WITHERILL ENGINEERING
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - WETLANDS - CONSTRUCTION OBSERVATION

SUNGATE DESIGN GROUP, P.A.
315 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL 919.859.2242 FAX 919.859.2428

PROJECT REFERENCE NO.	SHEET NO.
R-2417BB	8
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 09334 — 9/19/24

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL — 9/19/24

NAD 83

MATCH LINE SHEET 13 -Y3- STA.37+00

MATCH LINE SHEET 9 -L- STA.568+00

MATCH LINE SHEET 7 -L- STA.540+00

MATCH LINE SHEET 12 -Y3- STA.22+00

GRADE INTERIOR OF LOOP TO 420'

GRADE INTERIOR OF LOOP TO 422'

B

C

-RPB- PT Sta. 21+92.09
-RPB- SC Sta. 19+22.09
-RPB- TS Sta. 17+32.09
-RPB- ST Sta. 14+85.12
-RPB- CS Sta. 12+85.12
-RPB- SC Sta. 10+94.82
-RPB- TS Sta. 8+94.82
-RPB- ST Sta. 5+00.00
-RPB- CS Sta. 1+00.00
-L- POC Sta. 543+45.00 OFFSET 59.00 LT.

-RPC- PT Sta. 21+92.09
-RPC- SC Sta. 19+22.09
-RPC- TS Sta. 17+00.00 = -L- STA. 543+45.00 OFF 59.00 RT.
-RPC- ST Sta. 14+85.12
-RPC- CS Sta. 12+85.12
-RPC- SC Sta. 10+94.82
-RPC- TS Sta. 8+94.82
-RPC- ST Sta. 5+00.00
-RPC- CS Sta. 1+00.00

-LPB- PT Sta. 21+92.09
-LPB- SC Sta. 19+22.09
-LPB- TS Sta. 17+32.09
-LPB- ST Sta. 14+85.12
-LPB- CS Sta. 12+85.12
-LPB- SC Sta. 10+94.82
-LPB- TS Sta. 8+94.82
-LPB- ST Sta. 5+00.00
-LPB- CS Sta. 1+00.00
-L- POC Sta. 543+45.00 OFFSET 59.00 LT.

-LPC- PT Sta. 21+92.09
-LPC- SC Sta. 19+22.09
-LPC- TS Sta. 17+00.00 = -L- STA. 543+45.00 OFF 59.00 RT.
-LPC- ST Sta. 14+85.12
-LPC- CS Sta. 12+85.12
-LPC- SC Sta. 10+94.82
-LPC- TS Sta. 8+94.82
-LPC- ST Sta. 5+00.00
-LPC- CS Sta. 1+00.00
-L- POC Sta. 564+04.00 OFF 59.00 LT.

-RXR- PT Sta. 9+54.27
-RXR- POT Sta. 3+57.75
-RXR- PGT Sta. 1+00.00

-Y2- POT Sta. 23+00.02
-Y2- POT Sta. 19+00.19
-Y2- POT Sta. 16+00.39
-Y2- POT Sta. 10+00.00
-Y2- POT Sta. 7+00.00
-Y2- POT Sta. 3+00.00
-Y2- POT Sta. 19+34.99

-Y3- POT Sta. 24+17.12 = -Y3- POT Sta. 35+97.75
-LPB- POT Sta. 14+71.48 = -Y3- POT Sta. 35+48.75
-L- POT Sta. 566+37.25= -RXR- POT Sta. 3+26.77
-LPC- POT Sta. 14+38.95 = -Y3- POC Sta. 23+10.53
-RPC- POT Sta. 23+13.72 = -Y3- POC Sta. 22+85.53
-BY3- PINC 27+85.65
BL-292 = NCGS "UNDERWOOD"
-Y3- 22+48.48
OFFSET = 29.68'

-Y3- STA.37+00
-Y3- STA.25+46.88
-Y3- CS Sta. 25+46.88
-Y3- STA.22+00

-L- STA. 568+46.65
OFFSET = 28.98'

-L- STA. 540+46.44
OFFSET = 4.60'

-L- STA. 564+04.44
OFFSET = 5.00'

-L- STA. 543+25.44
OFFSET = 26.49'

-L- STA. 549+19.50
OFFSET = 14.49'

-L- STA. 553+95.20
OFFSET = 2.88'

-L- STA. 557+07.51
OFFSET = 0.85'

-L- STA. 560+21.32
OFFSET = 15.03'

-L- PROPOSED CABLE GUIDERAIL

-L- CS Sta. 551+09.69
-L- ST Sta. 554+39.69

-Pls Sta 5+74.38 Gs = 1°18' 15.8" Ls = 330.00' Lt = 220.04' St = 110.03'
-Pl Sta 3+70+45.90 Δ = 58° 49' 33.1" (RT) D = 1° 56' 32.0" L = 3,055.35 T = 1,660.86' R = 2,950.00' e = 0.01
-Pls Sta 552+87.72 Gs = 1°18' 15.8" Ls = 330.00' Lt = 220.04' St = 110.03'

-Y3-
-Pls Sta 12+33.34 Gs = 1°18' 44.7" Ls = 350.00' Lt = 233.34' St = 116.67'
-Pl Sta 19+49.67 Δ = 9° 59' 33.9" (LT) D = 0° 44' 59.2" L = 1,056.88 T = 559.67' R = 1,640.00' e = 0.12
-Pls Sta 25+63.56 Gs = 1°18' 44.7" Ls = 350.00' Lt = 233.34' St = 116.67'

-LPC-
-Pls Sta 3+75.43 Gs = 44° 04' 55.2" Ls = 400.00' Lt = 275.43' St = 141.33'
-Pl Sta 8+76.15 Δ = 107° 41' 42.1" (LT) D = 62° 00' 12.8" L = 500.26' T = 376.15' R = 160.00' e = 0.08
-Pls Sta 10+65.41 Gs = 127° 59' 06.0" Ls = 190.00' Lt = 127.56' St = 64.15'

-LPB-
-Pls Sta 3+75.43 Gs = 44° 04' 55.2" Ls = 400.00' Lt = 275.43' St = 141.33'
-Pl Sta 9+17.76 Δ = 116° 12' 21.6" (RT) D = 22° 00' 12.8" L = 527.33' T = 417.76' R = 260.00' e = 0.08
-Pls Sta 10+91.48 Gs = 127° 56' 06.0" Ls = 190.00' Lt = 127.56' St = 64.15'

-RPB-
-Pls Sta 23+33.39 Gs = 3° 54' 57.4" Ls = 400.00' Lt = 266.73' St = 133.39' e = 0.07
-Pls Sta 10+88.20 Gs = 4° 59' 58.7" Ls = 200.00' Lt = 133.39' St = 66.72'
-Pl Sta 1+98.09 Δ = 9° 33' 52.3" (LT) D = 4° 59' 58.7" L = 190.30' T = 95.17' R = 1,146.00' e = 0.07
-Pls Sta 13+45.84 Gs = 4° 59' 58.7" Ls = 200.00' Lt = 133.39' St = 66.72'
-Pls Sta 18+15.84 Gs = 9° 59' 57.3" Ls = 190.00' Lt = 126.65' St = 63.50'
-Pl Sta 20+45.24 Δ = 28° 24' 05.2" (RT) D = 9° 59' 57.3" L = 284.03' T = 159.14' R = 573.00' e = 0.08

-RPC-
-Pls Sta 3+33.65 Gs = 0° 44' 57.7" Ls = 350.00' Lt = 233.65' St = 116.93'
-Pls Sta 7+76.88 Δ = 31° 51' 25.4" (RT) D = 4° 59' 58.7" L = 636.85' T = 326.86' R = 1,146.00' e = 0.08
-Pls Sta 11+53.57 Gs = 4° 59' 58.7" Ls = 200.00' Lt = 133.39' St = 66.72'
-Pls Sta 16+20.40 Gs = 9° 59' 57.3" Ls = 200.00' Lt = 133.55' St = 66.86'
-Pl Sta 17+85.11 Δ = 20° 14' 50.4" (LT) D = 9° 59' 57.3" L = 202.49' T = 102.31' R = 573.00' e = 0.08

-Pls Sta 3+75.43 Gs = 44° 04' 55.2" Ls = 400.00' Lt = 275.43' St = 141.33'
-Pl Sta 9+17.76 Δ = 116° 12' 21.6" (RT) D = 22° 00' 12.8" L = 527.33' T = 417.76' R = 260.00' e = 0.08
-Pls Sta 10+91.48 Gs = 127° 56' 06.0" Ls = 190.00' Lt = 127.56' St = 64.15'

BL-288 -BY2- POT 5+00.00
BL-265 PINC 644+55.0= -BY2- PINC 1+16.39 -L- STA. 546+38.25 OFFSET = -26.49'
BL-264 PINC 292+83.43 -L- STA. 543+25.44 OFFSET = 26.49'
BL-266 PINC 69+03.63 -L- STA. 549+19.50 OFFSET = 14.49'
BL-263 PINC 72+18.30 -L- STA. 553+95.20 OFFSET = 2.88'
BL-268 PINC 75+31.62 -L- STA. 557+07.51 OFFSET = 0.85'
BL-269 PINC 78+45.76 -L- STA. 560+21.32 OFFSET = 15.03'
BL-271 PINC 85+45.44 -L- STA. 564+46.65 OFFSET = 28.98'
BL-270 PINC 83+50.86 -L- STA. 563+04.44 OFFSET = 5.00'
BL-289 -BY2- POT, 19+34.99

MELVIN L. BUCHANAN DB 14 PG 173
GLENN MATTHEWS DB 67 PG 84 DB 59 PG 570
PAULINE KRUEGER DB 507 PG 697
PERRY SPEAKLE DB 511 PG 95
GARY M. THOMAS SR. DB 428 PG 554 DB 436 PG 937 PC T SLIDE 86-F
DANIEL FREST DB 403 PG 369
JACK KELLY MATTHEWS DB 63 PG 574 DB 63 PG 575 DB 68 PG 126 DB 68 PG 127 DB 256 PG 474
DANNY BURNS DB 278 PG 742
DAVID BERNOTAS DB 522 PG 632
ANNE O'CONNELL DB 537 PG 549
JOHN LOCKHART DB 426 PG 85
HAZEL WOODS DB 45 PG 78
BERTHA STULTZ DB 45 PG 82
ERIK WADE DB 63 PG 574 DB 63 PG 575
JACK H. FALLIN
EDWARD THOMAS DB 232 PG 367
COTTY US INC. DB 490, 50' R/W PC 1 SLIDE 76-1

TRAFFIC DATA
2300 4200 — RTO 3080 — B — LT420 29790 — NC 42
14820 27620 — US 421
2300 4200 — RTO 3080 — C — LT570 34830
ADT 2004 45K
ADT 2024

TYPICAL SECTION NO. 1 — SHEET 2-0
TYPICAL SECTION NO. 2 — SHEET 2-0
TYPICAL SECTION NO. 3 — SHEET 2-0
TYPICAL SECTION NO. 4 — SHEET 2-0
TYPICAL SECTION NO. 5 — SHEET 2-0
TYPICAL SECTION NO. 6 — SHEET 2-0
TYPICAL SECTION NO. 7 — SHEET 2-0
TYPICAL SECTION NO. 8 — SHEET 2-0
TYPICAL SECTION NO. 9 — SHEET 2-0
TYPICAL SECTION NO. 10 — SHEET 2-0
TYPICAL SECTION NO. 11 — SHEET 2-0
TYPICAL SECTION NO. 12 — SHEET 2-0
TYPICAL SECTION NO. 13 — SHEET 2-0
TYPICAL SECTION NO. 14 — SHEET 2-0
TYPICAL SECTION NO. 15 — SHEET 2-0
TYPICAL SECTION NO. 16 — SHEET 2-0
TYPICAL SECTION NO. 17 — SHEET 2-0
TYPICAL SECTION NO. 18 — SHEET 2-0
TYPICAL SECTION NO. 19 — SHEET 2-0
TYPICAL SECTION NO. 20 — SHEET 2-0
TYPICAL SECTION NO. 21 — SHEET 2-0
TYPICAL SECTION NO. 22 — SHEET 2-0
TYPICAL SECTION NO. 23 — SHEET 2-0
TYPICAL SECTION NO. 24 — SHEET 2-0

SKETCH OF PAVEMENT IN RELATION TO BRIDGE FOR -L- OVER -Y3-

SEE SHEETS 17 & 18 FOR -L- PROFILE
SEE SHEET 19 & 20 FOR -RPB- PROFILE
SEE SHEET 20 & 21 FOR -RPC- PROFILE
SEE SHEET 21 FOR -LPB- PROFILE
SEE SHEET 22 FOR -LPC- PROFILE
SEE SHEET 23 & 24 FOR -Y3- PROFILE

GRAPHIC SCALE
50 25 0 50 100
PLANS

LOCATION:
TIP NO.: R-2417BB
COUNTY: LEE
DESIGNED BY:
CHECKED BY:
DATE: