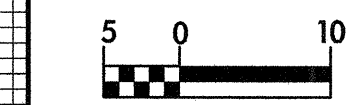


BM \*3 RR SPIKE IN BASE OF 450mm PINE  
7.513 RT OF -Y1- STA.10+21.098 EL= 40.828



CONST. REV.  
R / W REV.

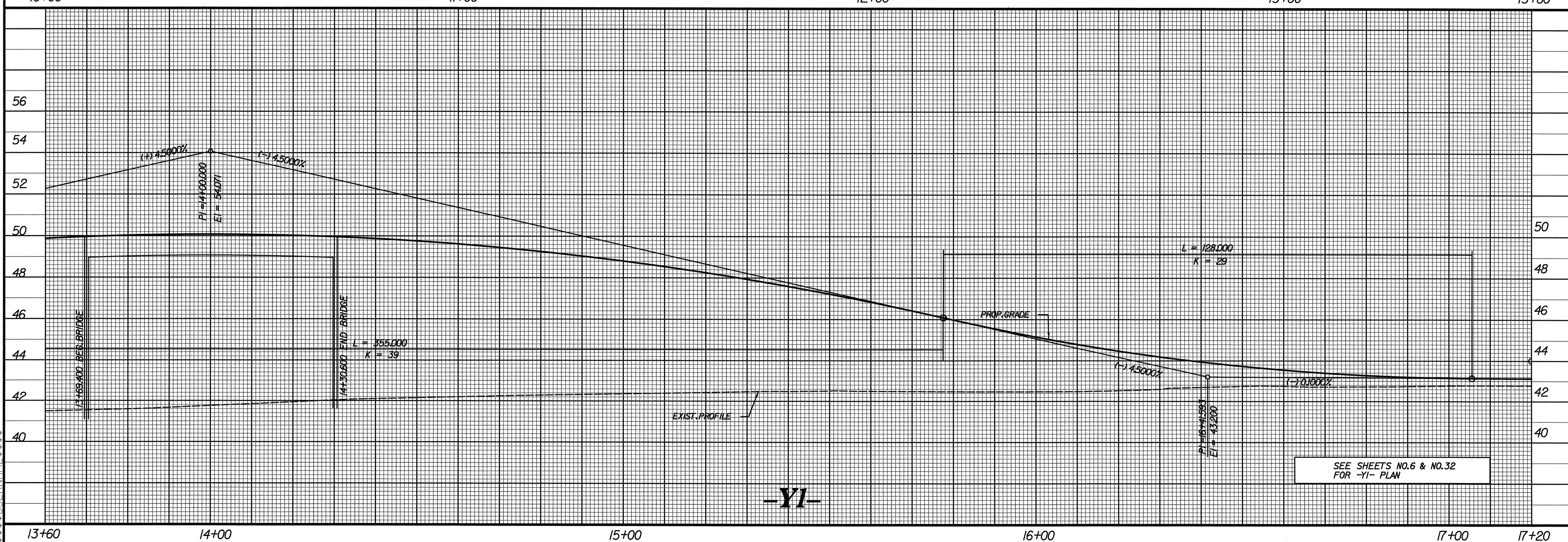
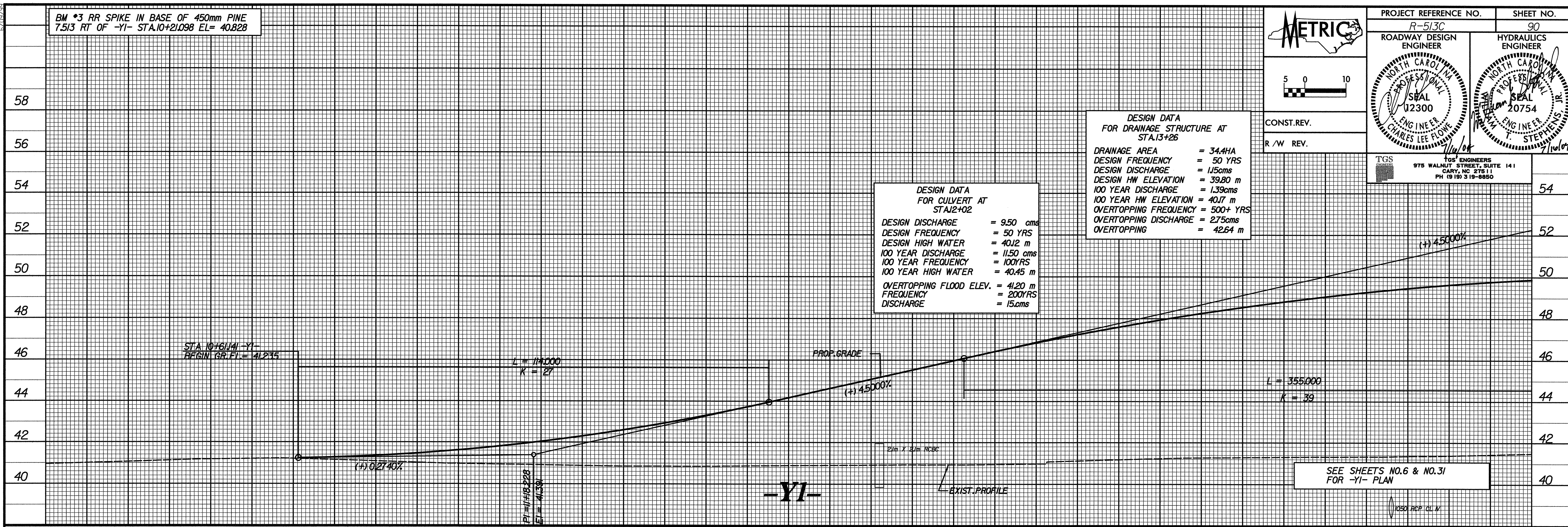
PROJECT REFERENCE NO. R-513C	SHEET NO. 90
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
TGS ENGINEERS 975 WALNUT STREET, SUITE 141 CARY, NC 27511 PH (919) 319-8800	

DESIGN DATA  
FOR DRAINAGE STRUCTURE AT  
STA.13+26

DRAINAGE AREA = 34.4HA  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN DISCHARGE = 115cms  
 DESIGN HW ELEVATION = 39.80 m  
 100 YEAR DISCHARGE = 139cms  
 100 YEAR HW ELEVATION = 40.17 m  
 OVERTOPPING FREQUENCY = 500+ YRS  
 OVERTOPPING DISCHARGE = 275cms  
 OVERTOPPING = 42.64 m

DESIGN DATA  
FOR CULVERT AT  
STA.12+02

DESIGN DISCHARGE = 9.50 cms  
 DESIGN FREQUENCY = 50 YRS  
 DESIGN HIGH WATER = 40.12 m  
 100 YEAR DISCHARGE = 11.50 cms  
 100 YEAR FREQUENCY = 100YRS  
 100 YEAR HIGH WATER = 40.45 m  
 OVERTOPPING FLOOD ELEV. = 41.20 m  
 FREQUENCY = 200YRS  
 DISCHARGE = 15.cms



SYSTEM\$\$\$\$\$  
 DGN\$\$\$\$\$  
 PLAN\$\$\$\$\$