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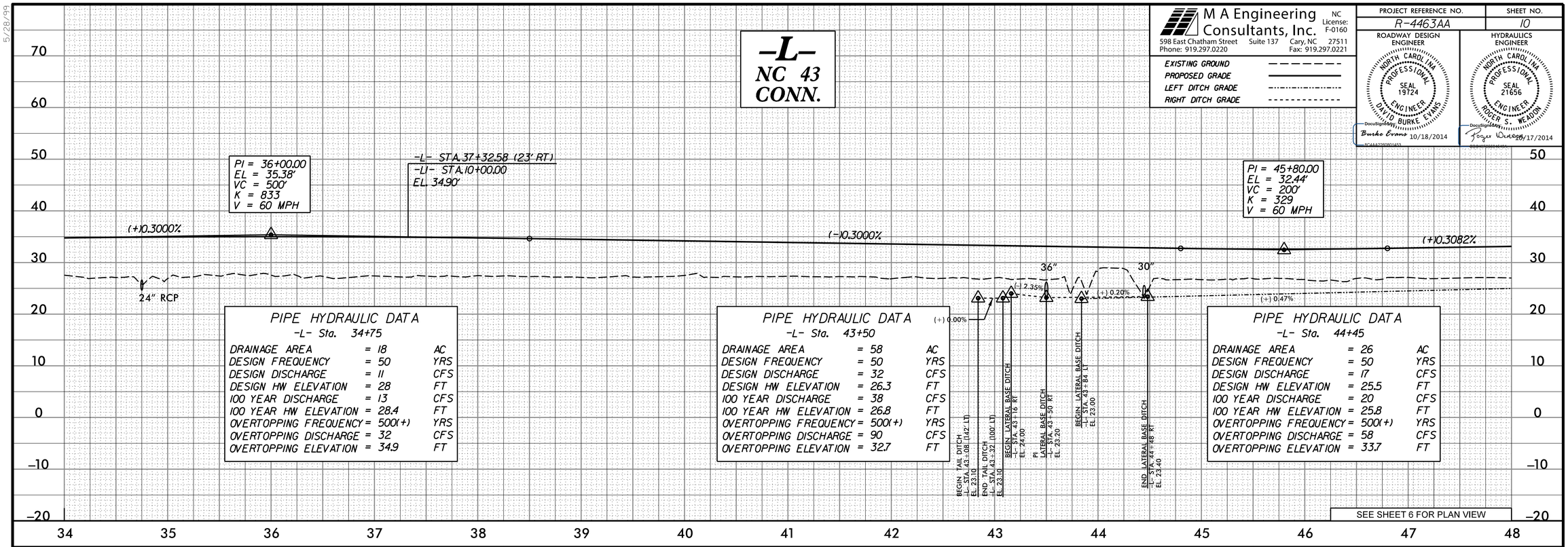
M A Engineering Consultants, Inc.
NC License: F-0160
598 East Chatham Street Suite 137 Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

PROJECT REFERENCE NO.	SHEET NO.
R-4463AA	10

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 19724 ENGINEER DAVID BURKE EVANS
DocuSigned by: Burke Evans 10/18/2014

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 21656 ENGINEER ROGER S. WEADON
DocuSigned by: Roger Weadon 10/17/2014

EXISTING GROUND
PROPOSED GRADE
LEFT DITCH GRADE
RIGHT DITCH GRADE



PIPE HYDRAULIC DATA
-L- Sta. 34+75

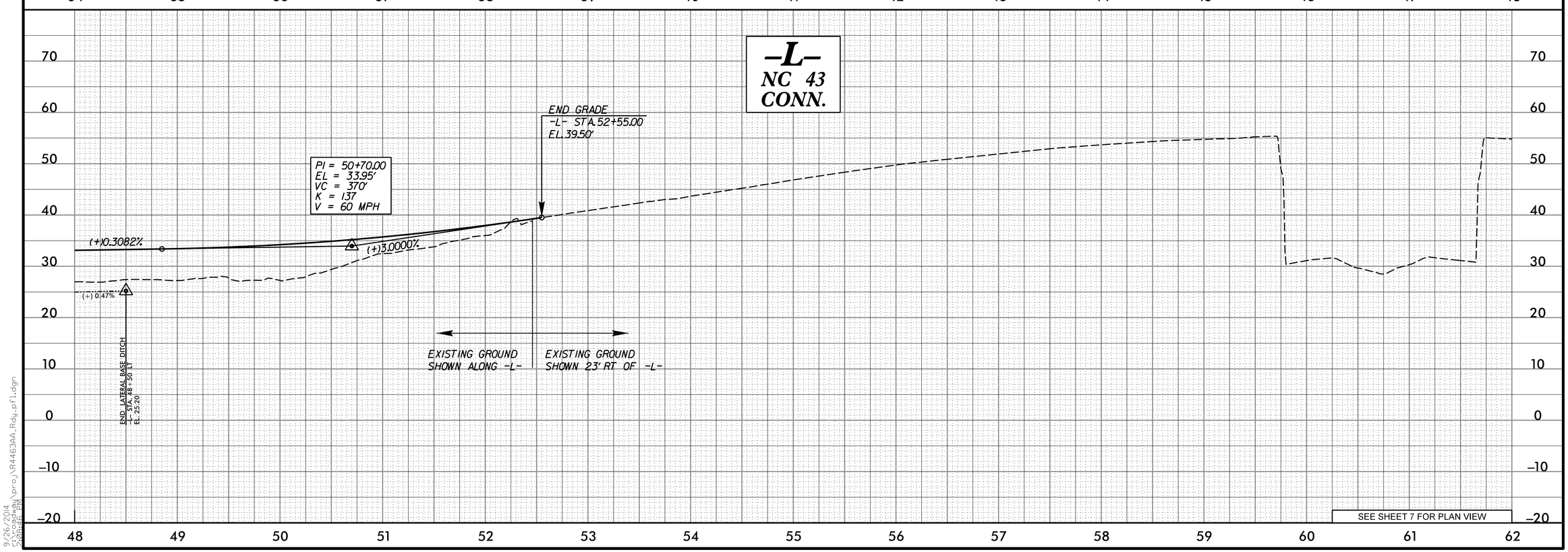
DRAINAGE AREA	= 18	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 11	CFS
DESIGN HW ELEVATION	= 28	FT
100 YEAR DISCHARGE	= 13	CFS
100 YEAR HW ELEVATION	= 28.4	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 32	CFS
OVERTOPPING ELEVATION	= 34.9	FT

PIPE HYDRAULIC DATA
-L- Sta. 43+50

DRAINAGE AREA	= 58	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 32	CFS
DESIGN HW ELEVATION	= 26.3	FT
100 YEAR DISCHARGE	= 38	CFS
100 YEAR HW ELEVATION	= 26.8	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 90	CFS
OVERTOPPING ELEVATION	= 32.7	FT

PIPE HYDRAULIC DATA
-L- Sta. 44+45

DRAINAGE AREA	= 26	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 17	CFS
DESIGN HW ELEVATION	= 25.5	FT
100 YEAR DISCHARGE	= 20	CFS
100 YEAR HW ELEVATION	= 25.8	FT
OVERTOPPING FREQUENCY	= 500(+)	YRS
OVERTOPPING DISCHARGE	= 58	CFS
OVERTOPPING ELEVATION	= 33.7	FT



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