

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO  
ROADWAY SHEET 4



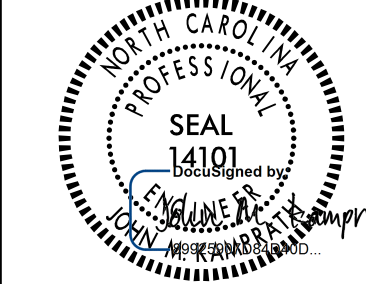
U-6187

3RD1 UC-4

NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
DAVIE COUNTY

ROADWAY DESIGN UNIT

6/3/2025



UTILITY CONSTRUCTION  
PLANS ONLY

PREPARED BY



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

REVISIONS

BEGIN CONSTRUCTION  
CONNECT TO EX. 4" PVC FORCE MAIN  
WITH 22.5 DEG DI BEND  
FM1 STA. 0+00.00  
L STA. 13+62.68, 29.6' LT.

4" X 22 1/2° DI BEND  
FM1 STA. 0+23.68  
L STA. 13+84.81, 38.0' LT.

INSTALL 562 LF OF 4"  
FORCE MAIN SEWER

INSTALL BY OPEN CUT  
86 LF 12" ENCASEMENT PIPE  
0.250" MINIMUM WALL THICKNESS

1" COMBINATION AIR  
VALVE W/ MANHOLE  
SEE DETAIL 6.06,  
SHT. UC-3B  
FM1 STA. 0+76.68  
L STA. 14+37.81, 38.0' LT.

4" X 90° DI BEND  
FM1 STA. 3+88.88  
L STA. 17+50.00, 38.0' LT.

-L- POT 19+10.82=  
-Y4- POB 10+00.00

ABANDON 429 LF OF  
4" UTILITY PIPE

4" X 45° DI BEND  
FM1 STA. 4+70.47  
L STA. 17+50.00, 43.6' RT.

4" X 22 1/2° DI BEND  
FM1 STA. 5+08.70  
L STA. 17+77.05, 70.6' RT.

END CONSTRUCTION  
CONNECT TO EX. 4" PVC  
FORCE MAIN  
FM1 STA. 5+61.60  
L STA. 18+25.91, 90.9' RT.

BEGIN CONSTRUCTION 8" WATER LINE  
CONNECT TO EX. 8" PVC WATER LINE WITH  
22 1/2 DEG DI BEND  
WL1 STA. 0+00.00  
DRW1 STA. 11+03.41, 13.6' LT.

RELOCATE WATER METER

6 LF 3/4" WATER SERVICE LINE

8" X 11 1/4° DI VERT. BEND  
WL1 STA. 1+25.00  
Y4 STA. 12+08.00, 72.4' RT.

8" VALVE  
WL1 STA.  
1+15.00

-Y4- PT 12+68.16

8" X 22 1/2° DI BEND  
WL1 STA. 1+56.88  
Y4 STA. 12+31.28, 76.9' RT.

INSTALL 495 LF - 8" WATER LINE

8" X 11 1/4° DI VERT. BEND  
WL1 STA. 2+10.00  
Y4 STA. 12+72.37, 70.9' RT.

INSTALL BY BORE & JACK  
106 LF - 18" ENCASEMENT PIPE  
0.250" MINIMUM WALL THICKNESS

8" X 11 1/4° DI BEND  
WL1 STA. 3+64.80  
Y4 STA. 14+26.70, 65.4' RT.

8" VALVE  
WL1 STA. 3+84.80

8" X 11 1/4° DI BEND  
WL1 STA. 4+42.60  
Y4 STA. 15+02.15, 47.6' RT.

8" X 22 1/2° BEND  
WL1 STA. 4+64.98  
Y4 STA. 15+23.09, 38.9' RT.

END CONSTRUCTION 8" WATER LINE  
CONNECT TO EX. 8" PVC WATER LINE WITH  
45 DEG DI BEND  
WL1 STA. 4+95.10  
Y4 STA. 15+44.39, 17.7' RT.

MATCH LINE -L- STA 24+00.00 SEE SHEET UC-5

NOTES:

- 4" DIAMETER FORCE MAIN PIPING SHALL BE DR11 HDPE PER ASTM 714 (PE 4710) UNLESS SHOWN AS DUCTILE IRON.
- HDPE JOINTS SHALL BE FUSION WELDED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 4" DIAMETER BURIED FORCE MAIN FITTINGS SHALL BE CEMENT LINED, ASPHALTIC COATED, DUCTILE IRON WITH MECHANICAL RESTRAINT EQUAL TO MEGALUGS.
- TRANSITIONS BETWEEN DUCTILE IRON AND HDPE SHALL BE PROVIDED IN ACCORDANCE WITH PLASTIC PIPE INSTITUTE, INC. TN-36-2006 "GUIDELINES FOR CONNECTING HDPE POTABLE WATER PRESSURE PIPES TO DI AND PVC PIPING SYSTEMS", ([www.plasticpipe.org](http://www.plasticpipe.org)), ARTICLE 2.8, TRANSITION FITTINGS. ALL TRANSITION FITTINGS WILL UTILIZE A MECHANICAL ASSEMBLY OF HDPE AND DI PIPE THAT WILL BE BUTT WELDED TO THE HDPE MEMBER.
- THE FORCE MAIN SYSTEM IS INTENDED TO BE TRENCHED IN THE ROAD RIGHT OF WAY. COMPACT TRENCH FILL TO 95% OF STANDARD PROCTOR THROUGHOUT.

FOR WATER LINE PROFILE SEE SHEET UC-8

FOR FORCE MAIN PROFILE SEE SHEET UC-10

THE ESTIMATED QUANTITY OF DUCTILE IRON  
SEWER PIPE FITTINGS ON THIS PLAN SHEET  
IS 255 POUNDS. THE ACTUAL QUANTITY AND  
TYPE OF FITTINGS WILL VARY BASED ON  
FIELD CONDITIONS.

THE ESTIMATED QUANTITY OF DUCTILE IRON  
WATER PIPE FITTINGS ON THIS PLAN SHEET  
IS 880 POUNDS. THE ACTUAL QUANTITY AND  
TYPE OF FITTINGS WILL VARY BASED ON  
FIELD CONDITIONS.