

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							
			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	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
			SCALE: NONE
			DRAWN BY: NBM
			CHECKED BY: FAP
			CITY ENGINEER: FRW

STANDARD DETAIL

SUPERELEVATION RATES
 $e_{max} = 0.04/FT.$

OFFICE OF THE
 CITY ENGINEER
 GASTONIA, N.C.

FILE NO. **71G-3**