

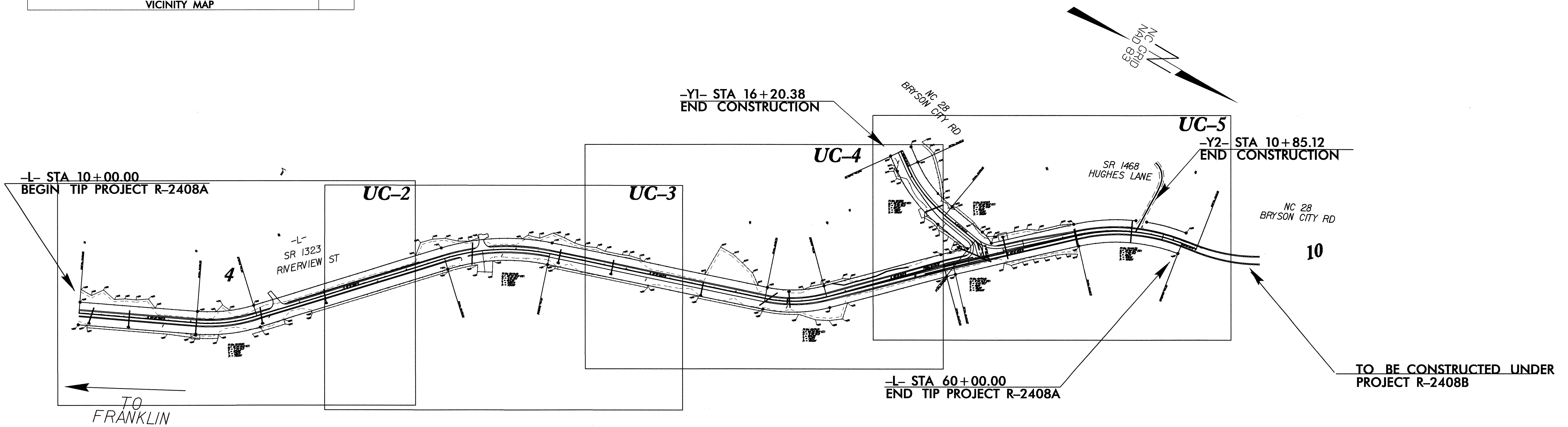
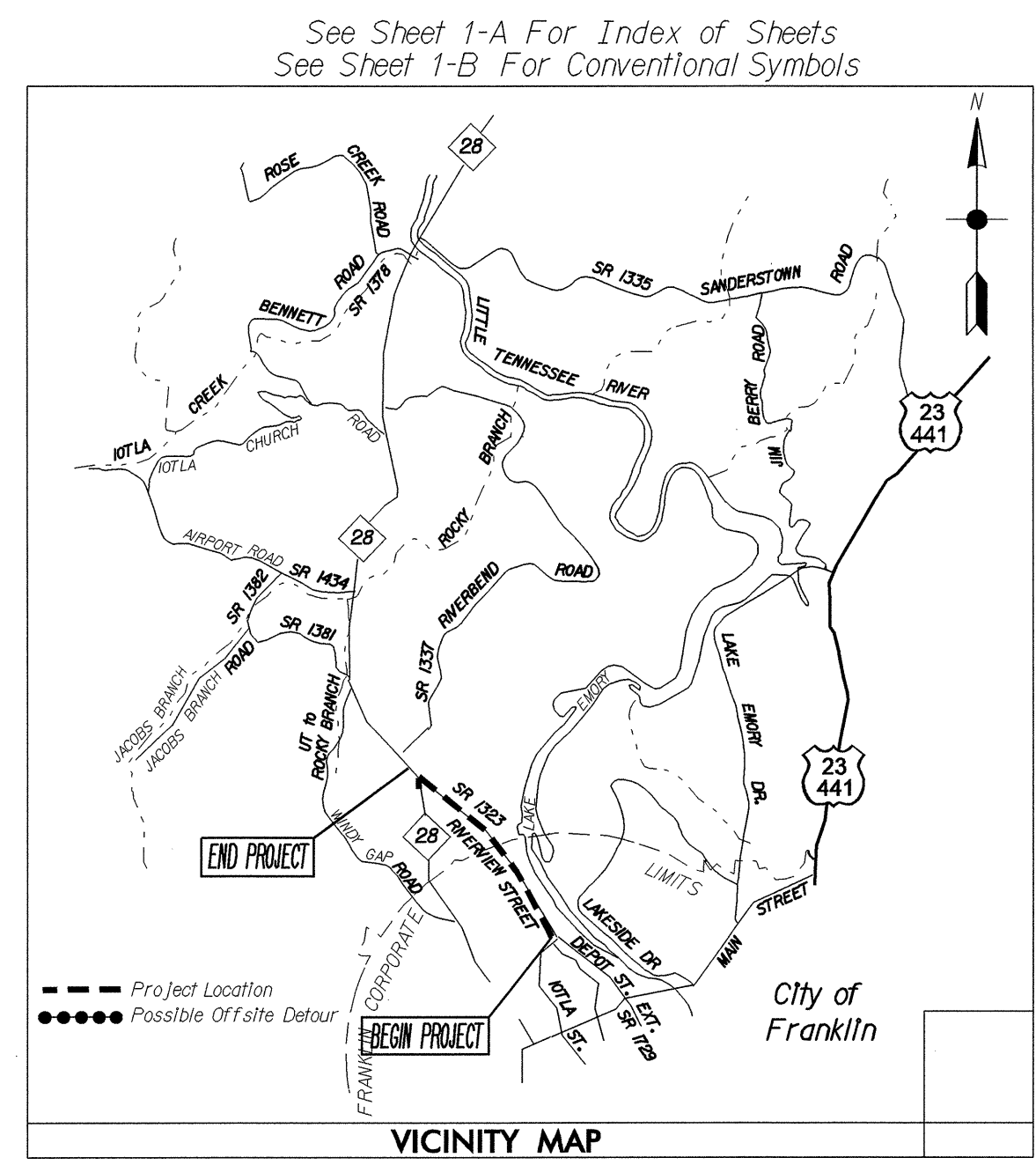
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS  
MACON COUNTY**

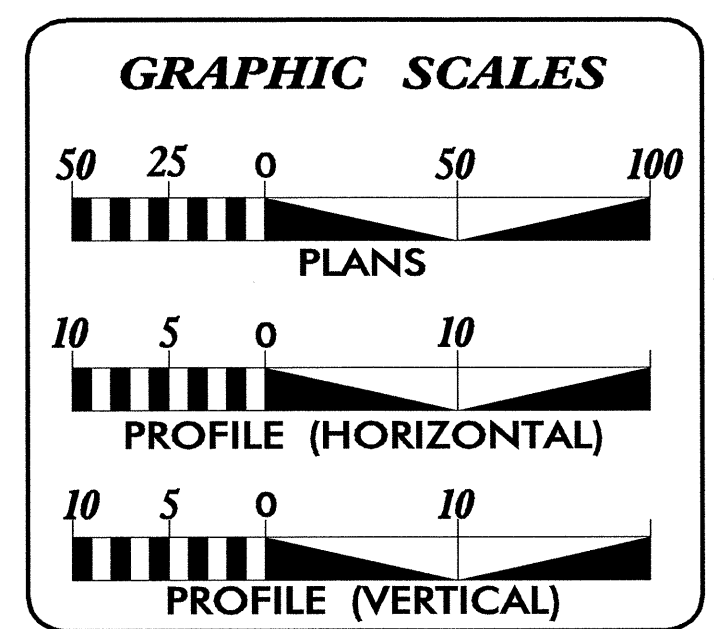
**LOCATION: SR 1323 (RIVERVIEW ST.)  
FROM DEPOT ST. EXTENSION TO NC 28**

**TYPE OF WORK: UTILITY RELOCATION**

**TIP PROJECT: R-2408A**



**ALL 8" AND LARGER SEWER PIPE SHALL BE DI AND DI RESTRAINED JOINT PIPE**

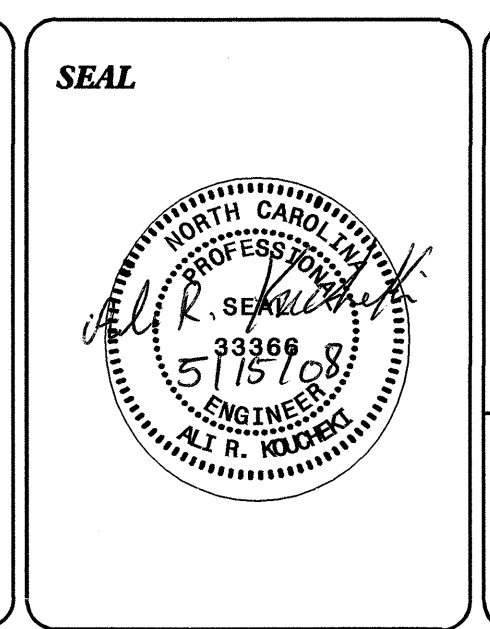


**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2 THRU UC-5	UTILITY CONSTRUCTION PLAN SHEETS
UC-6 THRU UC-9	PROFILE SHEETS
UC-10	DETAILS SHEET

**WATER AND SEWER OWNERS ON PROJECT**


(1) WATER TOWN OF FRANKLIN  
(2) SANITARY SEWER TOWN OF FRANKLIN



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

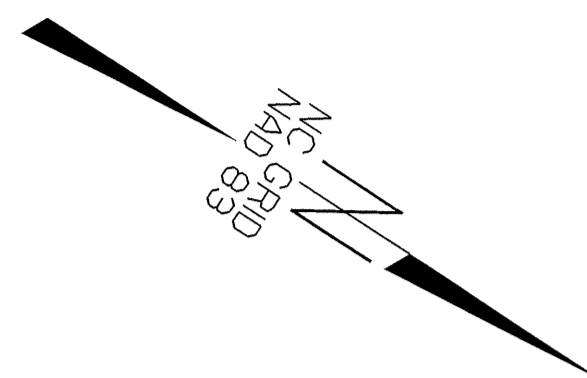
1591 MAIL SERVICES CENTER  
RALEIGH NC 27699-1591  
PHONE (919) 250-4128  
FAX (919) 250-4119

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**Carl Barclay, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**Ali Kouchehi, P.E.** UTILITIES PROJECT DESIGNER

PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-2
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**

WATER AND SEWER LINES OWNED BY TOWN OF FRANKLIN



NOTE: INSTALL THE PROPOSED SEWER LINE IN THE SAME ALIGNMENT AS THE EXISTING SEWER LINE. REMOVAL OF EXISTING PIPE SHALL BE INCIDENTAL TO THE INSTALLATION OF NEW PIPE

PROP. 232' OF 6" WATER LINE  
 THE REVERVIEW AND IOLA STREET LLC  
 DB N-30 PG 1645

PROP. 4' DIA MANHOLE "A1"  
 STA. 1+22 LINE 1  
 52' LEFT OF LINE -L-  
 STA. 13+14.94

PROP. 122' OF 8" GRAVITY SEWER LINE

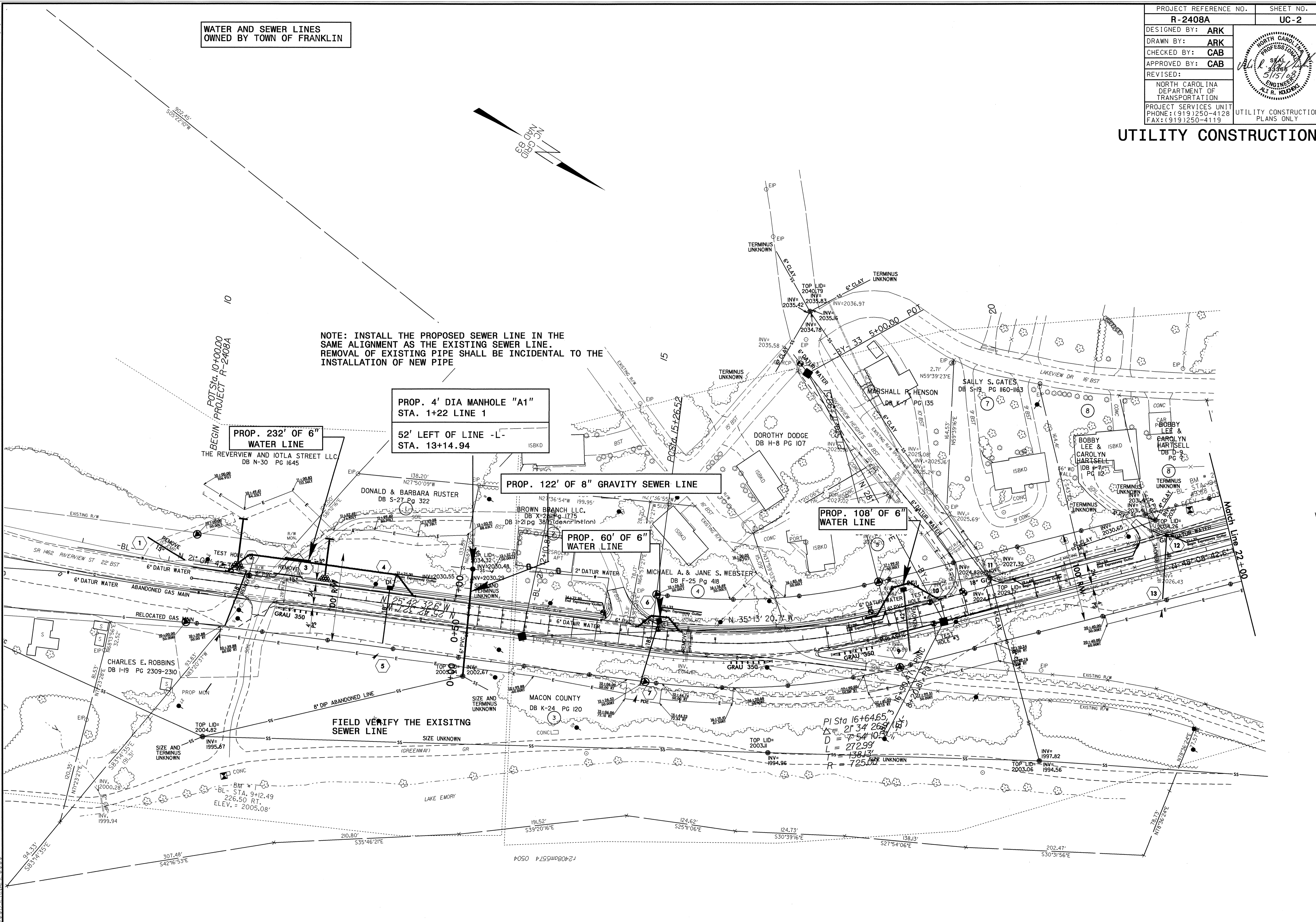
PROP. 60' OF 6" WATER LINE

PROP. 108' OF 6" WATER LINE

FIELD VERIFY THE EXISTING SEWER LINE

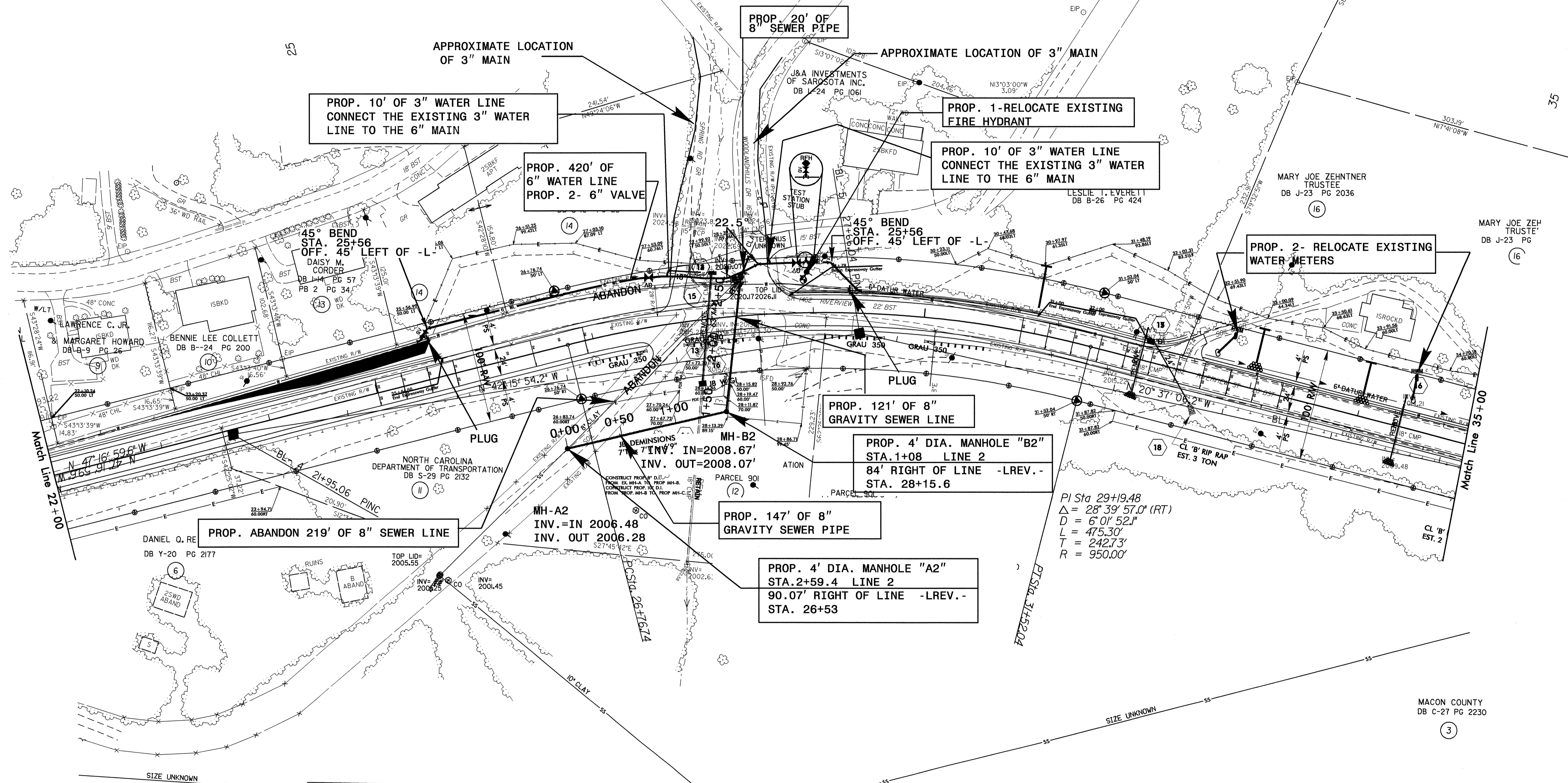
PI Sta 16+64.65  
 $\Delta = 21^{\circ} 34' 26.87''$   
 $D = 754.1057'$   
 $L = 272.99'$   
 $T_{SS} = 138.13'$   
 $R = 725.00'$

09-MAY-2008 15:25 089...R-2408A\Utilities\Crit\50scaleplansheet4.dgn  
 5/14/09



WATER AND SEWER LINE OWNED BY TOWN OF FRANKLIN

# UTILITY CONSTRUCTION



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-105"

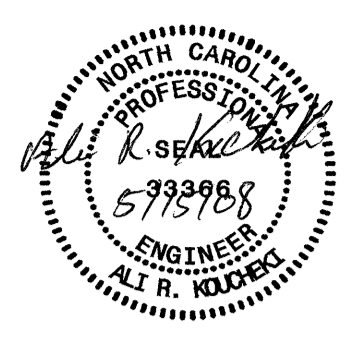
WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF NORTHING: 560403.586(FT) EASTING: 686157.220(FT)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99977456

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-105" TO L- STATION (supplied by roadway) IS

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88

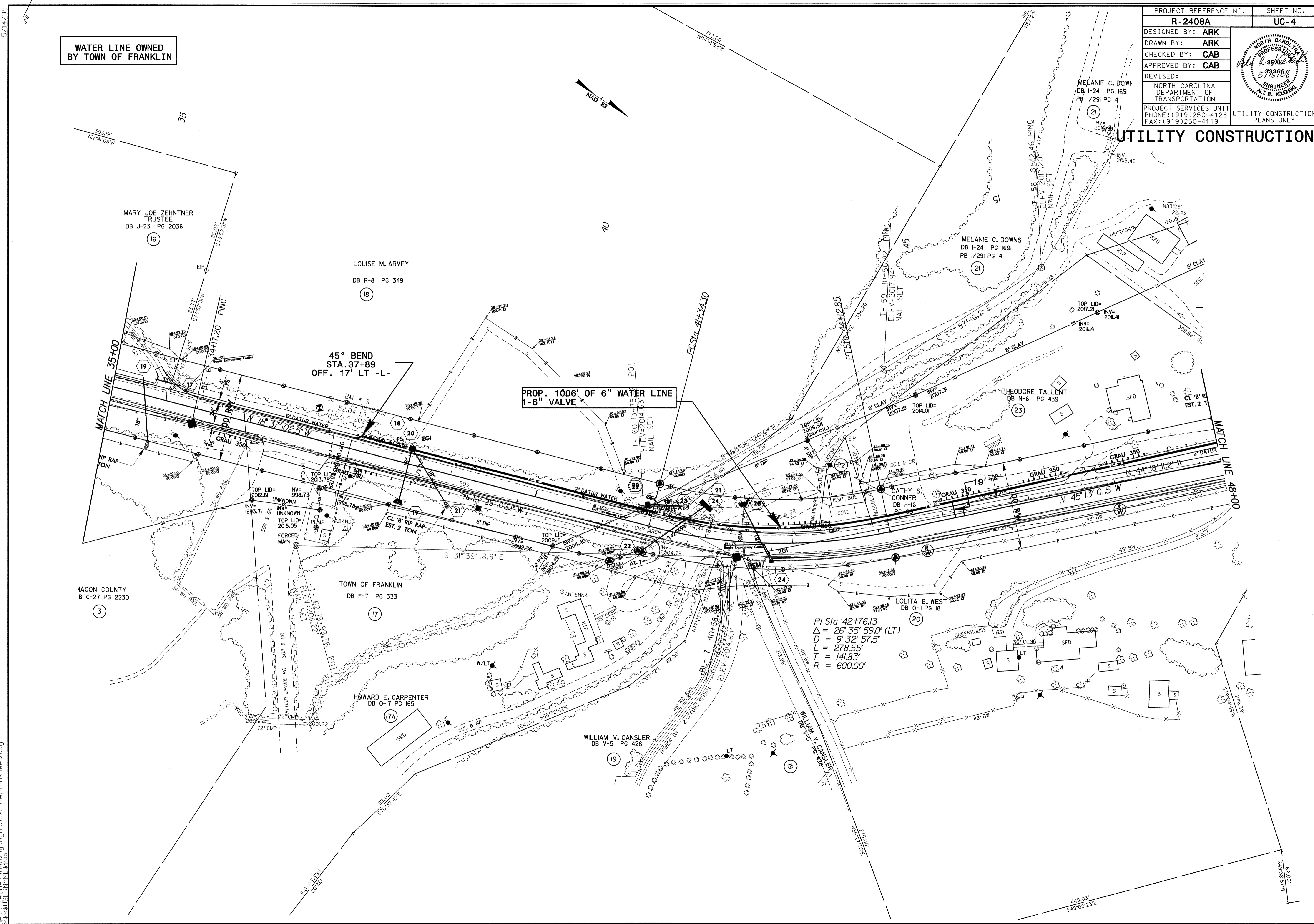
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 19-MAY-2008 09:34  
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 19-MAY-2008 09:34  
 2408A.dwg

PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-4
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

WATER LINE OWNED  
BY TOWN OF FRANKLIN

PROP. 1006' OF 6" WATER LINE  
1-6" VALVE

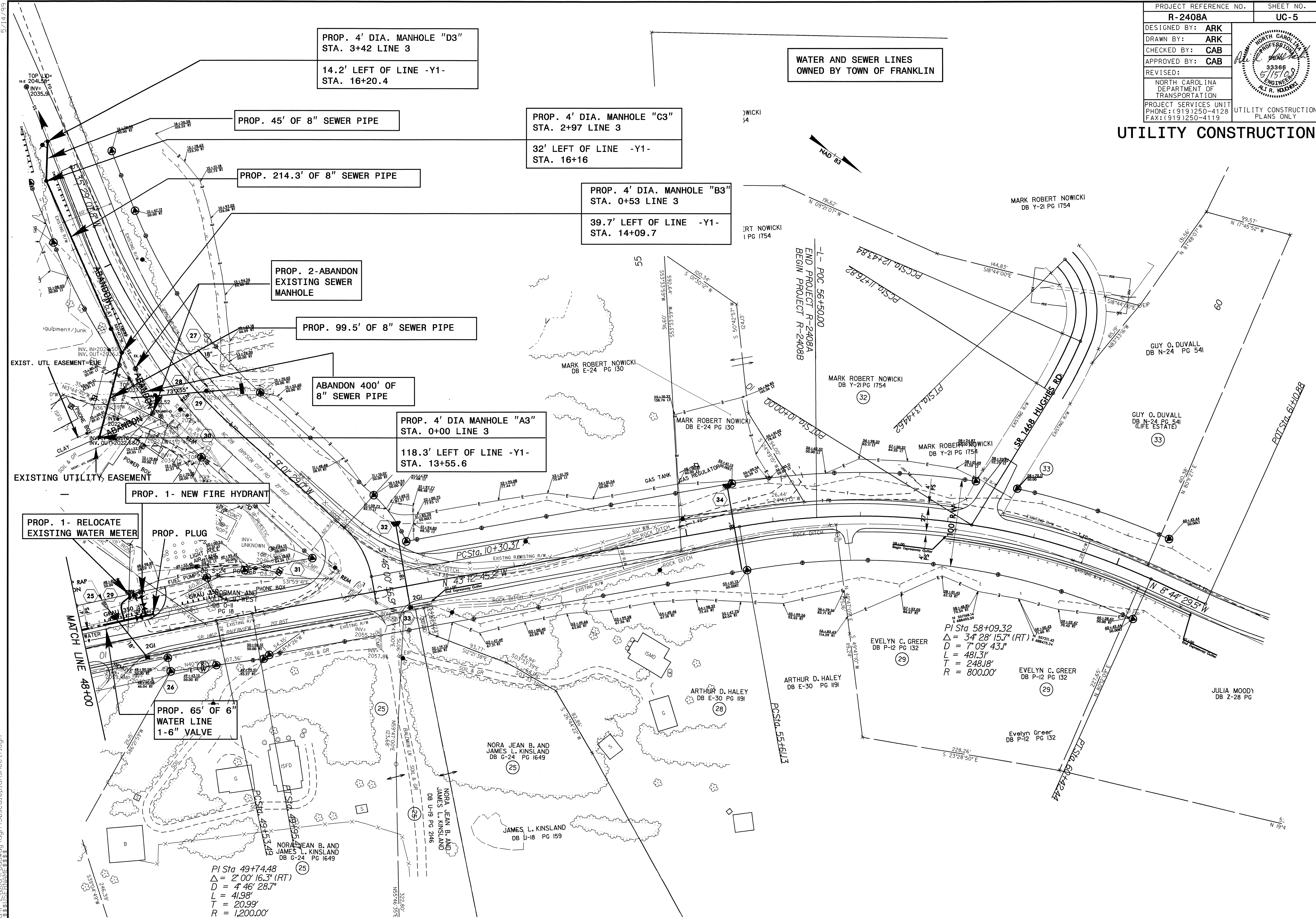
UTILITY CONSTRUCTION



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 100%

PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-5
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

**UTILITY CONSTRUCTION**



PROP. 4' DIA. MANHOLE "D3"  
STA. 3+42 LINE 3  
14.2' LEFT OF LINE -Y1-  
STA. 16+20.4

WATER AND SEWER LINES  
OWNED BY TOWN OF FRANKLIN

PROP. 45' OF 8" SEWER PIPE

PROP. 4' DIA. MANHOLE "C3"  
STA. 2+97 LINE 3  
32' LEFT OF LINE -Y1-  
STA. 16+16

PROP. 214.3' OF 8" SEWER PIPE

PROP. 4' DIA. MANHOLE "B3"  
STA. 0+53 LINE 3  
39.7' LEFT OF LINE -Y1-  
STA. 14+09.7

PROP. 2-ABANDON  
EXISTING SEWER  
MANHOLE

PROP. 99.5' OF 8" SEWER PIPE

ABANDON 400' OF  
8" SEWER PIPE

PROP. 4' DIA MANHOLE "A3"  
STA. 0+00 LINE 3  
118.3' LEFT OF LINE -Y1-  
STA. 13+55.6

PROP. 1- NEW FIRE HYDRANT

PROP. 1- RELOCATE  
EXISTING WATER METER

PROP. PLUG

PROP. 65' OF 6"  
WATER LINE  
1-6" VALVE

PI Sta 58+09.32  
Δ = 34° 28' 15.7" (RT)  
D = 7' 09' 43.1"  
L = 481.31'  
T = 248.18'  
R = 800.00'

PI Sta 49+74.48  
Δ = 2° 00' 16.3" (RT)  
D = 4' 46' 28.7"  
L = 41.98'  
T = 20.99'  
R = 1,200.00'

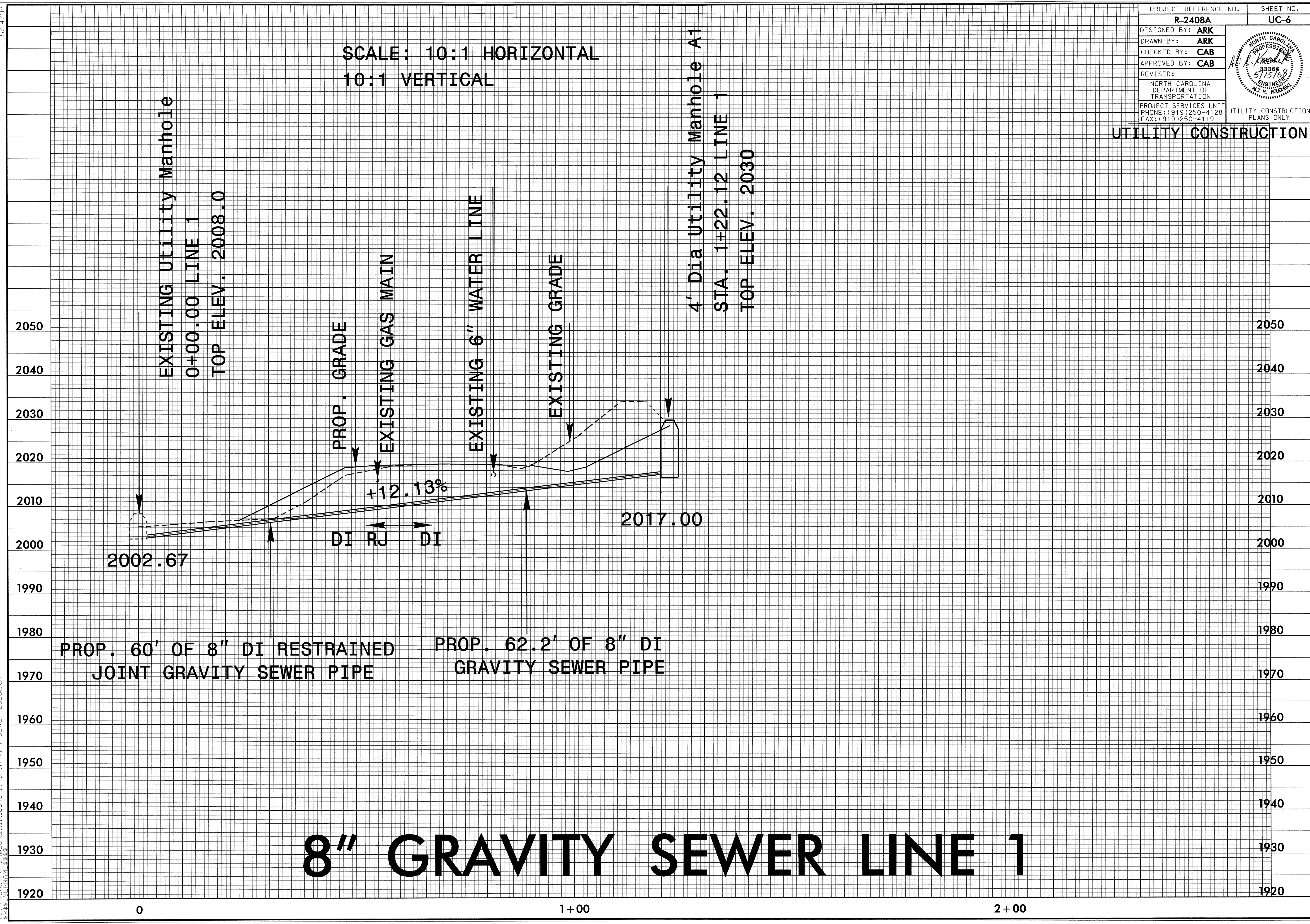
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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-6
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT SERVICES UNIT PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

SCALE: 10:1 HORIZONTAL  
10:1 VERTICAL



PROP. 60' OF 8" DI RESTRAINED  
JOINT GRAVITY SEWER PIPE

PROP. 62.2' OF 8" DI  
GRAVITY SEWER PIPE

# 8" GRAVITY SEWER LINE 1

0

1+00

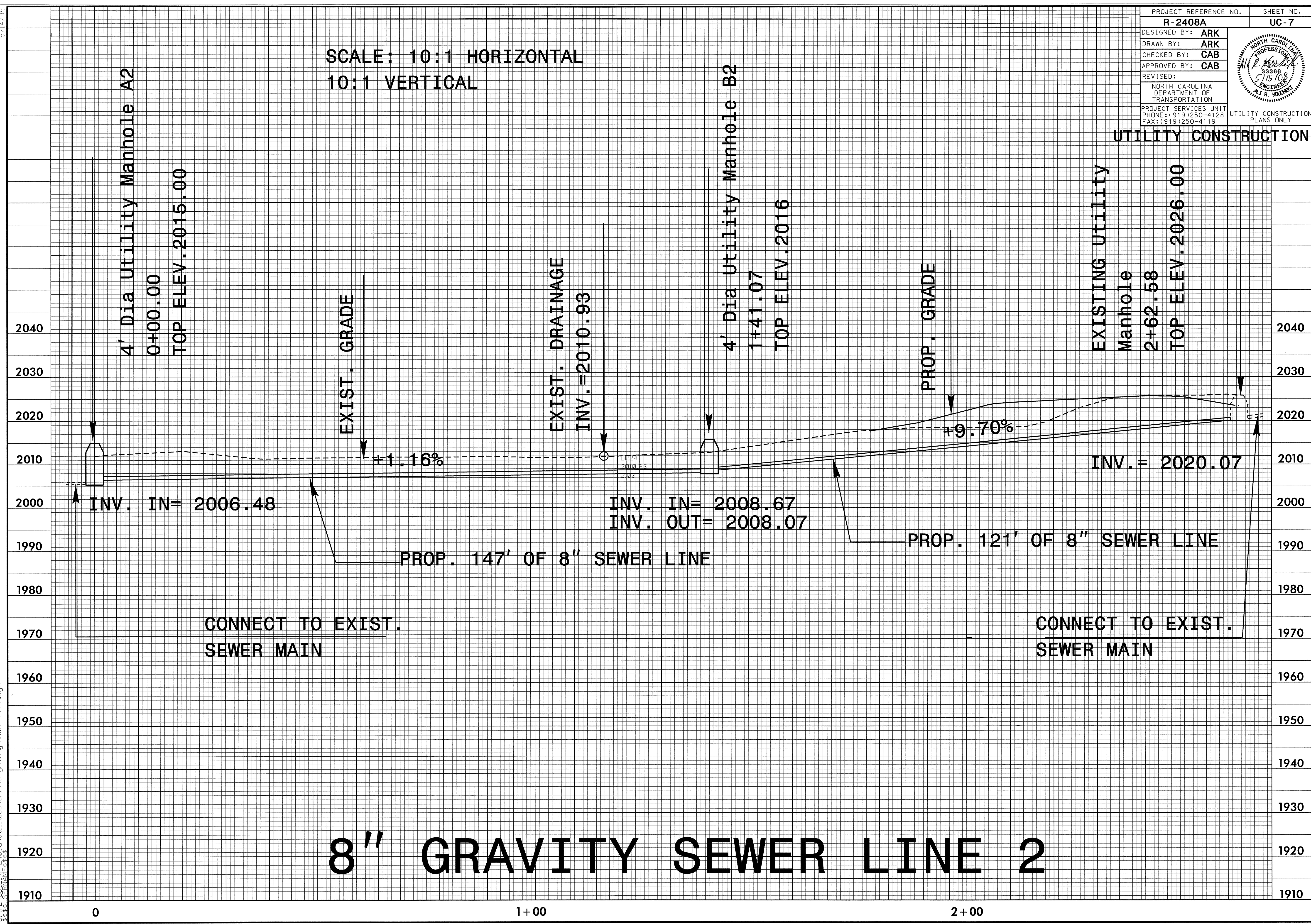
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5/14/99

PROJECT REFERENCE NO. <b>R-2408A</b>	SHEET NO. <b>UC-7</b>
DESIGNED BY: <b>ARK</b>	
DRAWN BY: <b>ARK</b>	
CHECKED BY: <b>CAB</b>	
APPROVED BY: <b>CAB</b>	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

SCALE: 10:1 HORIZONTAL  
10:1 VERTICAL



4' Dia Utility Manhole A2  
0+00.00  
TOP ELEV. 2015.00

EXIST. GRADE

EXIST. DRAINAGE  
INV. = 2010.93

4' Dia Utility Manhole B2  
1+41.07  
TOP ELEV. 2016

PROP. GRADE

EXISTING Utility  
Manhole  
2+62.58  
TOP ELEV. 2026.00

INV. IN= 2006.48

INV. IN= 2008.67  
INV. OUT= 2008.07

INV. = 2020.07

PROP. 147' OF 8" SEWER LINE

PROP. 121' OF 8" SEWER LINE

CONNECT TO EXIST.  
SEWER MAIN

CONNECT TO EXIST.  
SEWER MAIN

# 8" GRAVITY SEWER LINE 2

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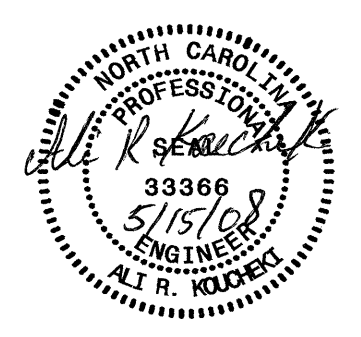
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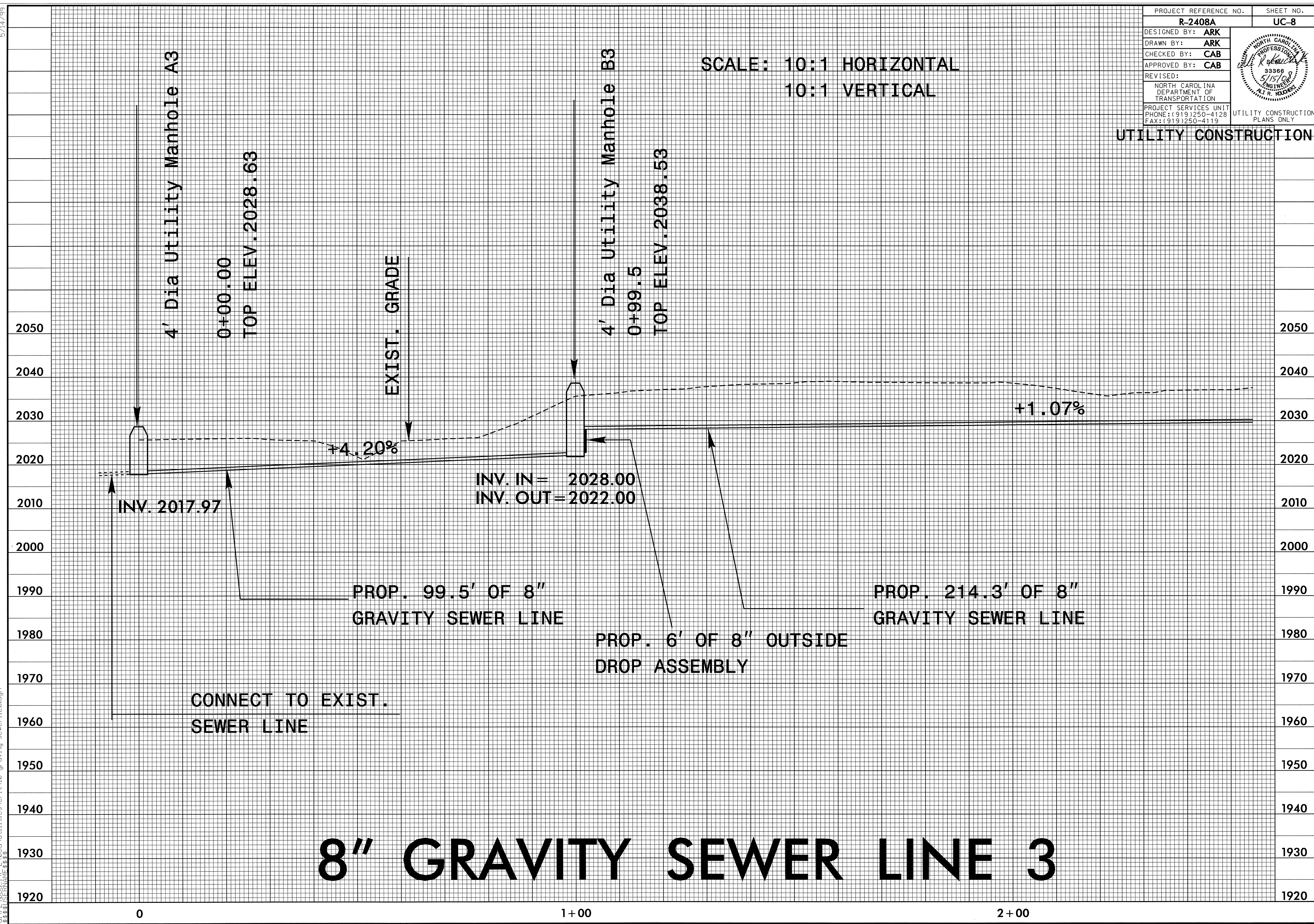
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PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-8
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

SCALE: 10:1 HORIZONTAL  
10:1 VERTICAL

UTILITY CONSTRUCTION



# 8" GRAVITY SEWER LINE 3

0

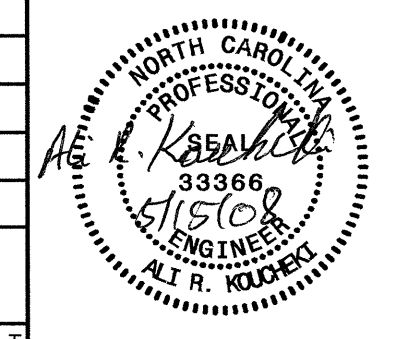
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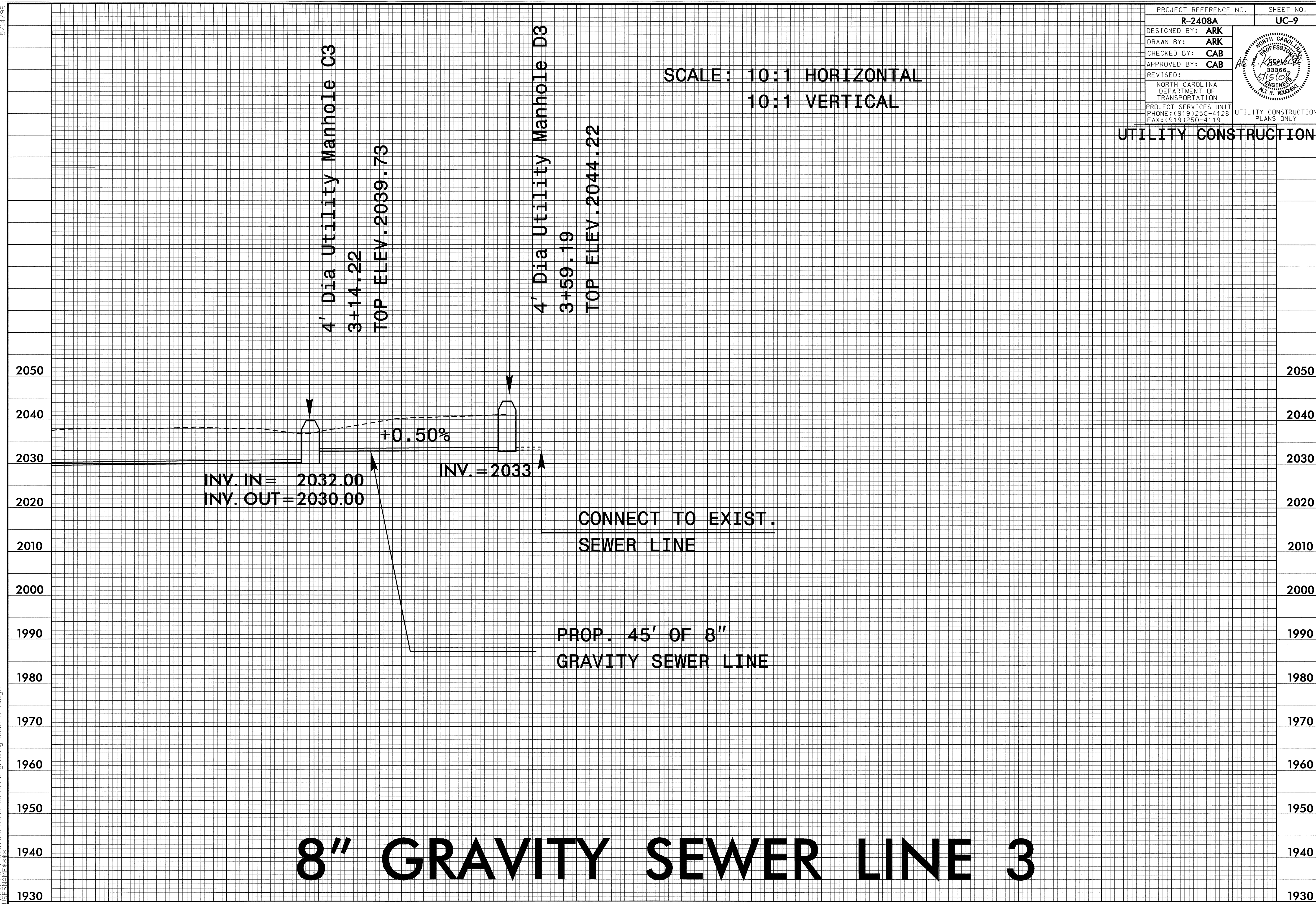
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PROJECT REFERENCE NO.	SHEET NO.
R-2408A	UC-9
DESIGNED BY: ARK	
DRAWN BY: ARK	
CHECKED BY: CAB	
APPROVED BY: CAB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

SCALE: 10:1 HORIZONTAL  
10:1 VERTICAL

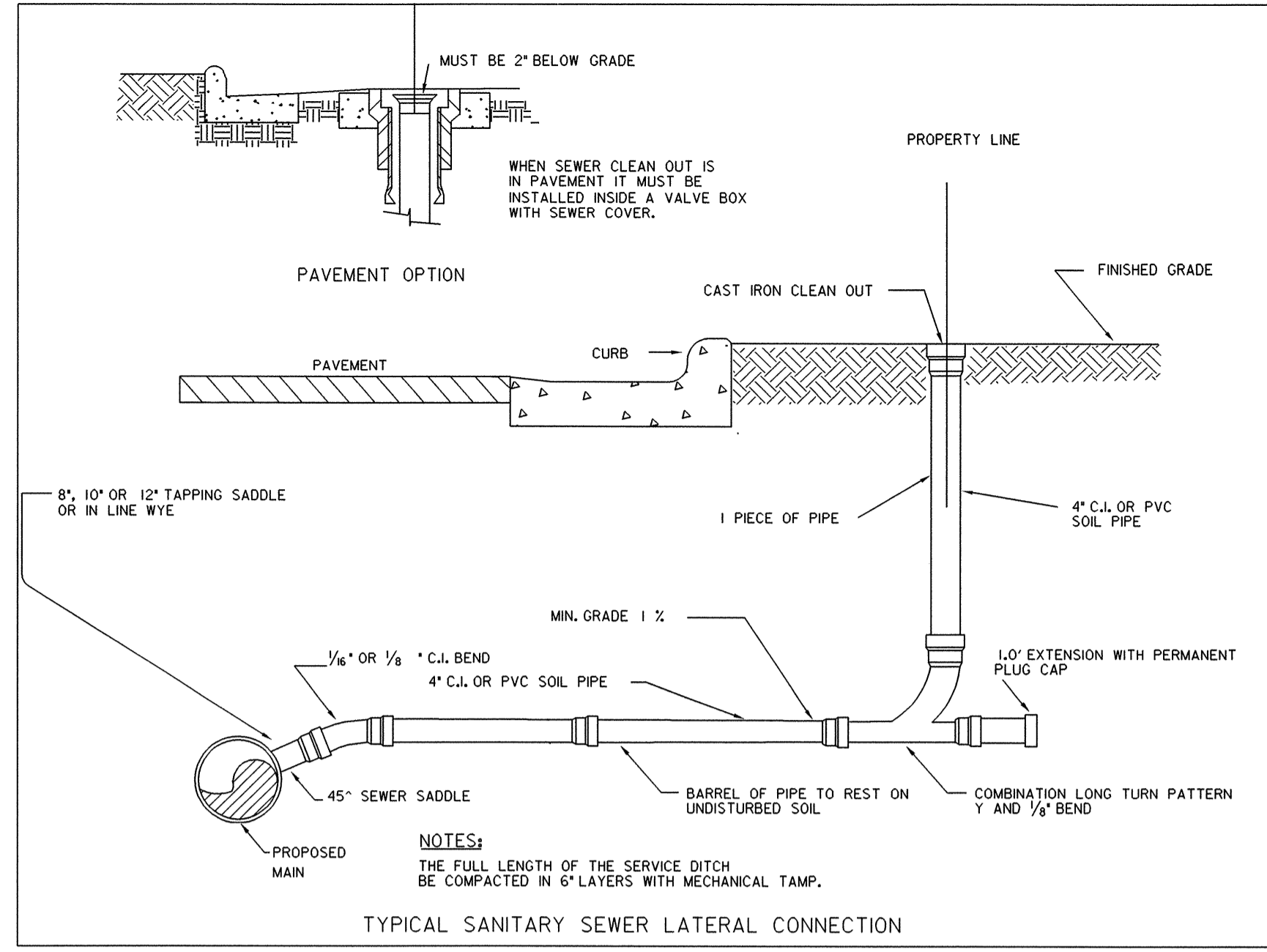
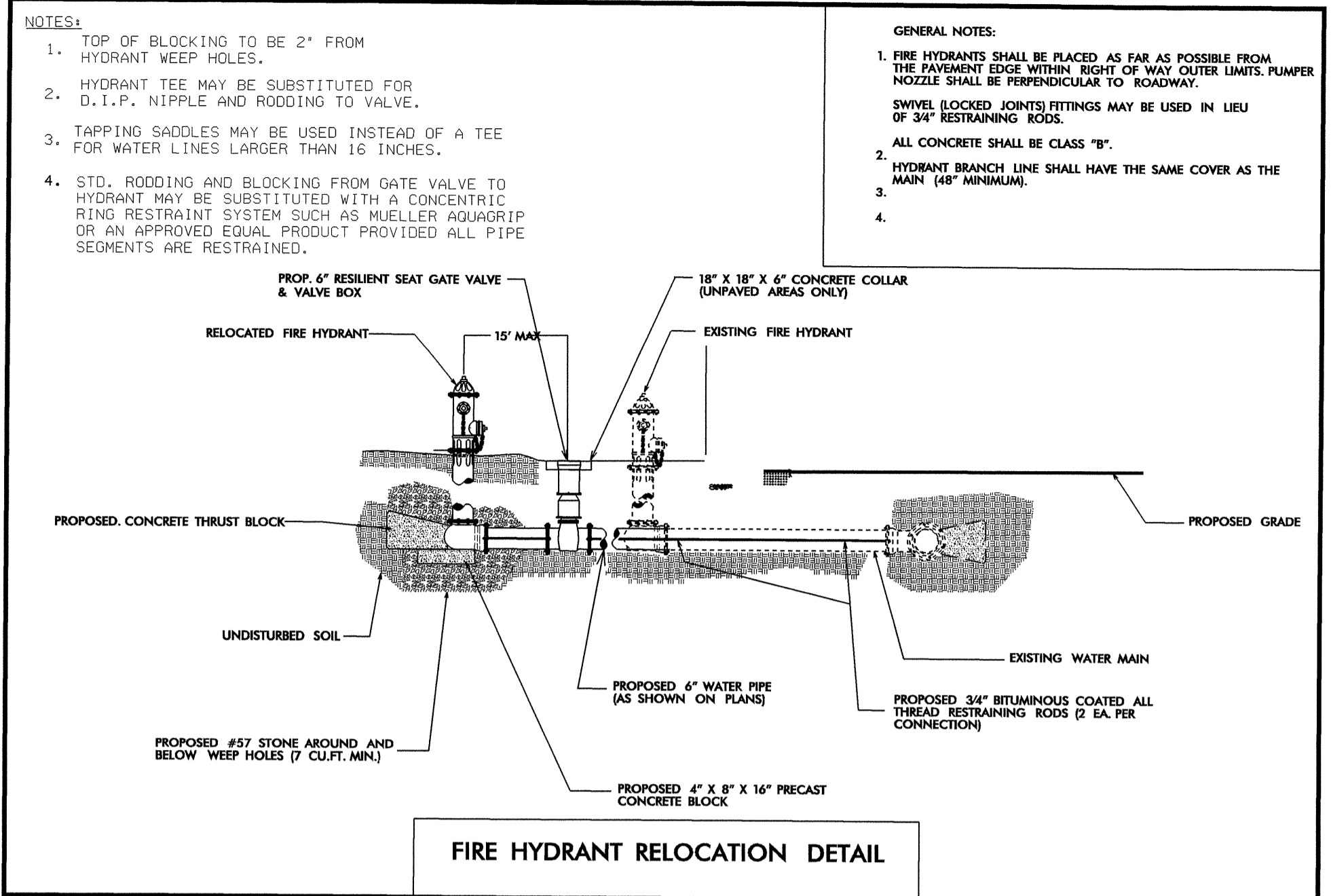
UTILITY CONSTRUCTION



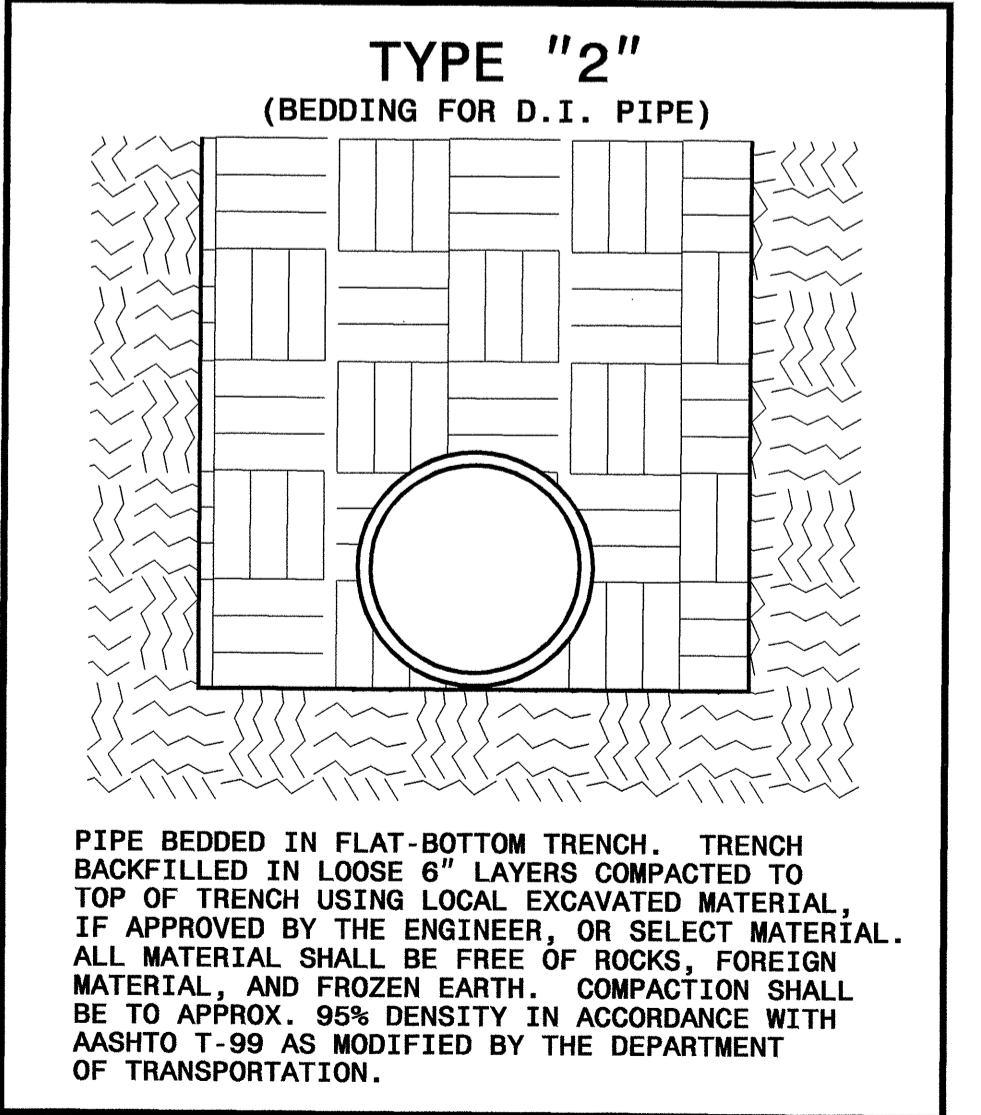
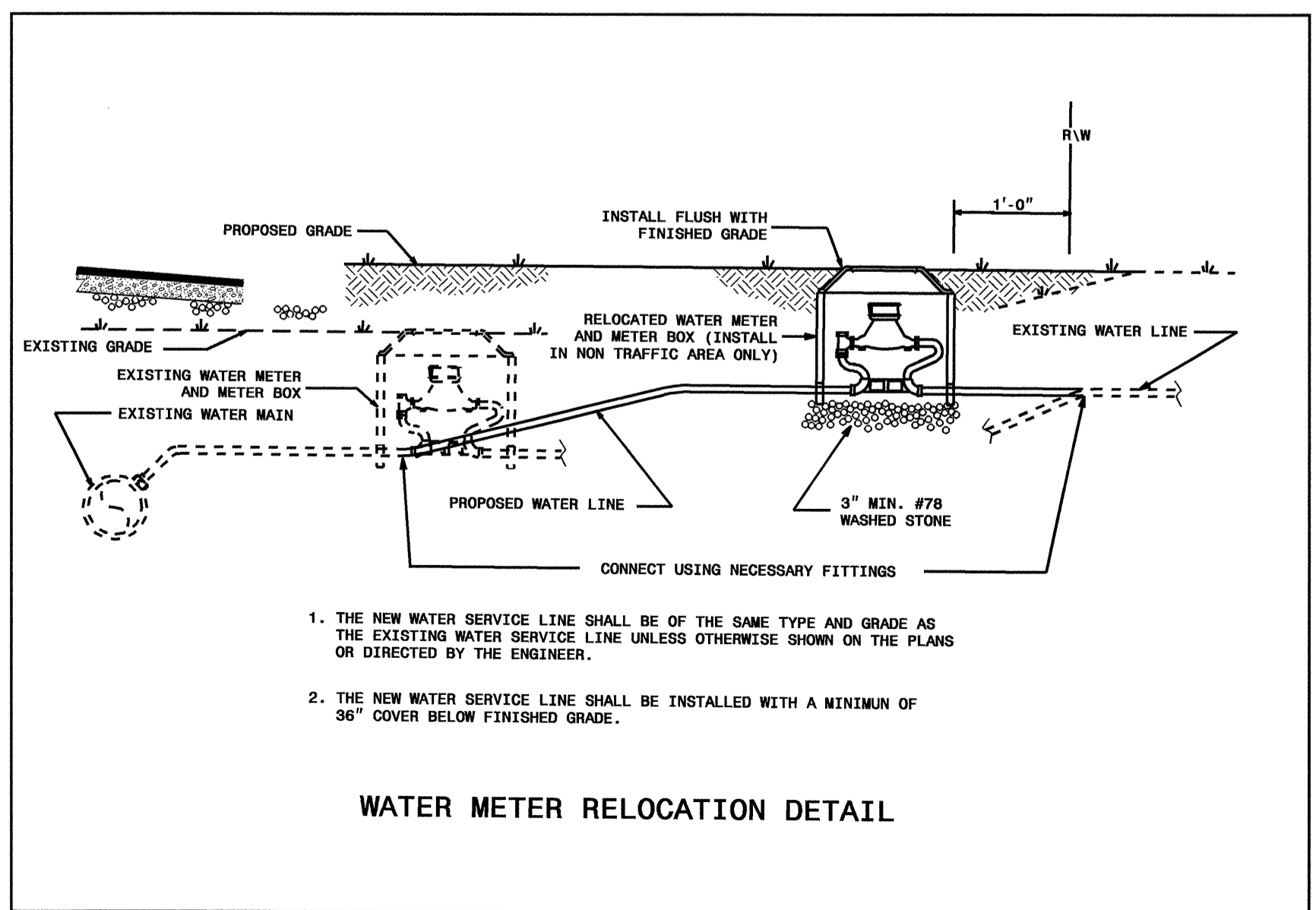
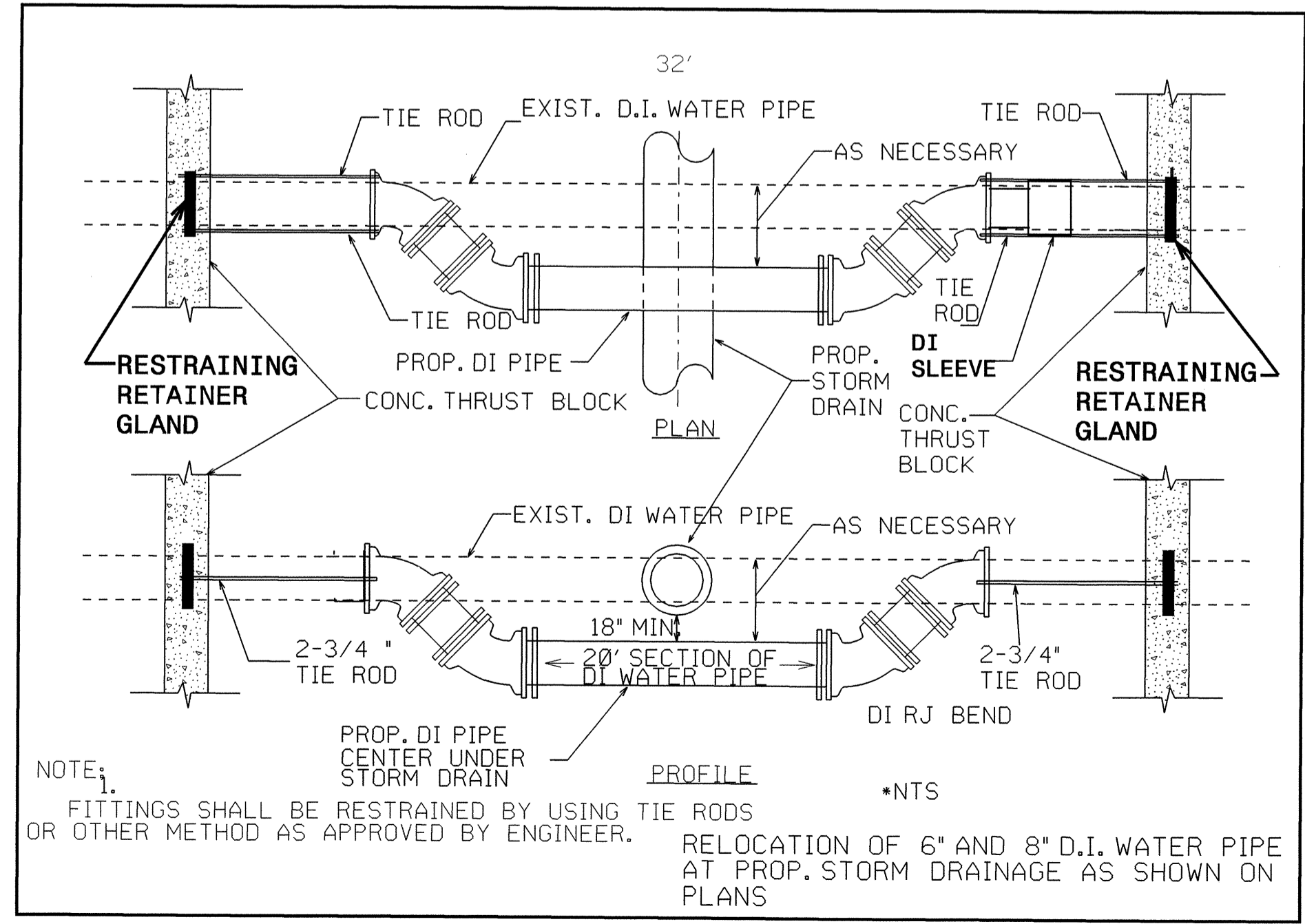
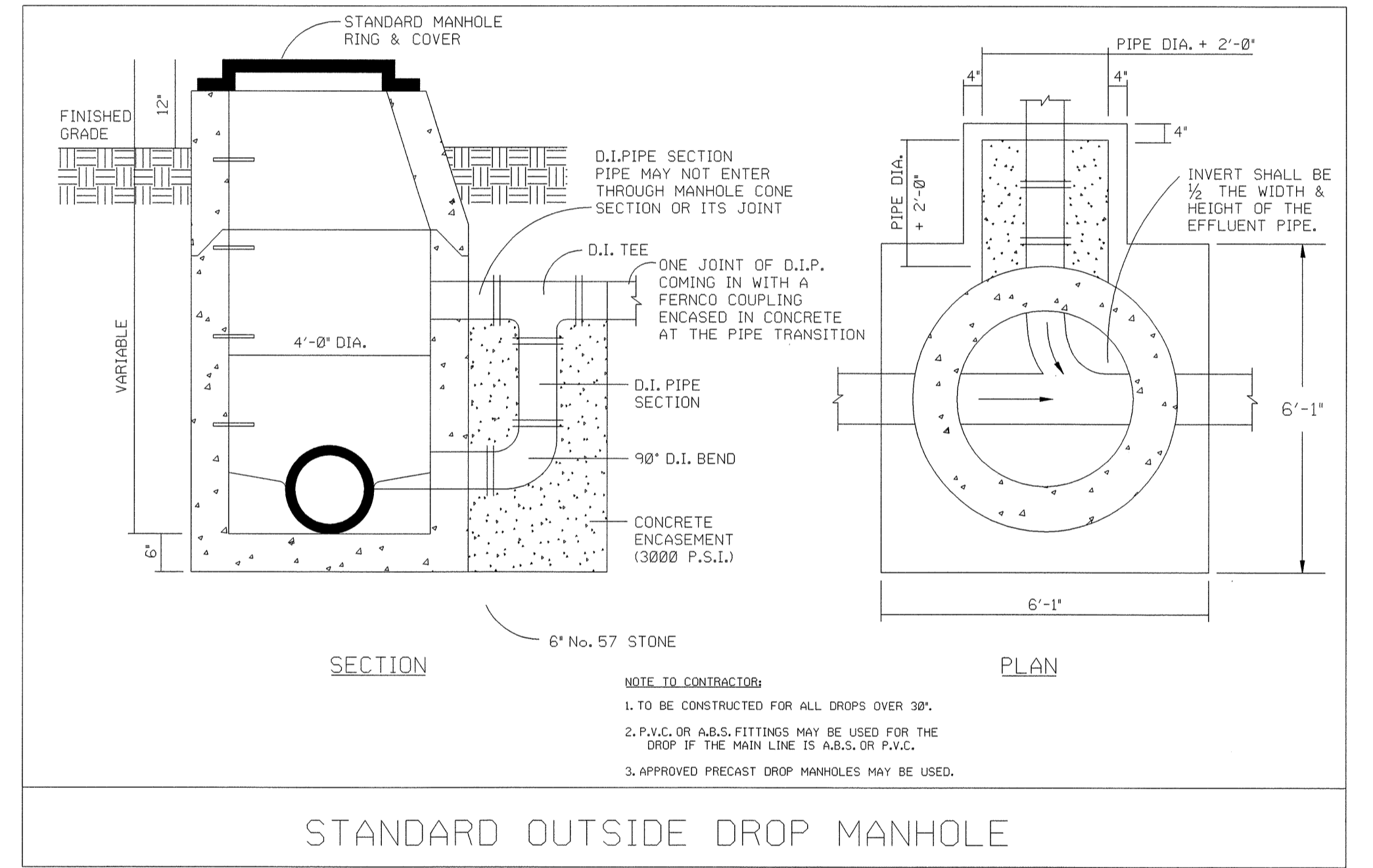
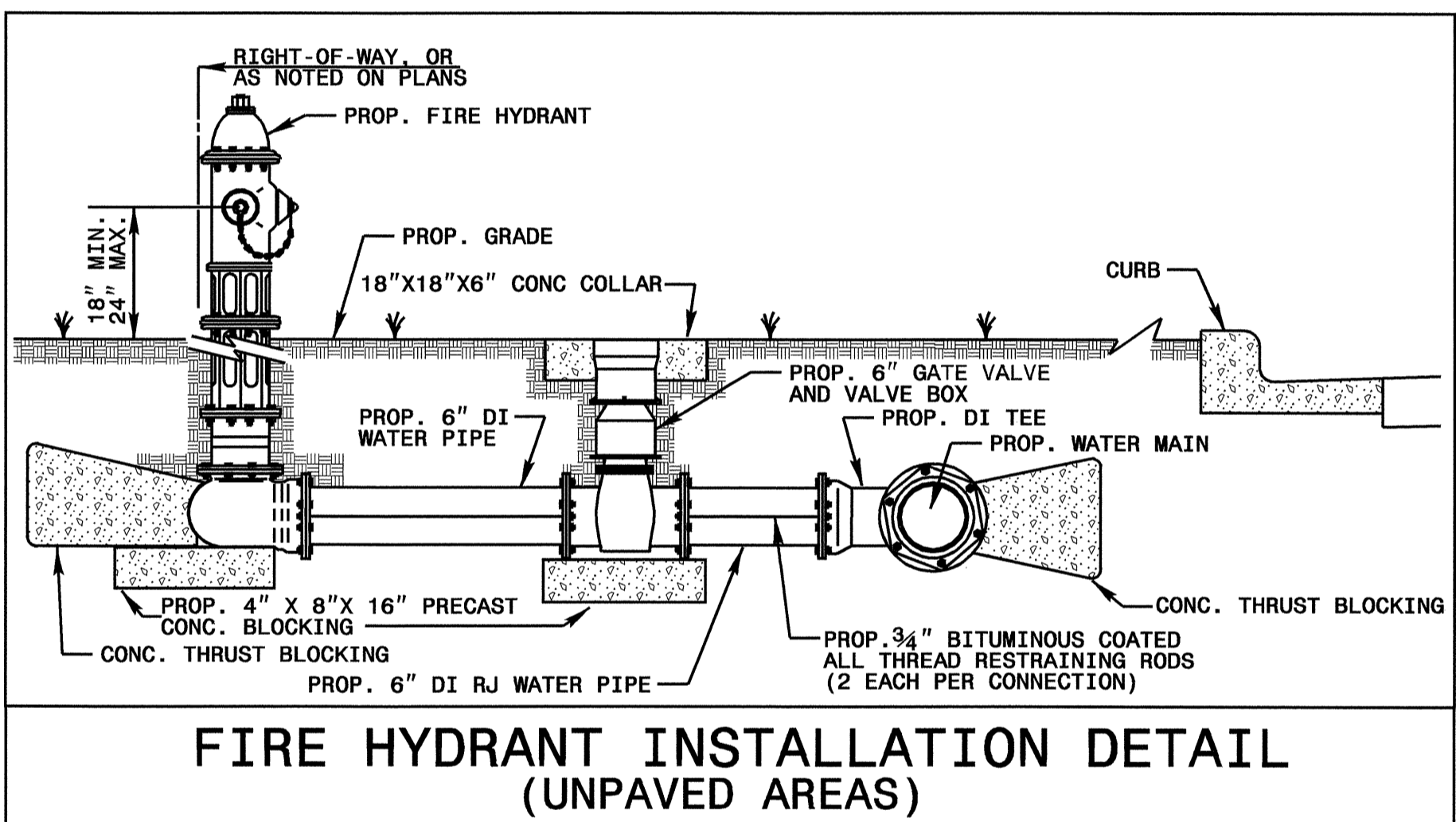
# 8" GRAVITY SEWER LINE 3

8/17/99

**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	46
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		



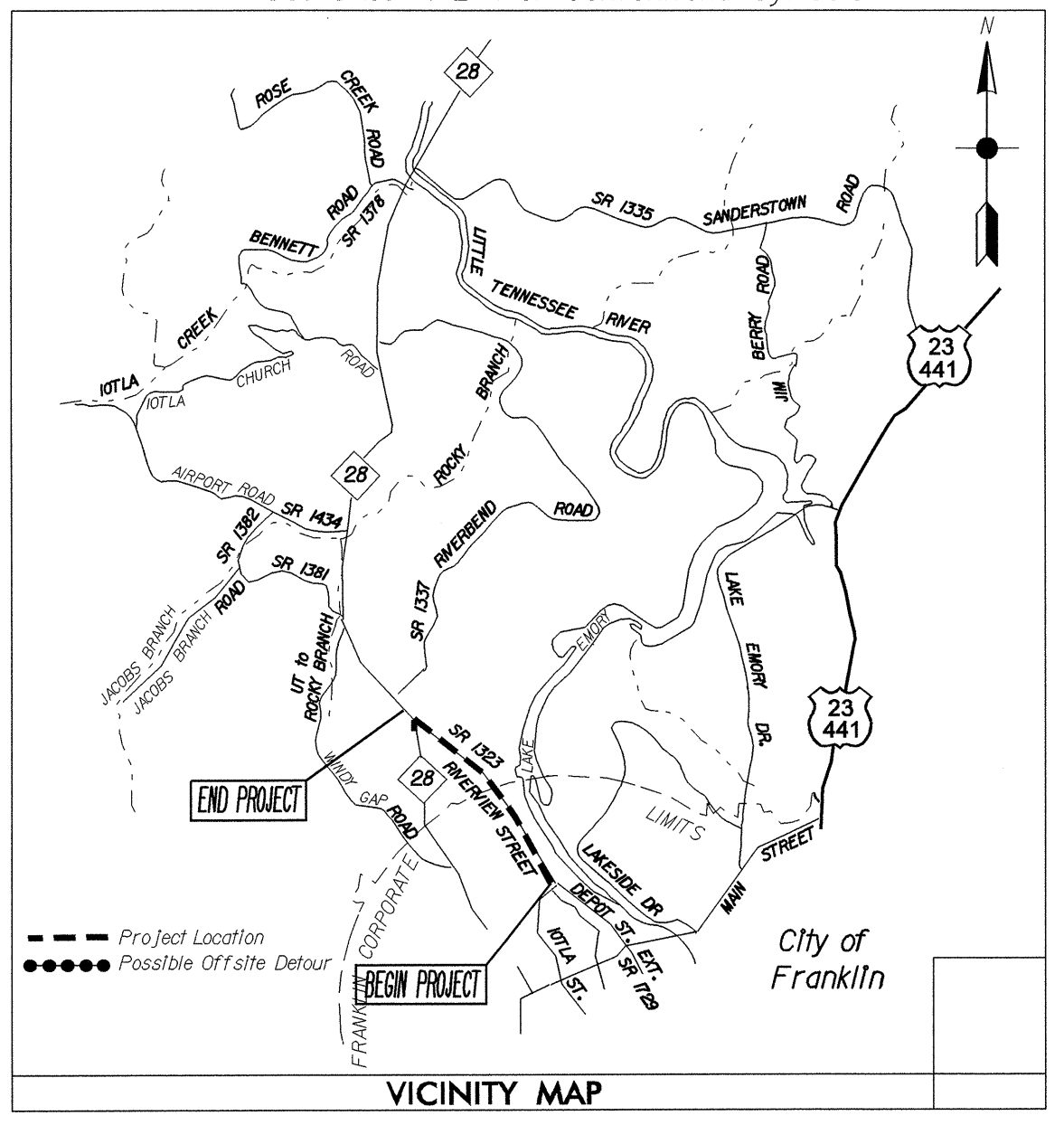
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 \$\$\$\$\$\$ USER NAME \$\$\$\$\$\$

09/08/99

T.I.P. NO.	SHEET NO.
R-2408A	UO-1

**TIP PROJECT: R-2408A**

See Sheet 1-A For Index of Sheets  
See Sheet 1-B For Conventional Symbols

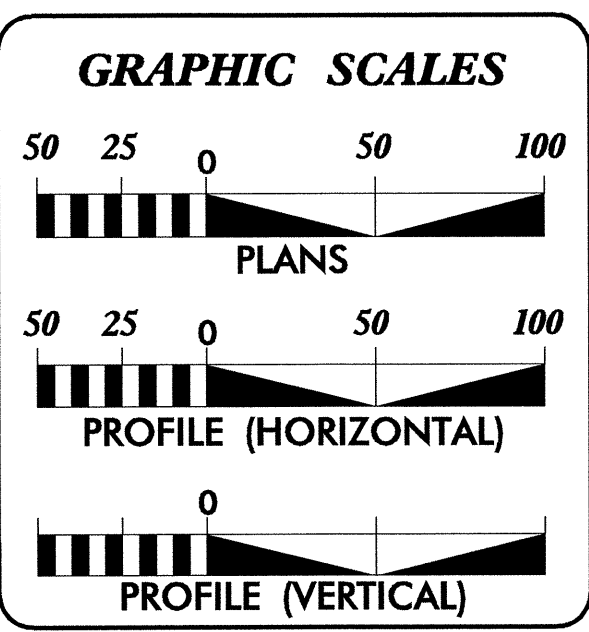
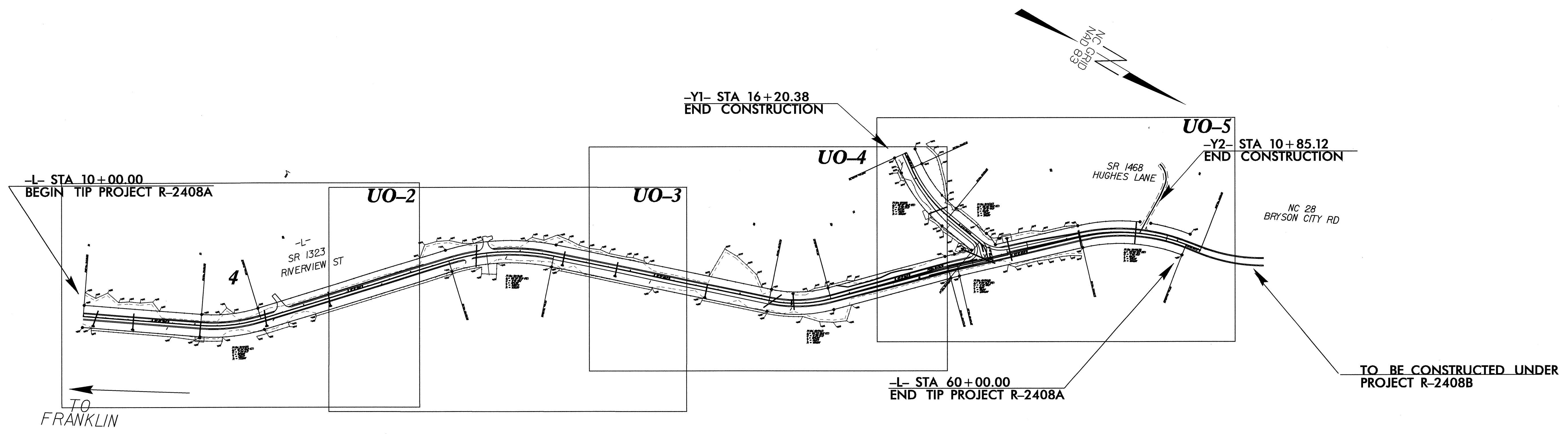


# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## UTILITY BY OTHERS PLANS MACON COUNTY

**LOCATION: SR 1323 (RIVERVIEW ST.)  
FROM DEPOT ST. EXTENSION TO NC 28**

**TYPE OF WORK: UTILITY RELOCATION**



SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2 THRU UO-5	UTILITIES BY OTHERS PLAN SHEETS

UTILITY OWNERS ON PROJECT
(1) DUKE POWER
(2) VERIZON-TELEPHONE
(3) MEDIACOM-CATV
(4) TCOCCOA NATURAL GAS

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

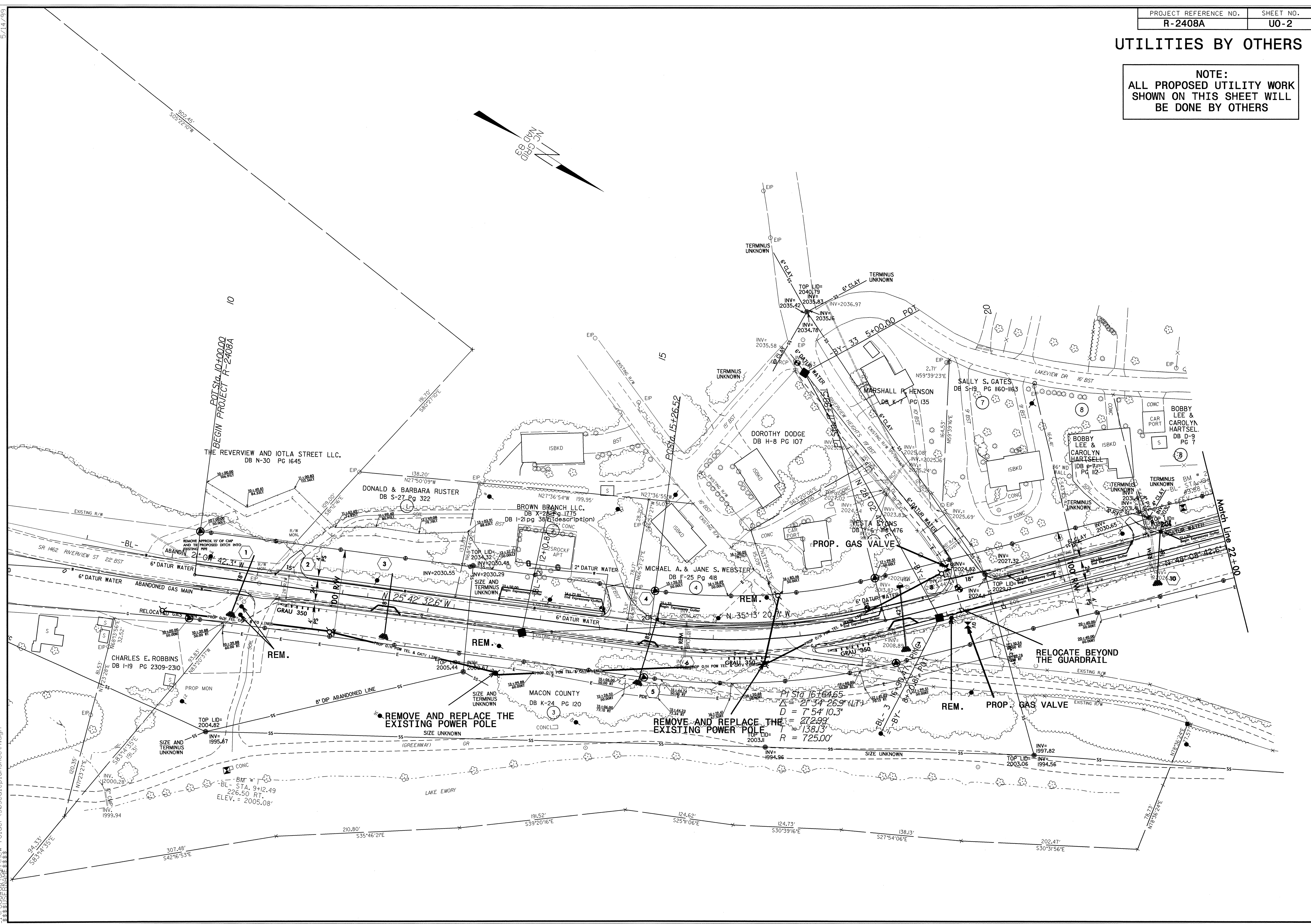
<b>Roger Worthington, P.E.</b>	UTILITIES SECTION ENGINEER
<b>Carl Barclay, P.E.</b>	UTILITIES SQUAD LEADER PROJECT ENGINEER
<b>Ali Kouchehi, P.E.</b>	UTILITIES PROJECT DESIGNER

I3-MAY-2008 10:24  
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\$\$\$\$\$USERNAME\$\$\$\$\$

### UTILITIES BY OTHERS

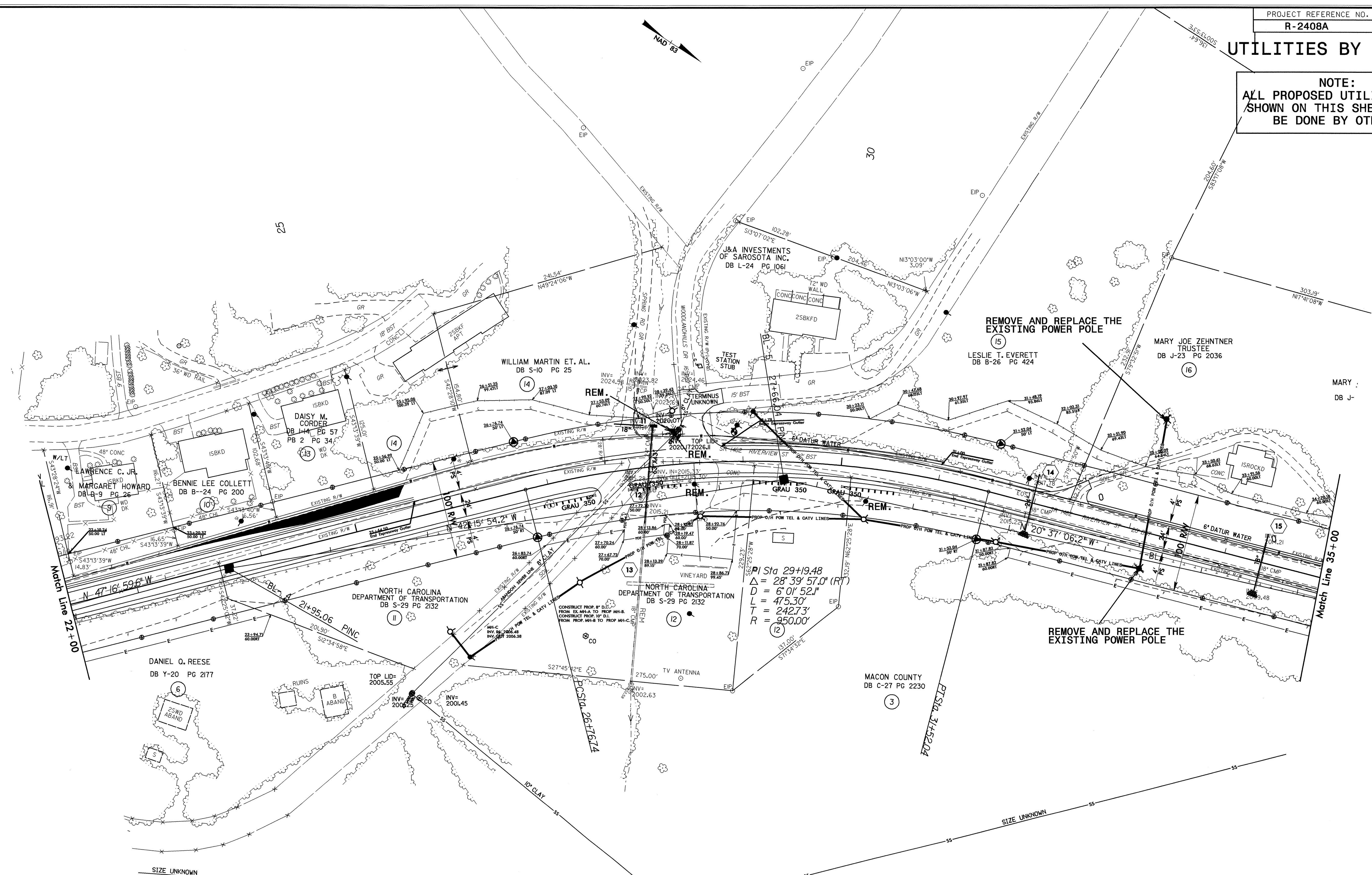
**NOTE:**  
ALL PROPOSED UTILITY WORK  
SHOWN ON THIS SHEET WILL  
BE DONE BY OTHERS

5/14/99  
09-MAY-2008 17:37 folder:\50scal\plansheet4.dgn



UTILITIES BY OTHERS

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



**DATUM DESCRIPTION**

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-105"

WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF NORTHING: 560403.586(1) EASTING: 686157.220(1)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99977456

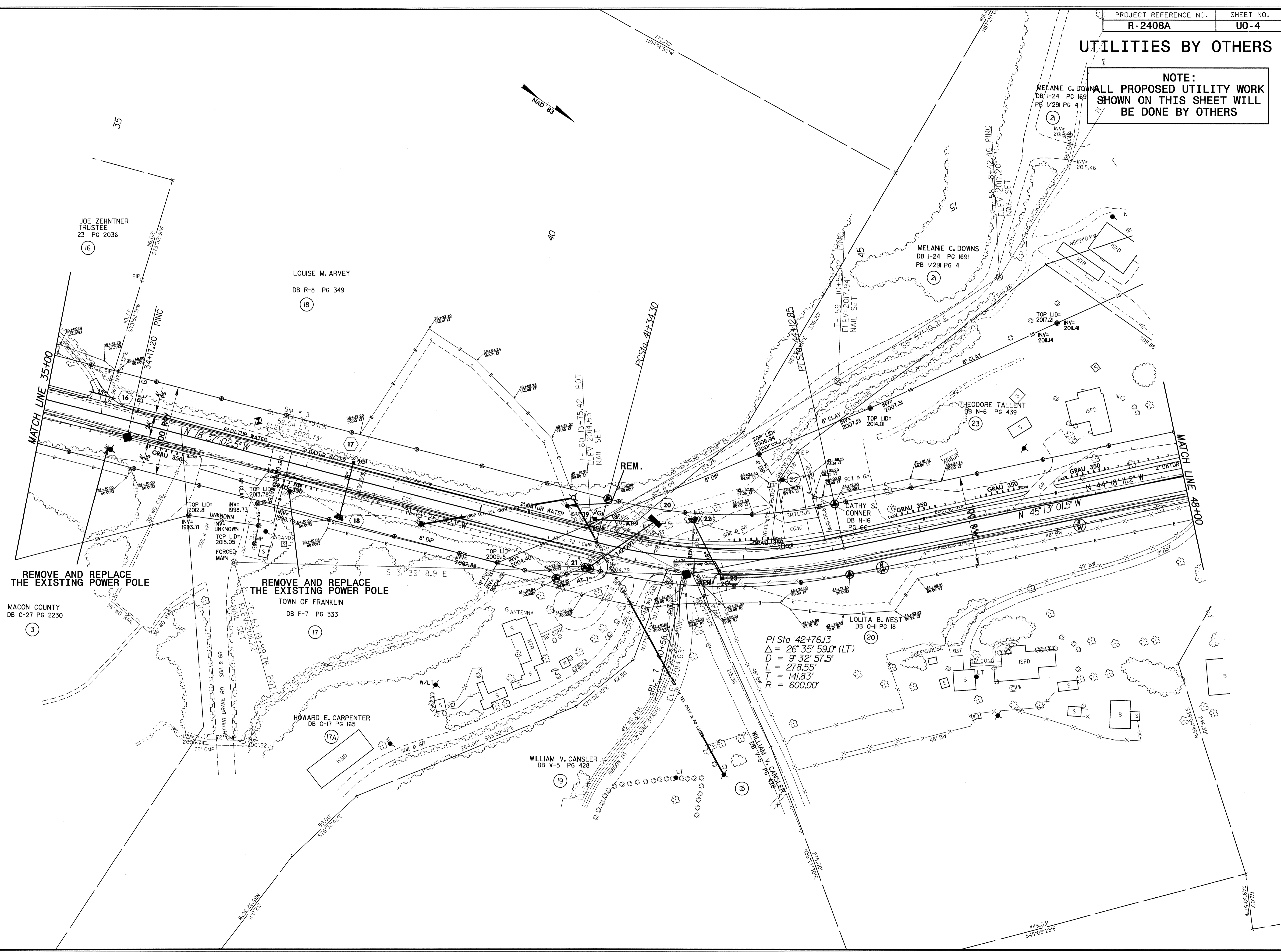
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-105" TO "L" STATION (supplied by roadway) IS

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAD 88

12-MAY-2008 10:00  
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 286

# UTILITIES BY OTHERS

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



**REMOVE AND REPLACE  
 THE EXISTING POWER POLE**

**REMOVE AND REPLACE  
 THE EXISTING POWER POLE**

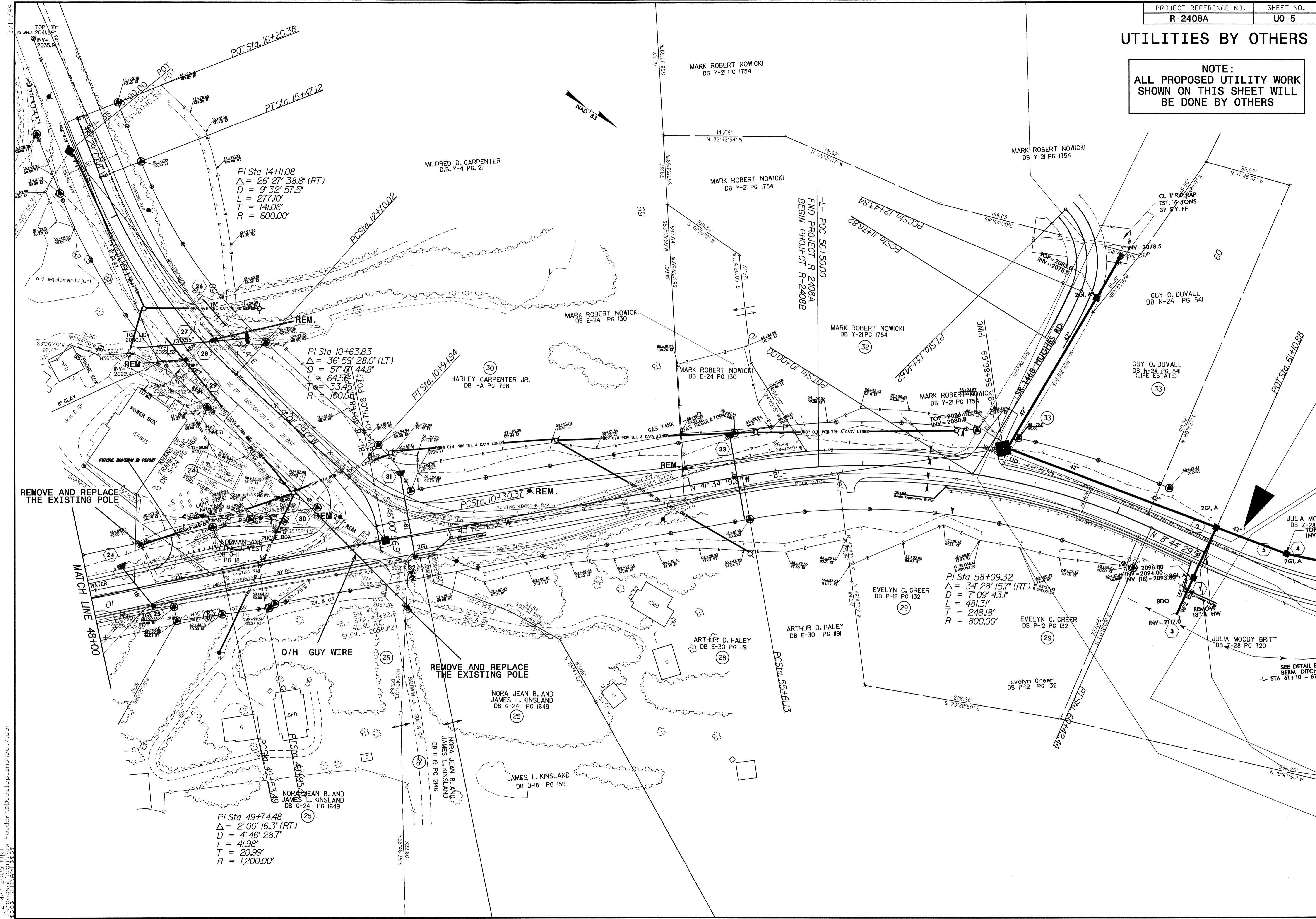
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 $T = 141.83'$   
 $R = 600.00'$

5/14/99

09-MAY-2008 17:41  
 \50scaleplansheets\dgn

# UTILITIES BY OTHERS

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



PI Sta 14+11.08  
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 $D = 9' 32'' 57.5''$   
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PI Sta 10+63.83  
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 $D = 64.56'$   
 $L = 33.45'$   
 $R = 100.00'$

PI Sta 58+09.32  
 $\Delta = 34' 28'' 15.7''$  (RT)  
 $D = 7' 09'' 43.1''$   
 $L = 481.31'$   
 $T = 248.18'$   
 $R = 800.00'$

PI Sta 49+74.48  
 $\Delta = 2' 00'' 16.3''$  (RT)  
 $D = 4' 46'' 28.7''$   
 $L = 41.98'$   
 $T = 20.99'$   
 $R = 1,200.00'$

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