

5/28/22

**TGS ENGINEERS**  
 706 HILLSBOROUGH ST. SUITE 200  
 RALEIGH, NC 27603  
 PH (919) 773-8887  
 CORP. LICENSE NO.: C-0275

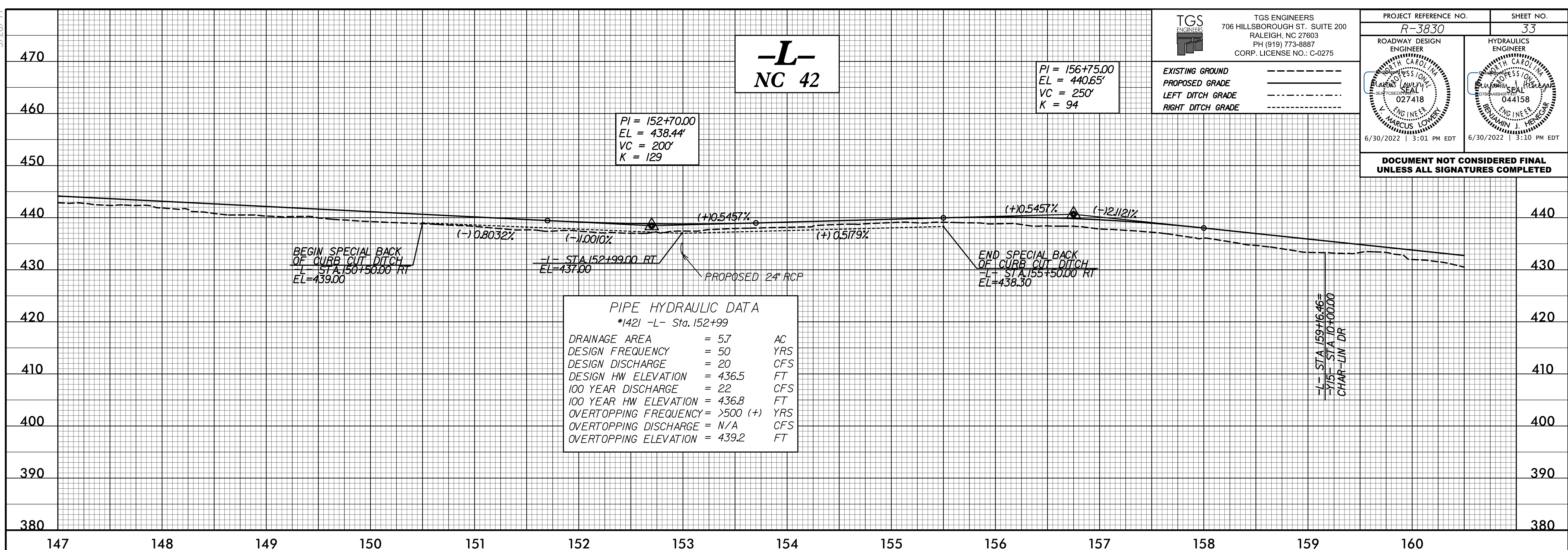
EXISTING GROUND - - - - -  
 PROPOSED GRADE - - - - -  
 LEFT DITCH GRADE - - - - -  
 RIGHT DITCH GRADE - - - - -

PROJECT REFERENCE NO. <b>R-3830</b>	SHEET NO. <b>33</b>
ROADWAY DESIGN ENGINEER MARCUS LOWERY LICENSE NO. 027418 6/30/2022   3:01 PM EDT	HYDRAULICS ENGINEER BENJAMIN J. HENEGAR LICENSE NO. 044158 6/30/2022   3:10 PM EDT

# -L- NC 42

PI = 156+75.00  
 EL = 440.65'  
 VC = 250'  
 K = 94

PI = 152+70.00  
 EL = 438.44'  
 VC = 200'  
 K = 129



**PIPE HYDRAULIC DATA**  
 \*142I -L- Sta. 152+99

DRAINAGE AREA	= 5.7	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 20	CFS
DESIGN HW ELEVATION	= 436.5	FT
100 YEAR DISCHARGE	= 22	CFS
100 YEAR HW ELEVATION	= 436.8	FT
OVERTOPPING FREQUENCY	= >500 (+)	YRS
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING ELEVATION	= 439.2	FT

# -L- NC 42

BM10 ELEVATION = 418.37  
 N 623263 E 1971051  
 -L- STA 168+50.294 RT.  
 RR SPIKE SET IN BASE OF 14" PINE

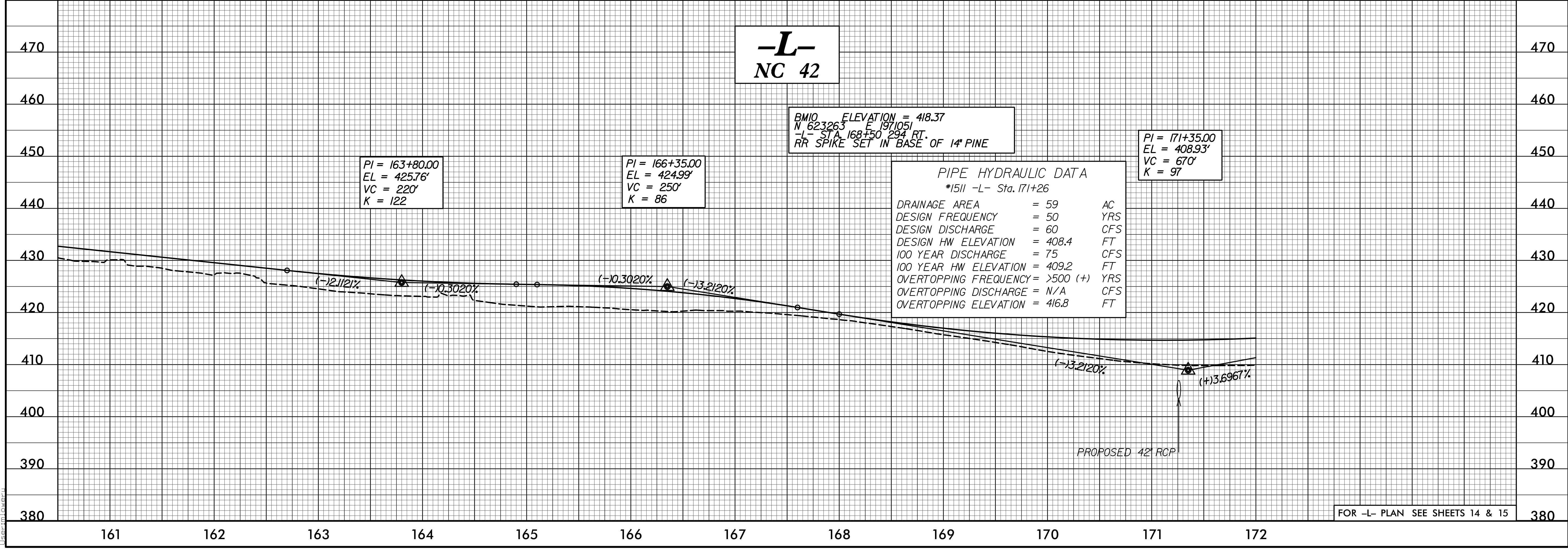
PI = 171+35.00  
 EL = 408.93'  
 VC = 670'  
 K = 97

PI = 163+80.00  
 EL = 425.76'  
 VC = 220'  
 K = 122

PI = 166+35.00  
 EL = 424.99'  
 VC = 250'  
 K = 86

**PIPE HYDRAULIC DATA**  
 \*151I -L- Sta. 171+26

DRAINAGE AREA	= 59	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 60	CFS
DESIGN HW ELEVATION	= 408.4	FT
100 YEAR DISCHARGE	= 75	CFS
100 YEAR HW ELEVATION	= 409.2	FT
OVERTOPPING FREQUENCY	= >500 (+)	YRS
OVERTOPPING DISCHARGE	= N/A	CFS
OVERTOPPING ELEVATION	= 416.8	FT



FOR -L- PLAN SEE SHEETS 14 & 15

4/8/2022  
C:\Users\lowery\OneDrive\Documents\Roadway\Proj\R-3830\Roadway\Profile\133.dgn