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5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-3100A	30

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 21102 JAMES TIMOTHY JOHNSON

3/15/2019

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 025503 RICHARD L MOORE

3/15/2019

MOTT MACDONALD I & E, LLC
LICENSE NO. F-0669

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McKIM & CREED
NC LICENSE #1136
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TEL: (910) 343-1048 FAX: (910) 790-4282

-L-

PI = 175+35.00
EL = 940.59'
VC = 450'
K = 347

PI = 181+75.00
EL = 957.28'
VC = 580'
K = 288

BEGIN DITCH GRADE RT
-L- STA. 174+00.00
EL = 932.43'

(+)3.9034%
(+)2.6078%
(+)2.3700%
(+)8.8200%
(+)2.6078%
(+)0.5914%
(-)14.6269%
(+)5.6481%
(-)10.4175%
(-)11.3333%

PI DITCH RT
-L- STA. 175+00.00
EL = 934.80'

END DITCH GRADE RT
-L- STA. 175+50.00
EL = 939.21'

BEGIN DITCH GRADE RT
-L- STA. 180+75.00
EL = 952.00'

PI DITCH RT
-L- STA. 181+42.00
EL = 948.90'

END DITCH GRADE RT
-L- STA. 182+50.00
EL = 955.00'

BEGIN DITCH GRADE LT
-L- STA. 186+50.00
EL = 956.19'

BEGIN DITCH GRADE RT
-L- STA. 187+00.00
EL = 954.00'

SEE PLAN SHEET 16

-L-

PIPE HYDRAULIC DATA
36" RCP Sta.189+40 -L-

DRAINAGE AREA	= 21.1	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 41	CFS
DESIGN HW ELEVATION	= 958.27	FT
100 YEAR DISCHARGE	= 44	CFS
100 YEAR HW ELEVATION	= 958.39	FT
OVERTOPPING FREQUENCY	= 100<Q<500	YRS
OVERTOPPING DISCHARGE	= 90	CFS
OVERTOPPING ELEVATION	= 961.52	FT

PIPE HYDRAULIC DATA
42" RCP Sta.196+66 -L-

DRAINAGE AREA	= 23.3	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 48	CFS
DESIGN HW ELEVATION	= 971.06	FT
100 YEAR DISCHARGE	= 51	CFS
100 YEAR HW ELEVATION	= 971.13	FT
OVERTOPPING FREQUENCY	= 100<Q<500	YRS
OVERTOPPING DISCHARGE	= 100	CFS
OVERTOPPING ELEVATION	= 972.67	FT

PI DITCH LT
-L- STA. 189+35.00
EL = 955.00'

PI DITCH LT
-L- STA. 189+50.00
EL = 956.30'

-L- STA. 190+18.97
-Y21- STA 10+00.00
(SR 1857) ANDERSON MOUNTAIN RD

END DITCH GRADE LT
-L- STA. 191+00.00
EL = 960.18'

PI DITCH LT
-L- STA. 196+87.00
EL = 965.90'

END DITCH GRADE LT
-L- STA. 197+50.00
EL = 966.20'

BEGIN DITCH GRADE LT
-L- STA. 196+20.00
EL = 969.35'

(+)10.5914%
(+)1.9702%
(-)10.4175%
(+)2.5867%
(+)8.6667%
(+)1.4000%
(+)2.6000%
(+)0.6000%
(-)1.6000%
(-)0.4500%
(-)5.1493%
(+)0.4762%
(+)10.5000%
(+)3.7000%
(+)2.4000%
(+)6.0000%
(-)12.0000%
(-)11.3333%
(-)10.3883%

36" RCP
42" RCP

PI DITCH RT
-L- STA. 188+50.00
EL = 952.00'

END DITCH GRADE RT
-L- STA. 189+53.00
EL = 951.60'

BEGIN DITCH GRADE RT
-L- STA. 190+50.00
EL = 957.60'

PI = 191+10.00
EL = 962.81'
VC = 350'
K = 254

PI DITCH RT
-L- STA. 192+00.00
EL = 959.70'

PI DITCH RT
-L- STA. 192+50.00
EL = 961.00'

PI DITCH RT
-L- STA. 193+50.00
EL = 961.60'

PI DITCH RT
-L- STA. 194+50.00
EL = 960.00'

PI DITCH RT
-L- STA. 196+50.00
EL = 959.10'

PI DITCH RT
-L- STA. 197+00.00
EL = 964.35'

PI DITCH RT
-L- STA. 197+50.00
EL = 966.20'

PI DITCH RT
-L- STA. 199+50.00
EL = 971.00'

PI DITCH RT
-L- STA. 200+50.00
EL = 977.00'

BENCH MARK
BM18 EL = 950.65'
N = 675880 E = 1378136
-L- STA 192+50 RIGHT 332'
8" SPIKE IN ROOT OF 8" WHITE OAK

RIGHT DTICH - - - - -
LEFT DTICH -·-·-·-

SEE PLAN SHEET 17

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