SPECIFICATION REFERENCE

DESIGN FACTORS FOR A DESIGN SPEED OF 35 MPH (RURAL) USING E= 8% MAX.

DESIGN VELOCITY =35		WIDTH= 18 FT			WIDTH=20 FT			WIDTH=22 FT			WIDTH=24 FT			WIDTH=48 FT			WIDTH=72 FT			INTERCHANGE RAMPS WIDTH			
		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)																		16 FT		18 FT	
		1 @ 9'			1 @ 10'			1 @ 11'			1 @ 12'			2 @ 12'			3 @ 12'						
RADIUS(FT)	E(%)	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	w	Lt	Lr	Lt	Lr
4260	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3160	2	30	30	0	33	33	0	36	36	0	39	39	0	59	59	0	78	78	0	46	46	48	48
3040	2.1	30	31	0	33	34	0	36	38	0	39	41	0	59	61	0	78	82	0	46	48	48	51
2940	2.2	30	32	0	33	36	0	36	40	0	39	43	0	59	64	0	78	86	0	46	50	48	53
2700	2.3	33	38	2	33	38	0	36	41	0	39	45	0	59	67	0	78	90	0	46	52	48	56
2580	2.4	33	39	2	33	39	0	36	43	0	39	47	0	59	70	0	78	93	0	46	55	48	58
2520	2.5	33	41	2	33	41	0	36	45	0	39	49	0	59	73	0	78	97	0	46	57	48	60
2412	2.6	80	103	2.1	33	42	0	36	47	0	39	51	0	59	76	0	78	101	0	46	59	48	63
2303	2.7	77	103	2.1	33	44	0	36	48	0	39	53	0	59	79	0	78	105	0	46	61	48	65
2220	2.8	74	103	2.1	33	46	0	36	50	0	39	55	0	59	82	0	78	109	0	46	64	48	68
2085	2.9	72	103	2.2	33	47	0	36	52	0	39	57	0	59	85	0	78	113	0	46	66	48	70
1994	3	69	103	2.2	33	49	0	36	54	0	39	59	0	59	88	0	78	117	0	46	68	48	72
1915	3.1	67	103	2.2	33	50	0	36	55	0	39	60	0	59	90	0	78	120	0	46	70	48	75
1865	3.2	65	103	2.3	33	52	0	36	57	0	39	62	0	59	93	0	78	124	0	46	73	48	77
1822	3.3	63	103	2.3	33	54	0	36	59	0	39	64	0	59	96	0	78	128	0	46	75	48	80
1706	3.4	61	103	2.3	33	55	0	36	61	0	39	66	0	59	99	0	78	132	0	46	77	48	82
1648	3.5	59	103	2.4	33	57	0	36	63	0	39	68	0	59	102	0	78	136	0	46	79	48	84
1590	3.6	58	103	2.4	33	59	0	36	64	0	39	70	0	59	105	0	78	140	0	46	82	48	87
1533	3.7	56	103	2.4	33	60	0	36	66	0	39	72	0	59	108	0	78	144	0	46	84	48	89
1476	3.8	55	103	2.5	33	62	0	36	68	0	39	74	0	59	111	0	78	148	0	46	86	48	92
1467	3.9	53	103	2.5	33	63	0	36	70	0	39	76	0	59	114	0	78	151	0	46	88	48	94
1410	4	52	103	2.5	33	65	0	36	71	0	39	78	0	59	117	0	78	155	0	46	91	48	96
1355	4.1	51	103	2.5	33	67	0	36	73	0	39	80	0	59	120	0	78	159	0	46	93	48	99
1300	4.2	50	103	2.6	33	68	0	36	75	0	39	82	0	59	122	0	78	163	0	46	95	48	101
1275	4.3	48	103	2.6	33	70	0	36	77	0	39	84	0	59	125	0	78	167	0	46	97	48	104
1220	4.4	47	103	2.7	33	71	0	36	79	0	39	86	0	59	128	0	78	171	0	46	100	48	106
1200	4.5	46	103	2.7	33	73	0	36	80	0	39	88	0	59	131	0	78	175	0	46	102	48	108
1140	4.6	45	103	2.7	33	75	0	36	82	0	39	90	0	59	134	0	78	179	0	46	104	48	111
1110	4.7	44	103	2.8	33	76	0	36	84	0	39	91	0	59	137	0	78	182	0	46	106	48	113
1080	4.8	43	103	2.8	33	78	0	36	86	0	39	93	0	59	140	0	78	186	0	46	109	48	116
1050	4.9	43	103	2.8	33	80	0	36	87	0	39	95	0	59	143	0	78	190	0	46	111	48	118
1020	5	42	103	2.9	33	81	0	36	89	0	39	97	0	59	146	0	78	194	0	46	113	48	120
990	5.1	41	103	2.9	33	83	0	36	91	0	39	99	0	59	149	0	78	198	0	46	115	48	123
960	5.2	40	103	2.9	33	84	0	36	93	0	39	101	0	59	151	0	78	202	0	46	118	48	125
930	5.3	39	103	3	36	95	2	36	95	0	39	103	0	59	154	0	78	206	0	46	120	48	128
889	5.4	39	103	3	36	96	2	36	96	0	39	105	0	59	157	0	78	210	0	46	122	48	130
873	5.5	38	103	3.1	36	99	2.1	36	98	0	39	107	0	59	160	0	78	213	0	46	124	48	132
847	5.6	37	103	3.1	36	100	2.1	36	100	0	39	109	0	59	163	0	78	217	0	46	127	48	135
806	5.7	37	103	3.2	36	103	2.2	36	102	0	39	111	0	59	166	0	78	221	0	46	129	48	137
790	5.8	36	103	3.2	36	104	2.2	36	103	0	39	113	0	59	169	0	78	225	0	46	131	48	140
752	5.9	35	103	3.3	36	107	2.3	36	105	0	39	115	0	59	172	0	78	229	0	46	133	48	142
730	6	35	104	3.4	37	109	2.4	36	107	0	39	117	0	59	175	0	78	233	0	46	136	48	144
709	6.1	35	106	3.4	37	111	2.4	36	109	0	39	119	0	59	178	0	78	237	0	46	138	48	147
689	6.2	35	107	3.4	37	112	2.4	36	110	0	39	120	0	59	180	0	78	240	0	46	140	48	149
666	6.3	35	110	3.5	37	115	2.5	36	112	0	39	122	0	59	183	0	78	244	0	46	142	48	152
654	6.4	35	111	3.5	37	117	2.5	36	114	0	39	124	0	59	186	0	78	248	0	46	145	48	154
629	6.5	36	114	3.6	37	119	2.6	36	116	0	39	126	0	59	189	0	78	252	0	46	147	48	156
607	6.6	36	116	3.7	37	121	2.7	36	118	0	39	128	0	59	192	0	78	256	0	46	149	48	159
591	6.7	36	118	3.7	37	123	2.7	36	119	0	39	130	0	59	195	0	78	260	0	46	151	48	161
568	6.8	36	120	3.8	38	126	2.8	36	121	0	39	132	0	59	198	0	78	264	0	46	154	48	164
558	6.9	36	122	3.8	37	127	2.8	36	123	0	39	134	0	59	201	0	78	268	0	46	156	48	166
534	7	36	124	3.9	38	130	2.9	36	125	0	39	136	0	59	204	0	78	271	0	46	158	48	168
518	7.1	36	126	4	38	132	3	39	138	2	39	138	0	59	207	0	78	275	0	46	160	48	171
494	7.2	36	129	4.1	38	135	3.1	39	140	2.1	39	140	0	59	210	0	78	279	0	46	163	48	173
476	7.3	36	131	4.2	38	137	3.2	40	143	2.2	39	142	0	59	212	0	78	283	0	46	165	48	176
464	7.4	37	134	4.3	38	140	3.3	40	146	2.3	39	144	0	59	215	0	78	287	0	46	167	48	178
446	7.5	37	136	4.4	38	142	3.4	40	148	2.4	39	146	0	59	218	0	78	291	0	46	170	48	180
437	7.6	37	138	4.4	38	144	3.4	40	150	2.4	39	148	0	59	221	0	78	295	0	46	172	48	183
420	7.7	37	140	4.5	38	146	3.5	40	153	2.5	39	150	0	59	224	0	78	299	0	46	174	48	185
402	7.8	37	143	4.6	39	149	3.6	40	155	2.6	39	151	0	59	227	0	78	302	0	46	176	48	188
367	7.9	37	146	4.9	39	153	3.9	41	159	2.9	39	153	0	59	230	0	78	306	0	46	179	48	190
316	8	38	151	5.4	40	158	4.4	41	164	3.4	43	171	2.4	70	279	4.8	93	372	7.2	46	181	48	192

NOTE:
Lt, Lr & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, Lt, Lr, AND w VALUES. WIDENING SHOWN IS BASED ON A SU-40 DESIGN VEHICLE.

TC-5.11

TRANSITION CURVES - RURAL
35 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE

803.35

SHEET 1 OF 1