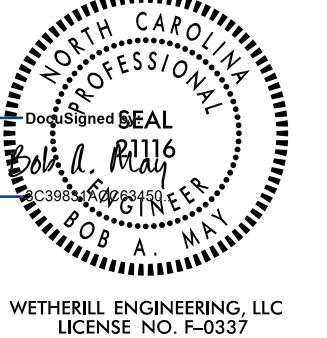
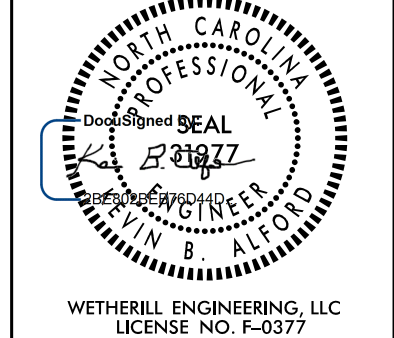


5/28/99

# -SR3-

BM#69 ELEV = 176.70'  
TIE SPIKE SET IN 22" PINE  
SR3 STA 47+53 - 202' RT

1223 Jones Franklin Rd.  
Raleigh, N.C. 27606  
License No. F-0377  
Bus: 919 851 8077  
Fax: 919 851 8107

PROJECT REFERENCE NO. 1-5987B	SHEET NO. 99
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
WETHERILL ENGINEERING, LLC LICENSE NO. F-0377	

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN  
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

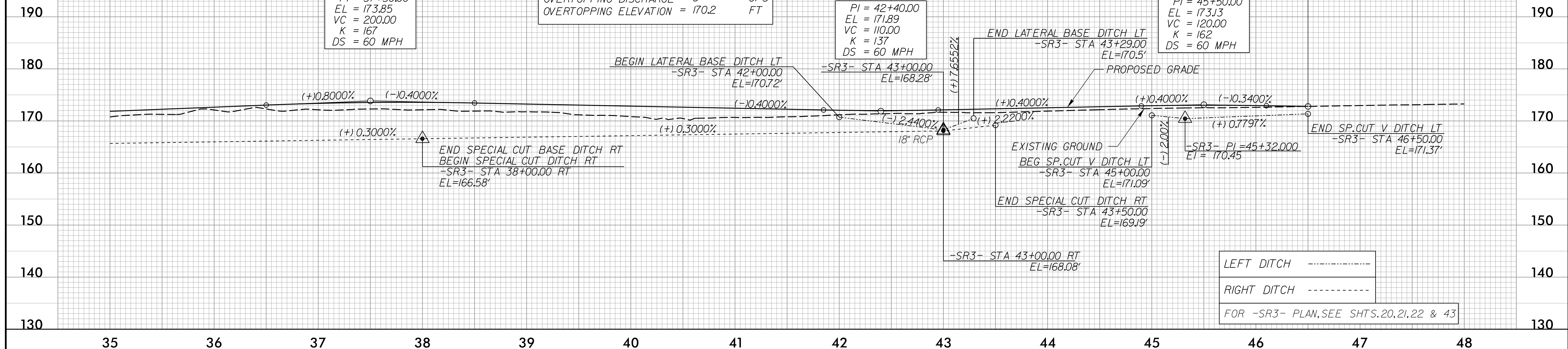
**PIPE HYDRAULIC DATA**  
-SR3- Sta. 43+00

DRAINAGE AREA	= 0.6	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 1.7	CFS
DESIGN HW ELEVATION	= 169J	FT
100 YEAR DISCHARGE	= 2.0	CFS
100 YEAR HW ELEVATION	= 169J	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 8	CFS
OVERTOPPING ELEVATION	= 170.2	FT

PI = 37+50.00  
EL = 173.85  
VC = 200.00  
K = 167  
DS = 60 MPH

PI = 42+40.00  
EL = 171.89  
VC = 110.00  
K = 137  
DS = 60 MPH

PI = 45+50.00  
EL = 173.13  
VC = 120.00  
K = 162  
DS = 60 MPH



LEFT DITCH -----  
RIGHT DITCH -----  
FOR -SR3- PLAN, SEE SHTS. 20, 21, 22 & 43

4/18/2002  
F:\Projects\5987B\ProJ\5987B\_rdy\_psh\_99.pfl.dgn