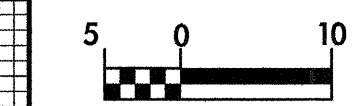


BM #7 RR SPIKE IN BASE OF 500mm PINE  
33.492 LT OF -L- STA.328+37.005 EL= 42.391



PROJECT REFERENCE NO. R-513C	SHEET NO. 64
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST. REV.	
R/W REV.	



TGS  
TGS ENGINEERS  
975 WALNUT STREET, SUITE 141  
CARY, NC 27511  
PH (919) 319-8850

50

48

46

44

42

40

38

L = 140.000  
K = 225

(-) 0.4051%

(+) 0.2165%

PI = 320+000.000  
EI = 41.746

PROP. GRADE

RETAIN. &  
EXTEND.  
450 RCP

EXIST. PROFILE

DESIGN DATA  
FOR DRAINAGE STRUCTURE AT  
STA.319+40 -L-

DRAINAGE AREA = 71 HA  
DESIGN FREQUENCY = 50 YRS  
DESIGN DISCHARGE = 2.10cms  
DESIGN HW ELEVATION = 40.95 m  
100 YEAR DISCHARGE = 2.54cms  
100 YEAR HW ELEVATION = 41.31 m  
OVERTOPPING FREQUENCY = 500+YRS  
OVERTOPPING DISCHARGE = 4.5 cms  
OVERTOPPING = 41.86 m

DESIGN DATA  
FOR DRAINAGE STRUCTURE AT  
STA.320+73 -L-

DRAINAGE AREA = 3.30HA  
DESIGN FREQUENCY = 50 YRS  
DESIGN DISCHARGE = 0.17cms  
DESIGN HW ELEVATION = 40.66 m  
100 YEAR DISCHARGE = 0.21cms  
100 YEAR HW ELEVATION = 40.85 m  
OVERTOPPING FREQUENCY = YRS  
OVERTOPPING DISCHARGE = cms  
OVERTOPPING = 41.86 m

**-L- LT. LN.**

SEE SHEET NO.23 FOR -L- PLAN

318+80

319+00

320+00

321+00

322+00

322+40

BM #7 RR SPIKE IN BASE OF 500mm PINE  
33.492 LT OF -L- STA.328+37.005 EL= 42.391

50

48

46

44

42

40

38

L = 310.000  
K = 318

(+) 0.2251%

PROP. GRADE

EXIST. PROFILE

**-L- RT. LN.**

SEE SHEET NO.23 FOR -L- PLAN

318+80

319+00

320+00

321+00

322+00

322+40

SYSTEM\$\$\$\$\$DGN\$\$\$\$\$USERNAME\$\$\$\$\$