

3220 GLEN ROYAL RD. RALEIGH, NC 27617
TELE 919.788.0224 FAX 919.788.0232
NC LICENSE #P-0189

PROJECT REFERENCE NO. SHEET NO.

U-5827 UC-4

DESIGNED BY: EMT

DRAWN BY: EMT

CHECKED BY: MJL

APPROVED BY:

REVISED:

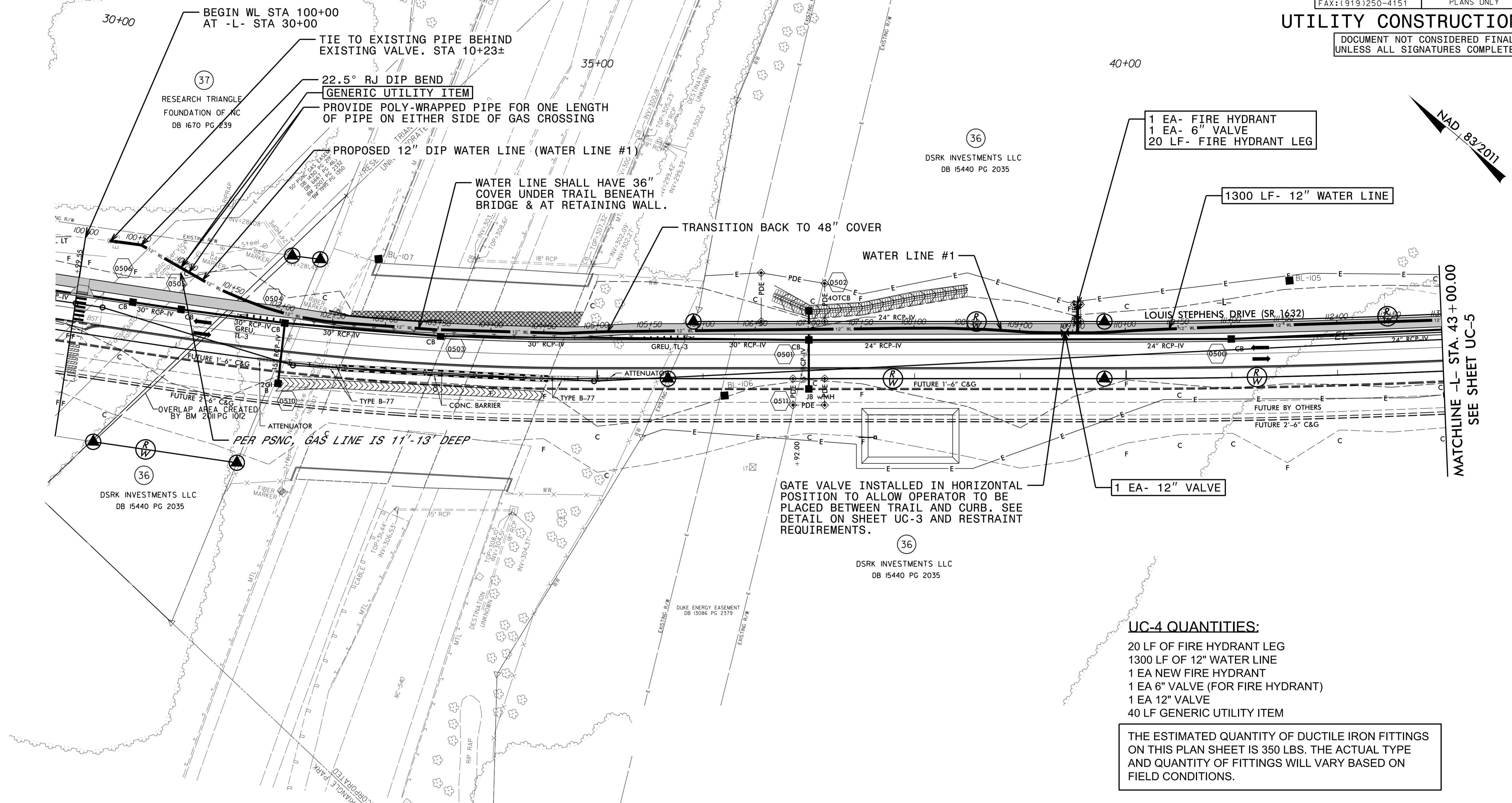
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 7250-4151

Professional Engineer Seal for Eric M. Tweed, License No. 028912, State of North Carolina. The seal is circular with the text 'NORTH CAROLINA PROFESSIONAL ENGINEER SEAL' and 'ERIC M. TWEED' around the perimeter. The date '5/23/2019' is stamped on the seal.

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



UC-4 QUANTITIES:

- 20 LF OF FIRE HYDRANT LEG
- 1300 LF OF 12" WATER LINE
- 1 EA NEW FIRE HYDRANT
- 1 EA 6" VALVE (FOR FIRE HYDRANT)
- 1 EA 12" VALVE
- 40 LF GENERIC UTILITY ITEM

THE ESTIMATED QUANTITY OF DUCTILE IRON FITTINGS ON THIS PLAN SHEET IS 350 LBS. THE ACTUAL TYPE AND QUANTITY OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

RESTRAINED JOINT CALCULATIONS:
PROVIDE RESTRAINT OF ALL JOINTS ON EACH SIDE OF BEND OR VALVE PER THE LIST BELOW:

- 11 1/4° BEND= 5'
- 22 1/2° BEND= 9'
- 45° BEND= 18'
- 90° BEND= 43'
- VALVE = 59'

DESIGN BASED ON 12" DIP BURIED 36" DEEP AT 200 PSI WITH 1.5:1 SAFETY FACTOR. FOR AREAS WITH DEEPER BURY, A LESSER LENGTH OF RESTRAINED JOINT PIPE MAY BE USED IF APPROVED BY ENGINEER.

COORDINATE WITH THE TOWN OF CARY FOR VALVE OPERATION AND FOR CONNECTIONS.

NOTE: CONTRACTOR SHALL FIELD LOCATE ALL PROPOSED CONNECTION POINTS AND ADVISE OF ANY DEVIATIONS FROM APPROVED DESIGN PRIOR TO ANY CONSTRUCTION.