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5/28/99

PROJECT REFERENCE NO.	SHEET NO.
R-5206	11

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

ROADWAY DESIGN ENGINEER
6/10/2015
NORTH CAROLINA PROFESSIONAL SEAL 22568 ENGINEER STEPHEN L SCOTT
Steve Scott

HYDRAULICS ENGINEER
6/12/2015
NORTH CAROLINA PROFESSIONAL SEAL 29474 ENGINEER DAVID W OLIVER
David Oliver
2EABAF90DC524FE...

PIPE HYDRAULIC DATA
-L- Sta. 70+00

DRAINAGE AREA	= 7.8	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 25	CFS
DESIGN HW ELEVATION	= 2159.9	FT
100 YEAR DISCHARGE	= 30.4	CFS
100 YEAR HW ELEVATION	= 2160.3	FT
OVERTOPPING FREQUENCY	= 200	YRS
OVERTOPPING DISCHARGE	= 33.1	CFS
OVERTOPPING ELEVATION	= 2160.5	FT

BM #6 ELEVATION 2172.81'
N 752315.2600 E 623683.7456
-L- STA.76+22.07 (31.69') LT

-L-

END GRADE
STA.75+08.00
ELEV.2171.89

PI = 68+80.00
EL = 2,160.35'
VC = 220'
K = 50

PI = 72+00.00
EL = 2,163.75'
VC = 81'
K = 51

(-)3.3854%
(+)1.0625%
(+)1.0625%
(+)1.2641%
30" RCP

-DR2-

BEGIN GRADE
-DR2- STA.10+00.00 =
-L- STA.22+73.36
EL = 2,235.41'

PI = 10+12.93
EL = 2,234.98'

END GRADE
-DR2- STA.11+30.00
EL = 2,226.01'

(-)3.3117%
(-)8.3117%
(-)2.4563%

PI = 11+17.00
EL = 2,226.33'
VC = 20
K = 3

-Y-

BEGIN GRADE
-Y- STA.10+00.00 =
-L- STA.45+37.93
EL = 2224.82

END GRADE
-Y- STA.10+95.00
EL = 2,225.98

PI = 10+11.00
EL = 2,225.48'

PI = 10+57.00
EL = 2,229.00'
VC = 32
K = 2

(+)6.0000%
(+)7.6522%
(-)2.8522%
(-)7.9%
(-)13.9%
(-)6.4%

BEGIN DITCH GRADE
STA.10+25.00 -Y- RT
STA.45+37.93 -L- RT
ELEV.2227.92

DITCH PI
STA.10+15 -Y- RT
ELEV.2226.66

END DITCH GRADE
STA.11+00 -Y- RT
ELEV.2225.88

-Y1-

BEGIN GRADE
-Y1- STA.10+00.00 =
-L- STA.60+00.78
EL = 2,182.86'

PI = 10+11.29
EL = 2,182.65'

END GRADE
EOP STA.10+37.30
EL = 2,182.69'

(-)11.8609%
(+)1.0227%
(-)11.5974%

PI = 10+20.00
EL = 2,182.51'
VC = 16
K = 6

-DR1-

BEGIN GRADE
-DRI- STA.10+05.00
EL = 2,253.96'

PI = 10+69.44
EL = 2,253.05'

END GRADE
-DRI- STA.10+80.44 =
-L- STA.41+96.02
EL = 2,252.55'

(-)15.0093%
(-)10.3141%
(-)14.5743%

PI = 10+20.00
EL = 2,253.21'
VC = 30
K = 6

PIPE HYDRAULIC DATA
-DRI- Sta. 10+48.7

DRAINAGE AREA	= 0.07	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 0.33	CFS
DESIGN HW ELEVATION	= 2251	FT
100 YEAR DISCHARGE	= 0.41	CFS
100 YEAR HW ELEVATION	= 2251.1	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	=	CFS
OVERTOPPING ELEVATION	= 2254.1	FT

NOTE: FOR -L- PLAN VIEW SEE SHEET 8
NOTE: FOR -Y- PLAN VIEW SEE SHEET 6
NOTE: FOR -Y1- PLAN VIEW SEE SHEET 7
NOTE: FOR -DRI- PLAN VIEW SEE SHEET 6
NOTE: FOR -DR2- PLAN VIEW SEE SHEET 4

SYSTEM NAME
USERNAME