

5/28/99

MULKEY
ENGINEERS & CONSULTANTS
PO Box 33187
Raleigh, NC 27666
919 881-1918 (FAX)
WWW.MULKEYINC.COM

PROJECT REFERENCE NO. U-5018A	SHEET NO. UC-6
ROADWAY DESIGN ENGINEER	UTILITY ENGINEER

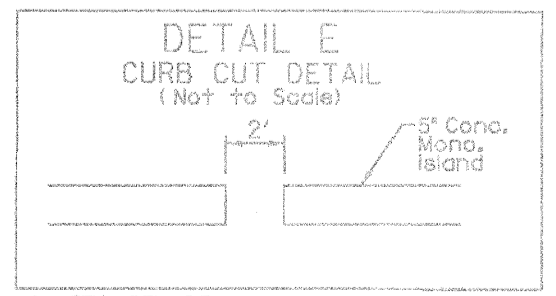
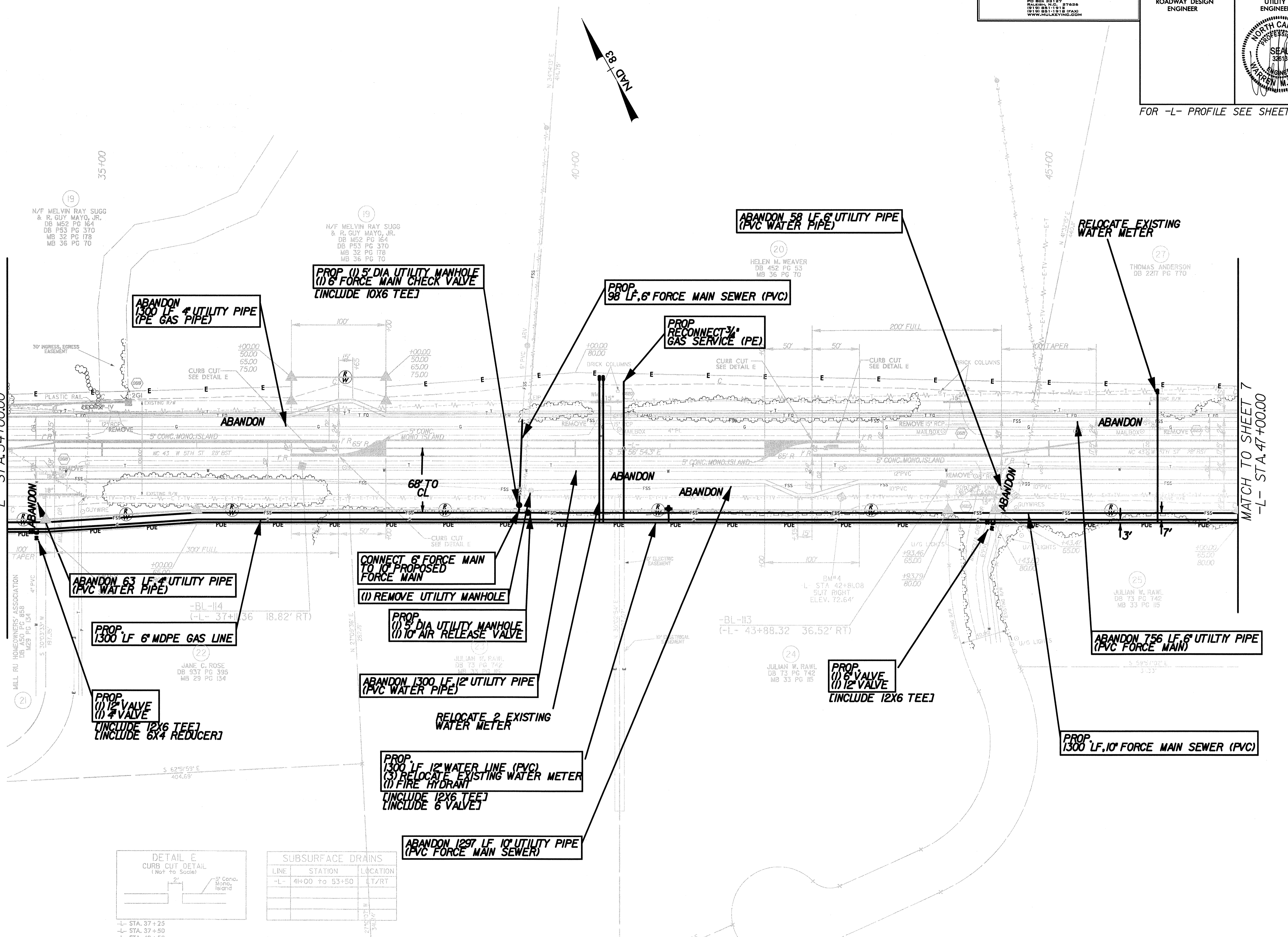
FOR -L- PROFILE SEE SHEET 10



REVISIONS

MATCH TO SHEET 5
-L- STA. 34+00.00

MATCH TO SHEET 7
-L- STA. 47+00.00



SUBSURFACE DRAINS

LINE	STATION	LOCATION
-L-	41+00 TO 53+50	LT/RT

- L- STA. 37+25
- L- STA. 37+50
- L- STA. 42+50
- L- STA. 42+75

SECTION A Utility Coordination Plot - UC plans\U5018A_UC6.dgn

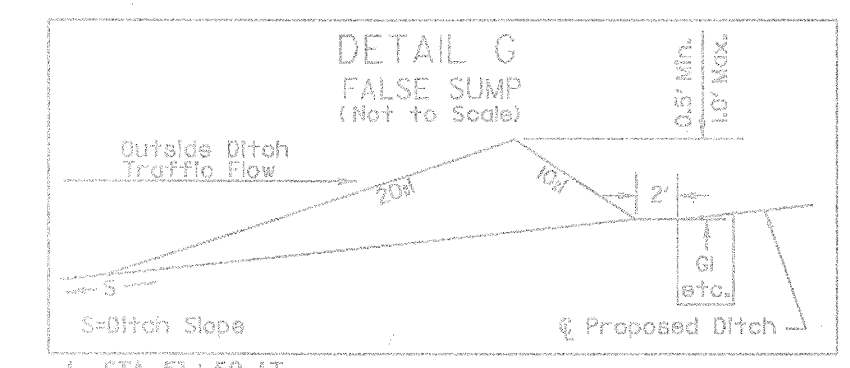
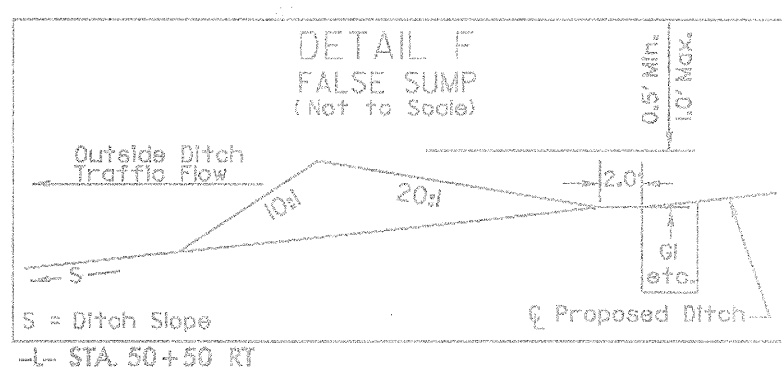
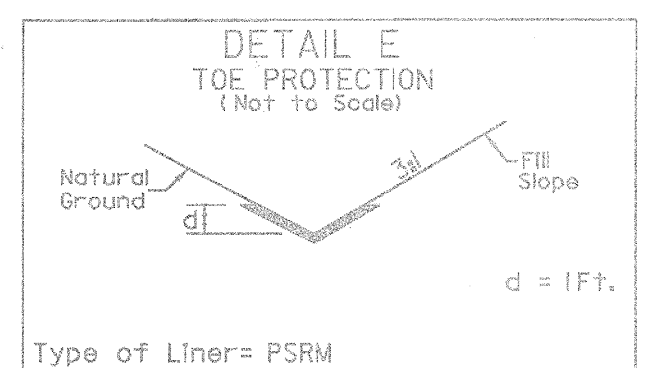
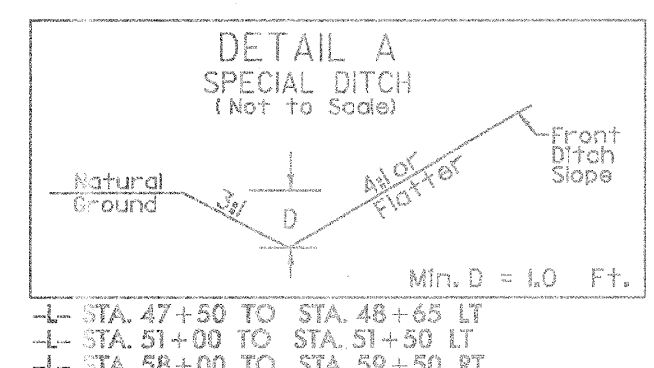
5/28/99



PROJECT REFERENCE NO. U-5018A		SHEET NO. UC-7	
ROADWAY DESIGN ENGINEER		UTILITY ENGINEER	

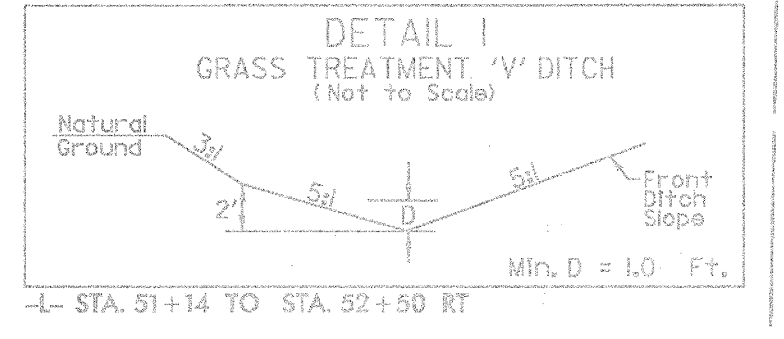
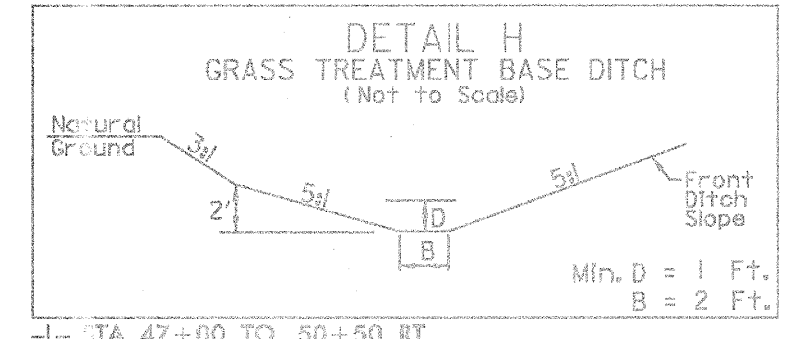


FOR -L- PROFILE SEE SHEET 10



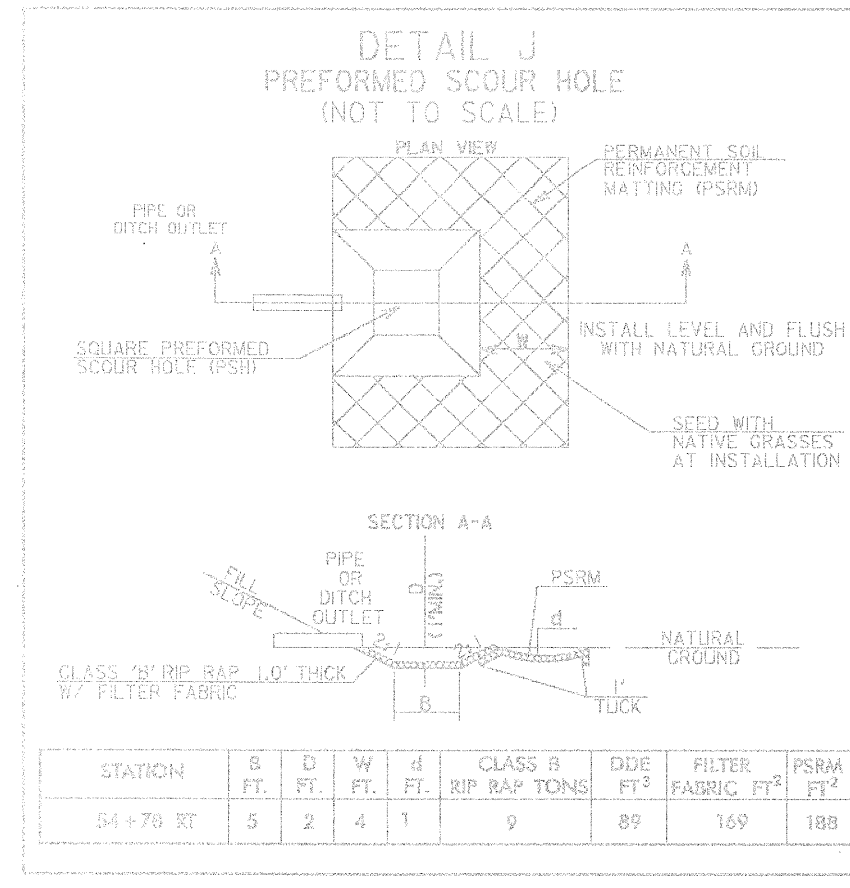
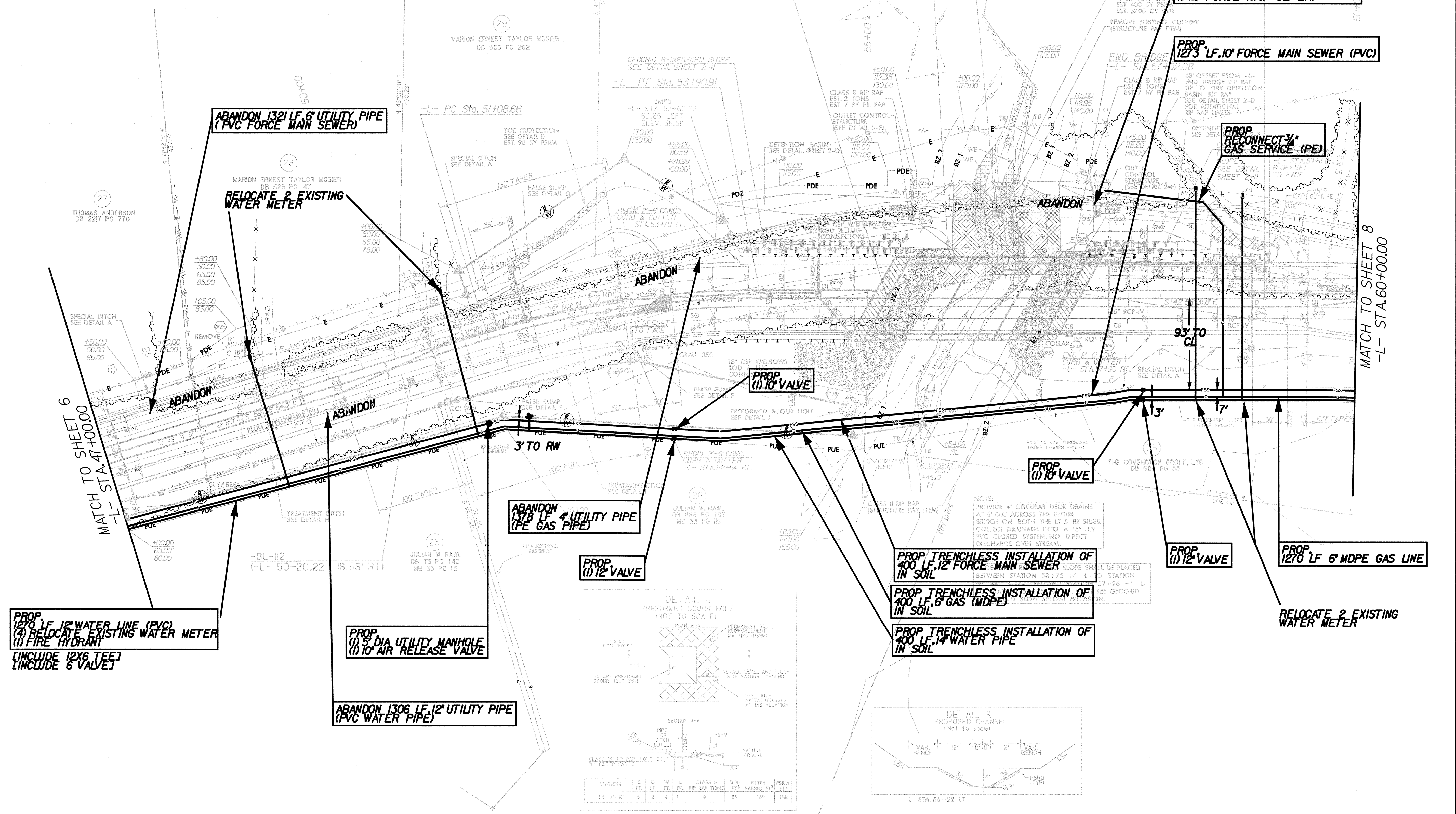
PI Sta 52+50.83 Δ = 17' 01" 22.4' (RT)
D = 6' 01" 52.1"
L = 282.25'
T = 142.17'
SE = 04
RO = 144'

PI Sta 61+27.90 Δ = 5' 09" 00.9' (RT)
D = 1' 09" 35.4"
L = 444.05'
T = 222.17'
SE = 02
RO = 72'



SUBSURFACE DRAIN
SEE DETAIL SHEET 2-N

LINE	STATION	LOCATION
-L-	41+00 TO 53+50	LT/RT



STATION	S	D	W	d	CLASS B	DATE	FILTER	PSRM
	FT.	FT.	FT.	FT.	RIP RAP TONS	FT.	FT.	FT.
54+78 RT	5	2	4	1	9	89	169	188

REVISIONS

SECTION AN Utility Coordination Plot + VUC Plans U5018A_UC7.dgn

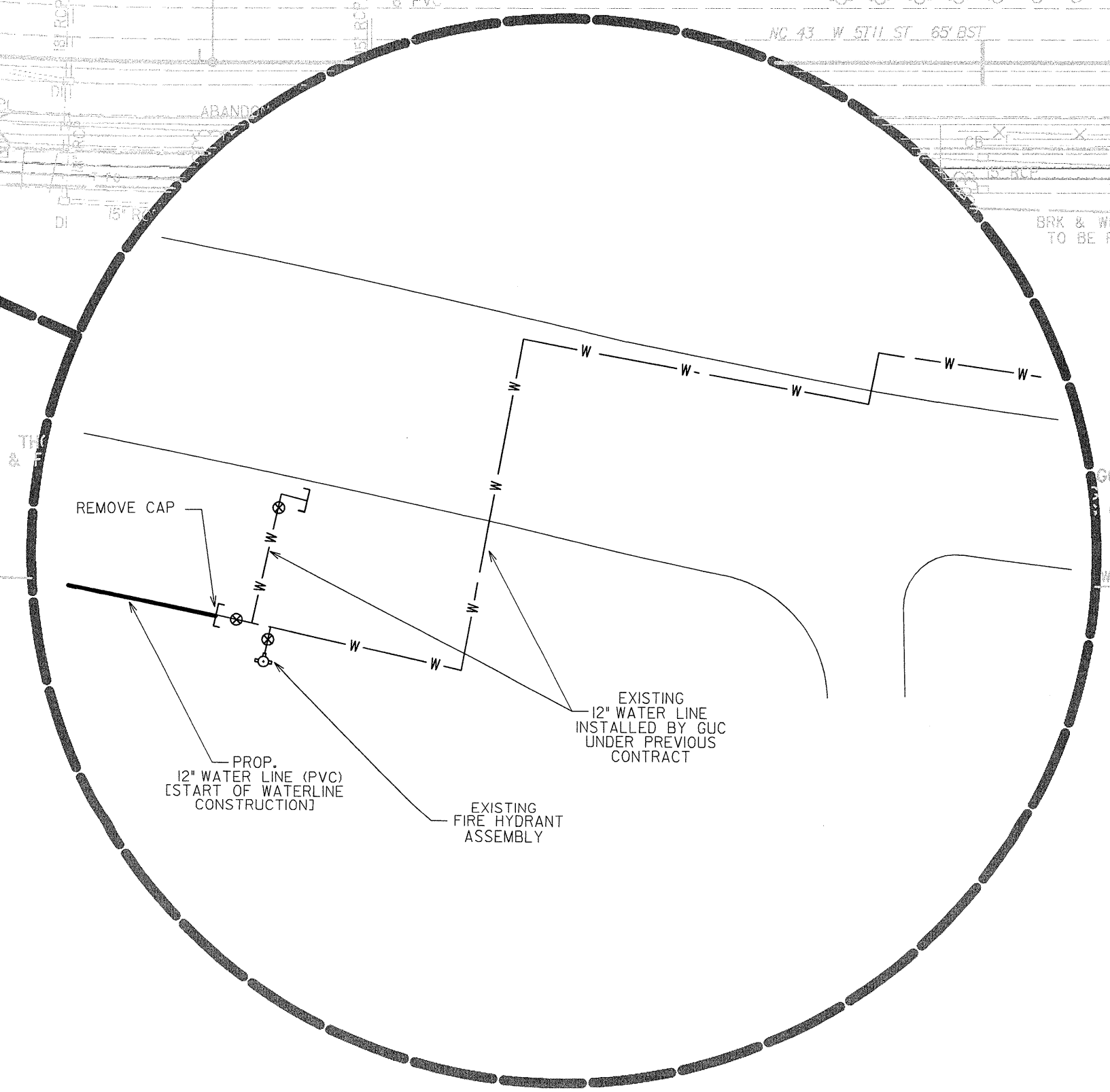
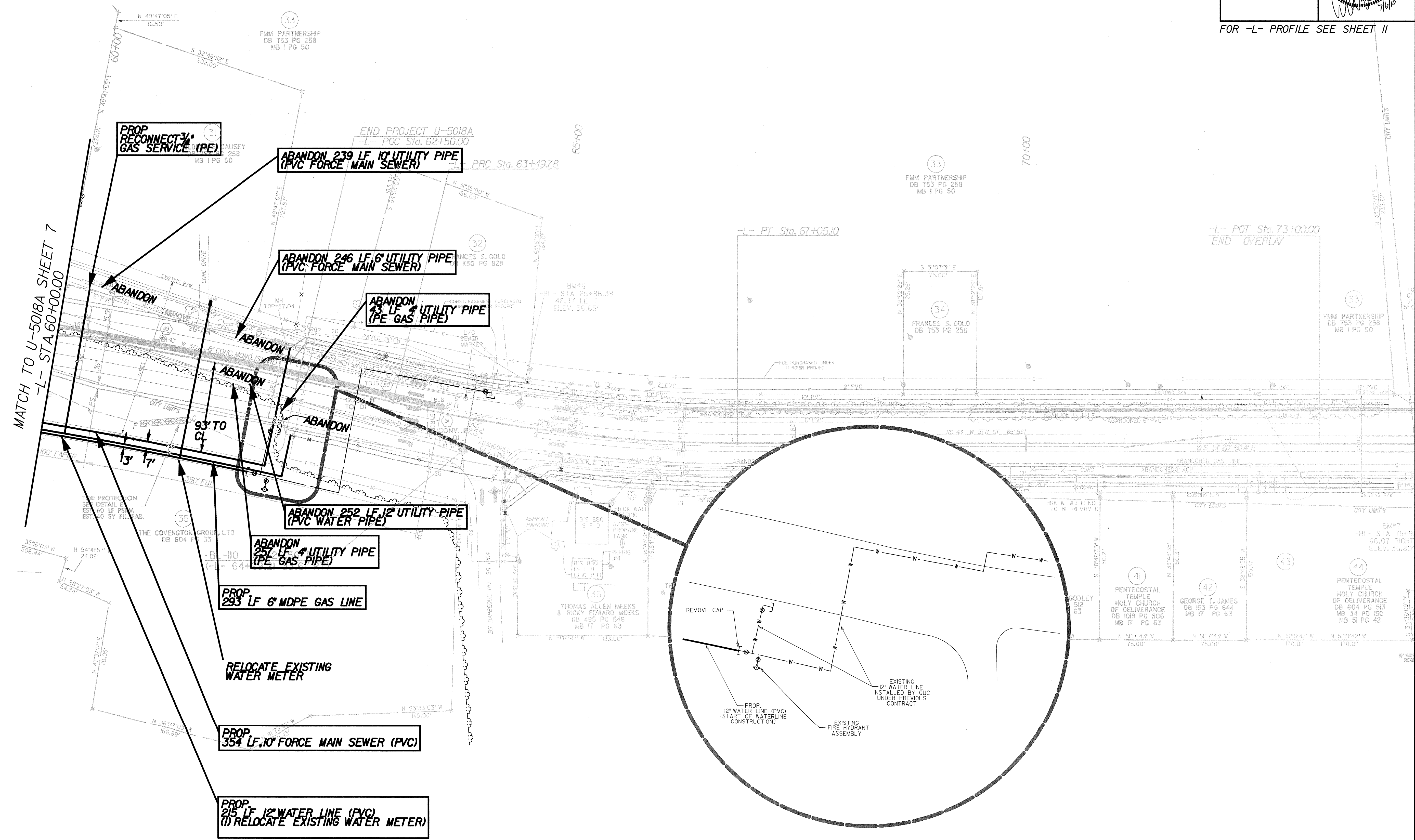
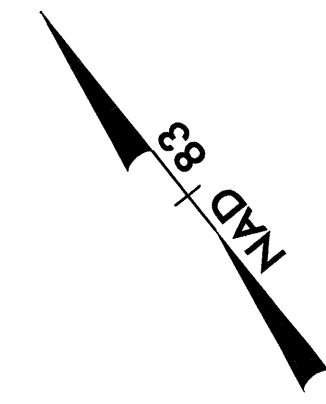
5/28/99

MULKEY
ENGINEERS & CONSULTANTS
PO Box 33127
Raleigh, NC 27626
(919) 851-7911
(919) 851-1912 (FAX)
WWW.MULKEYING.COM

PROJECT REFERENCE NO. U-5018A		SHEET NO. UC-8	
ROADWAY DESIGN ENGINEER		UTILITY ENGINEER	

FOR -L- PROFILE SEE SHEET II

PI Sta 61+27.90 PI Sta 65+28.27
 $\Delta = 5^{\circ}09'00.9''$ (RT) $\Delta = 13^{\circ}34'19.5''$ (LT)
 $D = 1'09'35.4''$ $D = 3'49'11.0''$
 $L = 444.05'$ $L = 355.32'$
 $T = 222.17'$ $T = 178.49'$
 $R = 4,940.00'$ $R = 1,500.00'$
 $SE = 02$ $SE = 04$
 $RO = 72'$ $RO = 144'$



DETAIL WATER CONNECTION

REVISIONS

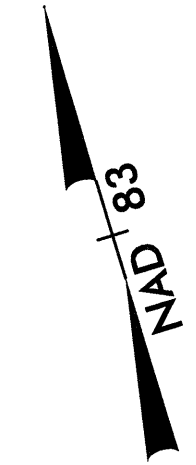
\\s01\proj\001\SECTION AND Utility Coordination Plot\UC Plans\U5018A_UC8.dgn

FOR INFORMATION ONLY
FOR -L- PROFILE SEE SHEET 9
UTILITY RELOCATION BY OTHERS PLANS
JUNE 25, 2009

5/28/09

REVISIONS

E:\Projects\SECTION A Utilities by others plans\BW_U5018A_U1_U01_NEW.dgn 6/4/2010 7:49:52 AM

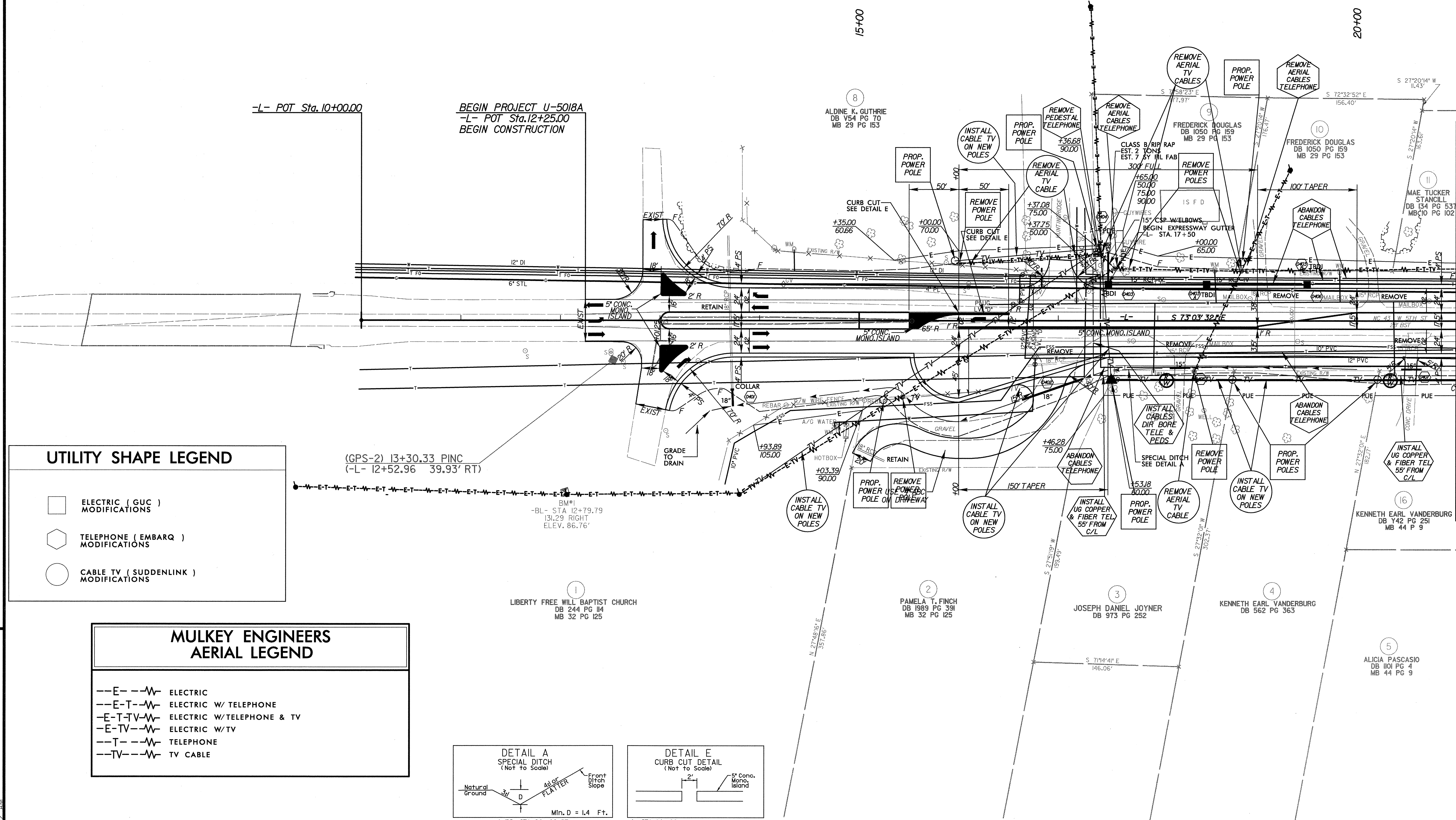


-L- POT Sta. 10+00.00

BEGIN PROJECT U-5018A
-L- POT Sta. 12+25.00
BEGIN CONSTRUCTION

15+00

20+00

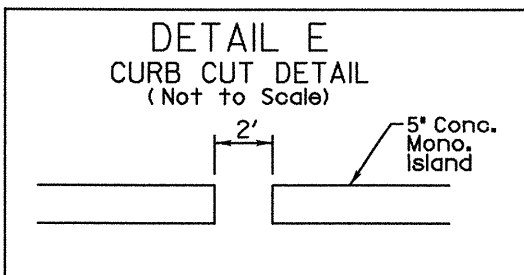
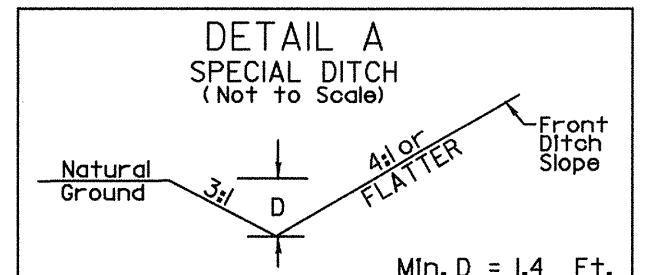


UTILITY SHAPE LEGEND

- ELECTRIC (GUC) MODIFICATIONS
- TELEPHONE (EMBARQ) MODIFICATIONS
- CABLE TV (SUDDENLINK) MODIFICATIONS


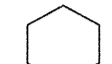

**MULKEY ENGINEERS
AERIAL LEGEND**

- E--- ELECTRIC
- E-T--- ELECTRIC W/ TELEPHONE
- E-T-TV--- ELECTRIC W/ TELEPHONE & TV
- E-TV--- ELECTRIC W/ TV
- T--- TELEPHONE
- TV--- TV CABLE

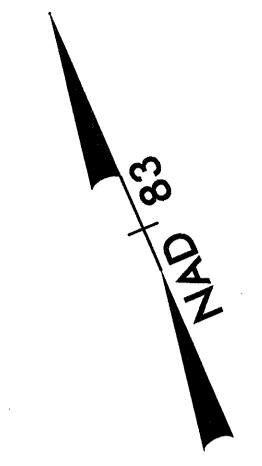


MATCH TO SHEET U02
-L- STA. 21+00.00

UTILITY SHAPE LEGEND

-  ELECTRIC (GUC) MODIFICATIONS
-  TELEPHONE (EMBARQ) MODIFICATIONS
-  CABLE TV (SUDDENLINK) MODIFICATIONS

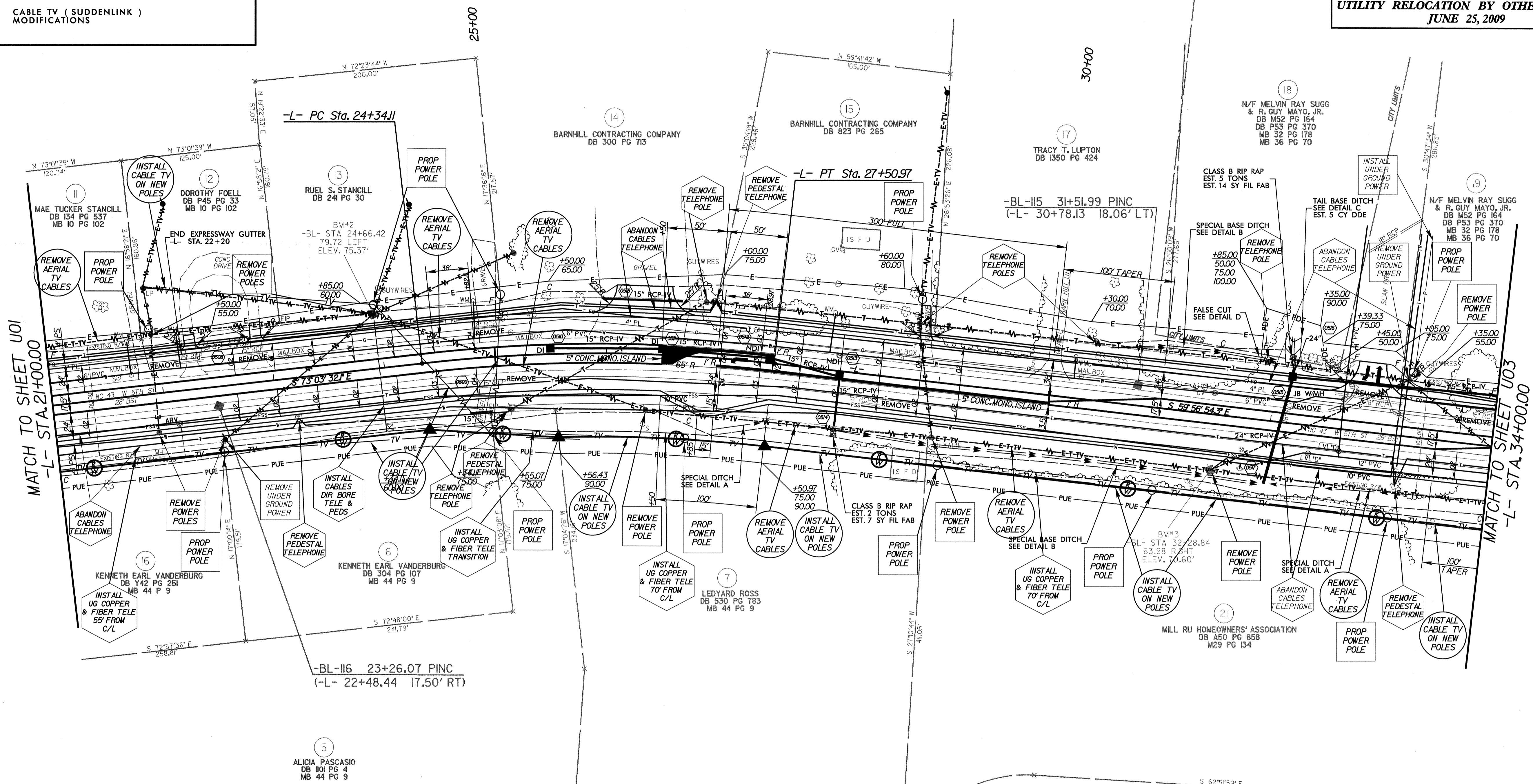
-L-
PI Sta 25+93.23
 $\Delta = 13^{\circ} 06' 37.8''$ (RT)
D = 4' 08" 15.5"
L = 316.86'
T = 159.12'
R = 1,384.74'
SE = 04
RO = 144'



FOR INFORMATION ONLY

FOR -L- PROFILE SEE SHEET 9


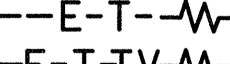


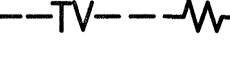

UTILITY RELOCATION BY OTHERS PLANS
JUNE 25, 2009

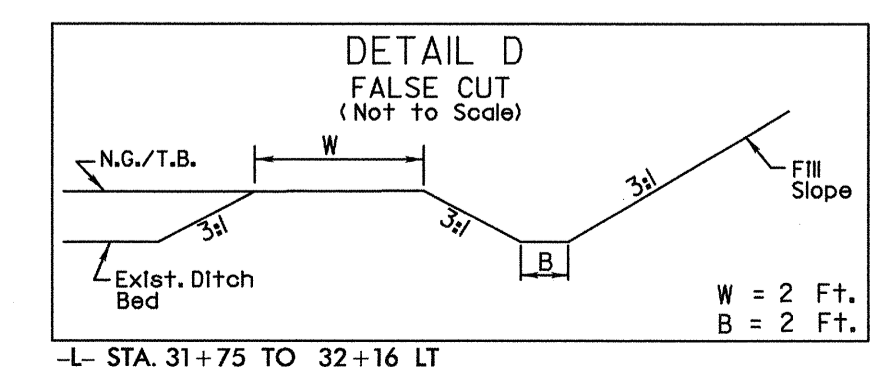
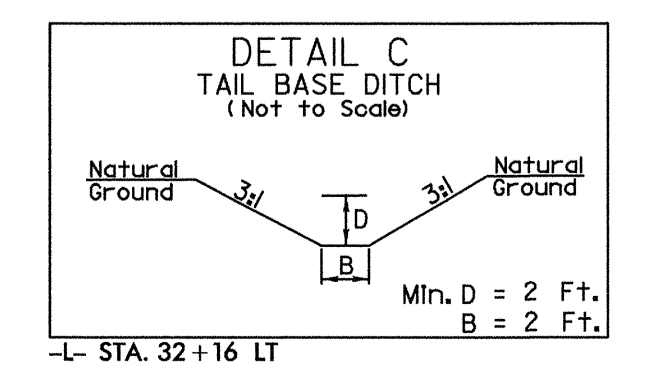
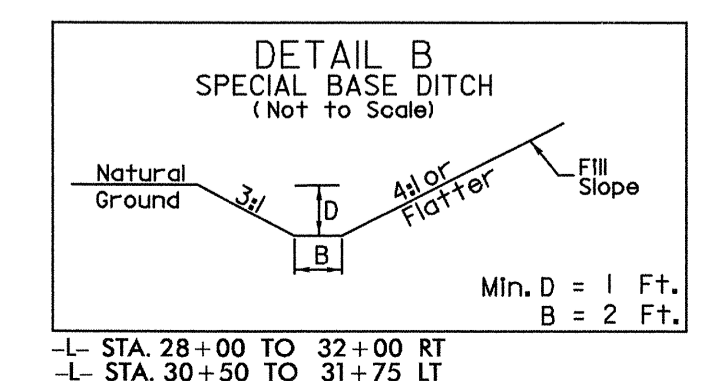
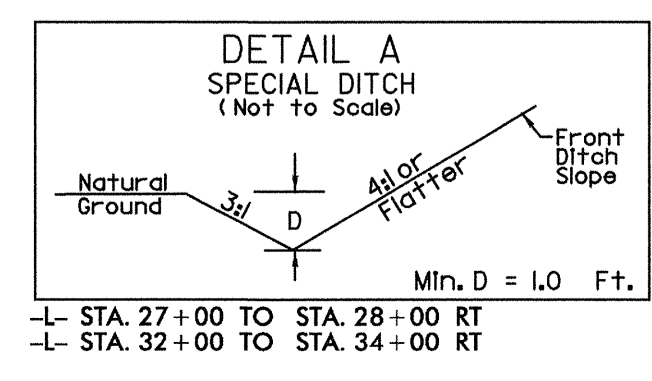


MATCH TO SHEET U01
-L- STA. 21+00.00

MATCH TO SHEET U03
-L- STA. 34+00.00

**MULKEY ENGINEERS
AERIAL LEGEND**

-  ELECTRIC
-  ELECTRIC W/ TELEPHONE
-  ELECTRIC W/ TELEPHONE & TV
-  ELECTRIC W/ TV
-  TELEPHONE
-  TV CABLE



REVISIONS

6/4/2010 Files SECTION A Utilities by others plans, BW_U5018A_U01_U02_NEW.dgn 7:48:59 AM

MULKEY ENGINEERS AERIAL LEGEND

- E--W ELECTRIC
- E-T--W ELECTRIC W/ TELEPHONE
- E-T-TV--W ELECTRIC W/ TELEPHONE & TV
- E-TV--W ELECTRIC W/ TV
- T--W TELEPHONE
- TV--W TV CABLE

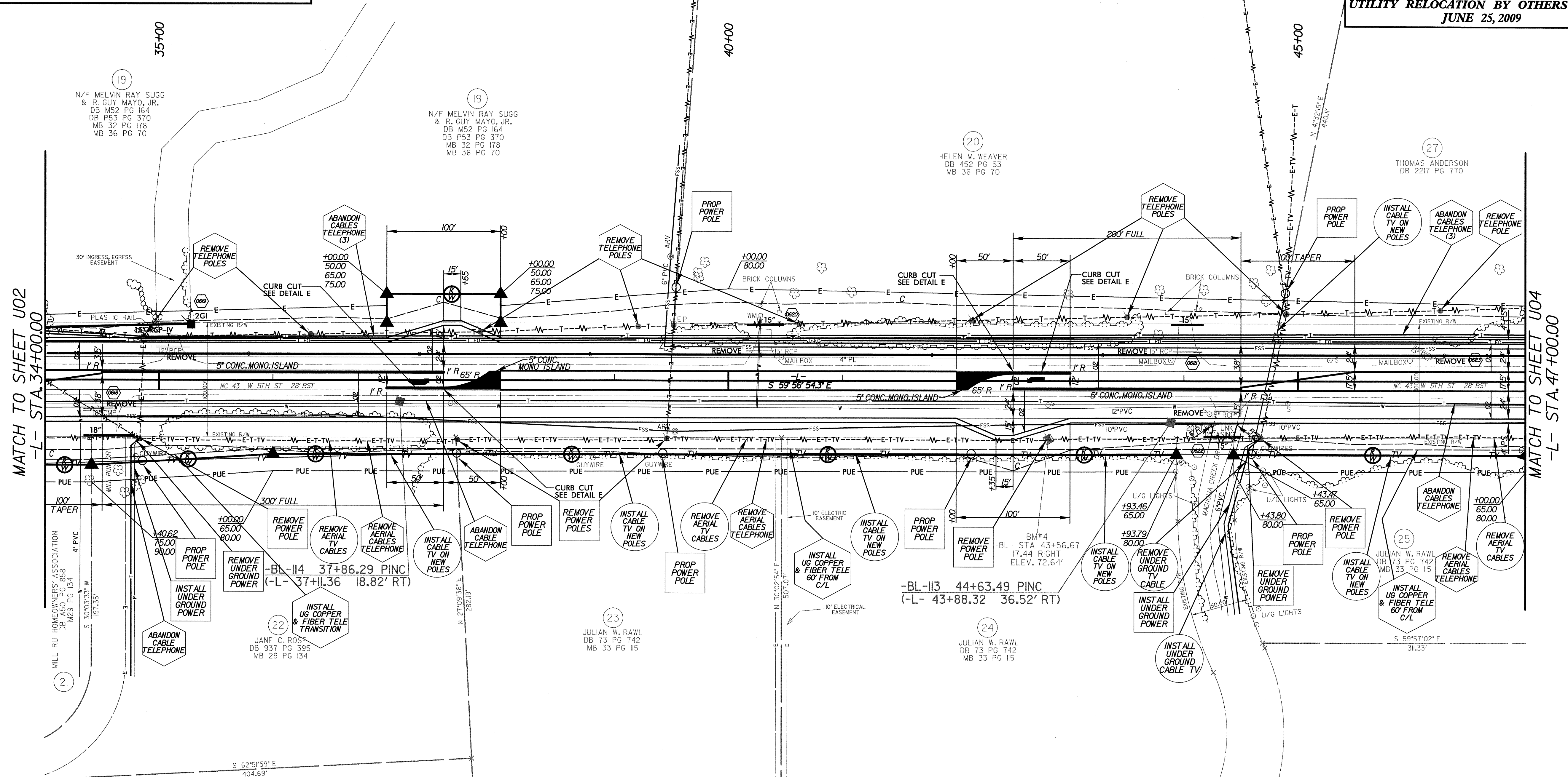
UTILITY SHAPE LEGEND

- ELECTRIC (GUC) MODIFICATIONS
- TELEPHONE (EMBARQ) MODIFICATIONS
- CABLE TV (SUDDENLINK) MODIFICATIONS

FOR INFORMATION ONLY

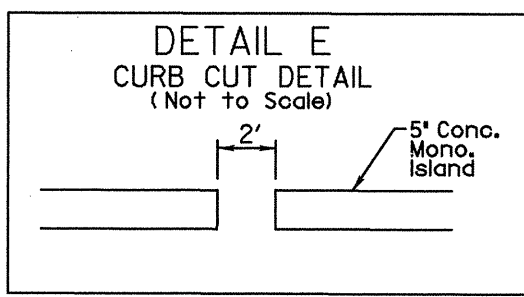
FOR -L- PROFILE SEE SHEET 10

**UTILITY RELOCATION BY OTHERS PLANS
JUNE 25, 2009**



MATCH TO SHEET U02
-L- STA. 34+00.00

MATCH TO SHEET U04
-L- STA. 47+00.00



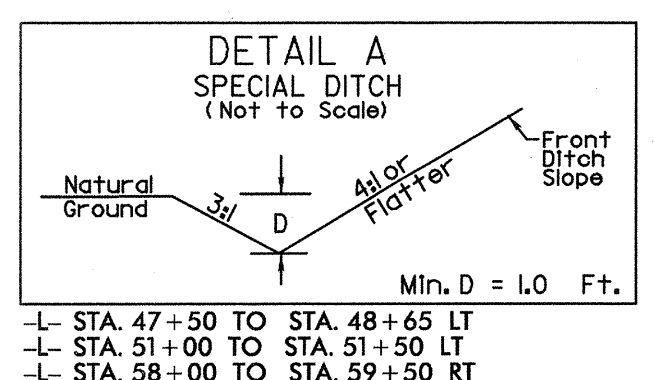
SUBSURFACE DRAINS

LINE	STATION	LOCATION
-L-	41+00 to 53+50	LT/RT

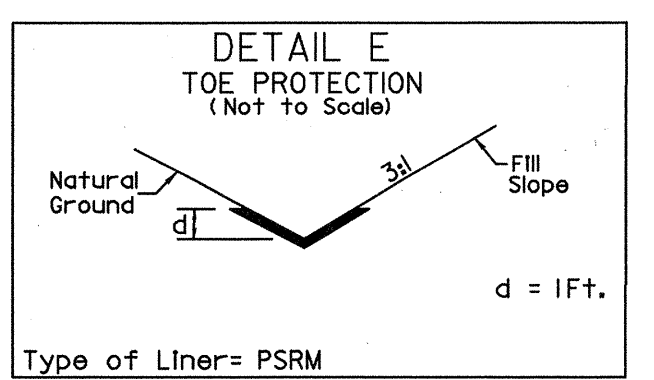
- L- STA. 37+25
- L- STA. 37+50
- L- STA. 42+50
- L- STA. 42+75

REVISIONS

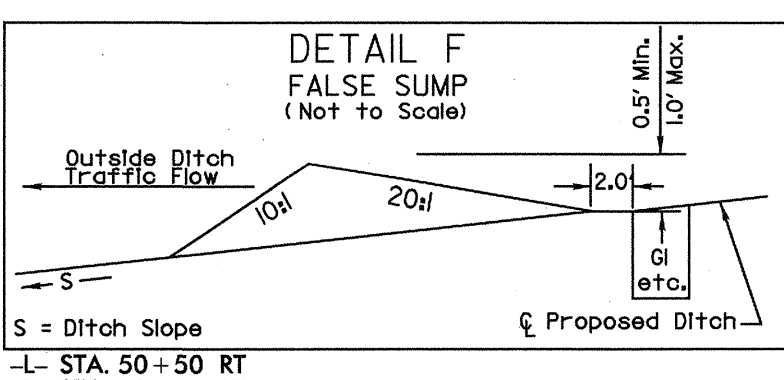
6/4/2010
 SECTION A utilities by others plans
 U03 NEW.dgn
 12:27 AM



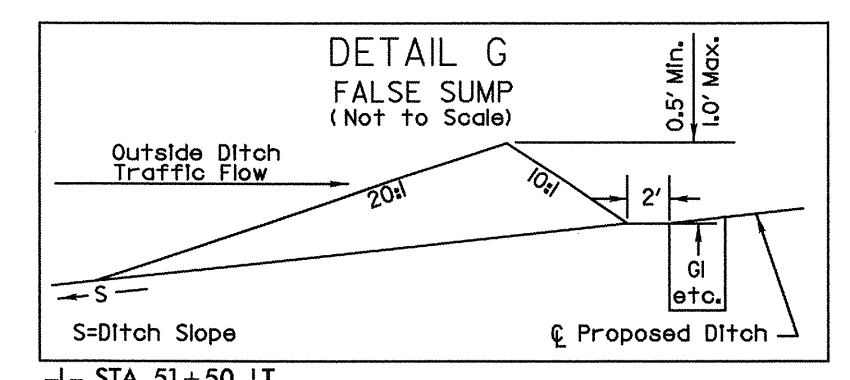
Min. D = 1.0 Ft.
-L- STA. 47+50 TO STA. 48+65 LT
-L- STA. 51+00 TO STA. 51+50 LT
-L- STA. 58+00 TO STA. 59+50 RT



Type of Liner = PSRM
-L- STA. 51+50 TO 52+50 LT



S = Ditch Slope
-L- STA. 50+50 RT
-L- STA. 52+50 RT

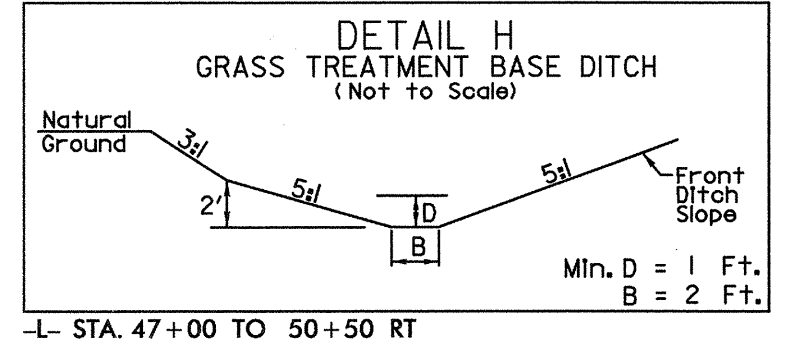


-L- STA. 51+50 LT

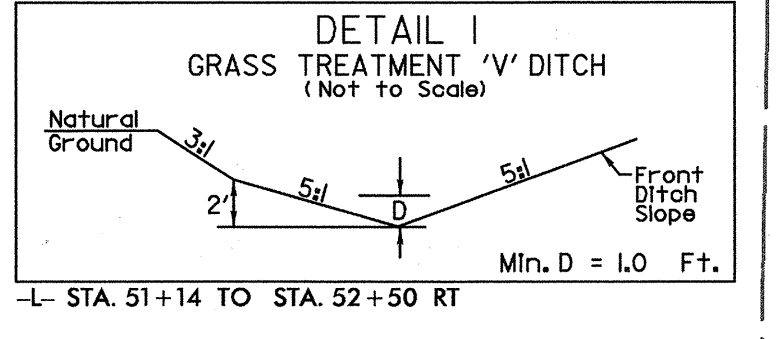
PI Sta 52+50.83
Δ = 17' 01" 22.4" (RT)
D = 6' 01" 52.1"
L = 282.25'
T = 142.17'
R = 950.00'
SE = 04
RO = 144'

PI Sta 61+27.90
Δ = 5' 09" 00.9" (RT)
D = 1' 09" 35.4"
L = 444.05'
T = 222.17'
R = 4,940.00'
SE = 02
RO = 72'

FOR INFORMATION ONLY
FOR -L- PROFILE SEE SHEET 10
UTILITY RELOCATION BY OTHERS PLANS
JUNE 25, 2009



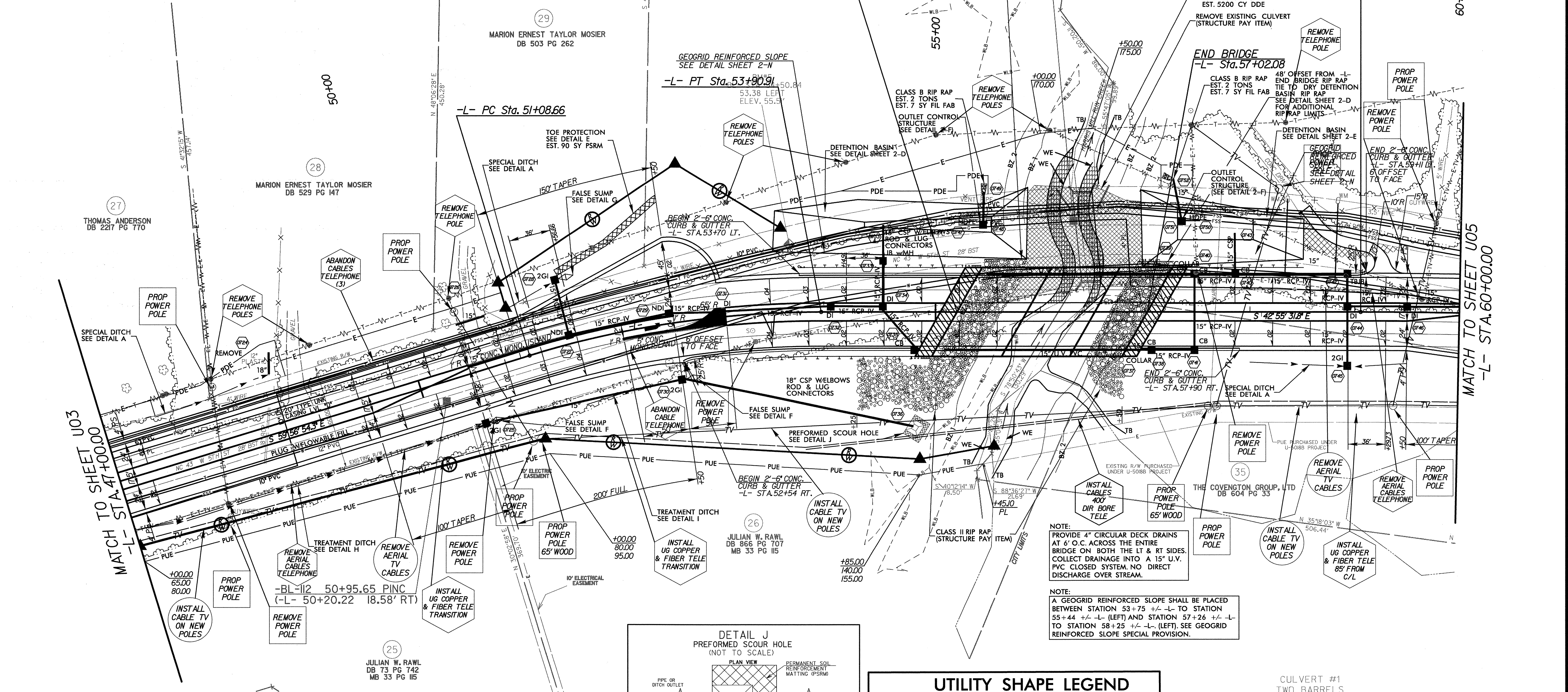
Min. D = 1 Ft.
B = 2 Ft.
-L- STA. 47+00 TO 50+50 RT



Min. D = 1.0 Ft.
-L- STA. 51+14 TO STA. 52+50 RT

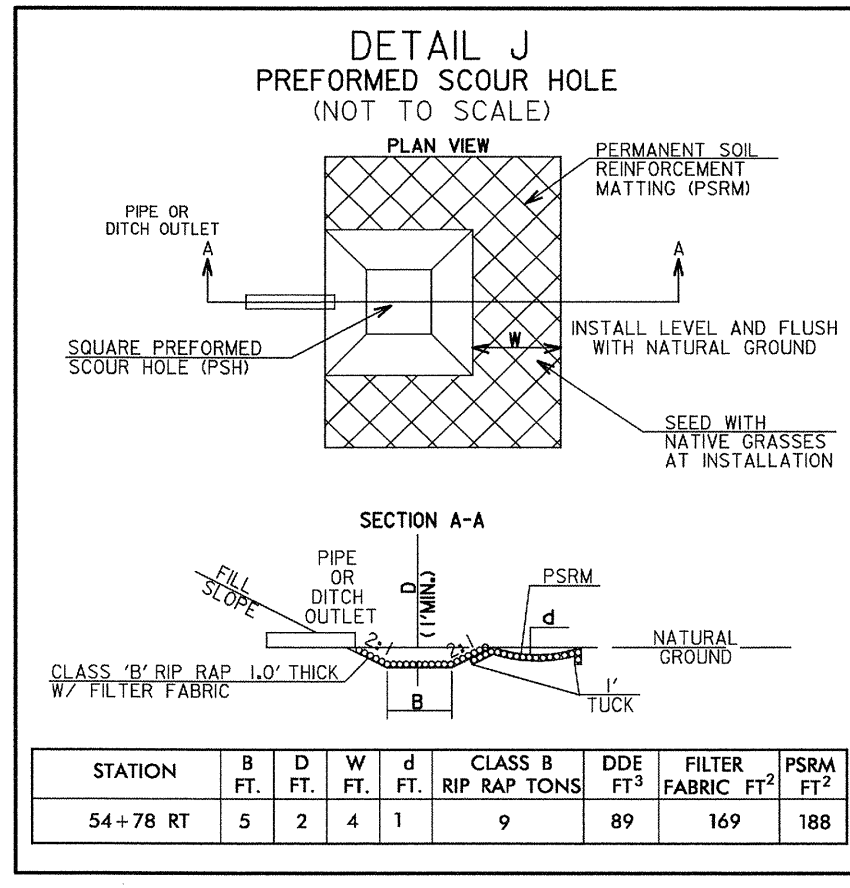
SUBSURFACE DRAINS

LINE	STATION	LOCATION
-L-	41+00 TO 53+50	LT/RT



MULKEY ENGINEERS AERIAL LEGEND

- E-E-W- ELECTRIC
- E-T-W- ELECTRIC W/ TELEPHONE
- E-T-TV-W- ELECTRIC W/ TELEPHONE & TV
- E-TV-W- ELECTRIC W/ TV
- T-W- TELEPHONE
- TV-W- TV CABLE



UTILITY SHAPE LEGEND

- ELECTRIC (GUC) MODIFICATIONS
- TELEPHONE (EMBARQ) MODIFICATIONS
- CABLE TV (SUDDENLINK) MODIFICATIONS

CULVERT #1 TWO BARRELS

	NORTH	EAST	ELEV.
CUL1	685536.02	2469885.38	20.63
CUL2	685530.15	2469890.67	20.69
CUL3	685529.99	2469891.04	19.72
CUL4	685524.26	2469896.73	19.56
CE1			30.47
HW1			30.47
CUL5	685470.46	2469826.00	19.78
CUL6	685464.44	2469833.36	19.59
CUL7	685464.21	2469833.60	19.63
CUL8	685458.40	2469839.24	19.55
CE2			30.59
HW2			30.59

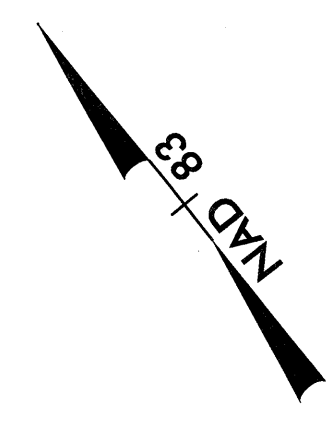
NOTE: PROVIDE 4" CIRCULAR DECK DRAINS AT 6' O.C. ACROSS THE ENTIRE BRIDGE ON BOTH THE LT & RT SIDES. COLLECT DRAINAGE INTO A 15" U.V. PVC CLOSED SYSTEM, NO DIRECT DISCHARGE OVER STREAM.

NOTE: A GEGRID REINFORCED SLOPE SHALL BE PLACED BETWEEN STATION 53+75 +/- L- TO STATION 55+44 +/- L- (LEFT) AND STATION 57+26 +/- L- TO STATION 58+25 +/- L- (LEFT). SEE GEGRID REINFORCED SLOPE SPECIAL PROVISION.

REVISIONS
6/4/2009 SECTION A UTILITIES BY OTHERS PLANS (U-5018-A) U-1, U-4, NEW, GDN

5/28/99

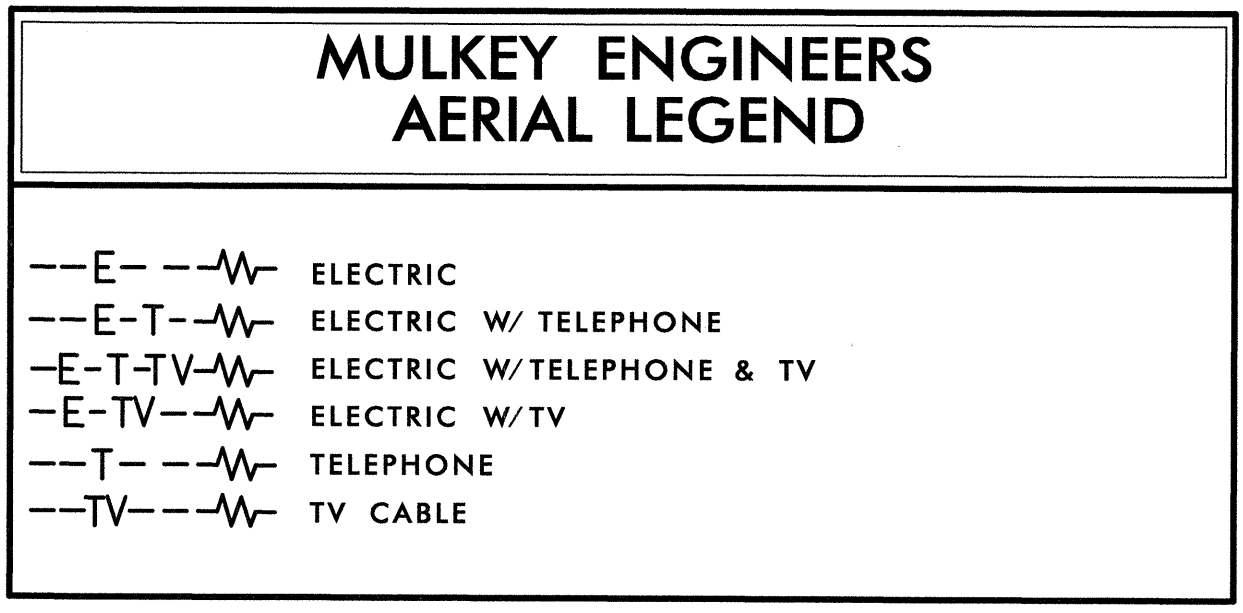
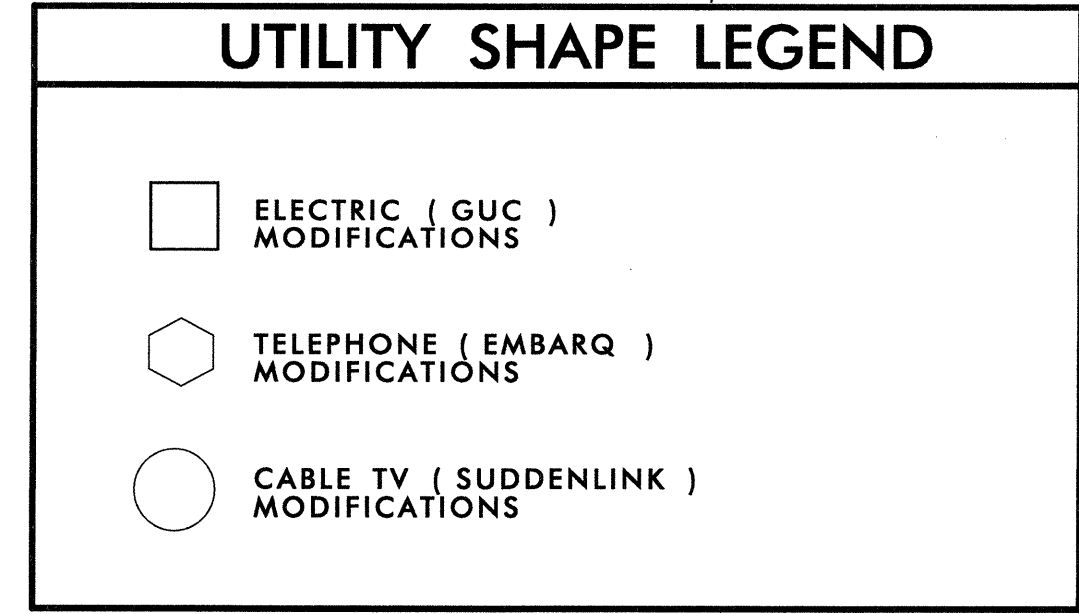
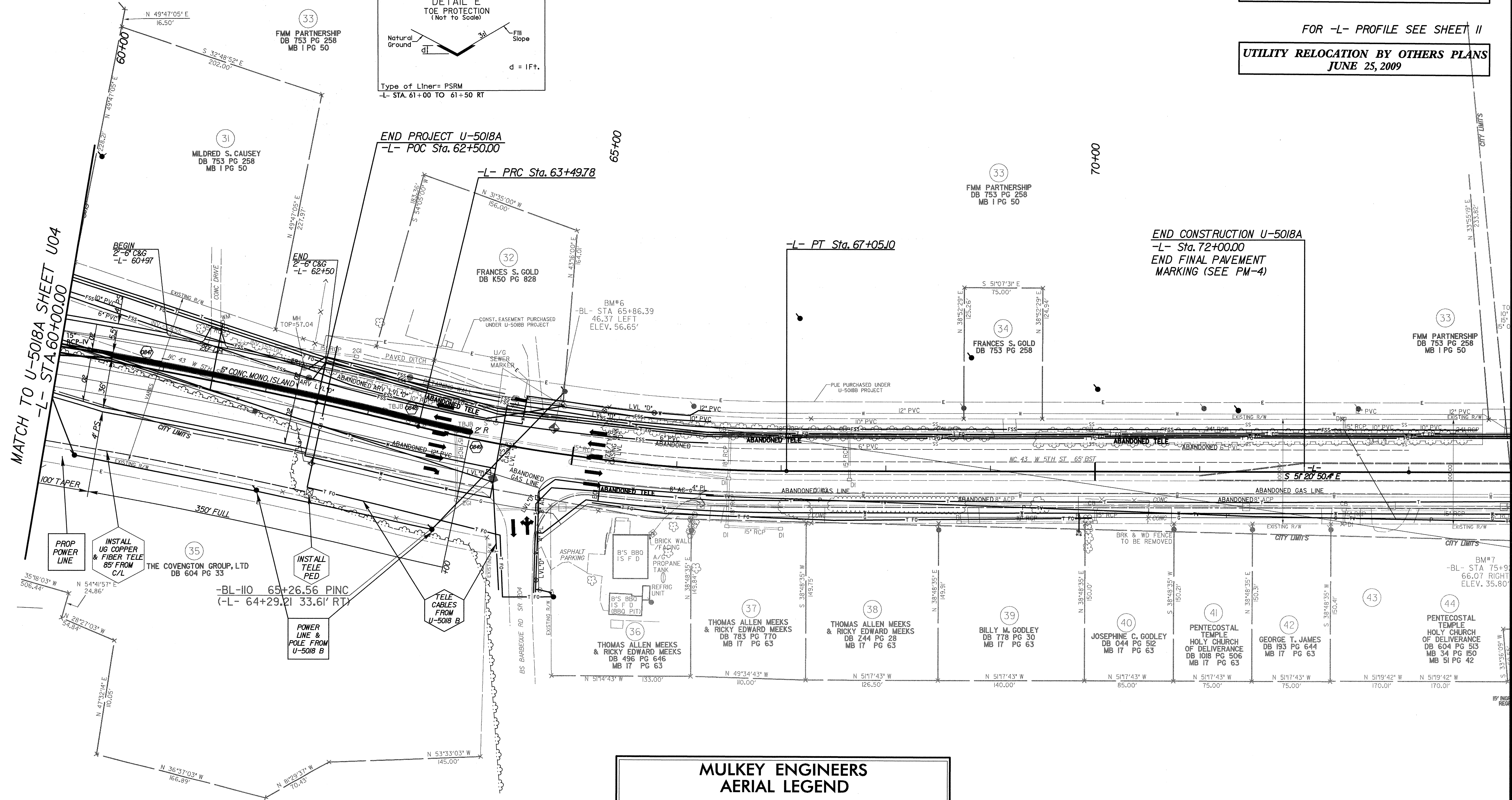
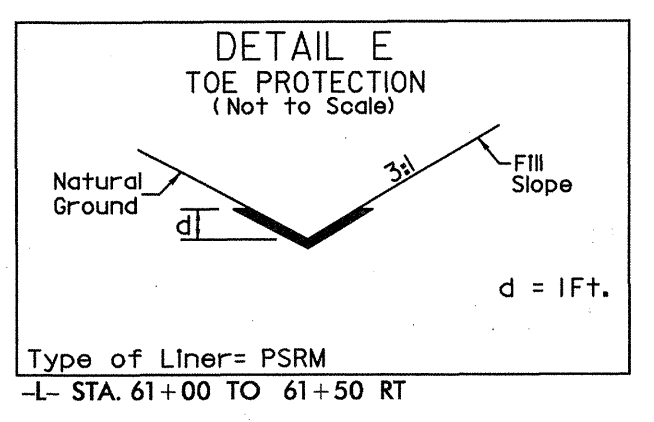
-L-
 PI Sta 61+27.90 Δ = 5° 09' 00.9" (RT) D = 1' 09' 35.4" L = 444.05' T = 222.17' R = 4940.00' SE = 02' RO = 72'
 PI Sta 65+28.27 Δ = 13° 34' 19.5" (LT) D = 3' 49' 11.0" L = 355.32' T = 178.49' R = 1500.00'



FOR INFORMATION ONLY

FOR -L- PROFILE SEE SHEET II

UTILITY RELOCATION BY OTHERS PLANS
JUNE 25, 2009



REVISIONS

6/4/2010 8:51 AM SECTION A Utilities by others plans -BW_U5018A-ufi_U05.dgn