PROJECT REFERENCE NO.	SHEET NO.
17BP.5.R.77	4

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 045230 ENGINEER MICHAEL S. BURNS
DocuSigned by: Michael S. Burns, Jr. 8/16/2018
D426CBCC006F437...

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 043870 ENGINEER REID B. ROBOL
DocuSigned by: Reid B. Robol 8/16/2018
7074FD0A9F200470...

STEWART
Firm License No. C-1051
223 S. West St.
Suite 1100
Raleigh, NC 27603
T 919.380.8750
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NC FIRM LICENSE No: F-1148
1155 SE Cary Parkway, Suite 101
Cary, NC 27518
T 919.362-0055
ECOLOGICAL ENGINEERING

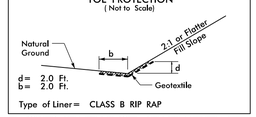
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

8/17/99

REVISIONS

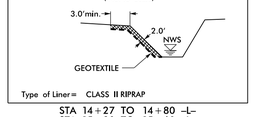
-L-		
PI Sta 10+76.20	PI Sta 16+00.26	PI Sta 17+93.62
Δ = 0° 58' 48.0" (LT)	Δ = 0° 12' 26.9" (RT)	Δ = 0° 05' 25.6" (LT)
D = 0° 38' 35.2"	D = 1° 00' 00.0"	D = 0° 01' 29.0"
L = 152.39'	L = 20.75'	L = 365.97'
T = 76.20'	T = 10.37'	T = 182.98'
R = 8,909.33'	R = 5,729.58'	R = 231,856.26'
S_e = Exist.	S_e = Exist.	S_e = Exist.

DETAIL 1
TOE PROTECTION
(Not to Scale)



d= 2.0 Ft.
b= 2.0 Ft.
Type of Liner= CLASS B RIP RAP
FROM STA. 12+00 TO STA. 12+50 -L- RT.
FROM STA. 15+99 TO STA. 17+50 -L- RT.

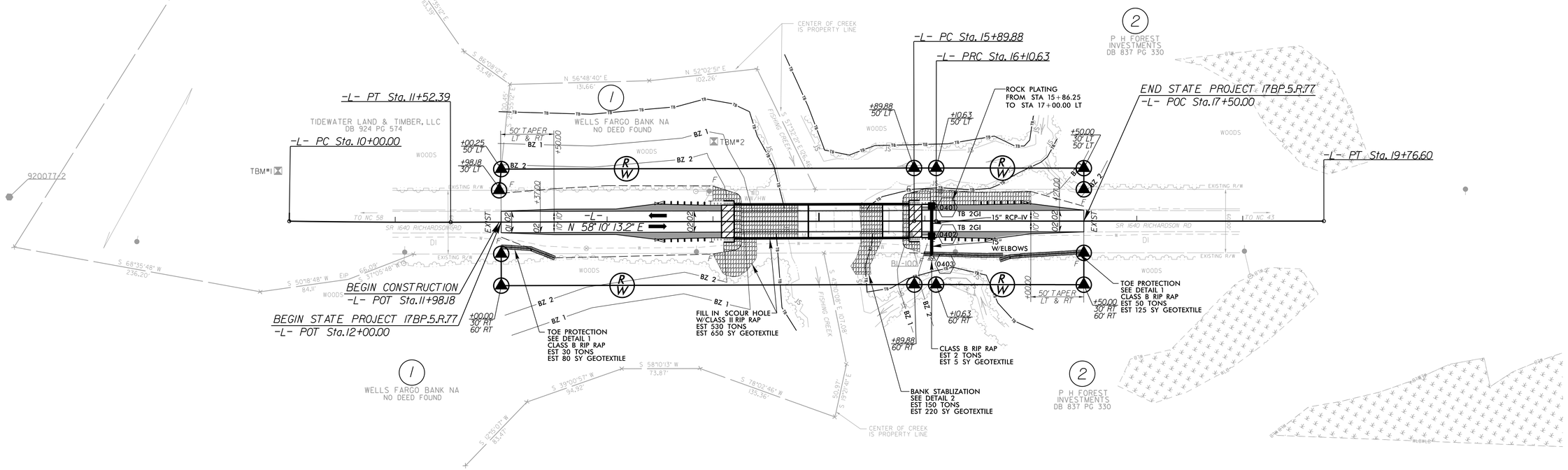
DETAIL 2
BANK STABILIZATION
(Not to Scale)



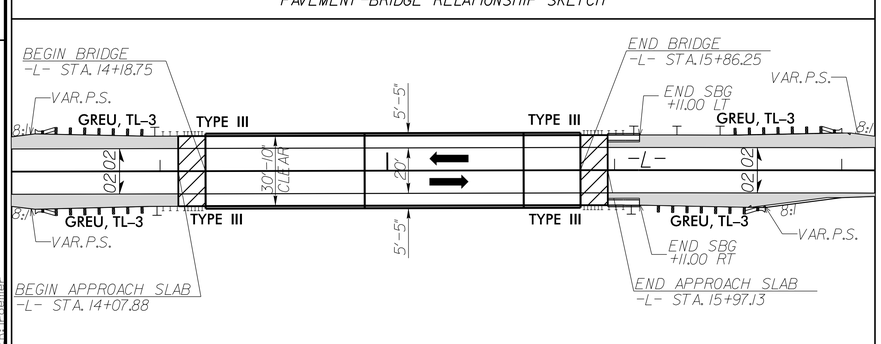
Type of Liner= CLASS II RIPRAP
STA 14+27 TO 14+80 -L-
STA 15+30 TO 15+60 -L-

15

NAD 83/NA 2011



PAVEMENT-BRIDGE RELATIONSHIP SKETCH



NOTE: NOT TO SCALE

FOR -L- PROFILE, SEE SHEET 5

FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-23

7/24/2018
17BP.5.R.77_920077_RDY_PSH04.dgn
USER: J.P. Greiner