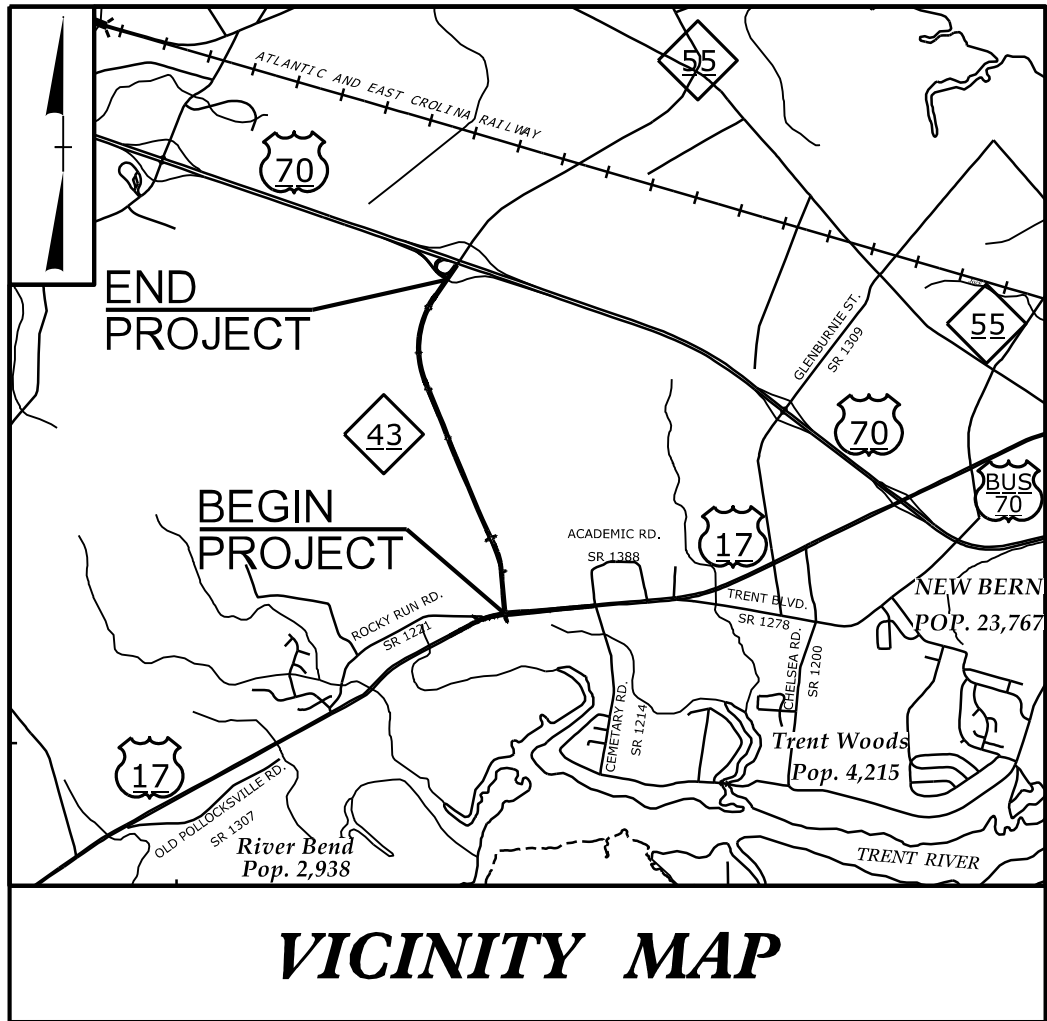


09-APR-2025 13:03
S:\Server\Files\PROJECTS\2017\A2017402.00_HDR_R-4463A\Design\Utilities\Engineering\UC\Proj\R-4463A_Ut_tsh_UC1_psh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$

TIP PROJECT: R-4463A

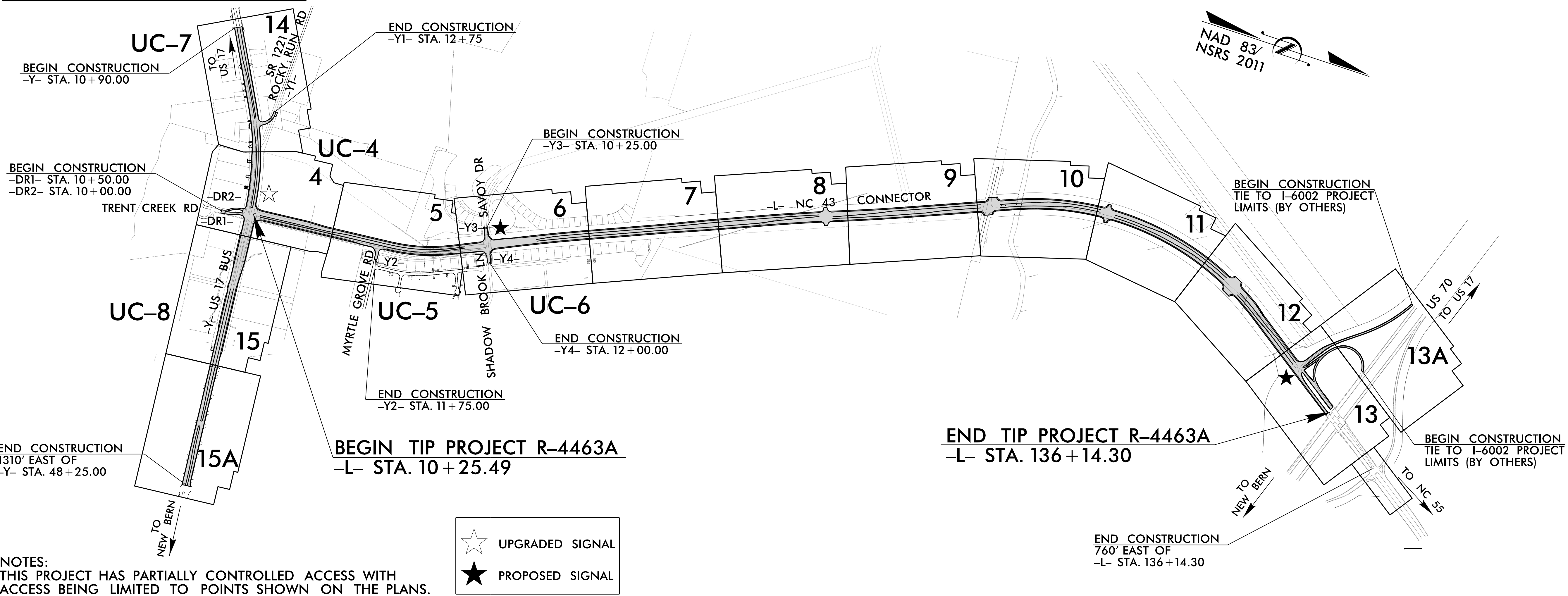


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
CRAVEN COUNTY

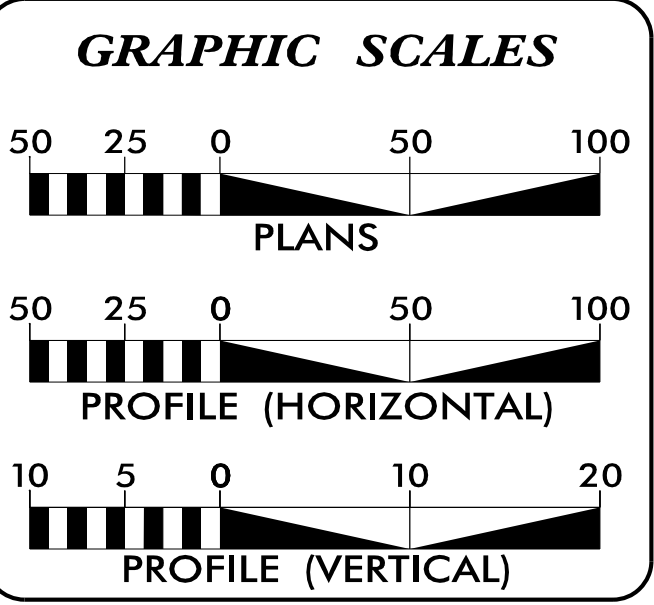
LOCATION: NC 43 CONNECTOR FROM US 70 TO US 17 BUSINESS
TYPE OF WORK: WATER & SEWER RELOCATIONS

T.I.P. NO.	SHEET NO.
R-4463A	UC-1
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



NOTES:
THIS PROJECT HAS PARTIALLY CONTROLLED ACCESS WITH
ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.

- ★ UPGRADED SIGNAL
- ★ PROPOSED SIGNAL



SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A THRU UC-3B	DETAILS
UC-4 THRU UC-8	UTILITY CONSTRUCTION SHEETS
UC-9 THRU UC-15	PROFILE SHEETS

WATER AND SEWER
OWNERS ON PROJECT

(A) WATER - CITY OF NEW BERN
(B) SEWER - CITY OF NEW BERN

PREPARED IN THE OFFICE OF:

HINDE ENGINEERING
License No. C-2639
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513
Ph. (919) 653-0001

Clint L. Stevens, P.E. UTILITIES PROJECT MANAGER
Jordan K. Chapman, E.I. UTILITIES PROJECT ENGINEER
James N. Arnold UTILITIES PROJECT DESIGNER

SEAL

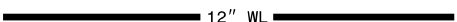
CLINT L. STEVENS
P.E.
4/9/2025

**DIVISION OF HIGHWAYS
DIVISION 2**
2815 ROUSE ROAD EXTENSION
KINSTON, NC 28504
PHONE (252) 775-6100
FAX (252) 208-7862

Heather Lane, P.E. DIVISION PROJECT DEV. ENG.
Michael Aman, P.E. PROJECT TEAM LEAD
Catherine Hossack Meyer, P.E. PROJECT ENGINEER
David Kramer DIVISION UTILITY ENGINEER

UTILITIES PLAN SHEET SYMBOLS

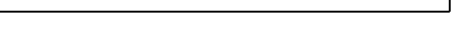
PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

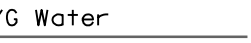
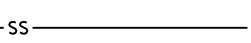
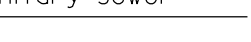
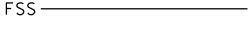
Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

NOTE

PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

*Underground Power Line	
*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	
*Underground Water Line	
Aboveground Water Line	
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	
*Underground SS Forced Main Line	
Underground Unknown Utility Line	
SUE Test Hole	
Water Meter	
Water Valve	
Fire Hydrant	
Sanitary Sewer Cleanout	

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

**HINDE
ENGINEERING**

License No. C-26539
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513



Documented by
Clint L. Stevens
040370
9063F32D777EB42D
CLINT L. STEVENS
6/18/2025
UTILITY CONSTRUCTION
PLANS ONLY

UTILITY CONSTRUCTION

PROJECT SPECIFIC NOTES:

UTILITIES BEING RELOCATED OR INSTALLED
AS SHOWN ON THE UTILITY CONSTRUCTION
PLANS MUST BE ADJUSTED ACCORDINGLY TO
MEET THESE CRITERIA.

UTILITY CONSTRUCTION
PLANS ONLY

Tees, Reducers, Caps		
Fitting Type	Size (inch)	Pipeline Restrained Rad. (feet)
Tee	4	35
	6	52
	8	70
	10	85
	12	101
Reducer	6x4	30
	8x6	32
	10x8	74
	10x6	58
	10x4	31
	12x6	93
	12x4	78
Cap	12x10	31
	4	41
	6	59
	8	76
	10	92
	12	107

The diagram illustrates the installation of a service box and meter assembly. It includes two parts: a perspective view of the service box and a cross-sectional side view of the installation.

Service Box Components:

- CAST IRON LID W/ 2" READ HOLE
- CAST IRON METER BOX
- 4"x 8" RED OR CONCRETE BRICK
- #57 WASHED STONE BED

Installation Details (Cross-Section View):

- METER VALVE:** Located at the top of the meter box, connected to the water main.
- WATER METER:** Installed below the meter valve.
- PIC SERVICE PIPE:** The pipe leading from the meter down towards the house.
- CORPORATION STOP:** A stop on the PIC service pipe.
- TAPPING SADDLE:** Used to tap the water main for the service pipe.
- TRACER WIRE:** A wire run alongside the PIC service pipe for future location identification.
- MIN. DEPTH:** Indicated as 1'-0" for the trench containing the meter and service pipe.
- RIGHT-OF-WAY LINE:** Shown as a horizontal line above the installation.
- BRICK SUPPORT (4 TYP.):** Bricks used to support the PIC service pipe where it crosses the gravel bed.
- HOUSE SERVICE (BY OTHERS):** The point where the service pipe enters the house.
- 4" GRAVEL:** A layer of gravel surrounding the PIC service pipe.
- LINE TO BE KEPT SLACK:** A note indicating the PIC service pipe should have some slack before entering the house.
- SERVICE BOX SET:** The label for the entire assembly shown in the perspective view.


NEW BERN
NORTH CAROLINA
Department of Water Resources
P.O. Box 1129, New Bern, NC 28563
252.639.7526 (FAX) 252.636.4103

STANDARD DRAWING No. W-1



STANDARD DRAWING No. W-3



STANDARD DRAWING No. W-4



STANDARD DRAWING No. S-10



STANDARD DRAWING No. W-5



STANDARD DRAWING No. W-6



STANDARD DRAWING No. W-9



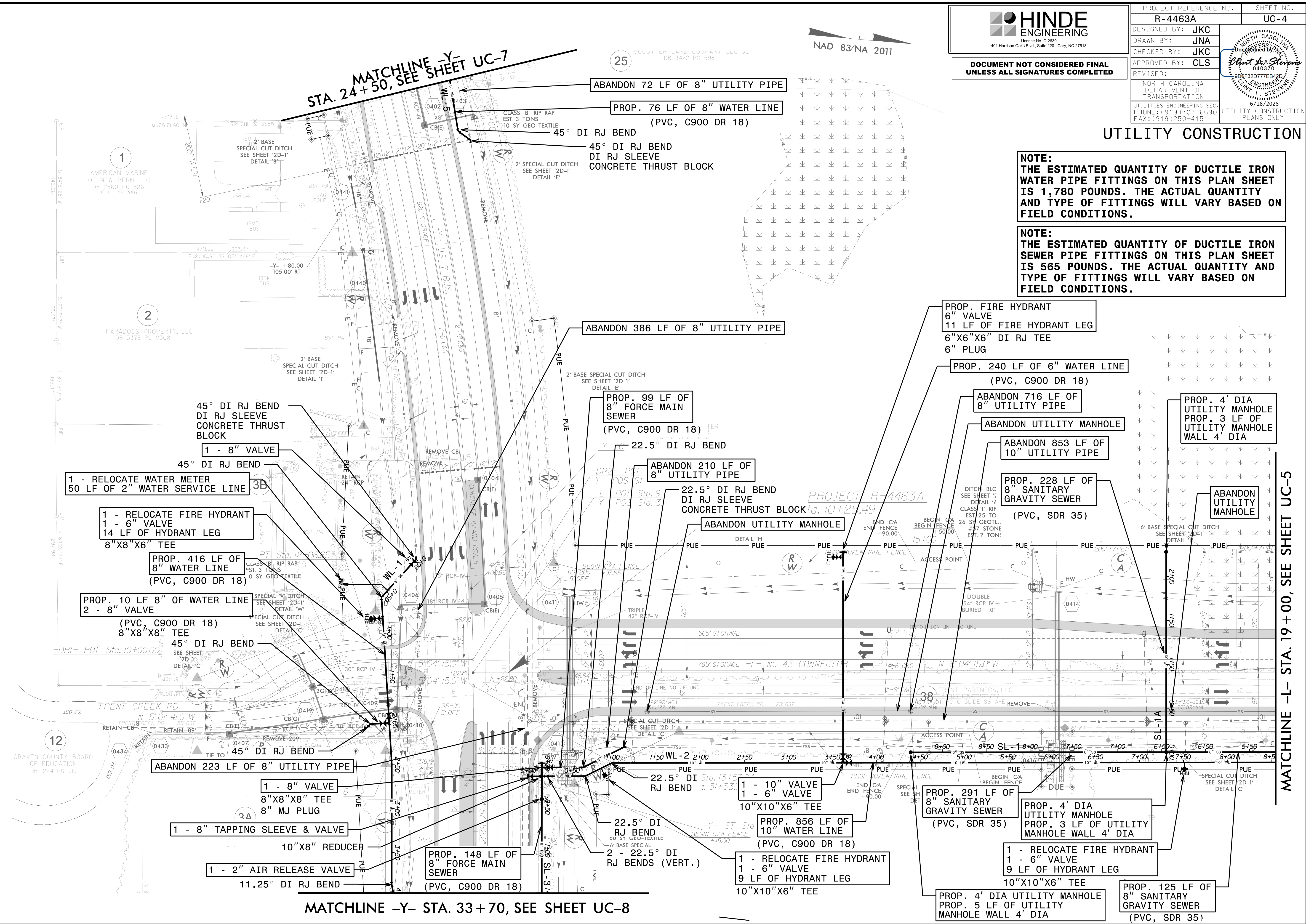
STANDARD DRAWING No. W-12



STANDARD DRAWING No. S-18

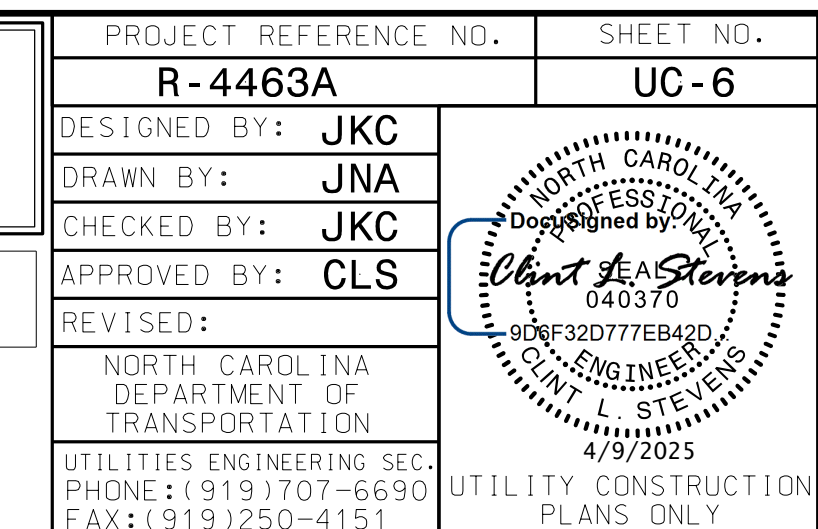
UTILITY CONSTRUCTION
PLANS ONLY



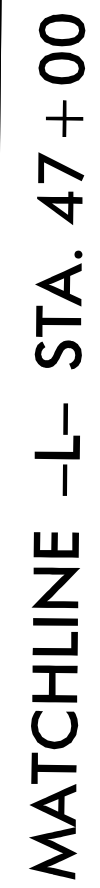


NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
SEWER PIPE FITTINGS ON THIS PLAN SHEET
IS 515 POUNDS. THE ACTUAL QUANTITY AND
TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.





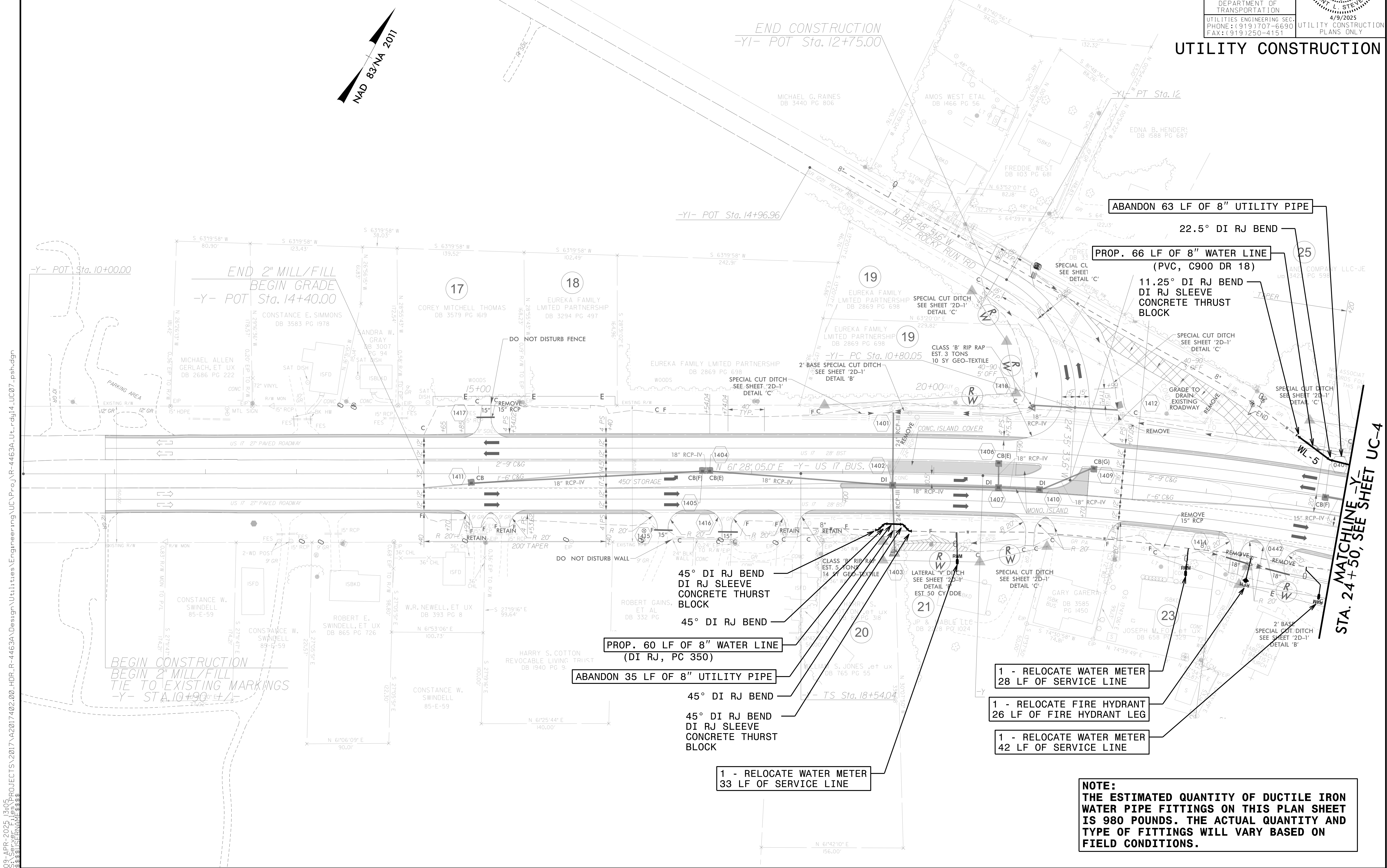
NAD 83/NA 2011



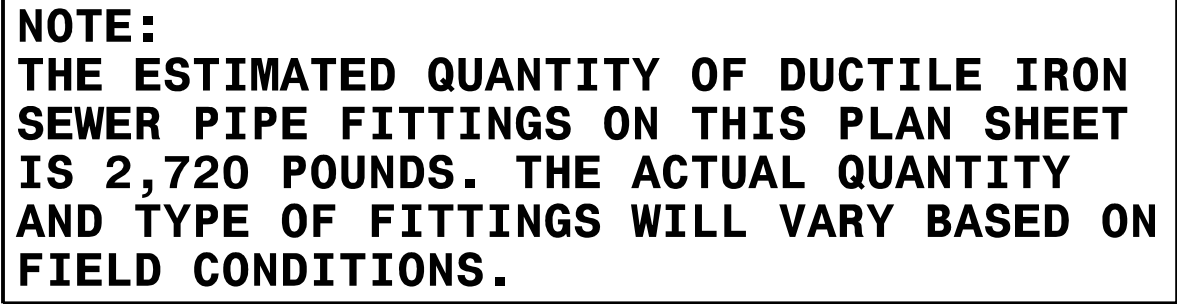
NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
SEWER PIPE FITTINGS ON THIS PLAN SHEET
IS 465 POUNDS. THE ACTUAL QUANTITY AND
TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.

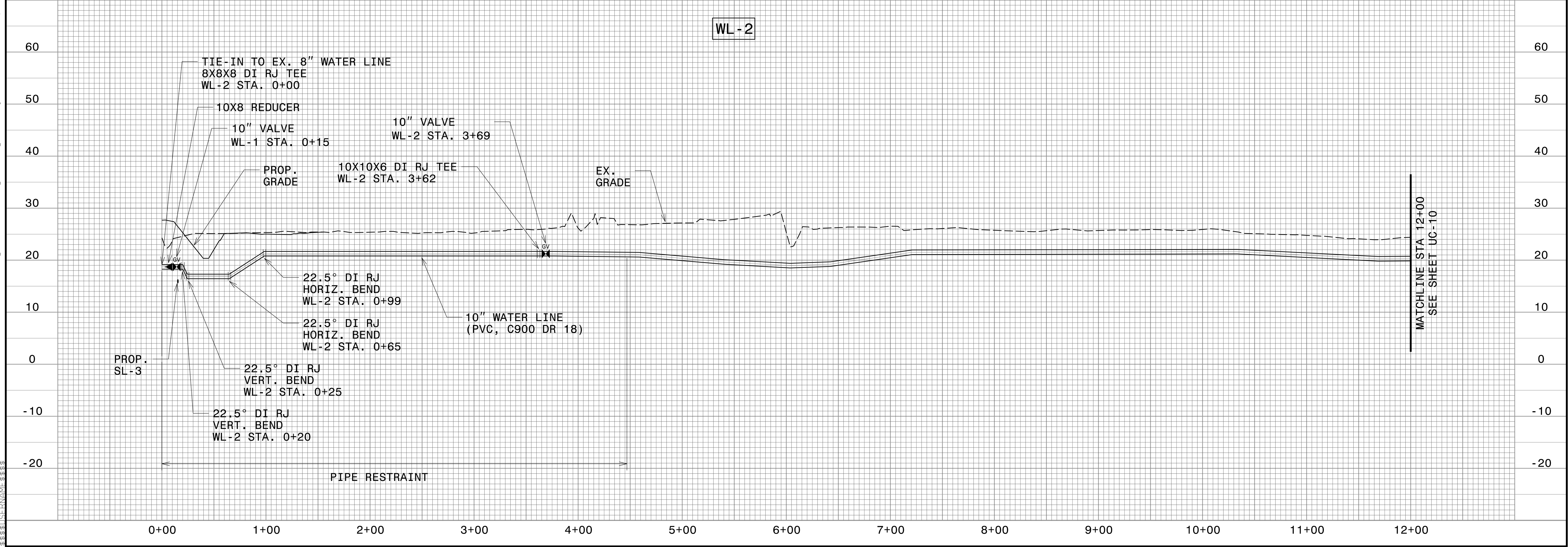
PROJECT REFERENCE NO.		SHEET NO.	
R-4463A		UC-7	
DESIGNED BY: JKC			
DRAWN BY: JNA			
CHECKED BY: JKC			
APPROVED BY: CLS			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		4/9/2025 UTILITIES CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION



NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 980 POUNDS. THE ACTUAL QUANTITY AND
TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.









HINDE

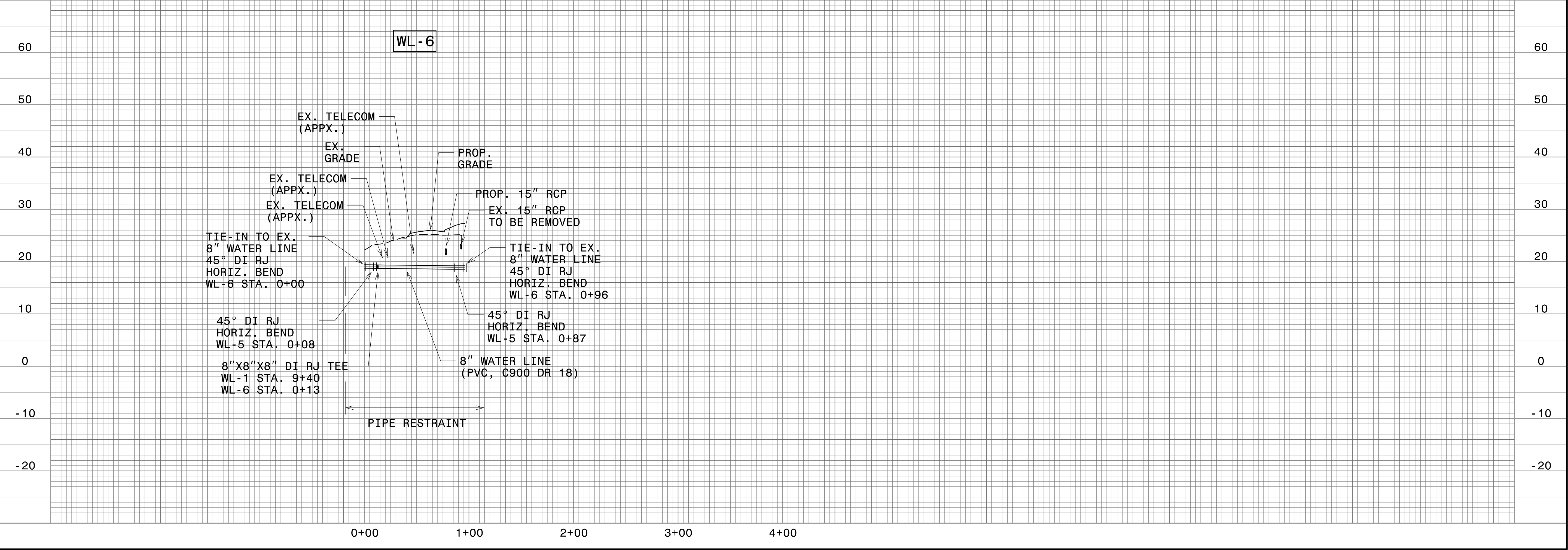
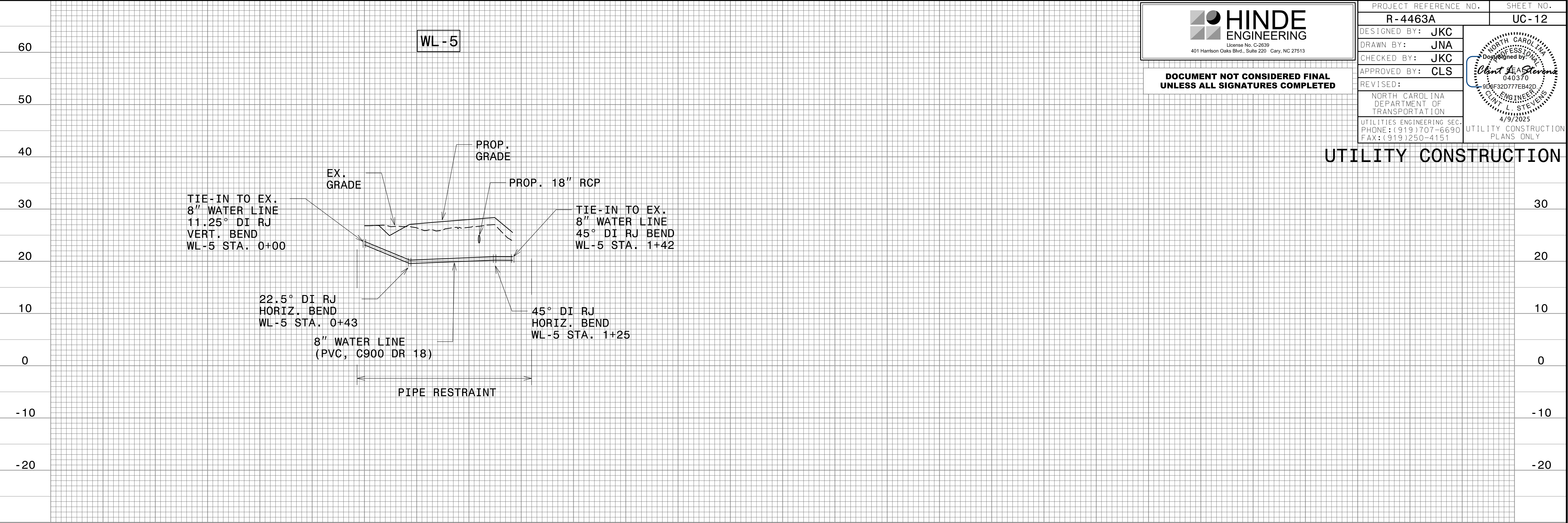
ENGINEERING

License No. C-2639
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

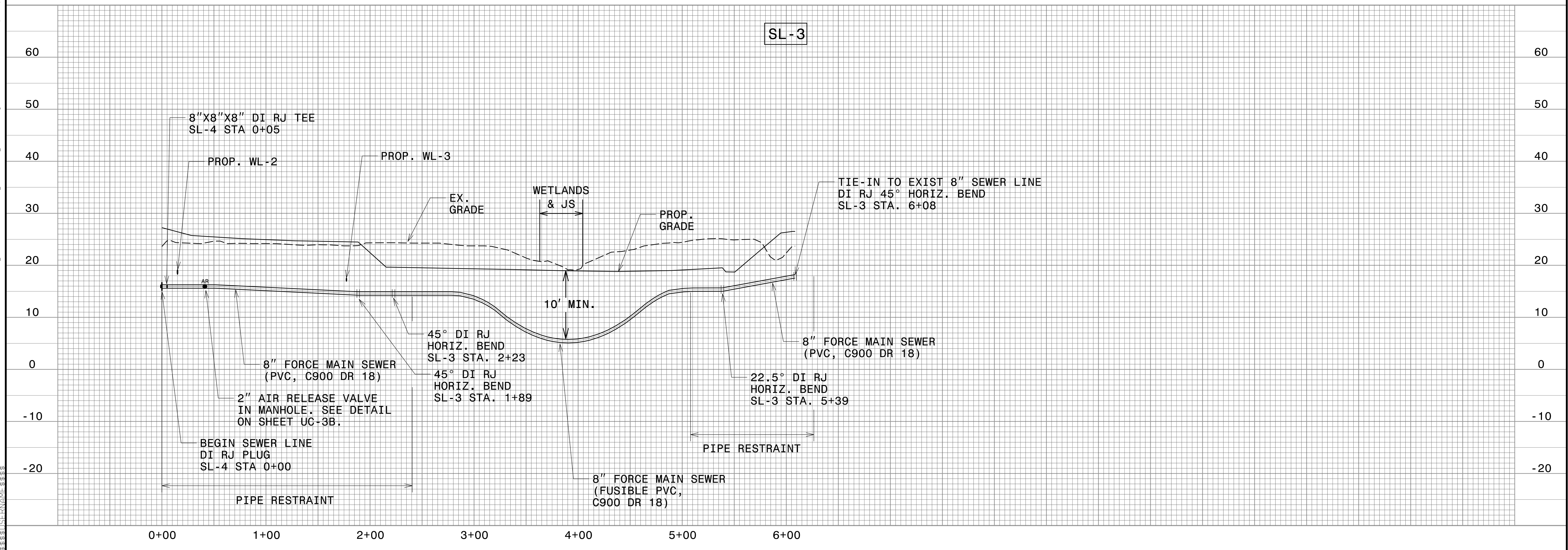
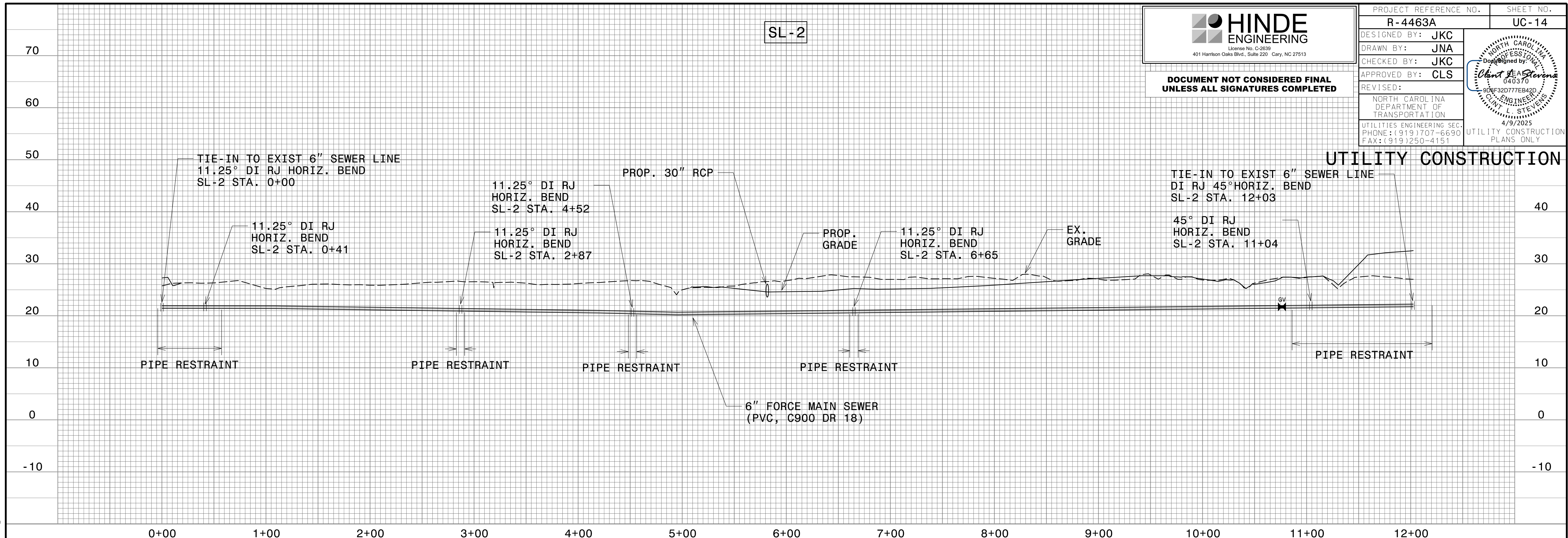
PROJECT REFERENCE NO.		SHEET NO.	
R-4463A		UC-12	
DESIGNED BY: JKC		North Carolina Professional Engineer 040370 C. L. STEVENS 4/9/2025	
DRAWN BY: JNA			
CHECKED BY: JKC			
APPROVED BY: CLS			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION



C:\APR-2025\13+07\PROJECTS\2017\A2017402.00_HDR_R-4463A\Design\Utilities\Engineering\UC\Proj\NR-4463A_Ut_UC12.pfl_psh.dgn
3/25/2025 1:58:58 PM





09-APR-2025 3:07
 C:\Server Files\PROJECTS\2017\A2017402.00_HDR_R-4463A\Design Utilities\Engineering\UC\Proj\R-4463A_Ut_UC14_pfl.psh.dgn
 \$\$\$\$(USERNAME)\$\$\$

HINDE

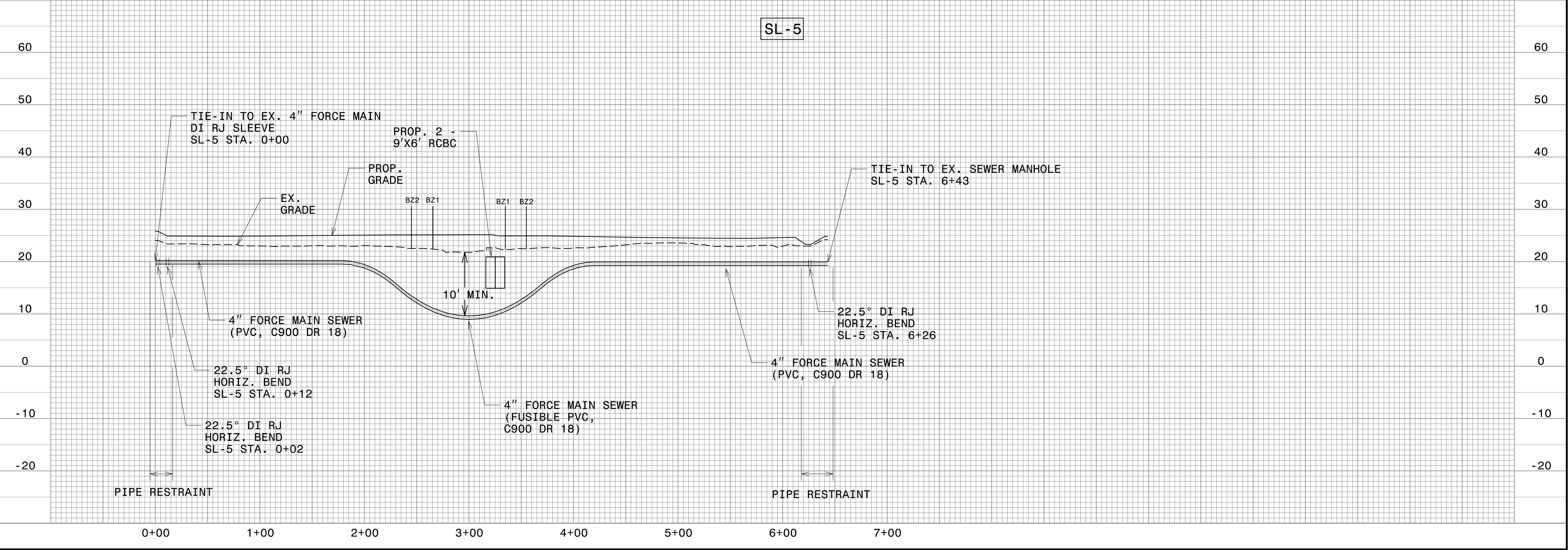
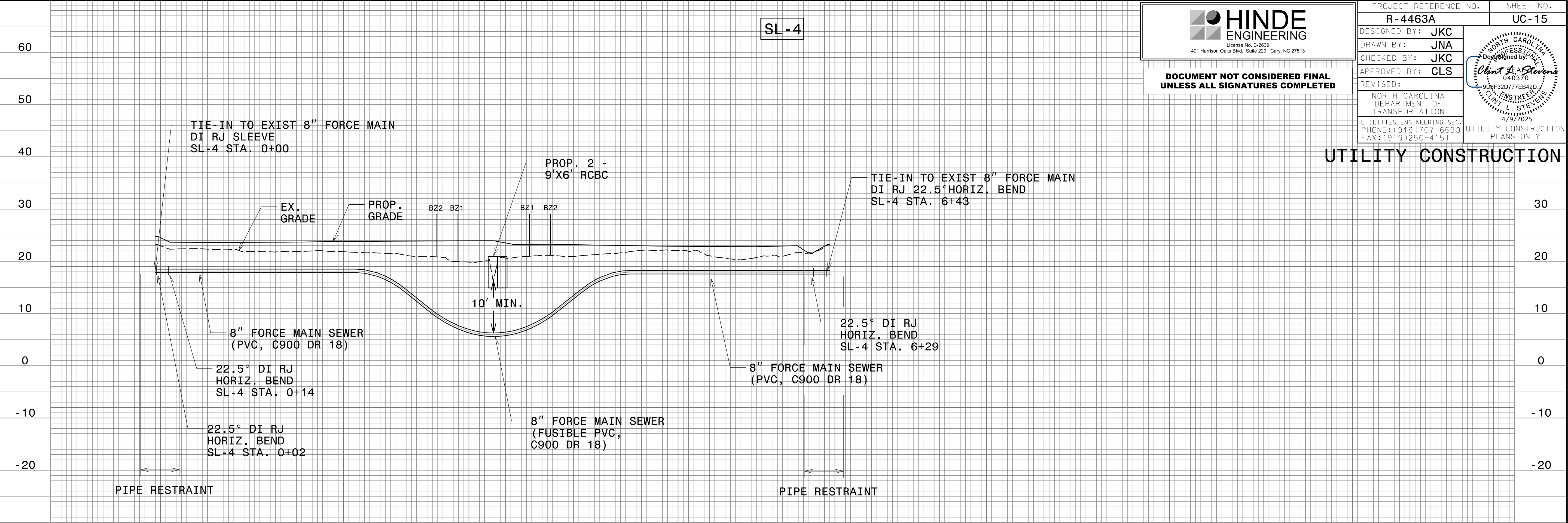
ENGINEERING

License No. C-2639
401 Harrison Oaks Blvd., Suite 220 Cary, NC 27513

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.		SHEET NO.
R-4463A		UC-15
DESIGNED BY: JKC	NORTH CAROLINA PROFESSIONAL ENGINEER Obert L. Stevens 040370 906f32d777EB42D CLAY ENGINEERS CLAY L. STEVENS 4/9/2025	
DRAWN BY: JNA		
CHECKED BY: JKC		
APPROVED BY: CLS		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION



C:\APR-2025\13+07\PROJECTS\2017\A2017402\00_HDR_R-4463A\Design\Utilities\Engineering\UC\Proj\NR-4463A_Ut_UC15.pfl_psh.dgn
3/3/2025 10:16:58 AM