DocuSign Envelope ID: DA518730-DB21-4CE9-928C-9D938A62EA59

8/17/99

REVISIONS

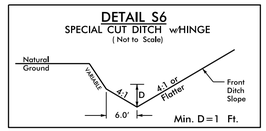
PROJECT REFERENCE NO.	SHEET NO.
R-2603	12
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 19724 ENGINEER
DAVID BURKE LEWIS
8/10/2015

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 21656 ENGINEER
RYAN GRAHAM MEADOR
8/10/2015

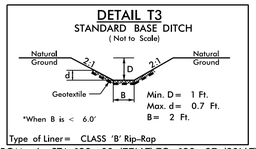
M A Engineering Consultants, Inc.
NC License: F-0160
598 East Chatham Street Suite 137 Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

DETAIL S6
SPECIAL CUT DITCH w/HINGE
(Not to Scale)



FROM –L– STA. 126+00 TO STA. 129+00 LT

DETAIL T3
STANDARD BASE DITCH
(Not to Scale)



Type of Liner= CLASS 'B' Rip-Rap
FROM –L– STA. 128+00 (77' LT) TO 128+37 (90' LT)

–L–

PI Sta 125+26.21
Δ = 4° 20' 33.9" (RT)
D = 0° 28' 38.9"
L = 909.54'
T = 454.99'
R = 12,000.00'
V = 50 mph
SE = NC

PI Sta 135+15.68
Δ = 15° 56' 33.6" (LT)
D = 1° 29' 59.6"
L = 1,062.92'
T = 534.92'
R = 3,820.00'
V = 50 mph
SE = 0.03

–Y13–

PI Sta 11+56.34
Δ = 30° 25' 01.0" (RT)
D = 28° 38' 52.4"
L = 106.18'
T = 54.37'
R = 200.00'

NAD 83 95

120 | 125 | 130

80 JAMES HUTCHINSON JR DB 1101 PG 270

81 BLUE RIDGE WATER ASSOCIATION INC DB 537 PG 567

83 CASWELL WAGONER PHYLLIS WAGONER DB 967 PG 427

84 LIFT BODIES INC DB 618 PG 447

85 LEAH ZETTELMEIER DIRK ZETTELMEIER DB 1043 PG 140

78 HUTCHINSONS LLC DB 734 PG 541

82Z 82 WILLIAM BLACKBURN EVELYN BLACKBURN DB 985 PG 100

–Y13– POT Sta. 10+00.00=
–L– POC Sta. 126+09.08

–BL–21

–BL–22

–BL–23

TAPER MED. C&G TO TIE TO EX. OR PROP. BRIDGE CURB

PSH SEE DETAIL P1 Q10 = 3 cfs

END SBG –L– STA 124+75

GRAU 350 TL-3

TAIL BASE DITCH SEE DETAIL T3 EST 33 CY DDE EST 11 TONS CL B 40 SY GEOTEXTILE

SPECIAL CUT DITCH SEE DETAIL S6

SPECIAL CUT DITCH SEE DETAIL S6

REMOVE EXIST. RCBC

REMOVE

REMOVE

ISMTLBUS

CONC

ATTENUATOR N 70° 06' 26.8" E

S 17° 19' 28.2" E

2 @ 36" RCP-IV TRANSITION 1'-6" C&G TO 2'-9" C&G –L– STA. 128+30.77 TO 128+80.77 GRAU 350 TL-3 SEE DETAIL SHEET 2C-3

END 4 P.S.

END CONSTRUCTION –Y13– POC 11+15.22

S 13° 05' 32.8" W

–Y13– PC Sta. 11+01.97

–Y13– PT Sta. 12+08.15

–Y13– POT Sta. 12+09.15

–L– PC Sta. 120+71.22

–L– PRC Sta. 129+80.77

CLASS 'B' RIP RAP PLACE ON BANKS ONLY SEE DETAIL PR3

CLASS 'B' RIP RAP PLACE ON BANKS ONLY SEE DETAIL PR4

CLASS 'B' RIP RAP EST. 3 TONS 10 SY GEOTEXTILE

MATCH LINE –L– STA.119+00 SEE SHEET NO.11

MATCH LINE –L– STA.133+00 SEE SHEET NO.13

NC 268 ELKIN RD 22' BST

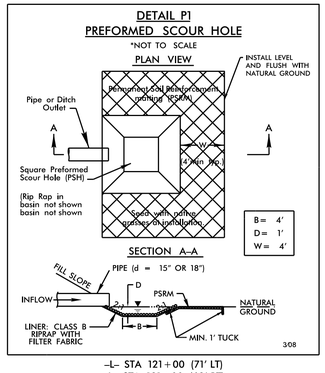
SKYVIEW DR. 20' EXISTING R/W PER NCDOT R/W ABSTRACT

NAIL S 72°06'38" W 395.99' REBAR

N 76°56'08" W 177.77'

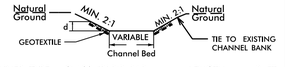
N 44°33'03" W 312.55'

DETAIL P1
PREFORMED SCOUR HOLE
*NOT TO SCALE



–L– STA 121+00 (71' LT)
–L– STA 121+00 (68' RT)

DETAIL PR3
PIPE OUTLET RIP RAP
(Not to Scale)



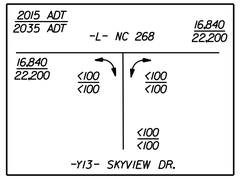
LINER TYPE – CLASS 'B' RIP RAP EST. 11 TONS & 28 SY GEOTEXTILE
LENGTH = 10 FT.
d= 2 Ft.

–L– STA. 126+96 RT

DETAIL PR4
PIPE OUTLET RIP RAP
(Not to Scale)

LINER TYPE – CLASS 'B' RIP RAP EST. 3 TONS & 10 SY GEOTEXTILE
LENGTH = 10 FT.
d= 1 Ft.

–L– STA. 129+60 RT



DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE

SEE SHEET 25 FOR –L– PROFILE
SEE SHEET 32 FOR –Y13– PROFILE

7/31/2015
12:42:29 PM
C:\Projects\R2603_Rdy_psh12.dgn