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–Y35–

BEGIN MILL & RESURFACING
–Y35– Sta.10+36.90
EL.201.57'

END MILL & RESURFACING
–Y35– Sta.14+02.91
EL.202.02'

–Y15– POT Sta.15+34.44 =
–Y35– POT Sta.10+00.00

PROPOSED RESURFACING

EXIST. GROUND

FOR –Y35– ALIGNMENT, SEE SHEET 56

–SR9–

END GRADE
–SR9– Sta.73+93.42 (I–5877)
BEGIN GRADE
–SR9– Sta.73+93.42 (I–5878)
EL. 198.03'

PI STA 73+93.42 –SR9– LT
ELEV=193.12

(+)0.3354%
(–)0.3600%
(–) 0.6313%
(–) 0.6313%
(+) 0.2969%
2@36" RCP

PI STA 75+55 –SR9– LT
ELEV=192.10

PI STA 76+83 –SR9– LT
ELEV=192.48

198.85'

PI = 78+00.00
EL = 199.39'
VC = 200'
K = 288
DS = 60 mph

PIPE HYDRAULIC DATA
2@36" RCP Sta. 75+55 –SR9–

DRAINAGE AREA	= 14.4	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 42	CFS
DESIGN HW ELEVATION	= 194.3	FT
100 YEAR DISCHARGE	= 48	CFS
100 YEAR HW ELEVATION	= 194.8	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 55+	CFS
OVERTOPPING ELEVATION	= 196.2	FT

FOR –SR9– ALIGNMENT, SEE SHEET 16

PROJECT REFERENCE NO.	SHEET NO.
I–5878	102

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 027373 ENGINEER SUSAN C LANCASTER
DocuSigned by: Susan C Lancaster 4EB965A26CFC495... 6/24/2021

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G DALTON
DocuSigned by: Joshua Dalton 1089AD8C14994C3... 6/24/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Michael Baker Engineering, Inc. — Michael Baker INTERNATIONAL — 8000 Regency Pkwy Suite 600 Cary, NC 27518 NC License: F–1084

SUNGATE DESIGN GROUP, P.A. — 555 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27606 NC COA No. C–0890

–SR9–

PIPE HYDRAULIC DATA
30" RCP Sta. 92+90 –SR9–

DRAINAGE AREA	= 7.4	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 21	CFS
DESIGN HW ELEVATION	= 189.9	FT
100 YEAR DISCHARGE	= 24	CFS
100 YEAR HW ELEVATION	= 190.1	FT
OVERTOPPING FREQUENCY	= >500	YRS
OVERTOPPING DISCHARGE	= >29	CFS
OVERTOPPING ELEVATION	= 192.0	FT

198.85'

PROPOSED GRADE

EXIST. GROUND

(–) 0.8920%
(–) 0.3868%
(–) 0.3868%

PI STA 80+80 –SR9– LT
ELEV=194.60

PI STA 82+93 –SR9– LT
ELEV=192.70

–SR9A– POT Sta.10+00.00 =
–SR9– POC Sta.88+49.90

PI = 89+50.00
EL = 195.25'
VC = 200'
K = 341
DS >= 60 mph

(–)0.3600%
(–)0.9457%
(–) 0.7254%

EXIST. GROUND

PI STA 88+90 –SR9– LT
ELEV=190.40

PI STA 88+10 –SR9– LT
ELEV=190.70

END GRADE
–SR9– Sta.93+04.22
EL.191.90'

PROPOSED GRADE

30" RCP

PI STA 92+76 –SR9– LT
ELEV=187.60

FOR –SR9– ALIGNMENT, SEE SHEETS 16 AND 17

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