

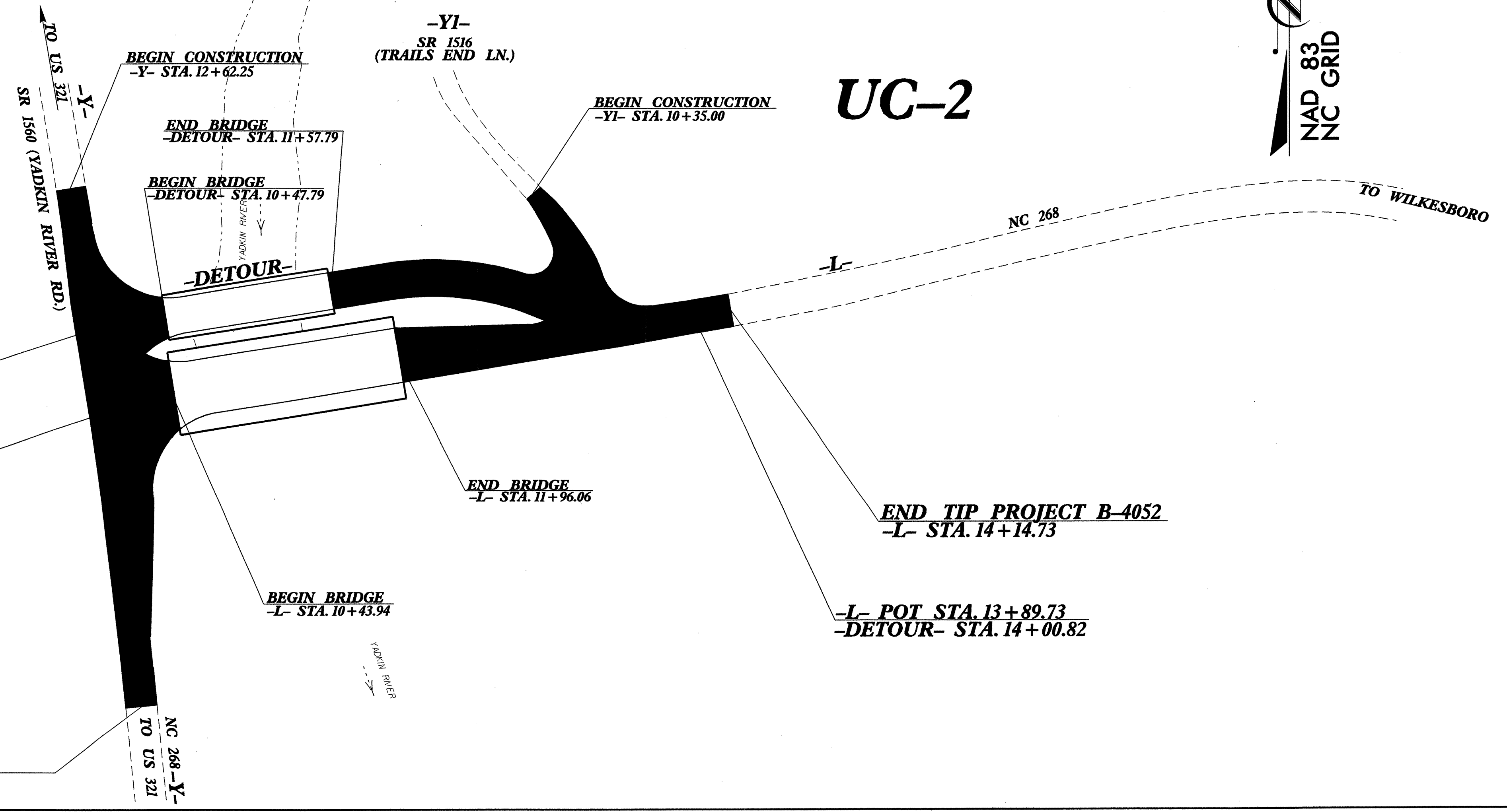
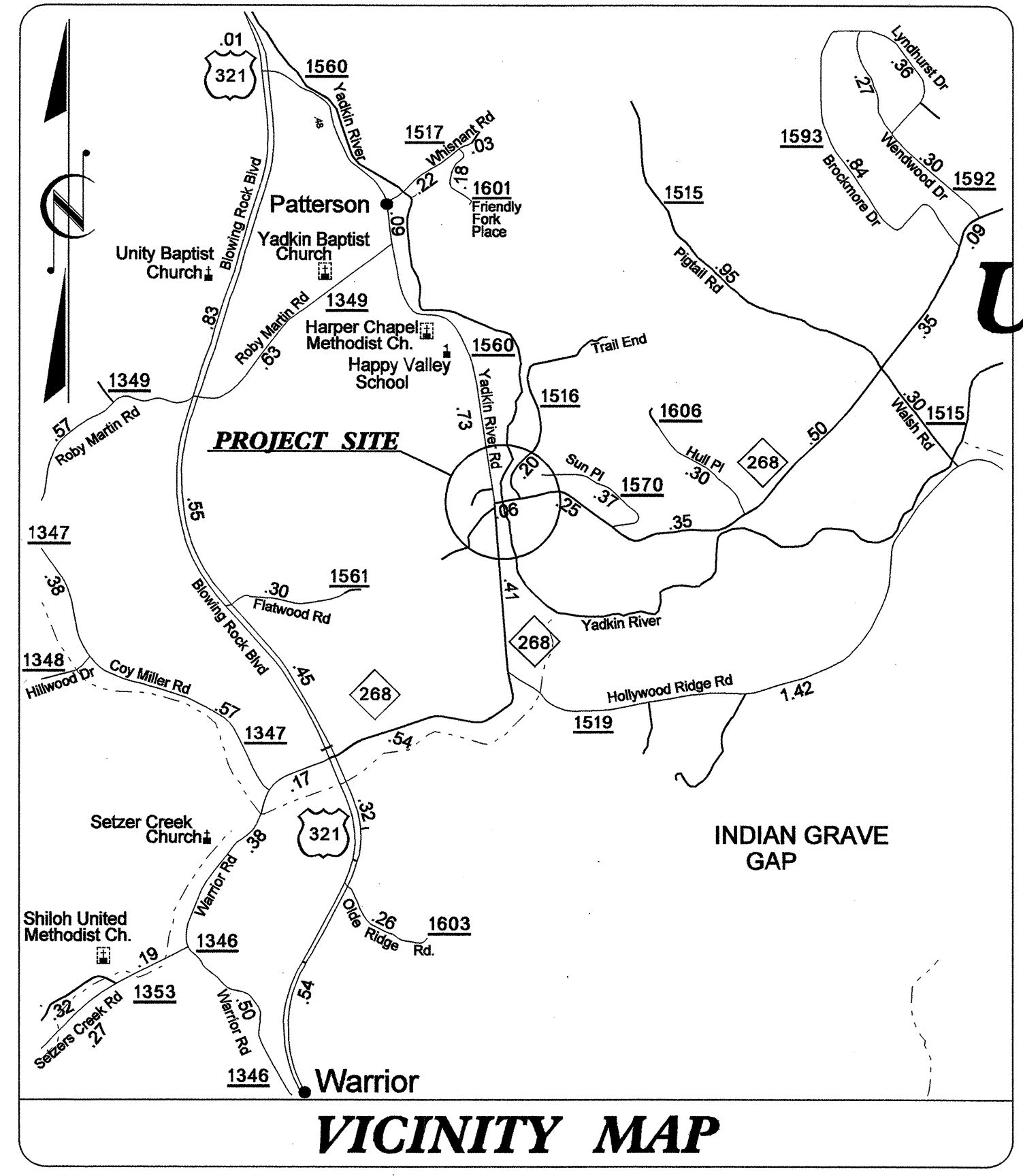
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
CALDWELL COUNTY**

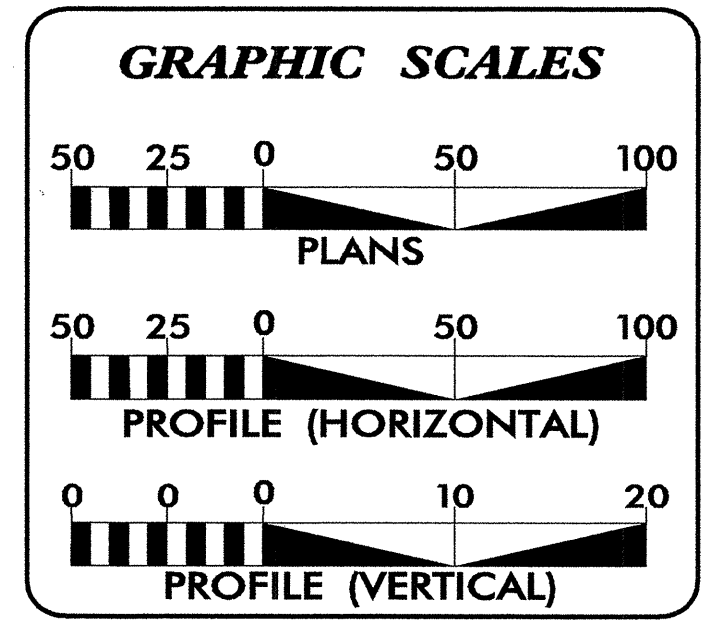
LOCATION: BRIDGE NO.7 OVER YADKIN ON NC 268

TYPE OF WORK: RELOCATION OF WATER LINES

UC-2



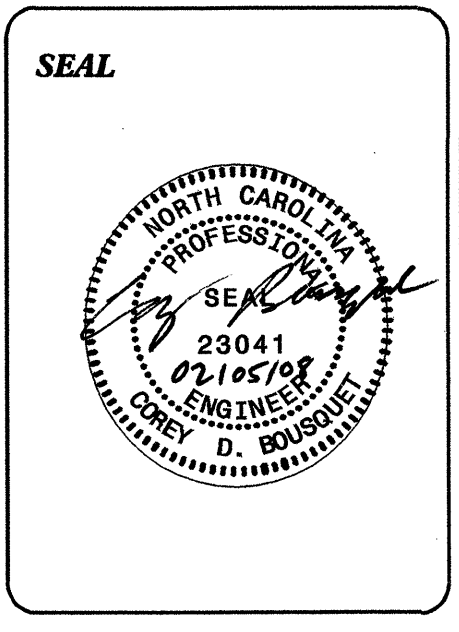
TIP PROJECT: B-4052



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY CONSTRUCTION PLAN SHEET
UC-3	DETAILS SHEET

WATER AND SEWER OWNERS ON PROJECT

(1) WATER: CALDWELL COUNTY WATER



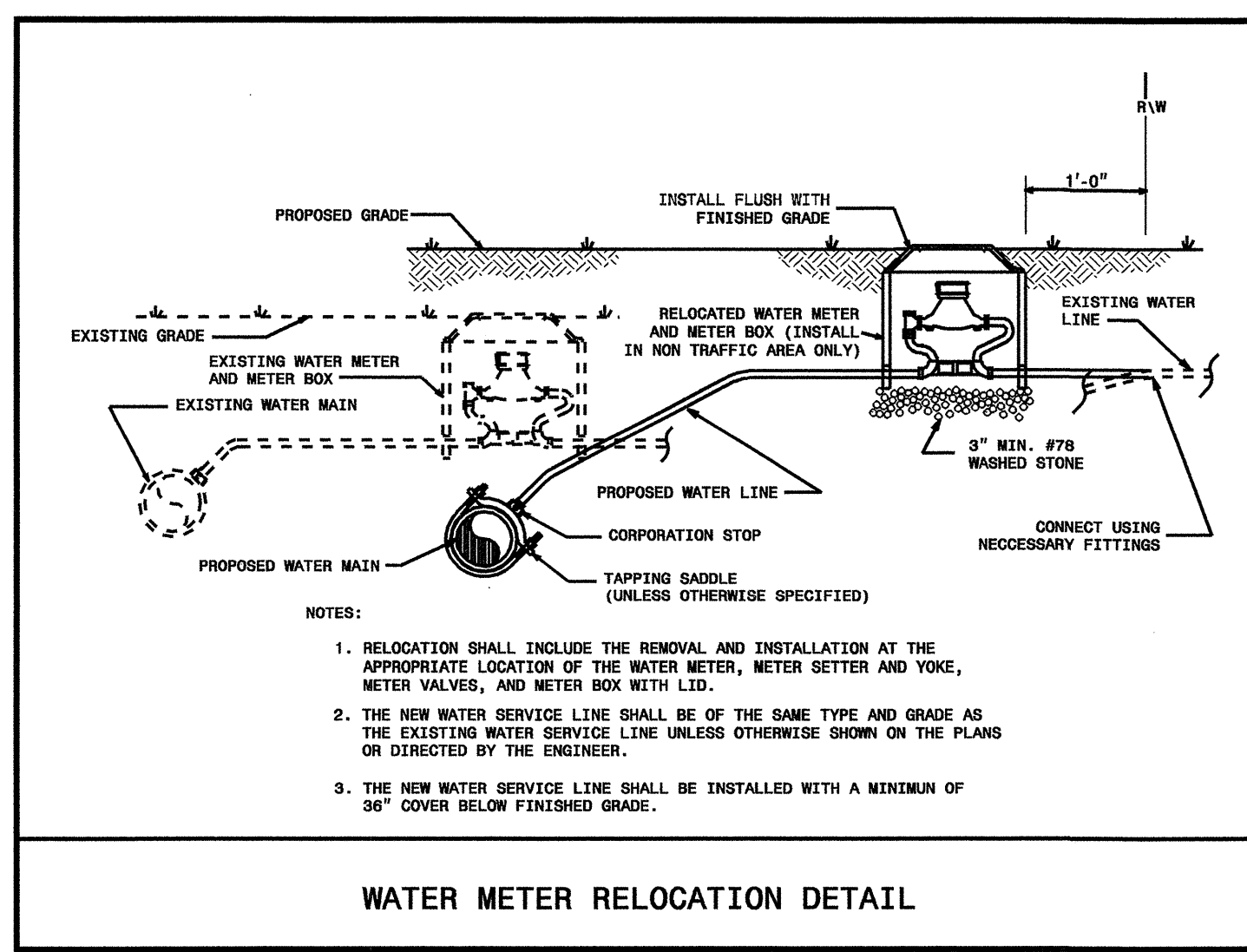
PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
PROJECT SERVICES
UTILITY SECTION**

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

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Kifah Kamil UTILITIES PROJECT DESIGNER

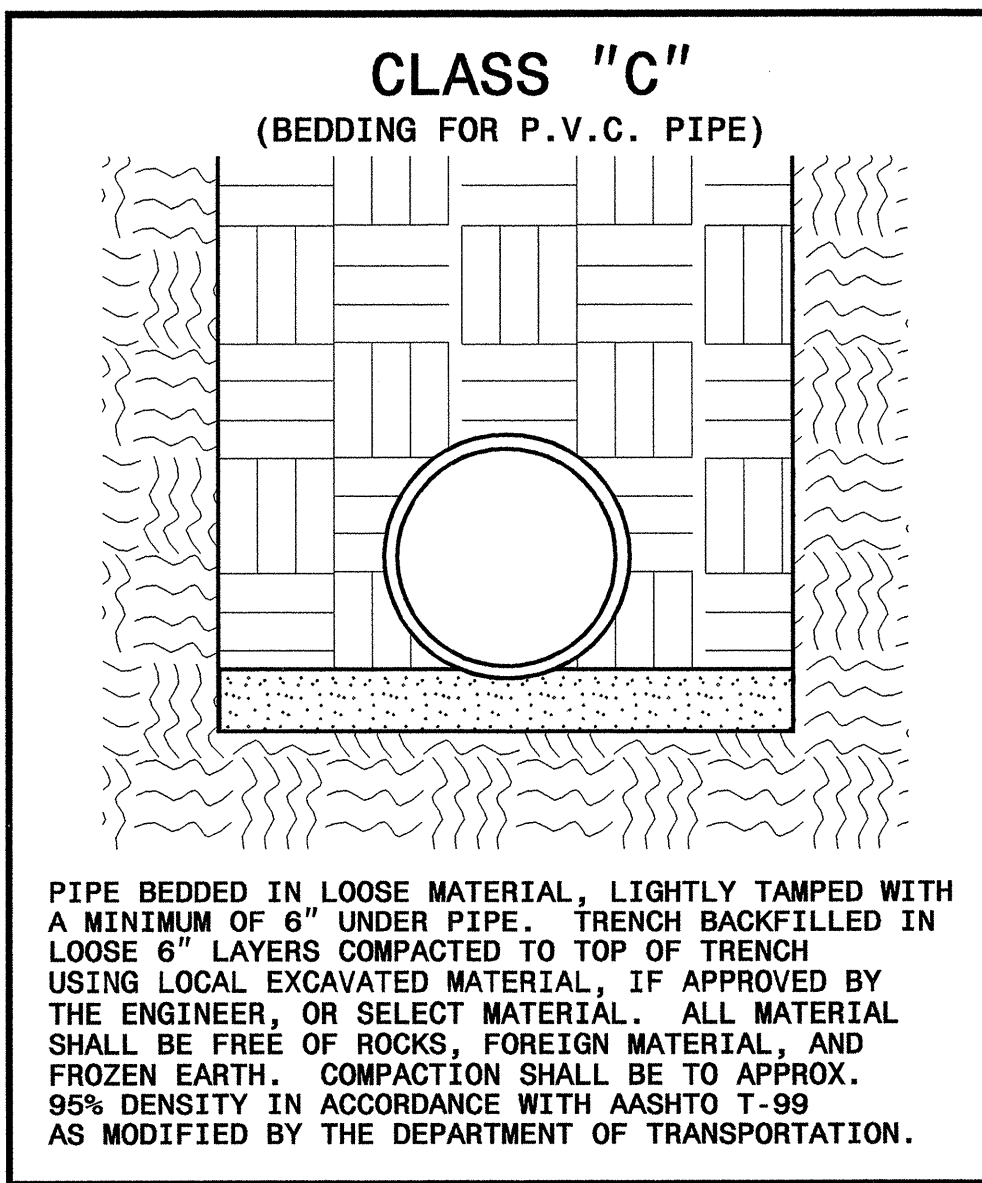
PROJECT REFERENCE NO.	SHEET NO.
B-4052	UC-3
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PROJECT SERVICES UNIT PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

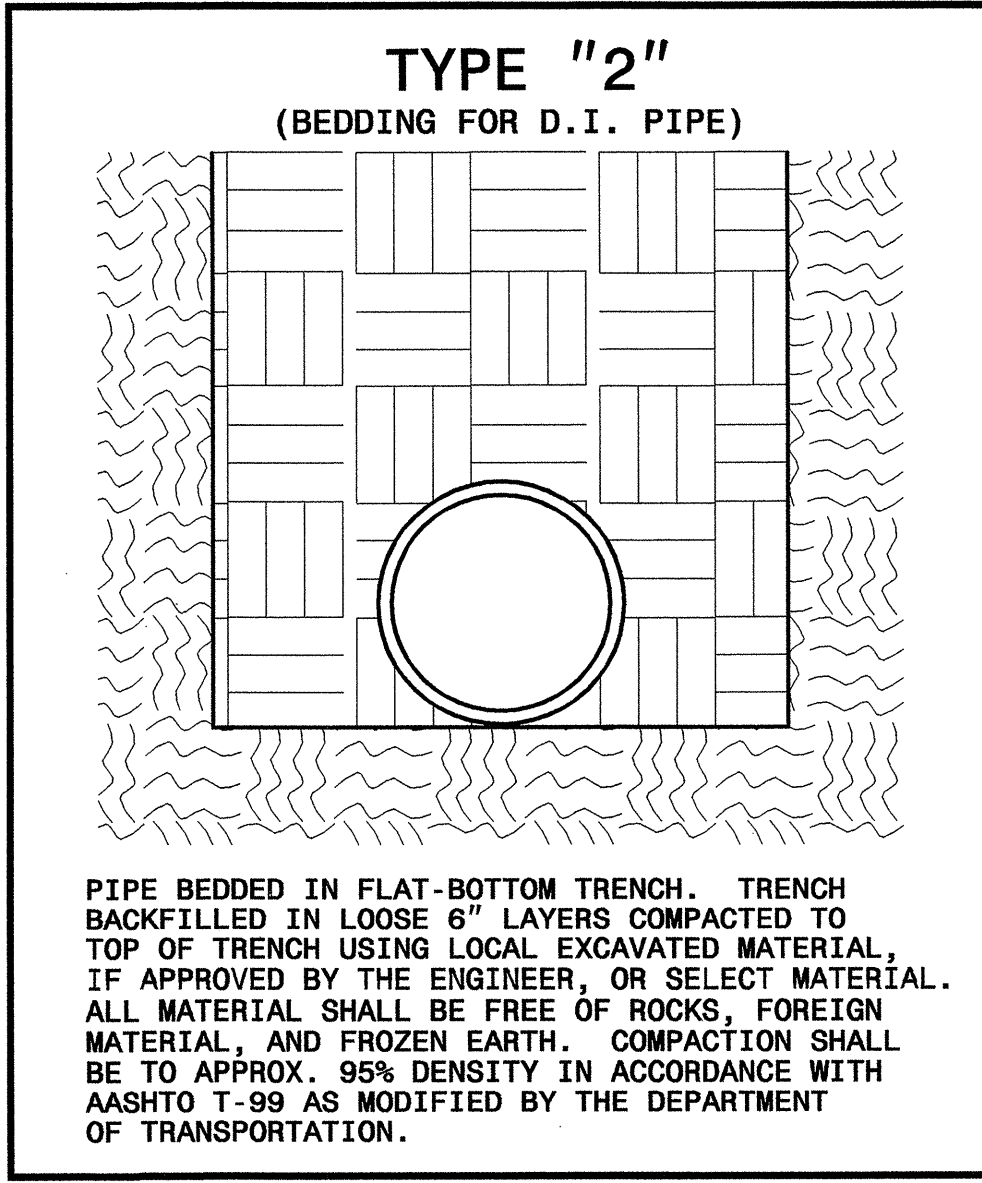


- NOTES:
1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE APPROPRIATE LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID.
 2. THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
 3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

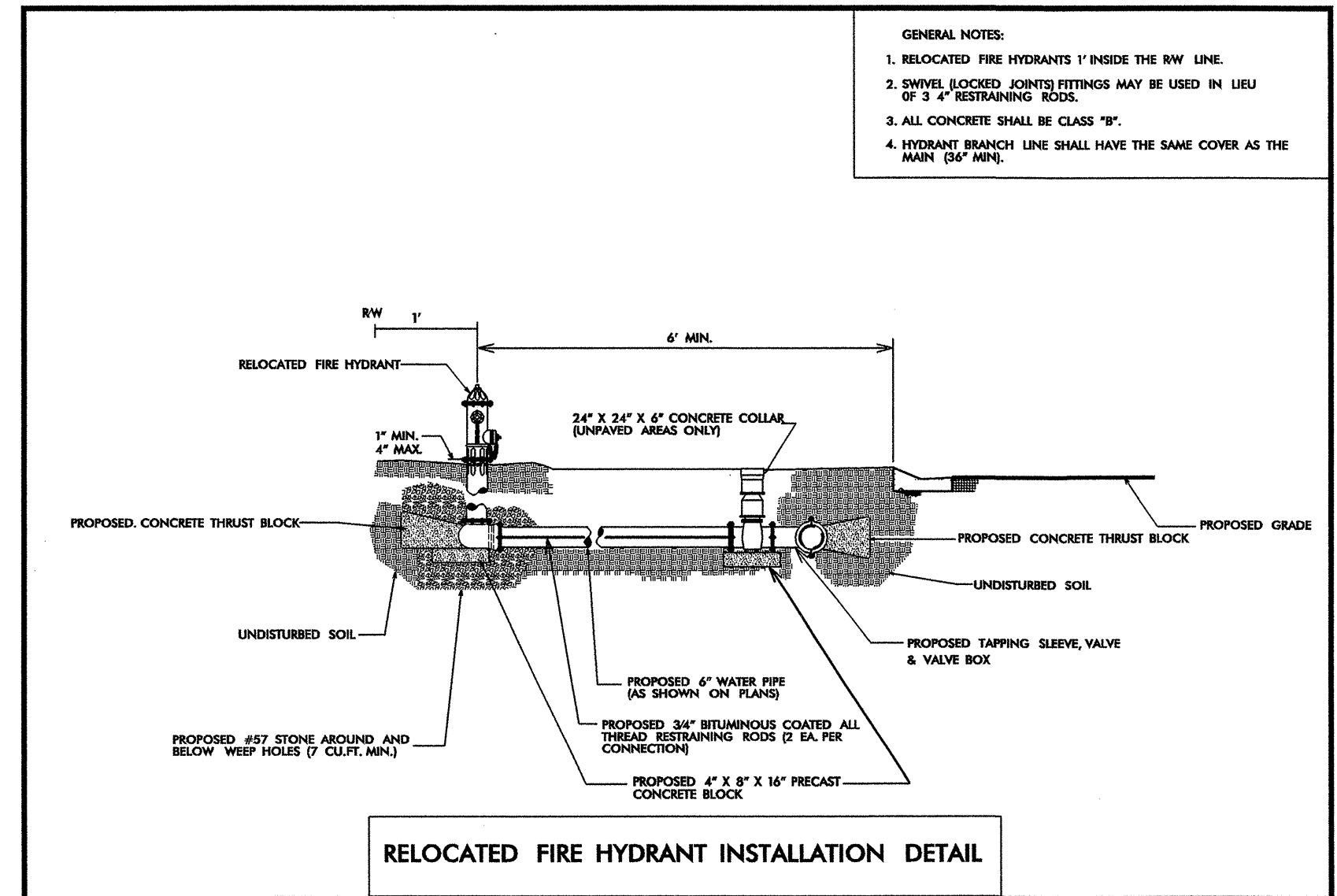
WATER METER RELOCATION DETAIL



PIPE BEDDED IN LOOSE MATERIAL, LIGHTLY TAMPED WITH A MINIMUM OF 6" UNDER PIPE. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL, IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROX. 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

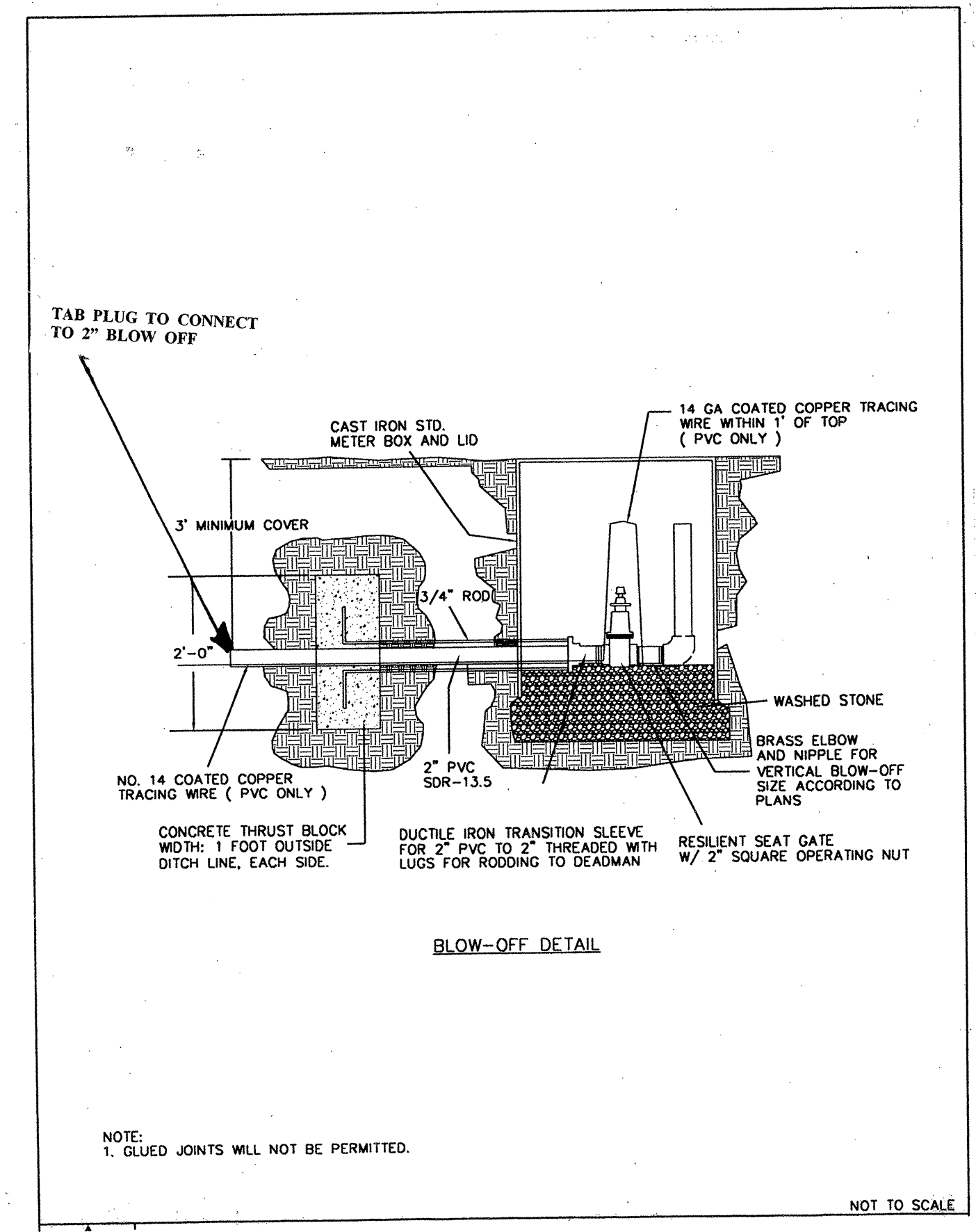


PIPE BEDDED IN FLAT-BOTTOM TRENCH. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL, IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROX. 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.



- GENERAL NOTES:
1. RELOCATED FIRE HYDRANTS 1' INSIDE THE RW LINE.
 2. SWIVEL LOCKED JOINTS FITTINGS MAY BE USED IN LIEU OF 3" X 4" RESTRAINING RODS.
 3. ALL CONCRETE SHALL BE CLASS "B".
 4. HYDRANT BRANCH LINE SHALL HAVE THE SAME COVER AS THE MAIN (36" MIN).

RELOCATED FIRE HYDRANT INSTALLATION DETAIL



- NOTE:
 1. GLUED JOINTS WILL NOT BE PERMITTED.

NOT TO SCALE

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		

09/08/09

T.I.P. NO.	SHEET NO.
B-4052	UO-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

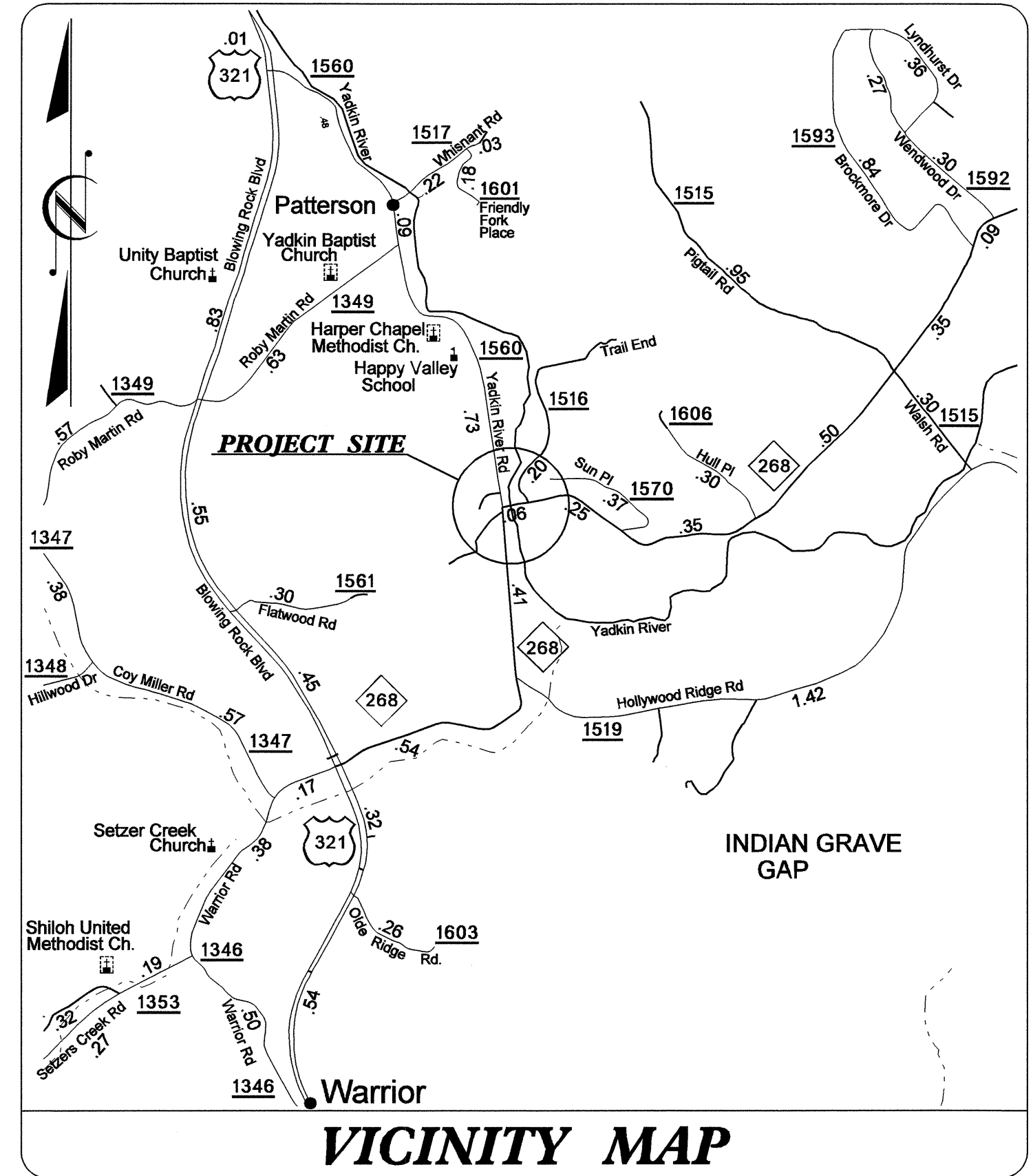
**UTILITY BY OTHERS PLANS
CALDWELL COUNTY**

LOCATION: BRIDGE NO.7 OVER YADKIN ON NC 268

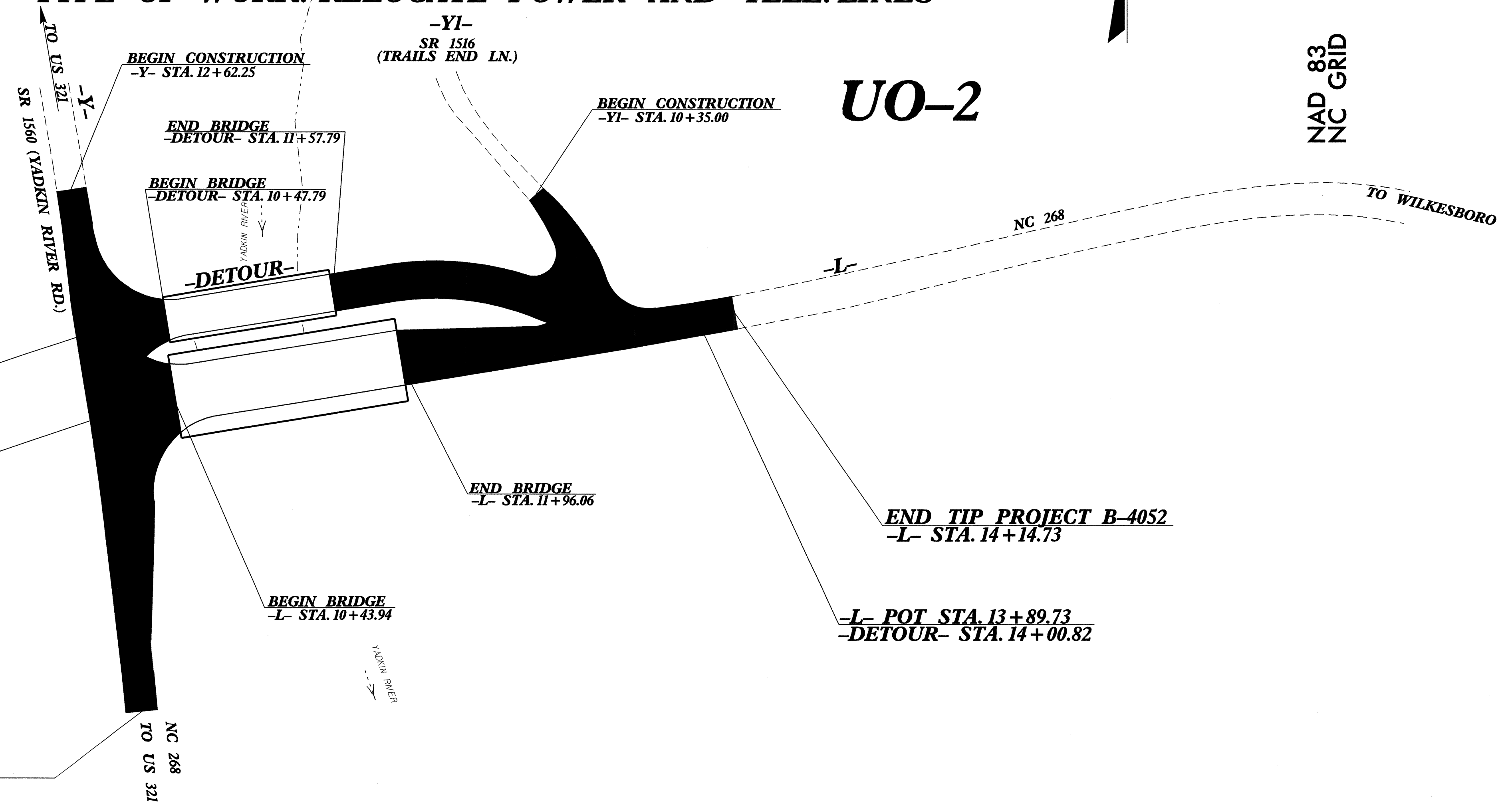
TYPE OF WORK: RELOCATE POWER AND TELE. LINES

UO-2

NAD 83
N/C GRID



TIP PROJECT: B-4052



BEGIN TIP PROJ B-4052
-L- STA. 10+00.00
-Y- STA. 14+11.25

-Y- STA. 13+56.25
-DETOUR- STA. 10+00.00

END CONSTRUCTION
-Y- STA. 16+05.36

BEGIN BRIDGE
-L- STA. 10+43.94

BEGIN BRIDGE
-DETOUR- STA. 10+47.79

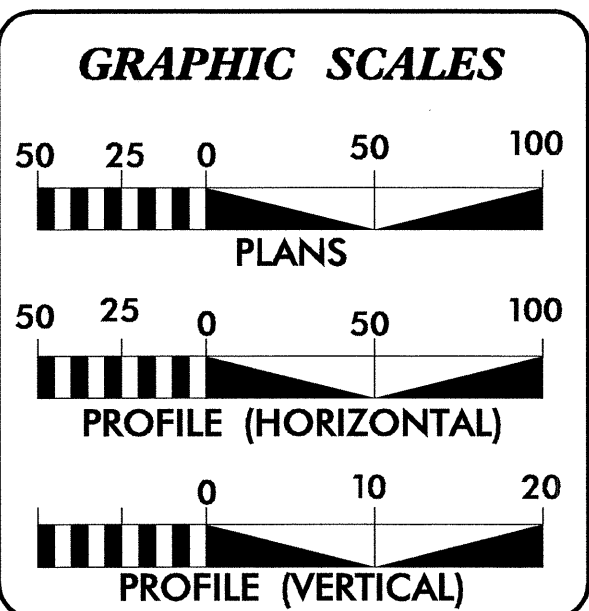
END BRIDGE
-DETOUR- STA. 11+57.79

BEGIN CONSTRUCTION
-YI- STA. 10+35.00

-YI-
SR 1516
(TRAILS END LN.)

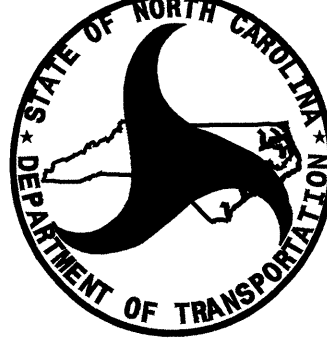
END TIP PROJECT B-4052
-L- STA. 14+14.73

-L- POT STA. 13+89.73
-DETOUR- STA. 14+00.82



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

UTILITY OWNERS ON PROJECT
(1) BLUE RIDGE EMC
(2) AT & T OF NC

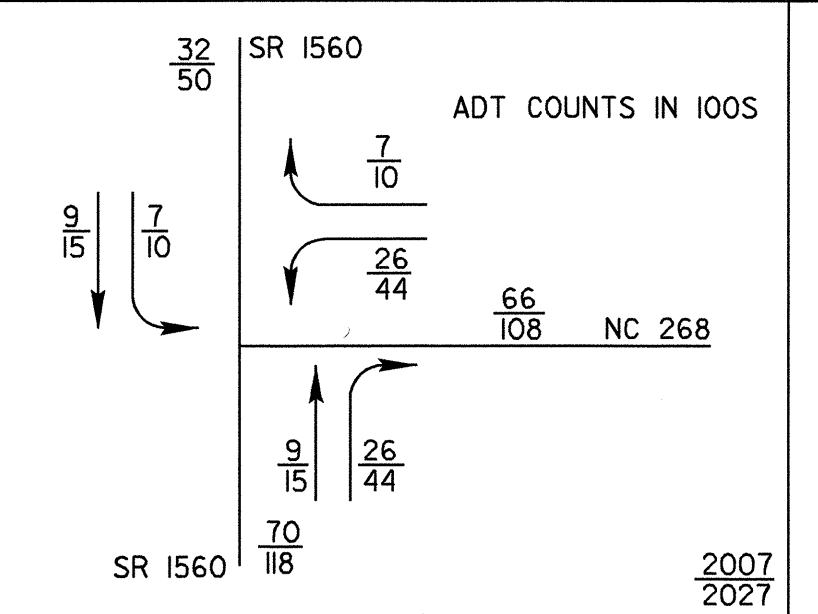

 PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
DESIGN SERVICES
UTILITY SECTION**
 1591 MAIL SERVICES CENTER
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 Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
 Kifah Kamil UTILITIES PROJECT DESIGNER

04-FEB-2008 15:35
G:\UTILITIES\CDV\UT\proj\b4052_uo_uo1_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

UTILITIES BY OTHERS

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



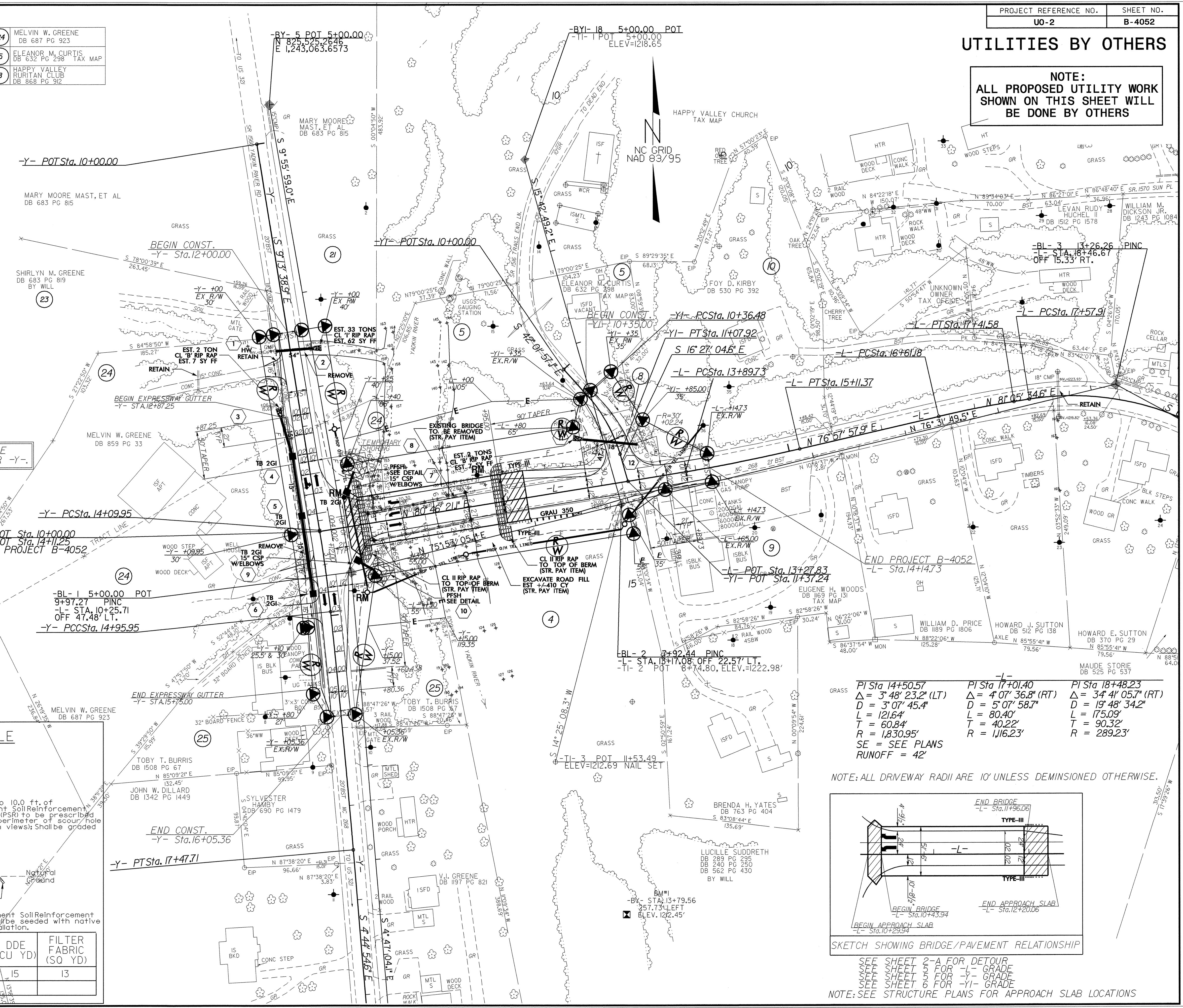
- 24 MELVIN W. GREENE
DB 687 PG 923
- 5 ELEANOR M. CURTIS
DB 632 PG 298 TAX MAP
- 8 HAPPY VALLEY RURITAN CLUB
DB 868 PG 912

PI Sta 14+52.96 Δ = 3' 11" 58.7" (RT)
D = 3' 43' 13.8"
L = 86.00'
T = 43.01'
R = 1,540.00'
SE = .04
RO = 126

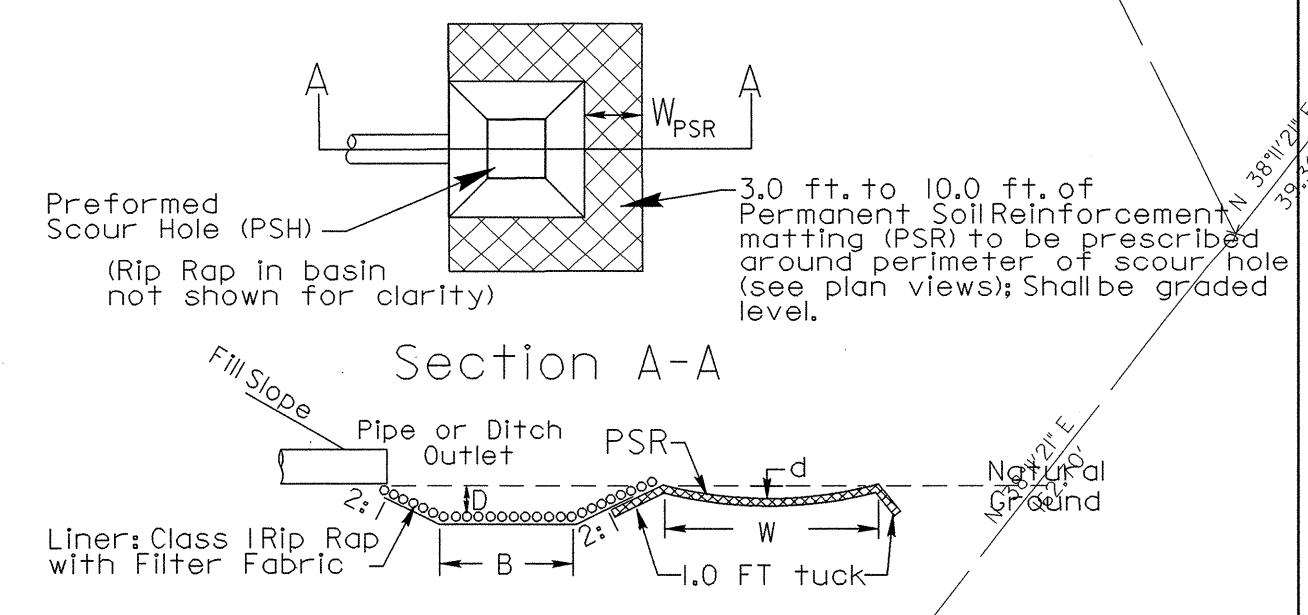
PI Sta 16+21.84 Δ = 1' 16" 45.7" (RT)
D = 0' 30' 29.4"
L = 251.76'
T = 125.89'
R = 11,275.00'
SE = .04
RO = 126

PI Sta 10+72.80 Δ = 25' 34' 52.5" (RT)
D = 35' 48' 35.5"
L = 71.44'
T = 36.32'
R = 160.00'

NOTE: A DESIGN EXCEPTION IS REQUIRED FOR THE PROPOSED LANE AND SHOULDER WIDTH FOR -Y-.



PREFORMED SCOUR HOLE
(Not to scale)



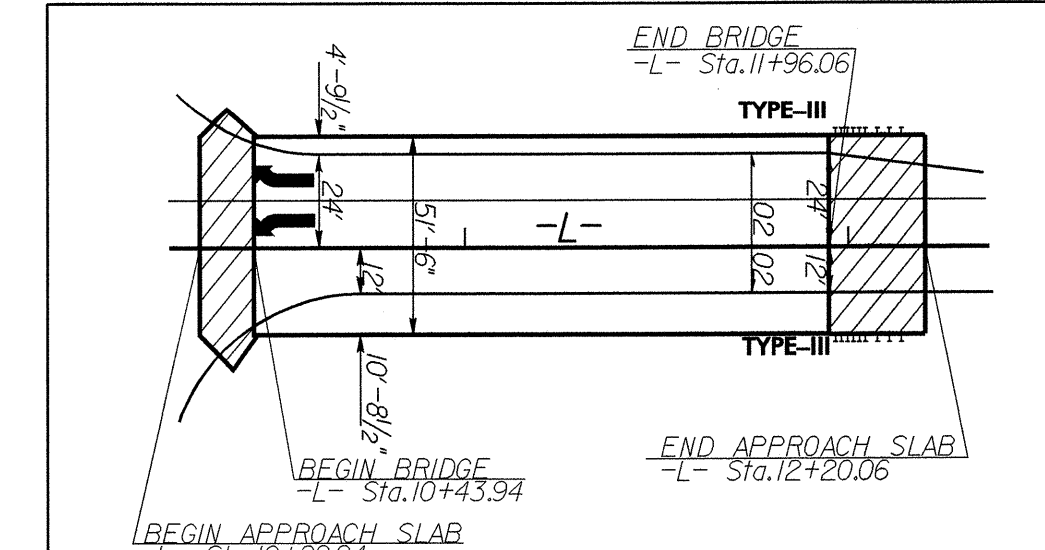
STATION	B FT.	D FT.	W _{PSR} FT.	d FT.	CLASS I RIP RAP TONS	DDE (CU YD)	FILTER FABRIC (SQ YD)
At 15' Pipes	4	1.5	5	0.5	9	15	13

PI Sta 14+50.57 Δ = 3' 48" 23.2" (LT)
D = 3' 07' 45.4"
L = 121.64'
T = 60.84'
R = 1,830.95'
SE = SEE PLANS
RUNOFF = 42'

PI Sta 17+01.40 Δ = 4' 07' 36.8" (RT)
D = 5' 07' 58.7"
L = 80.40'
T = 80.40'
R = 1,116.23'

PI Sta 18+48.23 Δ = 3' 41' 05.7" (RT)
D = 19' 48' 34.2"
L = 175.09'
T = 90.22'
R = 289.23'

NOTE: ALL DRIVEWAY RADII ARE 10' UNLESS DIMENSIONED OTHERWISE.



SEE SHEET 2-A FOR DETOUR
SEE SHEET 5 FOR -L- GRADE
SEE SHEET 5 FOR -Y- GRADE
SEE SHEET 6 FOR -YI- GRADE
NOTE: SEE STRUCTURE PLANS FOR APPROACH SLAB LOCATIONS

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