

**Texas Department of Transportation**

**TECHNICAL PROVISIONS**

**STATE HIGHWAY 360**

**DESIGN-BUILD PROJECT**

**Attachment 11-1**

**Roadway Design Criteria**

**TABLE 11-1: Geometric Design Criteria**

	<b>SH 360 Main lanes</b>	<b>Ramps and Transitions</b>	<b>Direct Connectors</b>	<b>SH 360 Frontage Roads</b>	<b>Cross Streets</b>
Functional Classification	Urban Freeway	Urban Freeway	Urban Freeway	Urban Collector	See Table 11-2
Design Speed (MPH)	70	50	50	40	See Table 11-2
Stopping Sight Distance (ft)	730	425	425	305	-
Horizontal Alignment					
Superelevation	e(max)= 6%	e(max)= 6%	e(max)= 6%	e(max)= 6%	N/A
Minimum Radius of Curvature (ft)	3390	1050	1050	485	-
Vertical Alignment					
Minimum Grade (%)	0.5	0.5	0.5	0.35 (curbed)	-
Maximum Grade (%)	3	4	4	7	-
Crest (Min. K-Value)	247	84	84	44	-
Sag (Min. K-Value)	181	96	96	64	-
Cross Section					
Lane Widths (ft)	12	14	14	12 <sup>4</sup>	12-14
Inside Shoulder Widths (ft)	4-24 <sup>1</sup>	4	4	2' curb offset	-
Outside Shoulder Widths (ft)	6-22 <sup>2</sup>	8	8	10 <sup>4</sup>	-
Pavement Cross Slope (ft/ft)	0.0200 <sup>3</sup>	0.0200	0.0200	0.0200	0.0200
Clear Zone					
Within Clear Zone	6:1	6:1	6:1	1.5% max for sidewalks	1.5% max
Outside of Clear Zone	4:1 max	4:1 max	4:1 max	4:1 max	3:1 max
Clear Zone Width (ft)	30	16	16	4' min / 6' des / 6' min to column	4' min / 6' des / 6' min to column

1. 4' inside shoulder only for new Super 2 SB passing lane area.
2. 6' outside shoulder only for new Super 2 SB passing lane area.
3. 2% for 2 interior lanes, then 2.5% for outside lanes
4. Outside lane width shall be 12' when 10' shoulder is used; a 14' outside lane is required to accommodate bicycle traffic at the UPRR bridge only.
5. Design vehicle WB-62
6. Design speed for SSD on direct connector ramps shall be 45 mph.