

**DESIGN FACTORS FOR A DESIGN SPEED OF 50 MPH (RURAL) USING E= 8% MAX.**

DESIGN VELOCITY-50		WIDTH-18 FT			WIDTH-20 FT			WIDTH-22 FT			WIDTH-24 FT			WIDTH-48 FT			WIDTH-72 FT		
		IGRDS EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																	
		1 @ 9'			1 @ 10'			1 @ 11'			1 @ 12'			2 @ 12'			3 @ 12'		
RADIUS (FT)	E(%)	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w
20000	2.1	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0
15000	2.1	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0
10000	2.1	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0
7000	2.1	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0	160	160	0.0
5000	2.4	140	160	0.0	140	160	0.0	140	160	0.0	140	160	0.0	140	160	0.0	140	160	0.0
4000	2.9	116	160	0.0	116	160	0.0	116	160	0.0	116	160	0.0	116	160	0.0	116	160	0.0
3000	3.7	91	160	0.0	91	160	0.0	91	160	0.0	91	160	0.0	91	160	0.0	103	180	0.0
2500	4.3	36	160	3.2	38	160	2.2	79	160	0.0	79	160	0.0	79	160	0.0	108	220	0.0
2250	4.7	36	160	3.3	38	160	2.3	72	160	0.0	72	160	0.0	81	180	0.0	108	240	0.0
2000	5.1	36	160	3.4	38	160	2.4	66	160	0.0	66	160	0.0	83	200	0.0	108	260	0.0
1750	5.6	36	160	3.5	38	160	2.5	60	160	0.0	60	160	0.0	83	220	0.0	105	280	0.0
1500	6.2	35	160	3.7	38	160	2.7	55	160	0.0	55	160	0.0	82	240	0.0	102	300	0.0
1300	6.7	35	160	3.8	37	160	2.8	51	160	0.0	57	180	0.0	82	260	0.0	107	340	0.0
1150	7.2	35	160	3.9	42	180	2.9	47	160	0.0	53	180	0.0	76	260	0.0	105	360	0.0
1000	7.6	39	180	4.1	41	180	3.1	48	200	2.1	56	200	0.0	78	280	0.0	105	380	0.0
900	7.9	39	180	4.3	46	200	3.3	48	200	2.3	54	200	0.0	80	300	0.0	102	380	0.0
800	8.0	38	180	4.4	45	200	3.4	48	200	2.4	53	200	0.0	80	320	2.8	105	420	4.2
⊗ 760	8.0	38	180	4.5	45	200	3.5	48	200	2.5	53	200	0.0	80	320	3.0	104	420	4.5

NOTE:

CR, LS & w VALUES IN FEET.

FOR PAVEMENT WIDTHS GREATER THAN 72 FEET  
USE LS VALUES DEVELOPED BY IGRDS.

⊗ MINIMUM ALLOWABLE RADIUS