERVICES UNIT PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**

JAMES M. REDMON, JR.  
DB 724 PG 499

**PROP. 100' OF 16" WATER LINE  
PROP. 100' OF ABANDON 16" UTILITY PIPE**



MATLINE AT -L- STA. 45+00

MATCH TO SHEET UC-3 -L- STA 58+00

BM 2  
-L- STA. 46+99.90  
OFF 286.22' LEFT  
ELEV. 820.66'

BL-5 PINC -BL- 49+30.50  
-L- POS 47+56.15 (9.63' LT)

-L- POT Sta. 55+60.65 =  
-Y- POT Sta. 12+50.38

BM 3  
-L- STA. 56+08.98  
OFF 208.4' LEFT  
ELEV. 821.68'

BL-6 PINC -BL- 57+60.15  
-L- POT 55+85.55 (0.20 LT)

JAMES M. REDMON, JR.  
DB 724 PG 499

-L-  
 PI Sta 44+40.87    Pls Sta 47+84.83  
 $\Delta = 11^{\circ} 07' 35.4" (RT)$      $\Delta s = 2^{\circ} 00' 00.0"$   
 $D = 2^{\circ} 00' 00.0"$      $Ls = 200.00'$   
 $L = 556.33$      $LT = 133.34'$   
 $T = 279.04'$      $ST = 66.67'$   
 $R = 2,864.79'$   
 $e = .05 \text{ ft/ft}$

BOBBY G. DAVIS AND WIFE  
LAURA J. DAVIS  
DB 667 PG 908

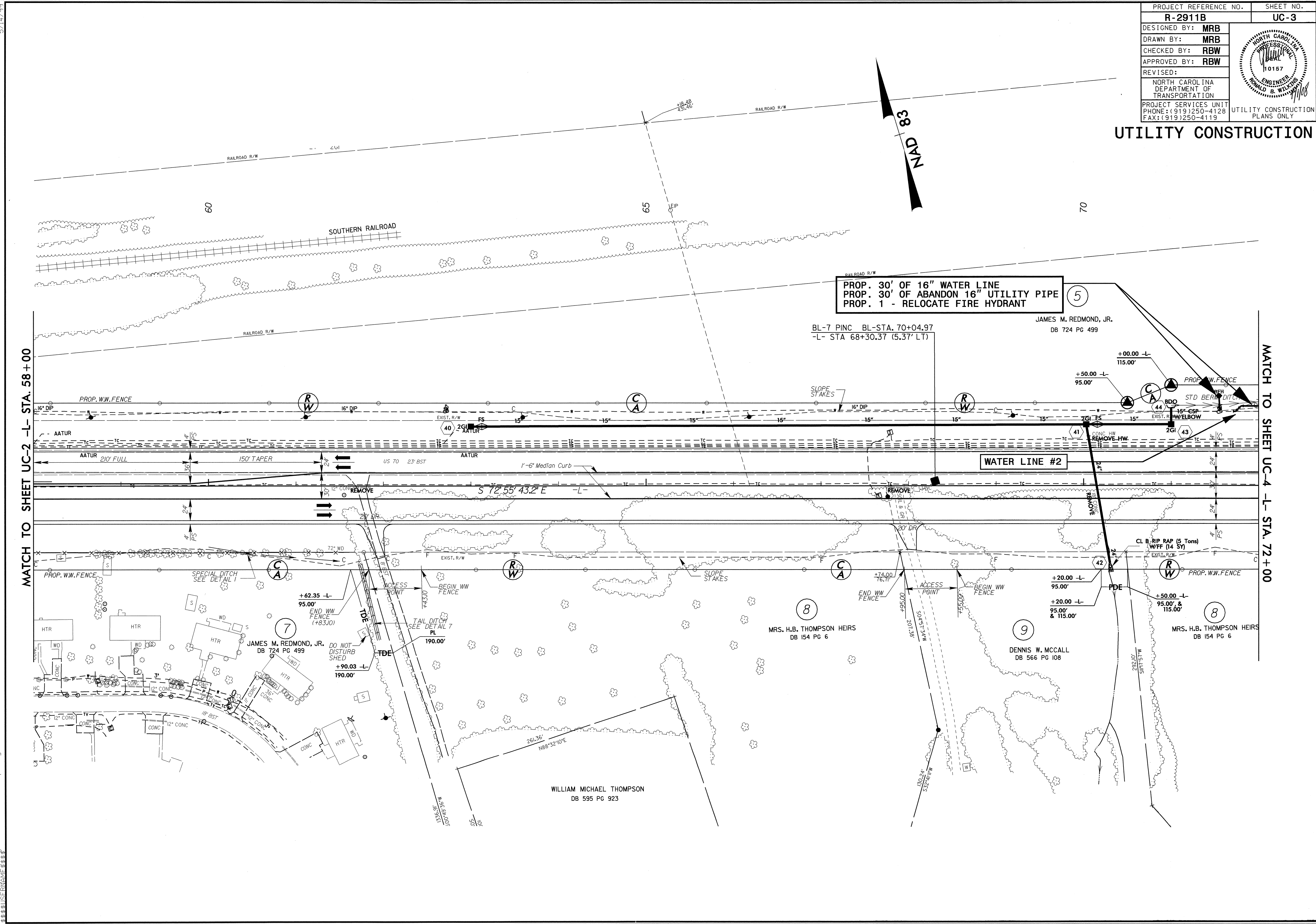
JAMES M. REDMON, JR.  
DB 724 PG 499

BEGIN CONST.  
-Y- POT Sta. 10+30.00

5/14/99  
3-MAR-2008 10:40  
r:\u0011\3-MAR-2008 10:40 \R-2911B-UC-2-PSH.dgn

PROJECT REFERENCE NO.	SHEET NO.
<b>R-2911B</b>	<b>UC-3</b>
DESIGNED BY: <b>MRB</b>	
DRAWN BY: <b>MRB</b>	
CHECKED BY: <b>RBW</b>	
APPROVED BY: <b>RBW</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**



MATCH TO SHEET UC-2 -L- STA. 58+00

MATCH TO SHEET UC-4 -L- STA. 72+00

PROP. 30' OF 16" WATER LINE  
 PROP. 30' OF ABANDON 16" UTILITY PIPE  
 PROP. 1 - RELOCATE FIRE HYDRANT

BL-7 PINC BL-STA. 70+04.97  
 -L- STA 68+30.37 (5.37' LT)

JAMES M. REDMOND, JR.  
 DB 724 PG 499

MRS. H.B. THOMPSON HEIRS  
 DB 154 PG 6

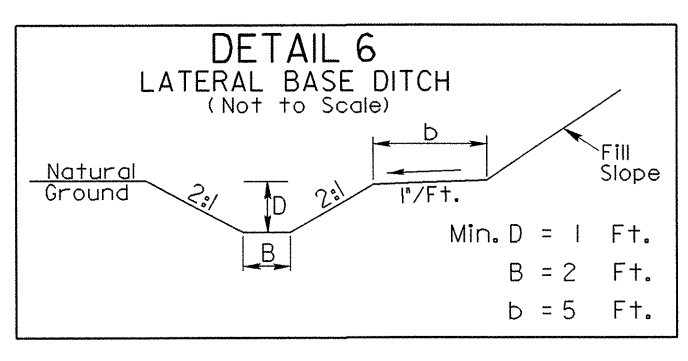
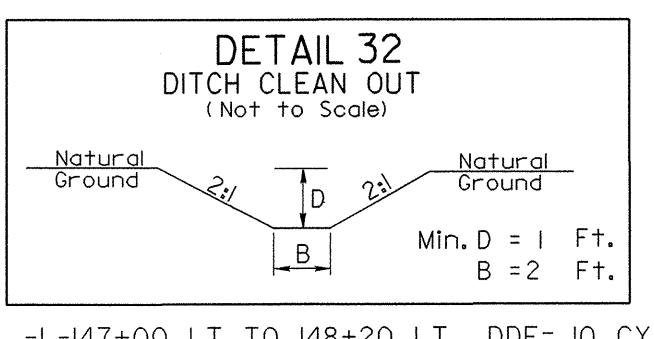
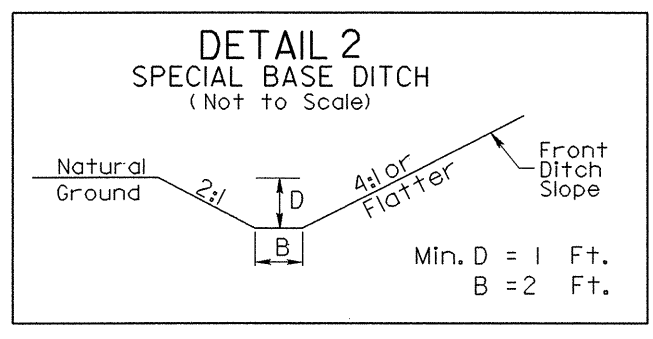
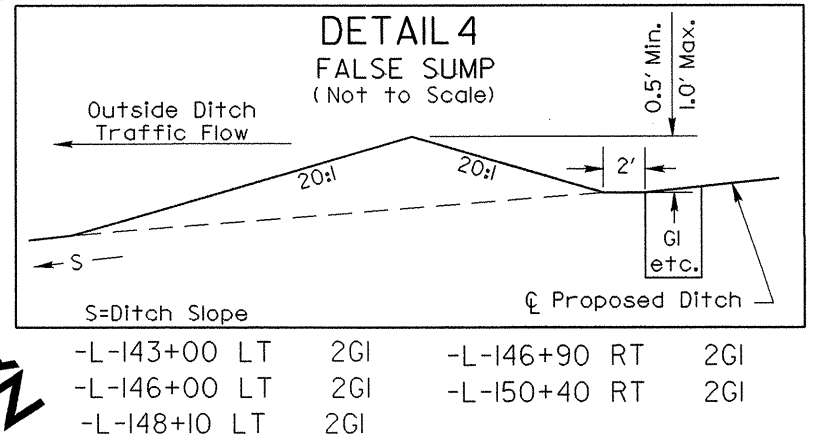
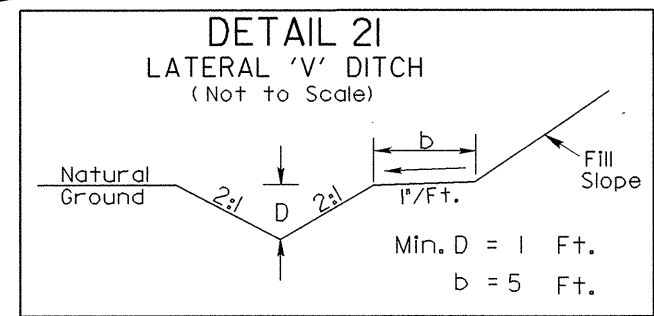
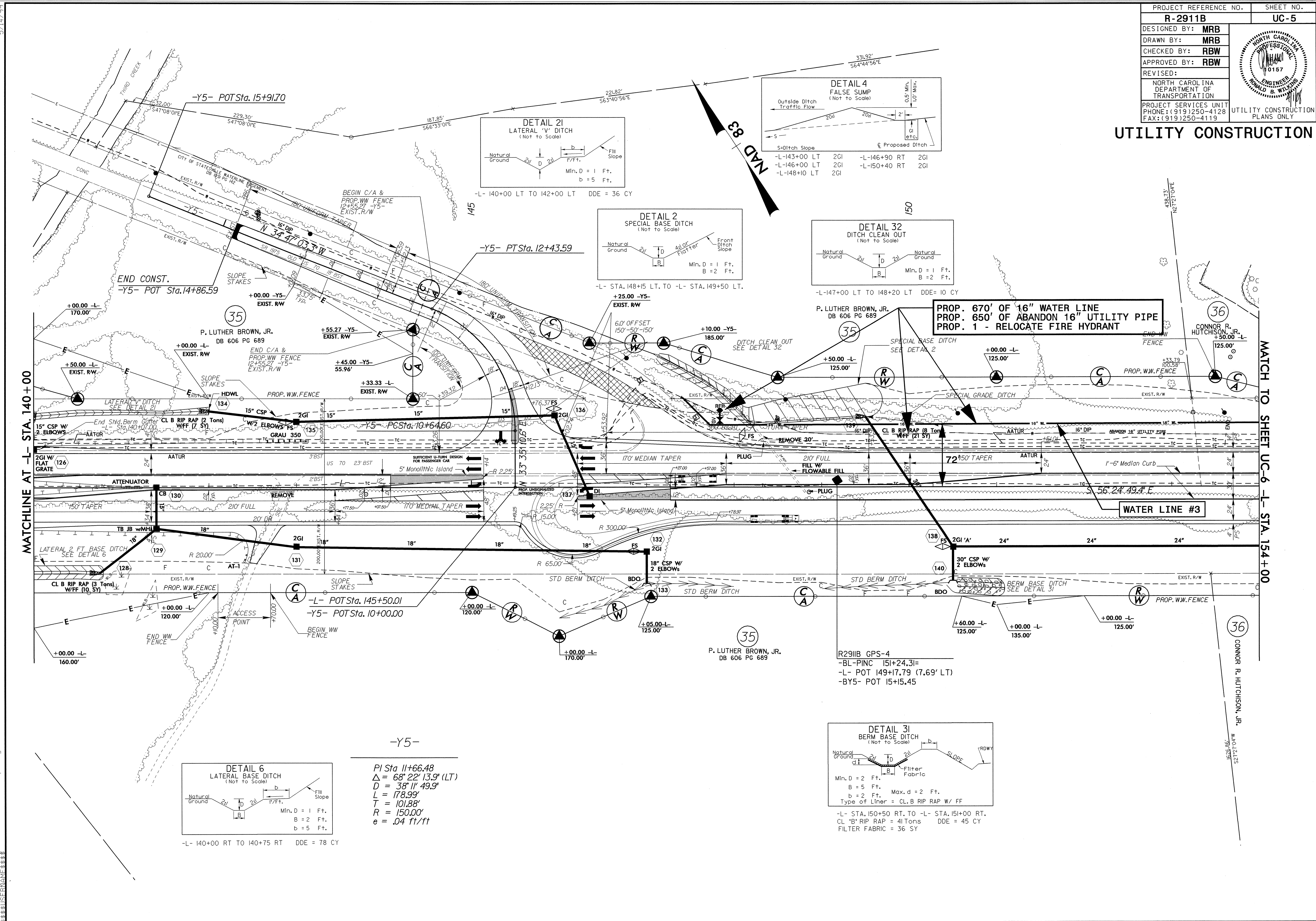
DENNIS W. MCCALL  
 DB 566 PG 108

WILLIAM MICHAEL THOMPSON  
 DB 595 PG 923

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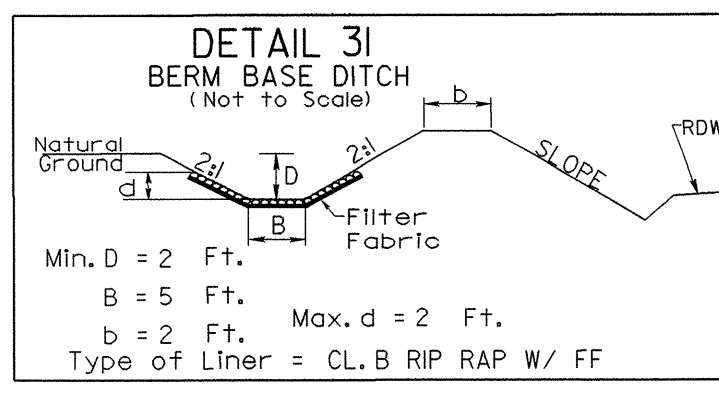


# UTILITY CONSTRUCTION



-Y5-

PI Sta 11+66.48  
 $\Delta = 68^\circ 22' 13.9''$  (LT)  
 $D = 38' 11'' 49.9''$   
 $L = 178.99'$   
 $T = 101.88'$   
 $R = 150.00'$   
 $e = .04$  ft/ft



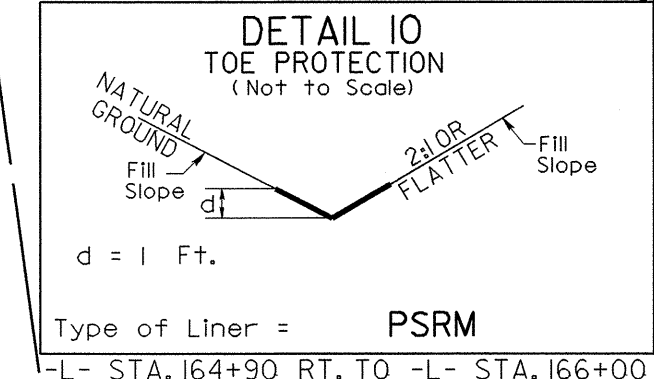
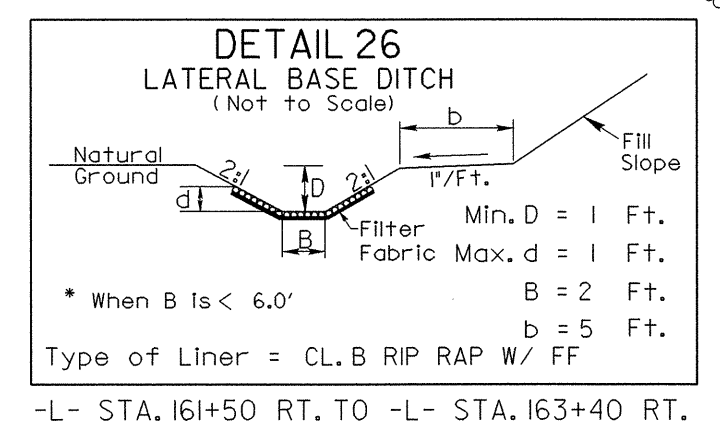
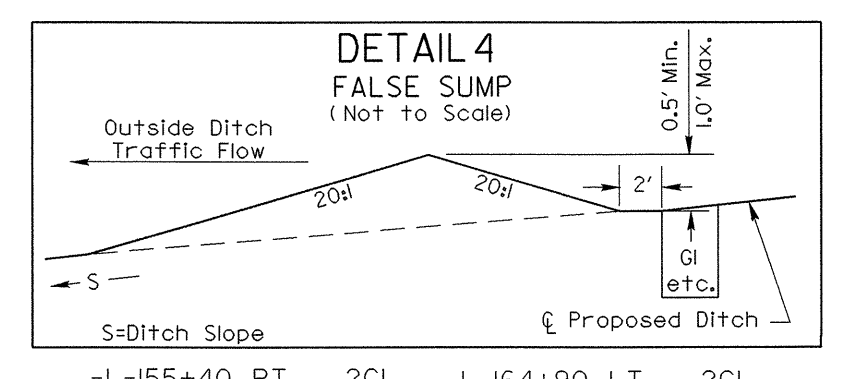
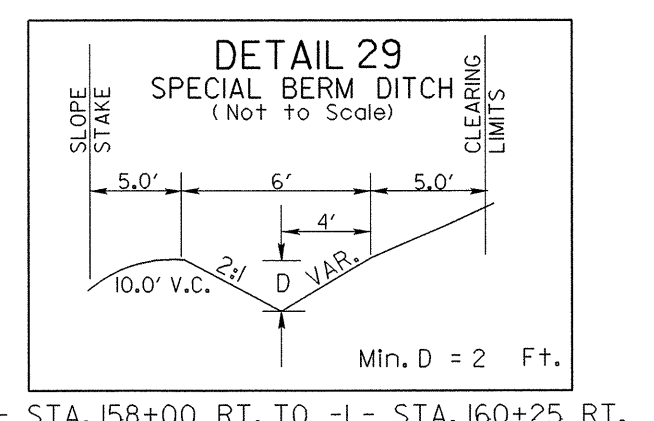
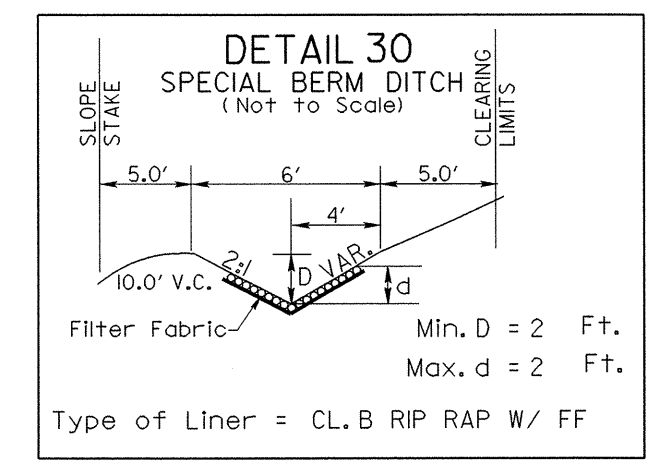
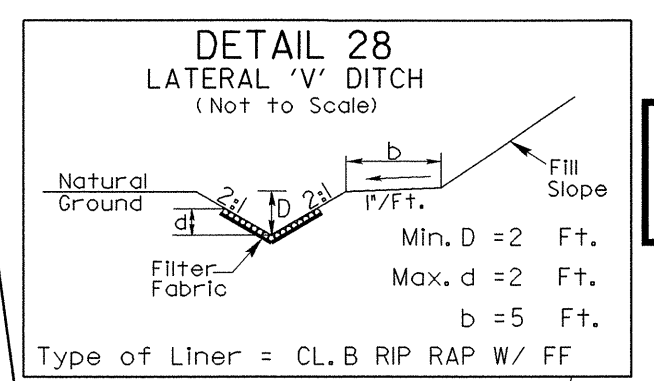
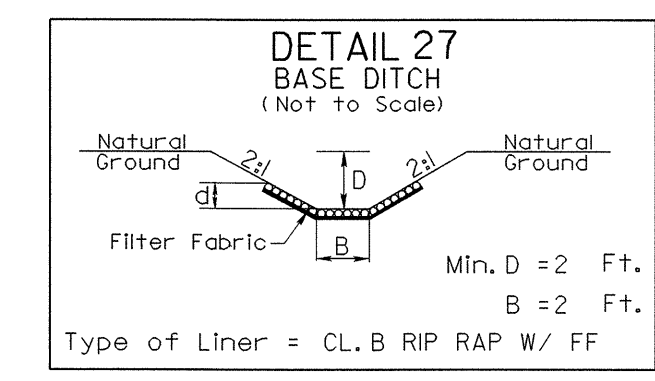
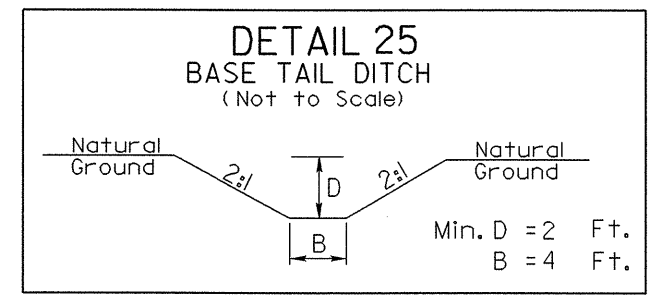
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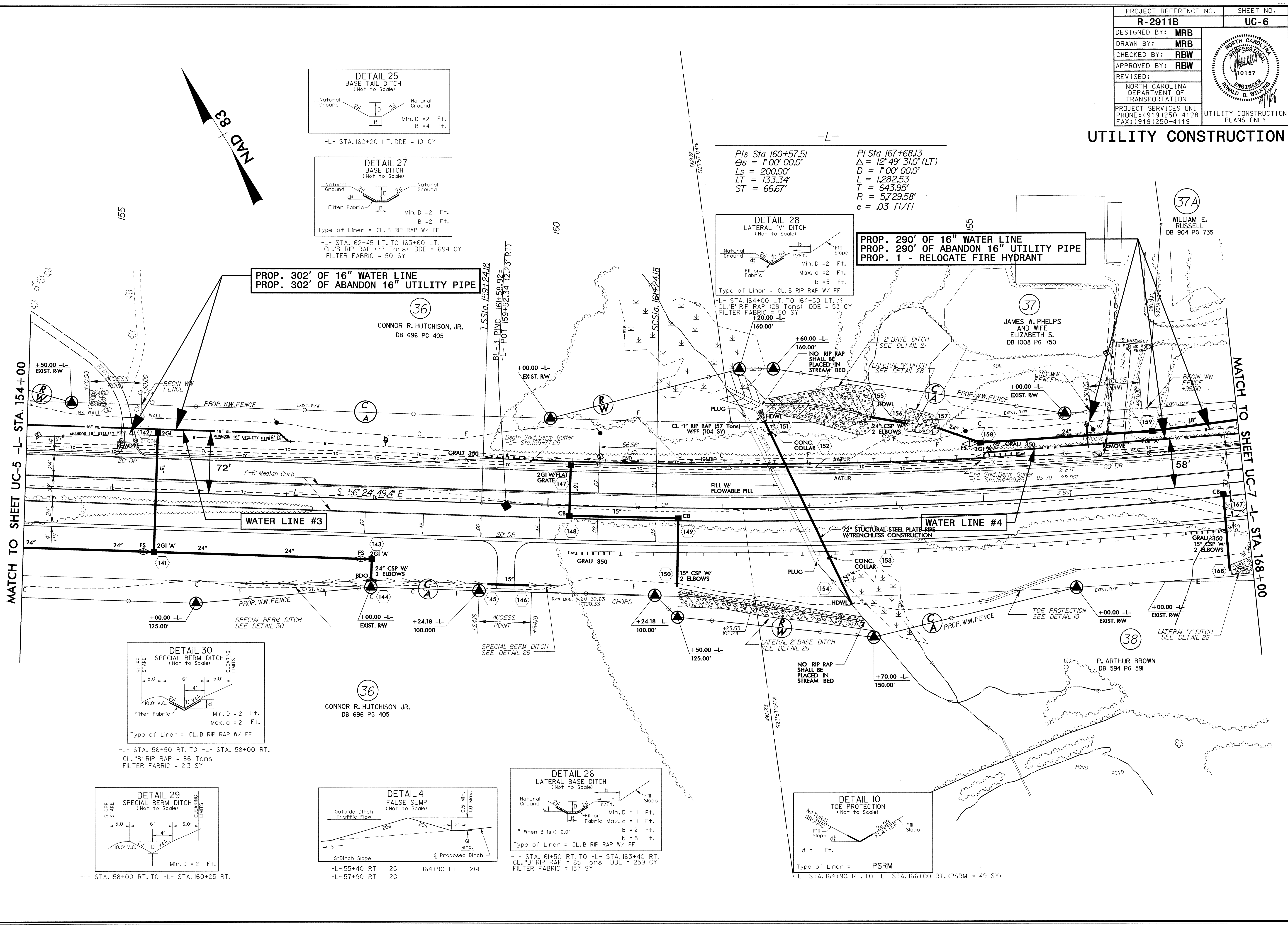
MATCH TO SHEET UC-6 -L- STA. 154+00

36 CONNOR R. HUTCHISON, JR. M.A. 012125

# UTILITY CONSTRUCTION



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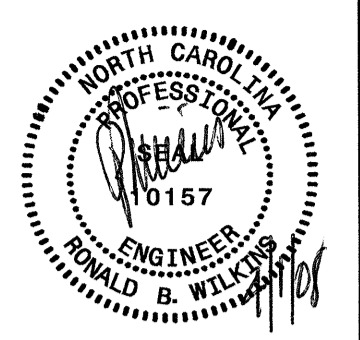




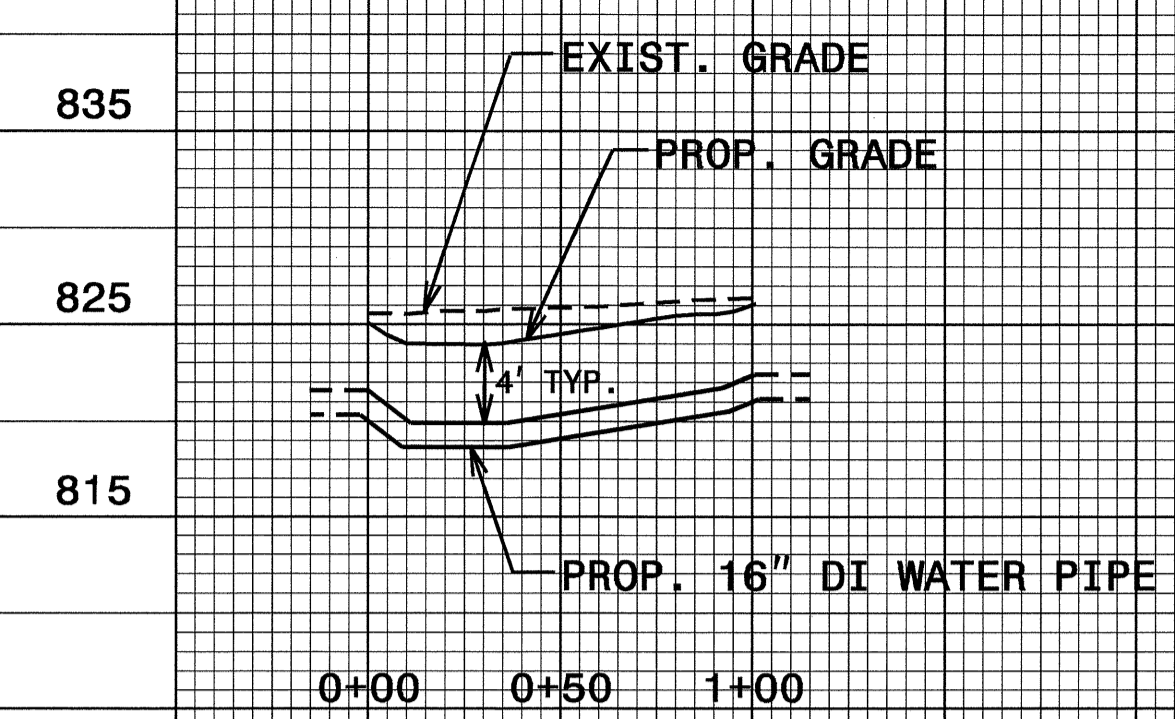




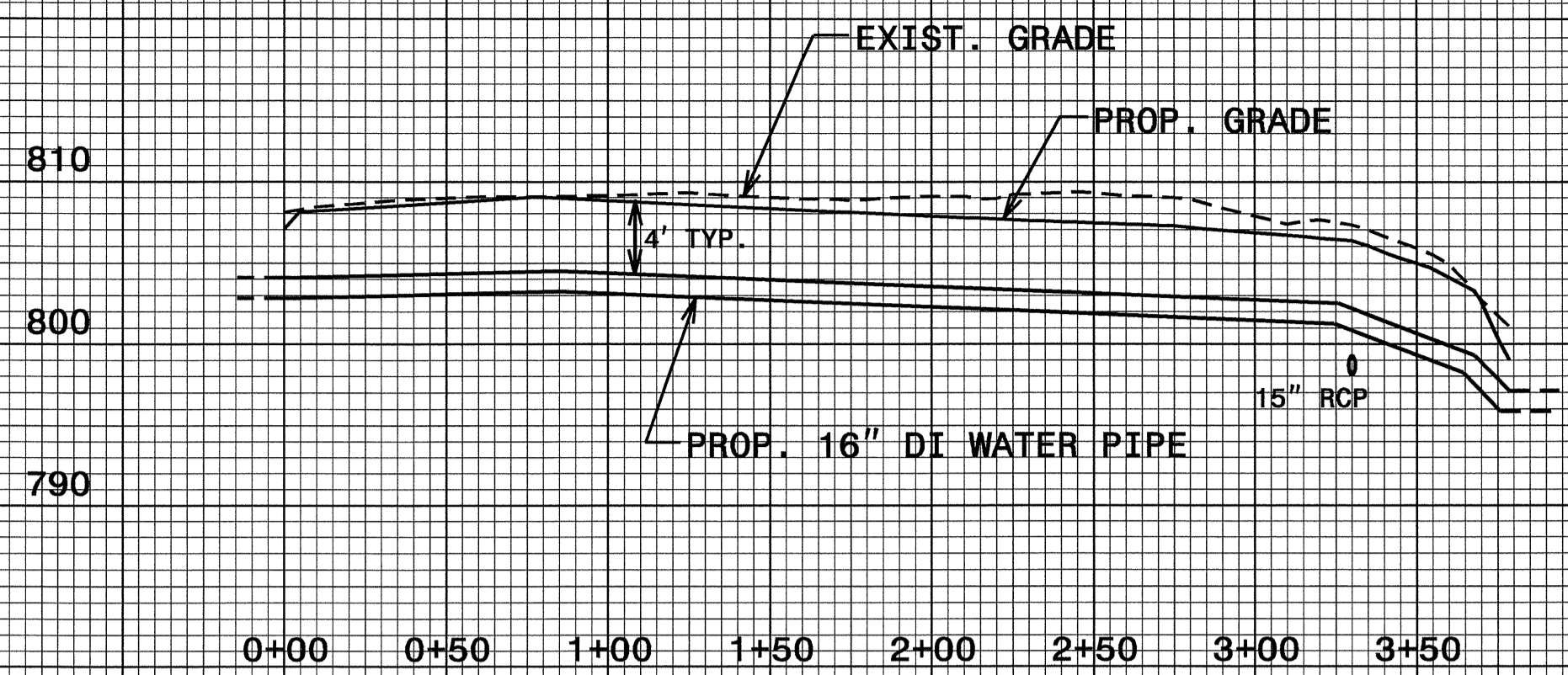
5/14/99

PROJECT REFERENCE NO.	SHEET NO.
<b>R-2911B</b>	<b>UC-9</b>
DESIGNED BY: <b>MRB</b>	
DRAWN BY: <b>MRB</b>	
CHECKED BY: <b>RBW</b>	
APPROVED BY: <b>RBW</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	

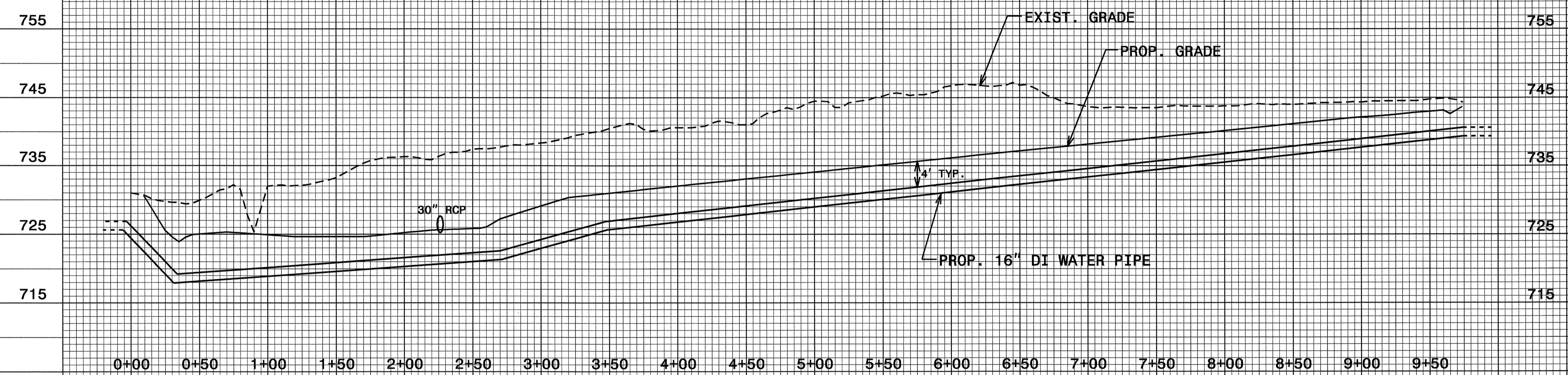
### UTILITY CONSTRUCTION



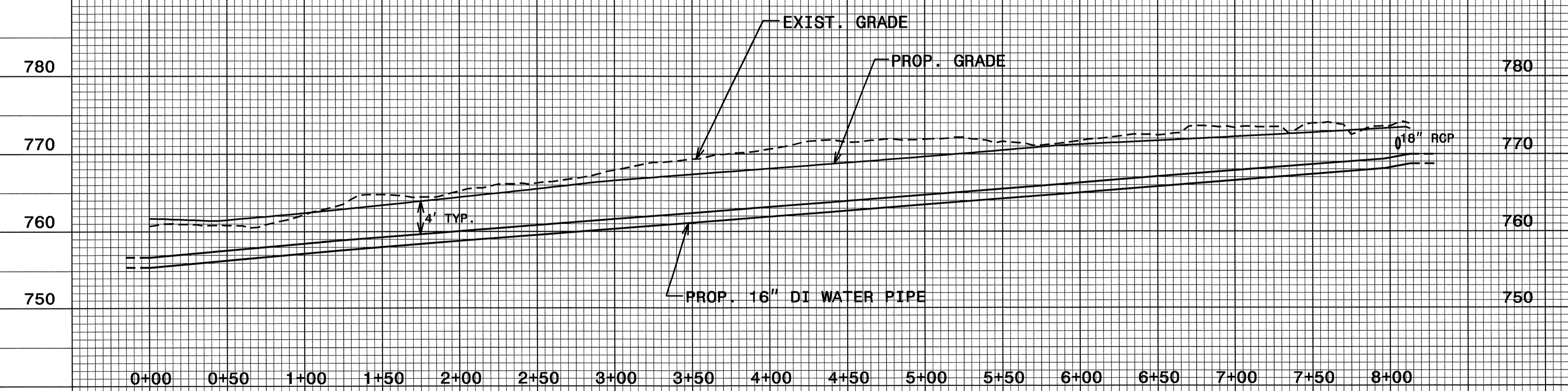
WATER LINE "1"



WATER LINE "2"



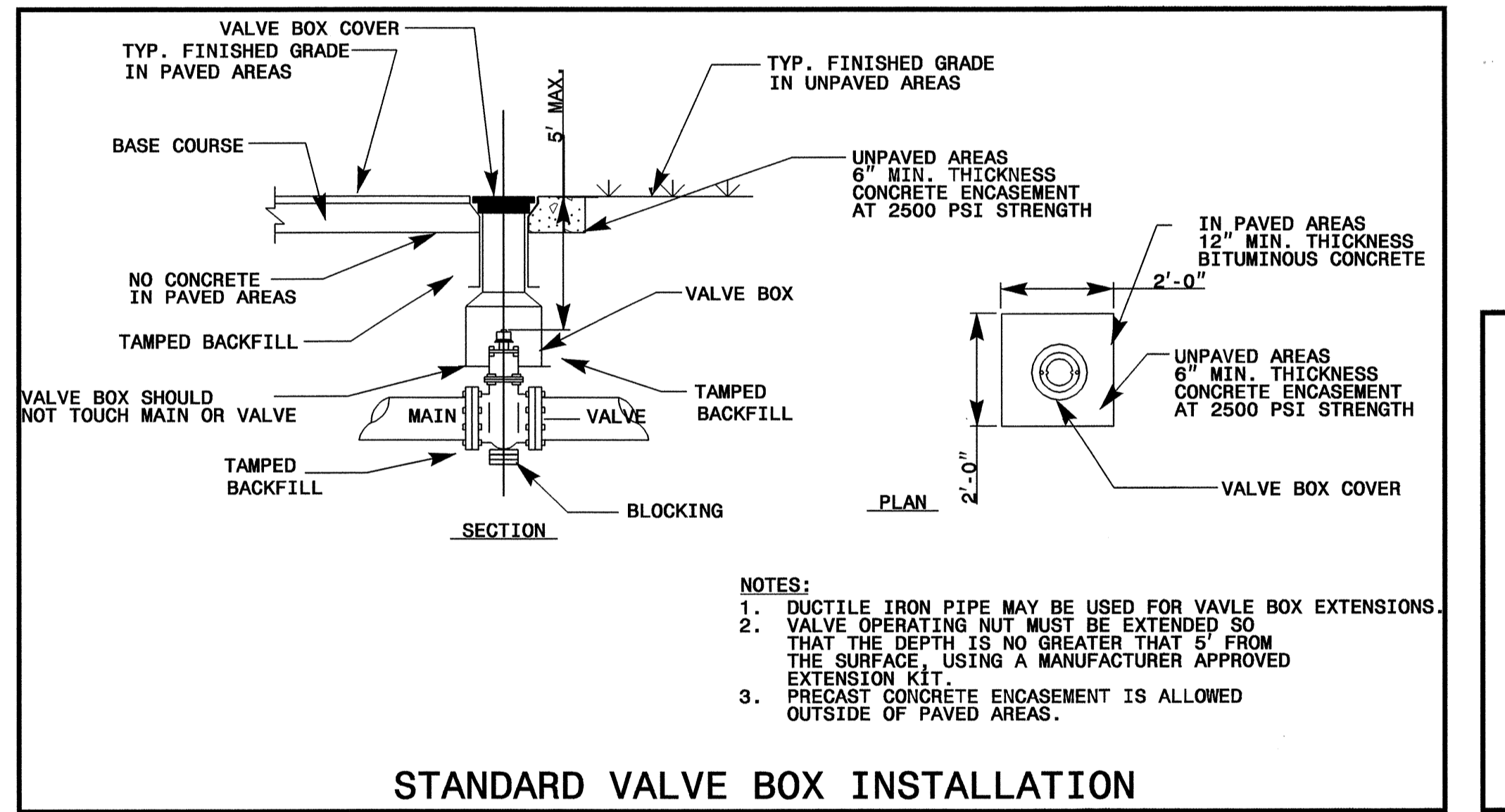
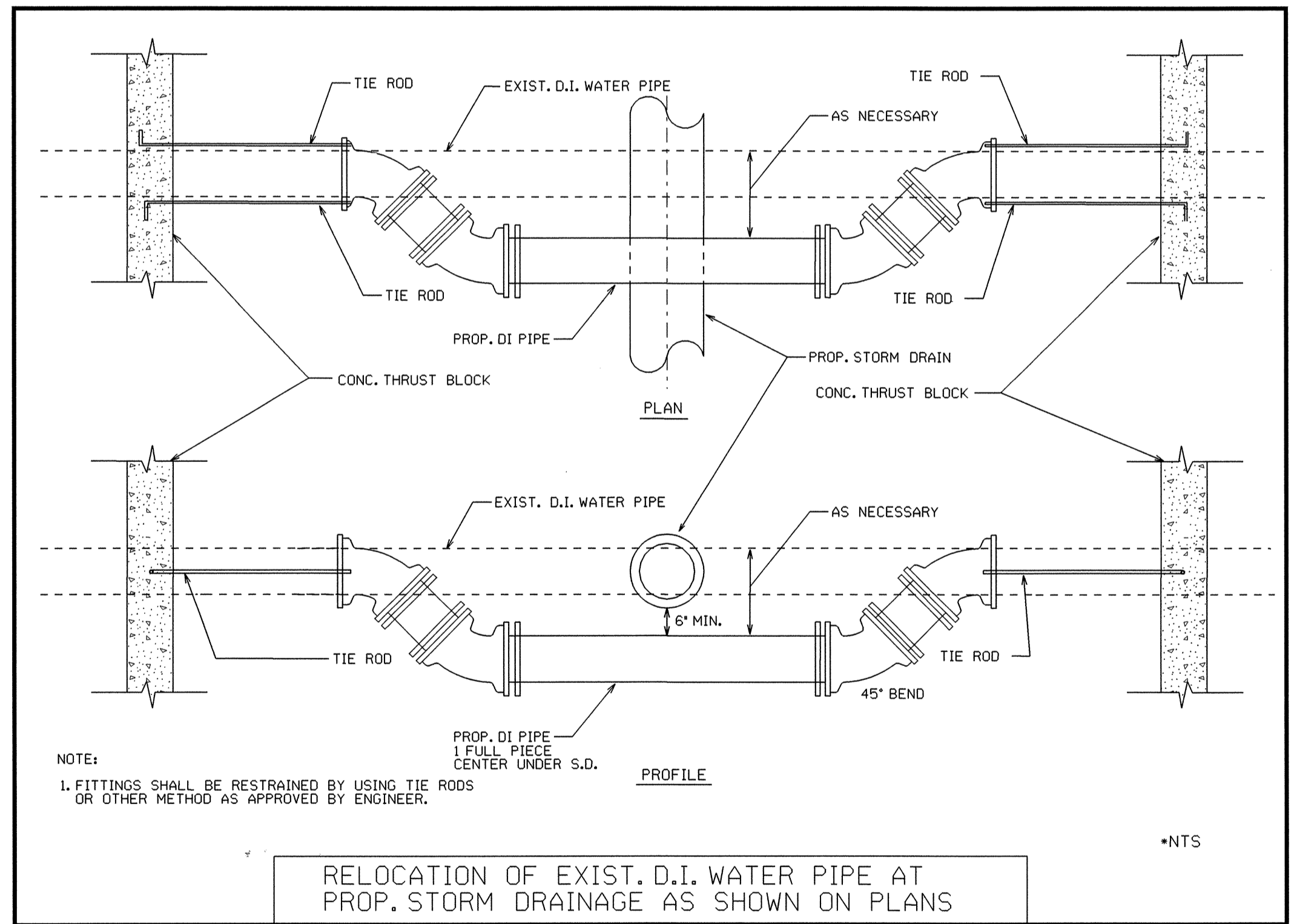
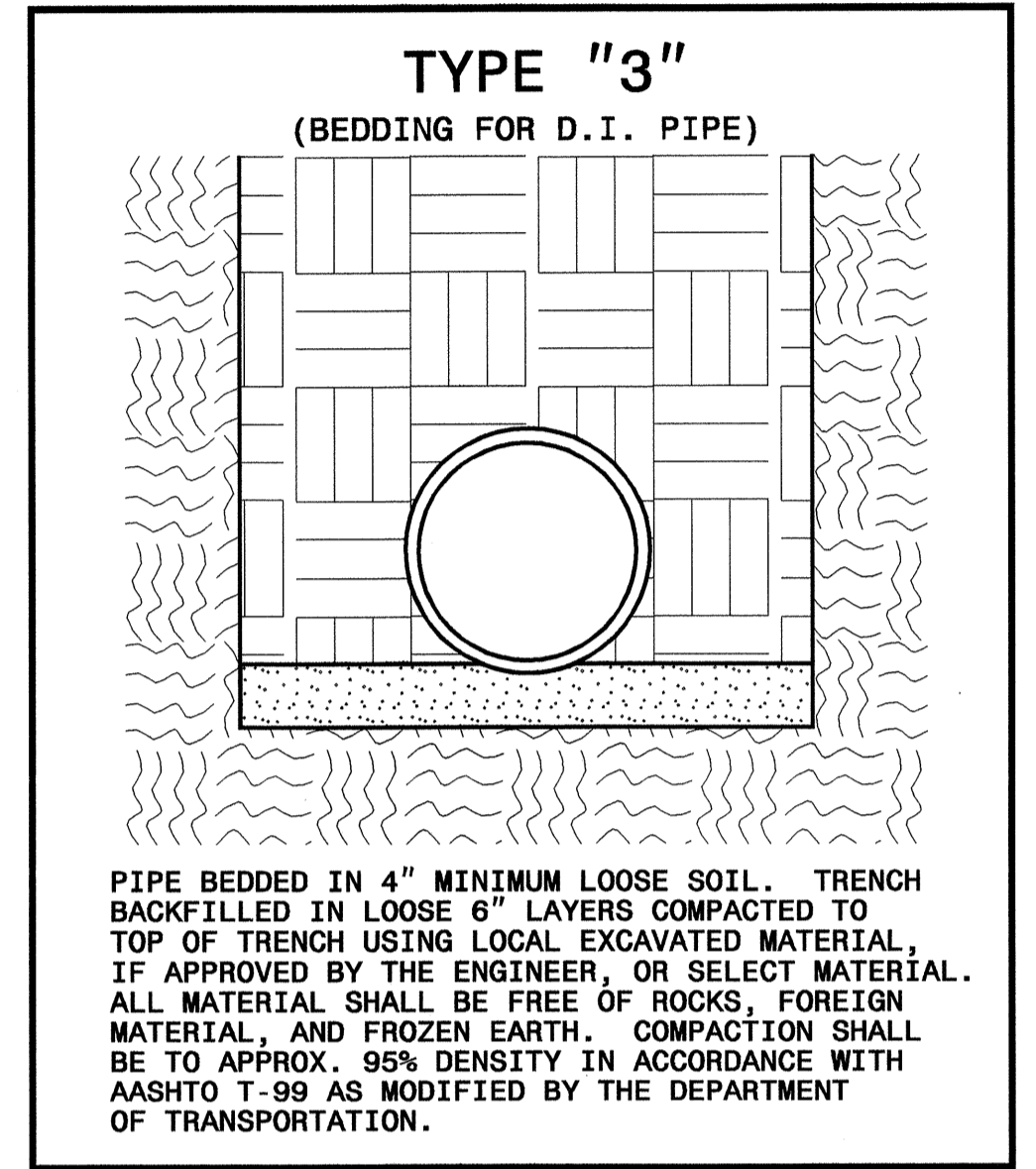
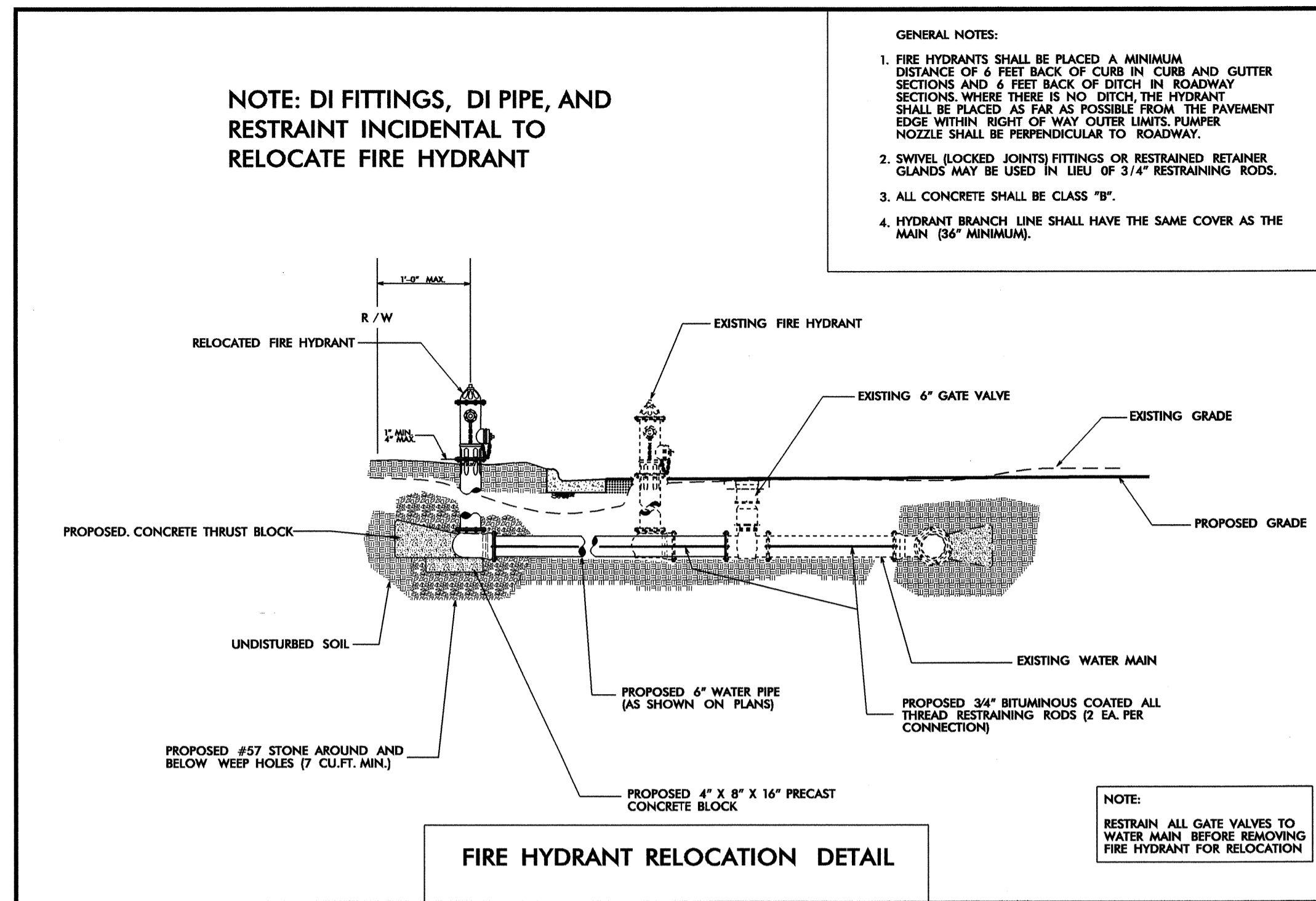
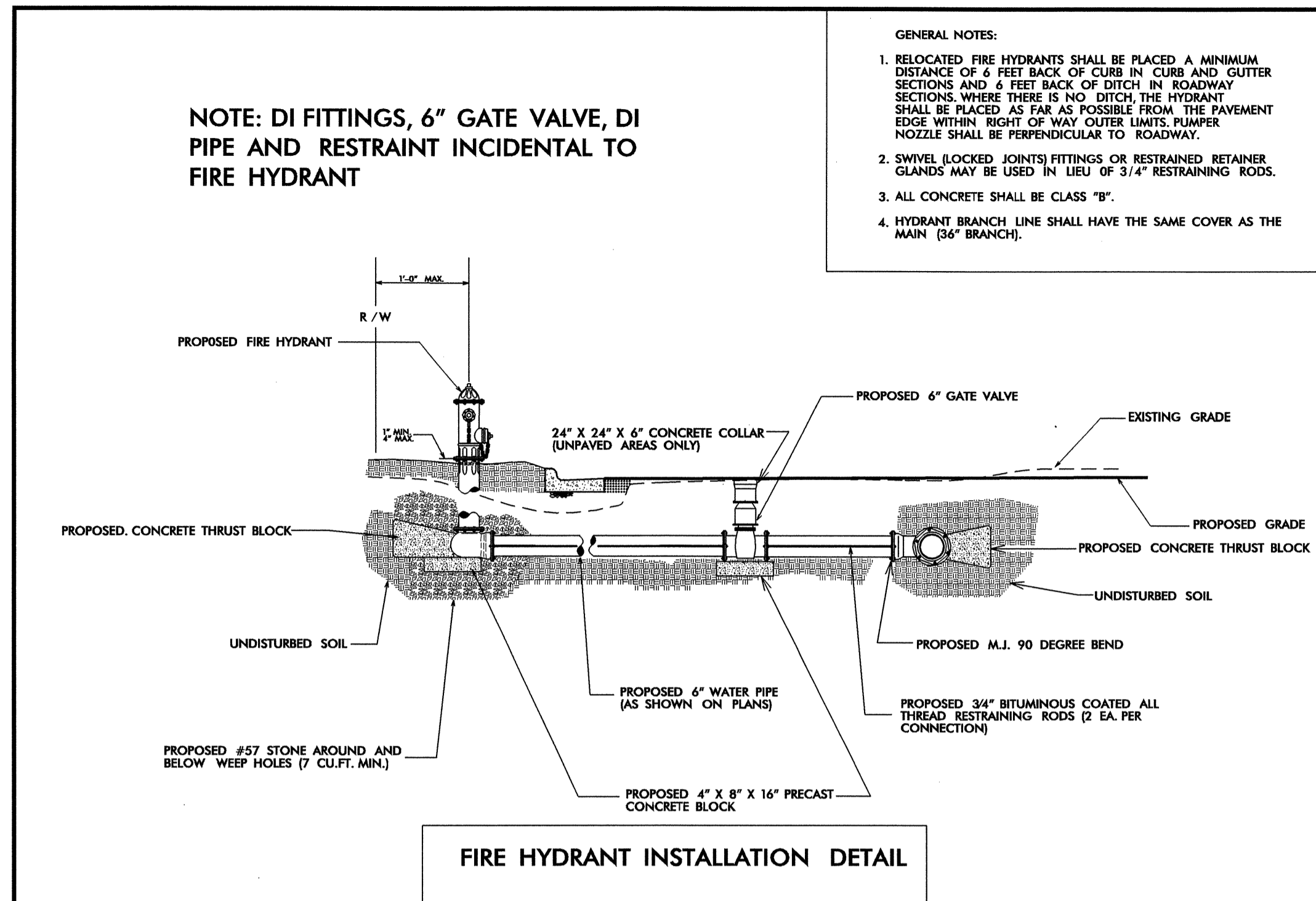
WATER LINE "3"



WATER LINE "4"

3-MAR-2008 10:13 2:\ut\1115106\proj\proj\R-2911B\_Ut\_upr\_UC9\_psh.dgn

**UTILITY CONSTRUCTION**



**MAXIMUM TRENCH WIDTH AT TOP OF PIPE**

NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		

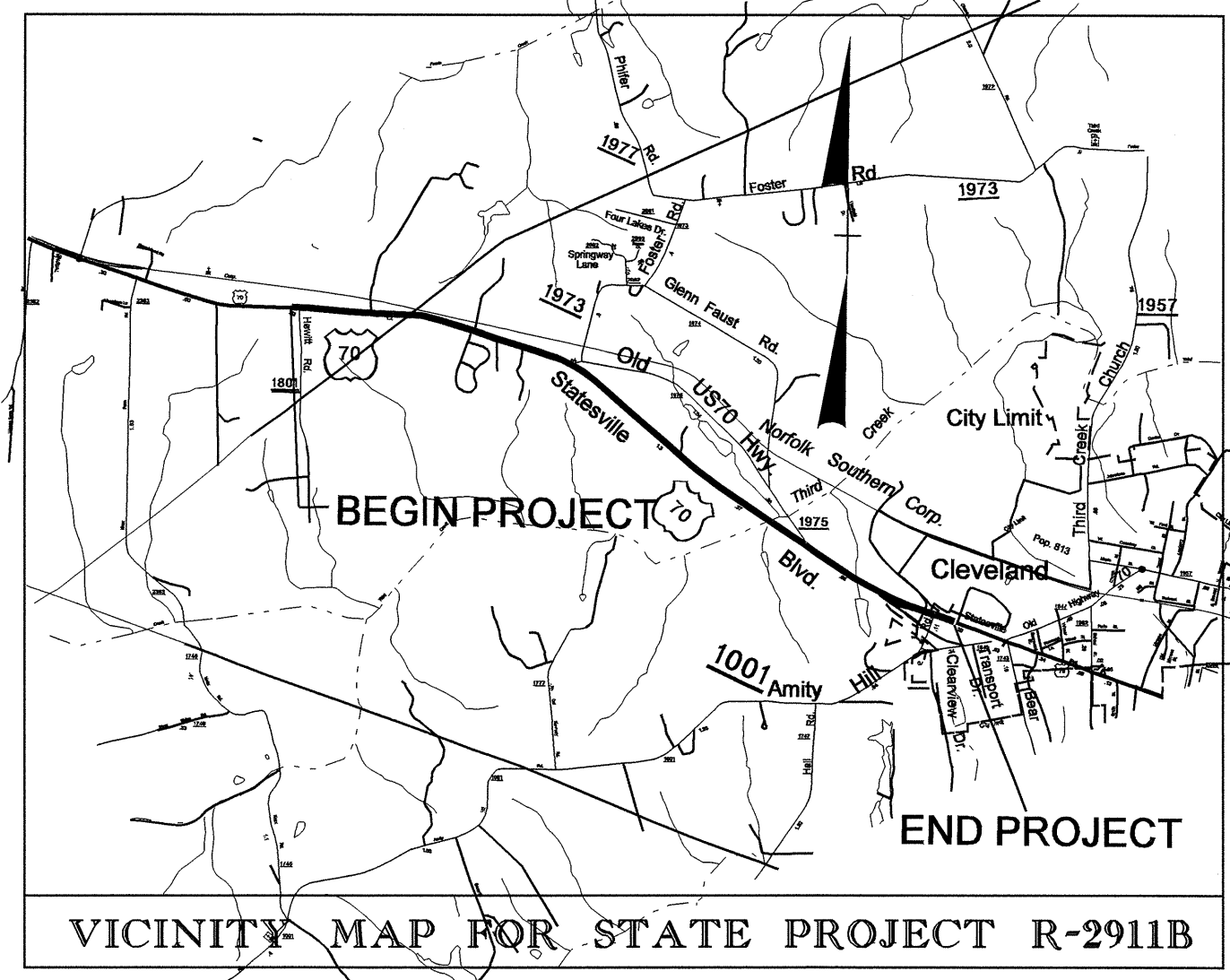
T.I.P. NO.	SHEET NO.
R-2911B	UO-1

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

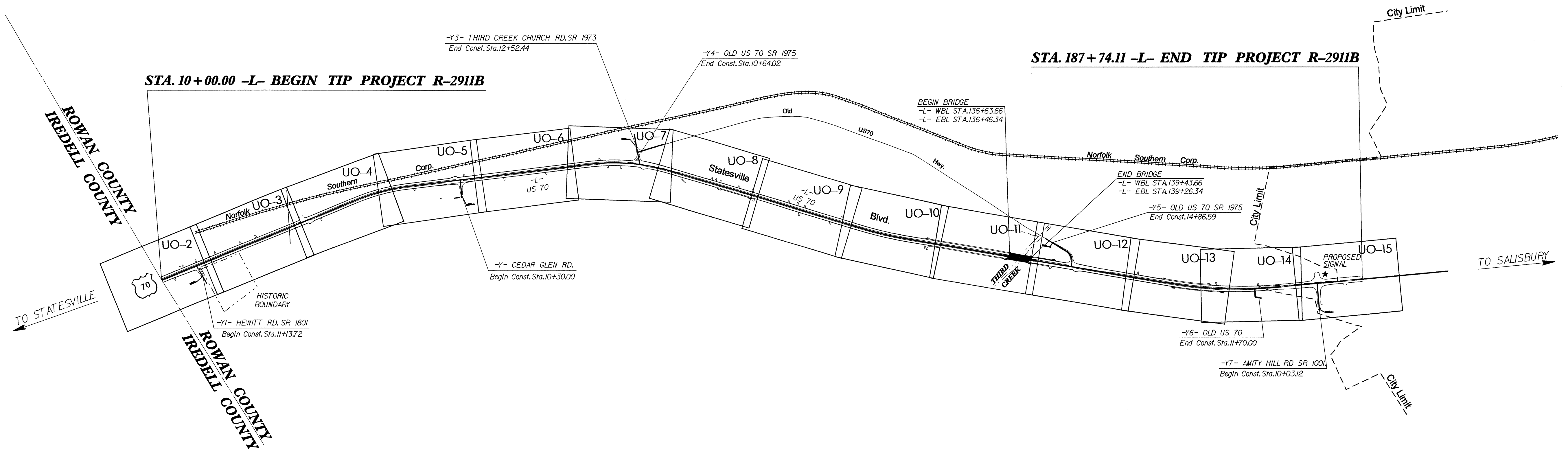
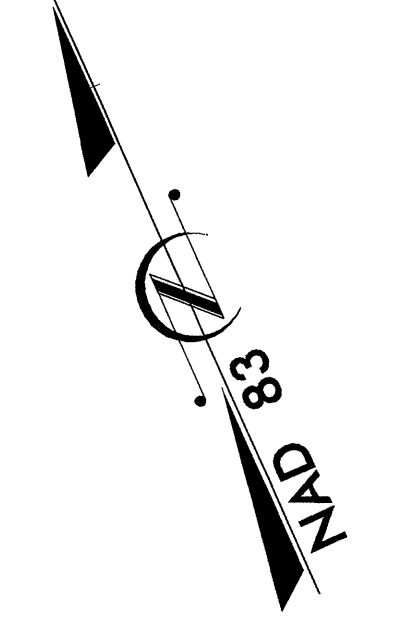
**UTILITY BY OTHERS PLANS  
ROWAN COUNTY**

**LOCATION: US 70 FROM IREDELL COUNTY LINE  
TO EAST OF SR 1001 (AMITY HILL ROAD)**

**TYPE OF WORK: UTILITIES BY OTHERS**

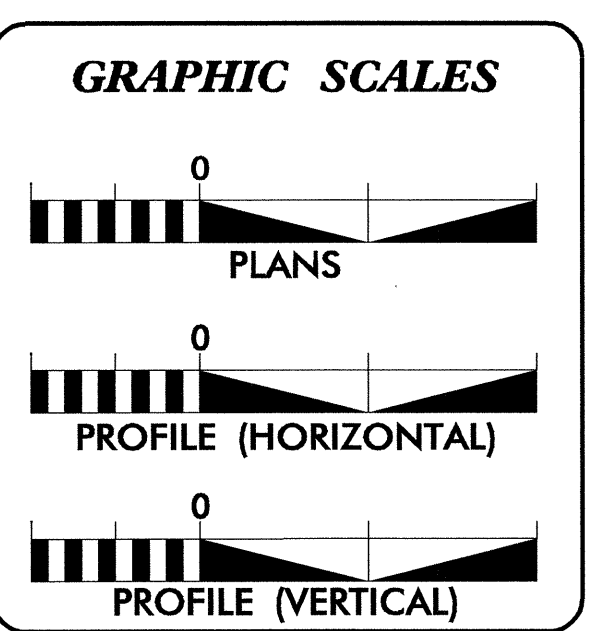


VICINITY MAP FOR STATE PROJECT R-2911B



**TIP PROJECT: R-2911B**

**CONTRACT: C201932**



**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THRU UO-15	UTILITY BY OTHERS PLAN SHEETS

- UTILITY OWNERS ON PROJECT**
- (1) DUKE ENERGY - POWER (DISTRIBUTION)
  - (2) AT&T - TELEPHONE
  - (3) PIEDMONT NATURAL GAS
  - (4) TIME WARNER - CATV

PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS  
DESIGN SERVICES  
UTILITY SECTION**

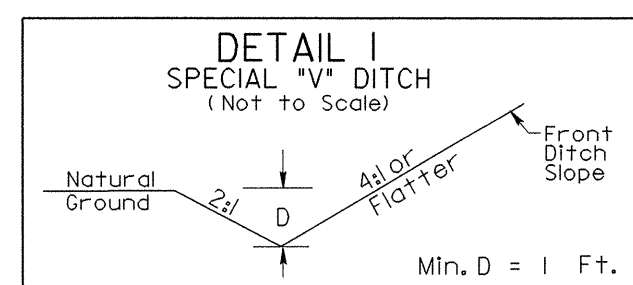
1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**R. B. WILKINS, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**MICHAEL R. BRIGHT** UTILITIES PROJECT DESIGNER

28-MAY-2008 14:15  
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\$\$\$\$\$USERNAME\$\$\$\$\$

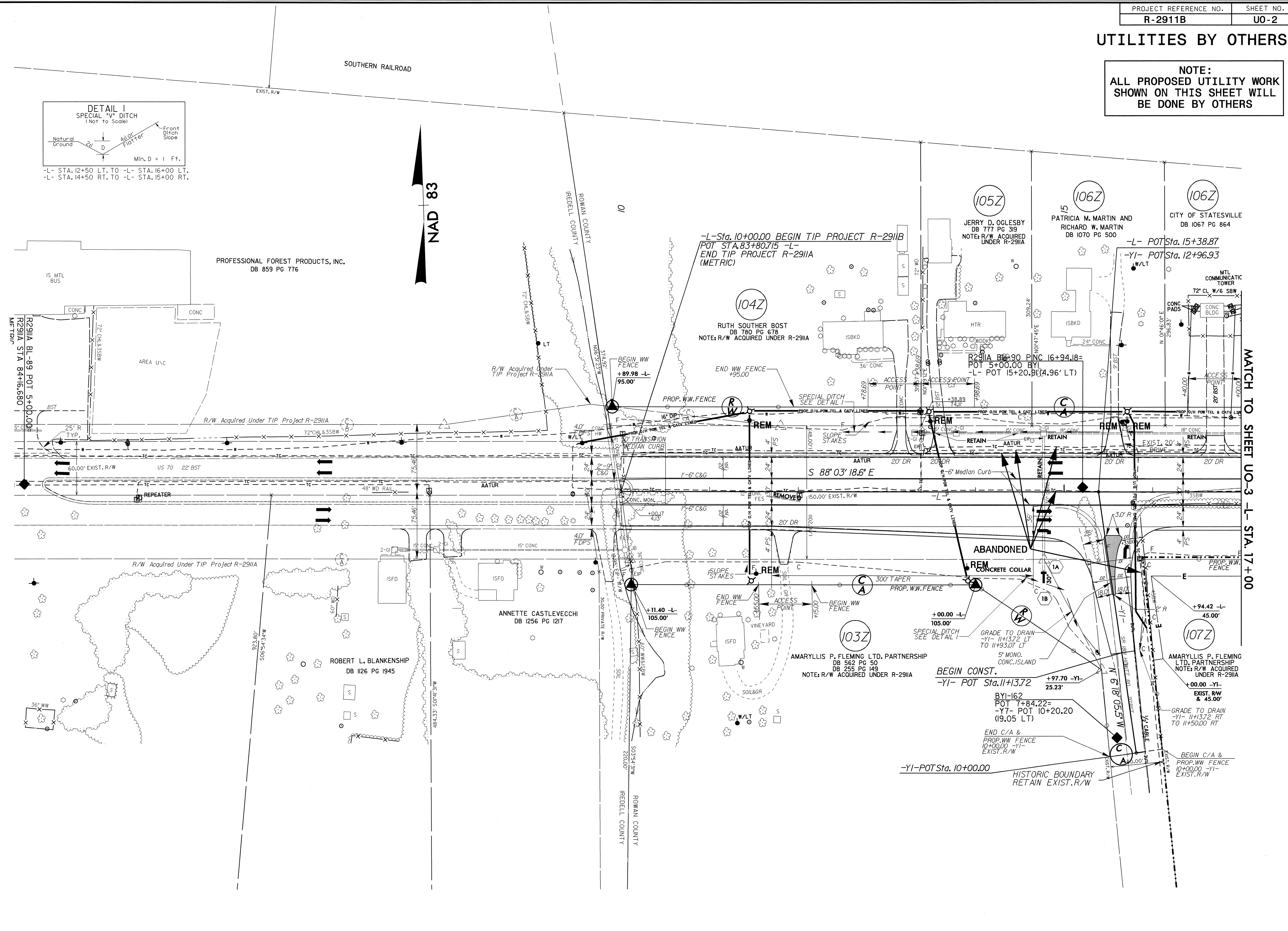
# UTILITIES BY OTHERS

**NOTE:**  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



-L- STA. 12+50 LT. TO -L- STA. 16+00 LT.  
-L- STA. 14+50 RT. TO -L- STA. 15+00 RT.

NAD 83

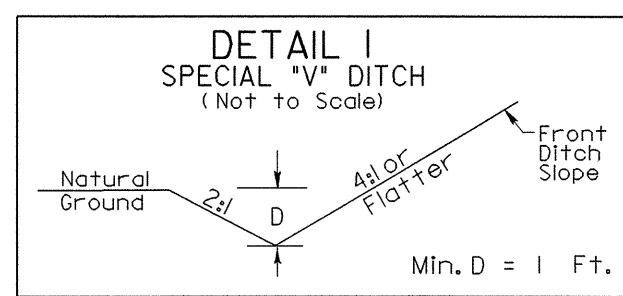


MATCH TO SHEET U0-3 -L- STA. 17+00

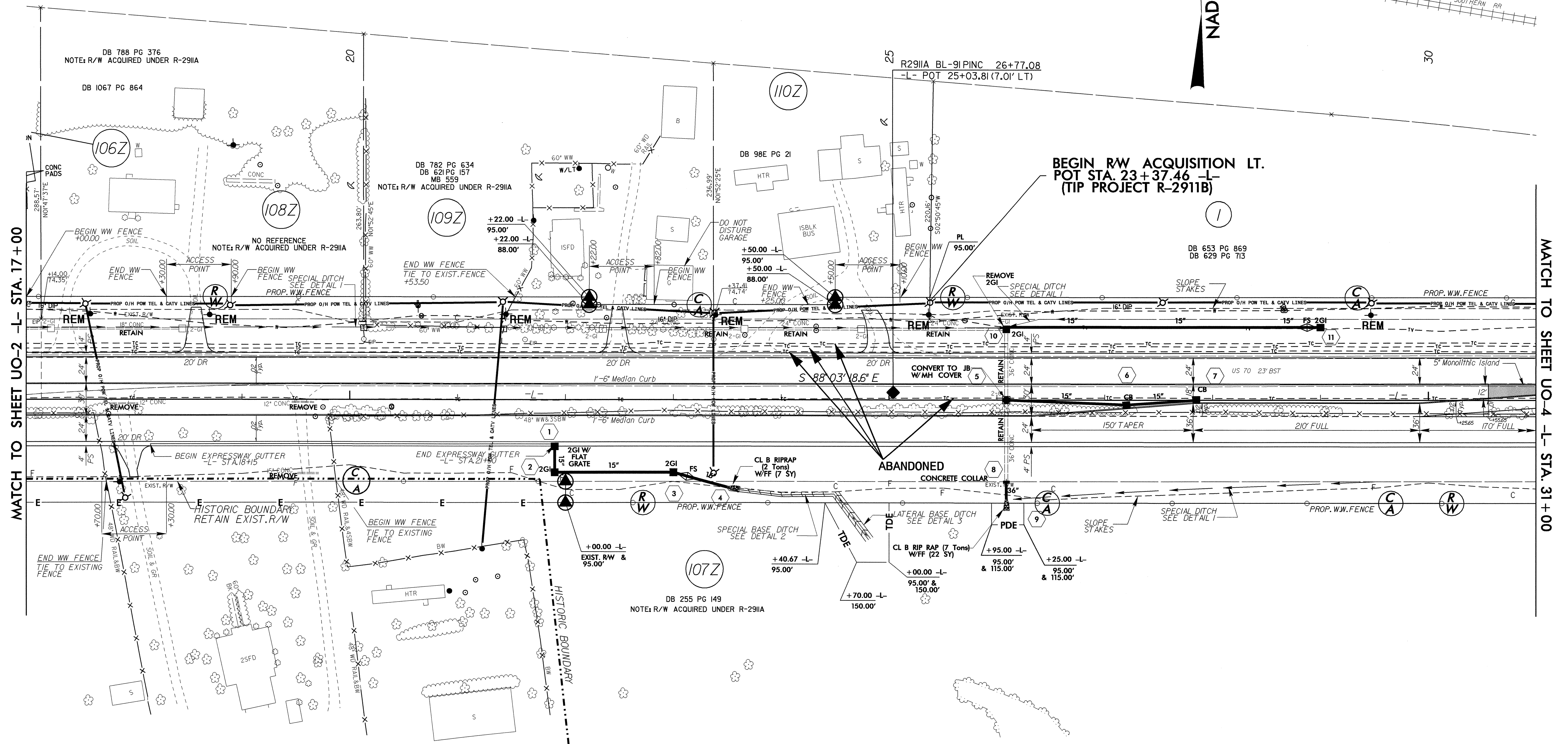
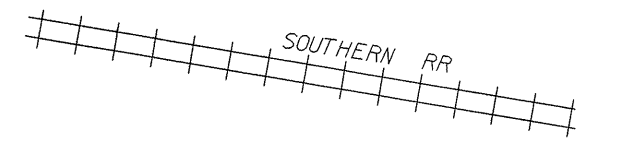
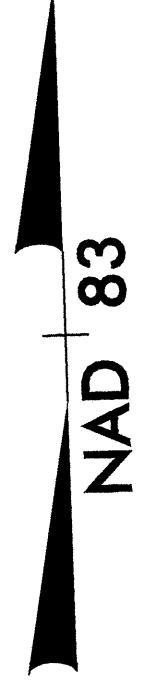
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UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

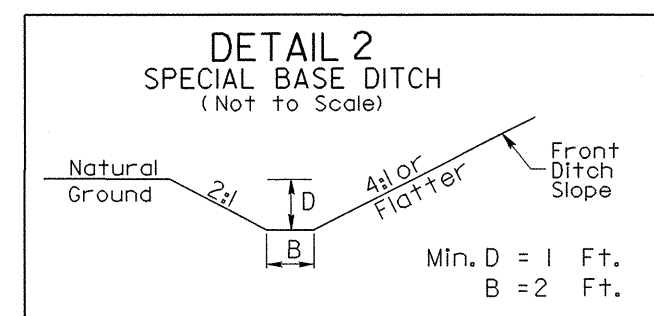


-L- STA. 26+00 RT. TO -L- STA. 29+50 RT.  
-L- STA. 17+00 LT. TO -L- STA. 26+10 LT.

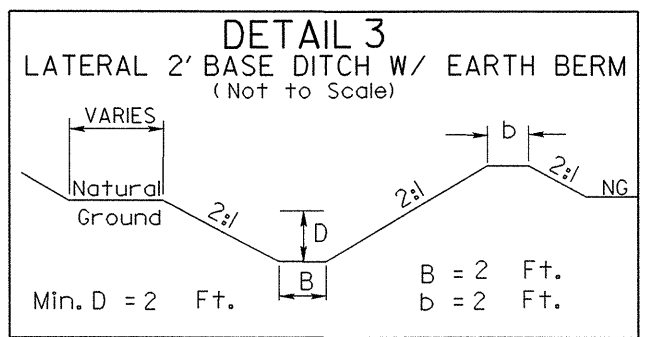


MATCH TO SHEET UO-2 -L- STA. 17 + 00

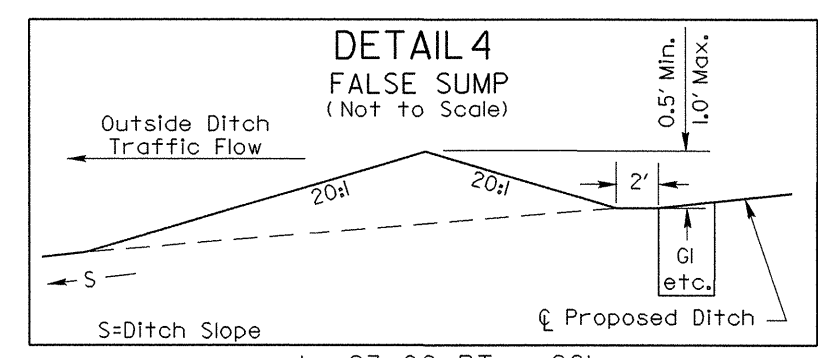
MATCH TO SHEET UO-4 -L- STA. 31 + 00



-L- STA. 23+50 RT. TO -L- STA. 24+50 RT.



-L- STA. 24+50 RT. TO -L- STA. 24+83 RT.  
DDE = 10 CY



-L- 23+00 RT 2GI  
-L- 29+00 LT 2GI  
-L- 30+00 RT 2GI

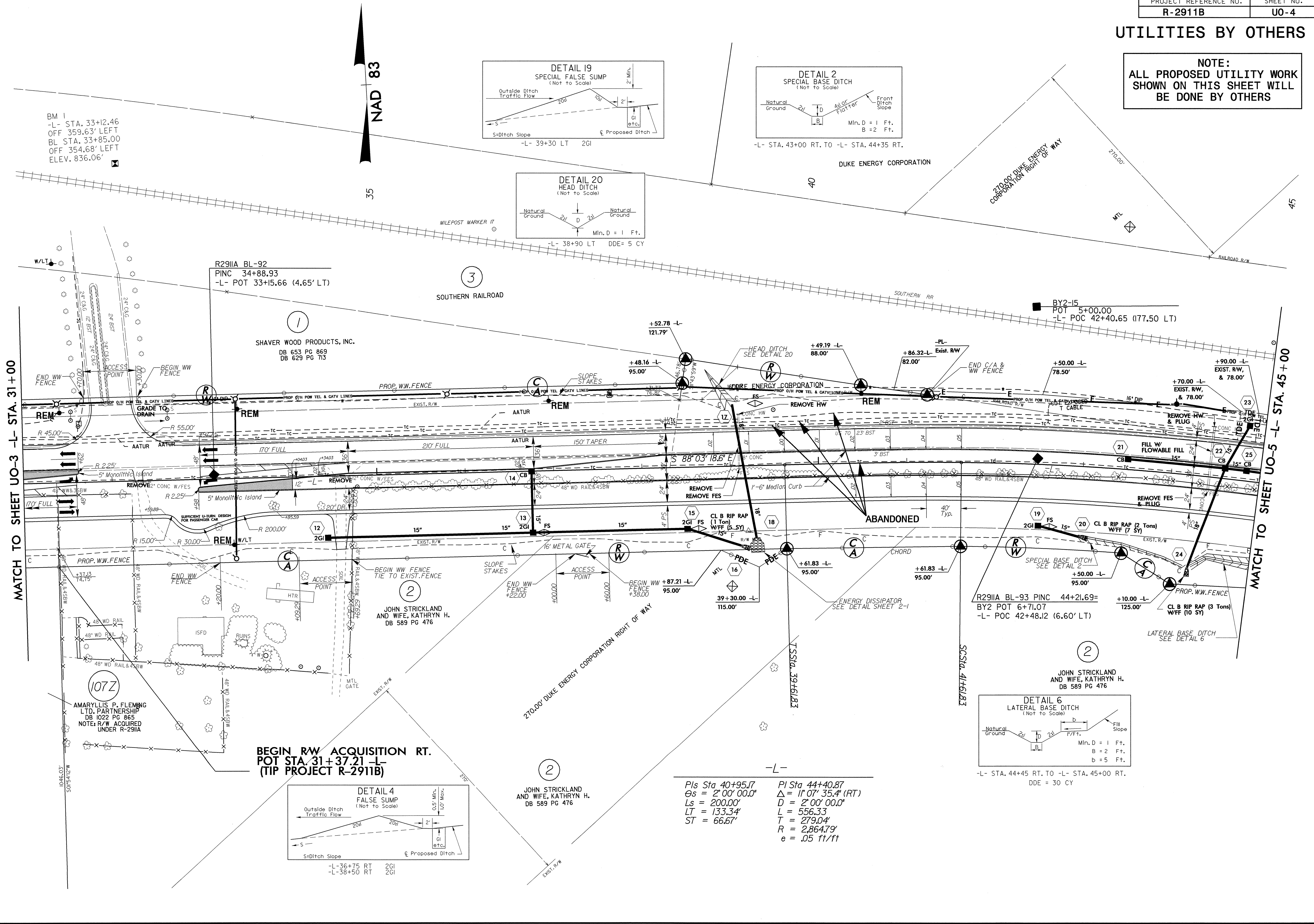
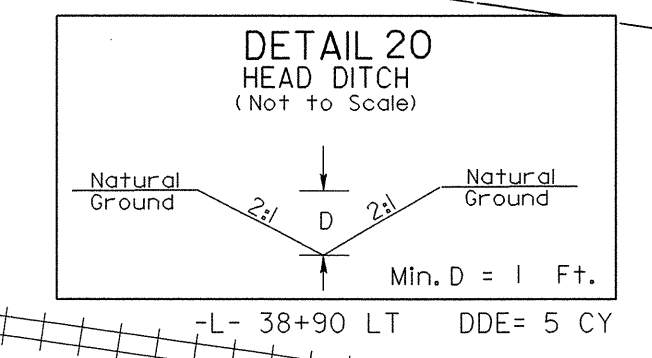
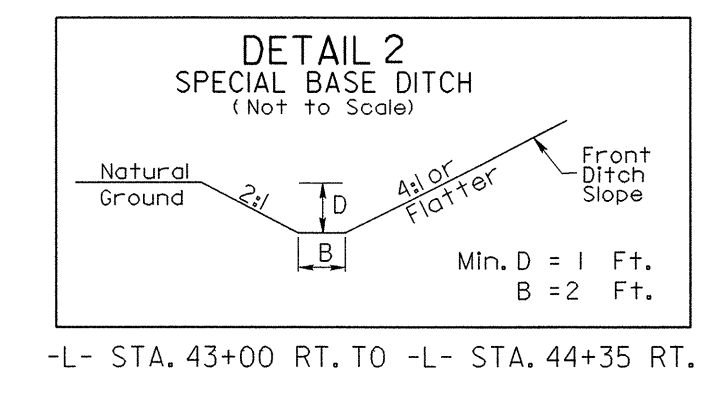
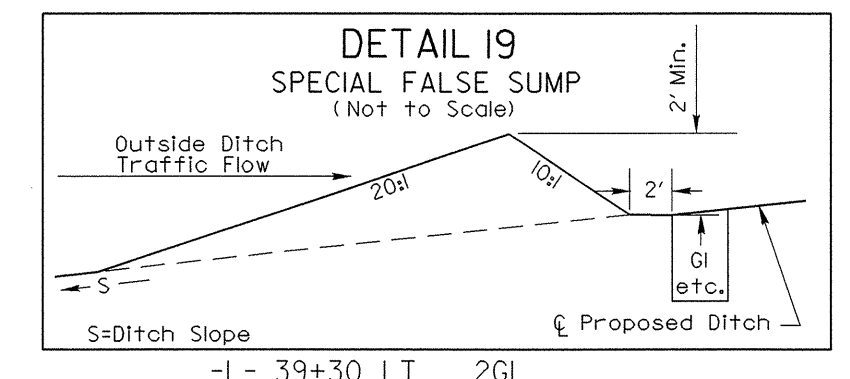
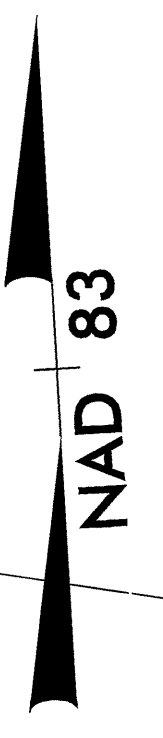
5/14/99

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UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

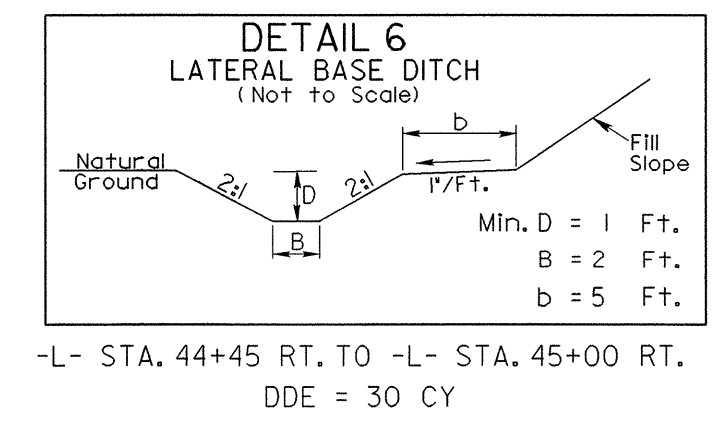
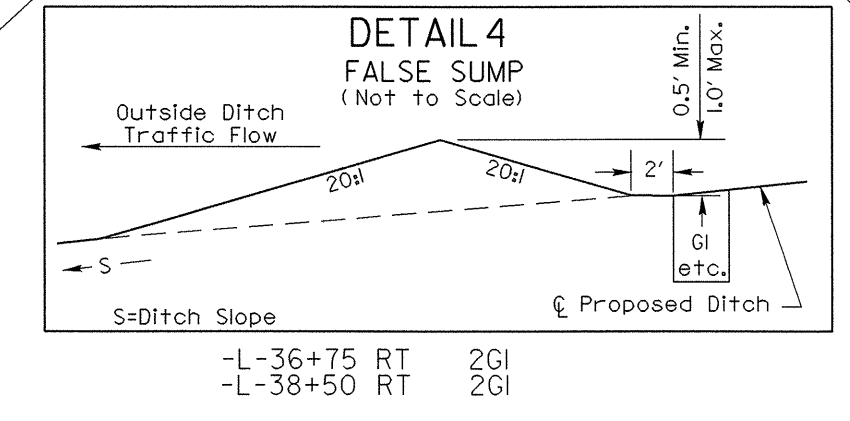
BM 1  
-L- STA. 33+12.46  
OFF 359.63' LEFT  
BL STA. 33+85.00  
OFF 354.68' LEFT  
ELEV. 836.06'



MATCH TO SHEET UO-3 -L- STA. 31+00

MATCH TO SHEET UO-5 -L- STA. 45+00

BEGIN RW ACQUISITION RT.  
POT STA. 31+37.21 -L-  
(TIP PROJECT R-2911B)



Pls Sta 40+95.17  
 $\theta_s = 2^\circ 00' 00.0''$   
 $L_s = 200.00'$   
 $LT = 133.34'$   
 $ST = 66.67'$

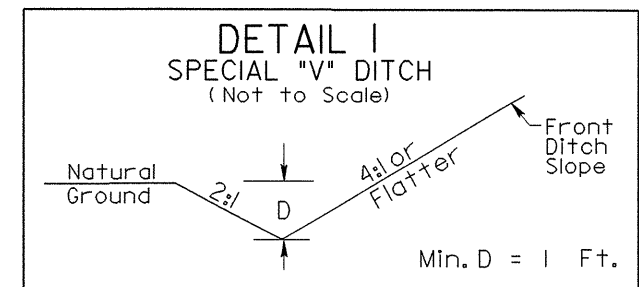
Pl Sta 44+40.87  
 $\Delta = 11^\circ 07' 35.4'' (RT)$   
 $D = 2^\circ 00' 00.0''$   
 $L = 556.33'$   
 $T = 279.04'$   
 $R = 2,864.79'$   
 $e = .05 \text{ ft/ft}$

5/14/99  
28-MAY-2008 14:46  
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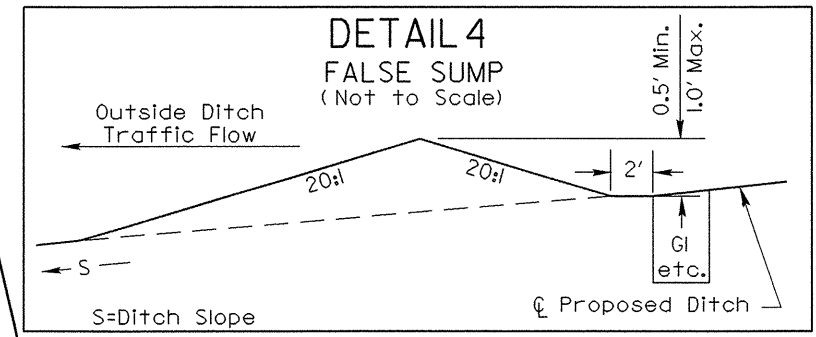
UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

JAMES M. REDMON, JR.  
DB 724 PG 499

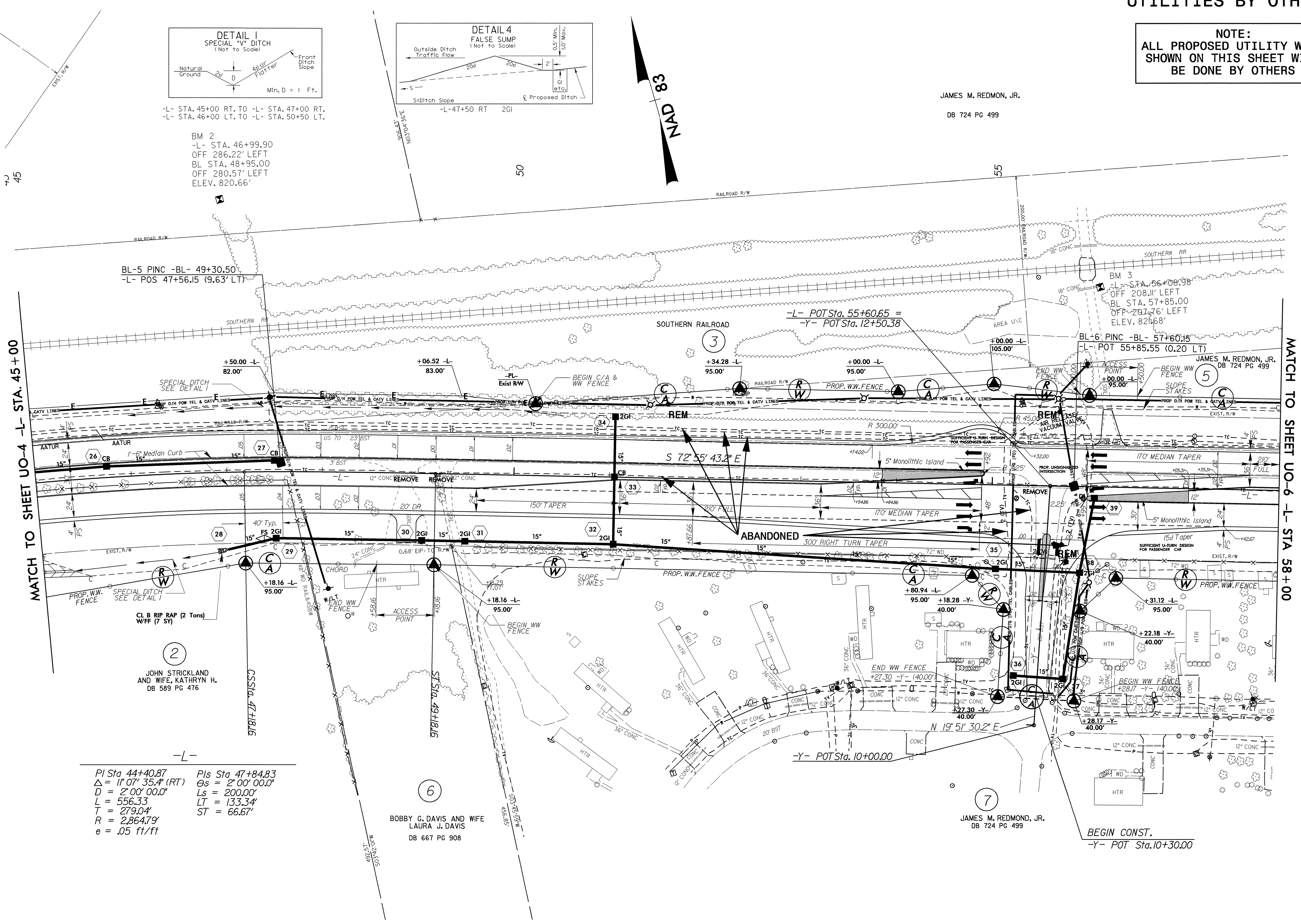


-L- STA. 45+00 RT. TO -L- STA. 47+00 RT.  
-L- STA. 46+00 LT. TO -L- STA. 50+50 LT.



-L- 47+50 RT 2GI

BM 2  
-L- STA. 46+99.90  
OFF 286.22' LEFT  
BL STA. 48+95.00  
OFF 280.57' LEFT  
ELEV. 820.66'



MATCH TO SHEET UO-4 -L- STA. 45+00

MATCH TO SHEET UO-6 -L- STA 58+00

-L-  
PI Sta 44+40.87  
 $\Delta = 1' 07'' 35.4''$  (RT)  
D = 2' 00' 00.0"  
L = 556.33  
T = 279.04'  
R = 2,864.79'  
e = .05 ft/ft

PIs Sta 47+84.83  
Os = 2' 00' 00.0"  
Ls = 200.00'  
LT = 133.34'  
ST = 66.67'

6  
BOBBY G. DAVIS AND WIFE  
LAURA J. DAVIS  
DB 667 PG 908

7  
JAMES M. REDMON, JR.  
DB 724 PG 499

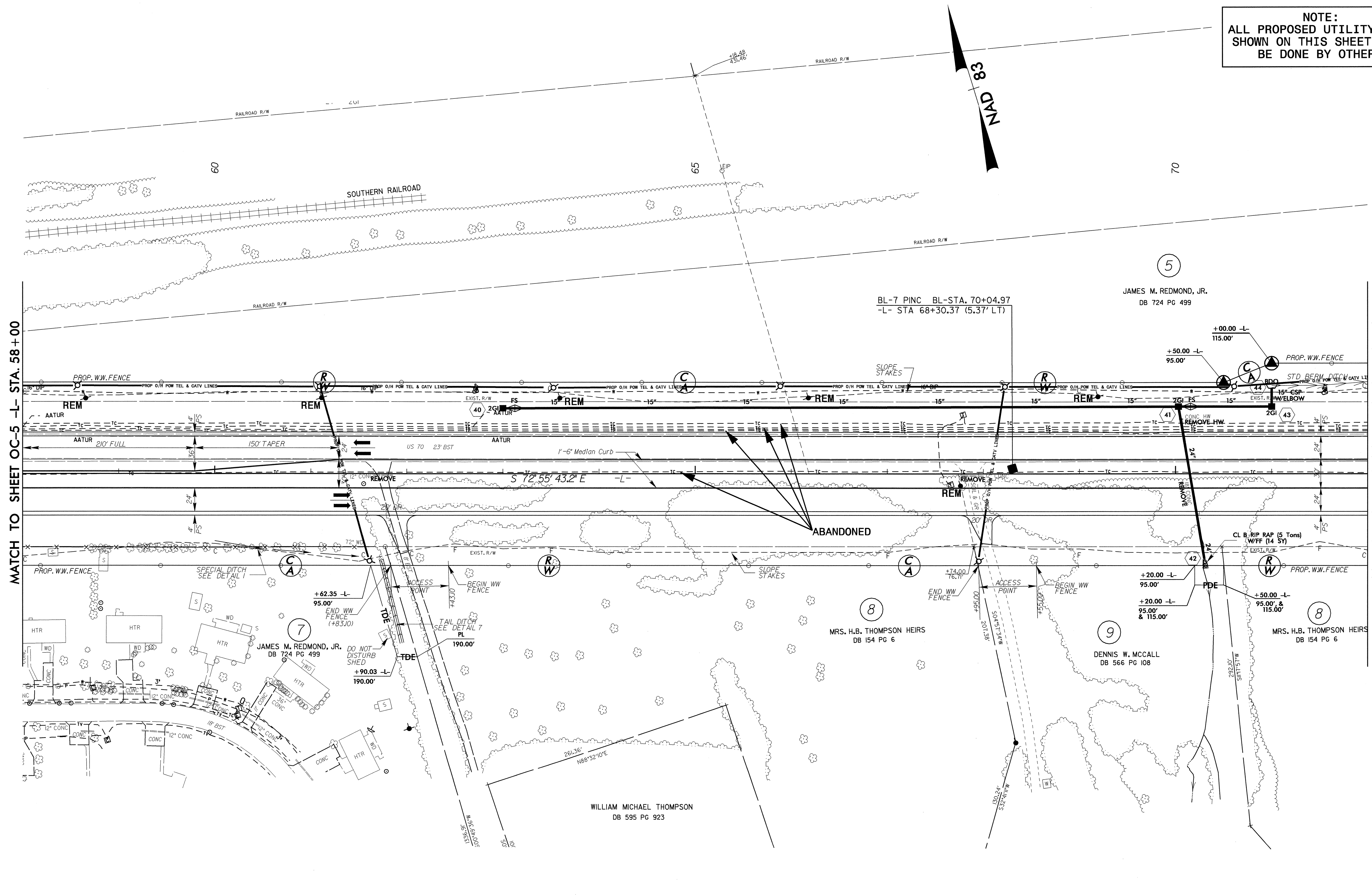
BEGIN CONST.  
-Y- POT Sta. 10+30.00

5/14/99  
28-MAY-2008 14:17  
\\s:\projects\2911B\ut\_7\_u05\_psh.dgn

**UTILITIES BY OTHERS**

**NOTE:**  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

5/14/99



MATCH TO SHEET OC-5 -L- STA. 58+00

MATCH TO SHEET UO-7 -L- STA. 72+00

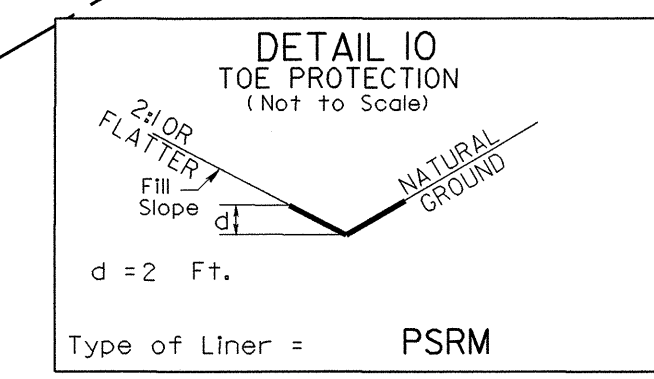
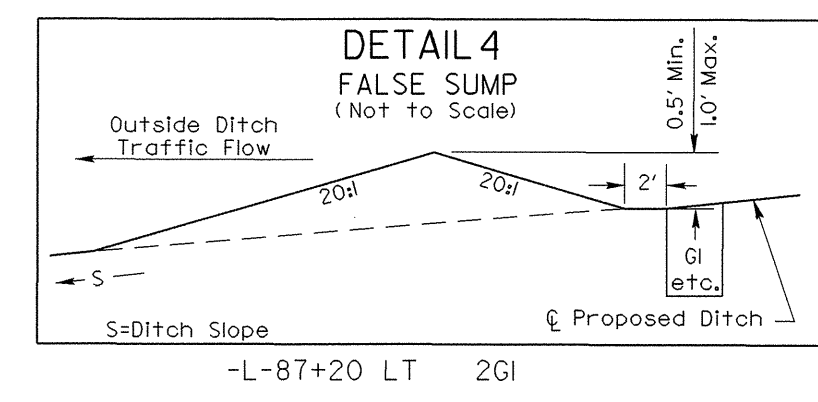
28-MAY-2008 14:47  
R-2911B-Uo-6.psh.dgn



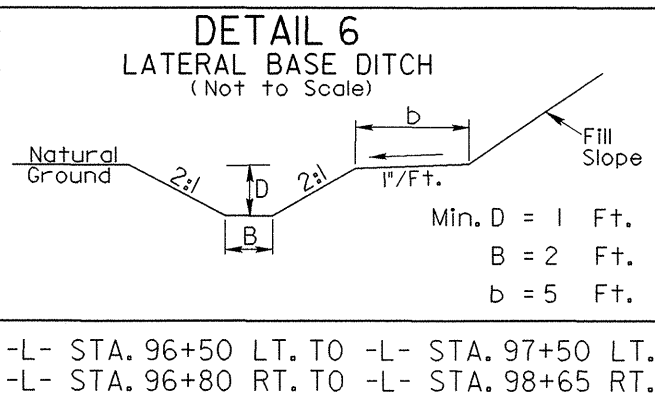
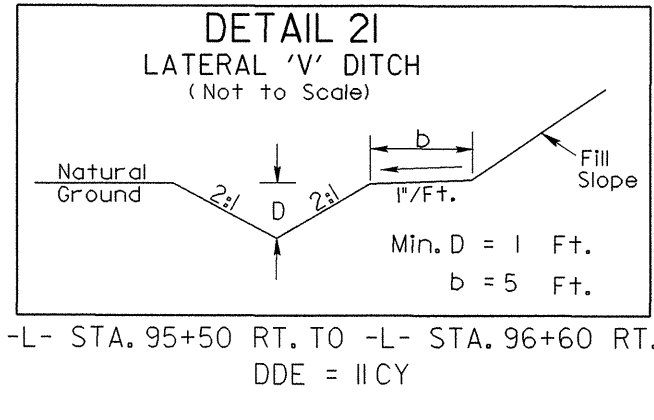
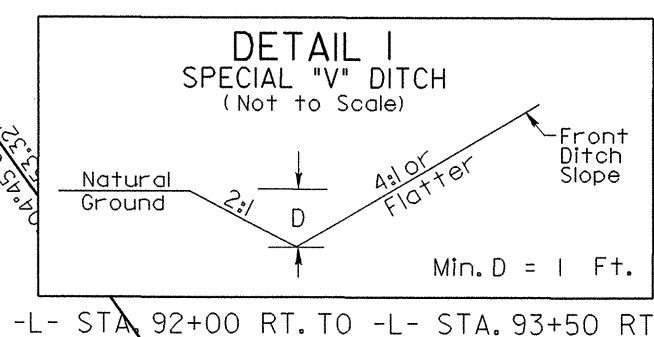
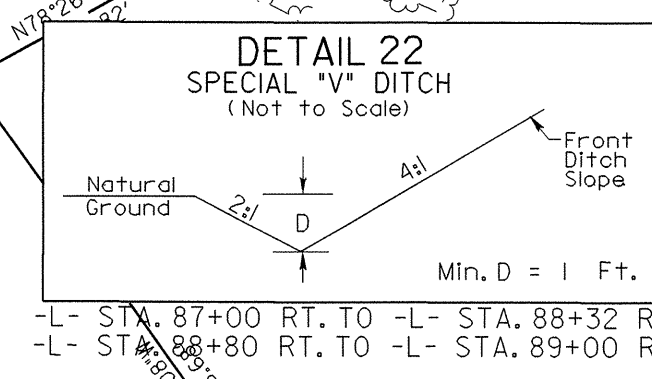
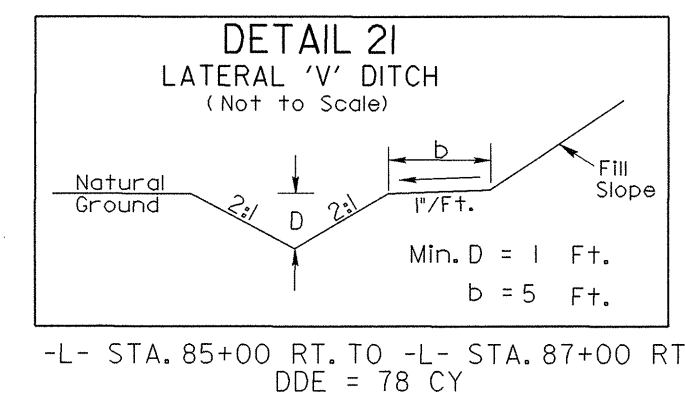
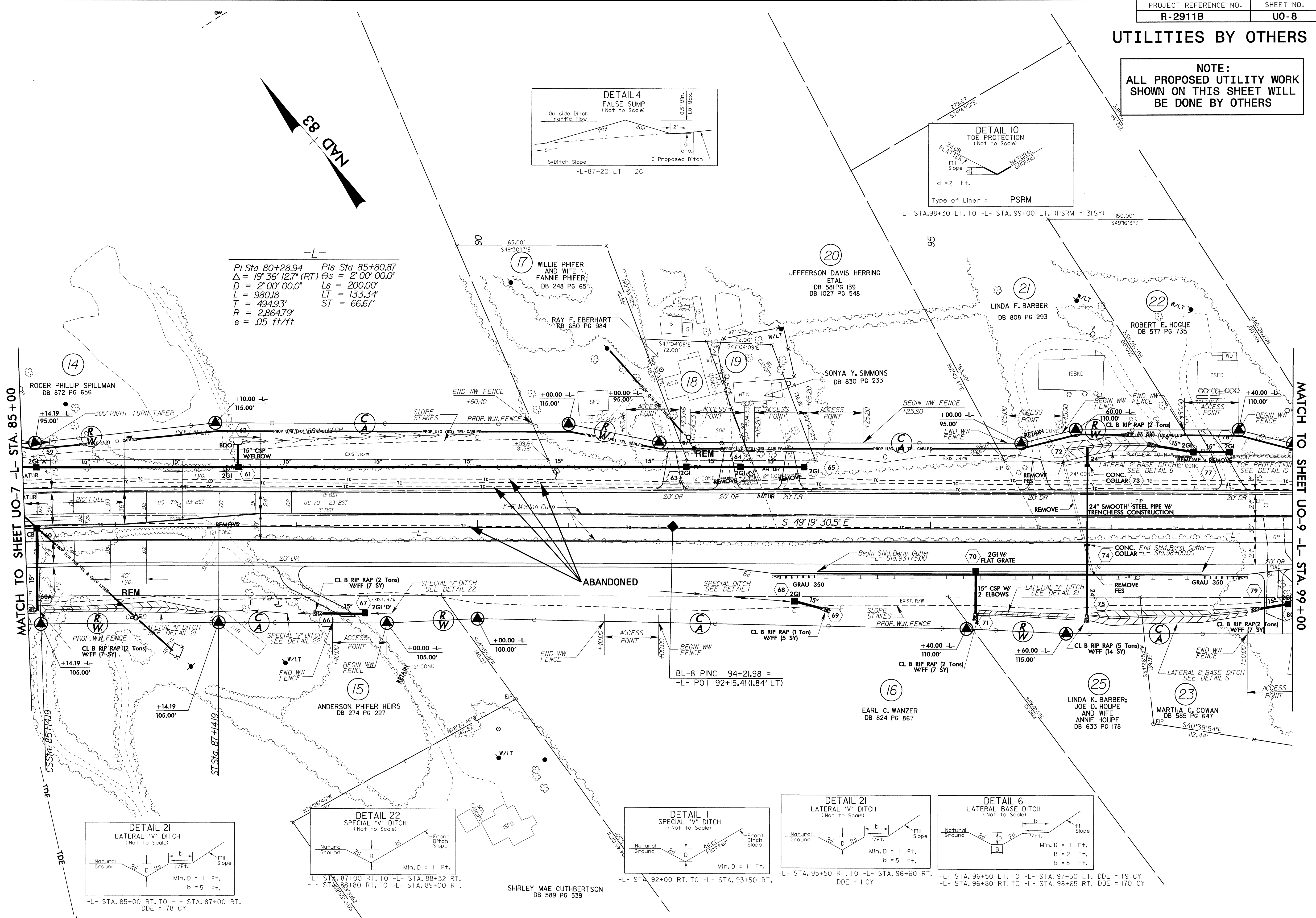


UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



-L-  
PI Sta 80+28.94 PI Sta 85+80.87  
 $\Delta = 19^{\circ} 36' 12.7''$  (RT)  $\Theta_s = 2^{\circ} 00' 00.0''$   
 $D = 2^{\circ} 00' 00.0''$   $L_s = 200.00'$   
 $L = 980.18$   $LT = 133.34'$   
 $T = 494.93'$   $ST = 66.67'$   
 $R = 2,864.79'$   
 $e = .05$  ft/ft



5/14/99  
28-MAY-2008 14:18  
R-2911B-UT-10-U08\_psh.dgn

MATCH TO SHEET UO-7 -L- STA. 85+00

MATCH TO SHEET UO-9 -L- STA. 99+00

-L- STA. 85+00 RT. TO -L- STA. 87+00 RT. DDE = 78 CY

-L- STA. 87+00 RT. TO -L- STA. 88+32 RT.  
-L- STA. 88+80 RT. TO -L- STA. 89+00 RT.

SHIRLEY MAE CUTHBERTSON  
DB 589 PG 539

-L- STA. 92+00 RT. TO -L- STA. 93+50 RT.

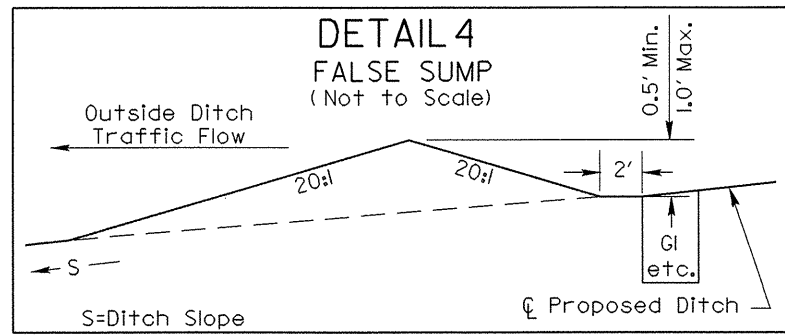
-L- STA. 95+50 RT. TO -L- STA. 96+60 RT. DDE = 11CY

-L- STA. 96+50 LT. TO -L- STA. 97+50 LT. DDE = 119 CY  
-L- STA. 96+80 RT. TO -L- STA. 98+65 RT. DDE = 170 CY



UTILITIES BY OTHERS

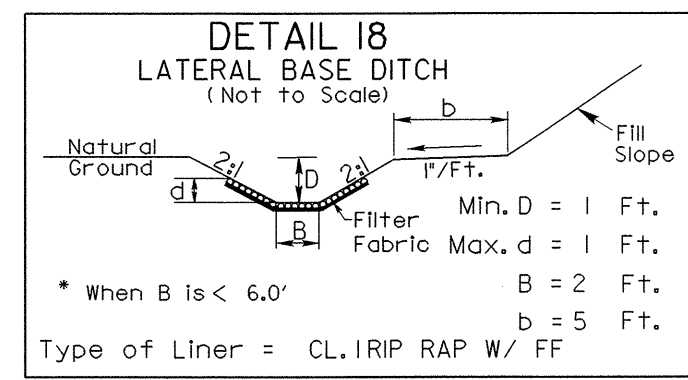
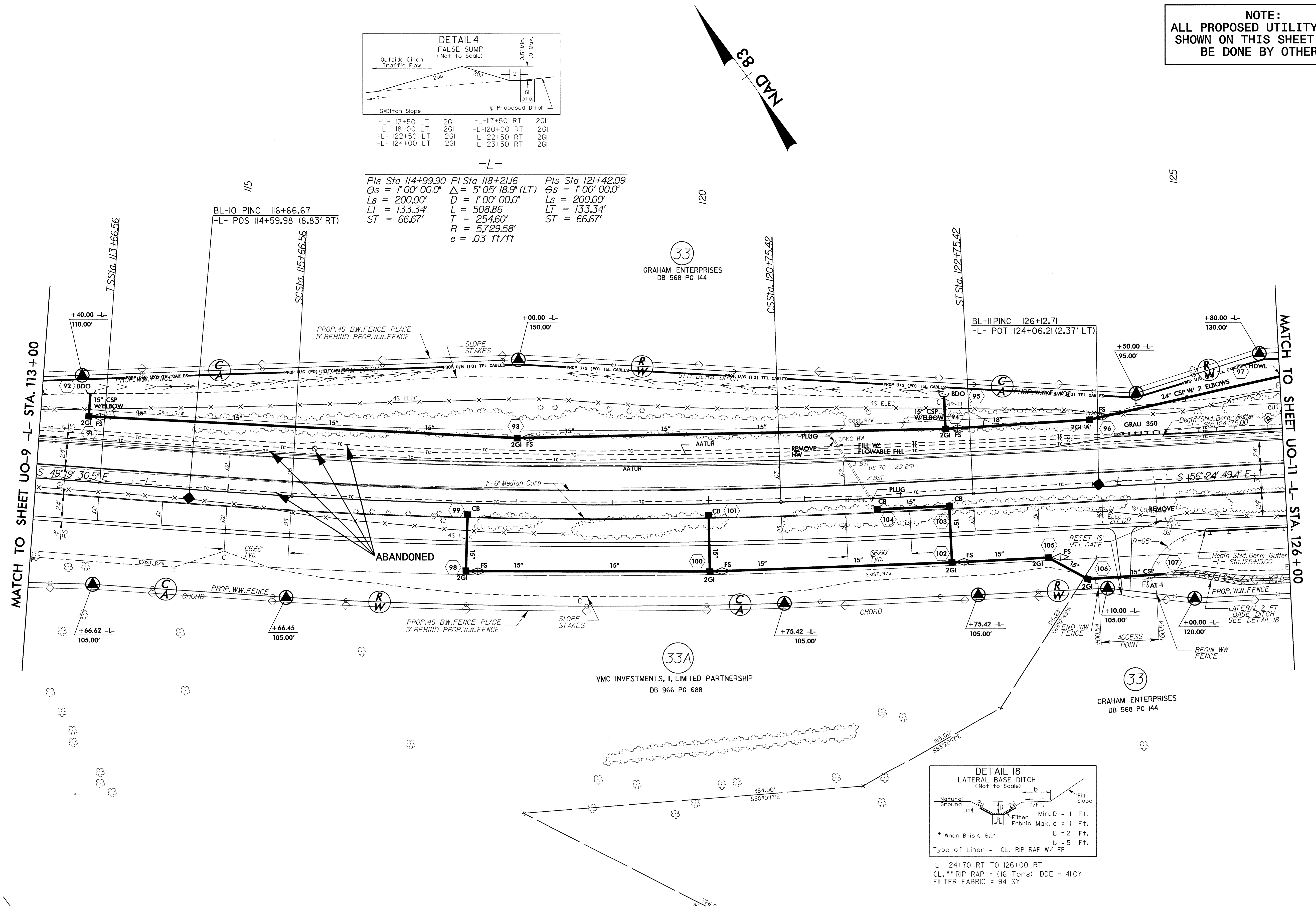
NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



-L- 113+50 LT	2GI	-L- 117+50 RT	2GI
-L- 118+00 LT	2GI	-L- 120+00 RT	2GI
-L- 122+50 LT	2GI	-L- 122+50 RT	2GI
-L- 124+00 LT	2GI	-L- 123+50 RT	2GI

-L-

Pls Sta 114+99.90	Pls Sta 118+21.16	Pls Sta 121+42.09
$\Theta_s = 1^{\circ}00'00.0''$	$\Delta = 5^{\circ}05'18.9''$ (LT)	$\Theta_s = 1^{\circ}00'00.0''$
$L_s = 200.00'$	$D = 1^{\circ}00'00.0''$	$L_s = 200.00'$
$LT = 133.34'$	$L = 508.86'$	$LT = 133.34'$
$ST = 66.67'$	$T = 254.60'$	$ST = 66.67'$
	$R = 5,729.58'$	
	$e = .03$ ft/ft	



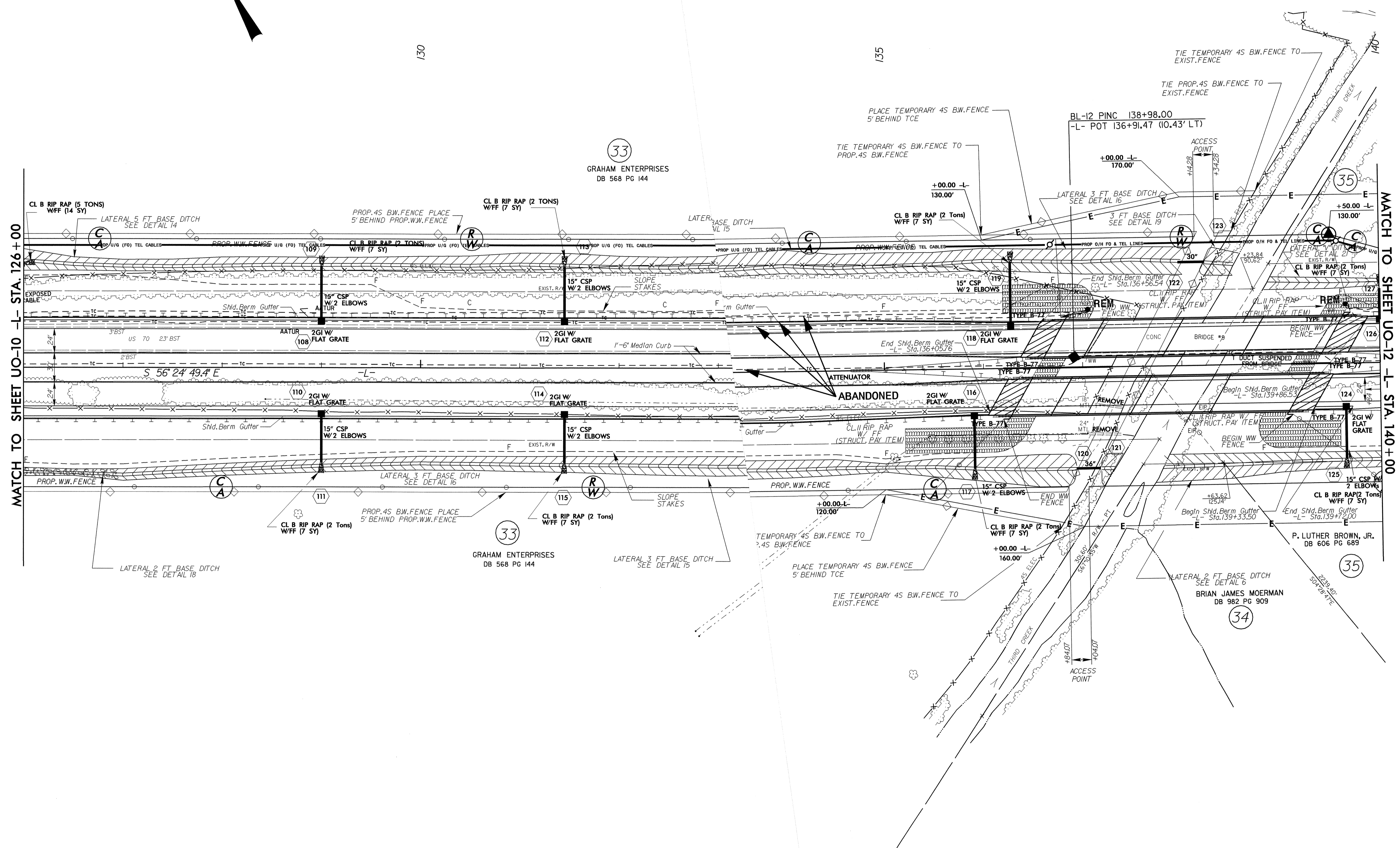
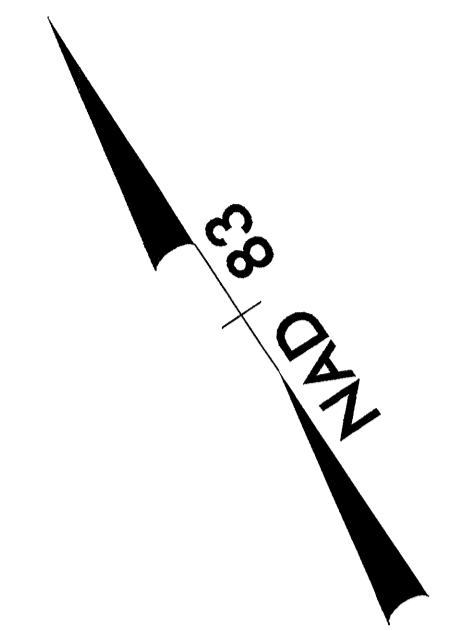
Type of Liner = CL.1RIP RAP W/ FF  
-L- 124+70 RT TO 126+00 RT  
CL. 1" RIP RAP = (116 Tons) DDE = 41CY  
FILTER FABRIC = 94 SY

5/14/99  
28-MAY-2008 14:19 R-2911B-UT-12-U010\_psh.dgn

# UTILITIES BY OTHERS

**NOTE:**  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

5/14/99



MATCH TO SHEET UO-10 -L- STA. 126+00

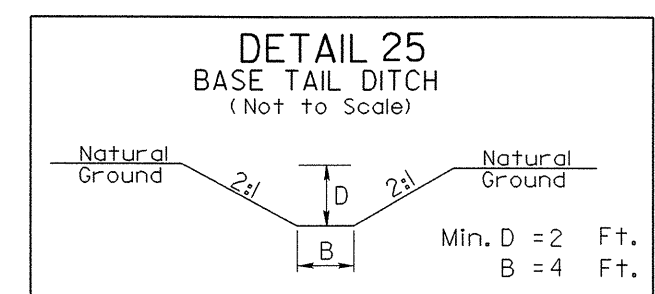
MATCH TO SHEET UO-12 -L- STA. 140+00

5/14/99 12:25-MAY-2008 14:20 R-2911B\_Ut\_13\_U011.psh.dgn

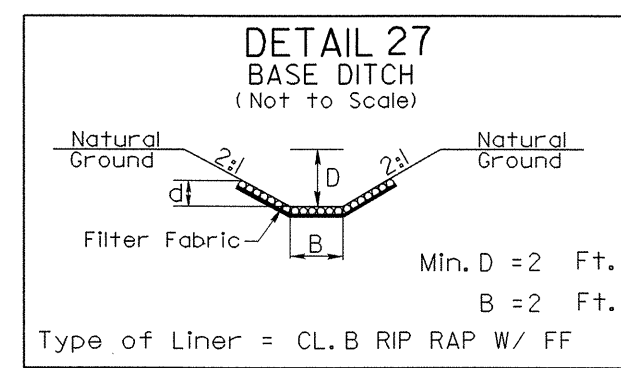


UTILITIES BY OTHERS

NOTE:  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



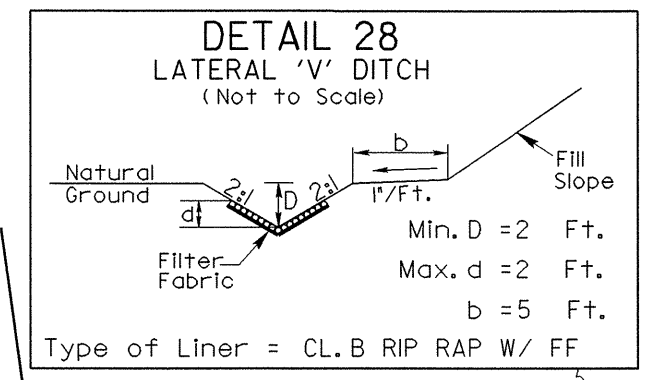
-L- STA. 162+20 LT. DDE = 10 CY



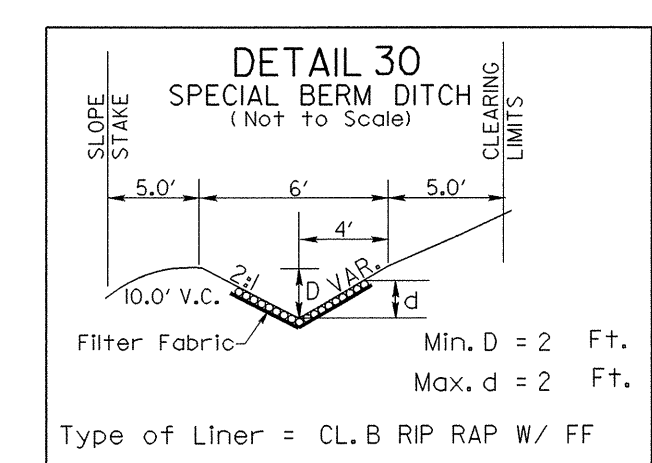
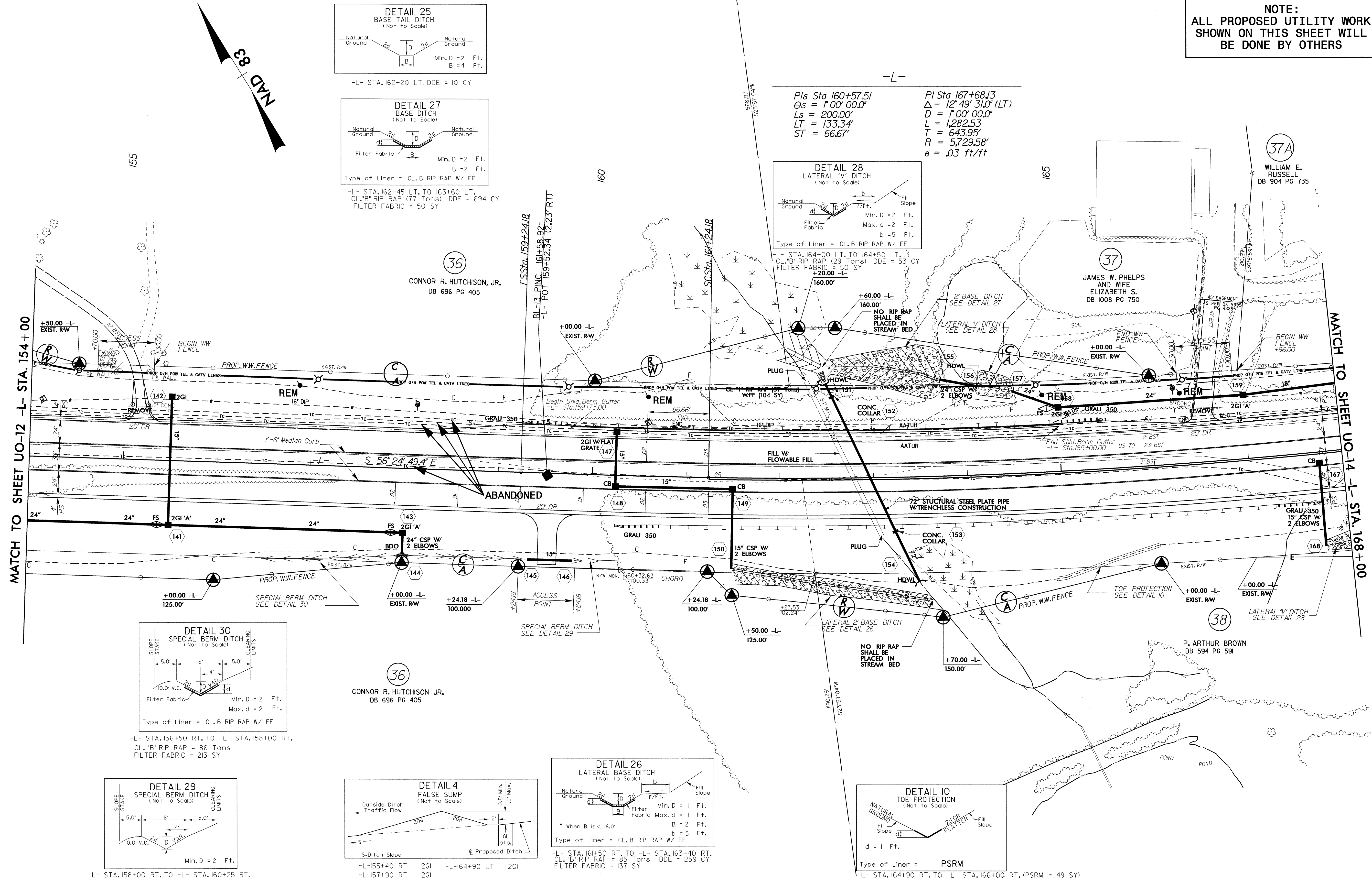
-L- STA. 162+45 LT. TO 163+60 LT.  
CL. "B" RIP RAP (77 Tons) DDE = 694 CY  
FILTER FABRIC = 50 SY

Pls Sta 160+57.51  
 $\Delta s = 1'00''00.0''$   
 $L_s = 200.00'$   
 $LT = 133.34'$   
 $ST = 66.67'$

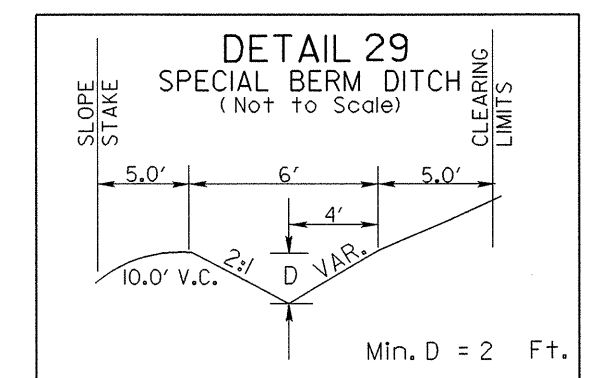
Pl Sta 167+68.13  
 $\Delta = 12'49''31.0''$  (LT)  
 $D = 1'00''00.0''$   
 $L = 1,282.53'$   
 $T = 643.95'$   
 $R = 5,729.58'$   
 $e = .03$  ft/ft



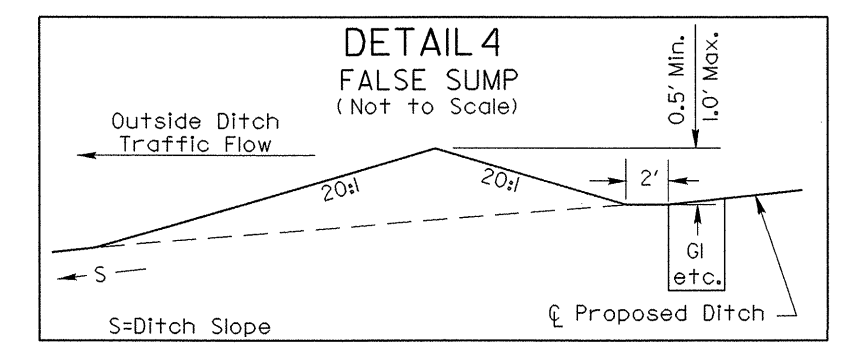
-L- STA. 164+00 LT. TO 164+50 LT.  
CL. "B" RIP RAP (29 Tons) DDE = 53 CY  
FILTER FABRIC = 50 SY



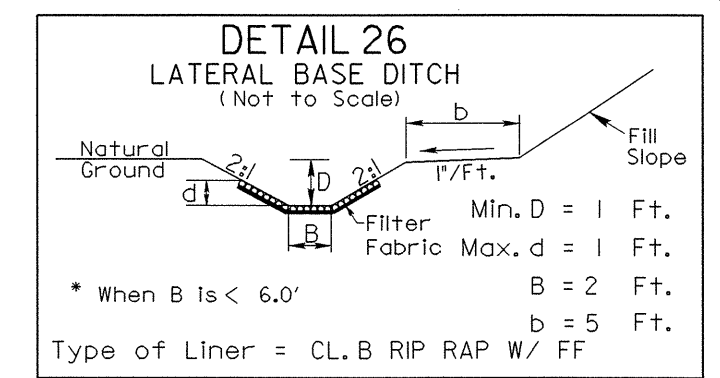
-L- STA. 156+50 RT. TO -L- STA. 158+00 RT.  
CL. "B" RIP RAP = 86 Tons  
FILTER FABRIC = 213 SY



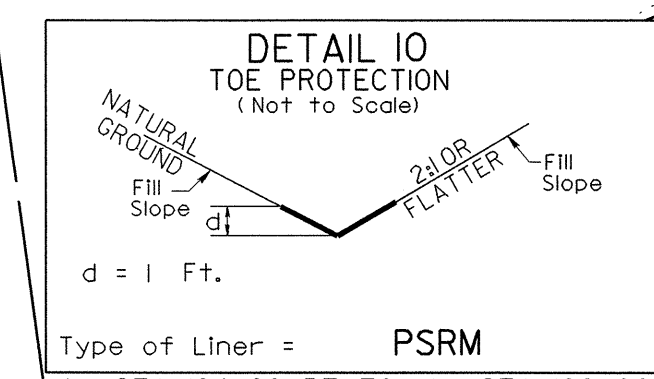
-L- STA. 158+00 RT. TO -L- STA. 160+25 RT.



-L-154+40 RT 2GI -L-164+90 LT 2GI  
-L-157+90 RT 2GI



-L- STA. 161+50 RT. TO -L- STA. 163+40 RT.  
CL. "B" RIP RAP = 85 Tons DDE = 259 CY  
FILTER FABRIC = 137 SY



-L- STA. 164+90 RT. TO -L- STA. 166+00 RT. (PSRM = 49 SY)

5/14/99  
28-MAY-2008 14:21 R-2911B\_U0-13\_U013\_psh.dgn

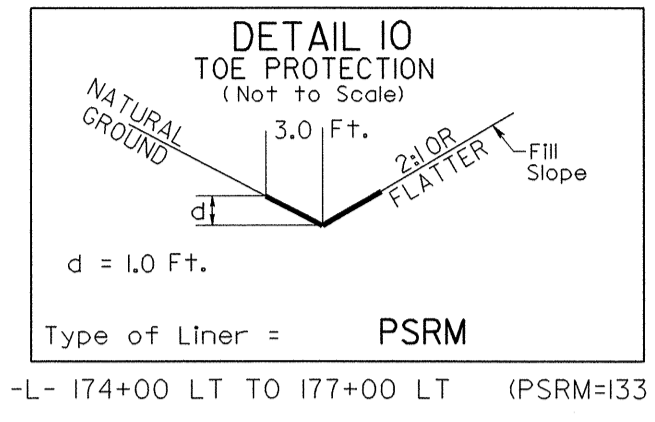
UTILITIES BY OTHERS

NOTE:  
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SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

5/14/99

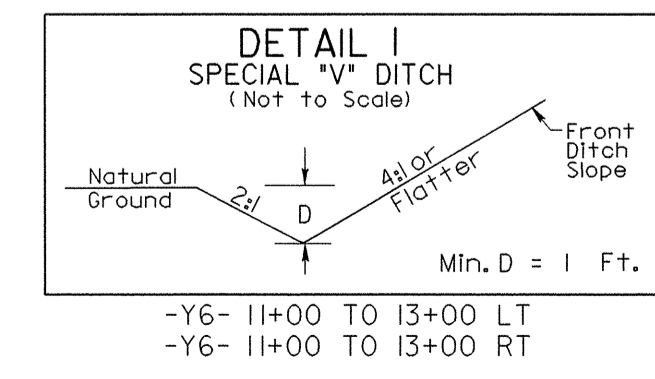
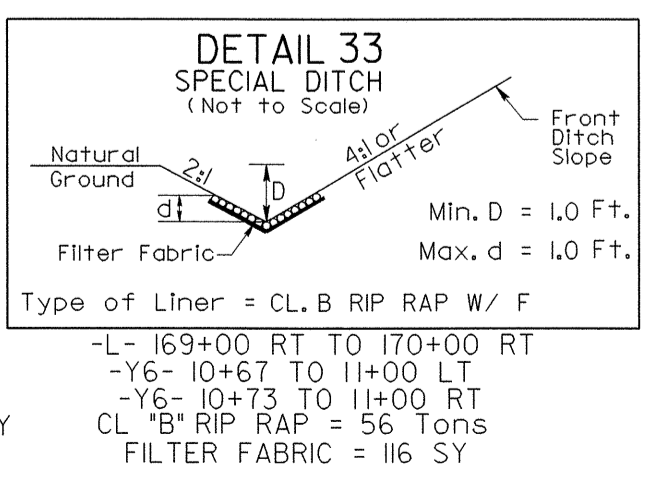
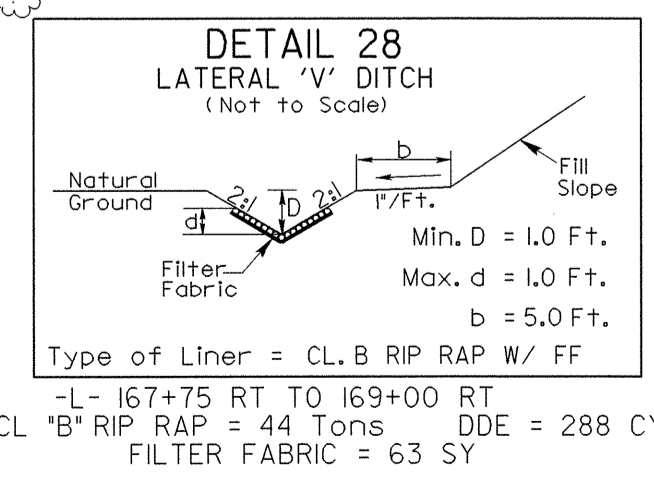
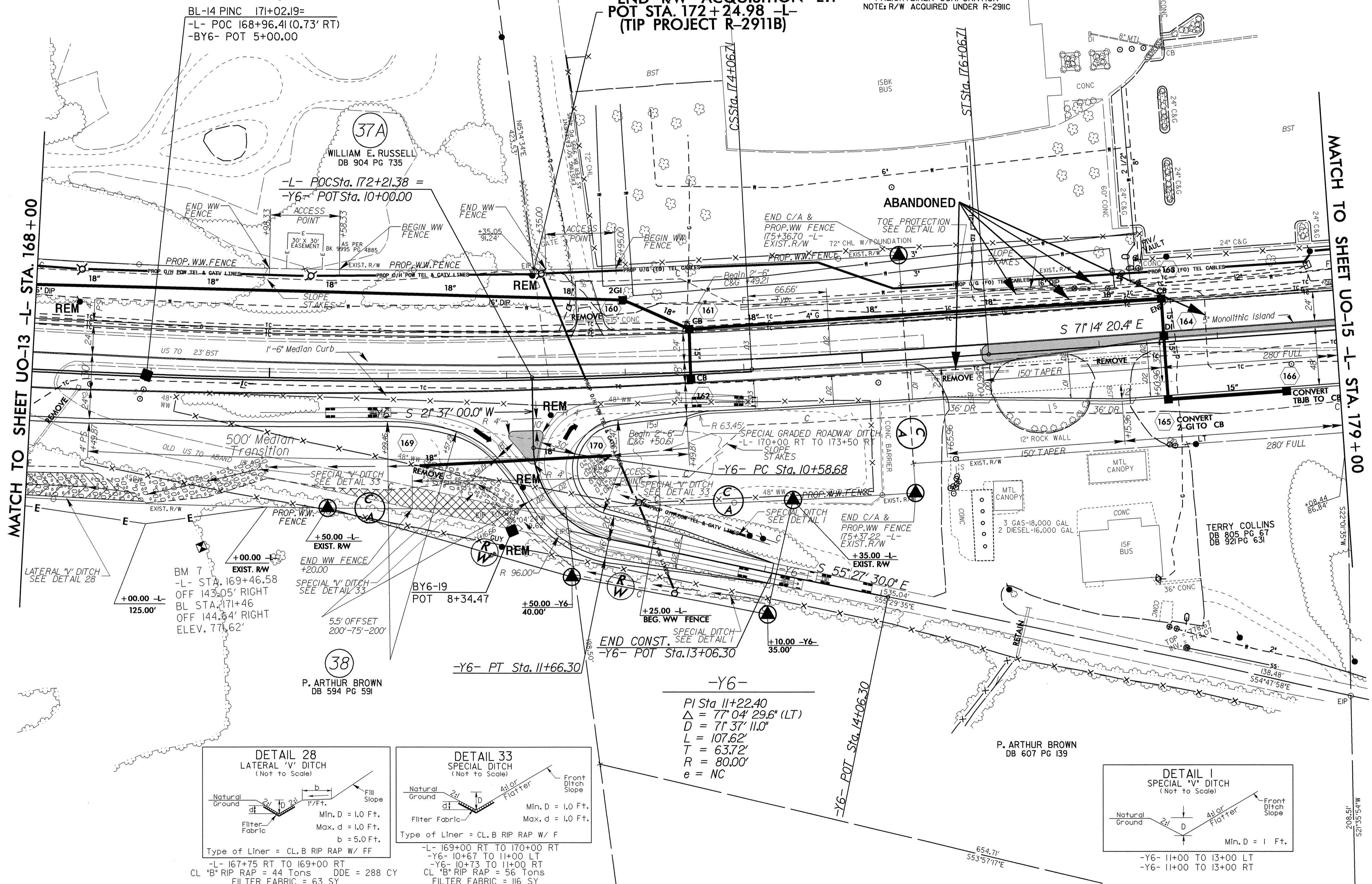
PI Sta 167+68.13  
 $\Delta = 12^\circ 49' 31.0"$  (LT)  
 $D = 1^\circ 00' 00.0"$   
 $L = 1,282.53'$   
 $T = 643.95'$   
 $R = 5,729.58'$   
 $e = .03$  ft/ft

Pls Sta 174+73.37  
 $\Theta_s = 1^\circ 00' 00.0"$   
 $L_s = 200.00'$   
 $LT = 133.34'$   
 $ST = 66.67'$



END RW ACQUISITION LT.  
 POT STA. 172+24.98 -L-  
 (TIP PROJECT R-2911B)

FREIGHTLINER CORPORATION  
 NOTES: R/W ACQUIRED UNDER R-2911C

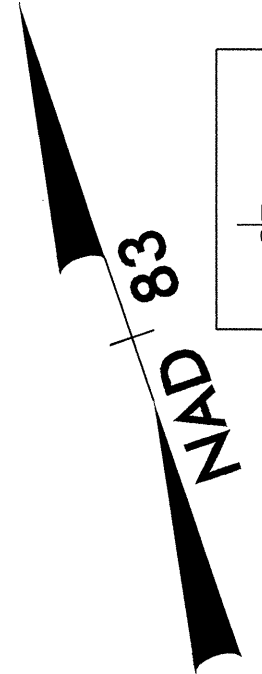
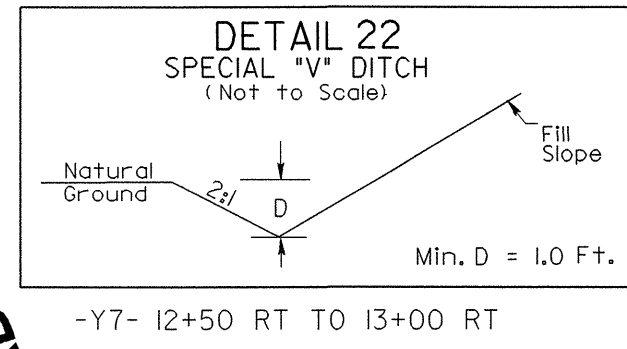
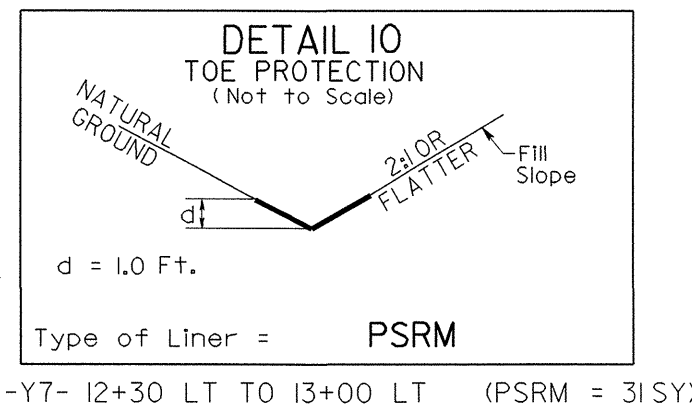
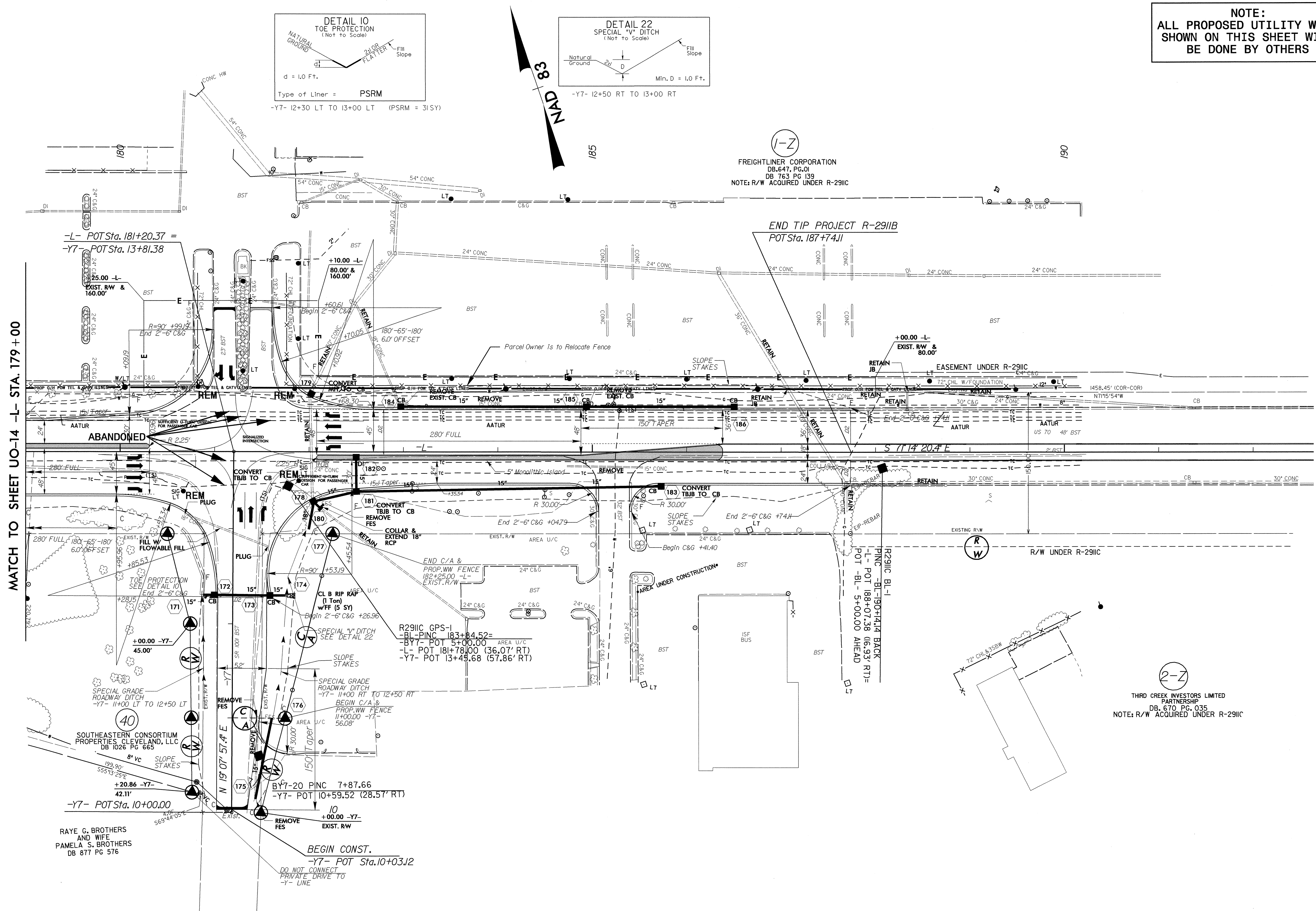


28-MAY-2008 14:21 R-2911B-Ut-16-U014\_psh.dgn



### UTILITIES BY OTHERS

**NOTE:**  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS



(1-Z)  
FREIGHTLINER CORPORATION  
DB.647, PG.01  
DB 763 PG 139  
NOTE: R/W ACQUIRED UNDER R-2911C

END TIP PROJECT R-2911B  
POT Sta. 187+74.11

MATCH TO SHEET U0-14 -L- STA. 179+00

-L- POT Sta. 181+20.37 =  
-Y7- POT Sta. 13+81.38

RAYE G. BROTHERS  
AND WIFE  
PAMELA S. BROTHERS  
DB 877 PG 576

BEGIN CONST.  
-Y7- POT Sta. 10+03.12

R2911C GPS-1  
-BL- PINC 183+84.52=  
-BY7- POT 5+00.00  
-L- POT 181+78.00 (36.07' RT)  
-Y7- POT 13+45.68 (57.86' RT)

R2911C BL-1  
PINC -BL-190+14.14 BACK  
-L- POT 188+07.38 (6.93' RT)=  
-Y7- POT 5+00.00 AHEAD

(2-Z)  
THIRD CREEK INVESTORS LIMITED  
PARTNERSHIP  
DB. 670 PG. 035  
NOTE: R/W ACQUIRED UNDER R-2911C

5/14/99  
1:28-MAY-2008 14:22 R-2911B-Ut-17-U015.psh.dgn