

Appendix XV

Cracked Section Properties of the Columns of the Steel Girder Bridge

Table XV-1. The results of the calculation to get the column cracked section properties.

Load	M10	M11	M12	M13	M21	M22	M23
Design Truck	16.8	17.3	17.3	16.8	22.3	24.9	22.3
Design Tandem	11.5	11.8	11.8	11.5	15.3	17.0	15.3
Two Design Trucks	22.5	23.2	23.2	22.5	29.8	33.2	29.8
Lane	15.4	15.9	15.9	15.5	19.8	22.1	19.8
Controlling Load	22.5	23.2	23.2	22.5	29.8	33.2	29.8
Live Load Effects	104	107	107	104	107	119	107
Dead Load Effects	262	277	277	262	279	316	279
LL+DL Effects	314	331	331	314	332	375	332
P / fc'Ag	0.0755	0.0796	0.0796	0.0755	0.0799	0.0903	0.0799
le / lg	0.402	0.405	0.405	0.402	0.388	0.393	0.388
le x-x	61403	61862	61862	61403	59265	60029	59265
le y-y	61403	61862	61862	61403	59265	60029	59265

Note- Loads are in kips, and moment of inertias are in kip-in.