10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2610B	50

METRIC

5 0 10

ROADWAY DESIGN ENGINEER

06-23-04

NORTH CAROLINA PROFESSIONAL SEAL 17691 ENGINEER RICHARD D. SHILLINGLAW

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 22100 ENGINEER STEPHEN R. MORGAN

12564

CONST.REV.

R /W REV.

PI = 82+35.000
EL = 156.991 m
VC = 130 m
K = 77

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO.77A

DRAINAGE AREA	=	5.6 HA
DESIGN FREQUENCY	=	50 YRS
DESIGN DISCHARGE	=	0.51 CMS
DESIGN HW ELEVATION	=	155.75 M
100 YEAR DISCHARGE	=	0.62 CMS
100 YEAR HW ELEVATION	=	155.82 M
OVERTOPPING FREQUENCY	=	500+/- YRS
OVERTOPPING DISCHARGE	=	1.25 CMS
OVERTOPPING ELEVATION	=	156.30 M

156.876

+0.4954%

+2.1940%

900mm

(+) 0.5000%

(+) 2.0000%

(+) 2.5000%

(+) 2.2500%

(+) 1.2500%

(+) 2.5000%

(+) 3.0000%

(+) 4.5000%

(+) 4.3000%

163.746

PI =82+00.000 EI = 154.000

PI =82+20.000 EI = 154.100

PI =82+40.000 EI = 154.500

PI =82+60.000 EI = 155.000

PI =82+80.000 EI = 155.450

PI =83+00.000 EI = 155.700

PI =83+20.000 EI = 156.200

PI =83+60.000 EI = 157.400

END SPECIAL LAT V DITCH LT STA 83+80 EL 158.300

BEG SPECIAL LAT V DITCH LT STA 85+40 EL 161.900

END SPECIAL LAT V DITCH LT STA 85+60 EL 162.760

82 +20 +40 +60 +80 83 +20 +40 +60 +80 84 +20 +40 +60 +80 85 +20 +40 +60

PI = 86+66.500
EL = 166.458 m
VC = 350 m
K = 63

BM # 15
R/R SPIKE IN BASE OF POWER POLE, 34.000m RIGHT OF -L- 87+26.000 ELEV. 165.942m

163.746

+2.1940%

-3.4011%

(+) 1.7500%

BEG V DITCH LT STA 86+00 EL 163.180

END V DITCH LT STA 86+20 EL 163.530

UNDERCUT

157.836

+60 +80 86 +20 +40 +60 +80 87 +20 +40 +60 +80 88 +20 +40 +60 +80 89 +20

29-MAR-2004 14:00
RShillinglaw
c:\projects\2610b\2610bpf1