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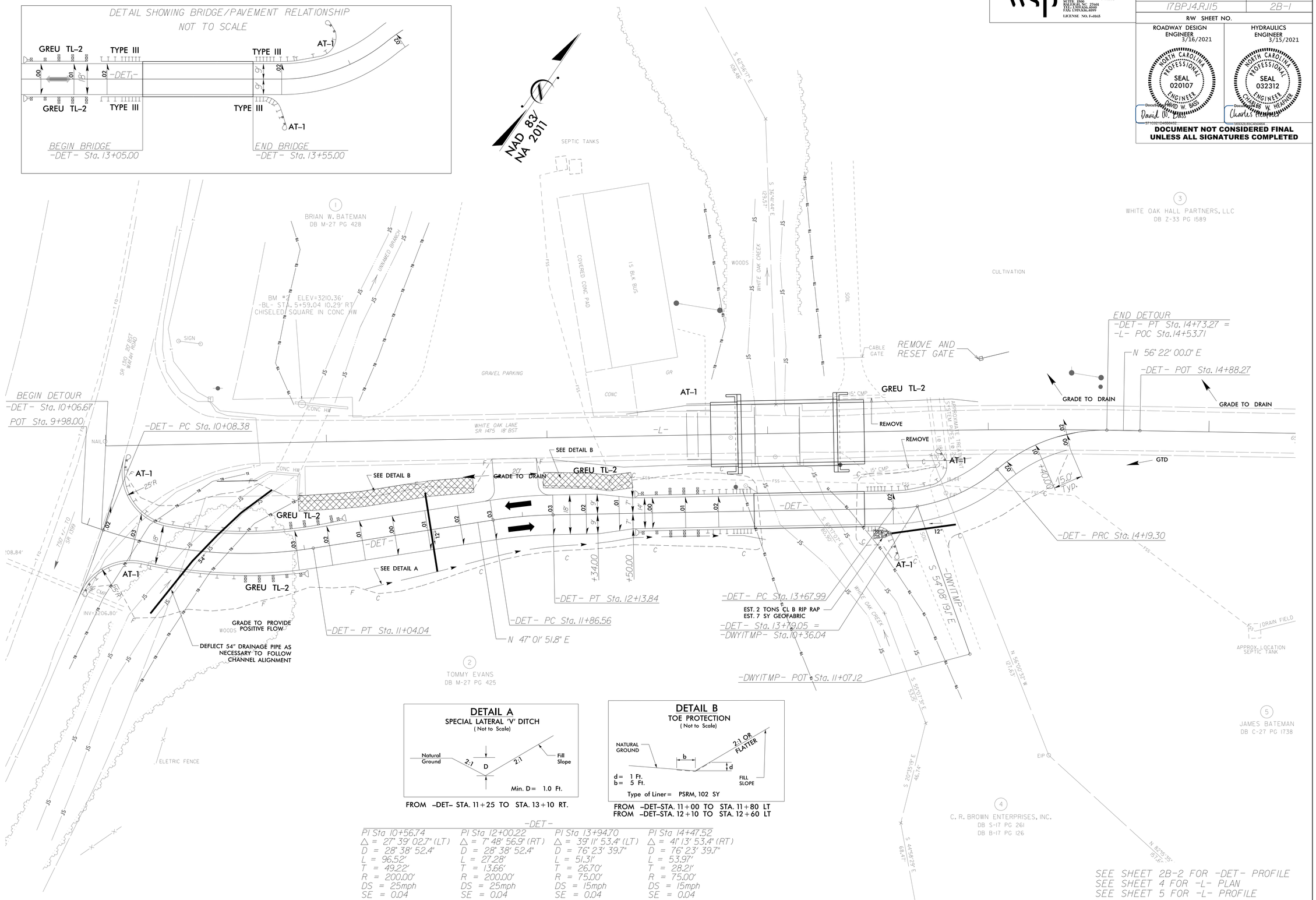
WSP USA
651 FAYETTEVILLE STREET
SUITE 1300
RALEIGH, NC 27601
TEL: 1.919.836.4000
FAX: 1.919.836.4999
LICENSE NO. F-0165

PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.115	2B-1
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER 3/16/2021
NORTH CAROLINA PROFESSIONAL SEAL 020107 ENGINEER DAVID W. BASS
DocuSigned by: David W. Bass
5F1C0010D9B442...

HYDRAULICS ENGINEER 9/15/2021
NORTH CAROLINA PROFESSIONAL SEAL 032312 ENGINEER CHARLES W. HEAFNER
DocuSigned by: Charles Heafner
A6DDEB8E3D3D4E4...

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)

Natural Ground — 2:1 — D — 2:1 — Fill Slope

Min. D= 1.0 Ft.

FROM -DET- STA. 11+25 TO STA. 13+10 RT.

DETAIL B
TOE PROTECTION
(Not to Scale)

NATURAL GROUND — b — d — 2:1 OR FLATTER — FILL SLOPE

d= 1 Ft.
b= 5 Ft.

Type of Liner= PSRM, 102 SY

FROM -DET-STA. 11+00 TO STA. 11+80 LT
FROM -DET-STA. 12+10 TO STA. 12+60 LT

-DET-

PI Sta 10+56.74	PI Sta 12+00.22	PI Sta 13+94.70	PI Sta 14+47.52
Δ = 27° 39' 02.7" (LT)	Δ = 7° 48' 56.9" (RT)	Δ = 39° 11' 53.4" (LT)	Δ = 41° 13' 53.4" (RT)
D = 28° 38' 52.4"	D = 28° 38' 52.4"	D = 76° 23' 39.7"	D = 76° 23' 39.7"
L = 96.52'	L = 27.28'	L = 51.31'	L = 53.97'
T = 49.22'	T = 13.66'	T = 26.70'	T = 28.21'
R = 200.00'	R = 200.00'	R = 75.00'	R = 75.00'
DS = 25mph	DS = 25mph	DS = 15mph	DS = 15mph
SE = 0.04	SE = 0.04	SE = 0.04	SE = 0.04

SEE SHEET 2B-2 FOR -DET- PROFILE
SEE SHEET 4 FOR -L- PLAN
SEE SHEET 5 FOR -L- PROFILE

REVISIONS

DATE PRINTED: 3/14/2021 4:02:11 PM
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