

DESIGN FACTORS FOR A DESIGN SPEED OF 50 km/h (RURAL) USING E = 8% MAX.

DESIGN VELOCITY -50	DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)												INTERCHANGE RAMPS				
	WIDTH-5.4 m		WIDTH-6.0 m		WIDTH-6.6 m		WIDTH-7.2 m		WIDTH-14.4 m		WIDTH		4.8 m		5.4 m		
	1 e	2 e	1 e	2 e	1 e	2 e	1 e	2 e	1 e	2 e	Lt	Lr	Lt	Lr	Lt	Lr	
1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
851	2.0	9	0.0	10	0.0	11	11	0.0	12	12	0.0	17	17	0.0	17	17	0.0
850	2.0	30	0.6	10	0.0	11	11	0.0	12	12	0.0	17	17	0.0	17	17	0.0
796	2.0	30	0.6	10	0.0	11	11	0.0	12	12	0.0	17	17	0.0	17	17	0.0
754	2.1	29	30	0.6	10	0.0	11	11	0.0	12	12	0.0	17	18	0.0	17	18
716	2.2	28	30	0.6	10	0.0	11	12	0.0	12	13	0.0	17	19	0.0	17	19
682	2.3	27	30	0.6	10	0.0	11	12	0.0	12	13	0.0	17	20	0.0	17	20
650	2.4	25	30	0.6	10	0.0	11	13	0.0	12	14	0.0	17	20	0.0	17	20
620	2.5	24	30	0.6	10	0.0	11	13	0.0	12	14	0.0	17	21	0.0	17	21
593	2.6	24	30	0.6	10	0.0	11	14	0.0	12	15	0.0	17	22	0.0	17	22
568	2.7	23	30	0.6	10	0.0	11	14	0.0	12	15	0.0	17	23	0.0	17	23
544	2.8	22	30	0.6	10	0.0	11	15	0.0	12	16	0.0	17	24	0.0	17	24
523	2.9	21	30	0.7	10	0.0	11	15	0.0	12	17	0.0	17	25	0.0	17	25
502	3.0	20	30	0.7	10	0.0	11	16	0.0	12	17	0.0	17	25	0.0	17	25
483	3.1	20	30	0.7	10	0.0	11	16	0.0	12	18	0.0	17	26	0.0	17	26
465	3.2	19	30	0.7	10	0.0	11	17	0.0	12	18	0.0	17	27	0.0	17	27
448	3.3	19	30	0.7	10	0.0	11	17	0.0	12	19	0.0	17	28	0.0	17	28
432	3.4	18	30	0.7	10	0.0	11	18	0.0	12	19	0.0	17	29	0.0	17	29
417	3.5	18	30	0.7	10	0.0	11	18	0.0	12	20	0.0	17	30	0.0	17	30
402	3.6	17	30	0.7	10	0.0	11	19	0.0	12	20	0.0	17	30	0.0	17	30
389	3.7	17	30	0.7	10	0.0	11	19	0.0	12	21	0.0	17	31	0.0	17	31
376	3.8	16	30	0.7	10	0.0	11	20	0.0	12	22	0.0	17	32	0.0	17	32
363	3.9	16	30	0.7	10	0.0	11	20	0.0	12	22	0.0	17	33	0.0	17	33
352	4.0	15	30	0.7	10	0.0	11	21	0.0	12	23	0.0	17	34	0.0	17	34
340	4.1	15	30	0.8	10	0.0	11	21	0.0	12	23	0.0	17	35	0.0	17	35
329	4.2	15	30	0.8	10	0.0	11	22	0.0	12	24	0.0	17	35	0.0	17	35
319	4.3	14	30	0.8	10	0.0	11	22	0.0	12	24	0.0	17	36	0.0	17	36
309	4.4	14	30	0.8	10	0.0	11	23	0.0	12	25	0.0	17	37	0.0	17	37
300	4.5	14	30	0.8	10	0.0	11	23	0.0	12	25	0.0	17	38	0.0	17	38
290	4.6	14	30	0.8	10	0.0	11	24	0.0	12	26	0.0	17	39	0.0	17	39
281	4.7	13	30	0.8	10	0.0	11	24	0.0	12	27	0.0	17	40	0.0	17	40
273	4.8	13	30	0.8	10	0.0	11	25	0.0	12	27	0.0	17	40	0.0	17	40
265	4.9	13	30	0.8	10	0.0	11	25	0.0	12	28	0.0	17	41	0.0	17	41
256	5.0	12	30	0.8	10	0.0	11	26	0.0	12	28	0.0	17	42	0.0	17	42
249	5.1	12	30	0.8	10	0.0	11	26	0.0	12	29	0.0	17	43	0.0	17	43
241	5.2	12	30	0.9	12	30	0.6	11	27	0.0	29	0.0	17	44	0.0	17	44
233	5.3	12	30	0.9	12	30	0.6	11	27	0.0	29	0.0	17	45	0.0	17	45
226	5.4	12	30	0.9	12	30	0.6	11	28	0.0	30	0.0	17	45	0.0	17	45
219	5.5	11	30	0.9	11	30	0.6	11	28	0.0	30	0.0	17	46	0.0	17	46
212	5.6	11	30	0.9	11	30	0.6	11	29	0.0	32	0.0	17	47	0.0	17	47
205	5.7	11	30	0.9	11	30	0.6	11	29	0.0	32	0.0	17	48	0.0	17	48
198	5.8	11	30	0.9	11	30	0.6	11	30	0.0	33	0.0	17	49	0.0	17	49
192	5.9	11	30	0.9	11	30	0.6	11	30	0.0	33	0.0	17	50	0.0	17	50
186	6.0	10	30	1.0	11	31	0.7	11	31	0.0	34	0.0	17	50	0.0	17	50
180	6.1	10	31	1.0	11	32	0.7	11	31	0.0	34	0.0	17	51	0.0	17	51
175	6.2	10	31	1.0	11	32	0.7	11	32	0.0	35	0.0	17	52	0.0	17	52
170	6.3	10	32	1.0	11	33	0.7	11	32	0.0	35	0.0	17	53	0.0	17	53
164	6.4	10	32	1.0	11	33	0.7	11	33	0.0	36	0.0	17	54	0.0	17	54
159	6.5	10	32	1.0	11	34	0.7	11	33	0.0	36	0.0	17	54	0.0	17	54
154	6.6	10	33	1.0	11	35	0.7	11	34	0.0	37	0.0	17	55	0.0	17	55
150	6.7	10	34	1.1	11	36	0.8	11	35	0.0	38	0.0	17	56	0.0	17	56
145	6.8	10	34	1.1	11	36	0.8	11	35	0.0	38	0.0	17	57	0.0	17	57
141	6.9	10	35	1.1	11	37	0.8	11	36	0.0	39	0.0	17	58	0.0	17	58
136	7.0	10	35	1.1	11	37	0.8	11	36	0.0	39	0.0	17	59	0.0	17	59
132	7.1	10	36	1.1	11	38	0.8	11	37	0.0	40	0.0	17	59	0.0	17	59
127	7.2	10	36	1.1	11	38	0.8	11	37	0.0	40	0.0	17	60	0.0	17	60
123	7.3	11	38	1.2	11	39	0.9	12	41	0.6	41	0.0	18	66	0.6	18	66
119	7.4	11	38	1.2	11	40	0.9	12	41	0.6	41	0.0	18	67	0.6	18	67
114	7.5	11	39	1.2	11	40	0.9	12	42	0.6	42	0.0	18	68	0.6	18	68
110	7.6	11	39	1.2	11	41	0.9	12	43	0.6	43	0.0	18	69	0.6	18	69
105	7.7	11	40	1.3	11	42	1.0	12	44	0.7	43	0.0	19	72	0.8	19	72
100	7.8	11	41	1.3	11	42	1.0	12	44	0.7	44	0.0	19	72	0.8	19	72
94	7.9	11	41	1.3	11	43	1.0	12	45	0.7	44	0.0	19	73	0.8	19	73
83	8.0	11	43	1.5	12	45	1.2	12	47	0.9	48	0.6	20	78	1.2	20	78

NOTE: Lt, Lr & w VALUES IN METERS. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, Lr, AND w VALUES.

TRANSITION CURVES - RURAL
50 km/h DESIGN SPEED
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE