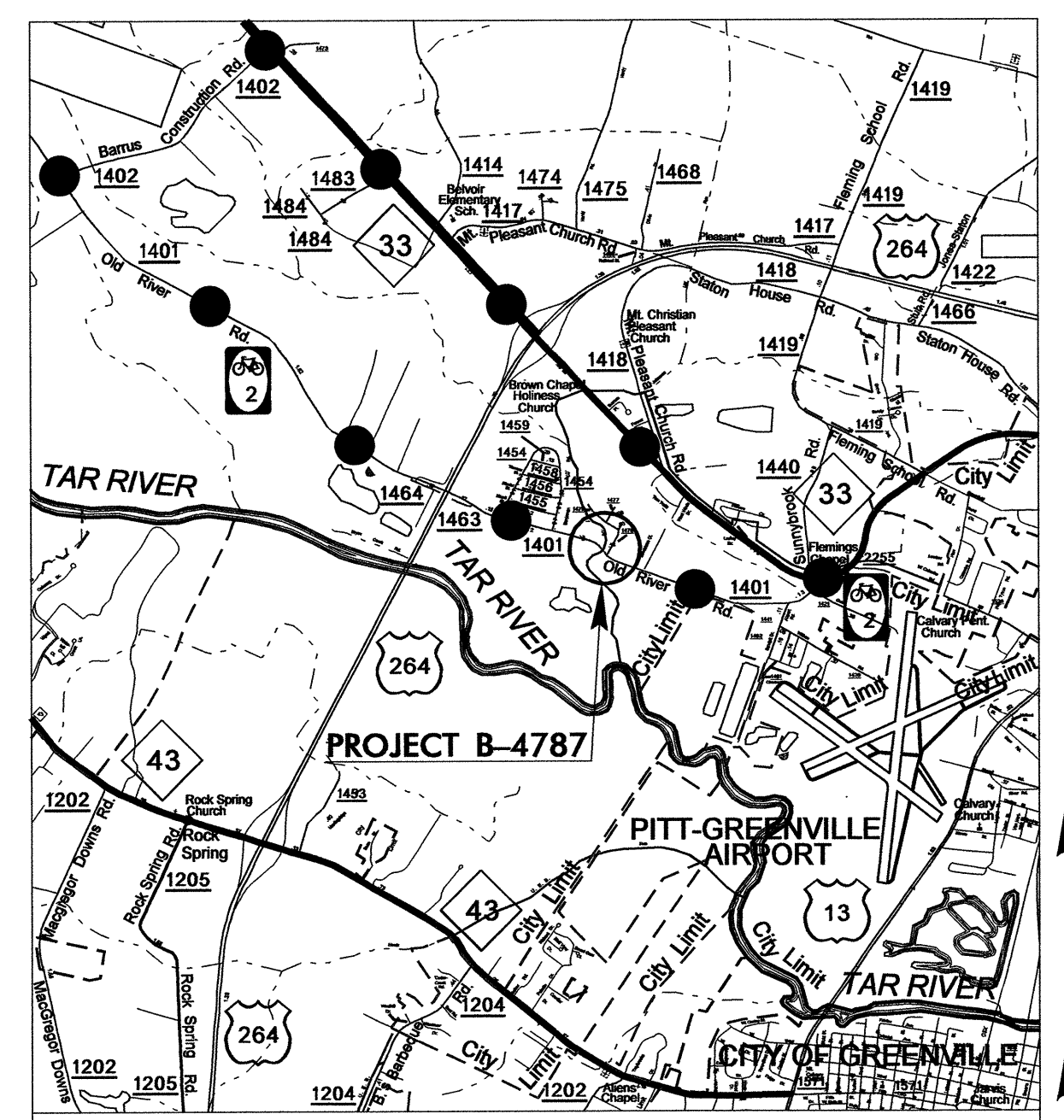
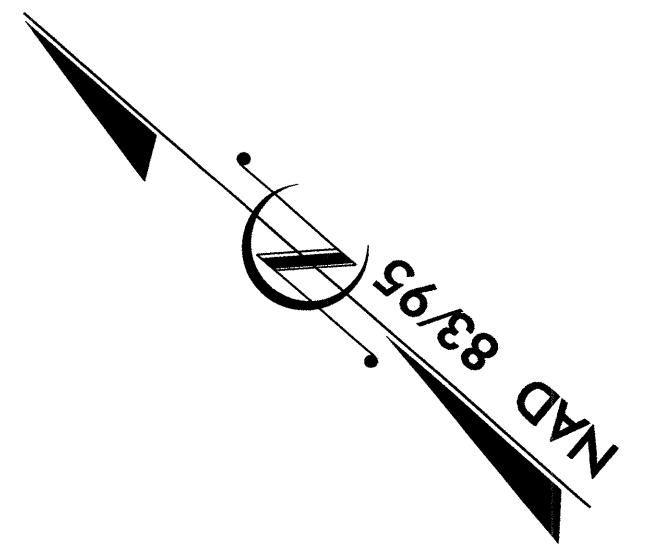


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
PITT COUNTY**

**LOCATION: BRIDGE NO. 95 ON SR 1401 (OLD RIVER ROAD)
OVER JOHNSON MILL RUN**

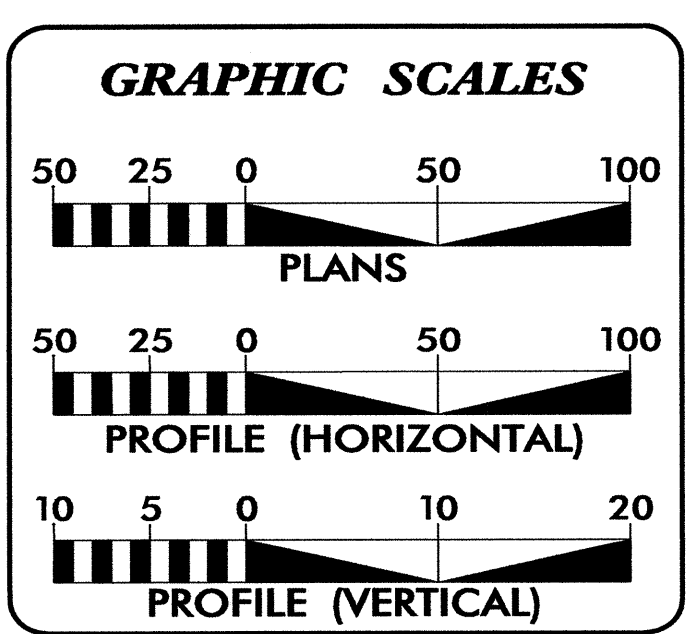
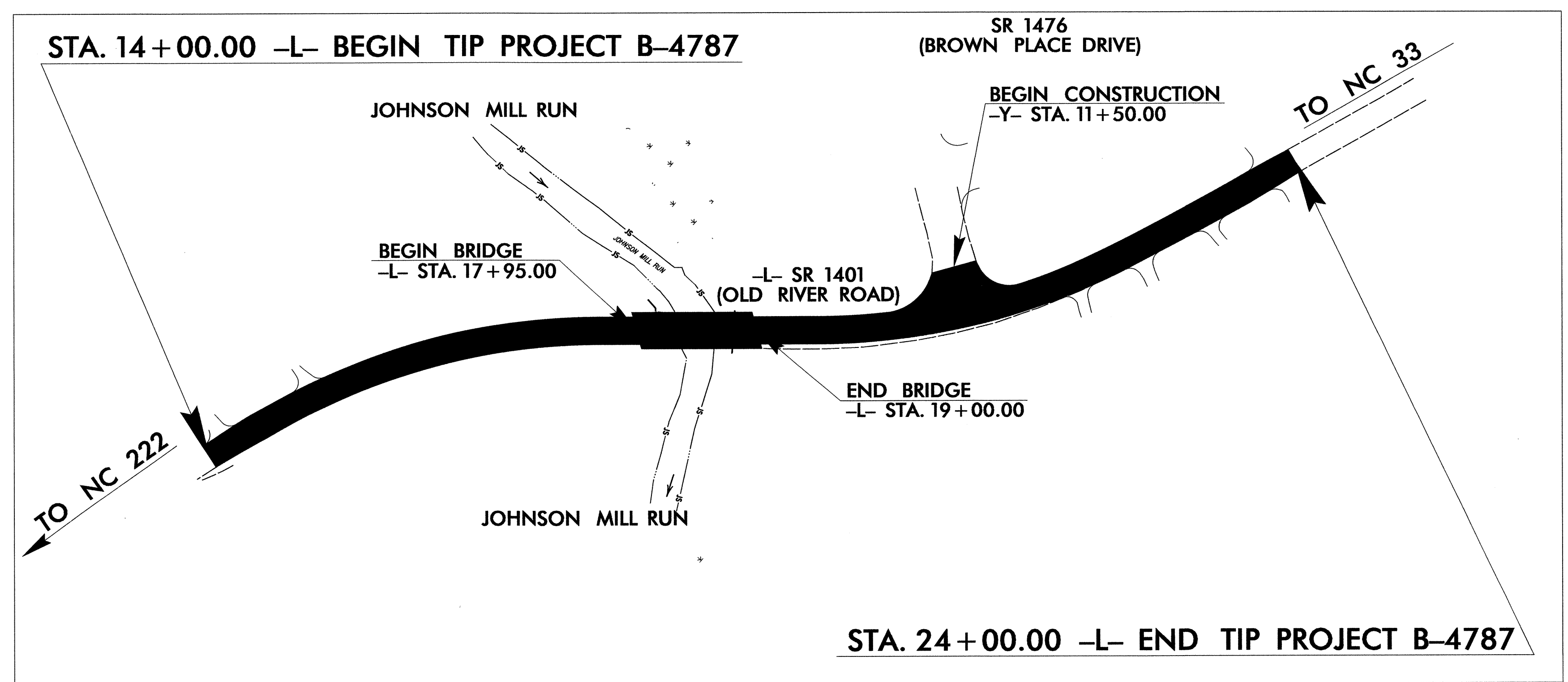
TYPE OF WORK: WATER AND GAS LINE RELOCATIONS



VICINITY MAP

● ● OFFSITE DETOUR ROUTE

TIP PROJECT: B-4787

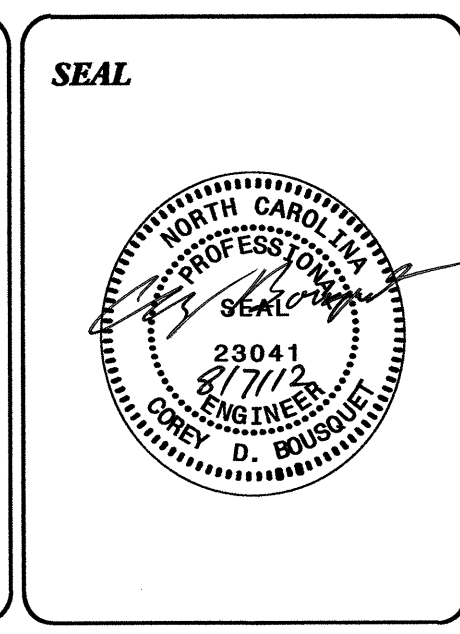


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A	DETAILS
UC-4	UTILITY CONSTRUCTION SHEET
UC-5 THRU UC-8	UTILITY PROFILE SHEET

WATER AND SEWER OWNERS ON PROJECT

(1) GREENEVILLE UTILITIES COMMISSION (WATER)
(2) GREENEVILLE UTILITIES COMMISSION (GAS)



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

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Kelvin Martin UTILITIES PROJECT DESIGNER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	----- 12" W -----
11¼ Degree Bend	----- ++
22½ Degree Bend	----- +x
45 Degree Bend	----- +x
90 Degree Bend	----- ++
Plug	-----
Tee	----- ++
Cross	----- ++
Reducer	----- ▶
Gate Valve	----- GV
Butterfly Valve	----- BV
Tapping Valve	----- TGV
Line Stop	----- LS
Line Stop with Bypass	----- LS/BP
Blow Off	----- BO
Fire Hydrant	----- PFH
Relocate Fire Hydrant	----- PFH
Remove Fire Hydrant	----- REM FH
Water Meter	----- PWM
Relocate Water Meter	----- PWM
Remove Water Meter	----- REM WM
Water Pump Station	----- PS(W)
RPZ Backflow Preventer	----- PRPZ
DCV Backflow Preventer	----- PBFP
Relocate RPZ Backflow Preventer	----- PRPZ
Relocate DCV Backflow Preventer	----- PBFP

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	----- 12" SS -----
Force Main Sewer Line (Sized as Shown)	----- 12" FSS -----
Manhole (Sized per Note)	----- •
Sewer Pump Station	----- PS(SS)

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	----- o
Telephone Pole	----- o
Joint Use Pole	----- o
Telephone Pedestal	----- TEL PED
Utility Line by Others (Type as Shown)	----- PROP O/H POW LINES -----
Trenchless Installation	----- 12" TL INSTALL -----
Encasement by Open Cut	----- 24" ENCAS BY OC -----
Encasement	----- 24" ENCASUREMENT -----

Thrust Block	-----
Air Release Valve	----- AR
Utility Vault	----- UV
Concrete Pier	----- CP
Steel Pier	----- SP
Plan Note	----- NOTE
Pay Item Note	----- PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	----- •	*Underground Power Line	----- P -----
Telephone Pole	----- •	*Underground Telephone Cable	----- T -----
Joint Use Pole	----- •	*Underground Telephone Conduit	----- TC -----
Utility Pole	----- •	*Underground Fiber Optics Telephone Cable	----- T FO -----
Utility Pole with Base	----- □	*Underground TV Cable	----- TV -----
H-Frame Pole	----- •—•	*Underground Fiber Optics TV Cable	----- TV FO -----
Power Transmission Line Tower	----- □	*Underground Gas Pipeline	----- G -----
Water Manhole	----- ⊙	Aboveground Gas Pipeline	----- A/G Gas -----
Power Manhole	----- ⊙	*Underground Water Line	----- W -----
Telephone Manhole	----- ⊙	Aboveground Water Line	----- A/G Water -----
Sanitary Sewer Manhole	----- ⊙	*Underground Gravity Sanitary Sewer Line	----- SS -----
Hand Hole for Cable	----- □	Aboveground Gravity Sanitary Sewer Line	----- A/G Sanitary Sewer -----
Power Transformer	----- □	*Underground SS Forced Main Line	----- FSS -----
Telephone Pedestal	----- □	Underground Unknown Utility Line	----- ?UTL -----
CATV Pedestal	----- □	SUE Test Hole	----- ⊙
Gas Valve	----- ◇	Water Meter	----- ⊙
Gas Meter	----- ◇	Water Valve	----- ⊙
Located Miscellaneous Utility Object	----- ⊙	Fire Hydrant	----- ⊙
Abandoned According to Utility Records	----- AATUR	Sanitary Sewer Cleanout	----- ⊙
End of Information	----- E.O.I.		

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)
Designated Utility Line (Type as Shown)

UTILITY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-3
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC: PHONE: (919) 707-6690 FAX: (919) 250-4151	

GENERAL NOTES:

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 AND THE LATEST VERSION OF GREENVILLE UTILITIES (GUC) MANUAL FOR DESIGN AND CONSTRUCTION.
2. THE EXISTING UTILITIES BELONG TO GUC .
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, DIVISION OF ENVIRONMENTAL HEALTH. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, DIVISION OF WATER QUALITY. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. GUC OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPROTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.
10. ALL MATERIALS REQUIRED FOR THE PROPOSED GAS LINES WILL BE PROVIDED BY GUC .

PROJECT SPECIFIC NOTES:

1. 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.
2. 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.
3. SEE SPECIFICATIONS FOR GAS MAIN INSTALLATION
4. GAS MAINS MAY EITHER BE ABANDONED IN-PLACE OR ABANDONED AND THE PIPE REMOVED AND DISPOSED OF. THE FOLLOWED PROCEDURES SHOULD BE FOLLOWING WHEN ABANDONING A PIPELINE IN-PLACE
 1. CHECK MAPS AND OTHER RECORDS AND PERFORM FIELD CHECKS TO ENSURE THAT ALL SOURCES OF GAS ARE IDENTIFIED AND ISOLATED.
 2. VENT THE PIPELINE TO BE ABANDONED TO 0 PSIG
 3. PURGE THE SEGMENT USING AIR OR INERT GAS. GAS DEPARTMENT PERSONNEL SHALL UTILIZE A CGI TO ENSURE THAT A COMBUSTIBLE MIXTURE OF GAS AND AIR IS NOT PRESENT AFTER PURGING.
 4. PHYSICALLY ISOLATE THE PIPELINE FROM ALL SUPPLY SOURCES BY CUTTING THE PIPE, OR REMOVING A FLANGED, COUPLE, OR SCREWED COMPONENT.
 5. SEAL ALL OPEN ENDS OF THE ABANDONED SECTIONS. THE PIPE MAY BE SEALED USING:
 - A. WELDED OR SCREWED CAPS
 - B. WELDED STEEL PLATES
 - C. BLIND FLANGES
 - D. SCREWED PLUGS
 - E. MECHANICAL/EXPANSION PLUGS
 - F. PLASTIC FUSED CAP
 - G. A PLUG MATERIAL SUCH AS CONCRETE

UTILITY CONSTRUCTION

LIST OF STANDARD DRAWINGS:

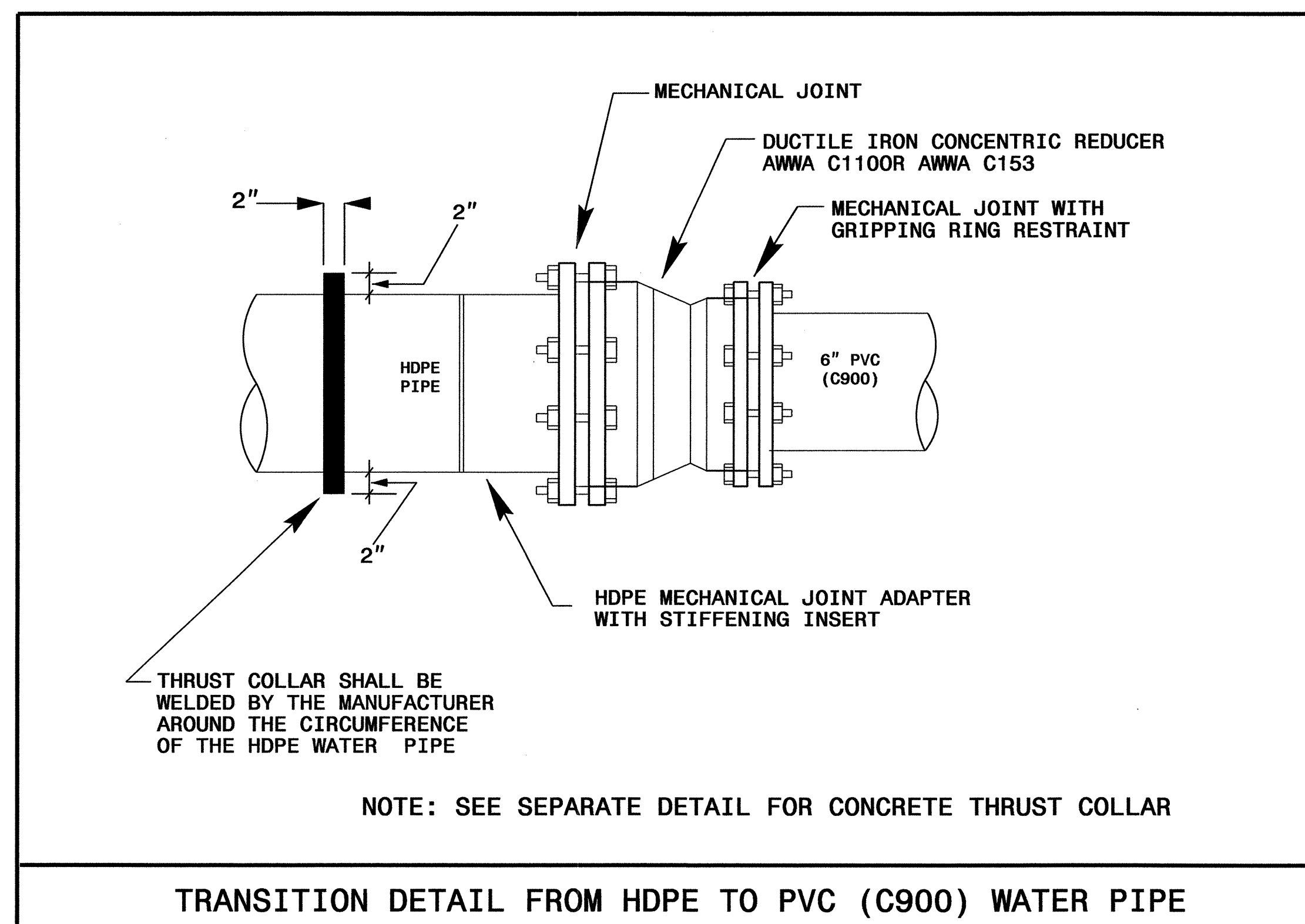
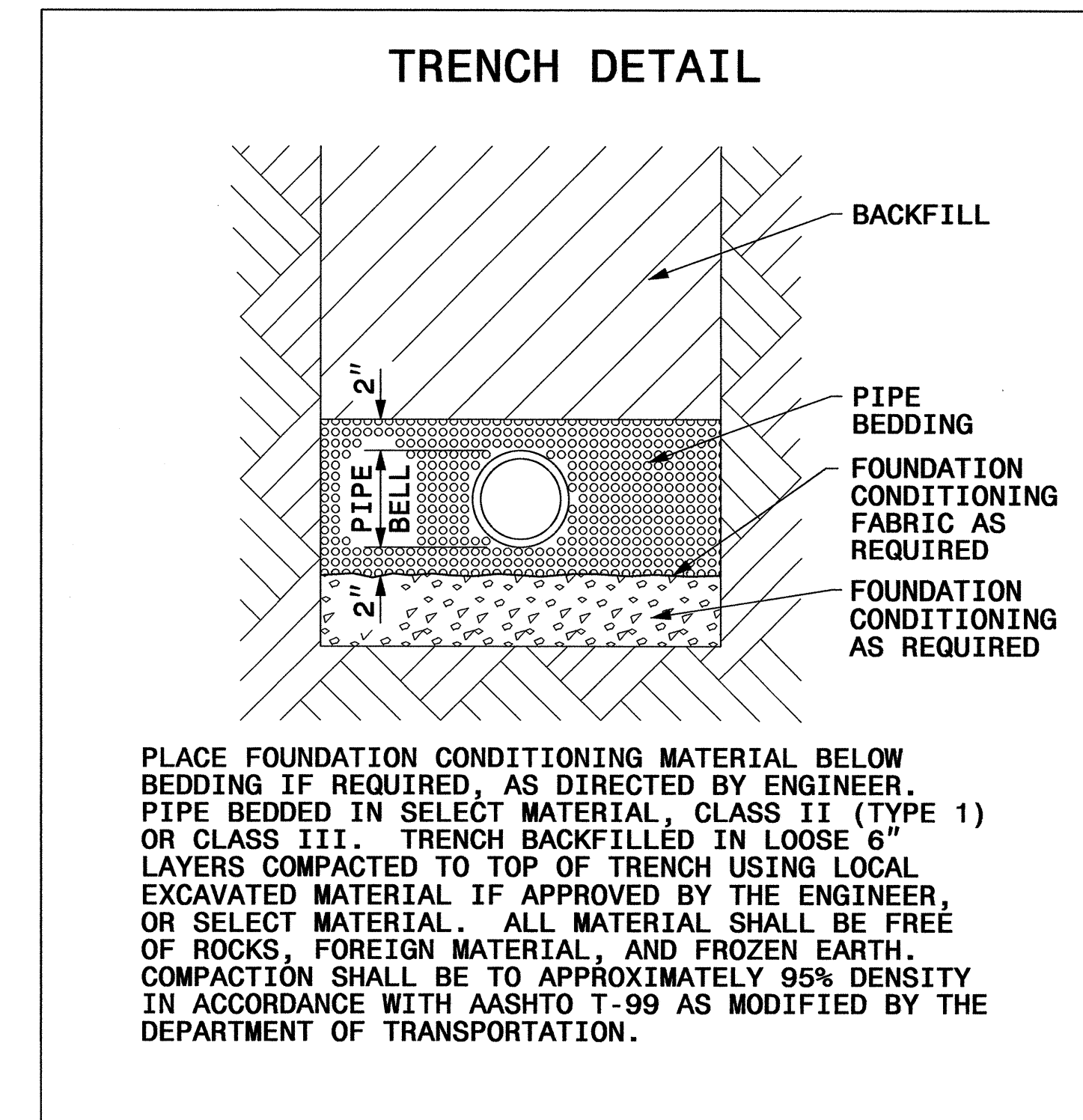
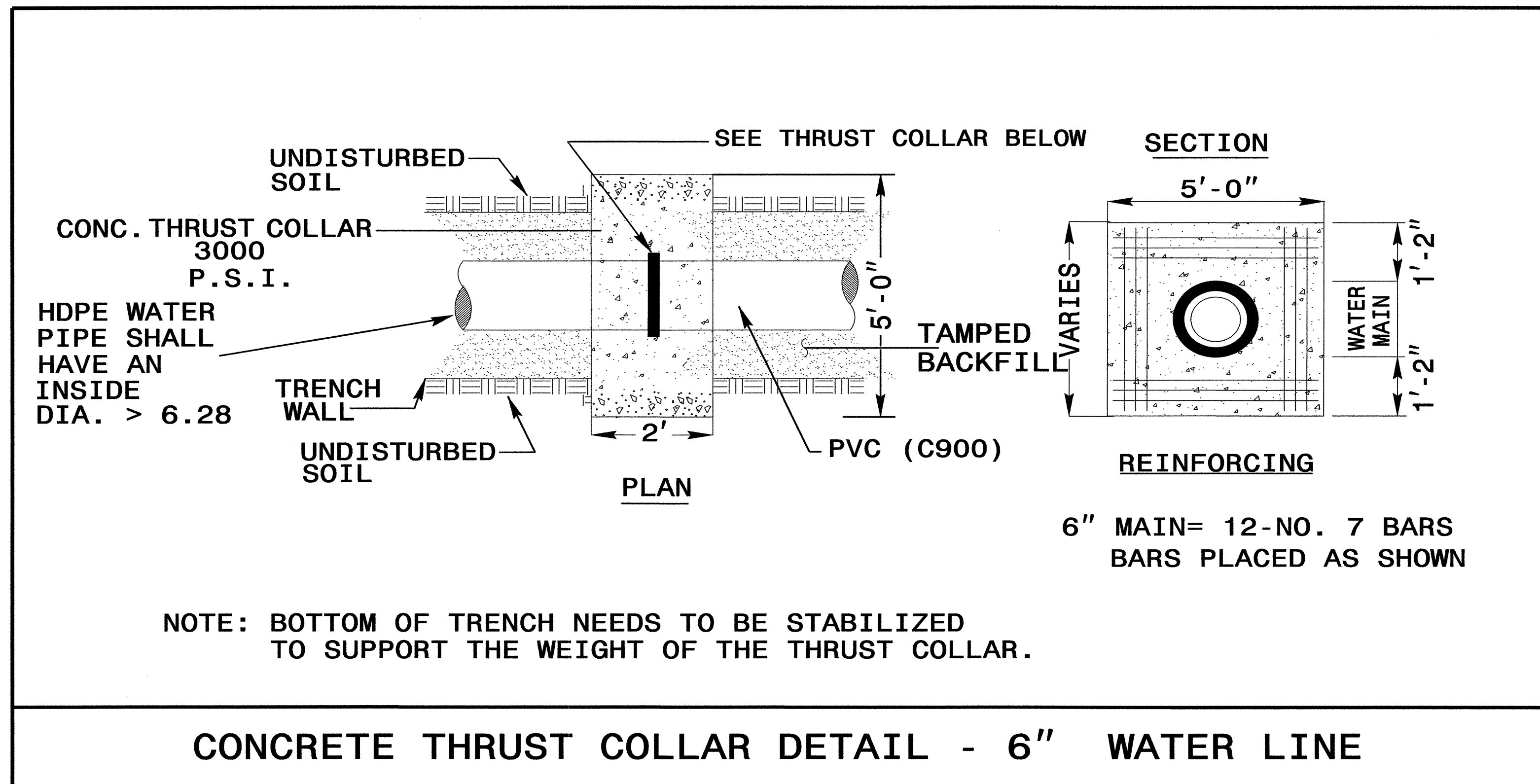
- 1515.01 WATER METER
1515.02 FIRE HYDRANT

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-3A
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

PROJECT TYPICAL DETAILS

UTILITY CONSTRUCTION



MAXIMUM TRENCH WIDTH AT TOP OF PIPE

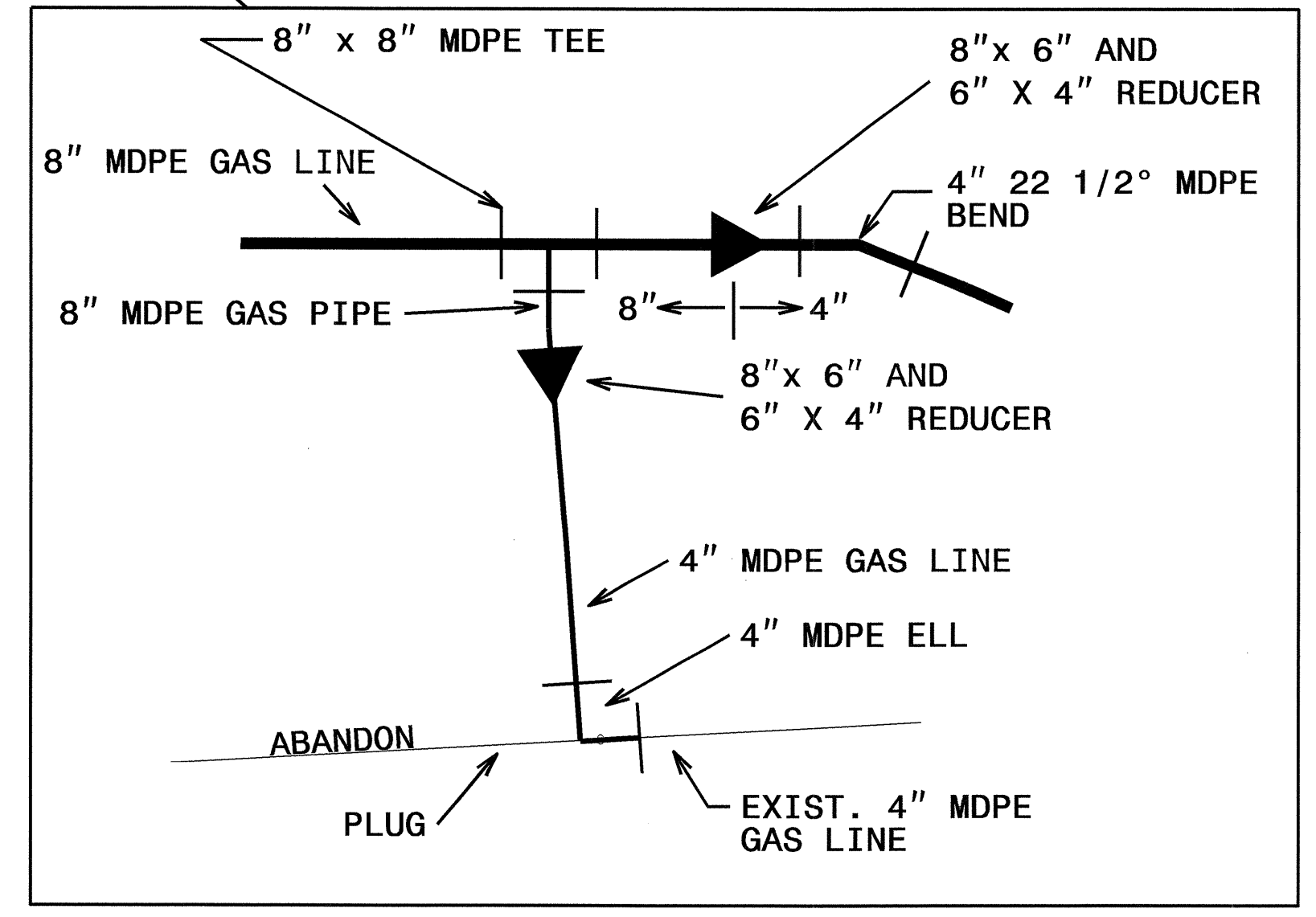
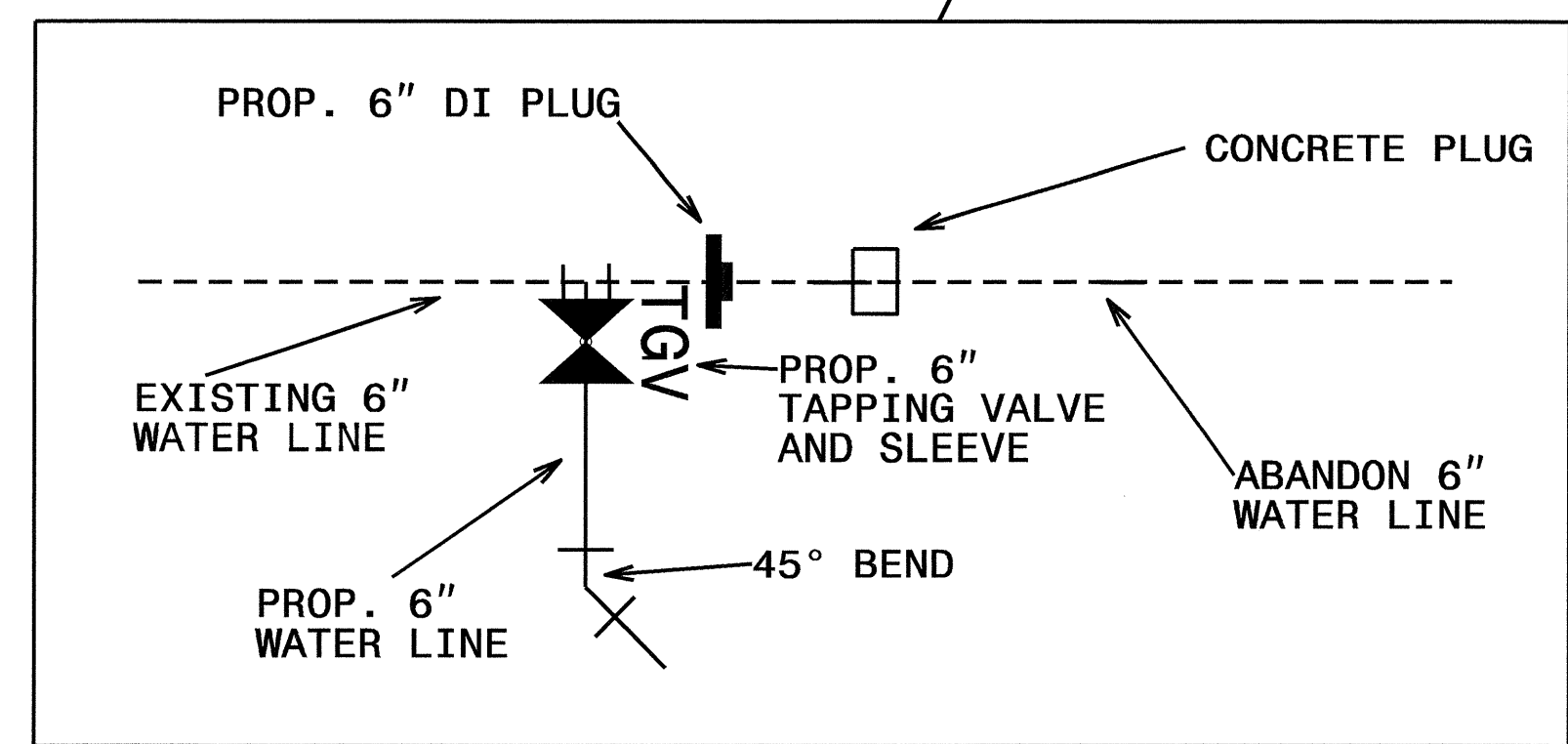
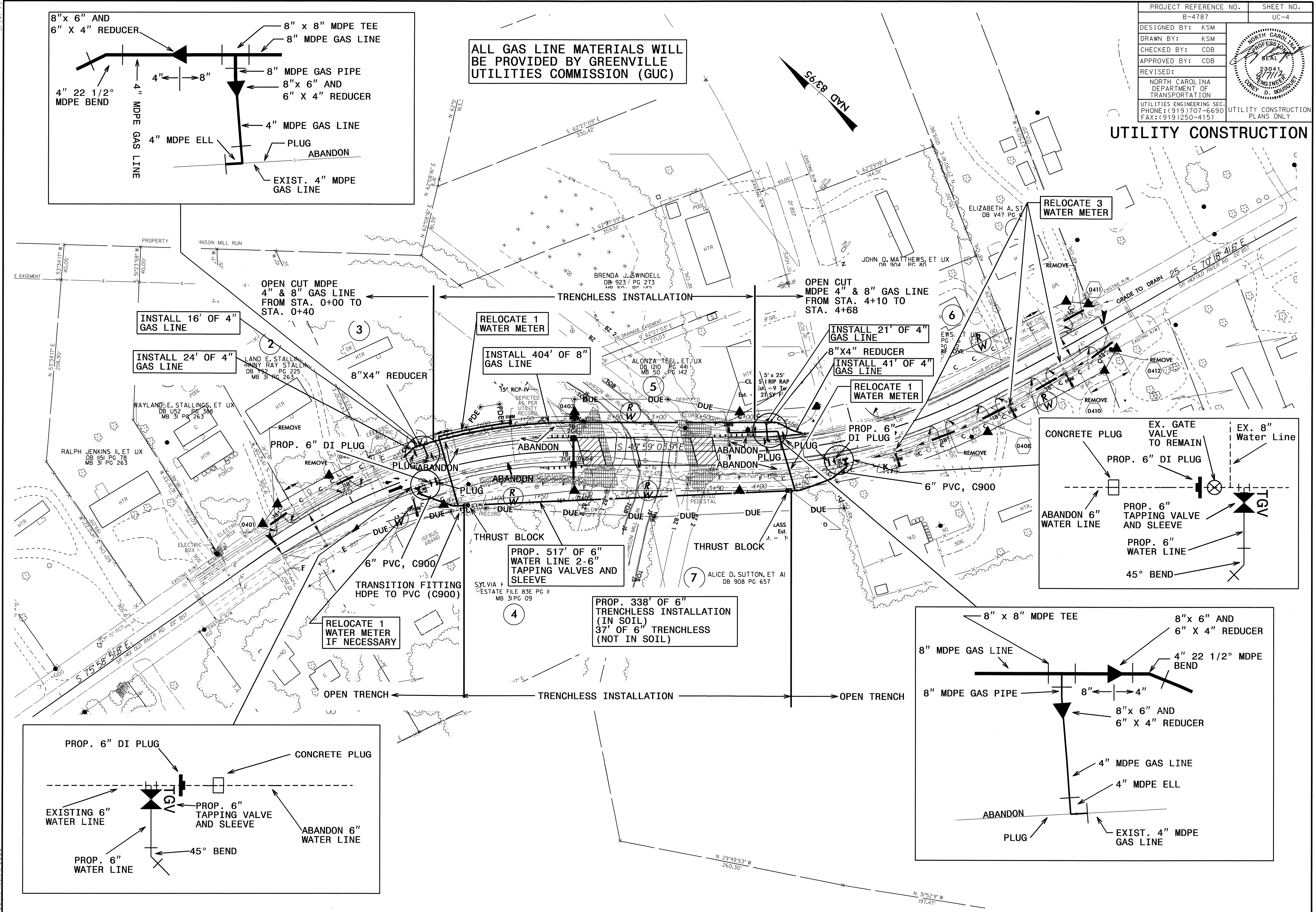
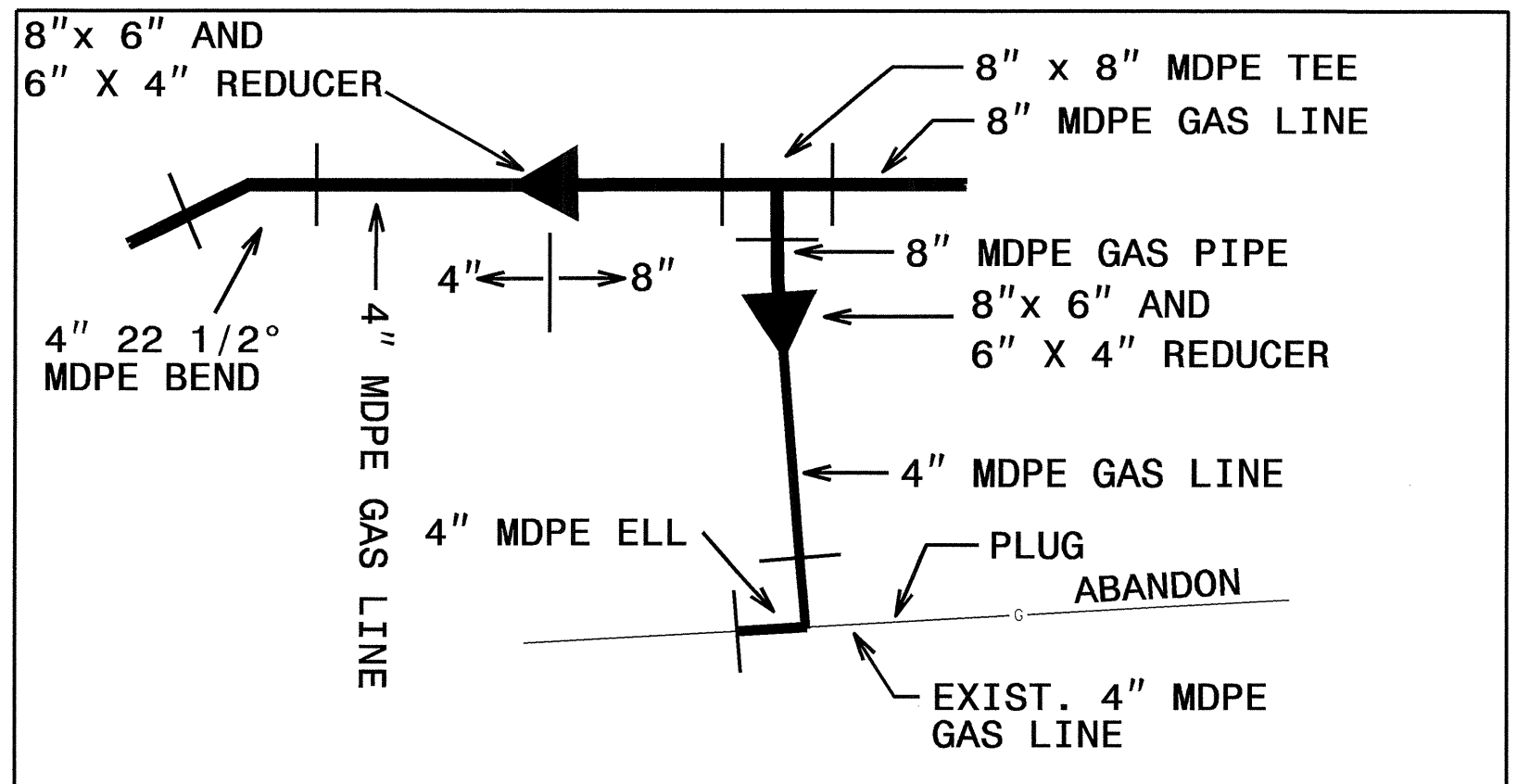
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42		

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 5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-4
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

ALL GAS LINE MATERIALS WILL BE PROVIDED BY GREENVILLE UTILITIES COMMISSION (GUC)



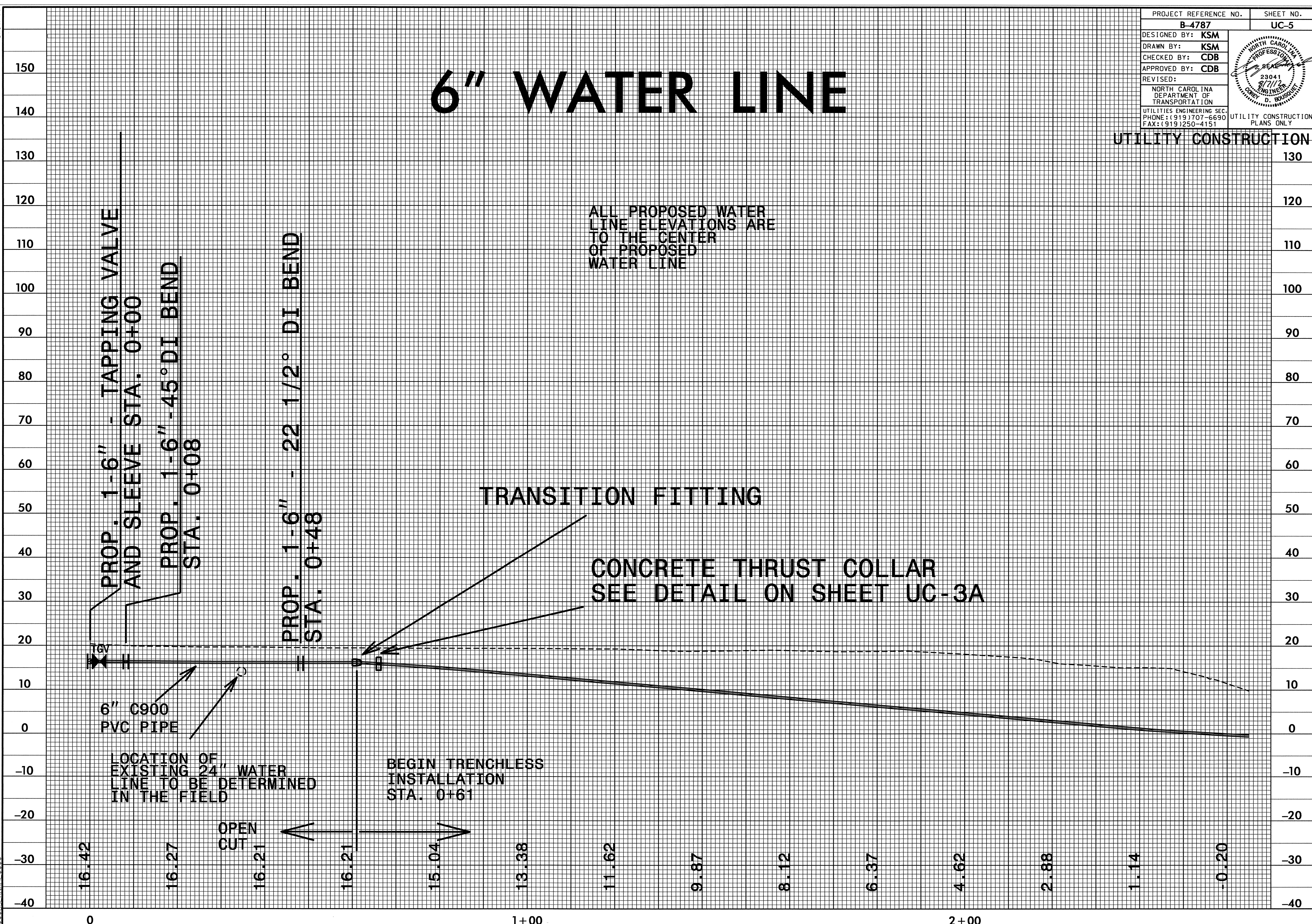
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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-5
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

6" WATER LINE

UTILITY CONSTRUCTION



ALL PROPOSED WATER LINE ELEVATIONS ARE TO THE CENTER OF PROPOSED WATER LINE

TRANSITION FITTING

CONCRETE THRUST COLLAR
SEE DETAIL ON SHEET UC-3A

PROP. 1-6" TAPPING VALVE AND SLEEVE STA. 0+00

PROP. 1-6" -45° DI BEND STA. 0+08

PROP. 1-6" - 22 1/2° DI BEND STA. 0+48

6" C900 PVC PIPE

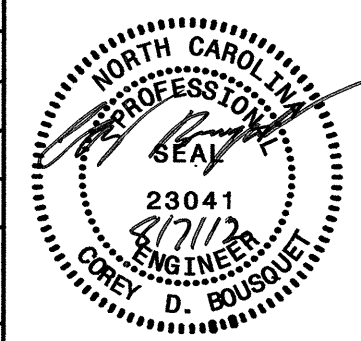
LOCATION OF EXISTING 24" WATER LINE TO BE DETERMINED IN THE FIELD

BEGIN TRENCHLESS INSTALLATION STA. 0+61

OPEN CUT

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5/14/99

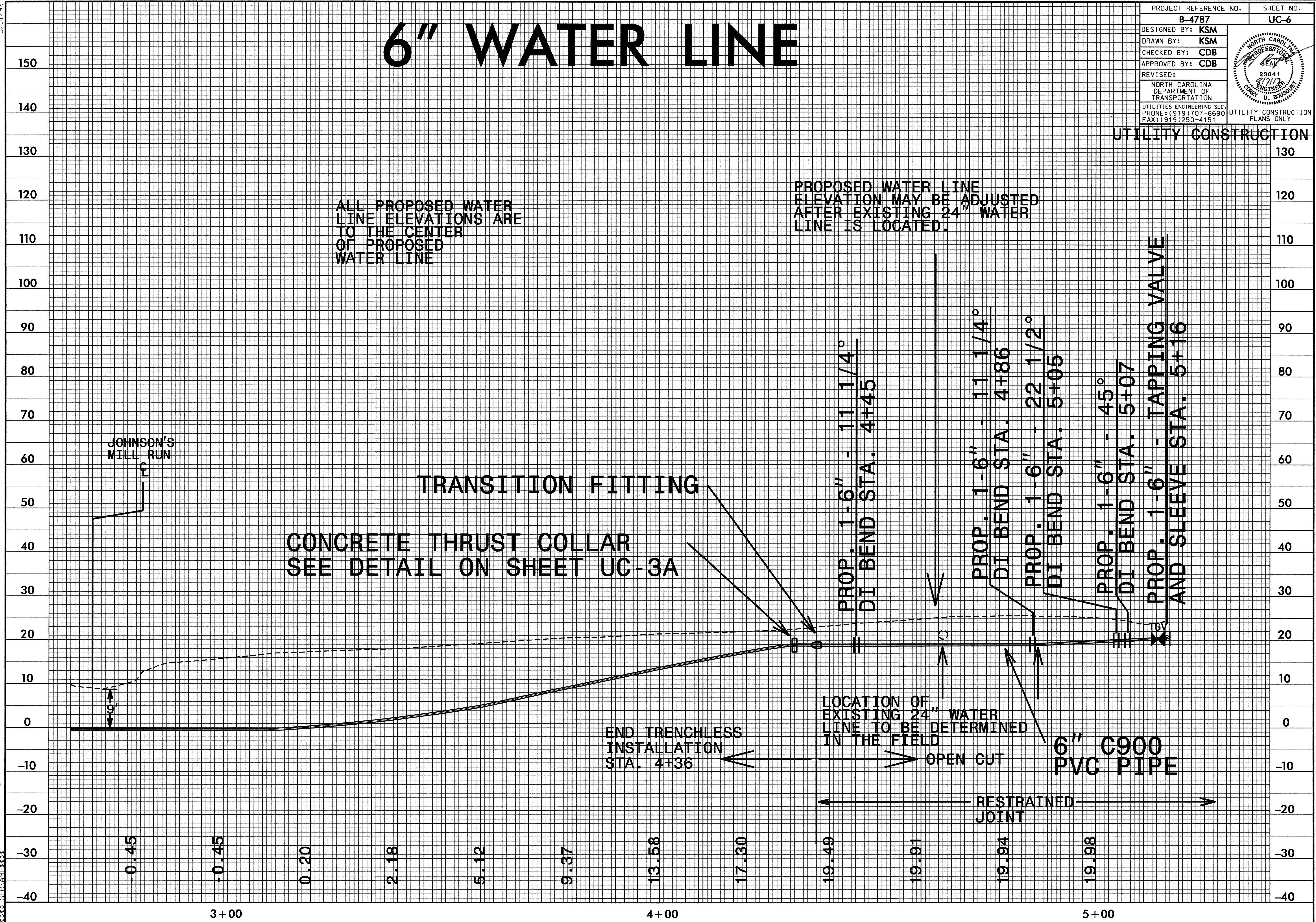
PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-6
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

6" WATER LINE

UTILITY CONSTRUCTION

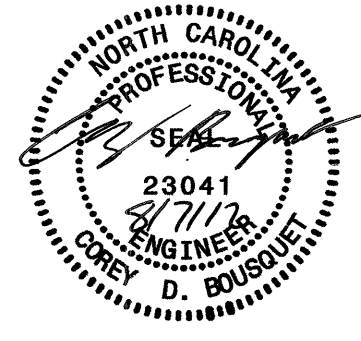
ALL PROPOSED WATER LINE ELEVATIONS ARE TO THE CENTER OF PROPOSED WATER LINE

PROPOSED WATER LINE ELEVATION MAY BE ADJUSTED AFTER EXISTING 24" WATER LINE IS LOCATED.



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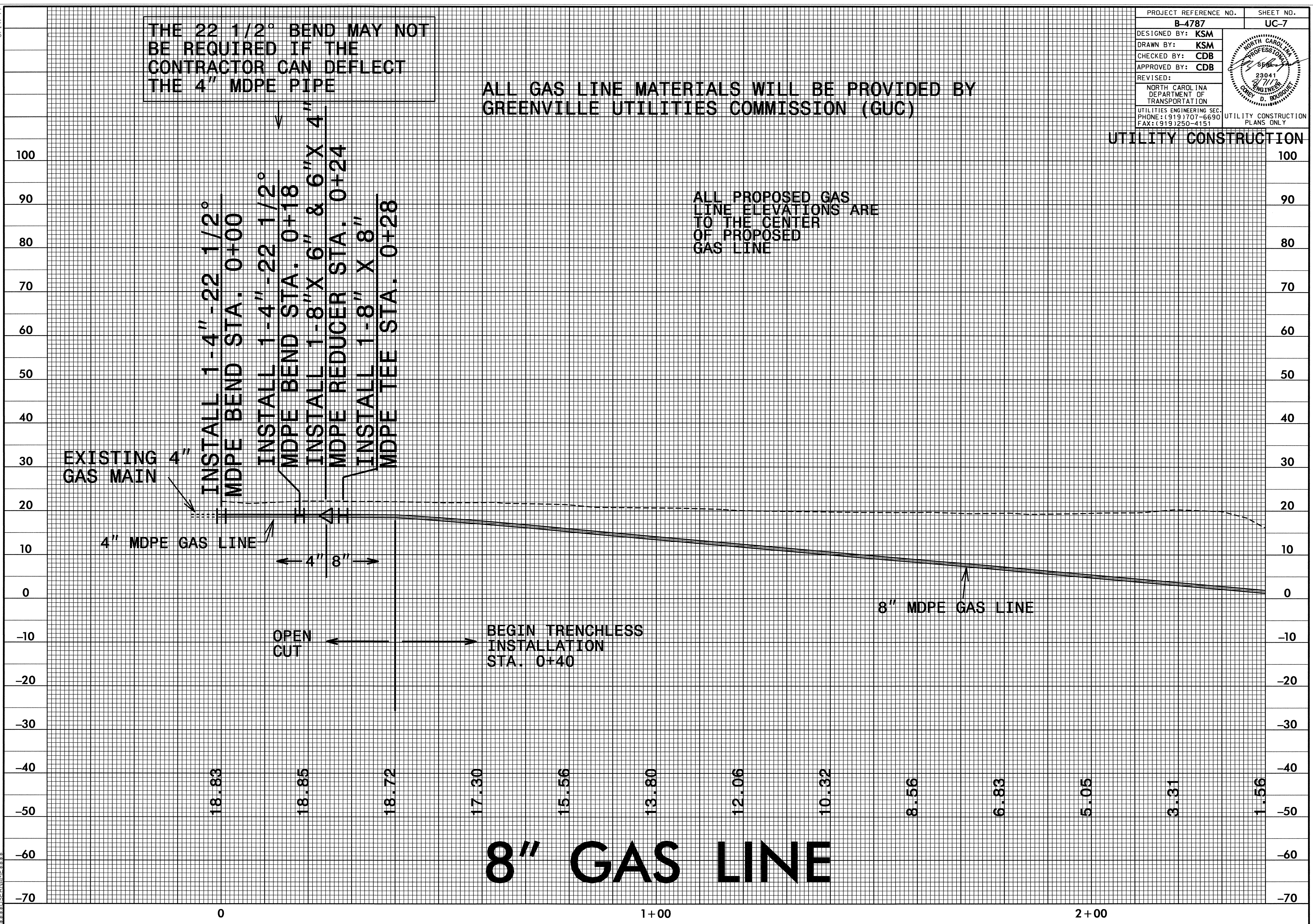
PROJECT REFERENCE NO.	SHEET NO.
B-4787	UC-7
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

THE 22 1/2° BEND MAY NOT BE REQUIRED IF THE CONTRACTOR CAN DEFLECT THE 4" MDPE PIPE

ALL GAS LINE MATERIALS WILL BE PROVIDED BY GREENVILLE UTILITIES COMMISSION (GUC)

UTILITY CONSTRUCTION

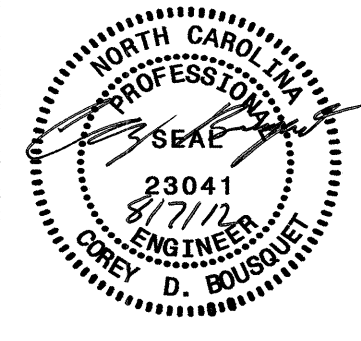
ALL PROPOSED GAS LINE ELEVATIONS ARE TO THE CENTER OF PROPOSED GAS LINE



8" GAS LINE

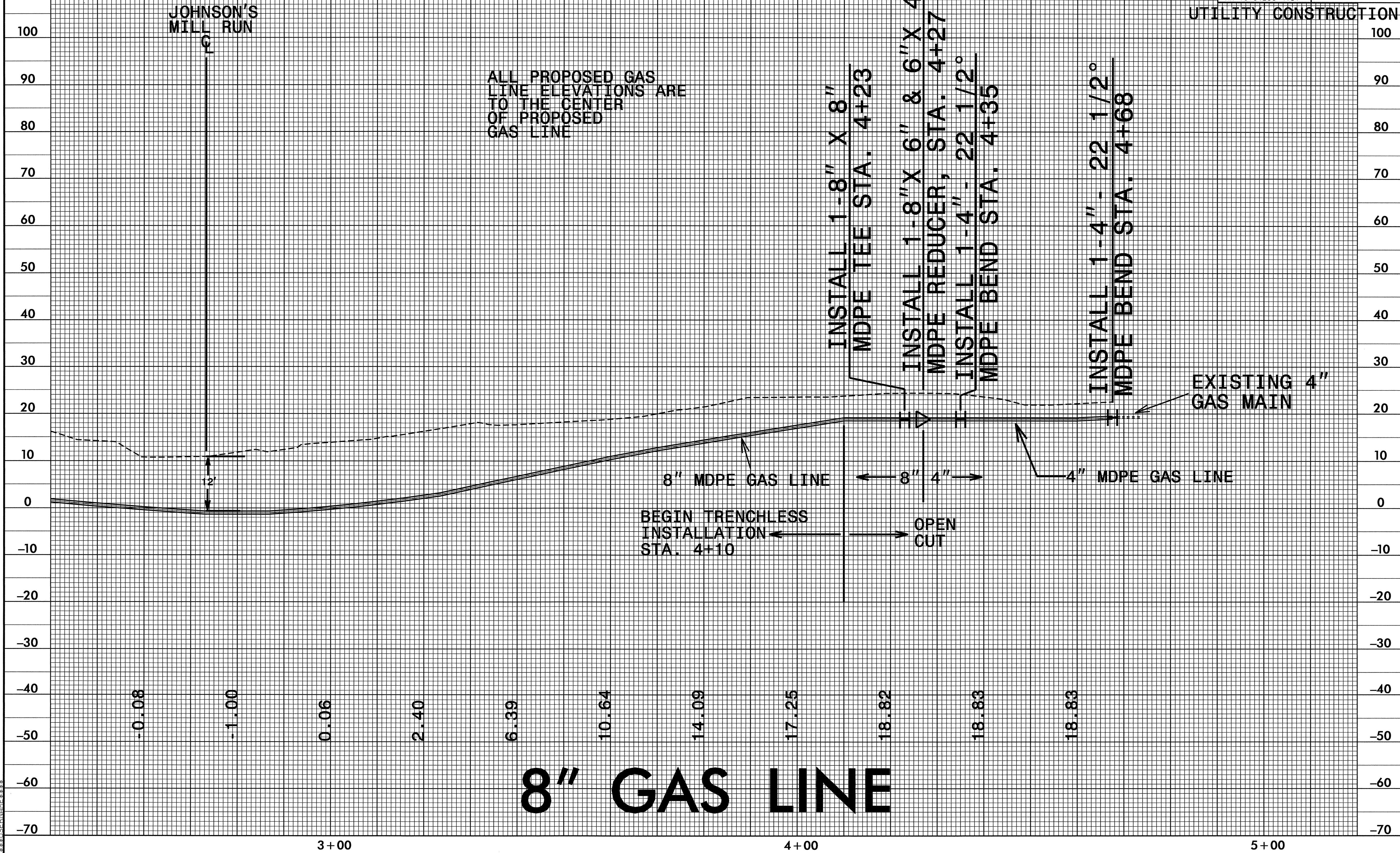
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5/14/99

PROJECT REFERENCE NO. B-4787	SHEET NO. UC-8
DESIGNED BY: KSM	
DRAWN BY: KSM	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

ALL GAS LINE MATERIALS WILL BE PROVIDED BY GREENVILLE UTILITIES COMMISSION (GUC)

ALL PROPOSED GAS LINE ELEVATIONS ARE TO THE CENTER OF PROPOSED GAS LINE



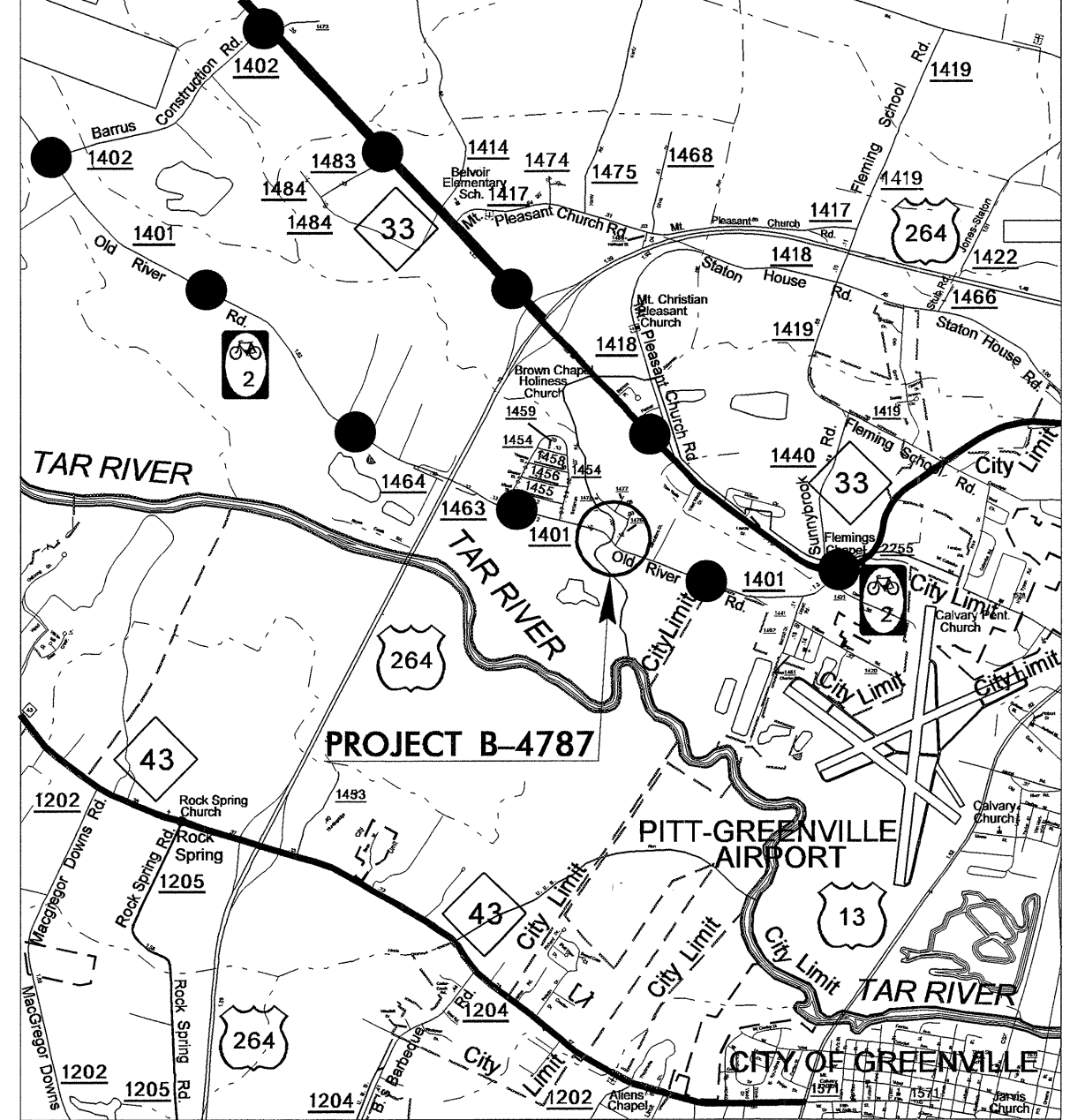
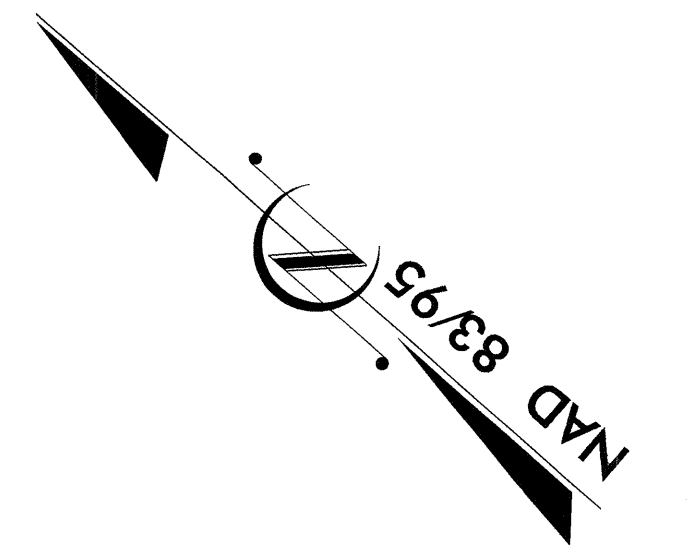
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**UTILITIES BY OTHERS PLANS
PITT COUNTY**

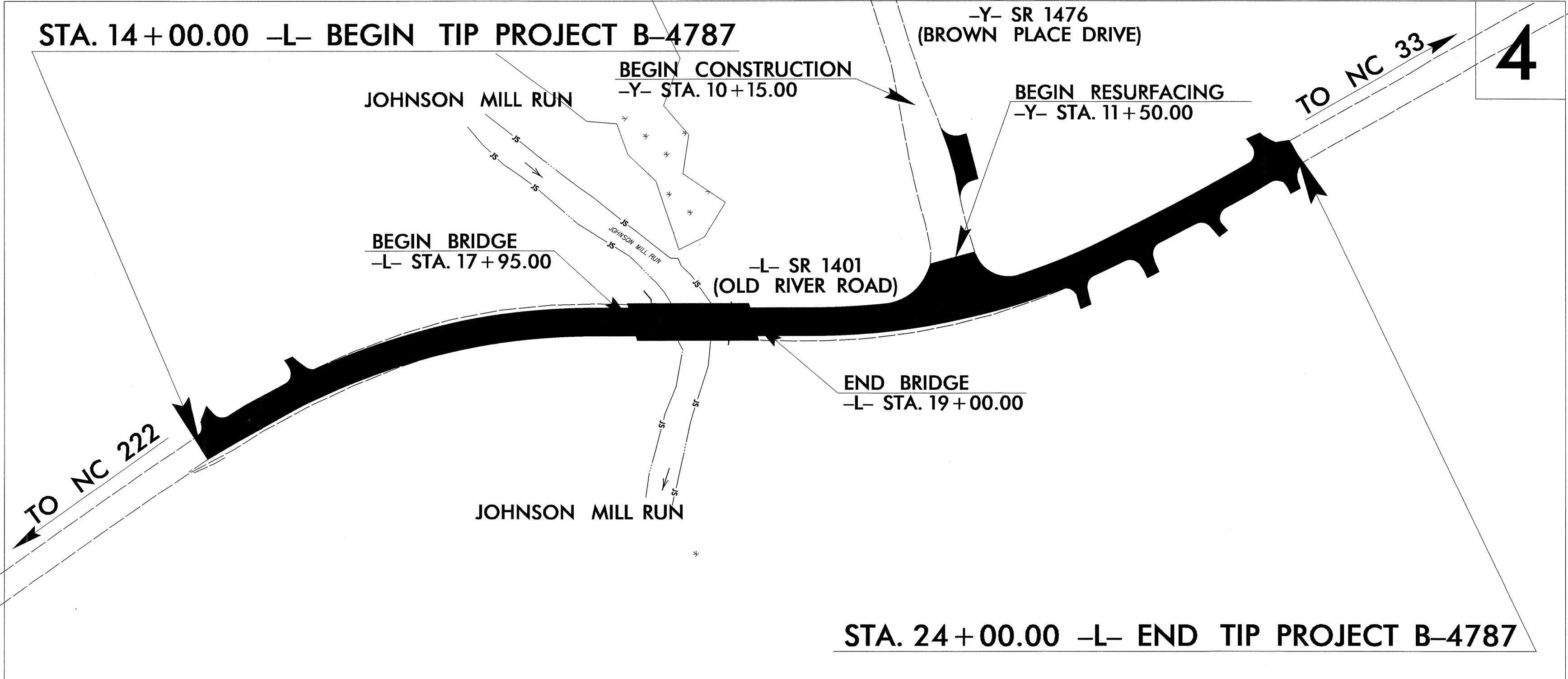
**LOCATION: BRIDGE 95 OVER JOHNSON'S MILL RUN ON
OLD RIVER ROAD SR 1401**

**TYPE OF WORK: RELOCATION OF TELEPHONE., POWER,
AND CATV LINES**



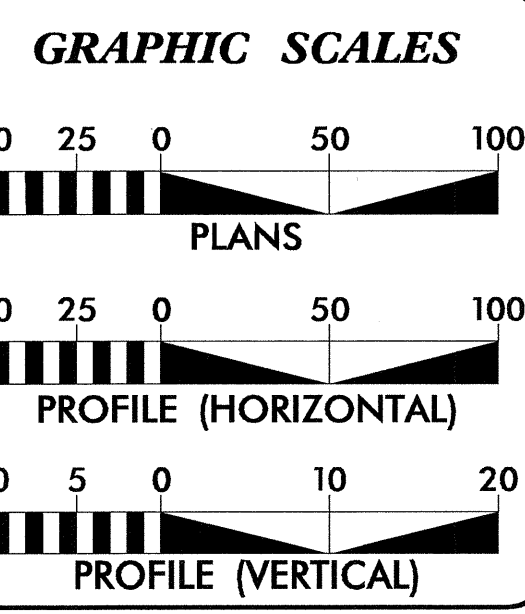
VICINITY MAP

● ● OFFSITE DETOUR ROUTE



STA. 24+00.00 -L- END TIP PROJECT B-4787

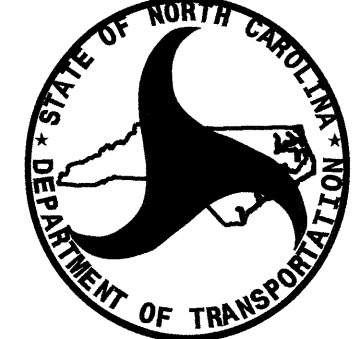
TIP PROJECT: B-4787



INDEX OF SHEETS

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

- UTILITY OWNERS ON PROJECT**
- (1) GREENVILLE UTILITIES COMMISSION POWER
 - (2) CENTURYLINK TELEPHONE
 - (3) SUDDENLINK CATV
 - (4) EDGEcombe MARTIN EMC POWER



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

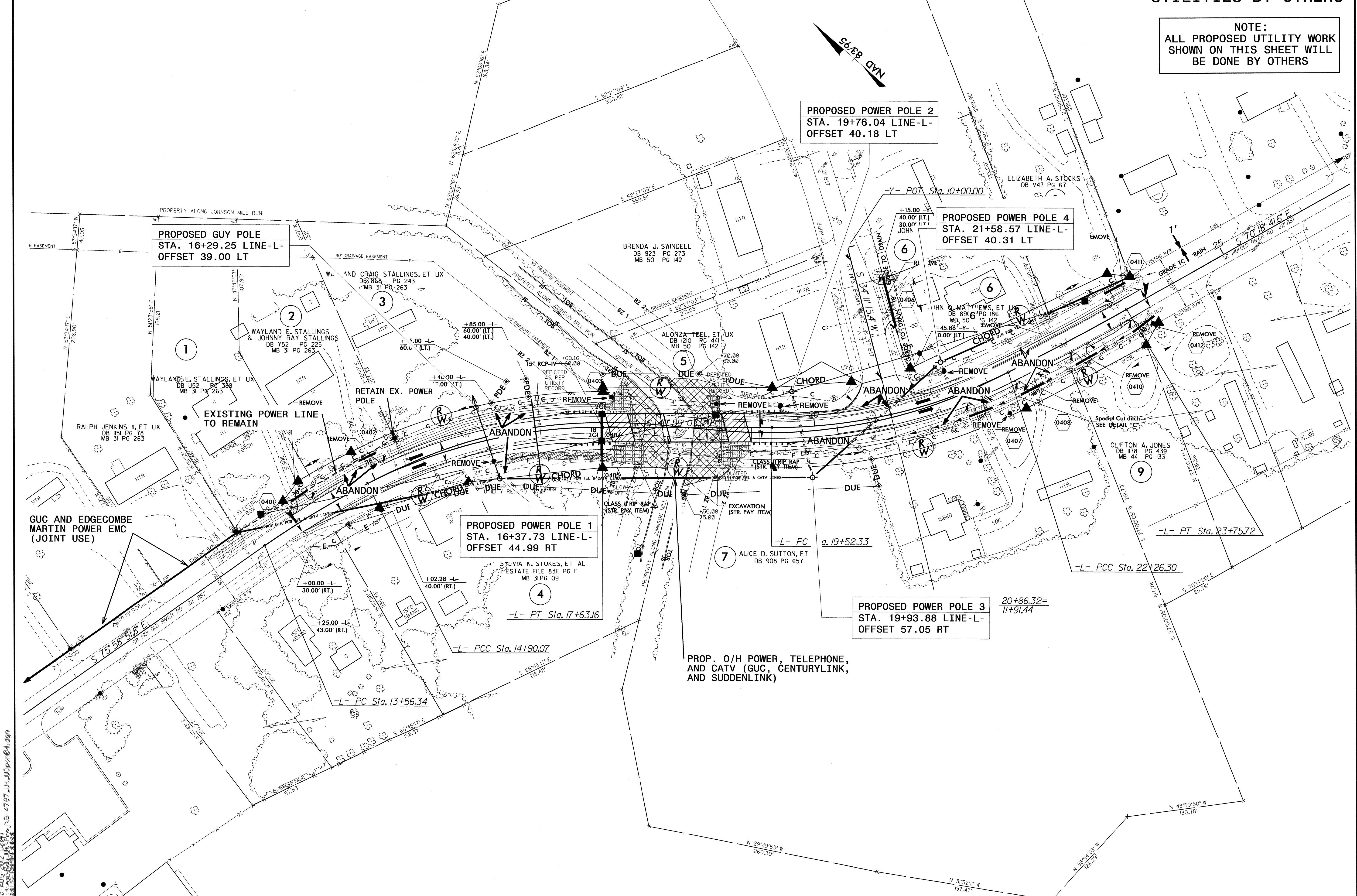
1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Kevin Martin UTILITIES PROJECT DESIGNER

UTILITIES BY OTHERS

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

5/14/99



08-AUG-2012 08:47
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