

The Effective Turning Radius is the minimum radius appropriate for a vehicle turning from a right-hand travel lane on the approach street to the appropriate lane of the receiving street. This radius is determined by the selection of a design vehicle appropriate for the streets being designed and the lane on the receiving street into which that design vehicle will turn. **The minimum effective turning radius is 25 feet.**

The Actual Curb Radius should be no greater than that needed to accommodate the design turning radius. The actual curb radius shall be such that the design vehicle does not encroach into the adjacent or opposite lanes when making a turn. **The minimum actual curb radius is 15 feet.**

If Intercity Buses or City Transit Buses are the design vehicle the minimum radius should be increased to accommodate the turning radius of such vehicles. Minimal encroachment into the opposing lane of traffic of the receiving street is expected.

Auto-TURN® diagrams shall be used to demonstrate the impact on the opposing lane of the receiving street and the sufficiency of the street widths to accommodate the vehicles without scrubbing curbs.

TURN LANE TAPERS

Turn Lane Tapers shall be determined using an 8:1 ratio for design speeds 45 mph and less, based on the width of the turn lane. However, the minimum turn lane taper for a single turn lane shall not be less than 80 feet. The turn lane taper for a dual turn lane shall be 1 ½ times the length of the single turn lane taper. This results in a longer length of full-width pavement for the auxiliary lane.

ROADWAY DRAINAGE

See [APPENDIX B\(1\), SECTION B\(1\) – 4 – ELEMENTS OF TYPICAL SECTION.](#)

RIGHT OF WAY

See [APPENDIX B\(1\), SECTION B\(1\) – 4 – ELEMENTS OF TYPICAL SECTION.](#)

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