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PROJECT REFERENCE NO.	SHEET NO.
W-5601A	EC-05/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 15759 ENGINEER STEPHEN C. BRONDE	NORTH CAROLINA PROFESSIONAL SEAL 029984 ENGINEER DAVID P. BOCKER

REVISIONS

8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

NAD 83/NA 2011

-L-

PIs STA. 13+83.17	PI STA. 20+60.94	PIs STA. 26+62.24
Θs = 4° 18' 28.6"	Δ = 49° 21' 28.0" (RT)	Θs = 4° 18' 28.6"
Ls = 200.00'	D = 4° 18' 28.6"	Ls = 200.00'
LT = 133.37'	L = 1,145.74'	LT = 133.37'
ST = 66.70'	T = 611.14'	ST = 66.70'
	R = 1,330.00'	
	Se = 0.06	
	D.S. = 60 MPH	

-Y1- POT STA. 12+05.45

-Y1- POT STA. 11+71.00
END CONSTRUCTION

-L- POT STA. 33+57.92

MATCHLINE SHEET 4
-L- STA. 22+00.00

-L- CS STA. 25+95.54

-L- ST STA. 27+95.54

END TIP PROJECT W-5601A
-L- STA. 29+30.00

-Y1- POT STA. 10+00.00
-L- POT STA. 26+58.82

SPECIAL DITCH GRADE
FROM STA. 26+00
TO STA. 29+00

ANDY HERRERA, et ux
DB 3870 PG 769
PC 61PG 240

JEAN C. ATENCIO, et al
DB 4196 PG 149
PC 61PG 240

ADAM R. GRIFFIN, et ux
DB 3867 PG 65
PC 61PG 240

JOSHUA D. BOUDREAU, et ux
DB 3867 PG 142
PC 61PG 240

WILLIAM J. BOTTOMS, et ux
DB 1102 PG 711
PC 61PG 240

MORTON FARMS, INC
NDR
PC 61PG 240

MORTON FARMS, INC
DB 3824 PG 132

MARION R. HOWARD, et ux
DB 1182 PG 74

CULTIVATED FIELD

SR 1316 (RHODESTOWN RD) 23' BST

N 80° 38' 21.5" E

RETAIN EX. DITCH

24" RCP
FAIR CONDITION

24" RCP IV

REMOVE

SPECIAL "V" DITCH
SEE DETAIL A

SPECIAL DITCH
SEE DETAIL A

TRANSITION TO EXIST

120' INTERVAL

CLUB RIP RAP
5 TONS
14 SY GEOTEXTILE

Sta. = 22+61 LT
Q10 = 1.61 cfs
V = 1.11 fps
d = 0.64 ft.
s = 0.33%
n = 0.035
Liner = Grass

Sta. = 25+00 LT
Q10 = 0.85 cfs
V = 1.47 fps
d = 0.42 ft.
s = 1.01%
n = 0.035
Liner = Grass

Sta. = 26+00 LT
Q10 = 7.52 cfs
V = 2.07 fps
d = 0.92 ft.
s = 40.00%
n = 0.035

Sta. = 29+00 LT
Q10 = 5.94 cfs
V = 1.69 fps
d = 1.00 ft.
s = 0.42%
n = 0.035
Liner = Grass

Sta. = 33+58 LT
Q10 = 3.81 cfs
V = 1.20 fps
d = 0.89 ft.
s = 0.24%
n = 0.035
Liner = Grass

Sta. = 22+30 RT
Q10 = 2.28 cfs
V = 1.10 fps
d = 0.77 ft.
s = 0.25%
n = 0.035
Liner = Grass

Sta. = 29+00 RT
Q10 = 5.20 cfs
V = 1.44 fps
d = 1.01 ft.
s = 0.30%
n = 0.035
Liner = Grass

Sta. = 33+58 RT
Q10 = 3.08 cfs
V = 1.52 fps
d = 0.71 ft.
s = 0.53%
n = 0.035
Liner = Grass

+70.50 -Y1-
EX. RW

+73.50 -Y1-
EX. RW

+89.97 -L-
60.00 LT.

+60.40 -Y1-
40.00 RT.

+95.54 -L-
55.00 LT.

+53.53 -L-
45.00 LT.

+52.09 -L-
EX. RW

+14.69 -L-
60.00 LT.

+31.64 -L-

+95.54 -L-
55.00 RT.

+99.54 -L-
55.00

+52.00 -L-
55.00 RT.
EX. RW

33.33'
TYP.

TRAFFIC DIAGRAM
-L- (SR 1316) AND -Y1- (SR 2721)

2018

91
-Y1-
HOLLY GROVE LANE
37
54
3,382
-L-
SR 1316

DETAIL A
SPECIAL CUT DITCH
(Not to Scale)

Natural Ground
3:1
D
4:1
Front Ditch Slope
Min. D = 1.5 Ft.

FROM -L- STA. 10+92 TO STA. 11+20 LT
-L- STA. 13+00 TO STA. 17+00 LT
-L- STA. 18+00 TO STA. 22+00 LT
-L- STA. 23+00 TO STA. 26+26 LT
-L- STA. 26+95 TO STA. 29+00 LT

PAVEMENT REMOVAL

NOTE:
SEE SHEET 6 FOR -L- PROFILE
SEE SHEET 6 FOR -Y1- PROFILE

1/3/2018
R:\Environmental\Design\W-5601A_HYD_EC_Psh05.dgn
lbogan