

5/14/99

PROJECT REFERENCE NO. R-3100A	SHEET NO. 29
ROADWAY DESIGN ENGINEER MOTT MACDONALD 1 & E, LLC LICENSE NO. F-0669	HYDRAULICS ENGINEER MOTT MACDONALD 1 & E, LLC LICENSE NO. F-0669
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	
<p>Prepared in the Office of:</p>	
<p>PO Box 700 Fayetteville, NC 27526 www.mottmac.com/americas</p>	
<p>REGISTERED PROFESSIONAL ENGINEERS 343 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA 28401 TEL: (910) 343-1448 FAX: (910) 343-4832</p>	

PIPE HYDRAULIC DATA
18" RCP Sta.159+24 -L-

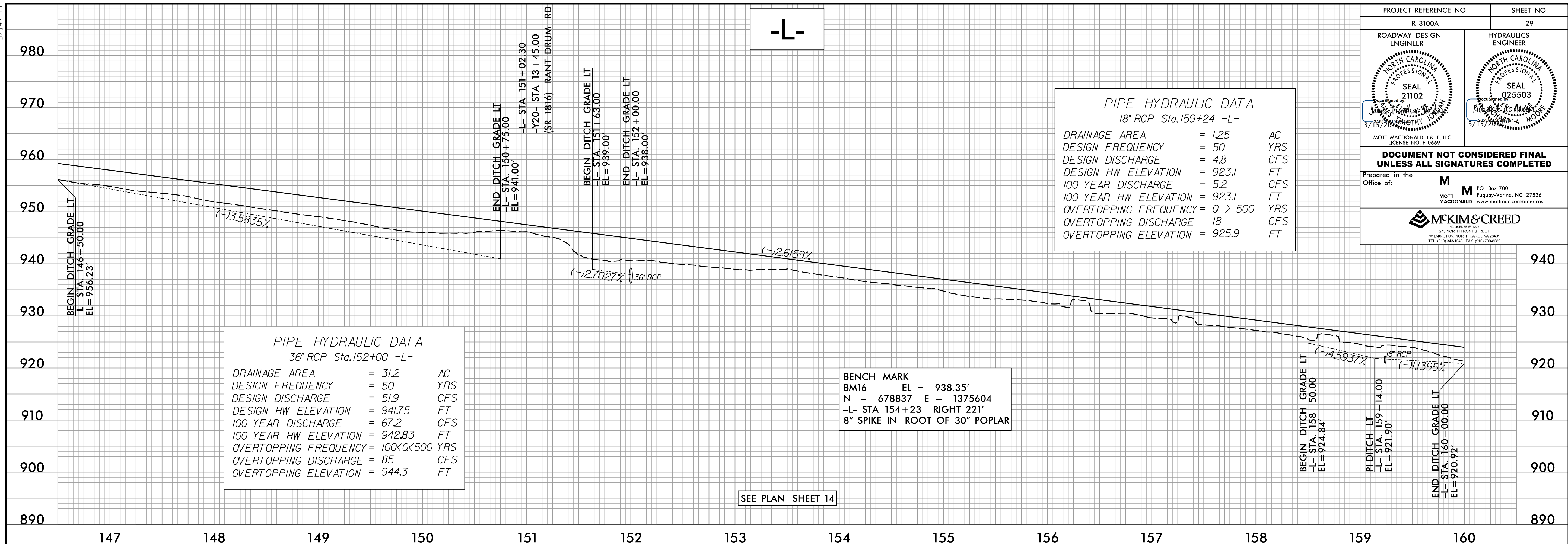
DRAINAGE AREA	= 1.25	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 4.8	CFS
DESIGN HW ELEVATION	= 923.1	FT
100 YEAR DISCHARGE	= 5.2	CFS
100 YEAR HW ELEVATION	= 923.1	FT
OVERTOPPING FREQUENCY	= Q > 500	YRS
OVERTOPPING DISCHARGE	= 18	CFS
OVERTOPPING ELEVATION	= 925.9	FT

PIPE HYDRAULIC DATA
36" RCP Sta.152+00 -L-

DRAINAGE AREA	= 31.2	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 51.9	CFS
DESIGN HW ELEVATION	= 941.75	FT
100 YEAR DISCHARGE	= 67.2	CFS
100 YEAR HW ELEVATION	= 942.83	FT
OVERTOPPING FREQUENCY	= 1000 < Q < 500	YRS
OVERTOPPING DISCHARGE	= 85	CFS
OVERTOPPING ELEVATION	= 944.3	FT

BENCH MARK
BM16 EL = 938.35'
N = 678837 E = 1375604
-L- STA 154+23 RIGHT 221'
8" SPIKE IN ROOT OF 30" POPLAR

SEE PLAN SHEET 14



CULVERT HYDRAULIC DATA
2 @ 9x9 RCB

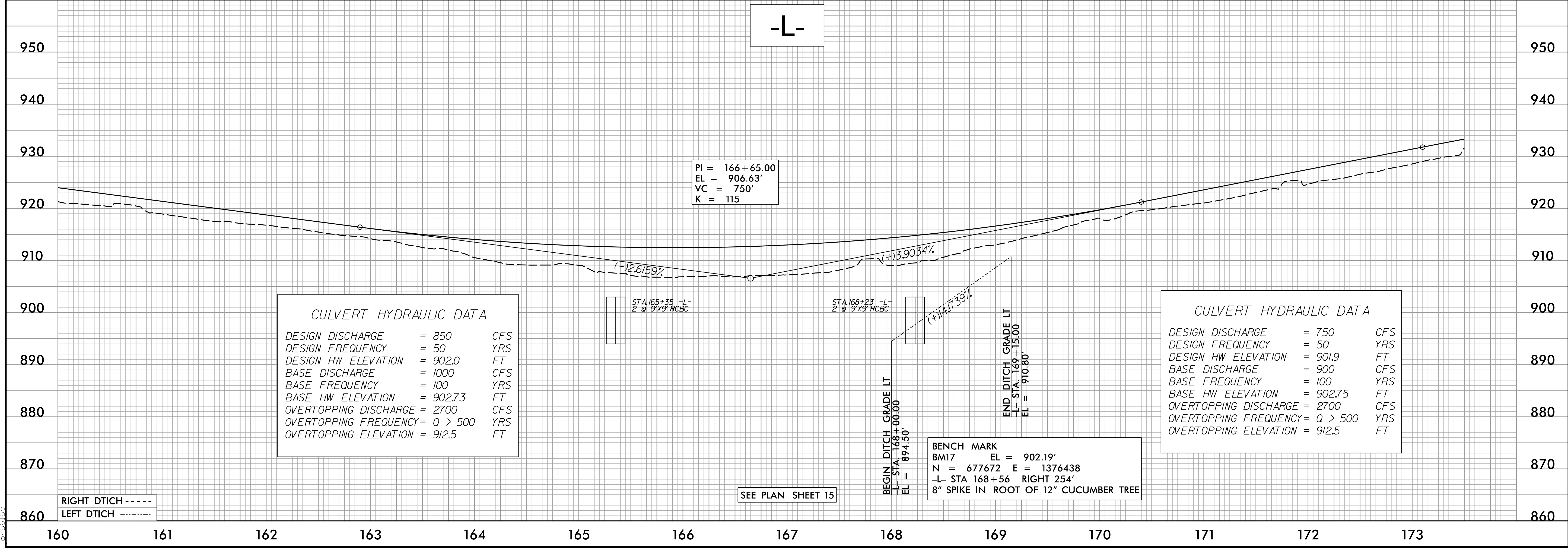
DESIGN DISCHARGE	= 850	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 902.0	FT
BASE DISCHARGE	= 1000	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 902.73	FT
OVERTOPPING DISCHARGE	= 2700	CFS
OVERTOPPING FREQUENCY	= Q > 500	YRS
OVERTOPPING ELEVATION	= 912.5	FT

CULVERT HYDRAULIC DATA
2 @ 9x9 RCB

DESIGN DISCHARGE	= 750	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 901.9	FT
BASE DISCHARGE	= 900	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 902.75	FT
OVERTOPPING DISCHARGE	= 2700	CFS
OVERTOPPING FREQUENCY	= Q > 500	YRS
OVERTOPPING ELEVATION	= 912.5	FT

BENCH MARK
BM17 EL = 902.19'
N = 677672 E = 1376438
-L- STA 168+56 RIGHT 254'
8" SPIKE IN ROOT OF 12" CUCUMBER TREE

SEE PLAN SHEET 15



RIGHT DTICH - - - - -
LEFT DTICH - - - - -

I:\0612 AM
10-66166
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10-66166