DocuSign Envelope ID: D55D29F6-B512-4B7D-A492-DAB88F2B59D3

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554

DATE: JANUARY 19, 2015

PROJECT REFERENCE NO.	SHEET NO.
P-4900A	8
R/W SHEET NO.	

RAILROAD DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 037992 ENGINEER COREY P. PENNOCK

DocuSigned by: Corey P. Pennock 1/21/2015
2CC1E0B62D39449...

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 15764 ENGINEER JAMES A BYRD

DocuSigned by: James A. Byrd 1/21/2015
23592959E54F47C...

TO FAYETTEVILLE

TO LUMBERTON

NO VEHICULAR OR PEDESTRIAN ACCESS TO PARCEL REMNANTS NORTH OF PROPOSED RAILROAD RIGHT-OF-WAY.

MATCHLINE STA. 59+00 SEE SHEET NO.7

MATCHLINE STA. 73+00 SEE SHEET NO.9

SHIRLEY LOCKLEAR AND HUSBAND JOSEPH DB 623 PG 222

SEE DETAIL I
EST 25 TONS
EST 70 SYGF
EST DDE 44 CY
NO RIP RAP IS TO BE PLACED IN STREAM BED

3' SPECIAL LAT. BASE DITCH SEE DETAIL A

3' BASE DITCH SLOPE = 0.3% EST DDE 5 CY SEE DETAIL C

CLASS 'I' RIP RAP EST 17 TONS EST 45 SYGF

REMOVE STRUCTURE

TDE — RW — C — F — HW — R080I — 42" RCP-V — 60+00 — 65+00 — 70+00 — 160' — -L- — S 37° 29' 11" E — ℄ PROP. TRACK — 3S ELEC WIRE — ISFD — WLB — ML B — 99.00' — S 41°45'00" E — 25.19' — S 54°15'00" E — 99.30' — S 60°30'00" E — 85.80' — S 66°00'00" E — 22.20' — S 44°00'00" E — 80.20' — S 28°00'00" E — 188.10' — S 08°45'00" E — 201.50'

⑦ EUPHORIA, LTD DB 1776 PG 168 PB 46 PG 35

⑧ SHIRLEY LOCKLEAR AND HUSBAND JOSEPH DB 19M PG 67

⑨ MARY PAUL FRECHETTE DB 1646 PG 399 DB 8H PG 31

+00.00 -L- 80.00' RT

+00.00 -L- 90.00' RT

REMOVE STRUCTURE

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO. R080I

DRAINAGE AREA	= 16.5	AC
DESIGN FREQUENCY	= 100	YRS
DESIGN DISCHARGE	= 36	CFS
DESIGN HW ELEVATION	= 159.9	FT
100 YEAR DISCHARGE	= 36	CFS
100 YEAR HW ELEVATION	= 159.9	FT
OVERTOPPING FREQUENCY	= >500+	YRS
OVERTOPPING DISCHARGE	=	CFS
OVERTOPPING ELEVATION	= 161.4	FT

VPC STA.62+03.02 ELEV=171.29

VC = 400' R= 0.23

VPT STA.66+03.02 ELEV=169.43

VPI STA.64+03.02 ELEVATION 169.45

PROP. -L- T/R PROFILE

EXISTING GROUND

42" RCP

(-)0.9200%

(-)0.0100%

(-) 0.4000%

(+) 0.4000%

(-) 1.2172%

(+) 1.0419%

END SPECIAL LAT. BASE DITCH LT PI =62+63.87 EL = 156.00

BEGIN/END SPECIAL LAT.BASE DITCH RT PI =62+71.50 EL = 157.32

BEGIN SPECIAL LAT. BASE DITCH LT PI =63+50.00 EL = 154.22

BEGIN/END SPECIAL LAT.BASE DITCH LT PI =66+44.00 EL = 153.04

PI =69+00.000 EL = 154.06

BEGIN/END SPECIAL LAT.BASE DITCH RT PI =70+00.000 EL = 160.23

PI =70+50.000 EL = 159.62

BEGIN/END SPECIAL LAT.BASE DITCH LT PI =73+00.00 EL = 158.23

163.16	163.33	162.93	161.84	159.74	159.79	159.76	159.67	159.34	159.71	160.42	161.46	161.29	160.74	160.32
174.07	EXIST. T/R 173.15 PROP. T/R	172.23	171.31	170.50	169.91	169.56	169.43	169.42	169.41	169.40	169.39	169.38	169.37	169.36
59+00	60+00	61+00	62+00	63+00	64+00	65+00	66+00	67+00	68+00	69+00	70+00	71+00	72+00	73+00

6:32:25 PM
1/21/2015
C:\Users\cembroke.psh_08.dgn
$$$$USERNAME$$$$