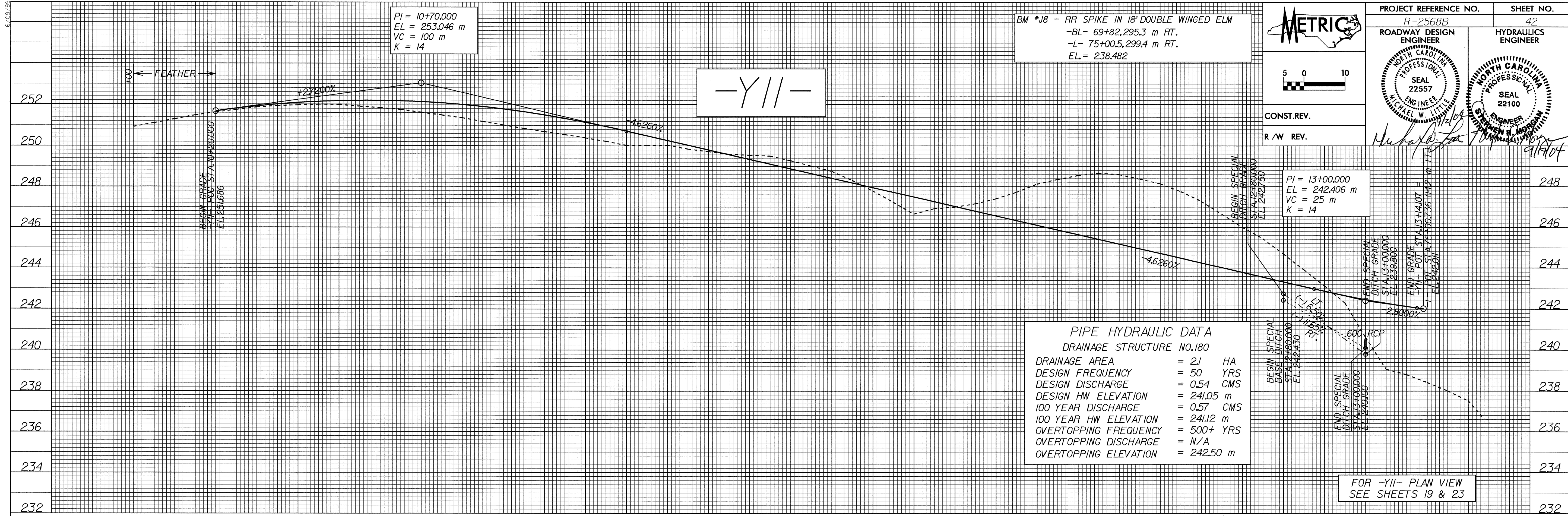
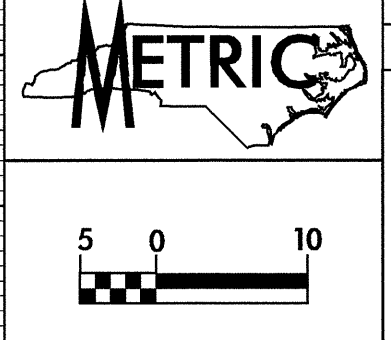


6/09/99



BM *J8 - RR SPIKE IN 18" DOUBLE WINGED ELM
 -BL- 69+82,295.3 m RT.
 -L- 75+00.5,299.4 m RT.
 EL= 238.482

PI = 10+70.000
 EL = 253.046 m
 VC = 100 m
 K = 14

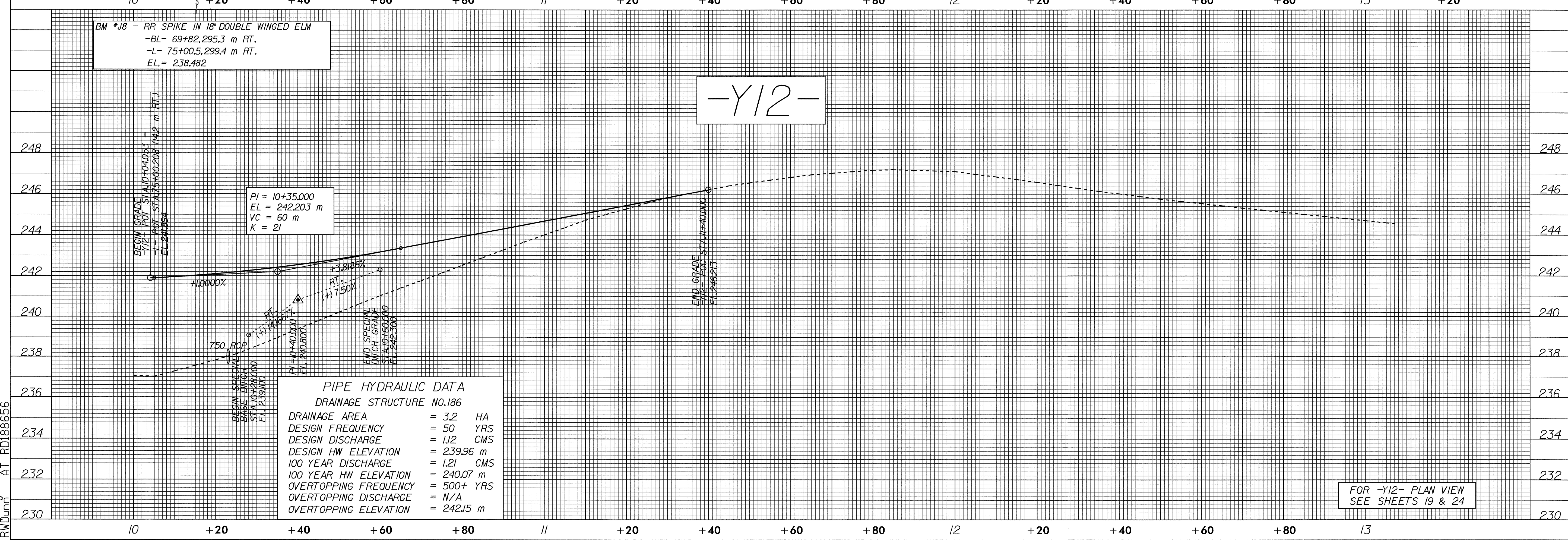


PROJECT REFERENCE NO. R-2568B
 SHEET NO. 42
 ROADWAY DESIGN ENGINEER
 HYDRAULICS ENGINEER
 NORTH CAROLINA PROFESSIONAL SEAL 22557
 NORTH CAROLINA PROFESSIONAL SEAL 22100
 CONST. REV.
 R / W REV.

PIPE HYDRAULIC DATA
 DRAINAGE STRUCTURE NO.180

DRAINAGE AREA	= 21	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.54	CMS
DESIGN HW ELEVATION	= 241.05	m
100 YEAR DISCHARGE	= 0.57	CMS
100 YEAR HW ELEVATION	= 241.2	m
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= N/A	
OVERTOPPING ELEVATION	= 242.50	m

FOR -Y11- PLAN VIEW
 SEE SHEETS 19 & 23



BM *J8 - RR SPIKE IN 18" DOUBLE WINGED ELM
 -BL- 69+82,295.3 m RT.
 -L- 75+00.5,299.4 m RT.
 EL= 238.482

PI = 10+35.000
 EL = 242.203 m
 VC = 60 m
 K = 21

PIPE HYDRAULIC DATA
 DRAINAGE STRUCTURE NO.186

DRAINAGE AREA	= 3.2	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 1.12	CMS
DESIGN HW ELEVATION	= 239.96	m
100 YEAR DISCHARGE	= 1.21	CMS
100 YEAR HW ELEVATION	= 240.07	m
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= N/A	
OVERTOPPING ELEVATION	= 242.15	m

FOR -Y12- PLAN VIEW
 SEE SHEETS 19 & 24

26-JUL-2004 15:17
 R:\proj\2568B\RF1
 RWD\jmm