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PROJECT REFERENCE NO.	SHEET NO.
17BP.11.R.52	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
DocuSign Envelope ID: 0D7F0A0A-0A0A-0A0A-0A0A-0A0A0A0A0A0A
NORTH CAROLINA PROFESSIONAL SEAL 022924 ENGINEER GLENN W. MUMFORD
5/3/2022

HYDRAULICS ENGINEER
DocuSign Envelope ID: 0A0A0A0A-0A0A-0A0A-0A0A-0A0A0A0A0A0A
NORTH CAROLINA PROFESSIONAL SEAL 049338 ENGINEER ERIK P. AADLAND
5/3/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PREPARED IN THE OFFICE OF: KCA KISINGER CAMPO & ASSOCIATES
NC FIRM LICENSE No: C-1506
301 Fayetteville St., Suite 1500
Raleigh, NC 27601
(919)882-7839

REVISIONS

8/17/99

-L-

PI Sta 11+48.11
△ = 37° 15' 59.2" (RT)
D = 36° 57' 54.1"
L = 100.82'
T = 52.26'
R = 155.00'
DS > 25 MPH
SE = 4%

PI Sta 14+83.88
△ = 31° 04' 32.8" (RT)
D = 14° 19' 26.2"
L = 216.95'
T = 111.21'
R = 400.00'
DS > 30 MPH
SE = 3%

PI Sta 17+33.89
△ = 19° 44' 23.6" (LT)
D = 30° 09' 20.4"
L = 65.46'
T = 33.06'
R = 190.00'

-Y1-

PI Sta 10+59.33
△ = 52° 03' 05.8" (RT)
D = 76° 23' 39.7"
L = 68.14'
T = 36.62'
R = 75.00'
DS > 15 MPH
SE = RC

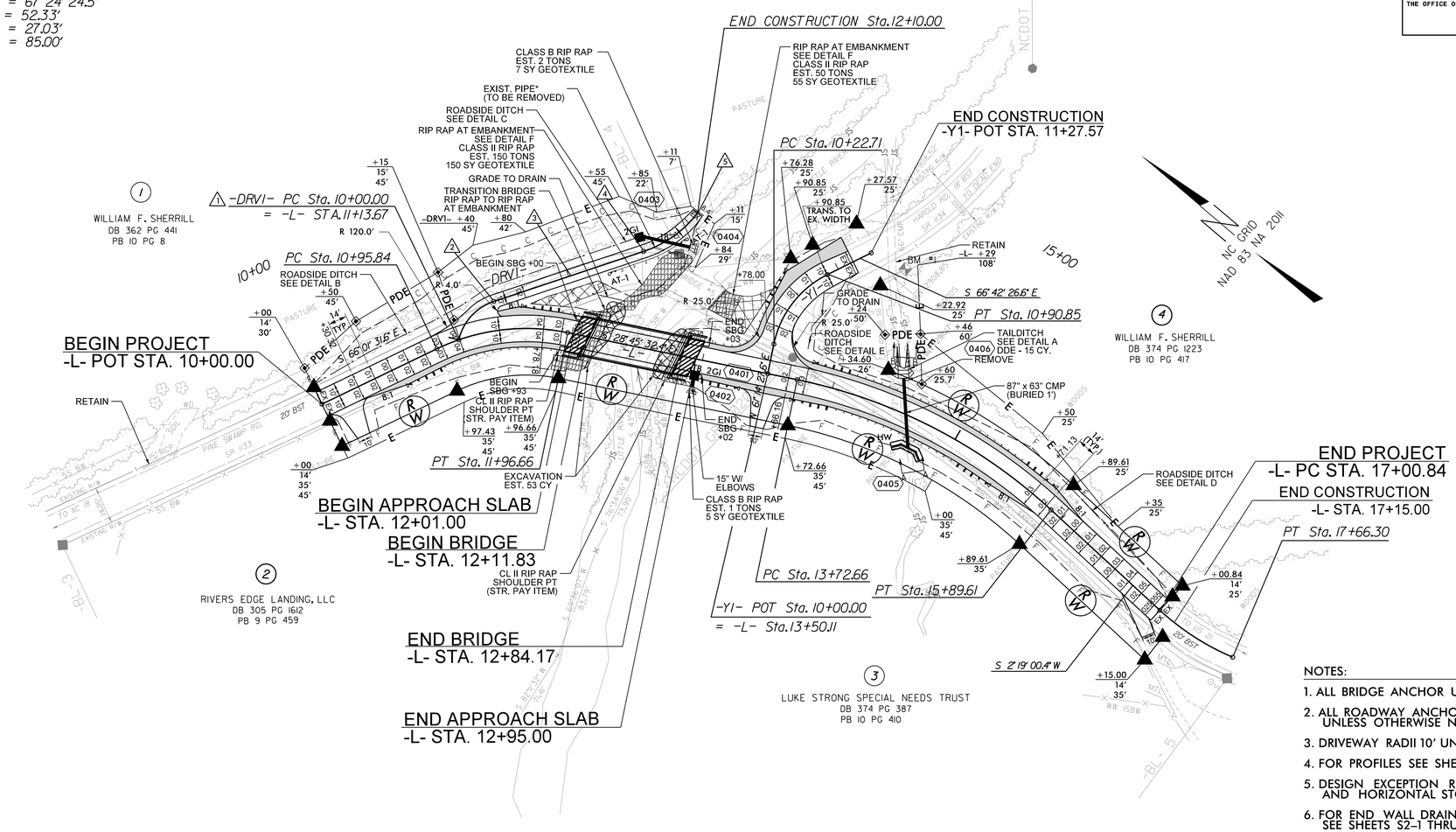
-DRV1-

PI Sta 10+22.33
△ = 58° 20' 45.0" (RT)
D = 143° 14' 22.0"
L = 40.73'
T = 22.33'
R = 40.00'

PI Sta 11+86.38
△ = 35° 16' 33.1" (LT)
D = 67° 24' 24.5"
L = 52.33'
T = 27.03'
R = 85.00'

-DRV1-

1	PC Sta. 10+00.00
2	PT Sta. 10+40.73
3	S 58° 47' 25.3" E
4	PC Sta. 11+59.35
5	PT Sta. 12+11.69

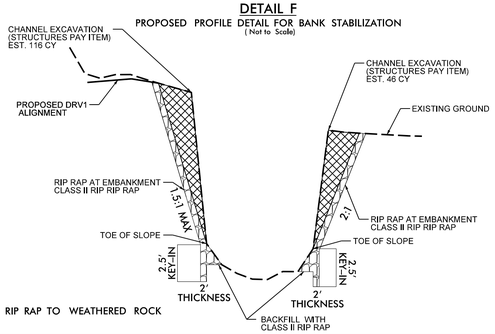


NOTES:

1. ALL BRIDGE ANCHOR UNITS ARE TYPE III.
2. ALL ROADWAY ANCHOR UNITS ARE GREU TL-2 UNLESS OTHERWISE NOTED.
3. DRIVEWAY RADII 10' UNLESS OTHERWISE NOTED.
4. FOR PROFILES SEE SHEET 5.
5. DESIGN EXCEPTION REQUIRED FOR DESIGN SPEED AND HORIZONTAL STOPPING SIGHT DISTANCE.
6. FOR END WALL DRAINAGE STRUCTURE PLANS SEE SHEETS S2-1 THRU S2-3.

* EXISTING PIPE WAS NOT INCLUDED IN LOCATION SURVEY, BUT IDENTIFIED DURING FIELD VISIT.

DETAIL F
PROPOSED PROFILE DETAIL FOR BANK STABILIZATION
(Not to Scale)



NOTES:

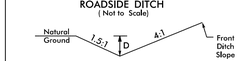
1.) KEY-IN RIP RAP TO WEATHERED ROCK

DETAIL A
TAILDITCH
(Not to Scale)

D = 2.5 Ft. Min.
B = 10 Ft.
S = 0.004 Ft./Ft.
L = 25 Ft.

TIE TO EXISTING GROUND AT ELEVATION 2911.1'
DDE: 15 CY

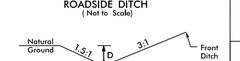
DETAIL B
ROADSIDE DITCH
(Not to Scale)



Min. D = 1.5 Ft.
DTICH LINING: PSRM

-L- STA 10+00 TO 11+00 LT

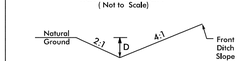
DETAIL C
ROADSIDE DITCH
(Not to Scale)



Min. D = 1.5 Ft.
DTICH LINING: PSRM

-DRV1- STA 10+20 TO 11+65 LT

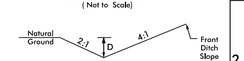
DETAIL D
ROADSIDE DITCH
(Not to Scale)



Min. D = 1.0 Ft.
DTICH LINING: PSRM

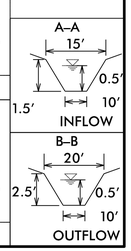
-L- STA 16+00 TO 17+00 LT

DETAIL E
ROADSIDE DITCH
(Not to Scale)



Min. D = 2.0 Ft.

-Y1- STA 10+25 TO 10+75 RT



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