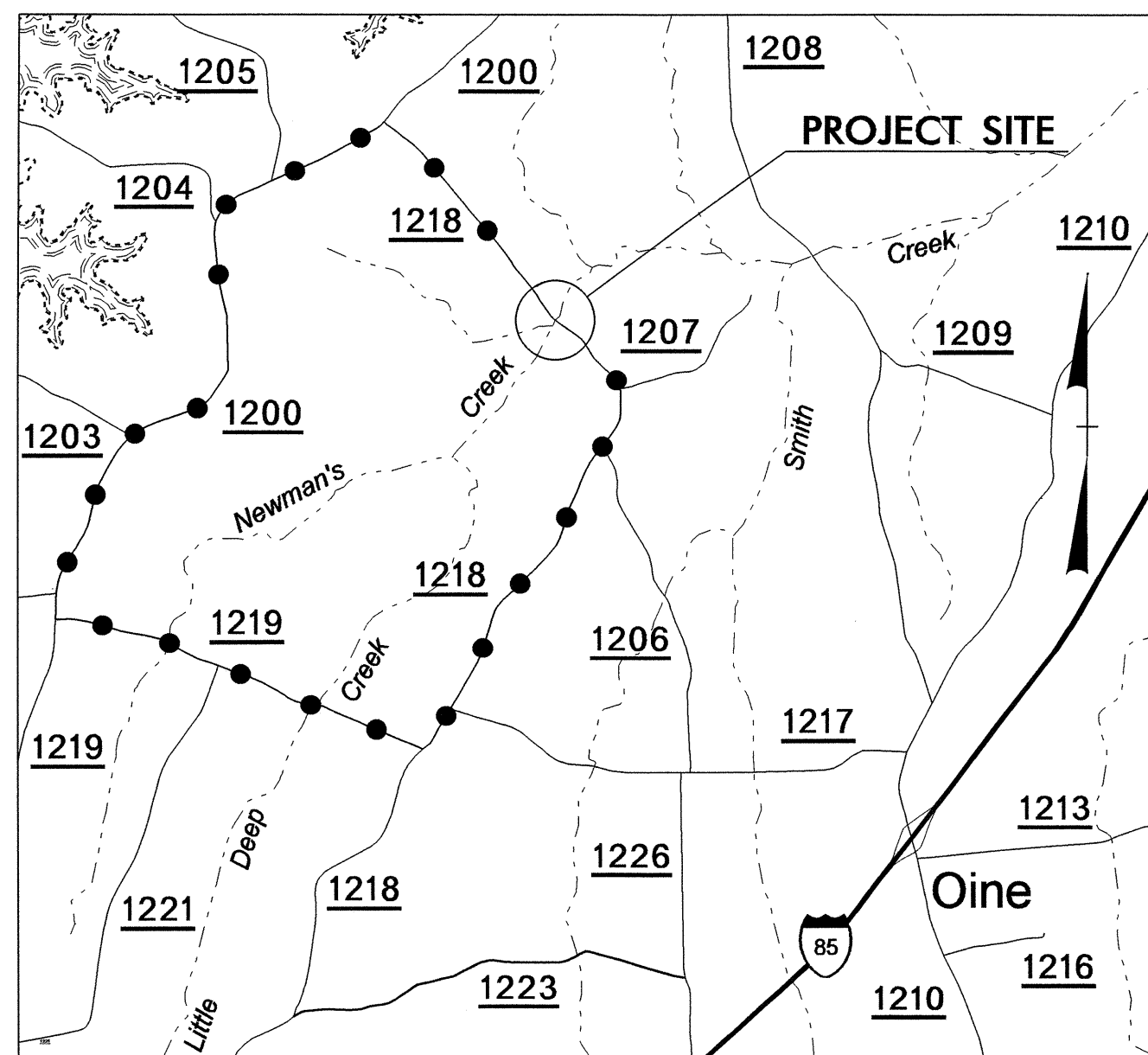


TIP PROJECT: B-4834

T.I.P. NO.	SHEET NO.
B-4834	UC-1



VICINITY MAP

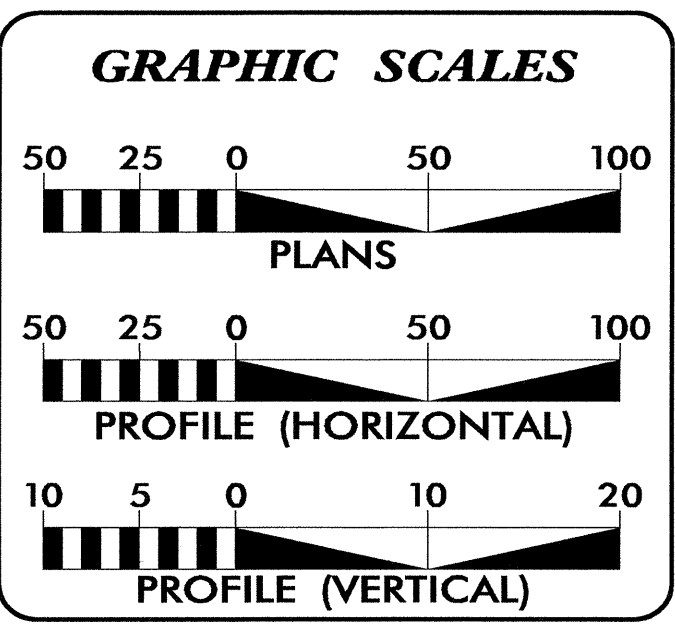
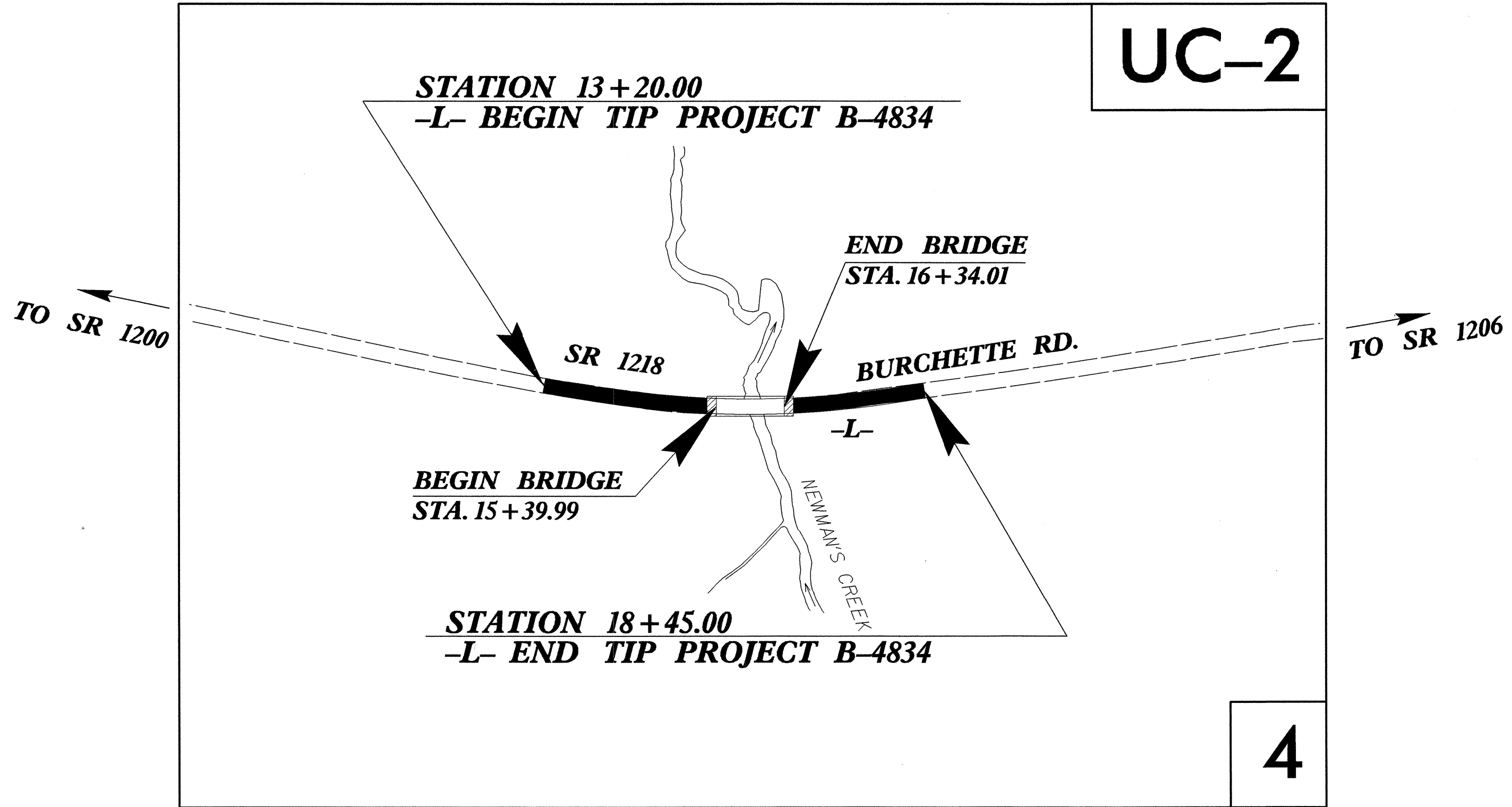
●●●●● OFFSITE DETOUR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS WARREN COUNTY

LOCATION: BRIDGE No. 23 OVER NEWMAN'S CREEK ON SR 1218

TYPE OF WORK: UTILITY CONSTRUCTION



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY CONSTRUCTION SHEET
UC-3	PROFILE SHEET
UC-4	DETAIL SHEET

WATER AND SEWER OWNERS ON PROJECT

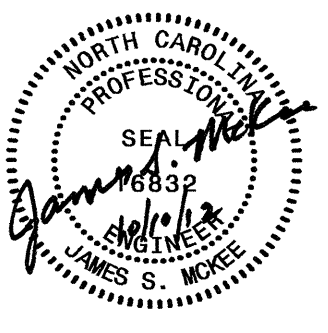
(1) WATER - WARREN COUNTY

SEAL

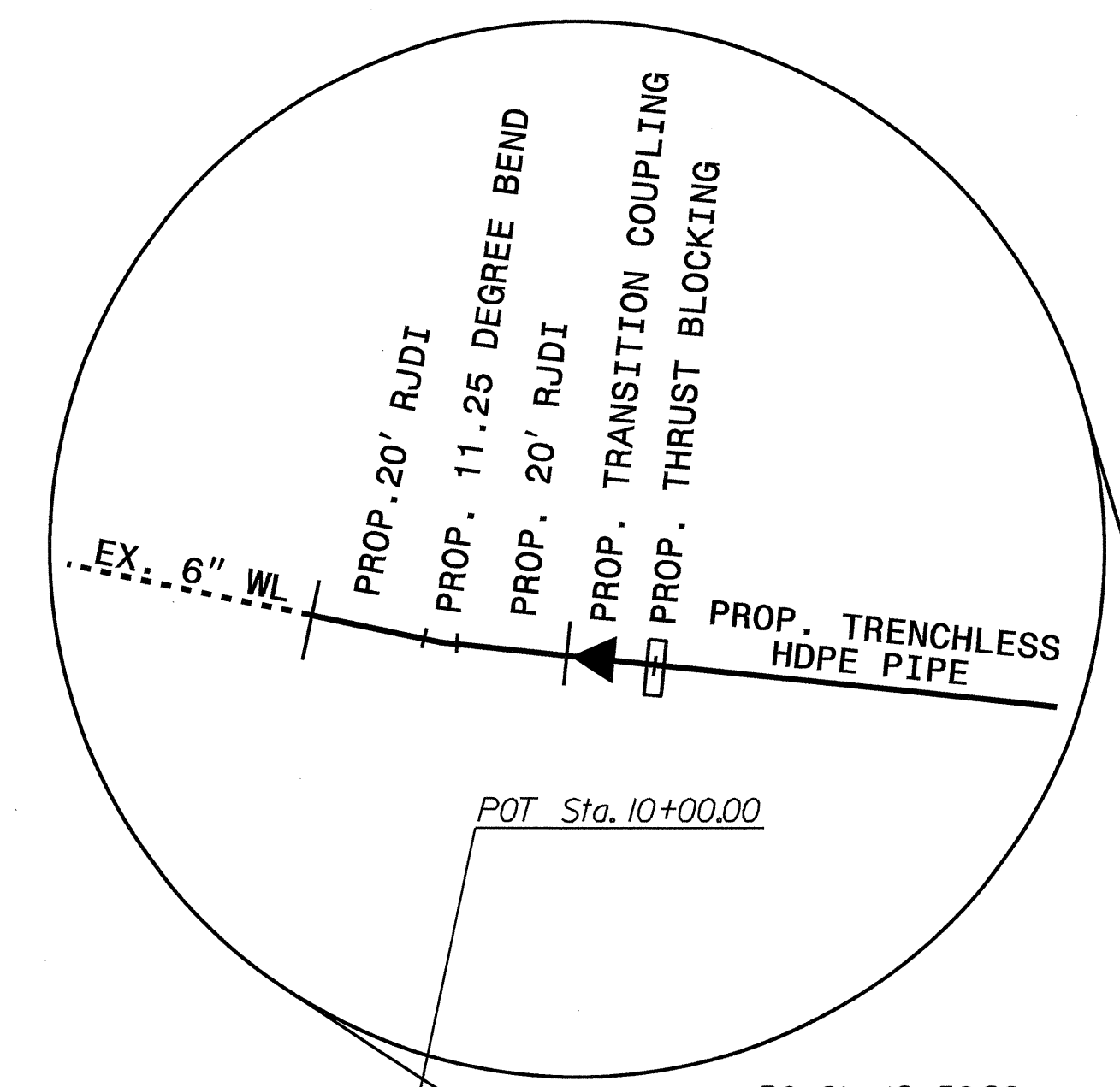
PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING**

1591 MAIL SERVICES CENTER
RALEIGH, NC 27699-1591
PHONE (919) 707-6600
FAX (919) 250-4151

<u>Roger Worthington, P.E.</u>	UTILITIES SECTION ENGINEER
<u>Steve McKee, P.E.</u>	UTILITIES SQUAD LEADER PROJECT ENGINEER
<u>Keely Lane</u>	UTILITIES PROJECT DESIGNER

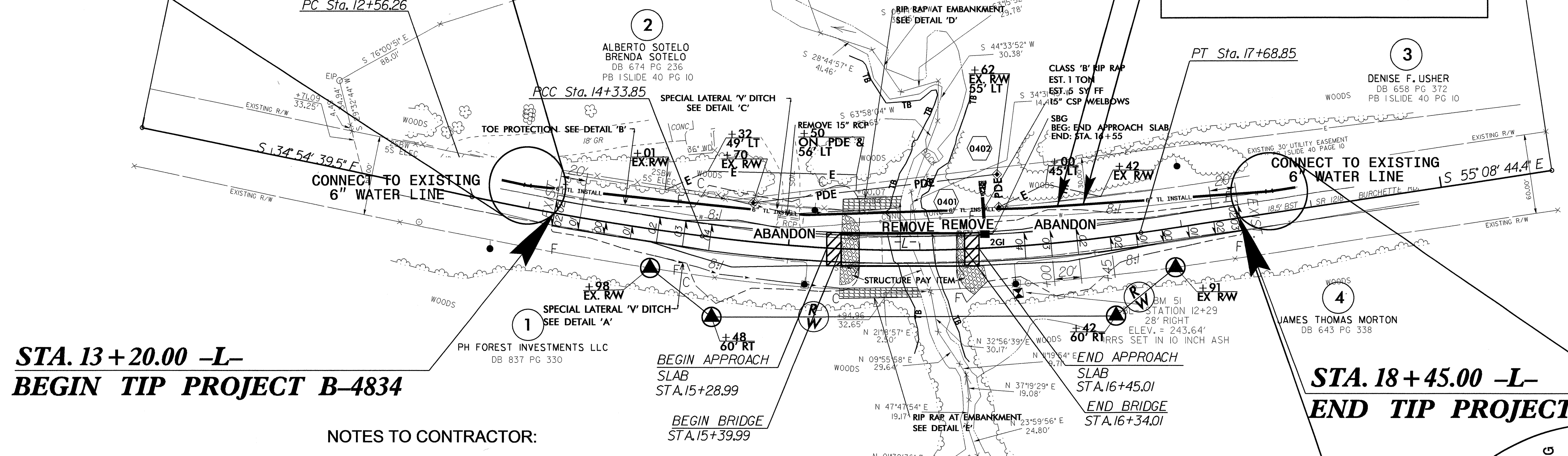
PROJECT REFERENCE NO.	SHEET NO.
B-4834	UC-2
DESIGNED BY: KTL	
DRAWN BY: KTL	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION



-L-

PI Sta 13+45.10 Δ = 4' 14" 22.6" (LT) D = 2' 23" 14.4" L = 177.59' T = 88.83' R = 2,400.00' SE = SEE PLANS RO = SEE PLANS	PI Sta 16+02.45 Δ = 15' 59" 42.3" (LT) D = 4' 46" 28.7" L = 335.00' T = 168.60' R = 1,200.00' SE = SEE PLANS RO = SEE PLANS
--	--



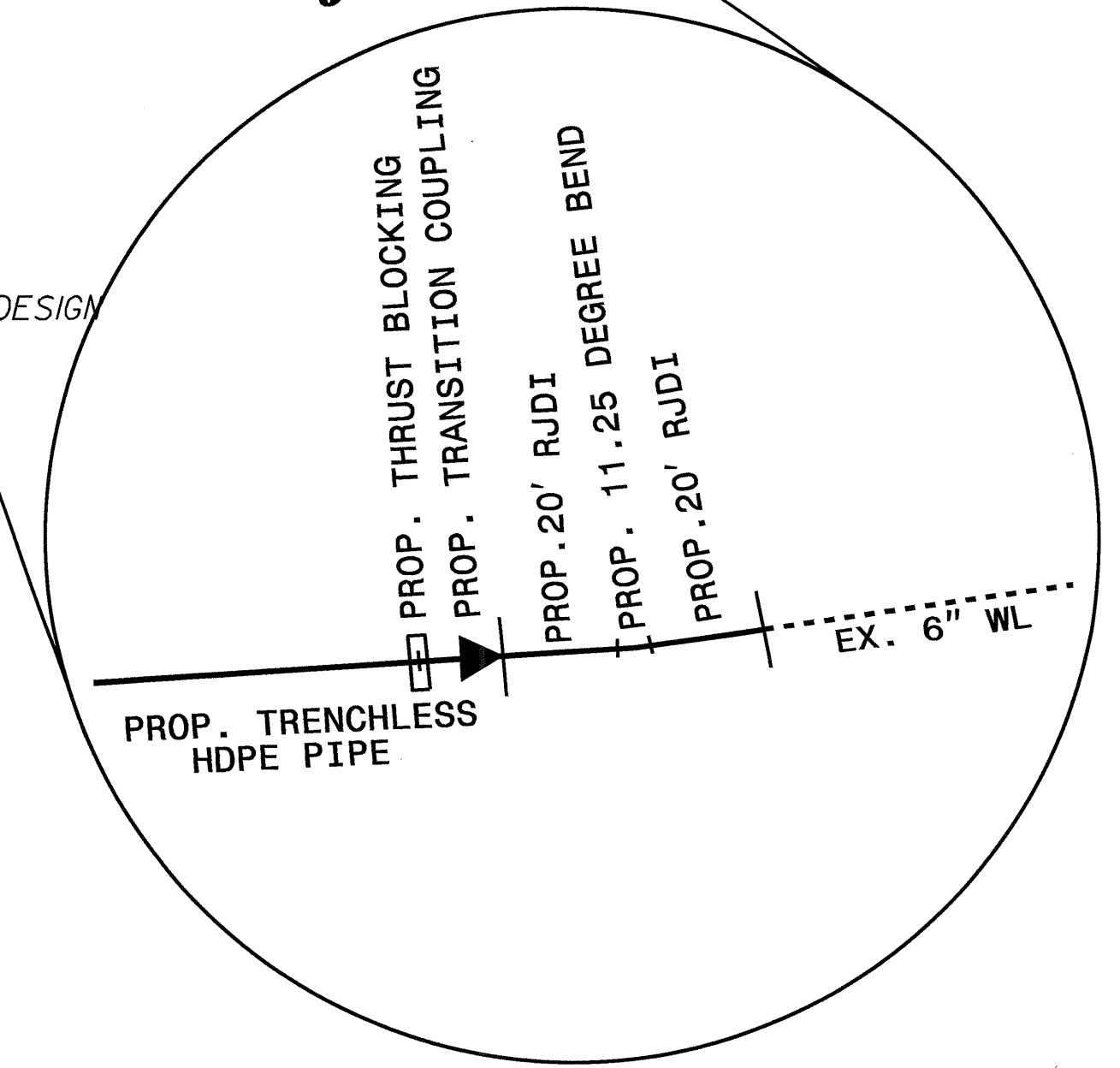
STA. 13+20.00 -L-
BEGIN TIP PROJECT B-4834

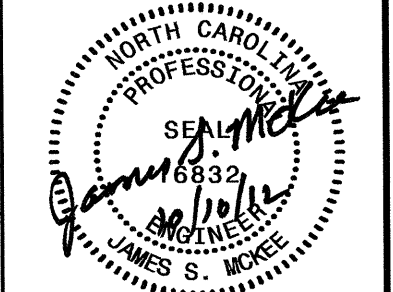
STA. 18+45.00 -L-
END TIP PROJECT B-4834

NOTES TO CONTRACTOR:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2012.
2. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE PATH DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
3. IF HDPE PIPE IS INSTALLED BY DIRECTIONAL DRILL. IT SHALL BE FILLED WITH WATER AND NOT BE CONNECTED TO ANY OTHER PIPE OR FITTINGS FOR ONE WEEK FROM THE TIME OF INSTALLATION.
4. ALL WATER LINES FOR THIS PROJECT SHALL BE TRENCHLESS HDPE DR-9 PIPE AND RESTRAINED JOINT DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
5. THE PROPOSED TRENCHLESS HDPE DR-9 PIPE SHALL HAVE AN EQUIVALENT INSIDE DIAMETER TO THE EXISTING 6" WATER LINE.

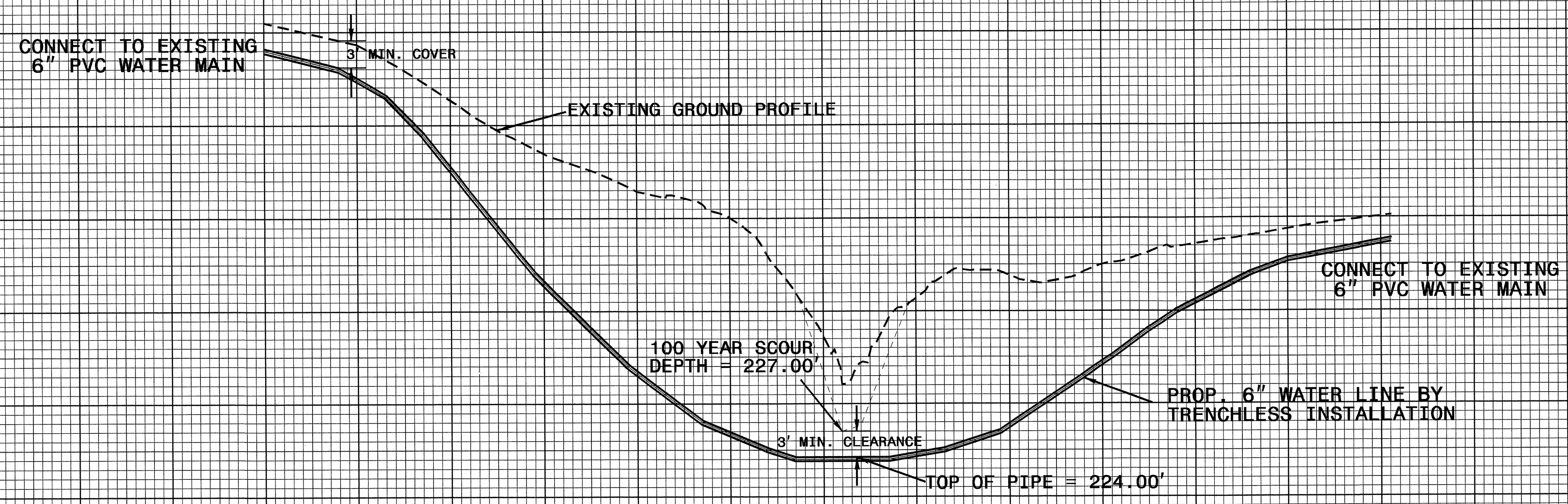
*DESIGN EXCEPTION REQUIRED FOR THE DESIGN SPEED FROM 60 MPH TO 30 MPH



PROJECT REFERENCE NO. B-4834	SHEET NO. UC-3
DESIGNED BY: KTL	
DRAWN BY: KTL	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

270
260
250
240
230
220

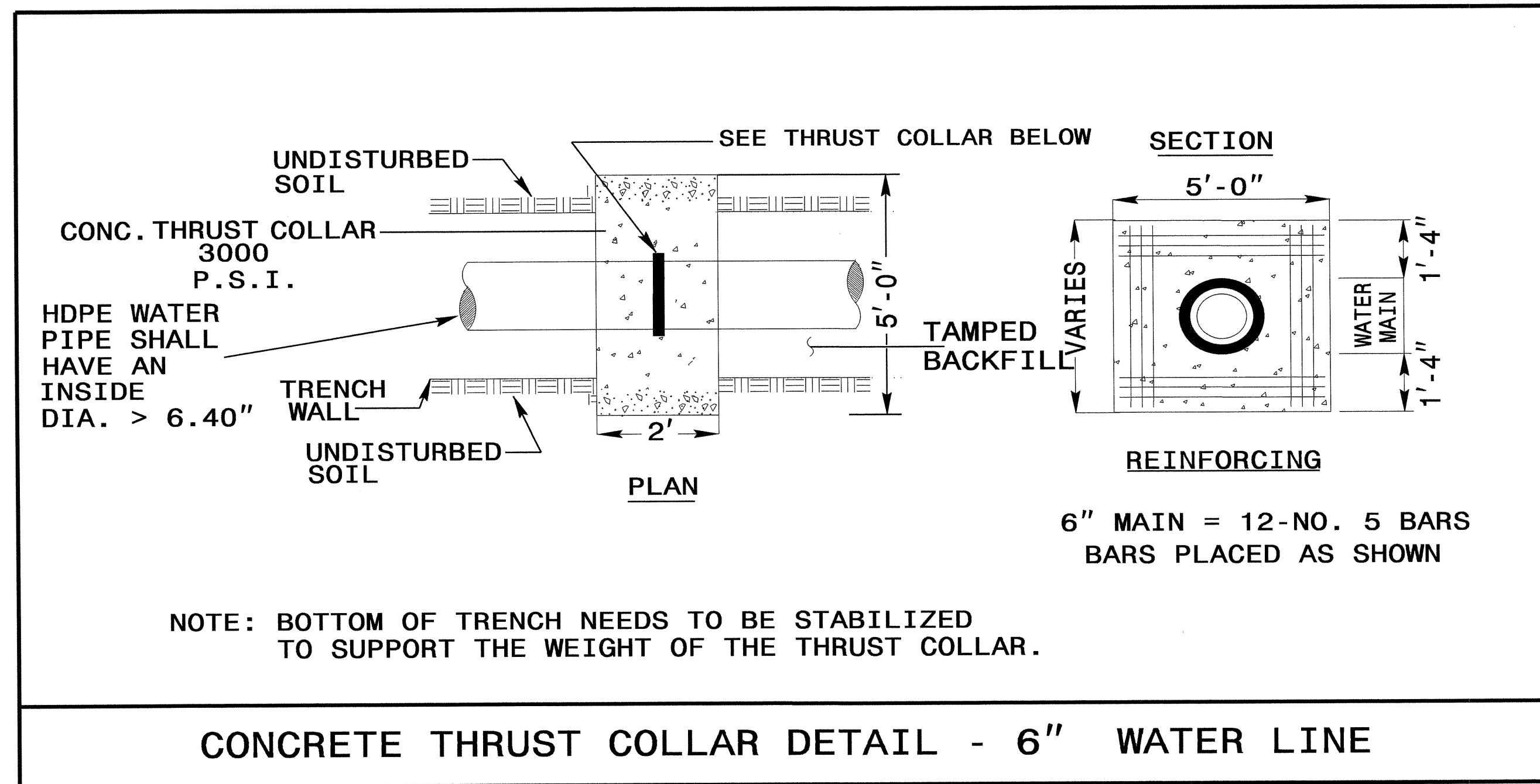


0+00 1+00 2+00 3+00 4+00 5+00 6+00

PROJECT TYPICAL DETAILS

PROJECT REFERENCE NO.	SHEET NO.
B-4834	UC-4
DESIGNED BY: KTL	
DRAWN BY: KTL	
CHECKED BY: JSM	
APPROVED BY: JSM	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

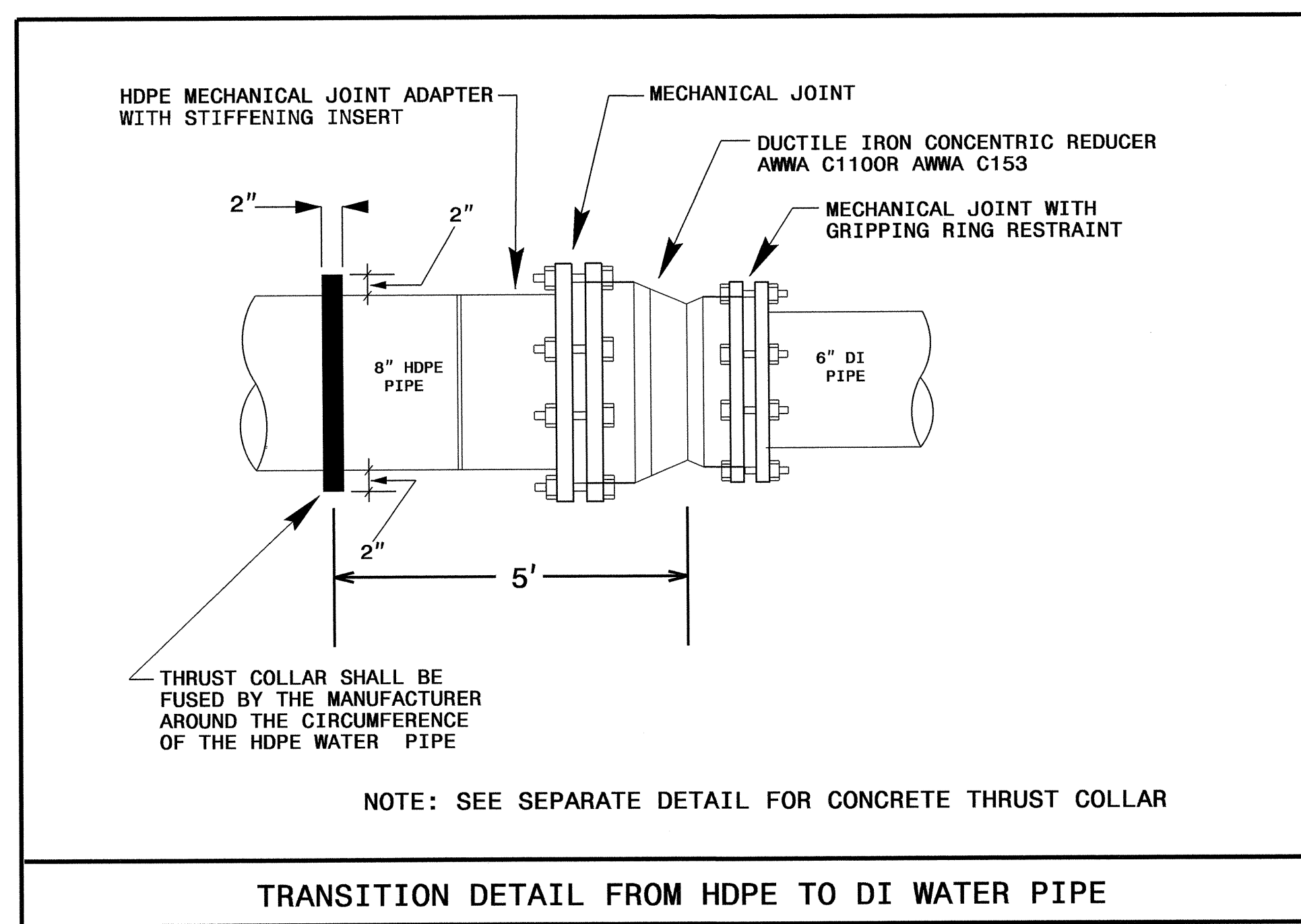
UTILITY CONSTRUCTION



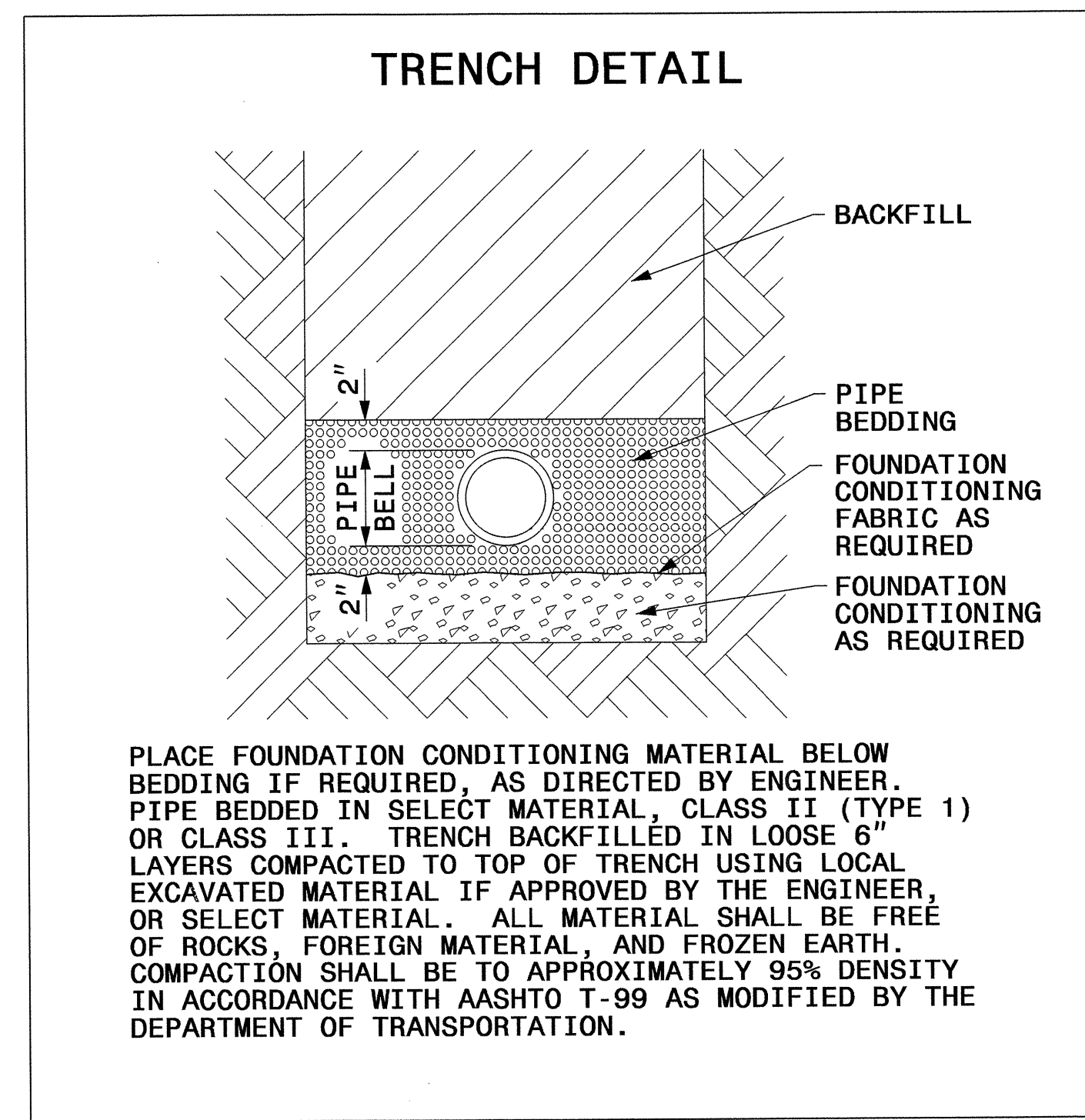
CONCRETE THRUST COLLAR DETAIL - 6" WATER LINE

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		



TRANSITION DETAIL FROM HDPE TO DI WATER PIPE



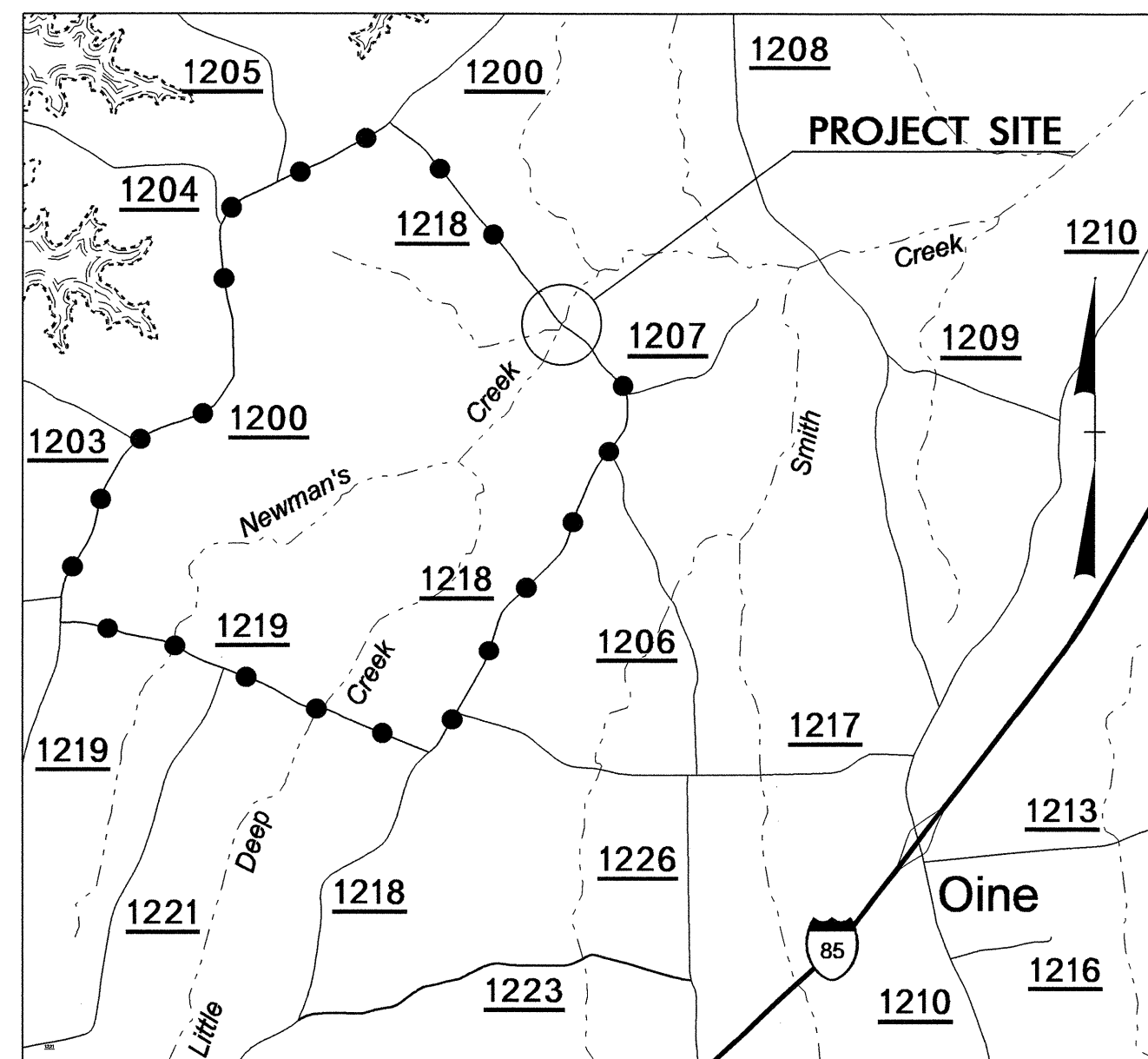
T.I.P. NO.	SHEET NO.
B-4834	UO-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS
WARREN COUNTY**

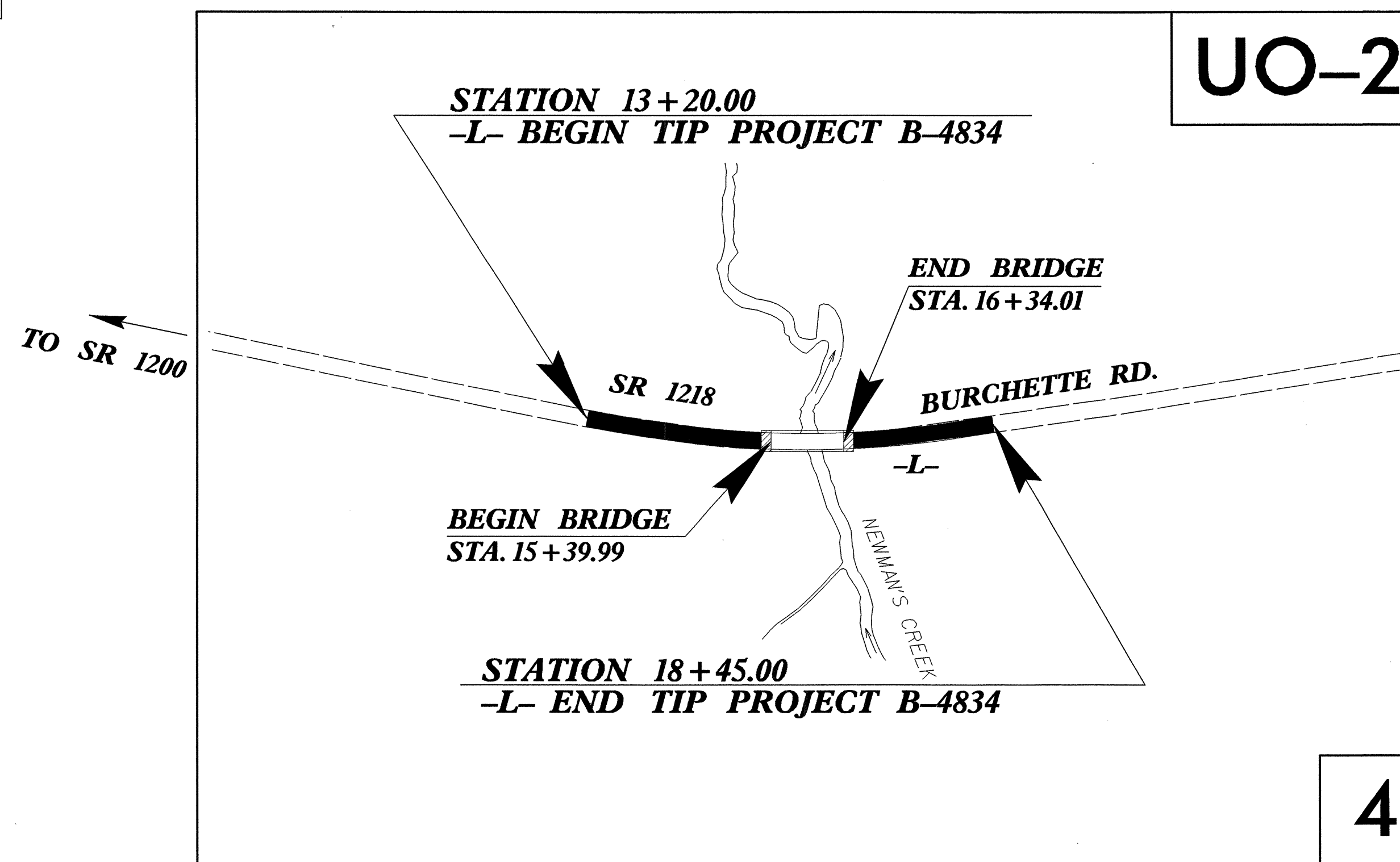
LOCATION: BRIDGE No. 23 OVER NEWMAN'S CREEK ON SR 1218

TYPE OF WORK: UTILITY RELOCATION

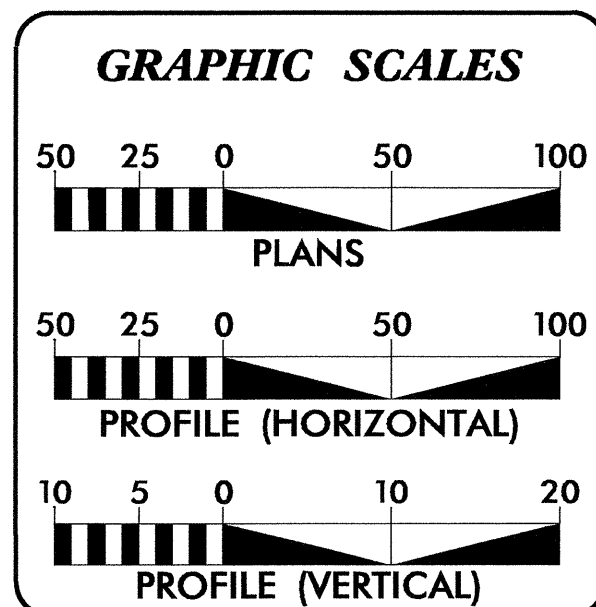


VICINITY MAP

●●●●● OFFSITE DETOUR



TIP PROJECT: B-4834



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

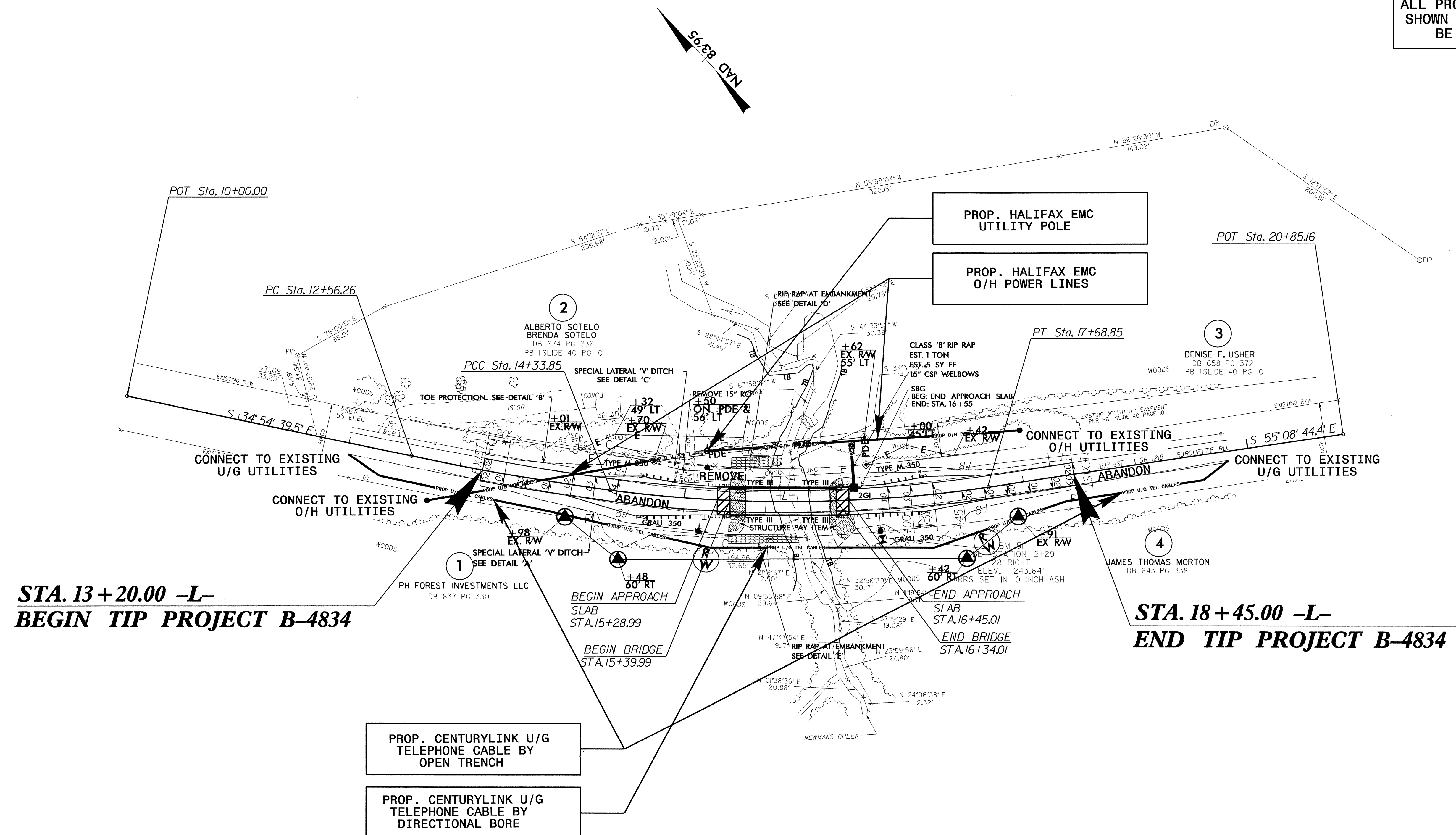
UTILITY OWNERS ON PROJECT
(A) HALIFAX EMC - POWER
(B) CENTURYLINK - TELEPHONE

PREPARED IN THE OFFICE OF:
**DIVISION OF HIGHWAYS
 UTILITIES UNIT
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 1591 MAIL SERVICES CENTER
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<u>Keely Lane</u>	UTILITIES PROJECT DESIGNER

UTILITIES BY OTHERS

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



STA. 13+20.00 -L-
BEGIN TIP PROJECT B-4834

STA. 18+45.00 -L-
END TIP PROJECT B-4834

PROP. CENTURYLINK U/G
TELEPHONE CABLE BY
OPEN TRENCH

PROP. CENTURYLINK U/G
TELEPHONE CABLE BY
DIRECTIONAL BORE

PROP. HALIFAX EMC
UTILITY POLE

PROP. HALIFAX EMC
O/H POWER LINES