

DESIGN FACTORS FOR A DESIGN SPEED OF 40 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY -40	WIDTH- 18 FT		WIDTH-20 FT		WIDTH-22 FT		WIDTH-24 FT		WIDTH-48 FT		WIDTH-72 FT		INTERCHANGE RAMP				
	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												WIDTH				
	1 @ 9'		1 @ 10'		1 @ 11'		1 @ 12'		2 @ 12'		3 @ 12'		16 FT		18 FT		
	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS	w	CR	LS
6000	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4000	2.0	32	0.0	35	3.0	38	3.0	42	4.0	46	4.0	50	4.0	54	4.0	58	5.0
3792	2.1	32	3.0	35	3.7	38	4.0	42	4.4	46	4.0	50	4.0	54	4.0	58	5.0
3603	2.2	32	3.0	35	3.8	4.0	42	4.6	4.0	50	4.0	54	4.0	58	4.0	62	5.0
3430	2.3	32	3.6	0.0	35	4.0	42	4.8	4.0	50	4.0	54	4.0	58	4.0	62	5.0
3271	2.4	32	3.8	0.0	35	4.2	0.0	38	4.6	0.0	42	5.0	0.0	44	4.0	48	5.0
3125	2.5	32	3.9	0.0	35	4.4	0.0	38	4.8	0.0	42	5.2	0.0	44	4.0	48	5.0
2990	2.6	32	4.1	0.0	35	4.5	0.0	38	5.0	0.0	42	5.4	0.0	44	4.0	48	5.0
2866	2.7	32	4.2	0.0	35	4.7	0.0	38	5.2	0.0	42	5.6	0.0	44	4.0	48	5.0
2865	2.7	89	120	2.0	35	4.7	0.0	38	5.2	0.0	42	5.6	0.0	44	4.0	48	5.0
2748	2.8	86	120	2.0	35	4.9	0.0	38	5.4	0.0	42	5.8	0.0	44	4.0	48	5.0
2640	2.9	83	120	2.0	35	5.0	0.0	38	5.5	0.0	42	6.0	0.0	44	4.0	48	5.0
2538	3.0	80	120	2.0	35	5.2	0.0	38	5.7	0.0	42	6.3	0.0	44	4.0	48	5.0
2443	3.1	78	120	2.1	35	5.4	0.0	38	5.9	0.0	42	6.5	0.0	44	4.0	48	5.0
2354	3.2	75	120	2.1	35	5.6	0.0	38	6.1	0.0	42	6.7	0.0	44	4.0	48	5.0
2269	3.3	73	120	2.1	35	5.7	0.0	38	6.3	0.0	42	6.9	0.0	44	4.0	48	5.0
2190	3.4	71	120	2.1	35	5.9	0.0	38	6.5	0.0	42	7.1	0.0	44	4.0	48	5.0
2115	3.5	69	120	2.2	35	6.1	0.0	38	6.7	0.0	42	7.3	0.0	44	4.0	48	5.0
2044	3.6	67	120	2.2	35	6.3	0.0	38	6.9	0.0	42	7.5	0.0	44	4.0	48	5.0
1977	3.7	65	120	2.2	35	6.4	0.0	38	7.1	0.0	42	7.7	0.0	44	4.0	48	5.0
1913	3.8	64	120	2.2	35	6.6	0.0	38	7.3	0.0	42	7.9	0.0	44	4.0	48	5.0
1852	3.9	62	120	2.2	35	6.8	0.0	38	7.4	0.0	42	8.1	0.0	44	4.0	48	5.0
1794	4.0	60	120	2.3	35	6.9	0.0	38	7.6	0.0	42	8.3	0.0	44	4.0	48	5.0
1739	4.1	59	120	2.3	35	7.1	0.0	38	7.8	0.0	42	8.5	0.0	44	4.0	48	5.0
1686	4.2	58	120	2.3	35	7.3	0.0	38	8.0	0.0	42	8.7	0.0	44	4.0	48	5.0
1635	4.3	56	120	2.3	35	7.5	0.0	38	8.2	0.0	42	8.9	0.0	44	4.0	48	5.0
1587	4.4	55	120	2.4	35	7.6	0.0	38	8.4	0.0	42	9.2	0.0	44	4.0	48	5.0
1540	4.5	54	120	2.4	35	7.8	0.0	38	8.6	0.0	42	9.4	0.0	44	4.0	48	5.0
1495	4.6	53	120	2.4	35	8.0	0.0	38	8.8	0.0	42	9.6	0.0	44	4.0	48	5.0
1452	4.7	52	120	2.4	35	8.2	0.0	38	9.0	0.0	42	9.8	0.0	44	4.0	48	5.0
1411	4.8	50	120	2.5	35	8.3	0.0	38	9.2	0.0	42	10.0	0.0	44	4.0	48	5.0
1370	4.9	49	120	2.5	35	8.5	0.0	38	9.3	0.0	42	10.2	0.0	44	4.0	48	5.0
1332	5.0	48	120	2.5	35	8.7	0.0	38	9.5	0.0	42	10.4	0.0	44	4.0	48	5.0
1294	5.1	48	120	2.5	35	8.8	0.0	38	9.7	0.0	42	10.6	0.0	44	4.0	48	5.0
1258	5.2	47	120	2.6	35	9.0	0.0	38	9.9	0.0	42	10.8	0.0	44	4.0	48	5.0
1222	5.3	46	120	2.6	35	9.2	0.0	38	10.1	0.0	42	11.0	0.0	44	4.0	48	5.0
1188	5.4	45	120	2.6	35	9.4	0.0	38	10.3	0.0	42	11.2	0.0	44	4.0	48	5.0
1154	5.5	44	120	2.7	35	9.5	0.0	38	10.5	0.0	42	11.4	0.0	44	4.0	48	5.0
1122	5.6	43	120	2.7	35	9.7	0.0	38	10.7	0.0	42	11.6	0.0	44	4.0	48	5.0
1090	5.7	43	120	2.7	35	9.9	0.0	38	10.9	0.0	42	11.8	0.0	44	4.0	48	5.0
1058	5.8	42	120	2.7	35	10.0	0.0	38	11.0	0.0	42	12.0	0.0	44	4.0	48	5.0
1028	5.9	41	120	2.8	35	10.2	0.0	38	11.2	0.0	42	12.3	0.0	44	4.0	48	5.0
999	6.0	40	120	2.8	35	10.4	0.0	38	11.4	0.0	42	12.5	0.0	44	4.0	48	5.0
971	6.1	40	120	2.8	35	10.6	0.0	38	11.6	0.0	42	12.7	0.0	44	4.0	48	5.0
944	6.2	39	120	2.9	35	10.7	0.0	38	11.8	0.0	42	12.9	0.0	44	4.0	48	5.0
917	6.3	39	120	2.9	35	10.9	0.0	38	12.0	0.0	42	13.1	0.0	44	4.0	48	5.0
891	6.4	38	120	2.9	35	11.1	0.0	38	12.2	0.0	42	13.3	0.0	44	4.0	48	5.0
866	6.5	37	120	3.0	39	12.4	2.0	38	12.4	0.0	42	13.5	0.0	44	4.0	48	5.0
842	6.6	37	120	3.0	39	12.6	2.0	38	12.6	0.0	42	13.7	0.0	44	4.0	48	5.0
818	6.7	37	122	3.0	39	12.8	2.0	38	12.8	0.0	42	13.9	0.0	44	4.0	48	5.0
794	6.8	37	124	3.1	39	13.0	2.1	38	12.9	0.0	42	14.1	0.0	44	4.0	48	5.0
771	6.9	37	126	3.1	39	13.2	2.1	38	13.1	0.0	42	14.3	0.0	44	4.0	48	5.0
748	7.0	37	128	3.2	39	13.4	2.2	38	13.3	0.0	42	14.5	0.0	44	4.0	48	5.0
726	7.1	37	130	3.2	39	13.6	2.2	38	13.5	0.0	42	14.7	0.0	44	4.0	48	5.0
703	7.2	37	133	3.3	39	13.9	2.3	38	13.7	0.0	42	14.9	0.0	44	4.0	48	5.0
681	7.3	37	135	3.3	39	14.1	2.3	38	13.9	0.0	42	15.2	0.0	44	4.0	48	5.0
658	7.4	38	137	3.4	39	14.3	2.4	38	14.1	0.0	42	15.4	0.0	44	4.0	48	5.0
635	7.5	38	139	3.4	39	14.5	2.4	38	14.3	0.0	42	15.6	0.0	44	4.0	48	5.0
612	7.6	38	141	3.5	39	14.8	2.5	38	14.5	0.0	42	15.8	0.0	44	4.0	48	5.0
587	7.7	38	143	3.5	39	15.0	2.5	38	14.7	0.0	42	16.0	0.0	44	4.0	48	5.0
560	7.8	38	146	3.6	39	15.2	2.6	38	14.8	0.0	42	16.2	0.0	44	4.0	48	5.0
529	7.9	38	148	3.7	40	15.5	2.7	38	15.0	0.0	42	16.4	0.0	44	4.0	48	5.0
465	8.0	38	152	4.0	40	15.9	3.0	42	16.6	0.0	42	16.6	0.0	44	4.0	48	5.0

NOTE: CR, LS & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, CR, LS, AND w VALUES.

SPECIFICATION REFERENCE

TRANSITION CURVES - RURAL  
40 MPH DESIGN SPEED