SPECIFICATION REFERENCE

TRANSITION CURVES - RURAL

40 km/h DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

DESIGN FACTORS FOR A DESIGN SPEED OF 40 km/h (RURAL) USING E- 8% MAX.

DESIGN VELOCITY -40		WIDTH- 5.4 m			WIDTH-6.0 m			WIDTH-6.6 m			WIDTH-7.2 m			WIDTH-14.4 m			INTERCHANGE RAMPS WIDTH			
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																		
		1 @ 2.7 m			1 @ 3.0 m			1 @ 3.3 m			1 @ 3.6 m			2 @ 3.6 m			4.8 m		5.4 m	
RADIUS (m)	E (%)	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	Lt	Lr
800	NC	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0	0
571	2.0	25	25	0.6	9	9	0.0	10	10	0.0	11	11	0.0	16	16	0.0	13	13	13	13
541	2.1	24	25	0.6	9	9	0.0	10	10	0.0	11	11	0.0	16	17	0.0	13	13	13	14
513	2.2	23	25	0.6	9	10	0.0	10	11	0.0	11	12	0.0	16	17	0.0	13	14	13	15
488	2.3	22	25	0.6	9	10	0.0	10	11	0.0	11	12	0.0	16	18	0.0	13	14	13	15
465	2.4	21	25	0.6	9	11	0.0	10	12	0.0	11	13	0.0	16	19	0.0	13	15	13	16
444	2.5	20	25	0.6	9	11	0.0	10	12	0.0	11	13	0.0	16	20	0.0	13	16	13	17
424	2.6	20	25	0.7	9	12	0.0	10	13	0.0	11	14	0.0	16	21	0.0	13	16	13	17
406	2.7	19	25	0.7	9	12	0.0	10	13	0.0	11	14	0.0	16	21	0.0	13	17	13	18
388	2.8	18	25	0.7	9	12	0.0	10	14	0.0	11	15	0.0	16	22	0.0	13	18	13	18
372	2.9	18	25	0.7	9	13	0.0	10	14	0.0	11	15	0.0	16	23	0.0	13	18	13	19
357	3.0	17	25	0.7	9	13	0.0	10	15	0.0	11	16	0.0	16	24	0.0	13	19	13	20
343	3.1	17	25	0.7	9	14	0.0	10	15	0.0	11	16	0.0	16	24	0.0	13	19	13	20
330	3.2	16	25	0.7	9	14	0.0	10	16	0.0	11	17	0.0	16	25	0.0	13	20	13	21
318	3.3	16	25	0.7	9	15	0.0	10	16	0.0	11	17	0.0	16	26	0.0	13	21	13	22
306	3.4	15	25	0.7	9	15	0.0	10	17	0.0	11	18	0.0	16	27	0.0	13	21	13	22
295	3.5	15	25	0.7	9	15	0.0	10	17	0.0	11	18	0.0	16	27	0.0	13	22	13	23
285	3.6	14	25	0.7	9	16	0.0	10	17	0.0	11	19	0.0	16	28	0.0	13	22	13	24
274	3.7	14	25	0.8	9	16	0.0	10	18	0.0	11	20	0.0	16	29	0.0	13	23	13	24
265	3.8	14	25	0.8	9	17	0.0	10	18	0.0	11	20	0.0	16	30	0.0	13	24	13	25
256	3.9	13	25	0.8	9	17	0.0	10	19	0.0	11	21	0.0	16	31	0.0	13	24	13	26
247	4.0	13	25	0.8	9	18	0.0	10	19	0.0	11	21	0.0	16	31	0.0	13	25	13	26
239	4.1	13	25	0.8	9	18	0.0	10	20	0.0	11	22	0.0	16	32	0.0	13	25	13	27
231	4.2	12	25	0.8	9	18	0.0	10	20	0.0	11	22	0.0	16	33	0.0	13	26	13	27
223	4.3	12	25	0.8	9	19	0.0	10	21	0.0	11	23	0.0	16	34	0.0	13	27	13	28
216	4.4	12	25	0.8	9	19	0.0	10	21	0.0	11	23	0.0	16	34	0.0	13	27	13	29
208	4.5	12	25	0.8	9	20	0.0	10	22	0.0	11	24	0.0	16	35	0.0	13	28	13	29
201	4.6	11	25	0.9	11	25	0.6	10	22	0.0	11	24	0.0	16	36	0.0	13	28	13	30
195	4.7	11	25	0.9	11	25	0.6	10	23	0.0	11	25	0.0	16	37	0.0	13	29	13	31
188	4.8	11	25	0.9	11	25	0.6	10	23	0.0	11	25	0.0	16	38	0.0	13	30	13	31
182	4.9	11	25	0.9	11	25	0.6	10	24	0.0	11	26	0.0	16	38	0.0	13	30	13	32
175	5.0	10	25	0.9	10	25	0.6	10	24	0.0	11	26	0.0	16	39	0.0	13	31	13	33
169	5.1	10	25	0.9	10	25	0.6	10	25	0.0	11	27	0.0	16	40	0.0	13	31	13	33
163	5.2	10	25	0.9	10	25	0.6	10	25	0.0	11	27	0.0	16	41	0.0	13	32	13	34
157	5.3	10	25	1.0	10	26	0.7	10	25	0.0	11	28	0.0	16	41	0.0	13	33	13	35
151	5.4	10	25	1.0	10	26	0.7	10	26	0.0	11	28	0.0	16	42	0.0	13	33	13	35
145	5.5	10	26	1.0	10	27	0.7	10	26	0.0	11	29	0.0	16	43	0.0	13	34	13	36
140	5.6	10	26	1.0	10	27	0.7	10	27	0.0	11	29	0.0	16	44	0.0	13	35	13	36
135	5.7	10	27	1.0	10	28	0.7	10	27	0.0	11	30	0.0	16	44	0.0	13	35	13	37
130	5.8	10	27	1.0	10	28	0.7	10	28	0.0	11	30	0.0	16	45	0.0	13	36	13	38
126	5.9	10	28	1.1	10	29	0.8	10	28	0.0	11	31	0.0	16	46	0.0	13	36	13	38
121	6.0	10	28	1.1	10	30	0.8	10	29	0.0	11	31	0.0	16	47	0.0	13	37	13	39
117	6.1	10	29	1.1	10	30	0.8	10	29	0.0	11	32	0.0	16	48	0.0	13	38	13	40
113	6.2	10	29	1.1	10	31	0.8	10	30	0.0	11	32	0.0	16	48	0.0	13	38	13	40
110	6.3	10	30	1.1	10	31	0.8	10	30	0.0	11	33	0.0	16	49	0.0	13	39	13	41
106	6.4	10	31	1.2	10	32	0.9	11	33	0.6	11	33	0.0	17	54	0.6	13	39	13	42
102	6.5	10	31	1.2	10	33	0.9	11	34	0.6	11	34	0.0	17	55	0.6	13	40	13	42
99	6.6	10	32	1.2	10	33	0.9	11	34	0.6	11	34	0.0	17	56	0.6	13	41	13	43
96	6.7	10	32	1.2	10	34	0.9	11	35	0.6	11	35	0.0	17	56	0.6	13	41	13	44
92	6.8	10	33	1.3	10	34	1.0	11	36	0.7	11	35	0.0	18	59	0.8	13	42	13	44
89	6.9	10	34	1.3	10	35	1.0	11	36	0.7	11	36	0.0	18	60	0.8	13	42	13	45
86	7.0	10	34	1.3	10	35	1.0	11	37	0.7	11	36	0.0	18	60	0.8	13	43	13	45
83	7.1	10	34	1.3	10	36	1.0	11	38	0.7	11	37	0.0	18	61	0.8	13	44	13	46
80	7.2	10	35	1.4	11	37	1.1	11	39	0.8	11	38	0.0	18	64	1.0	13	44	13	47
77	7.3	10	36	1.4	11	38	1.1	11	39	0.8	11	38	0.0	18	65	1.0	13	45	13	47
75	7.4	10	36	1.4	11	38	1.1	11	40	0.8	11	39	0.0	18	66	1.0	13	45	13	48
72	7.5	10	37	1.5	11	39	1.2	11	41	0.9	12	42	0.6	18	68	1.2	13	46	13	49
69	7.6	10	38	1.5	11	40	1.2	11	41	0.9	12	43	0.6	18	69	1.2	13	47	13	49
66	7.7	10	38	1.5	11	40	1.2	11	42	0.9	12	43	0.6	18	70	1.2	13	47	13	50
62	7.8	10	39	1.6	11	41	1.3	11	43	1.0	12	45	0.7	19	72	1.4	13	48	13	51
58	7.9	11	41	1.7	11	42	1.4	11	44	1.1	12	46	0.8	19	75	1.6	13	48	13	51
51	8.0	11	42	1.8	11	43	1.5	12	45	1.2	12	47	0.9	20	78	1.8	13	49	13	52

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