307.01.02 Roadside Terrain: Backslope

When a roadway is located in a cut section, the cut slope is called a backslope. A traversable backslope is 1:3 or flatter, relatively smooth, clear of fixed object hazards, and where a vehicle can be driven across without becoming stranded. This type of backslope can be included as part of the clear zone. However if the backslope is steeper than 1:3, rock cut or rough sided, the base of the backslope shall be outside the clear zone. If the recommended clear zone can not be practically accommodated, a barrier system may be required to protect motorists.

307.01.03 Roadside Terrain: Cross-slope

Cross-slopes can be located along medians, intersecting driveways and roadways. Cross slopes can be more hazardous to motorists than foreslopes or backslopes because of the possibility of colliding with opposing traffic. Cross-slopes of 1:10 or flatter, traversable, relatively smooth, and clear of fixed object hazards are recommended particularly in medians immediately adjacent to opposing traffic. In roadside sections where 1:10 can not be accommodated, such as urban areas, a maximum slope of 1:6 should be used.

307.01.04 Roadside Terrain: Ditch

The primary function of ditches is to prevent roadways from flooding by directing and carrying water away from the roadway. They are especially hazardous because of fixed hazards such as, exposed pipes, headwalls and culverts. The ditch cross section itself can also represent a serious hazard. Preferred ditch cross sections are traversable and free of hazards. See Figures 300.05 and 300.06. Cross sections that fall within the shaded area are considered traversable. Cross sections that fall outside the shaded regions are considered less desirable and should be used only under conditions of:

- restricted ROW
- rugged terrain
- resurfacing, restoration or rehabilitation
- low volume or low speed roads

Conditions where a ditch has a cross section that falls outside the shaded region, and is located in a vulnerable location shall consider closed drainage systems or shielding with barrier systems.

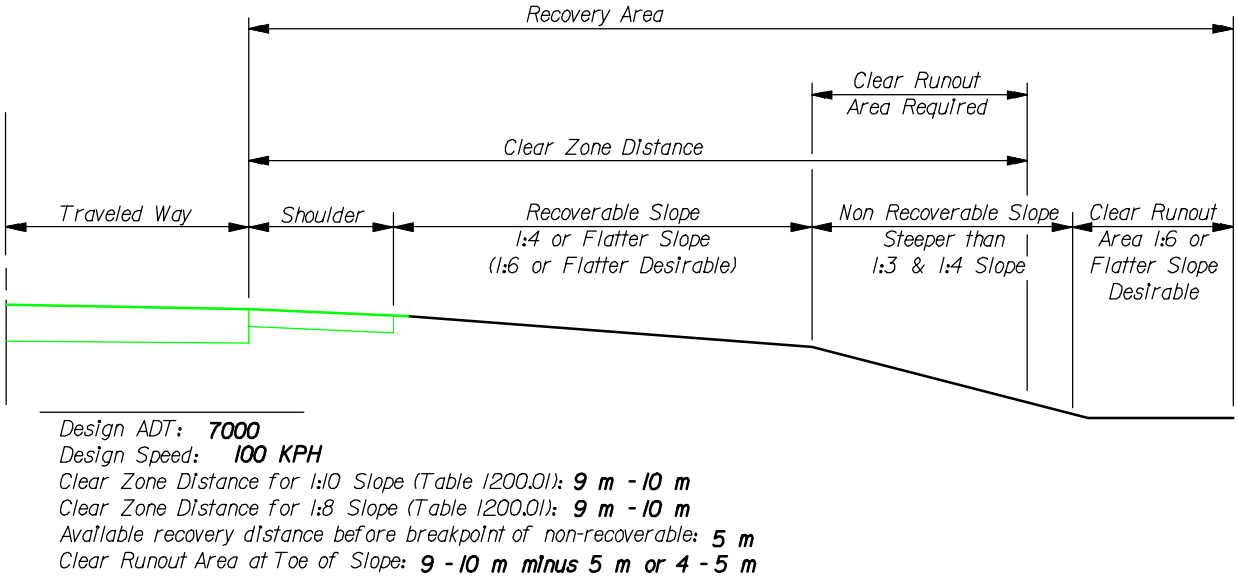

Figure 300.04
Clear Runout Area