6/03/99

NC 42 –Y2DET–

PROJECT REFERENCE NO.	SHEET NO.
R-2552AB	27

METRIC

5 0 10

CONST.REV.

R /W REV.

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 24912 ENGINEER KEVIN E. MOORE

3/16/05

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18533 ENGINEER A.T. NOTTINGHAM

3/16/05

BEGIN GRADE

-Y2DET- 16+58.776
EL. 98.081

PI = 17+40.000
EL = 98.750 m
VC = 120 m
K = 41
V = 90 KPH

98.081

+0.8236%

96.665

-2.0847%

100 99 98 97 96 95 94 93 92 91 90

15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20 +40 +60 +80 18 +20 +40

FOR –Y2DET–
SEE PLAN SHEET 11

NC 42 –Y2DET–

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.157

DRAINAGE AREA	= .42	HA
DESIGN FREQUENCY	= 5	YRS
DESIGN DISCHARGE	= 0.07	CMS
DESIGN HW ELEVATION	= 95.410 M	
100 YEAR DISCHARGE	= 0.09	CMS
100 YEAR HW ELEVATION	= 95.460 M	
OVERTOPPING FREQUENCY	= 200+	YRS
OVERTOPPING DISCHARGE	= 0.12	CMS
OVERTOPPING ELEVATION	= 95.500 M	

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.159

DRAINAGE AREA	= .06	HA
DESIGN FREQUENCY	= 5	YRS
DESIGN DISCHARGE	= 0.01	CMS
DESIGN HW ELEVATION	= 94.380 M	
100 YEAR DISCHARGE	= 0.02	CMS
100 YEAR HW ELEVATION	= 94.420 M	
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 0.7	CMS
OVERTOPPING ELEVATION	= 95.750 M	

END GRADE

-Y2DET- 20+78.680
EL.98.481

PI = 19+19.884
EL = 95.000 m
VC = 140 m
K = 29
V = 70 KPH

98.481

+0.5196%

96.665

+2.7307%

-2.0847%

400 mm csp

400 mm csp

PI = 20+40.000
EL = 98.280 m
K = 32
VC = 70 m
V = 80 KPH

100 99 98 97 96 95 94 93 92 91 90

+40 +60 +80 19 +20 +40 +60 +80 20 +20 +40 +60 +80 21 +20 +40 +60 +80

FOR –Y2DET–
SEE PLAN SHEET 11

13-JAN-2005 11:07
R:\Proj\r2552abpf1
HEdwards A1 RD203060