

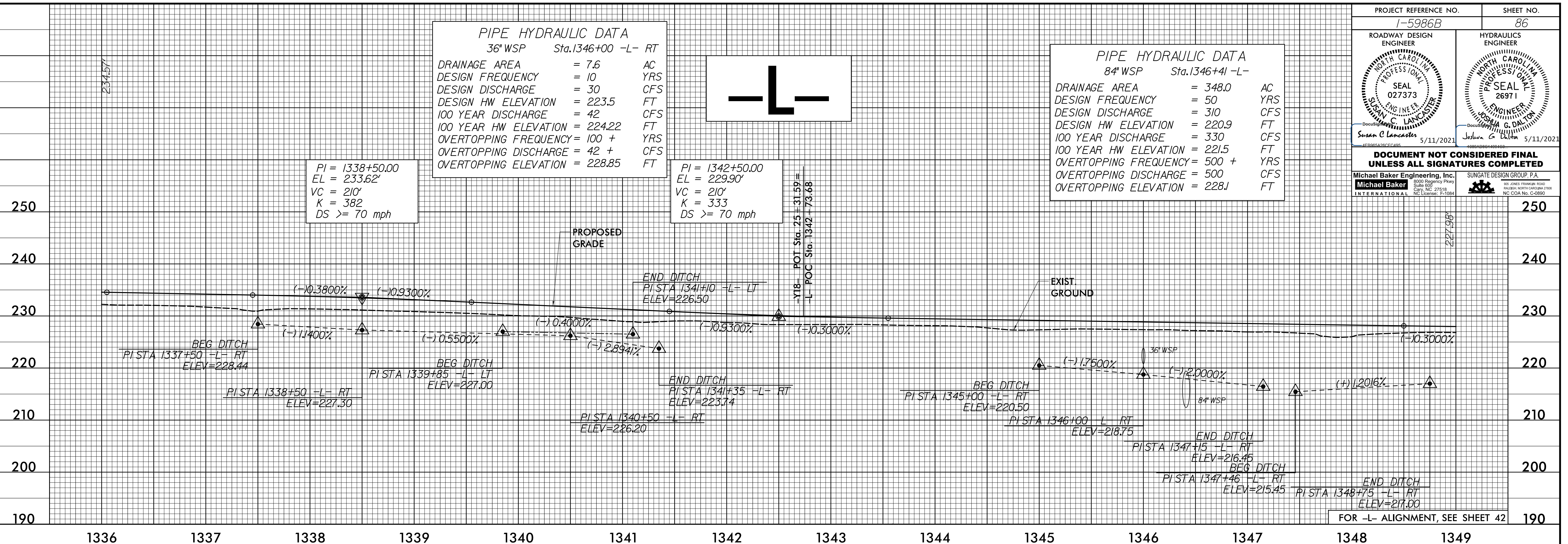
PROJECT REFERENCE NO. 1-5986B	SHEET NO. 86
ROADWAY DESIGN ENGINEER Susan C Lancaster SEAL 027373 5/11/2021	HYDRAULICS ENGINEER Joshua G. Dalton PROFESSIONAL SEAL 26971 5/11/2021
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Michael Baker Engineering, Inc. 8000 Regency Park Suite 600 Cary, NC 27518 NC License No. C-6884	SUNGATE DESIGN GROUP, P.A. 100 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27601 NC CDR No. C-2890

PIPE HYDRAULIC DATA
36" WSP Sta. 1346+00 -L- RT
DRAINAGE AREA = 7.6 AC
DESIGN FREQUENCY = 10 YRS
DESIGN DISCHARGE = 30 CFS
DESIGN HW ELEVATION = 223.5 FT
100 YEAR DISCHARGE = 42 CFS
100 YEAR HW ELEVATION = 224.22 FT
OVERTOPPING FREQUENCY = 100 + YRS
OVERTOPPING DISCHARGE = 42 + CFS
OVERTOPPING ELEVATION = 228.85 FT

PIPE HYDRAULIC DATA
84" WSP Sta. 1346+41 -L-
DRAINAGE AREA = 348.0 AC
DESIGN FREQUENCY = 50 YRS
DESIGN DISCHARGE = 310 CFS
DESIGN HW ELEVATION = 220.9 FT
100 YEAR DISCHARGE = 330 CFS
100 YEAR HW ELEVATION = 221.5 FT
OVERTOPPING FREQUENCY = 500 + YRS
OVERTOPPING DISCHARGE = 500 CFS
OVERTOPPING ELEVATION = 228.1 FT

PI = 1338+50.00
EL = 233.62'
VC = 210'
K = 382
DS >= 70 mph

PI = 1342+50.00
EL = 229.90'
VC = 210'
K = 333
DS >= 70 mph



PIPE HYDRAULIC DATA
24" WSP Sta. 1350+00 -L- RT
DRAINAGE AREA = 21 AC
DESIGN FREQUENCY = 10 YRS
DESIGN DISCHARGE = 12 CFS
DESIGN HW ELEVATION = 224.4 FT
100 YEAR DISCHARGE = 15 CFS
100 YEAR HW ELEVATION = 224.69 FT
OVERTOPPING FREQUENCY = 100 + YRS
OVERTOPPING DISCHARGE = 15 + CFS
OVERTOPPING ELEVATION = 227.88 FT

5/28/2021
234.57
227.98
232.28
24 MAR 2021 13:33
C:\Users\jlanam\OneDrive\Documents\1-5986B-Rdy-pf1-Sheets-L.dgn

FOR -L- ALIGNMENT, SEE SHEET 42

FOR -L- ALIGNMENT, SEE SHEETS 42 & 43