Docusign Envelope ID: 864F16B6-7CEB-4EC3-80CA-8B358F7DA5BE

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2044195	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 053427 ENGINEER KYLE S. HIPP — 4/2/2026

HYDRAULICS ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 051569 ENGINEER DEAN W. LEWIS — 4/2/2026

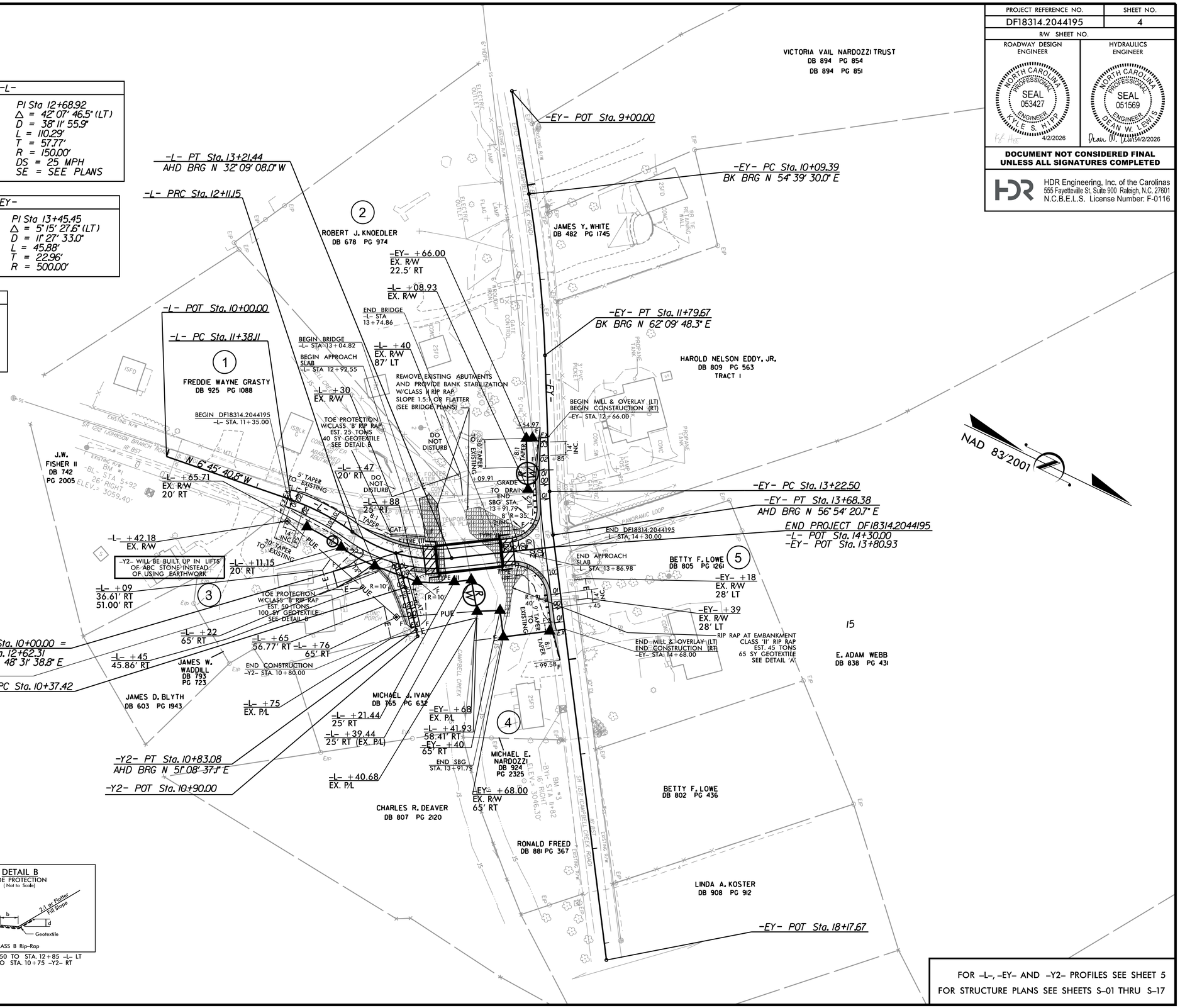
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

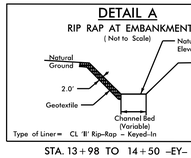
-L-	
PI Sta 11+74.89	PI Sta 12+68.92
Δ = 16° 44' 19.2" (RT)	Δ = 42° 07' 46.5" (LT)
D = 22° 55' 05.9"	D = 38° 11' 55.9"
L = 73.04'	L = 110.29'
T = 36.78'	T = 57.77'
R = 250.00'	R = 150.00'
DS = 25 MPH	DS = 25 MPH
SE = SEE PLANS	SE = SEE PLANS

-EY-	
PI Sta 10+94.65	PI Sta 13+45.45
Δ = 7° 30' 18.3" (RT)	Δ = 5° 15' 27.6" (LT)
D = 4° 24' 26.5"	D = 11° 27' 33.0"
L = 170.29'	L = 45.88'
T = 85.26'	T = 22.96'
R = 1,300.00'	R = 500.00'

-Y2-
PI Sta 10+60.25
Δ = 2° 36' 58.3" (RT)
D = 5° 43' 46.5"
L = 45.66'
T = 22.83'
R = 1,000.00'



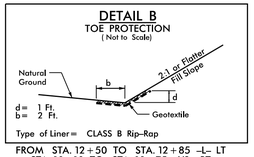
DETAIL A
RIP RAP AT EMBANKMENT
(Not to Scale)



Type of Liner= CL 'B' Rip-Rap - Keyed-In

STA. 13+98 TO 14+50 -EY- RT

DETAIL B
TOE PROTECTION
(Not to Scale)



d= 1 Ft.
b= 2 Ft.

Type of Liner= CLASS B Rip-Rap

FROM STA. 12+50 TO STA. 12+85 -L- LT
STA. 10+10 TO STA. 10+75 -Y2- RT

FOR -L-, -EY- AND -Y2- PROFILES SEE SHEET 5
FOR STRUCTURE PLANS SEE SHEETS S-01 THRU S-17

REVISIONS

PLOT DRIVER: NCDOT_pdf_color_eng_50.plt
USER: KHIPP
FILE: \
PENTABLE: NCDOT_pshpfl.tbl
DATE: 4/2/2026
TIME: 4:21:06 PM