

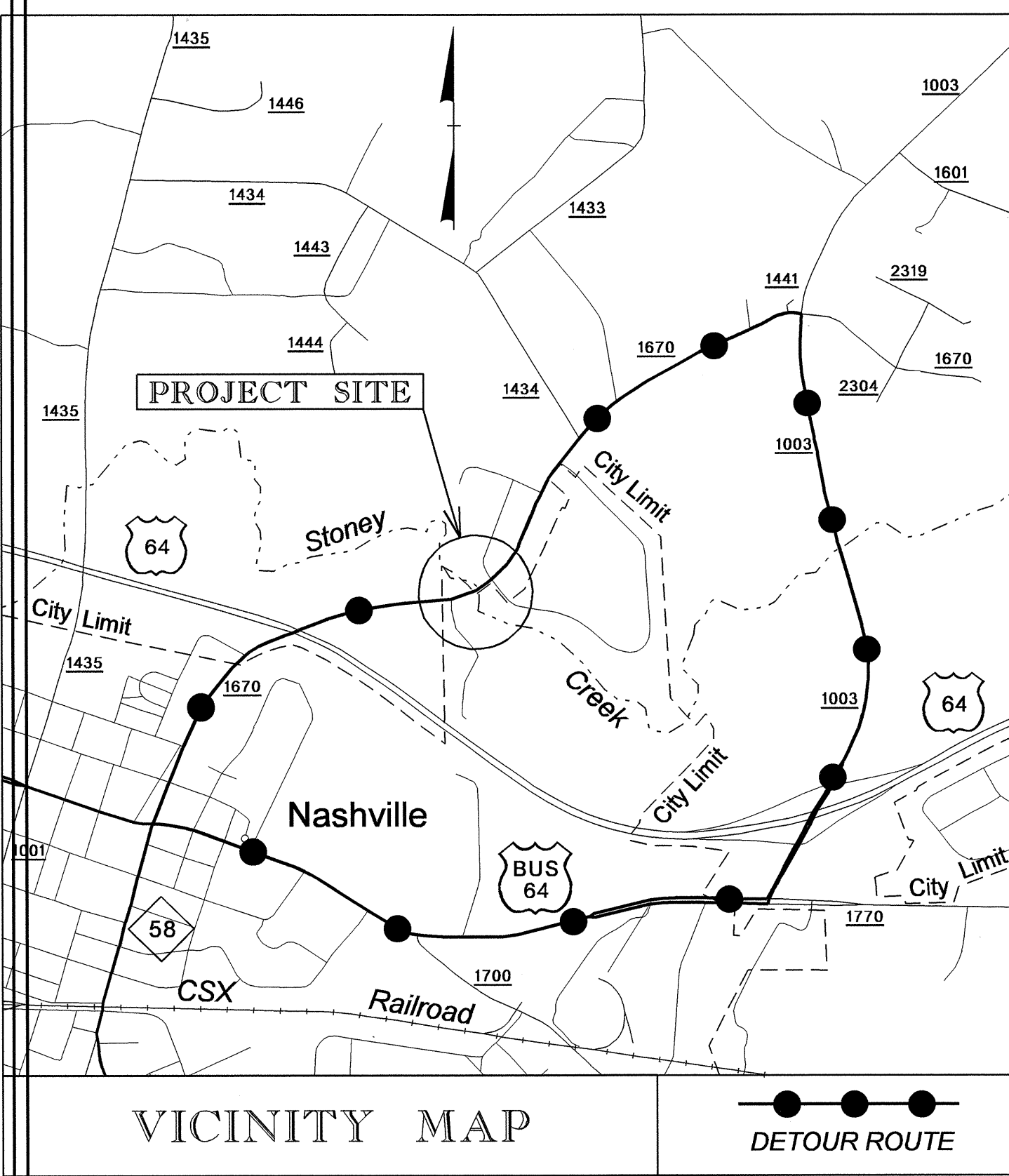
T.I.P. NO.	SHEET NO.
B-4588	UC-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

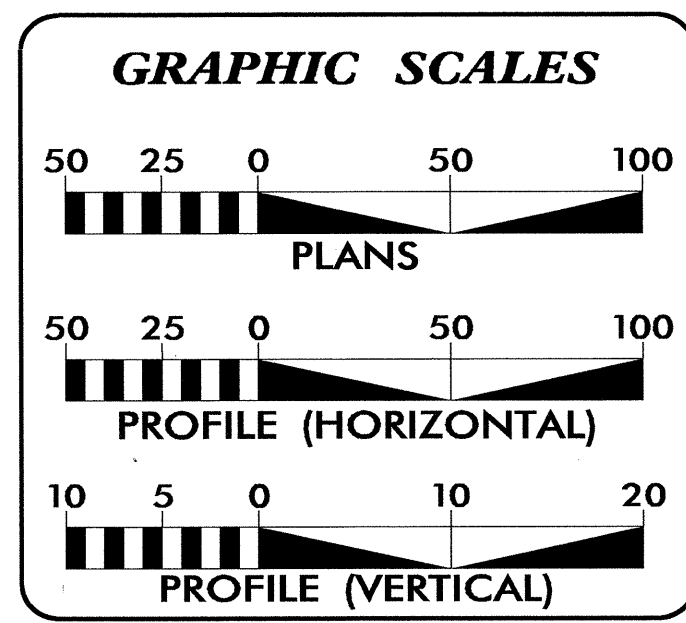
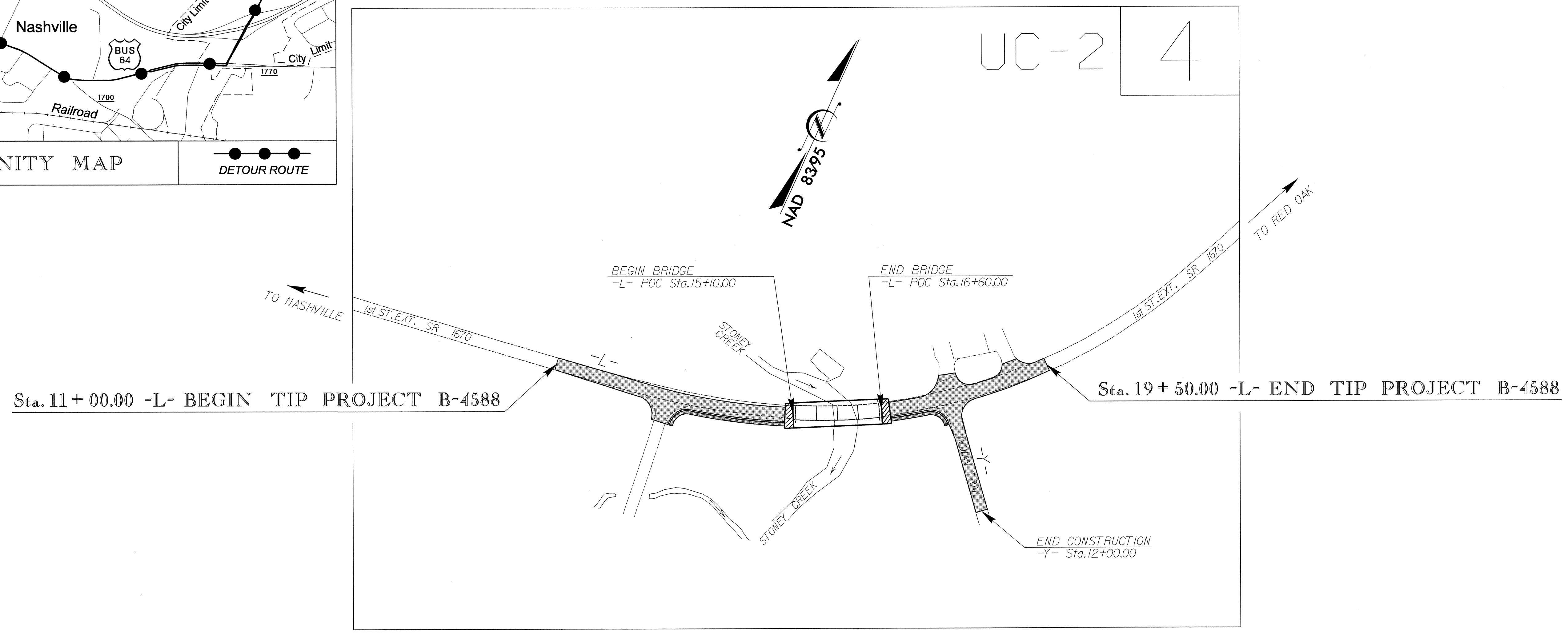
**UTILITY CONSTRUCTION PLANS
NASH COUNTY**

LOCATION: BRIDGE NO.1 OVER STONEY CREEK ON SR 1670
TYPE OF WORK: RELOCATION OF WATER LINE

TIP PROJECT: B-4588



UC-2 4

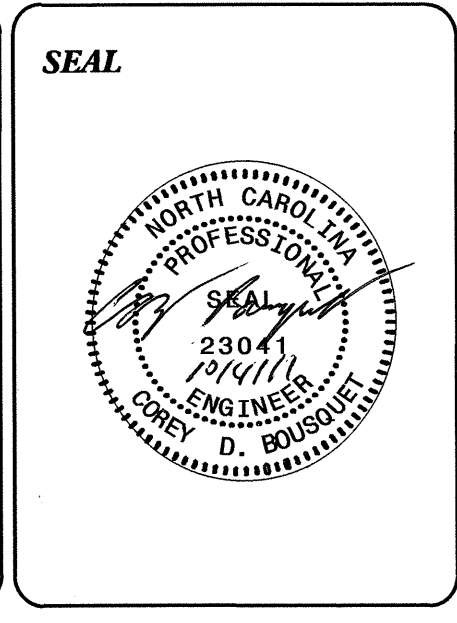


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY CONSTRUCTION PLAN SHEET
UC-3 THRU UC-5	PROFILE SHEETS
UC-6	DETAILS SHEET

WATER AND SEWER OWNERS ON PROJECT

(1) TOWN OF NASHVILLE UTILITIES (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
Kifah Kamil UTILITIES PROJECT DESIGNER

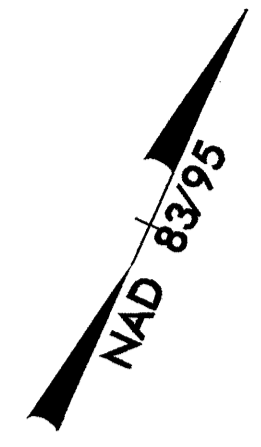
04-OCT-2011 10:06 R:\Utilities\RDY\UT\Proj\B4588_rdy_UT_uc.tsh.dgn \$\$\$USERNAME\$\$\$

5/14/99

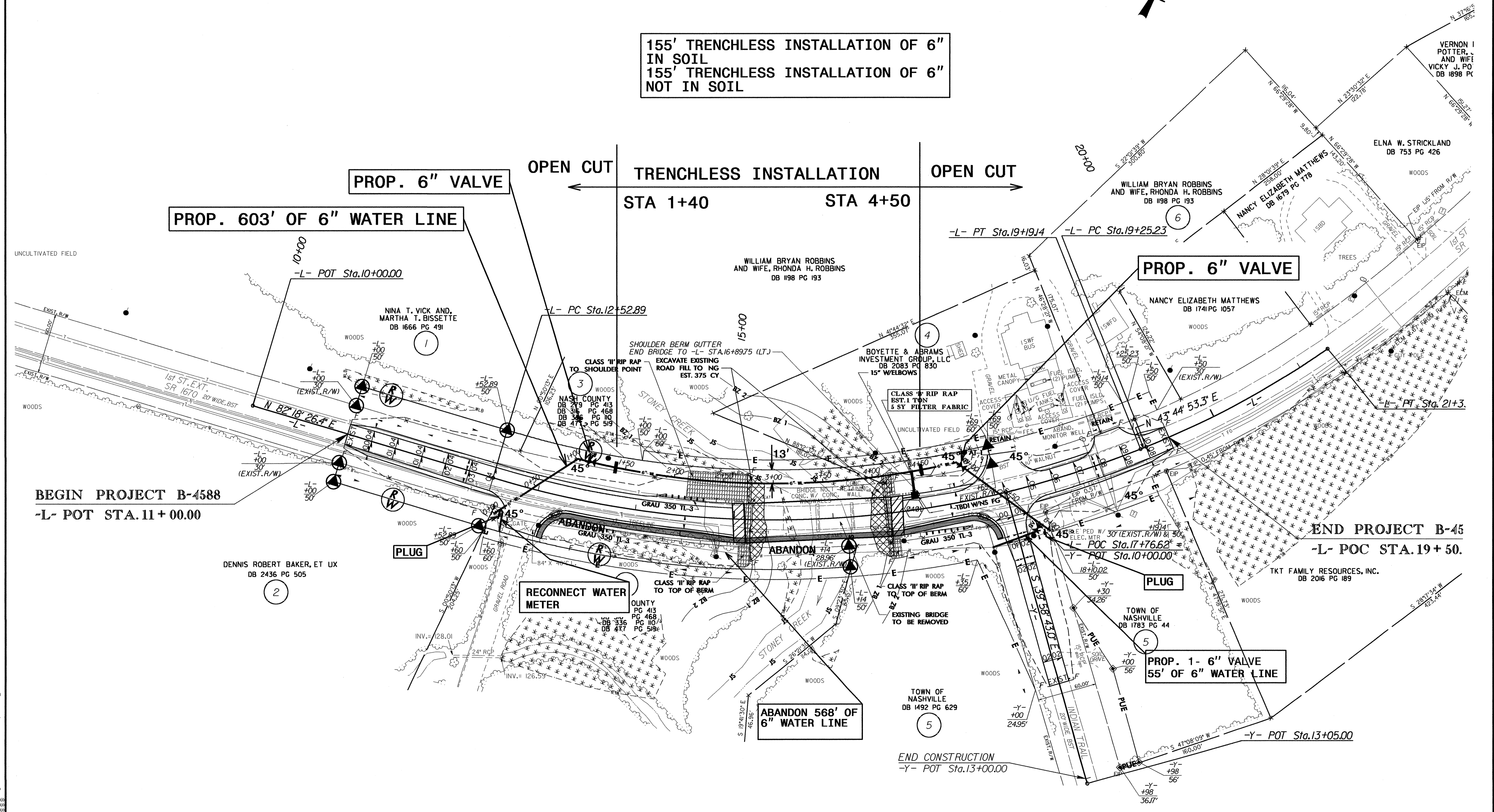
PROJECT REFERENCE NO. B-4588	SHEET NO. UC-2
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

-L- CURVE DATA

PI Sta 15+99.18	PI Sta 20+29.90
$\Delta = 38^{\circ} 33' 33.1''$ (LT)	$\Delta = 13^{\circ} 10' 02.1''$ (LT)
$D = 5^{\circ} 47' 14.8''$	$D = 6^{\circ} 19' 02.7''$
$L = 666.26'$	$L = 208.43'$
$T = 346.30'$	$T = 104.67'$
$R = 990.00'$	$R = 906.95'$
SE = SEE PLAN	SE = SEE PLAN



155' TRENCHLESS INSTALLATION OF 6" IN SOIL
155' TRENCHLESS INSTALLATION OF 6" NOT IN SOIL



BEGIN PROJECT B-4588
 -L- POT STA. 11 + 00.00

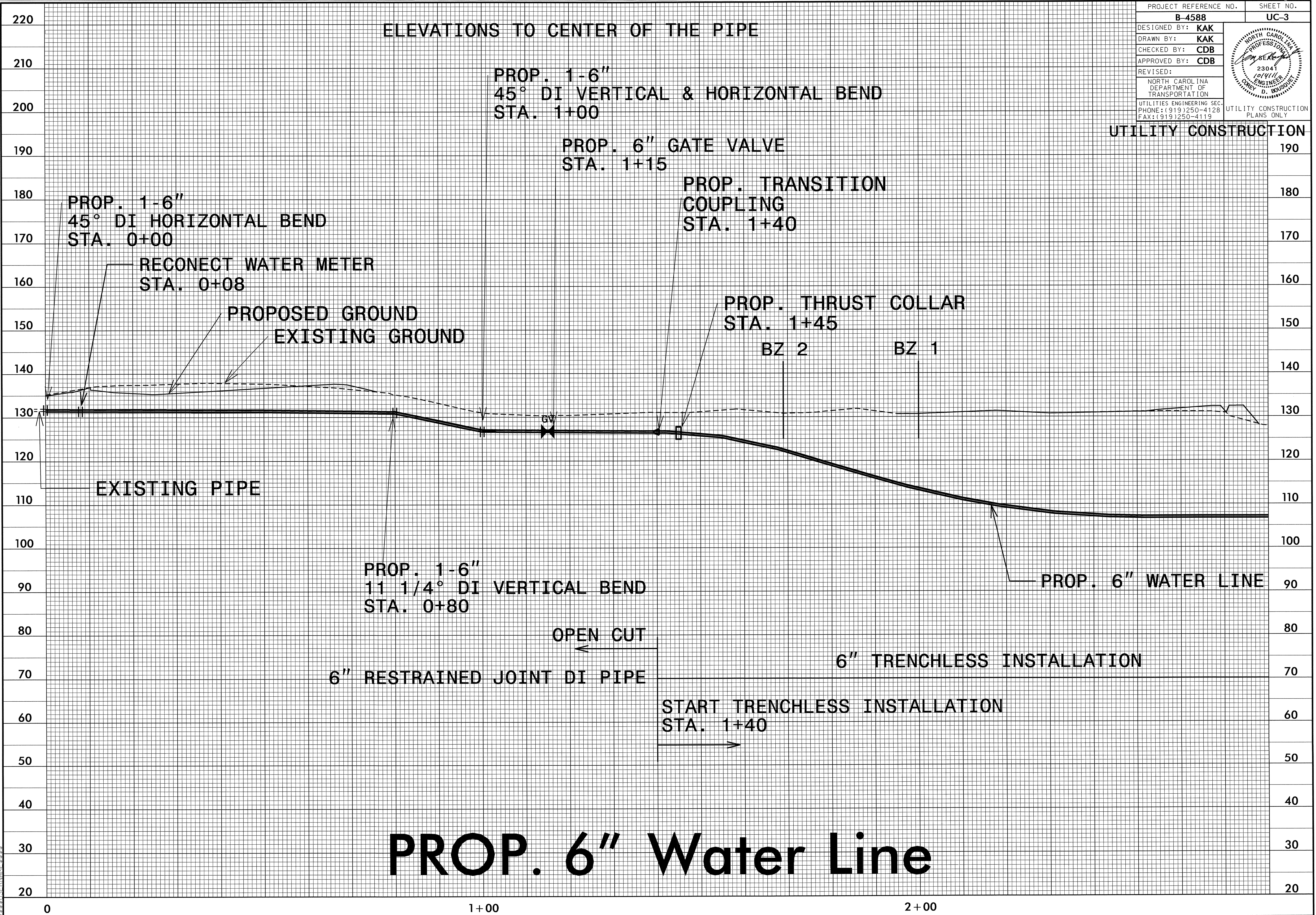
END PROJECT B-45
 -L- POC STA. 19 + 50.

R:\Ut\04-001\2011\6153\c\B4588_Ut_UC2.psd.dgn
 5/14/99 10:53:38 AM
 11/15/16 10:53:38 AM

5/14/99

PROJECT REFERENCE NO. B-4588	SHEET NO. UC-3
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

ELEVATIONS TO CENTER OF THE PIPE



PROP. 1-6"
45° DI HORIZONTAL BEND
STA. 0+00

RECONNECT WATER METER
STA. 0+08

PROPOSED GROUND
EXISTING GROUND

EXISTING PIPE

PROP. 1-6"
11 1/4° DI VERTICAL BEND
STA. 0+80

OPEN CUT

6" RESTRAINED JOINT DI PIPE

PROP. 1-6"
45° DI VERTICAL & HORIZONTAL BEND
STA. 1+00

PROP. 6" GATE VALVE
STA. 1+15

PROP. TRANSITION
COUPLING
STA. 1+40

PROP. THRUST COLLAR
STA. 1+45

BZ 2

BZ 1

PROP. 6" WATER LINE

6" TRENCHLESS INSTALLATION

START TRENCHLESS INSTALLATION
STA. 1+40

PROP. 6" Water Line

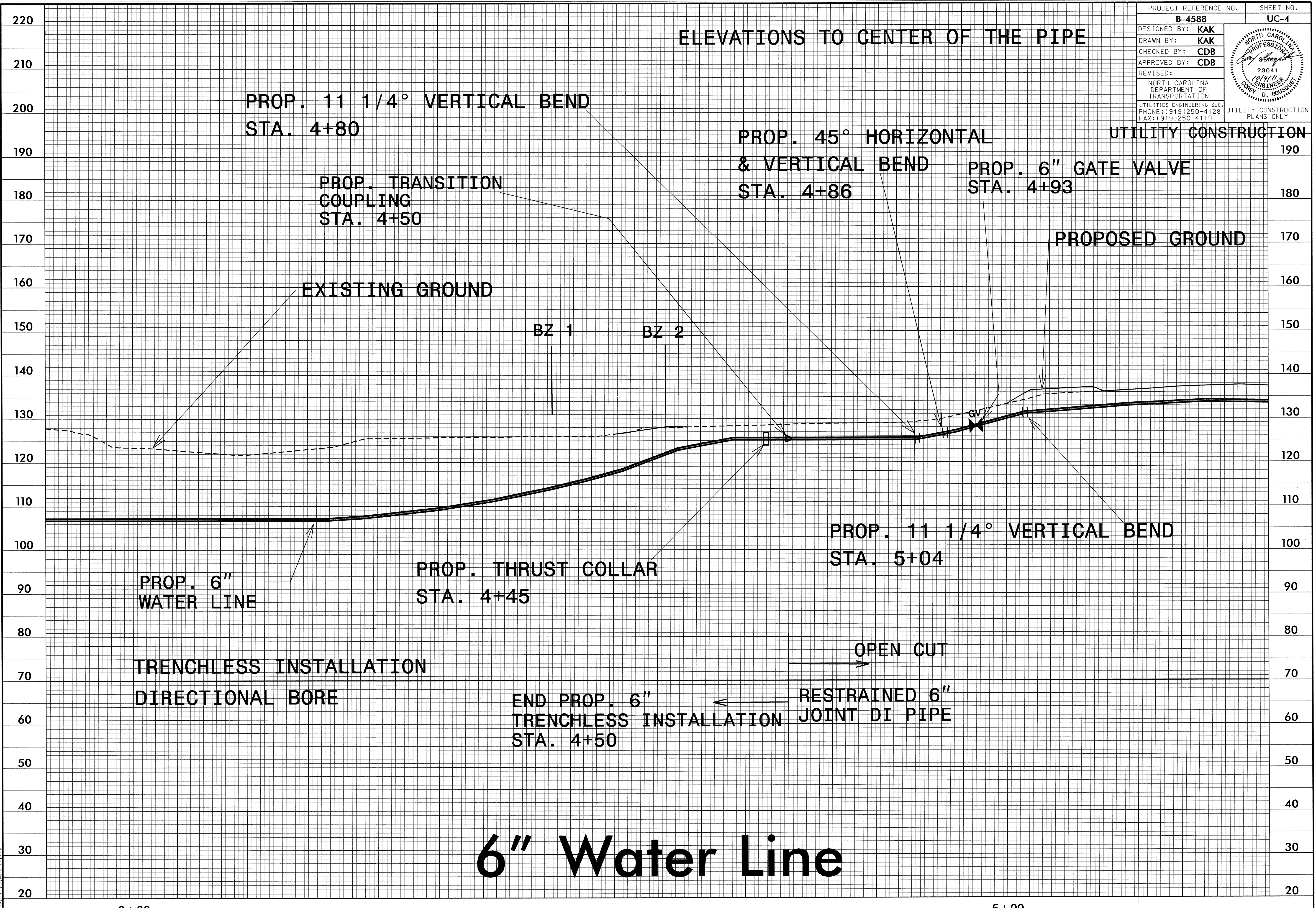
04-OCT-2001 12:02
 R:\Utilities\RD\U\Proj\B4588.p11.dgn
 \$\$\$\$FRANF\$\$\$

0 1+00 2+00

5/14/99

PROJECT REFERENCE NO. B-4588	SHEET NO. UC-4
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 250-4128 FAX: (919) 250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

ELEVATIONS TO CENTER OF THE PIPE



PROP. 11 1/4° VERTICAL BEND
STA. 4+80

PROP. TRANSITION
COUPLING
STA. 4+50

PROP. 45° HORIZONTAL
& VERTICAL BEND
STA. 4+86

PROP. 6" GATE VALVE
STA. 4+93

UTILITY CONSTRUCTION

EXISTING GROUND

PROPOSED GROUND

BZ 1

BZ 2

PROP. 6" WATER LINE

PROP. THRUST COLLAR
STA. 4+45

PROP. 11 1/4° VERTICAL BEND
STA. 5+04

TRENCHLESS INSTALLATION
DIRECTIONAL BORE

OPEN CUT

END PROP. 6" TRENCHLESS INSTALLATION
STA. 4+50

RESTRAINED 6" JOINT DI PIPE

6" Water Line

3+00

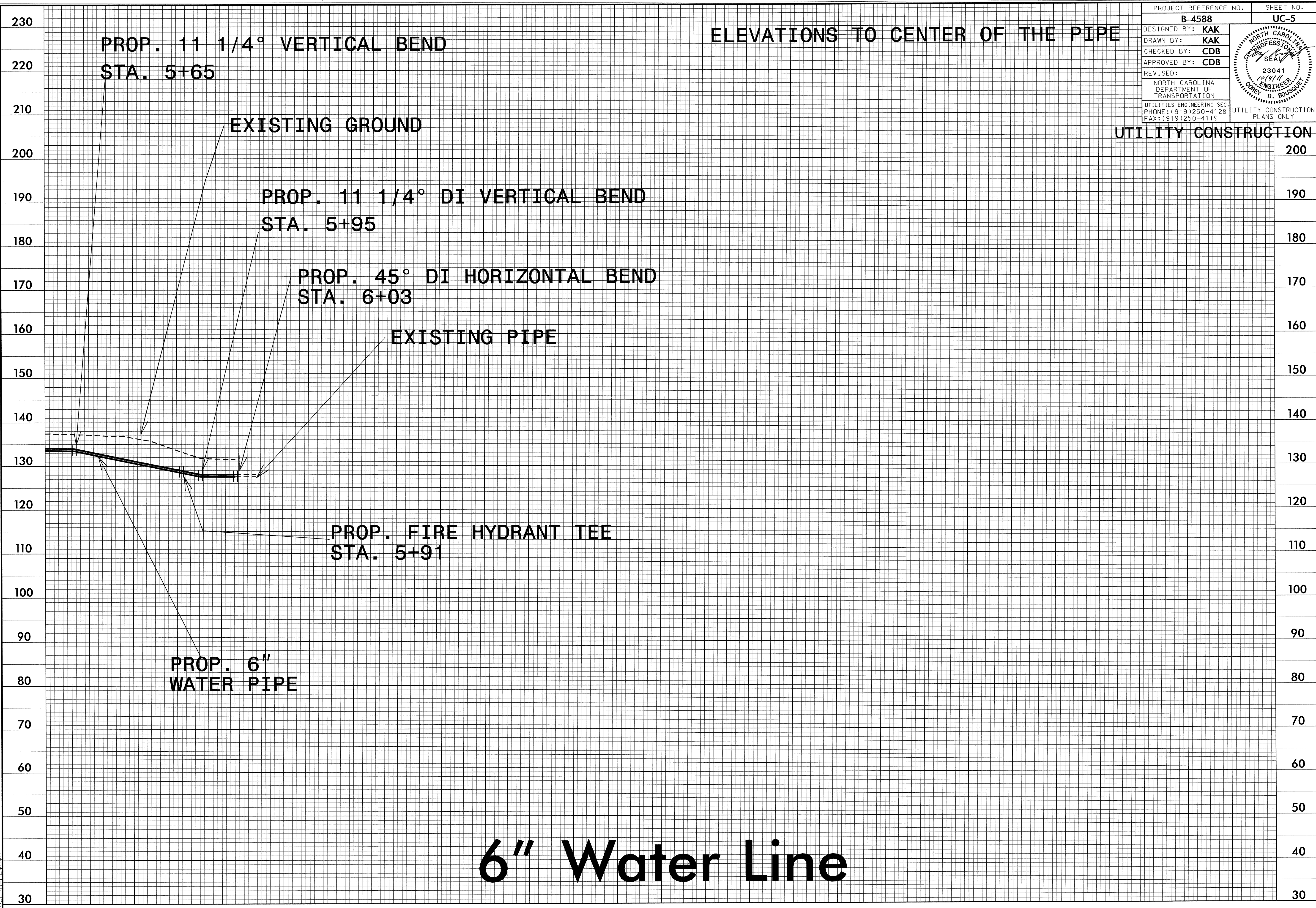
5+00

04-OCT-2011 2:28
R:\Utilities\NCDOT\Projects\B4588\p12.dgn

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-4588	UC-5
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)250-4128 FAX: (919)250-4119	
UTILITY CONSTRUCTION PLANS ONLY	

ELEVATIONS TO CENTER OF THE PIPE



PROP. 11 1/4° VERTICAL BEND
STA. 5+65

EXISTING GROUND

PROP. 11 1/4° DI VERTICAL BEND
STA. 5+95

PROP. 45° DI HORIZONTAL BEND
STA. 6+03

EXISTING PIPE

PROP. FIRE HYDRANT TEE
STA. 5+91

PROP. 6" WATER PIPE

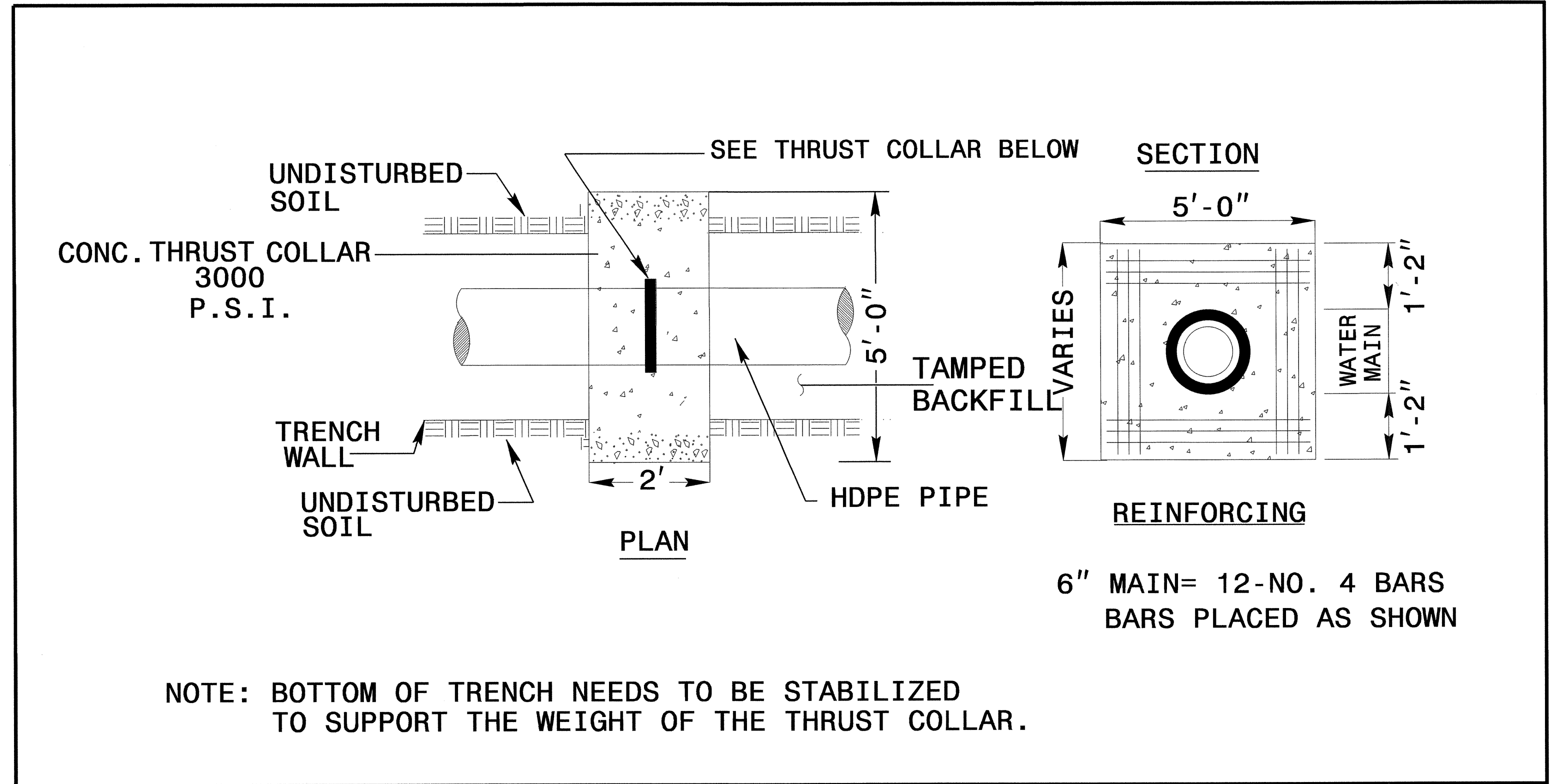
6" Water Line

6+00

04-OCT-2011 2:36
P:\Utilities\Nc\Ua\Proj\B4588.pf13.dgn

PROJECT REFERENCE NO. B-4588	SHEET NO. UC-6
DESIGNED BY: KAK	
DRAWN BY: KAK	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919)250-4128 FAX: (919)250-4119	

UTILITY CONSTRUCTION

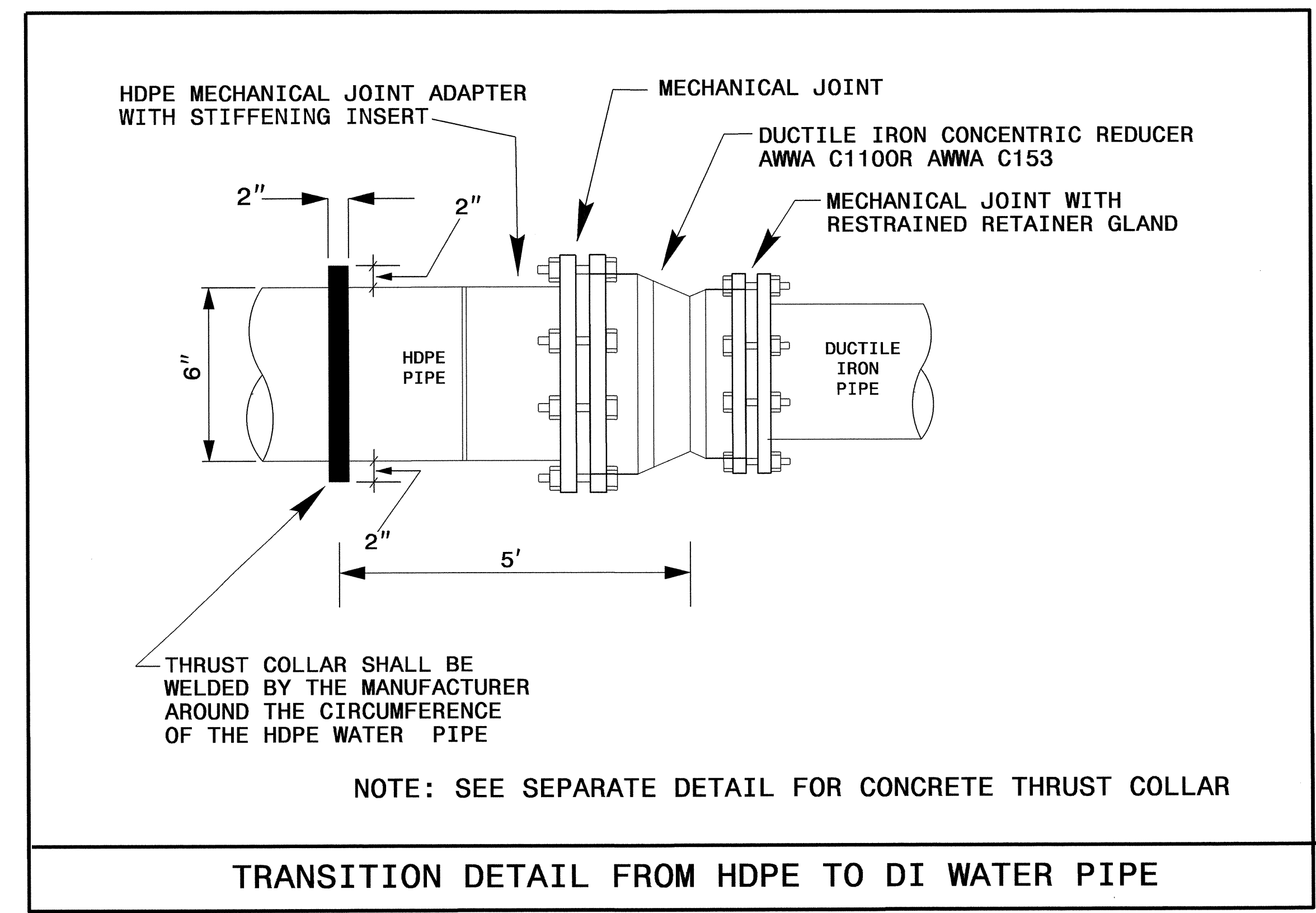


NOTE: BOTTOM OF TRENCH NEEDS TO BE STABILIZED TO SUPPORT THE WEIGHT OF THE THRUST COLLAR.

CONCRETE THRUST COLLAR DETAIL - 6" WATER LINES

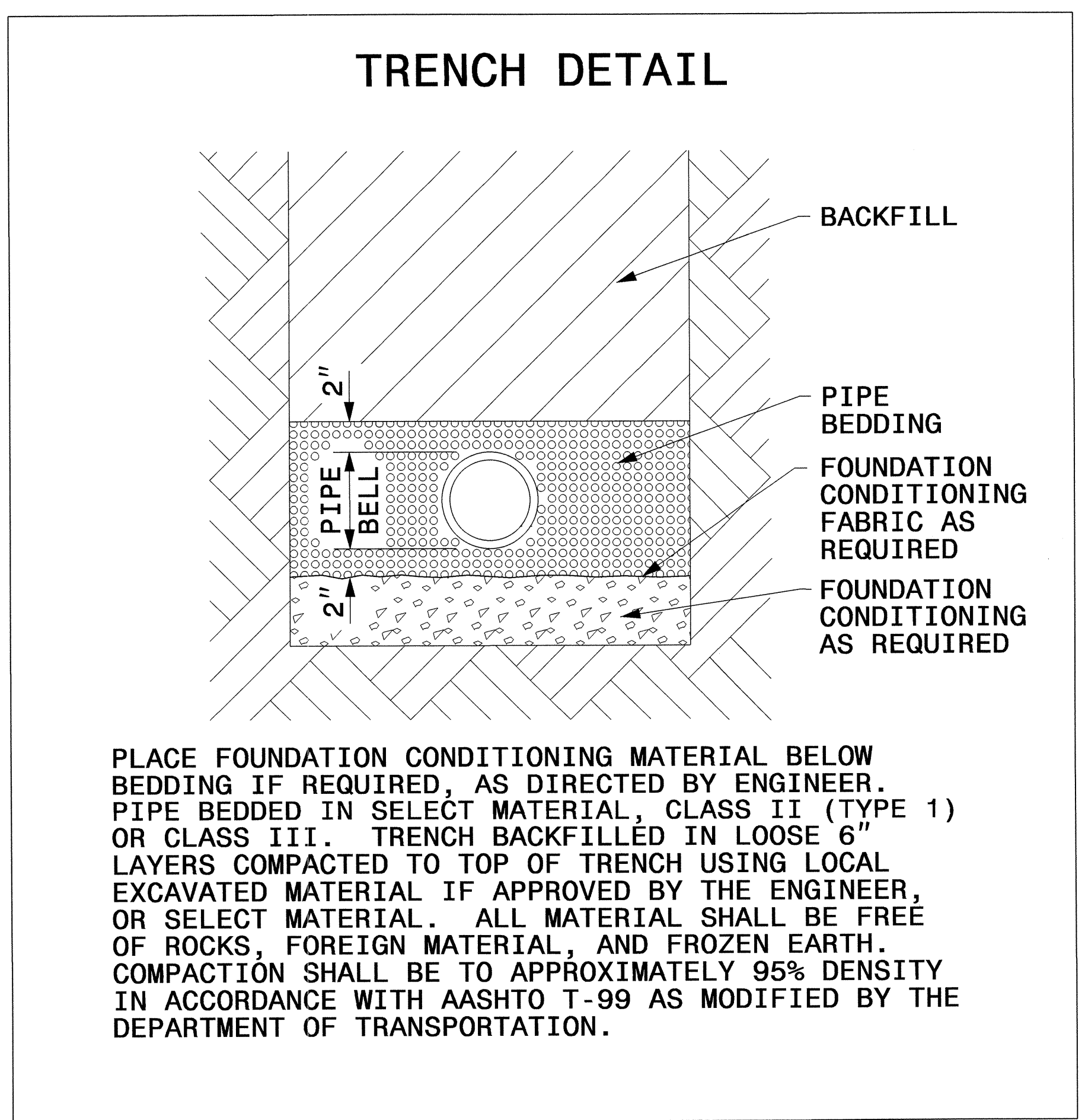
MAXIMUM TRENCH WIDTH AT TOP OF PIPE

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		



NOTE: SEE SEPARATE DETAIL FOR CONCRETE THRUST COLLAR

TRANSITION DETAIL FROM HDPE TO DI WATER PIPE



PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. 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 APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.

T.I.P. NO.	SHEET NO.
B-4588	UO-1

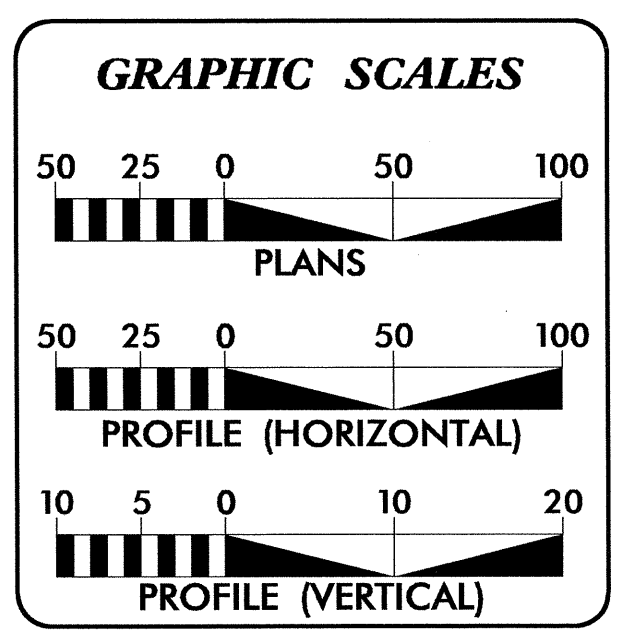
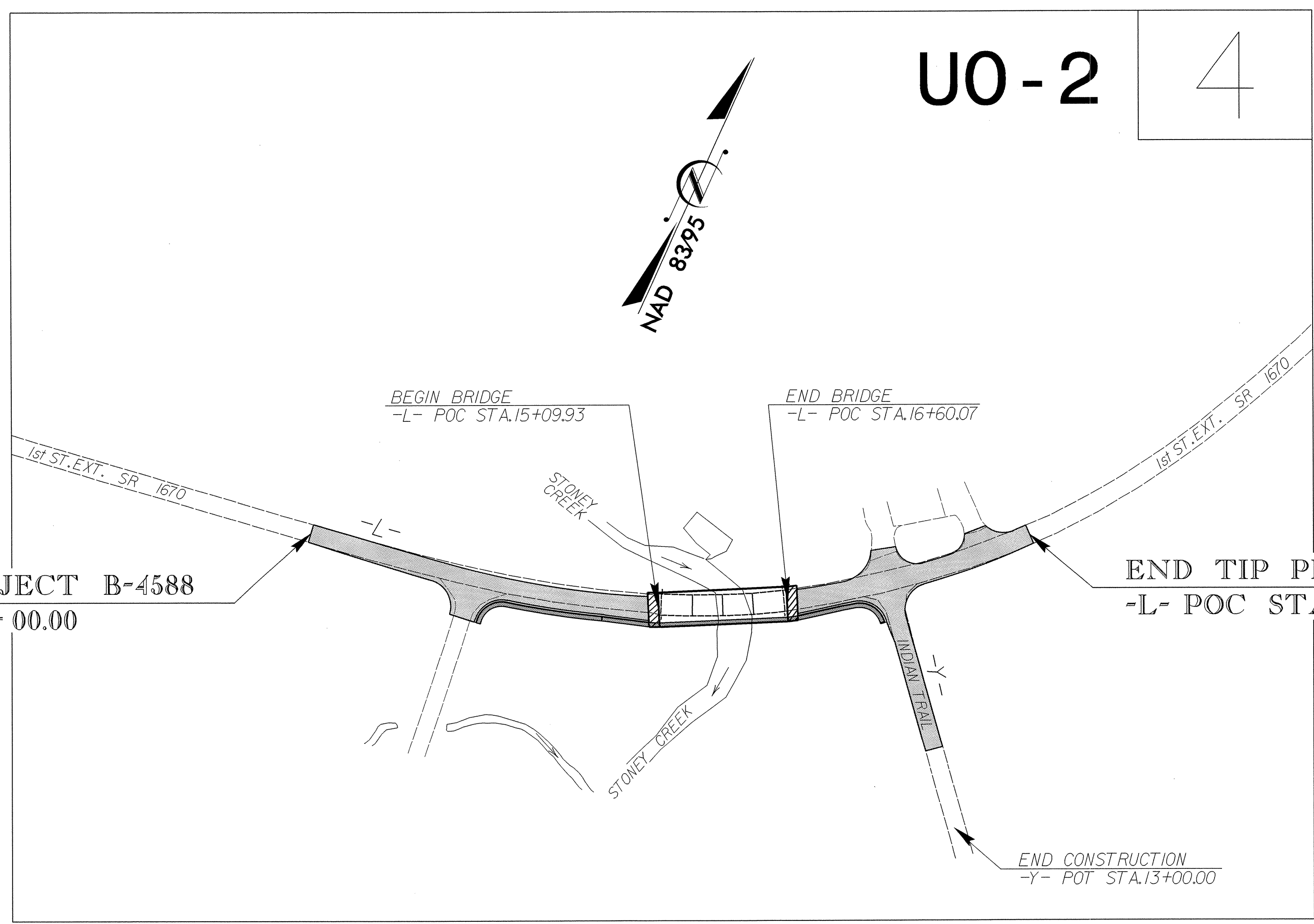
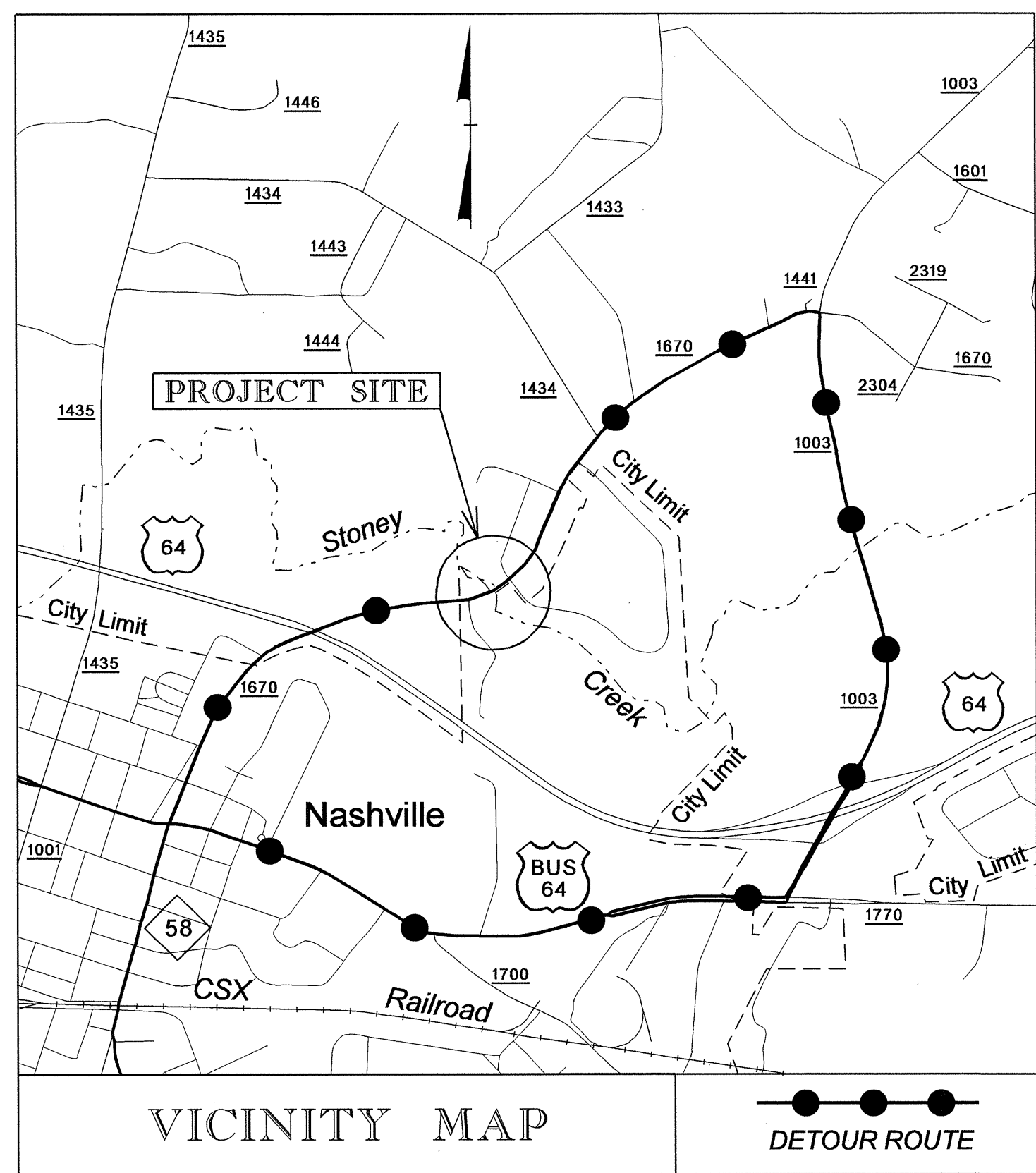
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS
NASH COUNTY**

LOCATION: BRIDGE NO.1 OVER STONEY CREEK ON SR 1670

TYPE OF WORK: UTILITY BY OTHERS RELOCATION

TIP PROJECT: B-4588



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

UTILITY OWNERS ON PROJECT
(1) CenturyLink - Telephone
(2) UC Synergetic (Progress Energy) - Power
(3) SuddenLink - CATV

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
Kijah Kamil UTILITIES PROJECT DESIGNER

14-OCT-2011 10:30 R:\Utilities\B4588_UO-1\Title_UO-1.psh.dgn

