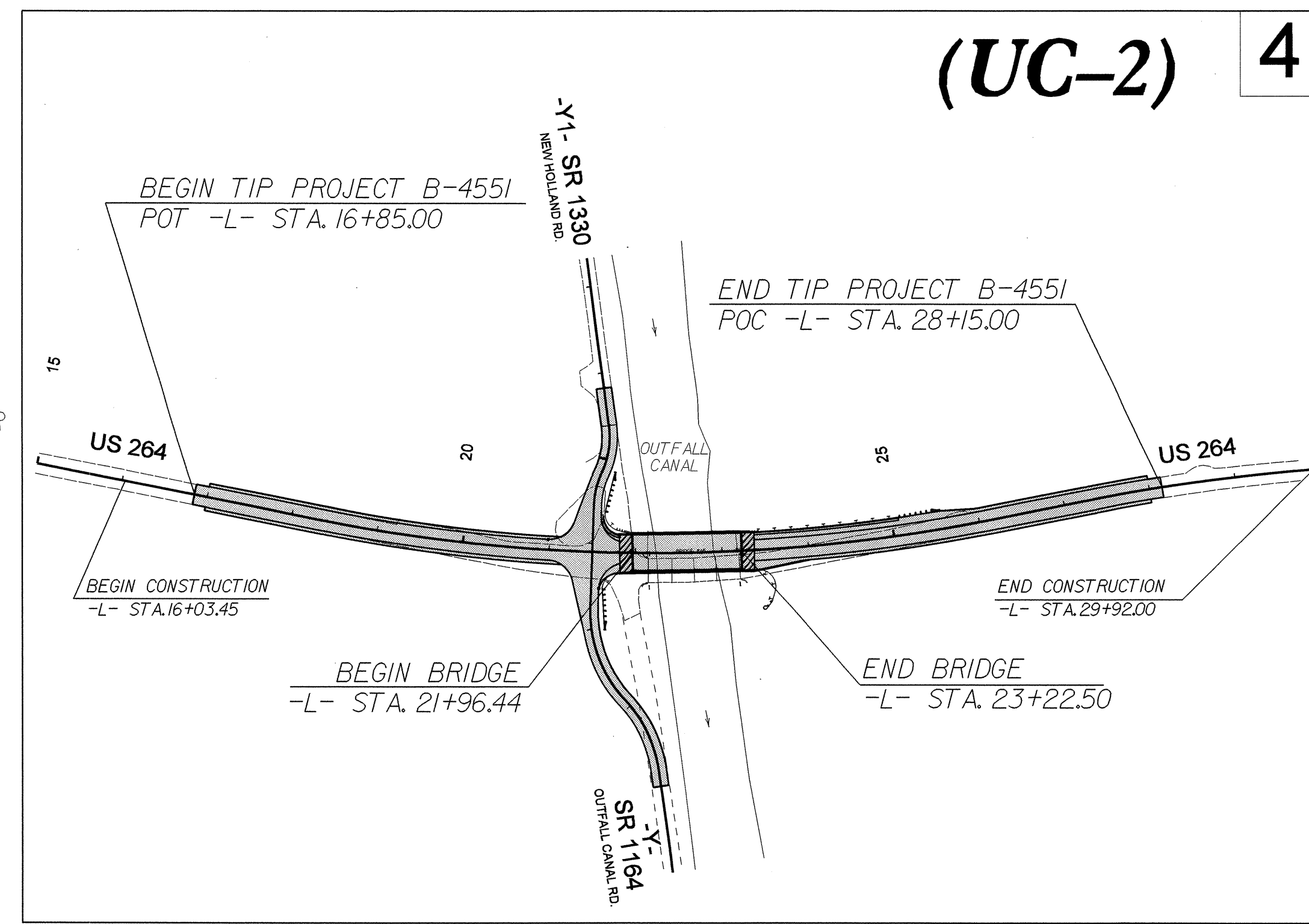
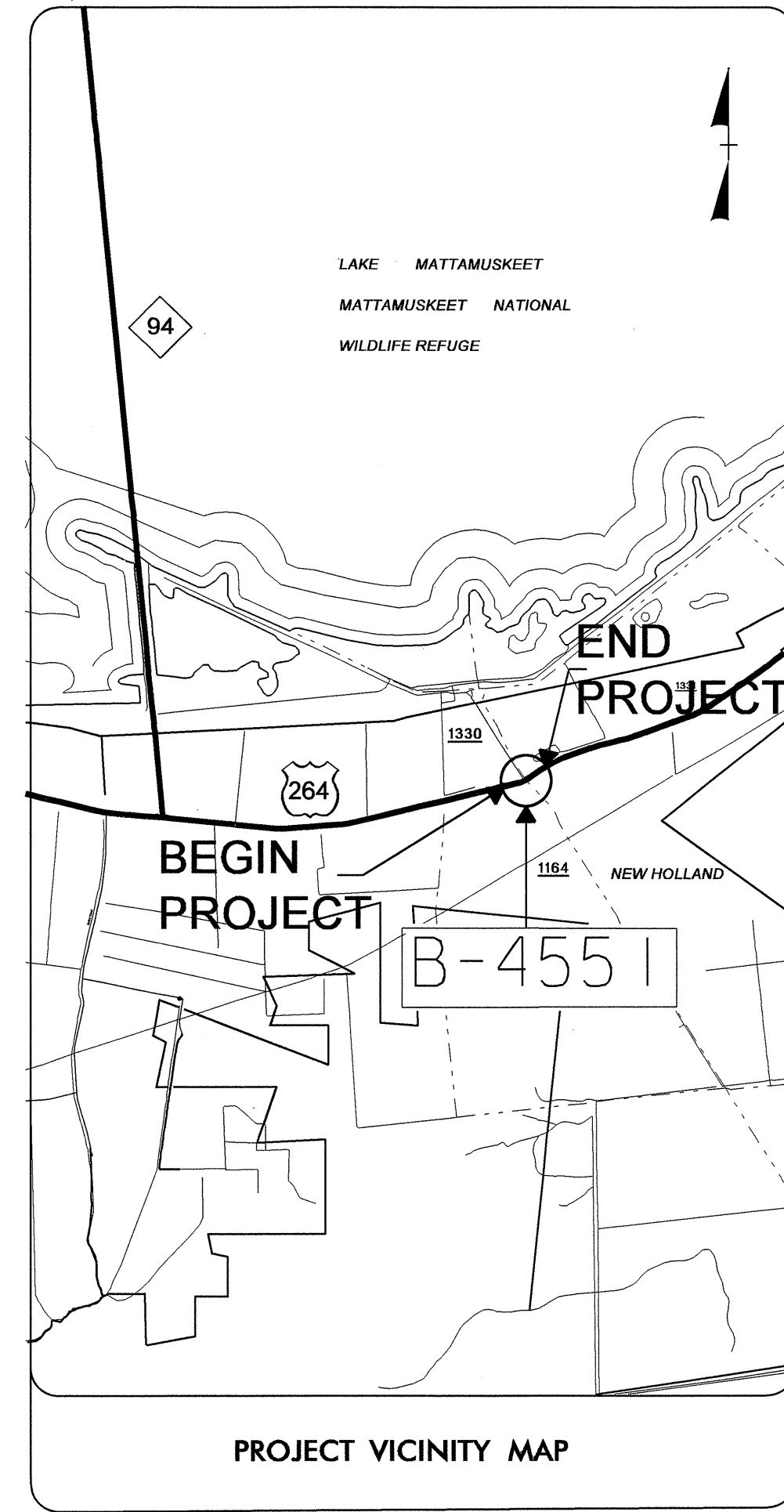


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

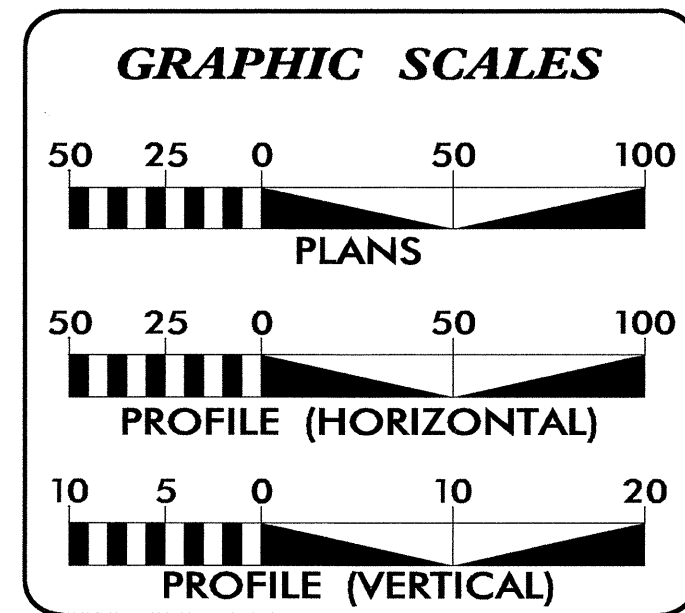
**UTILITY CONSTRUCTION PLANS**  
**HYDE COUNTY**

**LOCATION: BRIDGE NO. 45 OVER A CANAL ON US 264**  
**TYPE OF WORK: UTILITIES RELOCATION**

**TIP PROJECT: B4551**



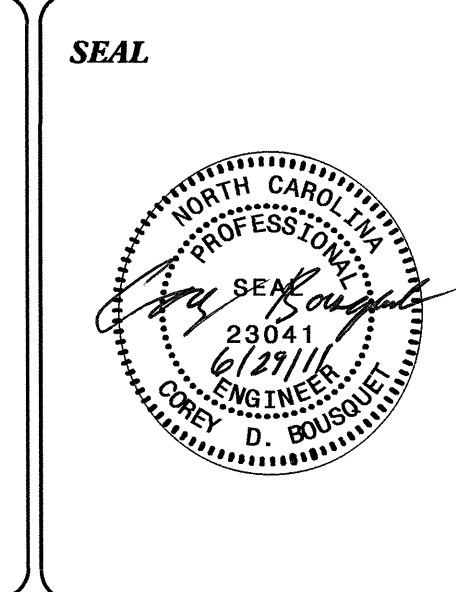
2006 STANDARD SPECIFICATIONS



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY CONSTRUCTION PLAN SHEET

**WATER AND SEWER OWNERS ON PROJECT**

(1) HYDE COUNTY WATER DISTRICT (WATER)

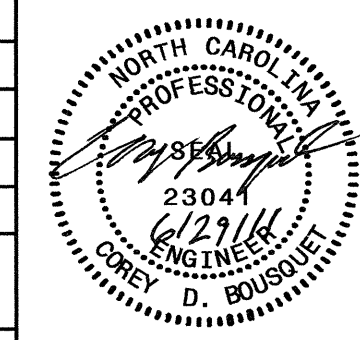


PREPARED IN THE OFFICE OF:  
**DIVISION OF HIGHWAYS**  
**UTILITIES ENGINEERING SECTION**

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

**Roger Worthington, P.E.** UTILITIES SECTION ENGINEER  
**Corey Bousquet, P.E.** UTILITIES SQUAD LEADER PROJECT ENGINEER  
**Nabil Hamdan** UTILITIES PROJECT DESIGNER

29-JUN-2011 11:49 P:\Utilities\RDY-UT\Proj\B4551\RDY-1.sh.dgn \$\$\$USERNAME\$\$\$

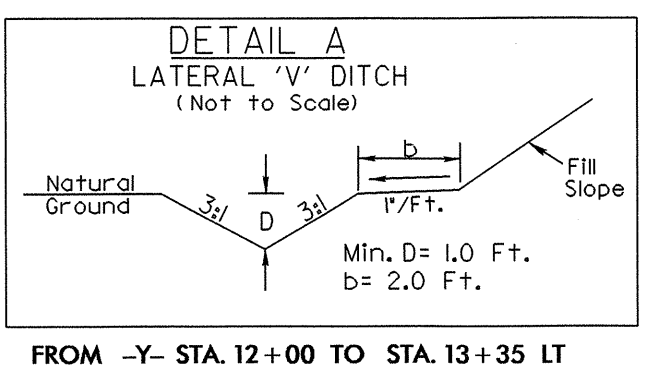
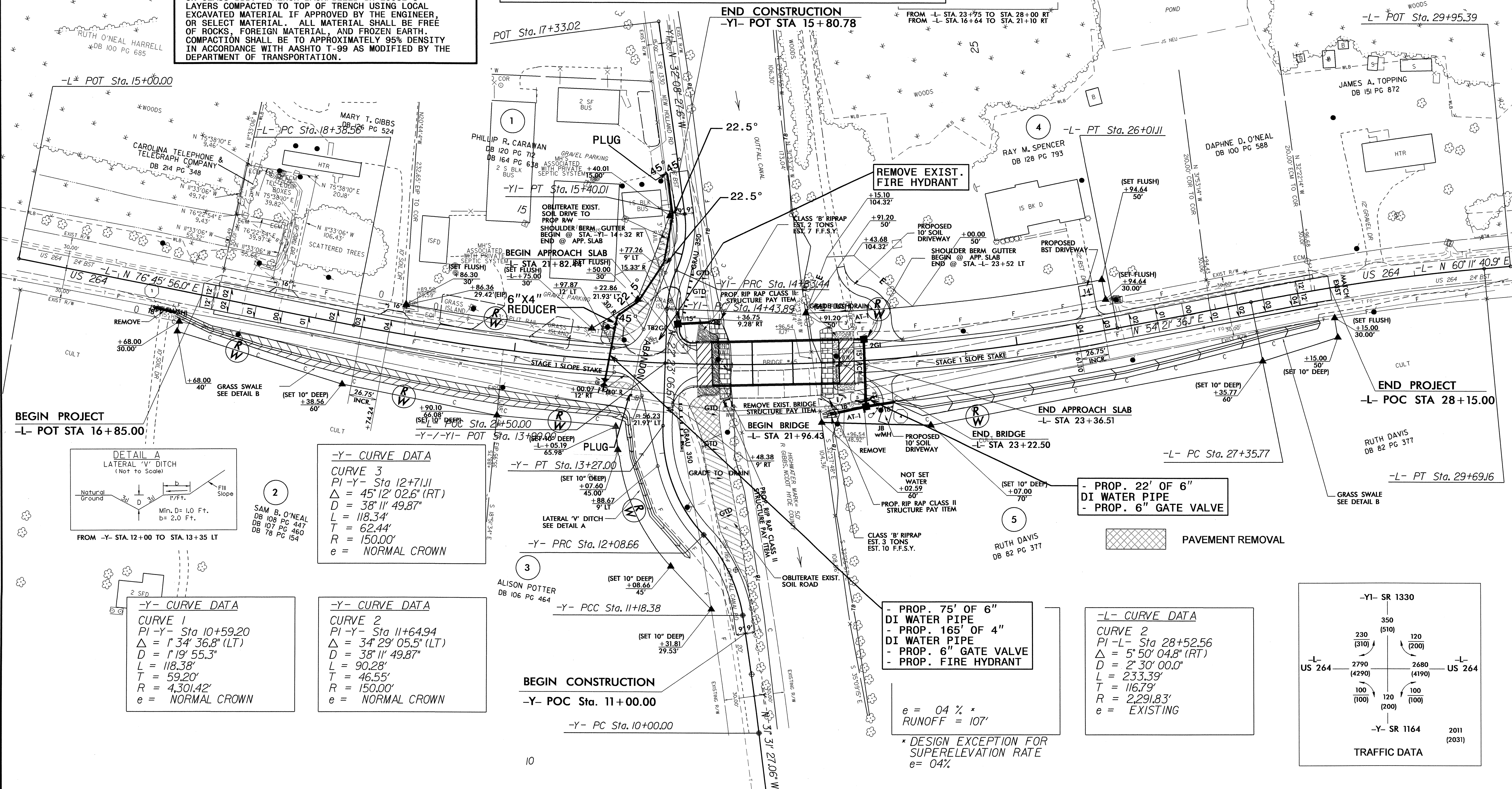
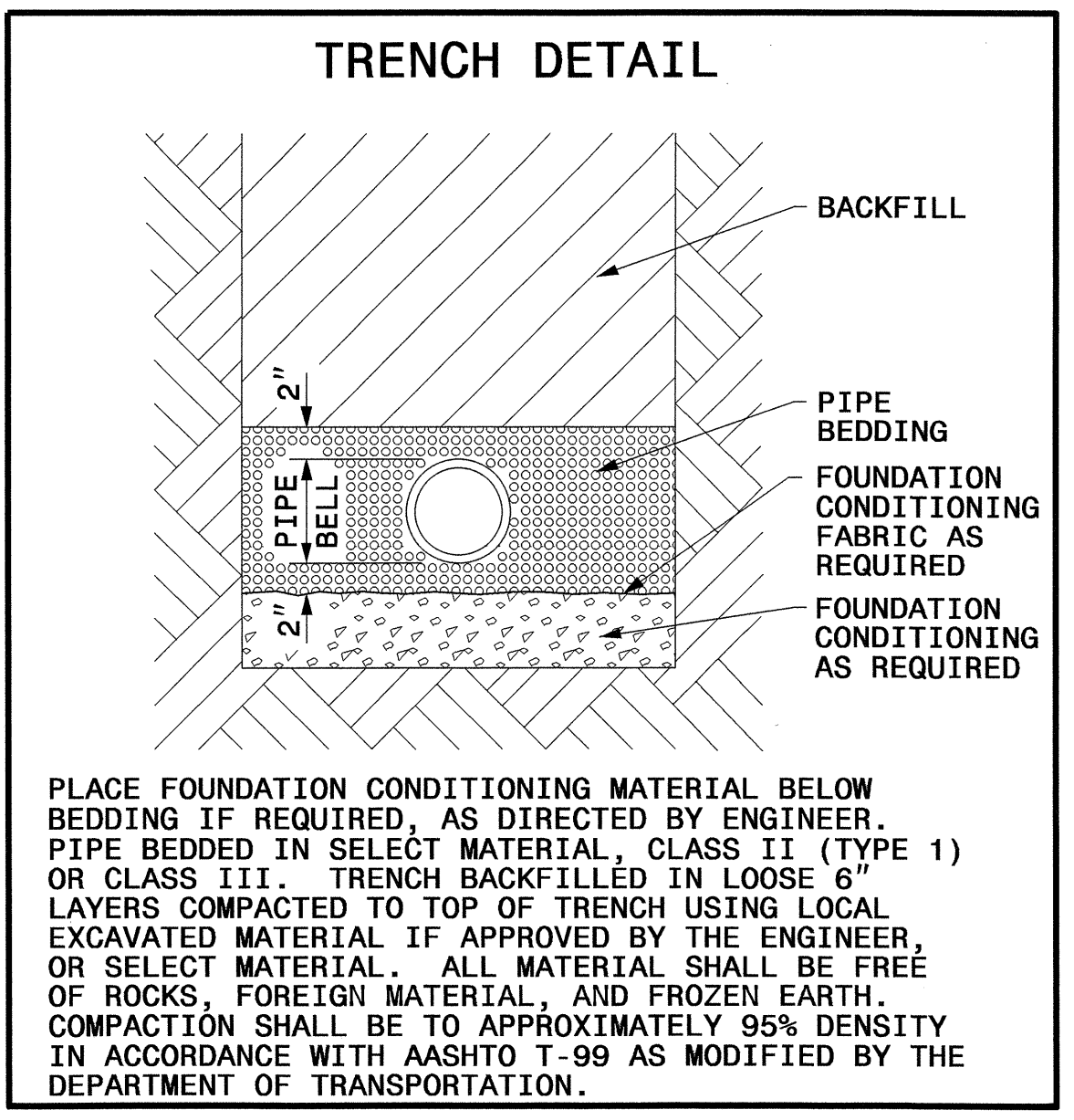
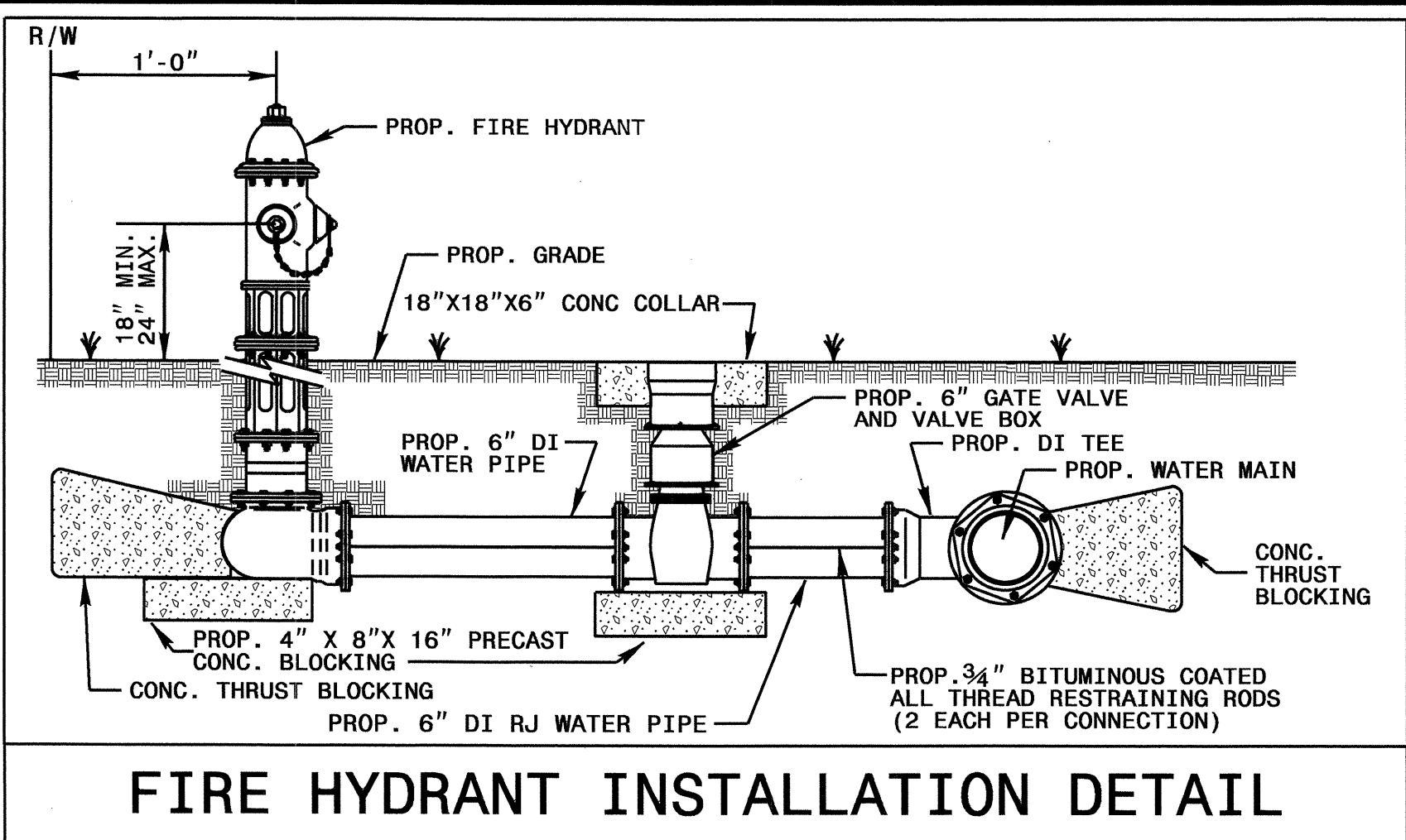


**UTILITY CONSTRUCTION**



**MAXIMUM TRENCH WIDTH AT TOP OF PIPE**

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

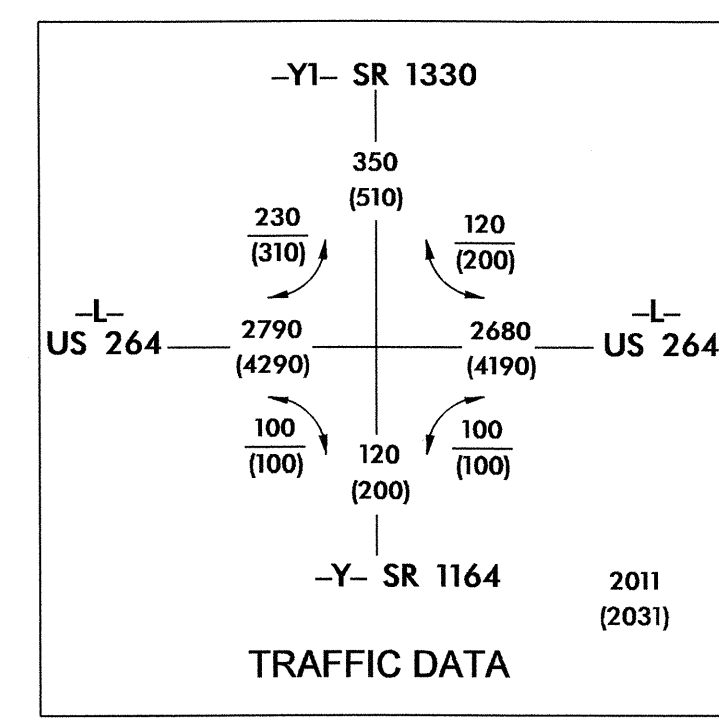


**-Y- CURVE DATA**  
**CURVE 3**  
 PI -Y- Sta 12+71.11  
 $\Delta = 45^\circ 12' 02.6''$  (RT)  
 $D = 38^\circ 11' 49.87''$   
 $L = 118.34'$   
 $T = 62.44'$   
 $R = 150.00'$   
 e = NORMAL CROWN

**-Y- CURVE DATA**  
**CURVE 1**  
 PI -Y- Sta 10+59.20  
 $\Delta = 1^\circ 34' 36.8''$  (LT)  
 $D = 1^\circ 19' 55.3''$   
 $L = 118.38'$   
 $T = 59.20'$   
 $R = 4,301.42'$   
 e = NORMAL CROWN

**-Y- CURVE DATA**  
**CURVE 2**  
 PI -Y- Sta 11+64.94  
 $\Delta = 34^\circ 29' 05.5''$  (LT)  
 $D = 38^\circ 11' 49.87''$   
 $L = 90.28'$   
 $T = 46.55'$   
 $R = 150.00'$   
 e = NORMAL CROWN

**-L- CURVE DATA**  
**CURVE 2**  
 PI -L- Sta 28+52.56  
 $\Delta = 5^\circ 50' 04.8''$  (RT)  
 $D = 2^\circ 30' 00.0''$   
 $L = 233.39'$   
 $T = 116.79'$   
 $R = 2,291.83'$   
 e = EXISTING



e = 04% \*  
 RUNOFF = 107%  
 \* DESIGN EXCEPTION FOR SUPERELEVATION RATE e = 04%.

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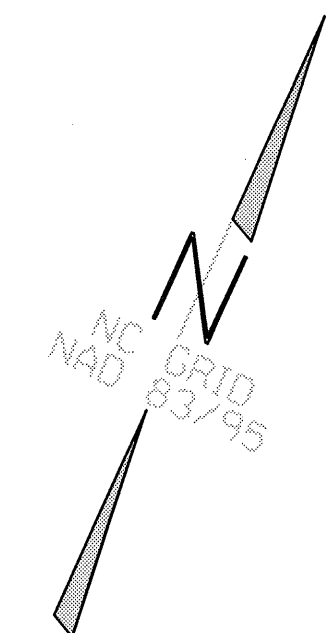
T.I.P. NO.	SHEET NO.
B-4551	UO-1

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

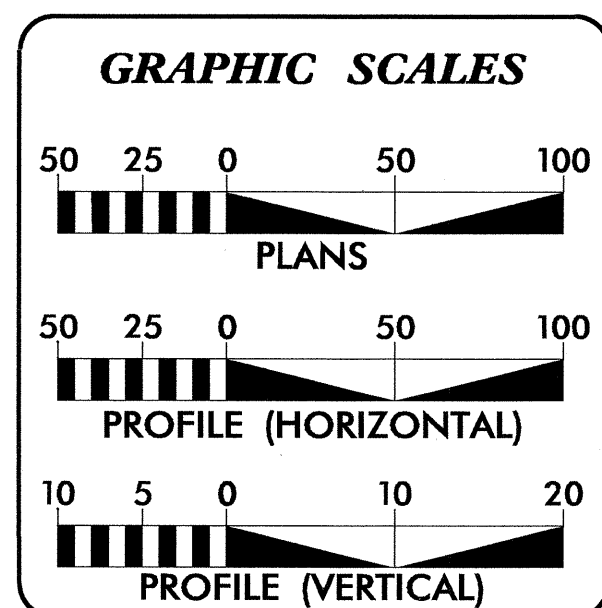
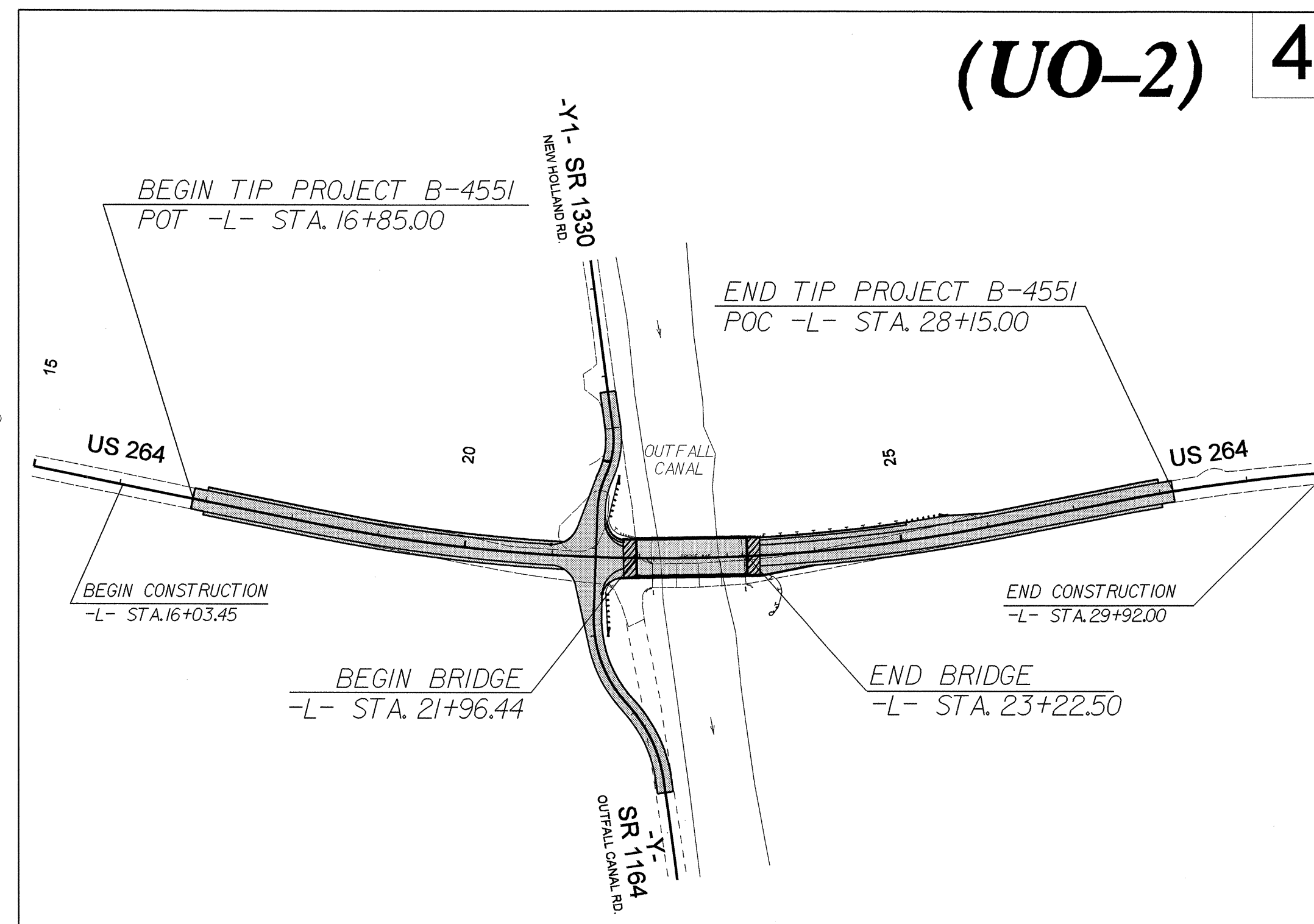
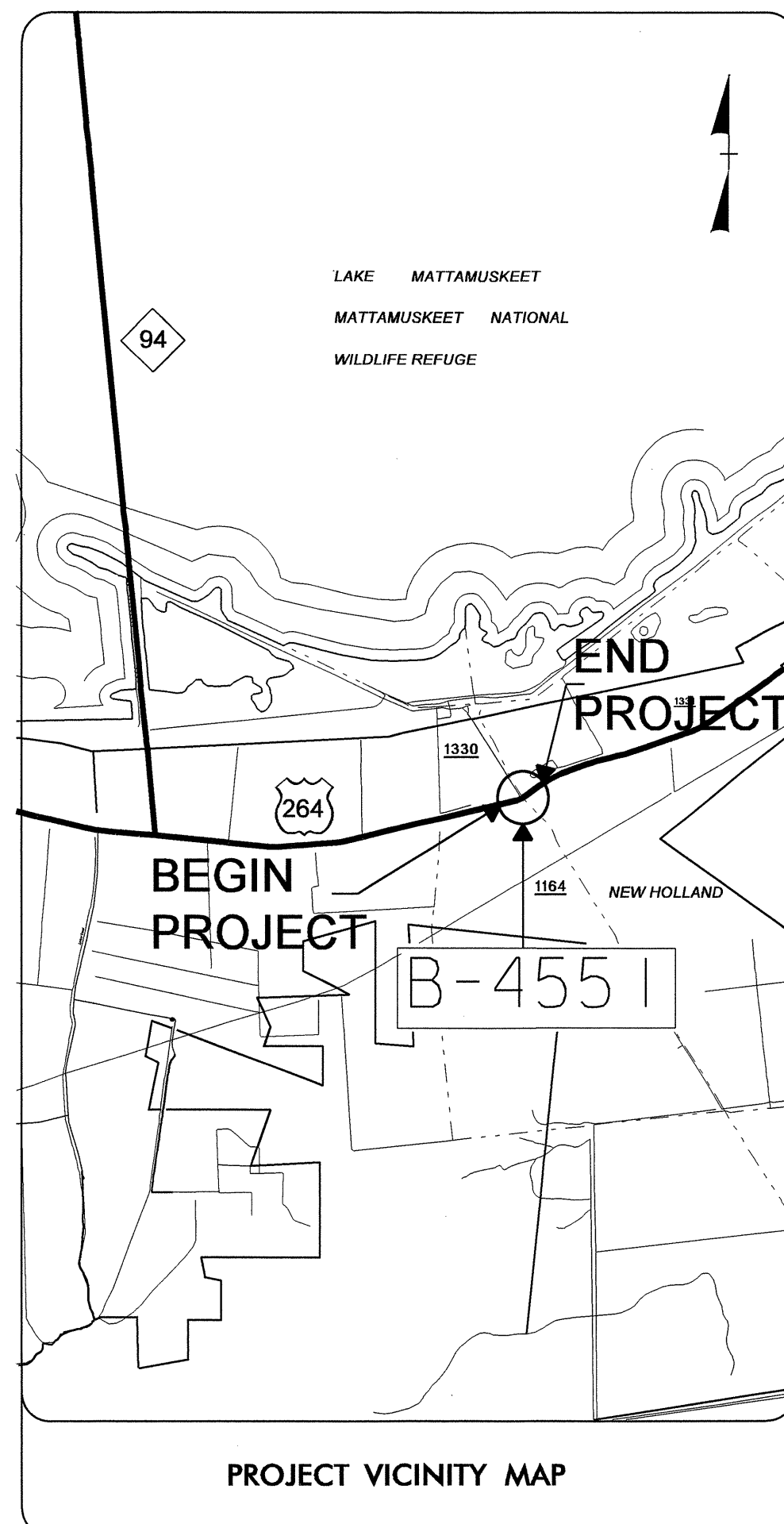
**UTILITIES BY OTHERS PLANS  
HYDE COUNTY**

**LOCATION: BRIDGE NO. 45 OVER A CANAL ON US 264**

**TYPE OF WORK: UTILITIES RELOCATION**



**TIP PROJECT: B-4551**



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	UTILITY BY OTHERS PLAN SHEET

UTILITY OWNERS ON PROJECT
(1) TIDELAND EMC - (POWER)
(2) CENTURYLINK - (TELEPHONE)

PREPARED IN THE OFFICE OF:  
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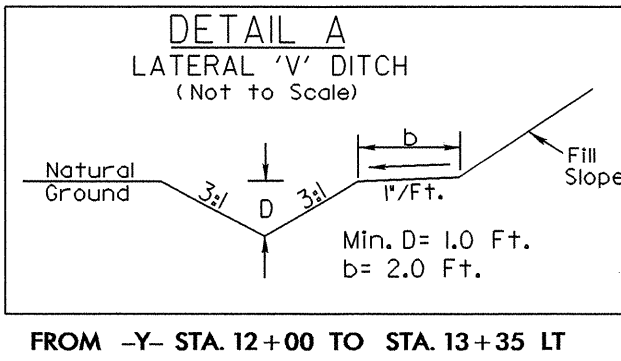
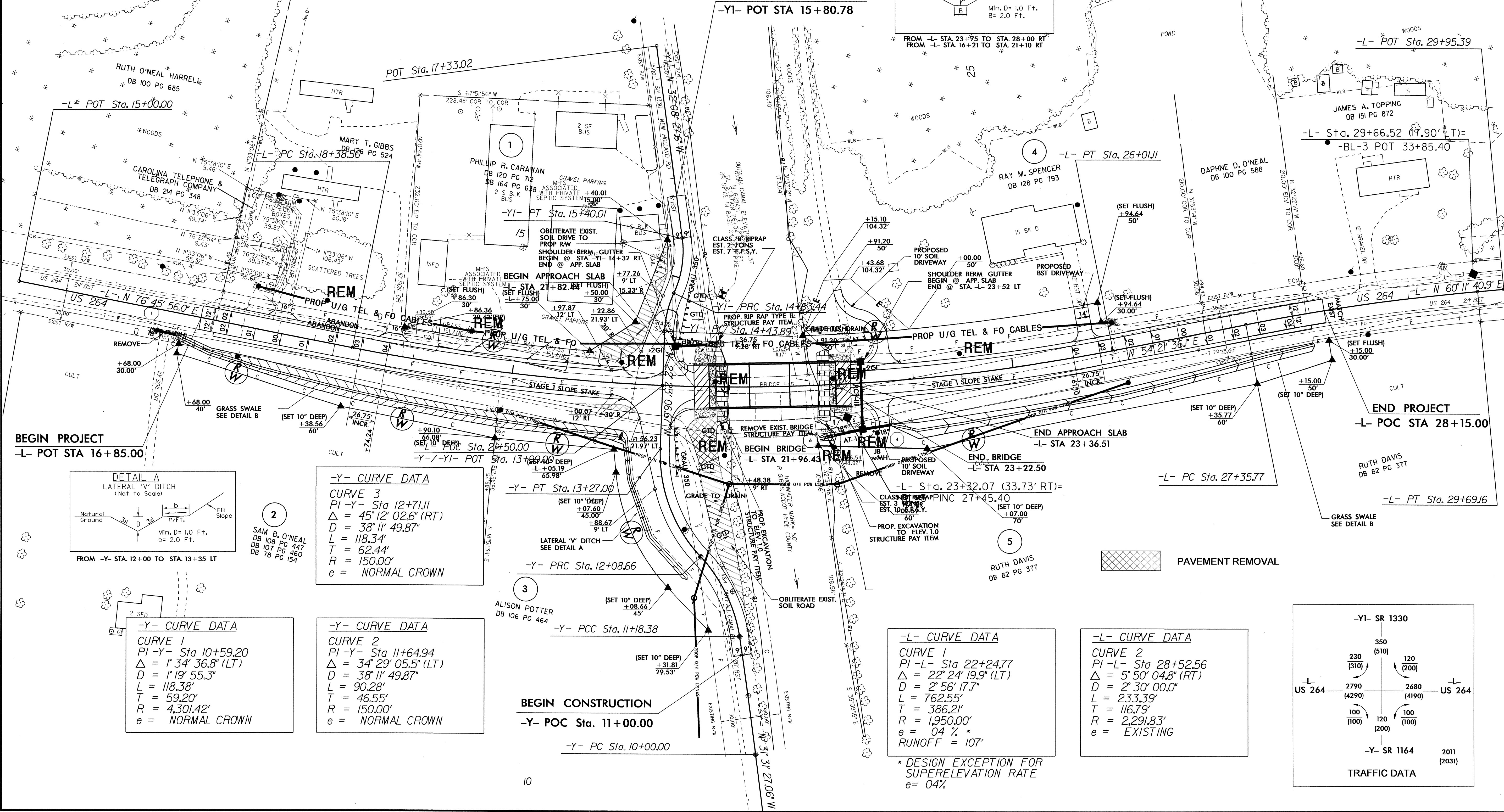
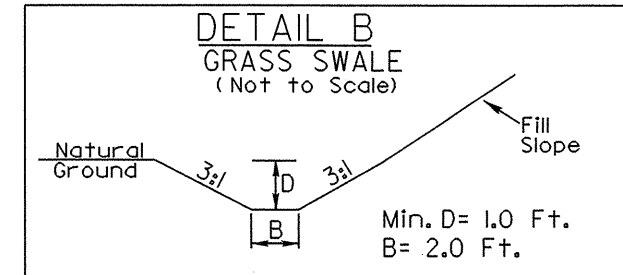
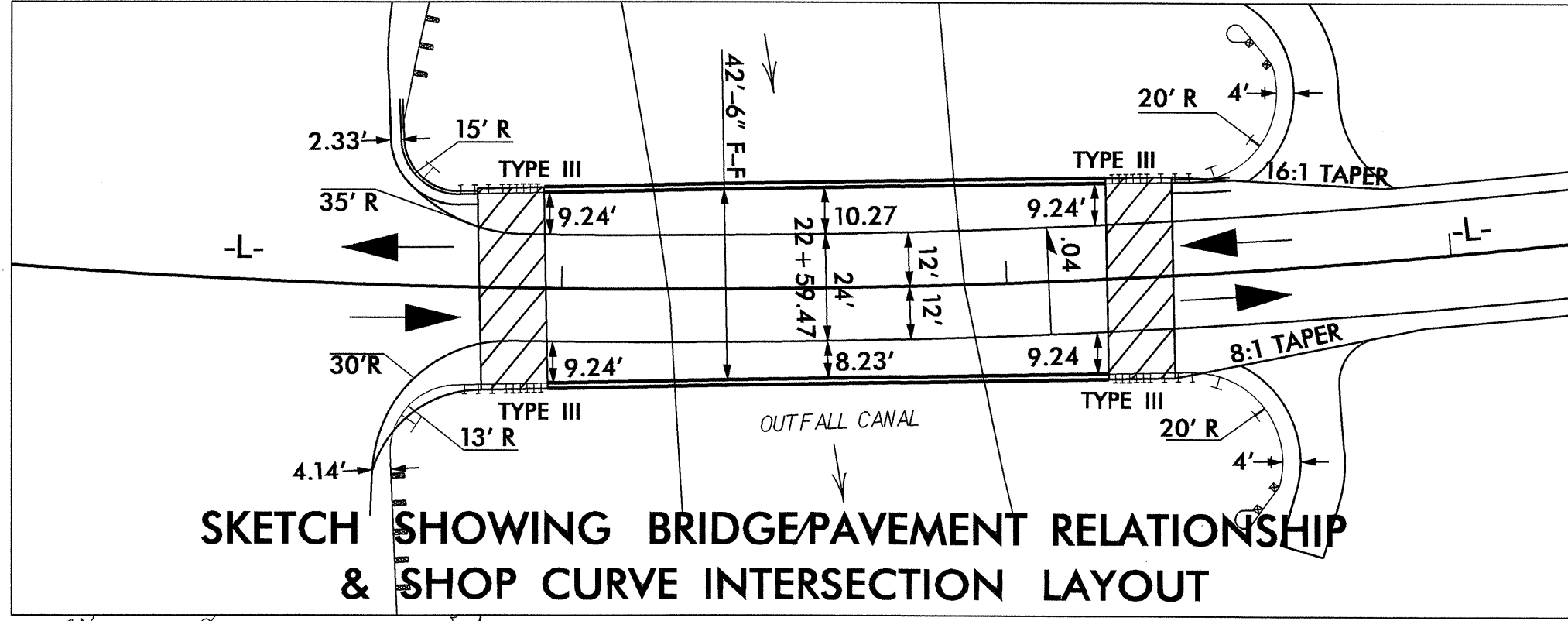
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UTILITIES BY OTHERS

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

-YI- CURVE DATA  
CURVE 1  
PI -YI- Sta 14+63.93  
 $\Delta = 22^{\circ} 39' 32.5''$  (RT)  
 $D = 57^{\circ} 17' 44.8''$   
 $L = 39.55'$   
 $T = 20.04'$   
 $R = 100.00'$   
 $e = \text{NORMAL CROWN}$

-YI- CURVE DATA  
CURVE 2  
PI -YI- Sta 15+12.51  
 $\Delta = 32^{\circ} 24' 53.5''$  (LT)  
 $D = 57^{\circ} 17' 44.8''$   
 $L = 56.57'$   
 $T = 29.07'$   
 $R = 100.00'$   
 $e = \text{NORMAL CROWN}$



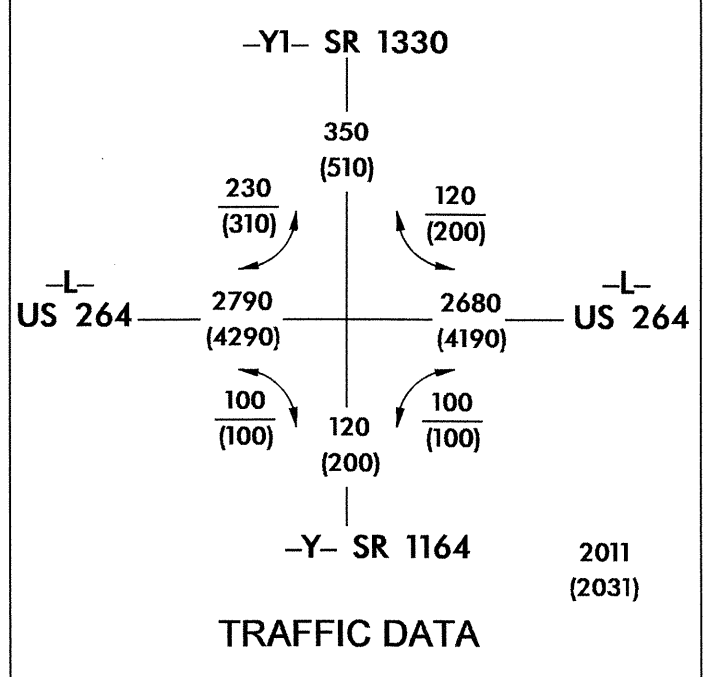
-Y- CURVE DATA  
CURVE 3  
PI -Y- Sta 12+71.11  
 $\Delta = 45^{\circ} 12' 02.6''$  (RT)  
 $D = 38^{\circ} 11' 49.8''$   
 $L = 118.34'$   
 $T = 62.44'$   
 $R = 150.00'$   
 $e = \text{NORMAL CROWN}$

-Y- CURVE DATA  
CURVE 2  
PI -Y- Sta 11+64.94  
 $\Delta = 34^{\circ} 29' 05.5''$  (LT)  
 $D = 38^{\circ} 11' 49.8''$   
 $L = 90.28'$   
 $T = 46.55'$   
 $R = 150.00'$   
 $e = \text{NORMAL CROWN}$

-Y- CURVE DATA  
CURVE 1  
PI -Y- Sta 10+59.20  
 $\Delta = 1^{\circ} 34' 36.8''$  (LT)  
 $D = 1^{\circ} 19' 55.3''$   
 $L = 118.38'$   
 $T = 59.20'$   
 $R = 4,301.42'$   
 $e = \text{NORMAL CROWN}$

-L- CURVE DATA  
CURVE 1  
PI -L- Sta 22+24.77  
 $\Delta = 22^{\circ} 24' 19.9''$  (LT)  
 $D = 2^{\circ} 56' 17.7''$   
 $L = 762.55'$   
 $T = 386.21'$   
 $R = 1,950.00'$   
 $e = 04\%$   
 $\text{RUNOFF} = 107'$

-L- CURVE DATA  
CURVE 2  
PI -L- Sta 28+52.56  
 $\Delta = 5^{\circ} 50' 04.8''$  (RT)  
 $D = 2^{\circ} 30' 00.0''$   
 $L = 233.39'$   
 $T = 116.79'$   
 $R = 2,291.83'$   
 $e = \text{EXISTING}$



\* DESIGN EXCEPTION FOR SUPERELEVATION RATE  
 $e = 04\%$

5/14/99  
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