



Traffic Signal Design Manual

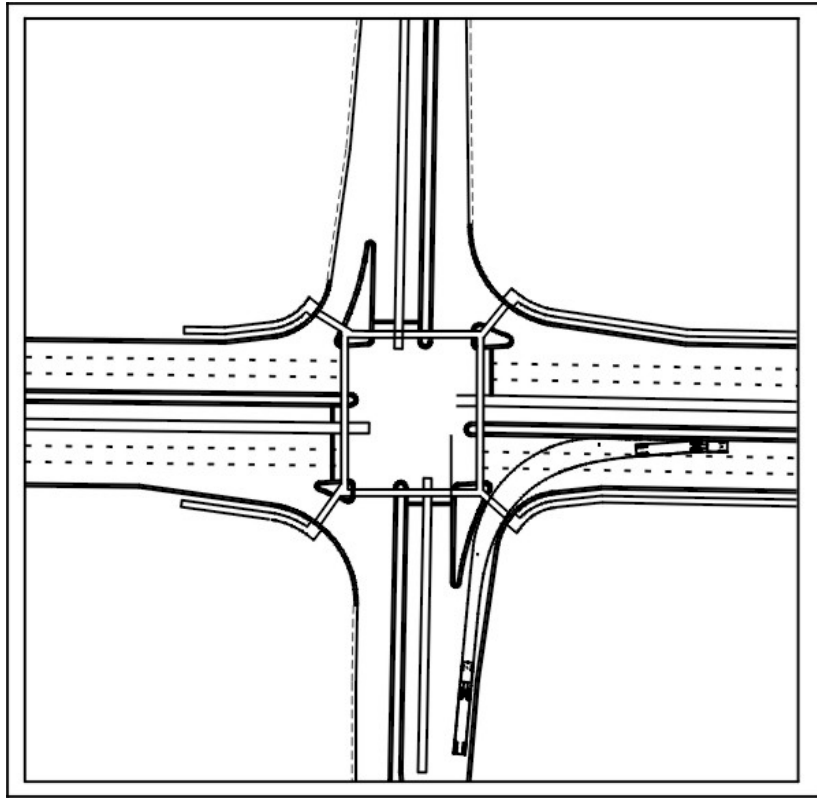
ORIGINATOR Director, Bureau of Highway Operations		3-3-6
CHAPTER 3	Project Scoping Process & Geometric Design Considerations	
SECTION 3	Intersection Geometrics	
SUBJECT 6	Right Turn Lanes	

THIS SECTION OFFERS INTERIM GUIDANCE ONLY

Refer to FDM Procedure 11-25-10. *Intersection at Grade, Right Turn Lanes* and FDM Procedure 11-25-15. *Intersection at Grade, Turning Roadways (Channelized Right)*

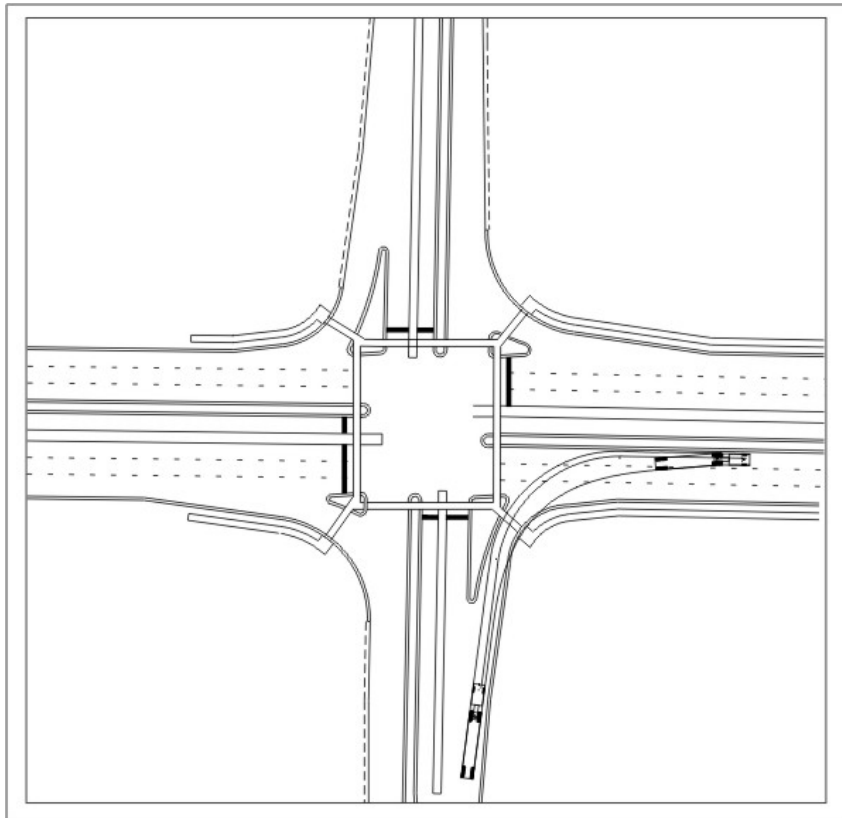
- Exclusive right turn lanes *should* always be considered on all approaches.
 - A right turn lane provides refuge for safe deceleration outside a high speed through lane and provides storage for right-turning vehicles to assist in optimizing traffic signal phasing.
- When the design of the radius is quite flat (i.e., > 70'), this creates a traffic signal design problem when locating the near right traffic signal. The preferred solution is to design a small pork chop island (minimum of 150 square feet) to place the traffic signal and lighting bases, pull box, pedestrian pushbuttons, pedestrian walkways, and to facilitate channelization of the right turn movement.
- Improperly designed right turn radii most likely will result in traffic signal knockdowns.
- For speeds in excess of 40 mph, the island *should* be offset 8-10 feet from the adjacent through lane.
- Consideration *should* be given for the type of controls to use for channelized right turns. Typically it is preferred to use a least restrictive method and increase the degree of control as volumes, safety, and geometric conditions dictate. Refer to TSDM Subject 3-4-2 on guidance for control of channelized right turns.
- Channelized right turns *should* be brought in as near as perpendicular as possible for vision to the left.
- Adequate R/W width *should* be provided for future right turn lane expansion.

For appropriate control guidance for right turns, refer to TSDM Subject 3-4-2.



CORRECT

Truck Does Not Travel Over Curb



INCORRECT