|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Design Element** | | **Manual**  **Section** | **Design Speed** | | | |
| 30 mph | 35 mph | 40 mph  **50 mph**  **55 mph**  **60 mph**  **65 mph**  305’  425’  495’ | 45 mph |
| \*Stopping Sight Distance **(1)** | | 10.1 | 200′ | 250′ | 305′ | 360′ |
| Decision Sight Distance **(2)** | | 10.3 | 490′ | 590′ | 690′ | 800′ |
| Intersection Sight Distance **(3)** | | 10.4 | 335′ | 390′ | 445′ | 500′ |
| \*Minimum Radii | emax = 6% | 11.2.3 | 275′ | 380′ | 510′ | 660′ |
| emax = 4% | 305′ | 425′ | 565′ | 735′ |
| \*Superelevation Rate **(4)** | | 11.3 | 4% or 6% | 4% or 6% | 4% or 6% | 4% or 6% |
| \*Horizontal Sight Distance **(5)** | | 11.4 | 22′ | 23′ | 24′ | 25′ |
| \*Minimum Vertical Curvature (K-values) **(6)** | Crest | 12.5 | 19 | 29 | 44 | 61 |
| Sag | 37 | 49 | 64 | 79 |
| \*Maximum Grade **(7)** | Level | 12.3 | 9% | 9% | 9% | 8% |
| Rolling | 11% | 10% | 10% | 9% |
| Mountainous | 12% | 12% | 12% | 11% |
| Minimum Grade | | 12.3 | Des.: 0.5% Min.: 0.3% Curb and Gutter | | | |