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8/17/99

MATCHLINE –RPC– STA. 19+50 SEE SHEET 14

MATCHLINE –L– STA. 262+00 SEE SHEET 10

MATCHLINE –L– STA. 275+90 SEE SHEET 12

MATCHLINE –RPD– STA. 11+50 SEE SHEET 13

MATCHLINE –RPA– STA. 16+50 SEE SHEET 13

PROJECT REFERENCE NO.	SHEET NO.
R-5020B	11
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — DocuSigned by: BARRY C. SMITH — NORTH CAROLINA PROFESSIONAL SEAL 034375 ENGINEER BARRY C. SMITH — 6/24/2020

HYDRAULICS ENGINEER — DocuSigned by: JOSHUA G. DALTON — NORTH CAROLINA PROFESSIONAL SEAL 26971 ENGINEER JOSHUA G. DALTON — 6/24/2020

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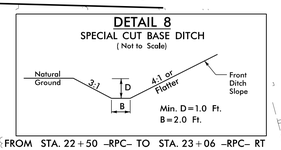
SUNGATE DESIGN GROUP, P.A.
905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-850

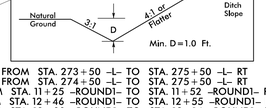
DETAIL 8
SPECIAL CUT BASE DITCH
(Not to Scale)



Min. D=1.0 Ft.
B=2.0 Ft.

FROM STA. 22+50 –RPC– TO STA. 23+06 –RPC– RT

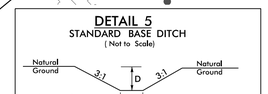
DETAIL 4
SPECIAL CUT DITCH
(Not to Scale)



Min. D=1.0 Ft.

FROM STA. 273+50 –L– TO STA. 275+50 –L– RT
FROM STA. 274+50 –L– TO STA. 275+50 –L– RT
FROM STA. 11+25 –ROUND1– TO STA. 11+52 –ROUND1– RT
FROM STA. 12+46 –ROUND1– TO STA. 12+55 –ROUND1– RT
FROM STA. 12+99 –ROUND1– TO STA. 13+14 –ROUND1– RT
FROM STA. 19+00 –RPA– TO STA. 19+50 –RPA– RT

DETAIL 5
STANDARD BASE DITCH
(Not to Scale)



Min. D=1.5 Ft.
B=2.0 Ft.

STA. 274+77 –L– RT

–L–
PI Sta 258+71.58
△ = 5° 32' 43.6" (RT)
D = 0° 42' 58.3"
L = 774.29'
T = 387.45'
R = 8,000.00'
SE = .025

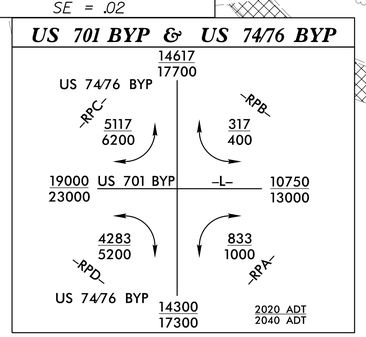
–RPB–
PI Sta 12+66.50
△ = 32° 00' 29.0" (RT)
D = 14° 19' 26.2"
L = 223.46'
T = 114.73'
R = 400.00'
SE = .02
RO = 40'

–ROUND2–	
PI Sta 10+57.00	PI Sta 13+25.61
△ = 90° 00' 00.0" (LT)	△ = 90° 00' 00.0" (LT)
D = 100° 31' 08.1"	D = 100° 31' 08.1"
L = 89.54'	L = 89.54'
T = 57.00'	T = 57.00'
R = 57.00'	R = 57.00'
SE = .02	SE = .02
PI Sta 12+36.07	PI Sta 11+46.54
△ = 90° 00' 00.0" (LT)	△ = 90° 00' 00.0" (LT)
D = 100° 31' 08.1"	D = 100° 31' 08.1"
L = 89.54'	L = 89.54'
T = 57.00'	T = 57.00'
R = 57.00'	R = 57.00'
SE = .02	SE = .02

–ROUND1–	
PI Sta 10+57.00	PI Sta 11+46.54
△ = 90° 00' 00.0" (LT)	△ = 90° 00' 00.0" (LT)
D = 100° 31' 08.1"	D = 100° 31' 08.1"
L = 89.54'	L = 89.54'
T = 57.00'	T = 57.00'
R = 57.00'	R = 57.00'
SE = .02	SE = .02
PI Sta 12+36.07	PI Sta 13+25.61
△ = 90° 00' 00.0" (LT)	△ = 90° 00' 00.0" (LT)
D = 100° 31' 08.1"	D = 100° 31' 08.1"
L = 89.54'	L = 89.54'
T = 57.00'	T = 57.00'
R = 57.00'	R = 57.00'
SE = .02	SE = .02

–RPA–
PI Sta 17+11.66
△ = 16° 16' 29.3" (LT)
D = 7° 09' 43.1"
L = 227.24'
T = 114.39'
R = 800.00'
SE = .06
RO = 150'

US 701 BYP & US 74/76 BYP



FOR –L– PROFILE, SEE SHEETS 18 & 19
FOR –ROUND1–, –ROUND2– PROFILES, SEE SHEET 20
FOR –RPA–, –RPB–, –RPC–, –RPD– PROFILES, SEE SHEET 24
FOR ROUNDABOUT DETAILS, SEE SHEETS 2B-1 & 2B-2
FOR RIGHT-OF-WAY DATA, SEE SHEET RW-11

29-APR-2020 11:29
N:\Projects\2016\016189 NCDOT R-5020B US 701 Widening\Roadway\Proj\R-5020B_Rdy_psh_11.dgn
$$$$USERNAME$$$$