

NOTE: L_t, L_r & w VALUES IN FEET. LISTED RADIUS IS THE MINIMUM ALLOWABLE RADIUS FOR THE CORRESPONDING E, L_t, L_r, AND w VALUES. WIDENING SHOWN IS BASED ON A WB-62 DESIGN VEHICLE.

TC-5.11

DESIGN VELOCITY -50		DESIGN SOFTWARE EQUIVALENTS (NUMBER OF LANES AT LANE WIDTH)										WIDTH				
		1 @ 10'		1 @ 11'		1 @ 12'		2 @ 12'		3 @ 12'		16 FT		18 FT		
		L _t	L _r	w	L _t	L _r	w	L _t	L _r	w	L _t	L _r	w	L _t	L _r	L _t
8150	NC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6013	2	44	44	2	44	44	0	48	48	0	72	72	0	96	96	0
5703	2.1	45	47	2.1	44	47	0	48	51	0	72	76	0	96	101	0
5420	2.2	45	49	2.1	44	49	0	48	53	0	72	80	0	96	106	0
5162	2.3	45	51	2.1	44	51	0	48	56	0	72	83	0	96	111	0
4926	2.4	45	54	2.2	44	53	0	48	58	0	72	87	0	96	116	0
4708	2.5	45	56	2.2	44	55	0	48	60	0	72	90	0	96	120	0
4507	2.6	45	58	2.2	44	58	0	48	63	0	72	94	0	96	125	0
4320	2.7	45	61	2.3	44	60	0	48	65	0	72	98	0	96	130	0
4146	2.8	45	63	2.3	44	62	0	48	68	0	72	101	0	96	135	0
3985	2.9	45	65	2.3	44	64	0	48	70	0	72	105	0	96	140	0
3834	3	45	68	2.4	44	66	0	48	72	0	72	108	0	96	144	0
3692	3.1	45	70	2.4	44	69	0	48	75	0	72	112	0	96	149	0
3560	3.2	45	72	2.4	44	71	0	48	77	0	72	116	0	96	154	0
3434	3.3	45	75	2.5	44	73	0	48	80	0	72	119	0	96	159	0
3316	3.4	45	77	2.5	44	75	0	48	82	0	72	123	0	96	164	0
3205	3.5	45	79	2.5	44	77	0	48	84	0	72	126	0	96	168	0
3099	3.6	46	82	2.6	44	80	0	48	87	0	72	130	0	96	173	0
2999	3.7	46	84	2.6	44	82	0	48	89	0	72	134	0	96	178	0
2904	3.8	46	86	2.6	44	84	0	48	92	0	72	137	0	96	183	0
2814	3.9	46	89	2.7	44	86	0	48	94	0	72	141	0	96	188	0
2728	4	46	91	2.7	44	88	0	48	96	0	72	144	0	96	192	0
2646	4.1	46	94	2.8	44	91	0	48	99	0	72	148	0	96	197	0
2568	4.2	46	96	2.8	44	93	0	48	101	0	72	152	0	96	202	0
2493	4.3	46	99	2.8	44	95	0	48	104	0	72	155	0	96	207	0
2422	4.4	46	101	2.9	44	97	0	48	106	0	72	159	0	96	212	0
2353	4.5	46	104	2.9	44	99	0	48	108	0	72	162	0	96	216	0
2287	4.6	46	106	2.9	44	102	0	48	111	0	72	166	0	96	221	0
2224	4.7	46	109	3	48	113	2	48	113	0	72	170	0	96	226	0
2163	4.8	46	111	3	48	116	2	48	116	0	72	173	0	96	231	0
2104	4.9	47	114	3.1	49	119	2.1	48	118	0	72	177	0	96	236	0
2047	5	47	116	3.1	49	121	2.1	48	120	0	72	180	0	96	240	0
1992	5.1	47	118	3.1	49	123	2.1	48	123	0	72	184	0	96	245	0
1939	5.2	47	121	3.2	49	126	2.2	48	125	0	72	188	0	96	250	0
1888	5.3	47	123	3.2	49	129	2.2	48	128	0	72	191	0	96	255	0
1838	5.4	47	126	3.3	49	132	2.3	48	130	0	72	195	0	96	260	0
1790	5.5	47	129	3.3	49	134	2.3	48	132	0	72	198	0	96	264	0
1743	5.6	47	132	3.4	49	137	2.4	48	135	0	72	202	0	96	269	0
1698	5.7	47	134	3.4	49	140	2.4	48	137	0	72	206	0	96	274	0
1653	5.8	47	137	3.5	49	143	2.5	48	140	0	72	209	0	96	279	0
1610	5.9	47	139	3.5	49	145	2.5	48	142	0	72	213	0	96	284	0
1568	6	47	141	3.5	49	147	2.5	48	144	0	72	216	0	96	288	0
1527	6.1	48	144	3.6	50	151	2.6	48	147	0	72	220	0	96	293	0
1487	6.2	48	147	3.6	50	153	2.6	48	149	0	72	224	0	96	298	0
1448	6.3	48	150	3.7	50	156	2.7	48	152	0	72	227	0	96	303	0
1410	6.4	48	153	3.8	50	159	2.8	48	154	0	72	231	0	96	308	0
1372	6.5	48	155	3.8	50	162	2.8	48	156	0	72	234	0	96	312	0
1336	6.6	48	158	3.9	50	165	2.9	48	159	0	72	238	0	96	317	0
1300	6.7	48	161	3.9	50	167	2.9	48	161	0	72	242	0	96	322	0
1265	6.8	48	164	4	50	170	3	52	177	2	78	266	4	104	354	6
1230	6.9	48	166	4	50	173	3	52	180	2	78	270	4	104	359	6
1196	7	49	169	4.1	51	176	3.1	53	183	2.1	79	275	4.2	105	366	6.3
1162	7.1	49	172	4.2	51	179	3.2	53	187	2.2	79	280	4.4	105	373	6.6
1128	7.2	49	175	4.3	51	183	3.3	53	190	2.3	79	285	4.6	106	379	6.9
1094	7.3	49	178	4.3	51	185	3.3	53	192	2.3	79	288	4.6	106	384	6.9
1059	7.4	49	181	4.4	51	188	3.4	53	196	2.4	80	294	4.8	106	391	7.2
1024	7.5	50	184	4.5	51	192	3.5	53	199	2.5	80	299	5	106	398	7.5
988	7.6	50	187	4.6	52	195	3.6	54	203	2.6	80	304	5.2	107	405	7.8
950	7.7	50	191	4.7	52	198	3.7	54	206	2.7	81	309	5.4	107	412	8.1
908	7.8	50	194	4.8	52	202	3.8	54	210	2.8	81	314	5.6	108	419	8.4
860	7.9	51	198	5	52	206	4	54	214	3	81	320	6	108	427	9
760	8	51	204	5.4	53	212	4.4	55	220	3.4	83	329	6.8	110	439	10.2

DESIGN VELOCITY		INTERCHANGE RAMP	
RADIUS(FT)	E(%)	L _t	L _r
8150	NC	0	0
6013	2	44	44
5703	2.1	45	47
5420	2.2	45	49
5162	2.3	45	51
4926	2.4	45	54
4708	2.5	45	56
4507	2.6	45	58
4320	2.7	45	61
4146	2.8	45	63
3985	2.9	45	65
3834	3	45	68
3692	3.1	45	70
3560	3.2	45	72
3434	3.3	45	75
3316	3.4	45	77
3205	3.5	45	79
3099	3.6	46	82
2999	3.7	46	84
2904	3.8	46	86
2814	3.9	46	89
2728	4	46	91
2646	4.1	46	94
2568	4.2	46	96
2493	4.3	46	99
2422	4.4	46	101
2353	4.5	46	104
2287	4.6	46	106
2224	4.7	46	109
2163	4.8	46	111
2104	4.9	47	114
2047	5	47	116
1992	5.1	47	118
1939	5.2	47	121
1888	5.3	47	123
1838	5.4	47	126
1790	5.5	47	129
1743	5.6	47	132
1698	5.7	47	134
1653	5.8	47	137
1610	5.9	47	139
1568	6	47	141
1527	6.1	48	144
1487	6.2	48	147
1448	6.3	48	150
1410	6.4	48	153
1372	6.5	48	155
1336	6.6	48	158
1300	6.7	48	161
1265	6.8	48	164
1230	6.9	48	166
1196	7	49	169
1162	7.1	49	172
1128	7.2	49	175
1094	7.3	49	178
1059	7.4	49	181
1024	7.5	50	184
988	7.6	50	187
950	7.7	50	191
908	7.8	50	194
860	7.9	51	198
760	8	51	204

SPECIFICATION REFERENCE



ROAD AND BRIDGE STANDARDS

TRANSITION CURVES - RURAL

50 MPH DESIGN SPEED

VIRGINIA DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 1

REVISION DATE

803.38

01/13