

5/28/20

PROJECT REFERENCE NO. 1-5883	SHEET NO. 107
ROADWAY DESIGN ENGINEER SUSAN C. LANCASTER SEAL 027373 5/11/2021	HYDRAULICS ENGINEER JOSHUA G. DIXON SEAL 2697 5/11/2021
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Michael Baker Engineering, Inc. 8000 Regency Parkway Suite 600 Charlotte, NC 27218 NC License: E-11084	SUNGATE DESIGN GROUP, P.A. 105 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27603 NC CEA No. C-2980

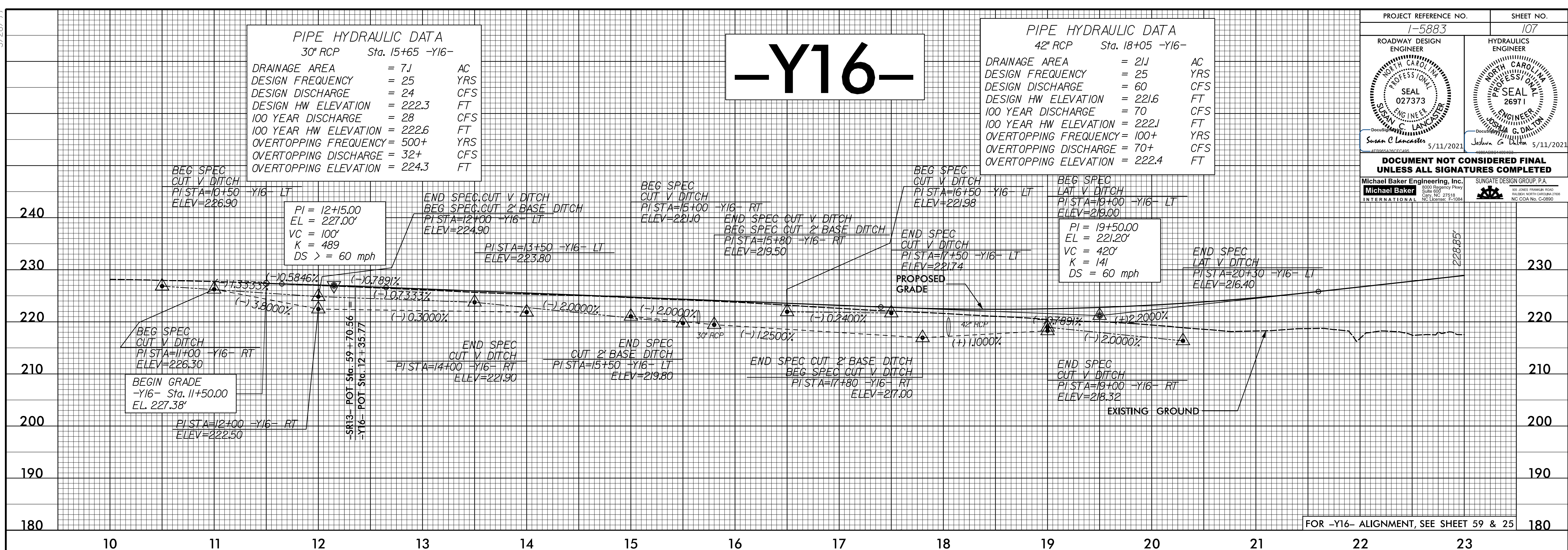
PIPE HYDRAULIC DATA
30" RCP Sta. 15+65 -Y16-

DRAINAGE AREA	= 7.1	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 24	CFS
DESIGN HW ELEVATION	= 222.3	FT
100 YEAR DISCHARGE	= 28	CFS
100 YEAR HW ELEVATION	= 222.6	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 32+	CFS
OVERTOPPING ELEVATION	= 224.3	FT

PIPE HYDRAULIC DATA
42" RCP Sta. 18+05 -Y16-

DRAINAGE AREA	= 21.1	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 60	CFS
DESIGN HW ELEVATION	= 221.6	FT
100 YEAR DISCHARGE	= 70	CFS
100 YEAR HW ELEVATION	= 222.1	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 70+	CFS
OVERTOPPING ELEVATION	= 222.4	FT

-Y16-



FOR -Y16- ALIGNMENT, SEE SHEET 59 & 25

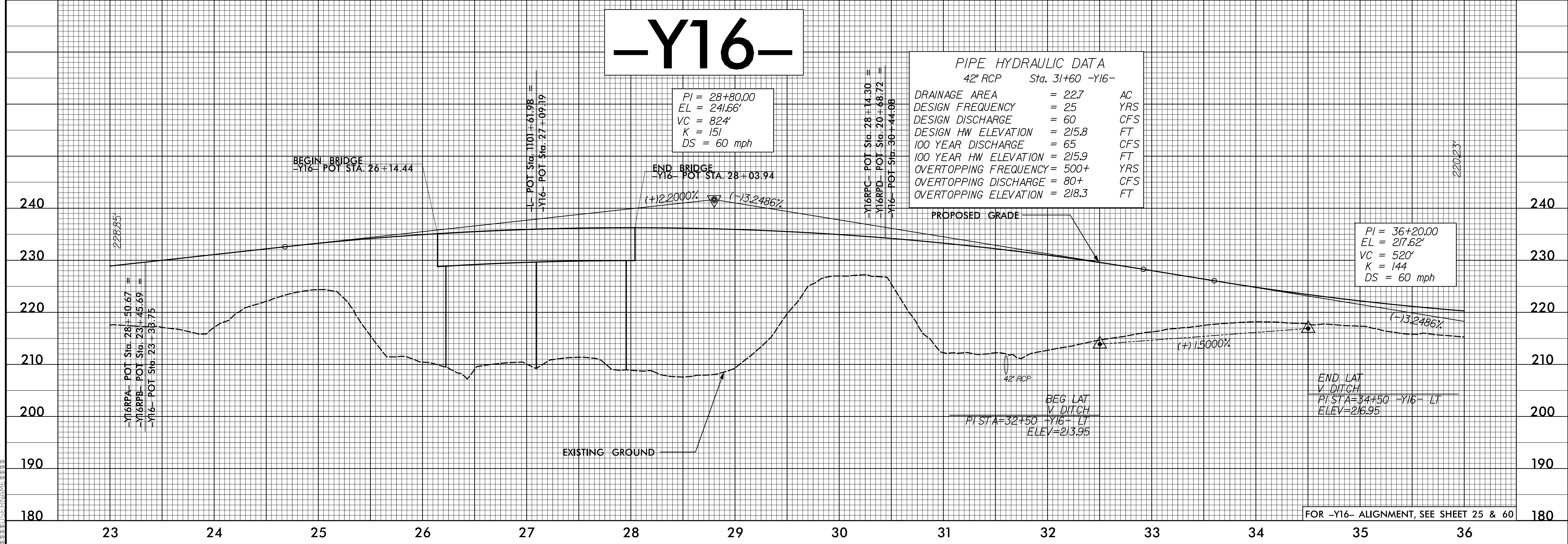
-Y16-

PIPE HYDRAULIC DATA
42" RCP Sta. 31+60 -Y16-

DRAINAGE AREA	= 22.7	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 60	CFS
DESIGN HW ELEVATION	= 215.8	FT
100 YEAR DISCHARGE	= 65	CFS
100 YEAR HW ELEVATION	= 215.9	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 80+	CFS
OVERTOPPING ELEVATION	= 218.3	FT

PI = 28+80.00
EL = 241.66'
VC = 824'
K = 151
DS = 60 mph

PI = 36+20.00
EL = 217.62'
VC = 520'
K = 144
DS = 60 mph



FOR -Y16- ALIGNMENT, SEE SHEET 25 & 60

12-MAR-2021 09:08
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