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5/14/99

PLANS PREPARED BY :
PARSONS
RALEIGH, NORTH CAROLINA, (919) 854-1345
NC LICENSE NO. F-0246
FOR NORTH CAROLINA DEPT. OF TRANSPORTATION
SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-2601
ENG FIRM LICENSE NO. C-850

PROJECT REFERENCE NO.	SHEET NO.
R-5857	8

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL — Digitally signed by Hyman Alqozaqi — 5/12/2023 — PROJECT ENGINEER — HYMAN I. ALQUDMANI

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 026971 — Digitally signed by Joshua G. Dalton — 5/5/2023 — PROJECT ENGINEER — JOSHUA G. DALTON

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L_LT-

BM #1 ELEVATION = 15.53
N 76203 E 2174727
-L- STATION 20+56.03, 128.93' RIGHT
BENCH TIE IN 15 INCH PINE

BEGIN GRADE
STA.29+02.34 -L_LT- =
STA.29+10.00 -L-, 30.00' LT
EL.= 15.00

-Y- POC Sta. 23+78.99 =
-L_LT- POC Sta.41+74.12

(+)0.5800%

PROPOSED GRADE

EXISTING GROUND

-L-

PIPE HYDRAULIC DATA
48" WSP Sta. 33+30 -L-

DRAINAGE AREA	= 7.8	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 48	CFS
DESIGN HW ELEVATION	= 12.1	FT
100 YEAR DISCHARGE	= 50	CFS
100 YEAR HW ELEVATION	= 12.2	FT
OVERTOPPING FREQUENCY	= 100	YRS
OVERTOPPING DISCHARGE	= 50	CFS
OVERTOPPING ELEVATION	= 12.2	FT

PIPE HYDRAULIC DATA
42" WSP Sta. 40+67 -L-

DRAINAGE AREA	= 9.6	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 42	CFS
DESIGN HW ELEVATION	= 16.8	FT
100 YEAR DISCHARGE	= 45	CFS
100 YEAR HW ELEVATION	= 16.9	FT
OVERTOPPING FREQUENCY	= <10	YRS
OVERTOPPING DISCHARGE	= <34	CFS
OVERTOPPING ELEVATION	= 15.6	FT

PIPE HYDRAULIC DATA
72" WSP Sta. 42+84 -L-

DRAINAGE AREA	= 94	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 180	CFS
DESIGN HW ELEVATION	= 18.4	FT
100 YEAR DISCHARGE	= 210	CFS
100 YEAR HW ELEVATION	= 19.1	FT
OVERTOPPING FREQUENCY	= >100	YRS
OVERTOPPING DISCHARGE	= >210	CFS
OVERTOPPING ELEVATION	= 19.6	FT

BEGIN GRADE
STA.29+10.00 -L-
EL.= 15.00

PROPOSED GRADE
(FOR DISPLAY PURPOSES ONLY.
SEE -L_LT- & -L_RT- PROFILES

-Y- POT Sta. 24+11.60 =
-Y1- POT Sta. 10+00.00 =
-L- POC Sta.42+05.99

PI STA 31+00 -L- LT
ELEV=12.20

PI STA 33+30 -L- LT
ELEV=9.00

PI STA 39+20 -L- LT
ELEV=15.20

BEG DITCH
PI STA 38+80 -L- LT
ELEV=15.00

(+)0.5800%

(+) 0.4667%

(-) 1.3913%

48"

(+) 1.2353%

(+) 1.5000%

EXISTING GROUND

(-) 0.5000%

(-) 1.1034%

42"

(+) 1.7600%

72"

BEG DITCH
PI STA 29+50 -L- LT
ELEV=11.50

BEG DITCH
PI STA 33+30 -L- RT
ELEV=8.40

END DITCH
PI STA 35+00 -L- LT
ELEV=11.10

END DITCH
PI STA 37+50 -L- RT
ELEV=14.70

END DITCH
PI STA 40+65 -L- LT
ELEV=13.60

BEG DITCH
PI STA 42+75 -L- LT
ELEV=12.80

-L_RT-

BM #1 ELEVATION = 15.53
N 76203 E 2174727
-L- STATION 20+56.03, 128.93' RIGHT
BENCH TIE IN 15 INCH PINE

-Y1- POT Sta. 10+29.91 =
-L_RT- POC Sta.42+26.69

BEGIN GRADE
STA.29+17.63 -L_RT- =
STA.29+10 -L-, 30.00' RT
EL.= 15.03

PI = 42+15.00
EL = 22.29'
VC = 300'
K = 2500
DS = 80 MPH

(+)0.5600%

(+)0.6800%

PROPOSED GRADE

EXISTING GROUND

NOTE:
SEE SHEET 4 FOR -L- PLAN

02-MAY-2023 14:45
s:\$\$BUSERNAME\$\$\Proj\R-5857_Rdy_PFL_08.dgn
$$$$USERNAME$$$$