PROJECT REFERENCE NO. R-5130 | SHEET NO. 89
METRIC
ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 12300 ENGINEER CHARLES LEE FLOWE — 7/16/01
HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 20754 ENGINEER T. STEPHENS — 7/16/01
CONST.REV.
R /W REV.
TGS ENGINEERS
975 WALNUT STREET, SUITE 141
CARY, NC 27511
PH (919) 319-8850

BM #54 RR SPIKE IN BASE OF 400mm PINE
55.338 RT OF -L- STA.291+42.740 EL= 43.044

(+) 2.5435%

L = 100.000
K = 35

(+) 2.5435%

PROP.GRADE

(-) 0.3000%

(-) 0.3000%

PI = 0+90.304
EL = 42.033

(+) 0.4043%

STA 304+32.271 -L- 17.7 RT =
STA 0+00.000 RP D
BEGIN GR.EL= 41.668

(+) 0.1465%

2+30 BEGIN LAT. DITCH,RT
GR EL 40.21

PI = 2+00.000
EL = 41.704

EXIST.PROFILE

0+93
END UNDERCUT

L = 80.000
K = 114

0+68
BEGIN UNDERCUT

RP 'D' @ -Y3-

SEE SHEET NO. 19 FOR RAMP "D" PLAN

STA 5+35.749 RP D =
STA 35+24.160 -Y3- 9.6 LT
END GR.EL = 50.244

50.244

(+) 2.5435%

PROP.GRADE

(+) 2.5435%

900 RCP

(+) 1.0265%

(+) 0.1465%

5+00 END LAT. DITCH,RT
GR EL 41.80

EXIST.PROFILE

PI = 3+81.00
EL = 40.144

DESIGN DATA
FOR DRAINAGE STRUCTURE AT
STA.4+00

DRAINAGE AREA	= 38 HA
DESIGN FREQUENCY	= 50 YRS
DESIGN DISCHARGE	= 1.20cms
DESIGN HW ELEVATION	= 41.64 m
100 YEAR DISCHARGE	= 1.45cms
100 YEAR HW ELEVATION	= 41.90 m
OVERTOPPING FREQUENCY	= 500+YRS
OVERTOPPING DISCHARGE	= 2.5 cms
OVERTOPPING	= 42.71 m

RP 'D' @ -Y3-

SEE SHEET NO. 19 FOR RAMP "D" PLAN

3+60 3+00 2+00 1+00 0+00

5+00 4+00 3+60

50 48 46 44 42 40 38

$$$$$$$$$$SYSTIME$$$$$$$$$$
$$$$$$$$$$ON$$$$$$$$$$
$$$$$$$$$$SCREEN$$$$$$$$$$