

5/28/99

M A Engineering Consultants, Inc.
 598 East Chatham Street Suite 137 Cary, NC 27511
 Phone: 919.297.0220 Fax: 919.297.0221

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

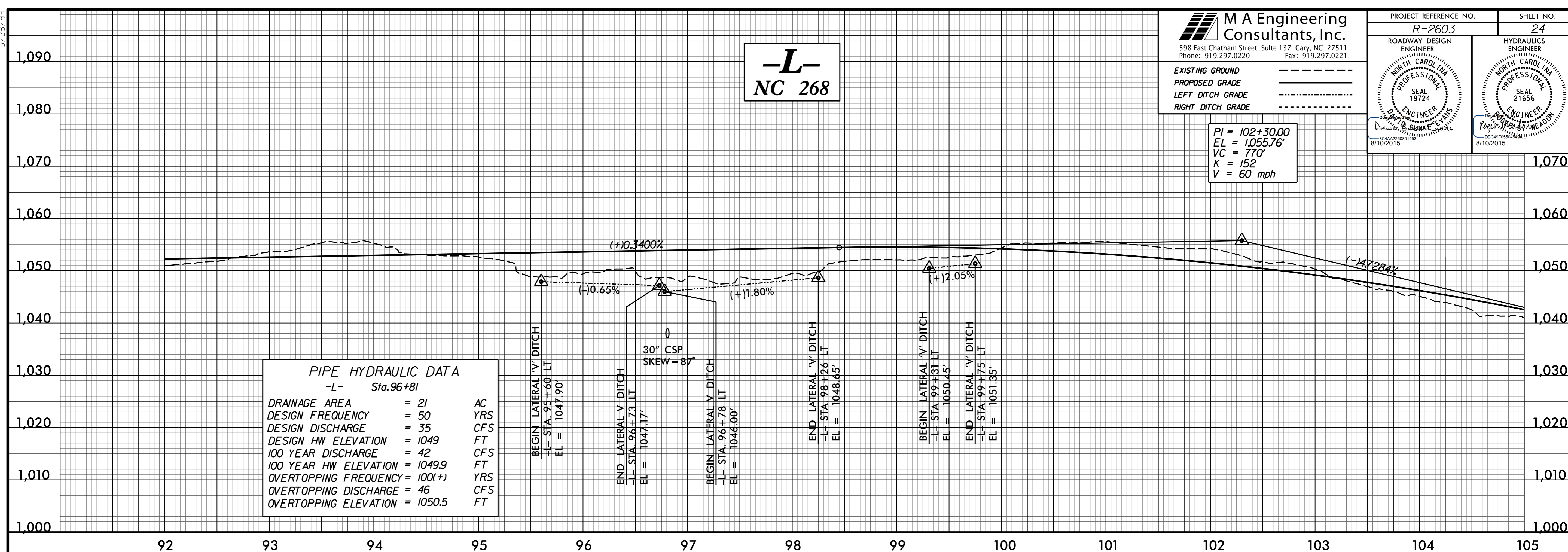
PROJECT REFERENCE NO. R-2603	SHEET NO. 24
ROADWAY DESIGN ENGINEER DAVID BURKE, E.I.T. SEAL 19724 8/10/2015	HYDRAULICS ENGINEER ROY P. WEAVER, E.I.T. SEAL 21656 8/10/2015

PI = 102+30.00
 EL = 1,055.76'
 VC = 770'
 K = 152
 V = 60 mph

-L-
NC 268

PIPE HYDRAULIC DATA
 -L- Sta. 96+81

DRAINAGE AREA	= 21	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 35	CFS
DESIGN HW ELEVATION	= 1049	FT
100 YEAR DISCHARGE	= 42	CFS
100 YEAR HW ELEVATION	= 10499	FT
OVERTOPPING FREQUENCY	= 100(+)	YRS
OVERTOPPING DISCHARGE	= 46	CFS
OVERTOPPING ELEVATION	= 1050.5	FT



-L-
NC 268

BRIDGE HYDRAULIC DATA

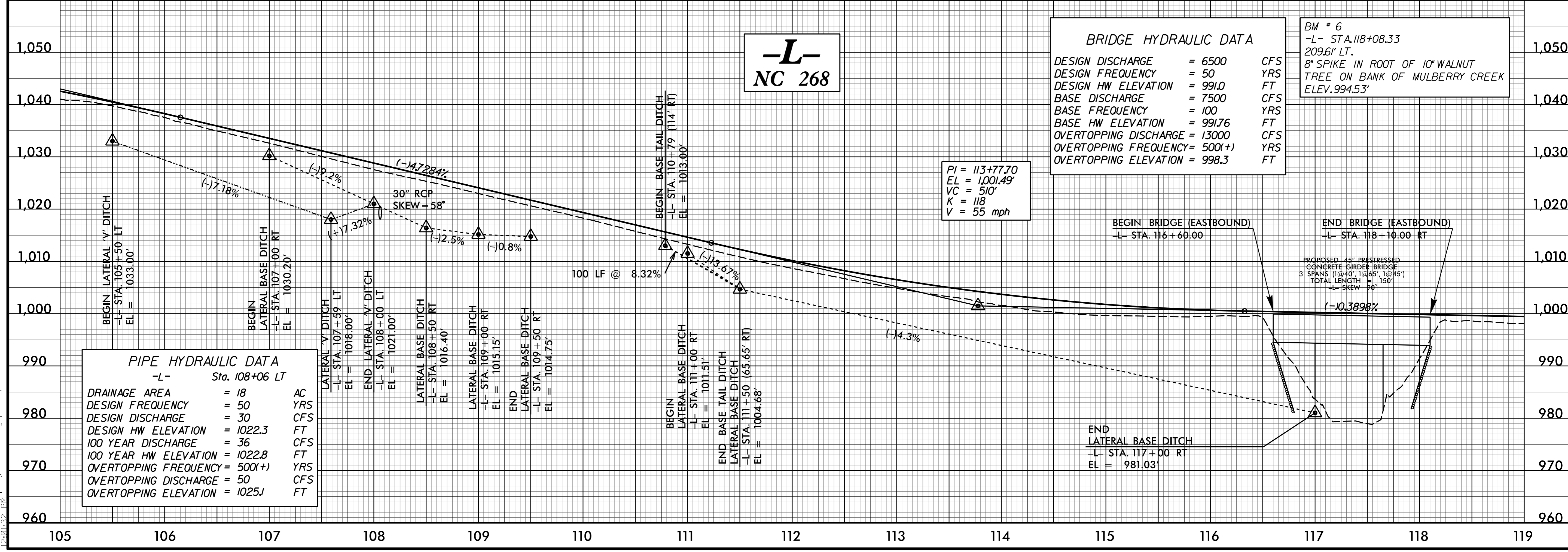
DESIGN DISCHARGE	= 6500	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 991.0	FT
BASE DISCHARGE	= 7500	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 991.76	FT
OVERTOPPING DISCHARGE	= 13000	CFS
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING ELEVATION	= 998.3	FT

BM * 6
 -L- STA. 118+08.33
 209.6' LT.
 8" SPIKE IN ROOT OF 10" WALNUT
 TREE ON BANK OF MULBERRY CREEK
 ELEV. 994.53'

PI = 113+77.70
 EL = 1,001.49'
 VC = 510'
 K = 118
 V = 55 mph

PIPE HYDRAULIC DATA
 -L- Sta. 108+06 LT

DRAINAGE AREA	= 18	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 30	CFS
DESIGN HW ELEVATION	= 1022.3	FT
100 YEAR DISCHARGE	= 36	CFS
100 YEAR HW ELEVATION	= 1022.8	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 50	CFS
OVERTOPPING ELEVATION	= 1025J	FT



7/2/2015 15:02:33 pro-j-r2603_Rdy-p1.dgn