

VALUES FOR DESIGN ELEMENTS RELATED TO DESIGN SPEED AND HORIZONTAL CURVATURE

D	R	V = 30 mph			V = 40 mph			V = 50 mph			V = 60 mph			V = 65 mph			V = 70 mph			V = 75 mph			V = 80 mph		
		e	L - Feet		e	L - Feet		e	L - Feet		e	L - Feet		e	L - Feet		e	L - Feet		e	L - Feet		e	L - Feet	
			2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane		2 Lane	4 Lane
0° 15'	22918'	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	RC	240	240
0° 30'	11459'	NC	0	0	NC	0	0	NC	0	0	RC	175	175	RC	190	190	RC	200	200	.021	220	220	.023	240	240
0° 45'	7639'	NC	0	0	NC	0	0	RC	0	0	.021	175	175	.023	190	190	.026	200	200	.030	220	220	.033	240	240
1° 00'	5730'	NC	0	0	RC	125	125	.020	150	150	.027	175	175	.029	190	190	.033	200	200	.037	220	220			
1° 30'	3820'	RC	100	100	.020	125	125	.028	150	150	.036	175	175	.040	190	190									
2° 00'	2865'	RC	100	100	.026	125	125	.035	150	150															
2° 30'	2292'	.020	100	100	.031	125	125	.040	150	150															
3° 00'	1910'	.023	100	100	.035	125	125																		
3° 30'	1637'	.026	100	100	.038	125	125																		
5° 00'	1432'	.029	100	100																					
4° 00'	1146'	.034	100	100																					
6° 00'	955'	.038	100	100																					

$$e_{\max} = 0.04$$

NOTES:

1. USE 0.04 WITH ANY RADIUS SMALLER THAN THAT LISTED.
2. TABLE ADAPTED FROM "A POLICY ON GEOMETRIC DESIGN OF RURAL HIGHWAYS", AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1965, P. 168

D - DEGREE OF CURVE
 R - RADIUS OF CURVE
 V - ASSUMED DESIGN SPEED
 e - RATE OF SUPERELEVATION
 L - MINIMUM LENGTH OF RUNOFF OF SPIRAL CURVE
 NC - NORMAL CROWN SECTION
 RC - REMOVE ADVERSE CROWN SECTION, SUPERELEVATE AT NORMAL CROWN SLOPE
 LENGTHS ROUNDED IN MULTIPLES OF 25 OR 50 FEET PERMIT SIMPLER CALCULATIONS

REVISED	F.B.	PG.	DATE: MAY 27, 1975	STANDARD DETAIL	OFFICE OF THE CITY ENGINEER GASTONIA, N.C.	
			SCALE: NONE		SUPERELEVATION RATES "e" MAX = 0.04/FT.	FILE NO. 71G-3
			DRAWN BY: NBM			
			CHECKED BY: FAP			
			CITY ENGINEER: FRW			